

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
<i>This represents the final version (updated 30 April, 2021). New publications since our last update have been highlighted in blue.</i>							
COVID-19; perinatal care; respectful care; health care systems; health disparities; Northwest United States; critical thematic analysis	31-Mar-21	<a href="#">Where the system failed: The COVID-19 pandemic's impact on pregnancy and birth care</a>	Global Qualitative Nursing Research	Research Article	The authors conducted a qualitative study of US-based patients (median age 31 years, range 20-38 years) and nurses (median age 34 years, age range 25-40) recruited between April- August 2020 to explore how experiences of care provision during pregnancy and birth were impacted by the COVID-19 pandemic. 9 of 15 patients (60%) were pregnant for the first time. Themes from the interviews of patients were: adaptations to care structures were inadequate to meet patient needs, and the need for additional support and services in response to stress from COVID-19. The patients described preferences for in-person visits rather than virtual or telehealth visits, which created a lack of connection. Patients wanted additional resources to cope with the isolation, stress, and loss that accompanied the pandemic. Themes identified by the nurses were: inconsistencies in policies and policy implementation greatly impacted nurses' ability to safely care for patients, and impacts on nurses from pandemic hospital responses. The nurses described hospital policies as reactive, including being told not to wear masks initially and the lack of available personal protective equipment. Nurses also described a decreased trust in their workplace, supporting them and keeping them safe. Both patients and nurses reported changes in care from perceived exposure risk. Patients reported feeling less cared for due to fewer interactions in the hospital with staff, and nurses reported marginalized community members receiving less attention. The authors report that the study illuminated the need of patients and nurses for mental health care that was not addressed during the pandemic.	The authors conducted a qualitative study of US-based patients and nurses, recruited between April- August 2020 to explore how experiences of care provision during pregnancy and birth were impacted by the COVID-19 pandemic. Patients reported feeling less cared for due to fewer interactions in the hospital with staff, and nurses reported marginalized community members receiving less attention.	Altman MR, Gavin AR, Eagen-Torkko MK, Kantrowitz-Gordon I, Khosa RM, Mohammed SA. Where the System Failed: The COVID-19 Pandemic's Impact on Pregnancy and Birth Care. <i>Glob Qual Nurs Res</i> . 2021;8:23333936211006397. Published 2021 Mar 31. doi:10.1177/23333936211006397
COVID-19; neurodevelopmental disorders; maternal immune activation; cholinergic anti-inflammatory pathway	31-Mar-21	<a href="#">A Translational Perspective of Maternal Immune Activation by SARS-CoV-2 on the Potential Prenatal Origin of Neurodevelopmental Disorders: The Role of the Cholinergic Anti-inflammatory Pathway</a>	Frontiers in Psychology	Perspective Article	In this paper, the authors hypothesized that a gestational infection triggered by SARS-CoV-2 increases the risks leading to neurodevelopmental disorders of the neonate, which can affect childhood and the long-term quality of life. In particular, disruption of either the maternal or fetal cholinergic anti-inflammatory pathway (CAP) could cause or exacerbate the severity of COVID-19 in the maternal-fetal binomial. From a translational perspective, the authors discussed the possible manifestation of a maternal immune activation by SARS-CoV-2 and the subsequent neurodevelopmental disorders considering the role of the fetal-maternal cytokine cross-talk and the CAP. However, there is limited evidence thus far regarding long-term physiological, immunological, and neurodevelopmental modifications produced by the SARS-CoV-2 virus in the human maternal-fetal binomial and, particularly, in the neonate. The authors thus highlighted the urgent need for preclinical studies and multicenter and international databanks of maternal-fetal psychophysiological data obtained pre-, during, and post-infection by SARS-CoV-2 from pregnant women and neonates. Furthermore, longitudinal recordings and offspring	The authors hypothesized that a gestational infection triggered by SARS-CoV-2 increases the risks leading to neurodevelopmental disorders of the neonate, which can affect childhood and the long-term quality of life. They discussed the possible manifestation of a maternal immune activation by SARS-CoV-2 and the subsequent neurodevelopmental disorders considering the role of the fetal-maternal cytokine cross-talk and the cholinergic anti-inflammatory pathway. Longitudinal recordings and offspring neurodevelopmental assessments, including	Reyes-Lagos JJ, Abarca-Castro EA, Echeverría JC, et al. A Translational Perspective of Maternal Immune Activation by SARS-CoV-2 on the Potential Prenatal Origin of Neurodevelopmental Disorders: The Role of the Cholinergic Anti-inflammatory Pathway. <i>Front Psychol</i> . 2021;12:614451. doi:10.3389/fpsyg.2021.614451.

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					neurodevelopmental assessments, including immunological markers, are desirable to appraise long-term effects.	immunological markers, are desirable to appraise long-term effects.	
COVID-19; pregnancy; screening; Italy	31-Mar-21	<a href="#">Universal Sars-Cov-2 Screening in Pregnant Women: Experience from the Italian Epidemic Outbreak</a>	Acta Biomed for Health Professions	Original Research	This study evaluated the practice of SARS-CoV-2 universal screening (using nasopharyngeal swab RT-PCR) in pregnant women admitted to hospital in Italy from 22 April-18 June 2020, and calculated the frequency of SARS-CoV-2 infection. 240 pregnant women were tested upon admission, of which 12 (5%) tested positive (median age for infected group=31 yrs, range=27-37 yrs). All positive cases were asymptomatic, and none developed COVID-19 symptoms or had adverse perinatal outcomes. 11 of these women were admitted at term of pregnancy for delivery, and 1 at 34+4 weeks for pre-term labor. 8 patients delivered spontaneously, while 4 had C-sections for non-COVID-19-related causes. All neonates tested negative for SARS-CoV-2. Breast-feeding and rooming-in was allowed, with caution, in every case, with the use of mask and gloves. The findings indicate high rates of asymptomatic infection in the healthcare setting, and highlight a critical need for universal screening of pregnant women.	This study evaluated the practice of SARS-CoV-2 universal screening (using nasopharyngeal swab RT-PCR) in pregnant women admitted to hospital in Italy from 22 April-18 June 2020, and calculated the frequency of SARS-CoV-2 infection. The findings indicate high rates of asymptomatic infection in the healthcare setting, and highlight a critical need for universal screening of pregnant women.	Grossi E, Agnoli B, Baldini M, et al. Universal Sars-Cov-2 Screening in Pregnant Women: Experience from the Italian Epidemic Outbreak. Acta Biomed. 2021;92(S2):e2021001. doi:10.23750/abm.v92iS2.11320.
Cytokines, COVID-19, Fetus, Immunoglobulins, IgG, IgM, Macrophages, Neonatal Immunity, Placenta, T cells, Umbilical Cord	31-Mar-21	<a href="#">Maternal-Fetal Immune Responses in Pregnant Women Infected with SARS-CoV-2</a>	Research Square	Preprint (not peer-reviewed)	This article discussed a multidisciplinary study that included the analysis of SARS-CoV-2 IgM/IgG, multiplex cytokine assays, immunophenotyping, single-cell transcriptomics, and viral RNA and protein detection, together with the assessment of the microbiome diversity and histopathology of the placenta, to characterize the maternal-fetal immune responses triggered by SARS-CoV-2 during pregnancy. 15 pregnant women were enrolled in the study, of which 7 tested positive for SARS-CoV-2 RT-PCR on nasopharyngeal swabs; 5 of these were asymptomatic, 1 had mild symptoms, and 1 had severe COVID-19 requiring oxygen supplementation. SARS-CoV-2-positive and control non-infected women all delivered term neonates. SARS-CoV-2 infection during pregnancy was associated with higher anti-SARS-CoV-2 IgG and IgM in maternal circulation. Infection in mothers was associated with increased IgG, but not IgM, in the cord blood of neonates. SARS-CoV-2 infection during pregnancy was also associated with a cytokine response in the fetal circulation (assessed via umbilical cord blood), without changing the cellular immune repertoire. Importantly, SARS-CoV-2 was not detected in the placental tissues, including the chorio-amniotic membranes, of women infected with SARS-CoV-2. This study provides insight into the maternal-fetal immune responses triggered by SARS-CoV-2 and further emphasizes the rarity of placental infection.	This article discussed a multidisciplinary study that included the analysis of SARS-CoV-2 IgM/IgG, multiplex cytokine assays, immunophenotyping, single-cell transcriptomics, and viral RNA and protein detection, together with the assessment of the microbiome diversity and histopathology of the placenta, to characterize the maternal-fetal immune responses triggered by SARS-CoV-2 during pregnancy. SARS-CoV-2 infection neither altered fetal cellular immune responses in the placenta nor induced elevated cord blood levels of IgM. This study provides insight into the maternal-fetal immune responses triggered by SARS-CoV-2 and further emphasizes the rarity of placental infection.	Garcia-Flores V, Romero R, Xu Y, et al. Maternal-Fetal Immune Responses in Pregnant Women Infected with SARS-CoV-2. Res Sq [Preprint]. 2021 Mar 31:rs.3.rs-362886. doi: 10.21203/rs.3.rs-362886/v1. PMID: 33821263; PMCID: PMC8020997.

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Age, sex, susceptibility, children, mortality	31-Mar-21	<a href="#">A comparative analysis of COVID-19 outbreak on age groups and both the sexes of population from India and other countries</a>	Journal of Infection in Developing Countries	Original Research	This study focused on age and sex variation among COVID-19 cases across multiple countries (Australia, Germany, India, Italy, Netherlands, Norway, South Korea, and Spain). The authors analyzed 3 different age groups (0-19 years, 20-49 years, and 50+ years) through late March/early April 2020. In all countries, the lowest percentage of infected people was among the 0-19 age group. The 20-49 group made up a higher percentage of cases in Germany (47%), India (62%), South Korea (51%), Australia (51%) and Norway (49%) than in Italy (25.8%), Spain (28%), and the Netherlands (24%). In the latter 3 countries, the 50+ age group made up a significant portion of cases (Italy 72.8%, the Netherlands 74.66%, and Spain 71.37%). In India, 26% of deaths were people 20-49 years of age, compared to other countries where they made up only 1-2% of deaths. Only 1 death was reported among children 0-19 years of age. In the 0-19 age group, males made up a greater percentage of SARS-CoV-2 infections than females (significance only found for Korea, $p = 0.0043$ ). The authors conclude that children demonstrated reduced SARS-CoV-2 susceptibility, and countries showed varying patterns in COVID-19 spread and associated mortality. More research is required to determine the influence of the sex on viral response.	This study focused on age and sex variation among COVID-19 cases across multiple countries. Children 0-19 years of age made up the lowest percentage of cases in all 8 countries. Only 1 death was reported among that age group. Males made up a greater percentage of cases 0-19 years of age than females. The authors conclude that children demonstrated reduced SARS-CoV-2 susceptibility. Countries showed varying patterns in COVID-19 spread and associated mortality, and more research is required to determine the influence of the sex on viral response.	Jakhmola S, Baral B, Jha HC. A comparative analysis of COVID-19 outbreak on age groups and both the sexes of population from India and other countries. J Infect Dev Ctries. 2021;15(3):333-341. Published 2021 Mar 31. doi:10.3855/jidc.13698
COVID-19; fear; anxiety; parenting behavior; United States	31-Mar-21	<a href="#">COVID-related fear maintains controlling parenting behaviors during the pandemic</a>	Cognitive Behaviour Therapy	Article	This study prospectively evaluated parenting behaviors in the United States during the COVID-19 pandemic through an online survey. 87 participants (52.9% male; mean age=39.26 ± 9.95 years, age range=25-68 years) living with ≥1 child (<21 years old, no exact range/mean given) completed the same survey on 13 April 2020 (time 1) and on 14 May 2020 (time 2). Results indicate that COVID-19-related fear was significantly positively related to controlling parenting behaviors over the previous 2 weeks at both time 1 ( $p=0.003$ ) and time 2 ( $p<0.001$ ), but was significantly negatively correlated with firm parenting behaviors at both time 1 ( $p=0.009$ ) and time 2 ( $p=0.018$ ). COVID-19-related fear at time 1 was significantly positively associated with time 2 controlling parenting behaviors ( $p<0.01$ ) but was non-significantly negatively correlated with time 2 firm parenting behaviors. COVID-19-related fear at time 1 predicted controlling parenting behavior at time 2, even when controlling for controlling parenting behaviors at time 1 ( $p=0.002$ ). Fear serves to maintain high levels of controlling parenting behaviors over time.	This study prospectively evaluated parenting behaviors in the United States during the COVID-19 pandemic through an online survey. The findings suggest that fear serves to maintain high levels of controlling parenting behaviors over time.	Wissemann K, Mathes B, Meyer A, et al. COVID-related fear maintains controlling parenting behaviors during the pandemic. Cogn Behav Ther. 2021;1-15. doi:10.1080/16506073.2021.1878274.
COVID-19, children, adolescent, Hispanic/Latinx, school health, symptoms; diagnostic value	31-Mar-21	<a href="#">Diagnostic Value of Symptoms for Pediatric SARS-CoV-2 Infection in a Primary Care Setting</a>	medRxiv	Preprint (not peer-reviewed)	In this retrospective cohort study, the authors aim to evaluate the diagnostic value of symptom-based screening approaches by daycares and 41 schools for identifying children and adolescents with possible SARS-CoV-2 infection. This study, which took place between March 20 - June 22, 2020 at a community health center in Providence, Rhode Island (USA), included 555 patients <18 years old who received RT-PCR testing for SARS-CoV-2 infection. The median age was 9 (IQR: 3.5-15) years. Of the 555 participants, 283 (51.0%)	The authors evaluated the diagnostic value of symptoms used in screening approaches by daycares and 41 schools for identifying children and adolescents with possible SARS-CoV-2 infection. They suggest that symptoms should not be	Weng C, Butt WW, Brooks M, et al. Diagnostic Value of Symptoms for Pediatric SARS-CoV-2 Infection in a Primary Care Setting. medRxiv 2021.03.29.21254600.

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					had known COVID-19 exposure and at least one symptom; 183 (33.0%) had at least one symptom but no known exposure; 56 (10.1%) had known exposure but no symptoms; and 33 (5.9%) participants had neither symptoms nor known exposure. 217 (39.1%) participants had SARS-CoV-2 infection. Asymptomatic infections occurred in 2/40 (5.0%) 0-4 year-olds, 9/69 (13.0%) 5-11 year-olds, and 9/108 (8.3%) 12-17 year-olds. Children with a positive PCR were more likely to be older (median age 11 vs. 8 years; $p < 0.001$ ), have known COVID-19 exposure (87.1 vs 44.4%; $p < 0.001$ ), be Hispanic (93.1 vs. 76.0%; $p = 0.018$ ), and present with more symptoms (3 vs. 2 symptoms; $p < 0.001$ ). In all age groups, known COVID-19 exposure alone had the highest AUC (area under receiver operating curve) for identifying SARS CoV-2 infection, indicating that it was the best predictor. The authors suggest that symptoms should not be used alone to identify cases of SARS-CoV-2 infection in children and adolescents and further emphasize the importance of available, efficient and accurate testing.	used alone to identify cases of SARS-CoV-2 infection in children and adolescents and emphasize the importance of available, efficient and accurate testing.	
COVID-19; children; parents; neglect; physical discipline; United States	31-Mar-21	<a href="#">Experiences With COVID-19 Stressors and Parents' Use of Neglectful, Harsh, and Positive Parenting Practices in the Northeastern United States [Free Access to Abstract Only]</a>	Child Maltreatment	Article	The authors estimated household exposure to COVID-19-related stress in the United States and the association with parent report of neglectful, harsh, and positive discipline practices. Cross sectional survey data was collected from 2,068 parents (41.9% aged 35-44 years; 63.2% female) of children aged 0-18 years. This included personal and household experiences of COVID-19 stressors, level of distress, and use of neglectful parenting and discipline practices for a randomly selected child in their home. Selected child mean age was $8.2 \pm 5.2$ years (51% male). The most frequently reported stressors included canceling a trip or vacation, financial loss, being required to work from home, and being required to work outside the home. The number of personal and household COVID-19 related stressors were each moderately correlated with caregiver reports of distress ( $p < 0.001$ ). In addition, caregivers whose child had experienced a school or childcare closure reported higher levels of pandemic-related stress ( $p < 0.001$ ). Individual stressor level, household stressor level, and distress were each positively associated with likelihood of neglect ( $p < 0.05$ , $p < 0.01$ , and $p < 0.001$ , respectively). Household stressor level ( $p < 0.01$ ) and parents' distress ( $p < 0.001$ ) were positively associated with harsh and positive discipline. The results suggest that parents may require additional support to provide appropriate care for their children while coping with the increased rates of stress associated with the pandemic.	The authors estimated household exposure to COVID-19-related stress in the United States and the association with parent report of neglectful, harsh, and positive discipline practices. Individual and household stressor level, as well as distress, were each positively associated with likelihood of neglect. Household stressor level and parents' distress were positively associated with harsh and positive discipline.	Connell CM, Strambler MJ. Experiences With COVID-19 Stressors and Parents' Use of Neglectful, Harsh, and Positive Parenting Practices in the Northeastern United States. Child Maltreat. 2021. doi:10.1177/10775595211006465.
COVID-19; pediatric, pharmacotherapy	31-Mar-21	<a href="#">The Trilogy of SARS-CoV-2 in Pediatrics (Part 1): Acute COVID-19 in Special Populations</a>	Journal of Pediatric Pharmacology and Therapeutics	Review	This review evaluated the pharmacologic treatment and prevention therapies used in pediatric patients to date, including emergency use authorizations, as well as rationales for pharmacotherapies not routinely used to treat acute SARS-CoV-2 infection. Inpatient therapies include corticosteroids, remdesivir (authorization required for use in children aged <12 years), convalescent plasma, and baricitinib. Outpatient treatments include recombinant monoclonal	This review evaluated the pharmacologic treatment and prevention therapies used in pediatric patients to date, including emergency use authorizations, as well as rationales for pharmacotherapies	Parsons S, Tran VL. The Trilogy of SARS-CoV-2 in Pediatrics (Part 1): Acute COVID-19 in Special Populations. J Pediatr Pharmacol Ther. 2021;26(3):220-239.

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					antibody therapy, bamlanivimab, and casirivimab-imdevimab. Pharmacotherapies not routinely recommended include chloroquine or hydroxychloroquine with or without azithromycin, famotidine, interferons (alfa, beta), ivermectin, lopinavir-ritonavir, and tocilizumab, among others. These regimens are not recommended due to lack of evidence to support that they benefit pediatric COVID-19 patients, lack of safety regulations, unknown dosage for safe and effective treatment, or their potential risk. The authors conclude by emphasizing the need for larger clinical trials, and trials including pediatric patients to evaluate the safety and efficacy of specific pharmacotherapies in this population.	not routinely used to treat acute SARS-CoV-2 infection. The authors conclude by emphasizing the need for larger clinical trials, and trials including pediatric patients to evaluate the safety and efficacy of specific pharmacotherapies in this population.	doi:10.5863/1551-6776-26.3.220.
COVID-19; pediatric; co-infections; Iran	31-Mar-21	<a href="#">Clinical Misdiagnosis of COVID-19 Infection with Confusing Clinical Course</a>	Case Reports in Infectious Diseases	Case Report	The authors present the case of a 29-month-old male with a potentially confusing clinical course for COVID-19 in Iran. The patient presented with a 2-month history of fever [date not specified]. His SARS-CoV-2 PCR test was positive, and there was pleural effusion and positive findings in the lower left lobe of the lung on the CT scan. Mid-sized splenomegaly was found on abdominal ultrasound, and laboratory tests disclosed pancytopenia. Considering the atypical lymphocyte counts in laboratory tests, he underwent bone marrow aspiration. The suggested diagnosis was hemophagocytic lymphohistiocytosis secondary to visceral leishmaniasis, and prednisolone was initiated. Subsequently, Leishman-Donovan bodies were seen in the bone marrow aspirate, and treatment was started with amphotericin, which led to clinical improvement. In conclusion, patients with vague clinical symptoms in tropical countries where other infectious diseases are prevalent should be carefully evaluated to identify possible simultaneous infections, even in the context of an ongoing epidemic or a pandemic. Familiarity with the possible differential diagnoses and appropriate, step-by-step consideration to rule out other possible causes is needed in all situations.	The authors present the case of a 29-month-old male with a potentially confusing clinical course for COVID-19 in Iran. He was found to have coinfection by SARS-CoV-2 and Leishmania sp., and clinically improved after treatment with amphotericin. In conclusion, patients with vague clinical symptoms in tropical countries where other infectious diseases are prevalent should be carefully evaluated to identify possible simultaneous infections, even in the context of an ongoing pandemic.	Eshaghi H, Ziaee V, Khodabande M, et al. Clinical Misdiagnosis of COVID-19 Infection with Confusing Clinical Course. Case Rep Infect Dis. 2021;2021:6629966. doi:10.1155/2021/6629966.
COVID-19 pandemic, pregnancy, outcomes, fetal outcomes, neonatal outcomes, stillbirth, maternal death, preterm pregnancy	31-Mar-21	<a href="#">Effects of the COVID-19 pandemic on maternal and perinatal outcomes: a systematic review and meta-analysis</a>	The Lancet Global Health	Systematic Review	This article assesses the collective evidence on the effects of the COVID-19 pandemic on maternal, fetal, and neonatal outcomes. A systematic review and meta-analysis of studies related to these topics was done by searching MEDLINE and Embase between January 1, 2020-January 8, 2021. Studies of solely SARS-CoV-2-infected pregnant individuals, case reports, studies without comparison groups, narrative or systematic literature reviews, pre-prints, and studies reporting on overlapping populations were excluded. The search identified 3592 citations, of which 40 studies were included. The authors identified significant increases in stillbirth (pooled odds ratio [OR] 1.28 [95% CI 1.07–1.54]) and maternal death (OR 1.37 [95% CI 1.22–1.53]) during versus before the pandemic. Preterm births did not significantly decrease overall (OR 0.94 [95% CI 0.87–1.02]), but did decrease in high-income countries (OR 0.91 [95% CI 0.84–0.99]), where spontaneous preterm births also decreased (OR 0.81 [95% CI 0.67–0.97]). Mean Edinburgh	This article assesses the collective evidence on the effects of the COVID-19 pandemic on maternal, fetal, and neonatal outcomes. A systematic review and meta-analysis of 40 studies related to these topics was done, including those published January 1, 2020-January 8, 2021. During the pandemic, the authors identified significant increases in stillbirth, maternal death, postnatal depression scores, and surgically-managed ectopic pregnancies. The authors argue that there is an urgent need to prioritize safe,	Chmielewska B, Barratt I, Townsend R, et al. Effects of the COVID-19 pandemic on maternal and perinatal outcomes: a systematic review and meta-analysis. The Lancet Global Health. March 2021. doi:10.1016/s2214-109x(21)00079-6

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					Postnatal Depression Scale (EPDS, scale of 0-30) scores were higher, indicating poorer mental health, during versus before the pandemic (pooled mean difference 0.42 [95% CI 0.02–0.81]). Surgically-managed ectopic pregnancies increased during the pandemic (OR 5.81 [2.16–15.6]). The authors argue that there is an urgent need to prioritize safe, accessible, and equitable maternity care within the strategic response to this pandemic and in future health crises.	accessible, and equitable maternity care within the strategic response to this pandemic and in future health crises.	
COVID-19, SARS-CoV-2, pregnancy, vertical transmission	31-Mar-21	<a href="#">Retrospective observational RT-PCR analyses on 688 babies born to 843 SARS-CoV-2 positive mothers, placental analyses and diagnostic analyses limitations suggest vertical transmission is possible</a>	Facts, Views, & Vision in ObGyn	Systematic Review	This review analyzed the method by which SARS-CoV-2 diagnostic and placental analyses were performed in cases of maternal SARS-CoV-2 infection, identify limitations in data interpretation, and determine whether vertical transmission of SARS-CoV-2 is possible. A systematic database search was conducted from December 2019 - May 2020. A total of 84 studies with 862 SARS-CoV-2 positive women were included; two studies had ongoing pregnancies and the remaining 82 included 705 infants, one miscarriage and one medical termination. 41 studies performed only one RT-PCR and 34 studies performed a second RT-PCR. The first RT-PCR, performed in 449 infants and two losses, resulted in 431 negative, 14 positive and 4 unclear results. The average time of positive results, documented in 14 infants, was 22 hours/day 0. 3 infants, with negative 1st RT-PCR became positive at day 6, day 7 and 24 hours and all remained positive at 1 week. Antibody testing (IgM/IgG) was performed in 28 infants from 6 studies; 21 infants had negative results, while 7 (25%) were positive (3 with positive IgM and all seven with positive IgG). 6 of 7 infants with positive IgG had a positive 1st Rt-PCR; however, when repeated at 37 hours, RT-PCR was negative. To confirm vertical transmission, amniotic fluid, placenta and cord blood were assessed for infection with SARS-CoV-2 by RT-PCR. 4/46 placental swabs were positive. In studies of amniotic fluid, 2/17 studies (10/67 women) had a positive RT-PCR; of these, two infants were found to have a positive RT-PCR on serial testing. The authors of this study suggest that it is important to combine information on serial diagnostic testing, incubation periods and placental analysis to assess vertical transmission; based on these indicators, there is a likelihood that intrapartum vertical transmission of SARS-CoV-2 can occur.	This review analyzed the method by which SARS-CoV-2 diagnostic and placental analyses were performed in cases of maternal SARS-CoV-2 infection, identified limitations in data interpretation, and aimed to determine whether vertical transmission of SARS-CoV-2 is possible. The authors emphasize the importance of combining information on serial diagnostic testing, incubation periods and placental analysis to assess vertical transmission and based on these indicators, suggest that there is a likelihood that intrapartum vertical transmission of SARS-CoV-2 can occur.	Bahadur G, Bhat M, Acharya S, et al. Retrospective observational RT-PCR analyses on 688 babies born to 843 SARS-CoV-2 positive mothers, placental analyses and diagnostic analyses limitations suggest vertical transmission is possible. Facts Views Vis ObGyn. 2021; 13 (1): 53-66. doi:10.52054/FVVO.13.1.001
COVID-19; child; mental health; school closure; Japan	31-Mar-21	<a href="#">Mental health in Japanese children during school closures due to the COVID-19</a>	Pediatrics International	Article	The authors explored changes in children's daily life and effects on their mental health during COVID-19-related school closures in Japan. Participants included elementary/junior high-school students aged >9 years seen in an outpatient clinic during school closures from 2 March-31 May 2020 (n=78 children; 62% male; mean age=11.4 ± 1.7 years [age ranges not given]), who completed the Japanese version of WHO Five Well-Being Index (WHO-5-J). The results were compared with students seen after schools re-opened on 1 June 2020 (n=113 children; 55% male; mean age=11.6 ± 1.8 years). Although more children in the school closure group devoted more time to family (87% vs. 78%, p<0.05) and sleep (62% vs. ~30%,	The authors explored changes in children's daily life and effects on their mental health during school closures in Japan. Although children in the closure group devoted more time to family and sleep, their sleep rhythms, eating habits, and physical activities were disrupted. As the children's living environment changed, they felt less active and had difficulty	Saito M, Kikuchi Y, Lefor AK, et al. Mental health in Japanese children during school closures due to the COVID-19. Pediatr Int. 2021. doi:10.1111/ped.14718.

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					p<0.05), they also reported staying up later at night (51% vs. ~30%, p<0.05), more difficulty getting up in the morning (40% vs. ~20%, p<0.05) and skipping breakfast more (12% vs. 5%, p<0.05), compared to the school re-opening group. During closure, fewer children ate 3 meals per day (12% vs. ~25%, p<0.05). There were also more reports of increased TV/DVD (60% vs. ~30%, p<0.05) and internet/game time (74% vs. ~50%, p<0.05), and decreased exercise (56% vs. ~25%, p<0.05) during school closure. Although there were no significant differences between the two groups in total WHO-5-J scores (p=0.13), single WHO-5-J items such as “activity” and “vigor” and “interest” were significantly worse, and “rest” was significantly better in the school closure group (all p<0.05). The findings indicate that during school closures, children were less active and had difficulty finding things that interested them, although sleep improved overall.	finding things that interested them, although sleep improved overall.	
COVID-19; smell; taste; pediatric; otolaryngology; Saudi Arabia	31-Mar-21	<a href="#">Otolaryngology Manifestations of COVID-19 in Pediatric Patients</a>	International Journal of Pediatric Otorhinolaryngology	Original Research	The authors discussed the clinical features of COVID-19 in pediatric patients, with an emphasis on otolaryngology manifestations in Saudi Arabia. The study included 660 laboratory-confirmed SARS-CoV-2 positive pediatric patients aged 3-15 years (mean age=; 50.2% male). Data were retrospectively retrieved from January-July 2020 from electronic medical records and included patients' epidemiological and clinical features. Patients were categorized into three main groups according to age (3-6 years, 7-10 years, 11-15 years) and then followed up via phone calls to document any symptoms encountered after the first visit. The results showed that 95.2% of patients were treated conservatively, 4.4% required admission, and 0.3% passed away. 43.6% of patients had asymptomatic infections. Fever and cough were the most commonly reported manifestations accounting for 39.2% and 19.8%, respectively. The most frequently reported otolaryngology symptoms were sore throat (17.3%), rhinorrhea (14.4%), and nasal congestion (7%). Moreover, 10.4% and 13.1% of children aged 7-15 years old experienced smell and taste disturbances, respectively. Reporting these symptoms can help identify the suspected cases and isolate them before the test result. Older children (11-15 years) were more likely to report taste disturbances when compared to younger children (17.2% vs. 9.8%, p=0.02). Children aged between 3-6 years had significantly higher rates of admission (13.7%) and mortality (0.9%) when compared to the older groups (p=0.00). The findings indicate that pediatric COVID-19 patients have a mild disease course, a high rate of asymptomatic infections, and low mortality and hospital admission rates.	The authors discussed the clinical features of COVID-19 in pediatric patients, with an emphasis on otolaryngology manifestations in Saudi Arabia. Sore throat, nasal congestion, and rhinorrhea were the most frequently reported otolaryngology symptoms. The findings indicate that pediatric COVID-19 patients have a mild disease course, a high rate of asymptomatic infections, and low mortality and hospital admission rates.	Hijazi LO, Alaraifi AK, Alsaab F. Otolaryngology Manifestations of COVID-19 in Pediatric Patients. Int J Pediatr Otorhinolaryngol. 2021. doi:10.1016/j.ijporl.2021.110701.

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COVID-19; children; youth; telehealth	31-Mar-21	<a href="#">Youth telemental health and COVID-19</a>	Irish Journal of Psychological Medicine	Commentary	The authors comment on the recently published article by Power et al., 2020 [doi:10.1017/ipm.2020.84] that highlighted the anticipated increased demand for mental health support in young people and how the COVID-19 pandemic has impacted mental health across the age spectrum, disproportionately affecting younger populations. The authors supported the argument that greater attention is needed for youth mental health, and research funds should be levied at improving knowledge of process, experience, and outcomes. They also emphasized the need for caution regarding the digital modalities discussed in Power et al.'s article and append some additional critical comments regarding youth telemental health during the pandemic. The authors caution that variable experiences of these mediums should not be overlooked, and time should be taken to consider who stands to benefit most and least from a reliance on their use in the longer term. Good clinical care may sometimes require face-to-face interaction. There can be significant challenges in working with young people suffering from trauma and assessing patient affect, particularly dissociation, via video. There are other issues to consider relating to connectivity and access to suitable technology and other factors outside the clinician's and patient's control, including not having a physical space to talk, which is sufficiently private. The authors suggest that services should be supported to offer an integrated blend of care options, which account for clinicians' experience, the preference of the young person, their family and caregivers, and the nature of presenting problems and evidence to ensure that the appropriate modality is utilized.	The authors addressed the recently published article by Power et al., 2020, and supported the argument that greater attention is needed for youth mental health, but also emphasized the need for caution regarding the digital modalities related to youth tele-mental health. The authors suggest that services should be supported to offer an integrated blend of care options, which account for clinicians' experience, the preference of the young person, their family and caregivers, and the nature of presenting problems and evidence to ensure that the appropriate modality is utilized.	Archard PJ, O'Reilly M, Fitzpatrick S, et al. Youth telemental health and COVID-19. Ir J Psychol Med. 2021;1-5. doi:10.1017/ipm.2021.27.
COVID-19; pregnancy; remdesivir	31-Mar-21	<a href="#">Remdesivir for the treatment of COVID-19 in pregnancy</a>	Journal of Medical Virology	Letter to the Editor	The author discussed the use of Remdesivir for the treatment of COVID-19 in pregnant women. There is no evidence that pregnant women are more susceptible to SARS-CoV-2 infection than the general population; however, pregnancy-associated immunological changes could potentially render pregnant individuals more vulnerable to severe COVID-19. Remdesivir (GS-5734), an inhibitor of the viral RNA-dependent RNA polymerase, was identified as a potential candidate for the treatment of COVID-19 after it was demonstrated to inhibit SARS-CoV-2 replication in vitro. A recent systematic review of remdesivir in hospitalized COVID-19 patients found that remdesivir significantly increased the recovery rate (by 22% and 14% on days 7 and 28, respectively) compared to the control group. It significantly reduced 14-day mortality (by 36%) among moderate and severe COVID-19 patients, but there was no significant difference in 28-day mortality. Pregnant women, however, are excluded from many recommendations for the use of remdesivir in COVID-19 largely due to a lack of clinical trial data. Its administration in pregnancy has primarily been on a compassionate use basis. The limited data available to date suggest that remdesivir is well tolerated in the latter stages (second/third trimesters) of	The author discussed the use of Remdesivir for the treatment of COVID-19 in pregnant women. The limited data available to date suggest that remdesivir is well tolerated in the latter stages (second/third trimesters) of pregnancy with a low risk of serious adverse events. Remdesivir could be a potentially helpful treatment for COVID-19 in pregnant women; however, further safety and efficacy data are required to support its use.	Lampejo DT. Remdesivir for the treatment of COVID-19 in pregnancy. J Med Virol. 2021. doi: 10.1002/jmv.26986.

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					pregnancy with a low risk of serious adverse events. There is an even greater paucity of data for its use in the first trimester of pregnancy. Remdesivir could be a potentially helpful treatment for COVID-19 in pregnant women; however, further safety and efficacy data are required to support its use.		
COVID-19; pregnancy; maternal health; neonate; vertical transmission	31-Mar-21	<a href="#">COVID-19 in Women's Health: Epidemiology</a>	Best Practice and Research Clinical Obstetrics and Gynaecology	Article	The authors discussed the epidemiology of COVID-19 in women's health. Pregnant women do not appear more likely to contract the virus than the general population. The majority of pregnant women who contract the virus will have mild or moderate symptoms, but some will experience severe illness requiring hospitalization, ICU admission, and mechanical ventilation. Severe illness is more common in the later stages of pregnancy and in women who are overweight or obese, > 35 years of age, from minority ethnic backgrounds, or who live with socioeconomic deprivation. Vertical transmission, if it occurs, is rare, and the course of infection in neonates is mild. Maternal infection with SARS-CoV-2 alone is not an indication for cesarean birth, formula feeding, or separation of the neonate from the mother, as the likelihood of transmission appears not to be affected by mode of birth, method of feeding, or whether the mother and neonate are cared for together. Important areas for future research include the safety and efficacy of vaccination against COVID-19 in pregnant women, persistence of symptoms in pregnant women, and care for pregnant women with long or sub-acute COVID-19.	The authors discussed the epidemiology of COVID-19 in women's health. Severe illness is more common in the later stages of pregnancy and in women who are overweight or obese, over 35 years of age, from minority ethnic backgrounds, or who live with socioeconomic deprivation. Important areas for future research include the safety and efficacy of vaccination against COVID-19 in pregnant women, persistence of symptoms in pregnant women, and care for pregnant women with long or sub-acute COVID-19.	Jardine J, Morris E. COVID-19 in Women's Health: Epidemiology. Best Pract Res Clin Obstet Gynaecol. 2021. doi:10.1016/j.bpobgyn.2021.03.010.
COVID-19; neonate; infant; Greece	31-Mar-21	<a href="#">Clinical characteristics of COVID-19 in neonates and young infants</a>	European Journal of Pediatrics	Original Research	The authors reported the clinical characteristics and management of neonates and infants with SARS-CoV-2 infection between February-September 2020 at a hospital in Greece. 253 neonates and infants aged <3 months (79% male; age range=11-87 days) were tested for SARS-CoV-2, and 14 (5.5%) were found positive. 11 infants (78.5%) had at least one parent tested positive for SARS-CoV-2, and in 9 (64.2%) cases, the source of infection was the mother. In all cases, the maternal history during delivery was negative for SARS-CoV-2, and all infants were infected after delivery. Upon admission, symptoms included fever (11, 79%), rhinorrhea (n=9, 64%), cough (n=3, 21%), diarrhea (n=4, 28.5%), drowsiness (n=3, 21%), feeding difficulties (n=3, 21%), and tachypnea (n=2, 14%). 1 infant was asymptomatic. Chest X-rays were performed in 13 (92.8%) infants, and diffuse interstitial infiltration was detected in 7 of them (54%). 1 infant had extra right upper lobe consolidation. Laboratory tests revealed neutropenia (n=7, 50%), monocytosis (n=6, 42.9%), or both (n=3, 21%) but not lymphopenia. None received specific treatment for SARS-CoV-2. During hospitalization, mothers stayed in the same room with their infants to enhance mother-infant bonding and continued breastfeeding. All patients were discharged 2-12 days after admission in excellent condition but still positive for SARS-CoV-2. 7 infants tested positive for SARS-CoV-2 by RT-PCR up to 35 days	The authors reported clinical characteristics and management of 253 neonates and infants aged <3 months with SARS-CoV-2 infection between February-September 2020 at a hospital in Greece. 14 (5.5%) tested positive for SARS-CoV-2, all were discharged 2-12 days after admission in excellent condition, and 7 remained positive for SARS-CoV-2 up to 35 days from the initial diagnosis. The findings suggest that COVID-19 is mild in infants but may be associated with prolonged viral shedding.	Spoulou V, Noni M, Koukou D, et al. Clinical characteristics of COVID-19 in neonates and young infants. Eur J Pediatr. 2021;1-5. doi:10.1007/s00431-021-04042-x.

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					from the initial diagnosis. The findings suggest that COVID-19 is mild in infants but may be associated with prolonged viral shedding.		
Pregnancy, vaccination, breast milk, lactation, infant, breast feeding	31-Mar-21	<a href="#">Anti-SARS-CoV-2 antibodies induced in breast milk after Pfizer-BioNTech/BNT162b2 vaccination: SARS-CoV-2 antibodies in breast milk after vaccination</a>	American Journal of Obstetrics and Gynecology	Research Letter	In this letter, the authors describe their study characterizing breast milk levels of anti-SARS-CoV-2 antibodies in 5 lactating people undergoing COVID-19 vaccination with the Pfizer-BioNTech/BNT162b2 vaccine in the USA [study dates and participant age not provided]. Participants provided frozen breast milk samples prior to, within the first 24 hours of, and weekly following vaccination. Samples were then assessed for SARS-CoV-2 RNA by quantitative RT-PCR and anti-spike immunoglobulin (Ig) G and IgA by an enzyme-linked immunosorbent assay. Anti-spike IgG and IgA levels were significantly elevated relative to pre-vaccine baseline at all time points. Anti-spike protein IgG remained sustained at a significant elevation beginning at 20 days after the first dose compared with the pre-vaccine baseline ( $p < 0.01$ ) through the final milk sample. Levels of anti-spike protein IgA were significantly elevated from baseline starting 2 weeks after the first dose through the final sample; however, individual-level data suggest a possible gradual decline in anti-spike IgA in human milk over time following the second dose. The authors conclude that given the sustained elevation of IgG/IgA levels after Pfizer-BioNTech/BNT162b2 vaccination, the vaccine may also confer protection against COVID-19 to breastfed infants.	In this letter, the authors describe their study characterizing breast milk levels of anti-SARS-CoV-2 antibodies in 5 lactating people undergoing COVID-19 vaccination with the Pfizer-BioNTech/BNT162b2 vaccine. They found that anti-spike IgG and IgA levels were significantly elevated in breast milk relative to pre-vaccine baseline at all time points after vaccination, and anti-spike protein IgG remained sustained beginning at 20 days after vaccination. The authors conclude that therefore the vaccine may also confer protection against COVID-19 to breastfed infants.	Kelly JC, Carter EB, Raghuraman N, et al. Anti-SARS-CoV-2 antibodies induced in breast milk after Pfizer-BioNTech/BNT162b2 vaccination: SARS-CoV-2 antibodies in breast milk after vaccination. <i>Am J Obstet Gynecol.</i> 2021;S0002-9378(21)00211-8. doi:10.1016/j.ajog.2021.03.031
Brazil; Breastfeeding; Breastfeeding guidelines; Breastfeeding practices; COVID-19; Milk bank; Public health; Skin-to-skin	31-Mar-21	<a href="#">The impact of coronavirus outbreak on breastfeeding guidelines among Brazilian hospitals and maternity services: a cross-sectional study</a>	International Breastfeeding Journal	Research Article	This study analyzed whether Brazilian hospitals and maternity services promote and support breastfeeding among mothers with suspected or confirmed COVID-19. Data were collected from representatives of 24 Brazilian hospitals and maternity services between March and July 2020. The vast majority of hospitals (75%) developed their own guidelines, largely due to socio-economic differences between the regions requiring adaptation of established recommendations based on what is feasible. In delivery rooms, 98.5% of the services prohibited immediate and uninterrupted skin-to-skin contact between mothers and their infants and did not support the initiation of breastfeeding in the 1st hour of life. In the postnatal ward, 98.5% allowed breastfeeding while implementing respiratory hygiene practices to prevent transmission of SARS-CoV-2. Only 1 hospital (4.1%) recommended dyad separation. The decision to breastfeed was shared with the mother in 75% of hospitals; however, a companion was not allowed in the majority of centers (83.3%). Hospital discharge was mostly between 24 and 28 h (79.1%); discharge guidelines were not individualized. 87.5% allowed in-hospital and at-home breast pumping for feeding neonates expressed maternal milk (87.5%); however 95.8% recommended against breast milk donation. The authors conclude that in Brazil, hospitals have not followed recommendations to protect, promote, and support breastfeeding during the COVID-19	This study analyzed whether Brazilian hospitals and maternity services promote and support breastfeeding among mothers with suspected or confirmed COVID-19. The authors conclude that in Brazil, hospitals have not followed recommendations to protect, promote, and support breastfeeding during the COVID-19 pandemic, which they consider to be caused by a lack of consistency among international guidelines.	Gonçalves-Ferri WA, Pereira-Cellini FM, Coca K, et al. The impact of coronavirus outbreak on breastfeeding guidelines among Brazilian hospitals and maternity services: a cross-sectional study. <i>Int Breastfeed J.</i> 2021;16(1):30. Published 2021 Mar 31. doi:10.1186/s13006-021-00377-1

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					pandemic, which they consider to be caused by a lack of consistency among international guidelines.		
COVID-19; vitamin D; vitamin D deficiency; severity; pediatric; inflammatory markers	31-Mar-21	<a href="#">The association between vitamin D levels and the clinical severity and inflammation markers in pediatric COVID-19 patients: single-center experience from a pandemic hospital</a>	European Journal of Pediatrics	Original Research	The authors evaluated the relationship between vitamin D (25 OH vitamin D) levels, clinical severity, and inflammatory markers in pediatric patients with COVID-19. They conducted a retrospective cohort study using the clinical and laboratory records of children attending the pediatrics department in Istanbul, Turkey, between March-May 2020 with laboratory-confirmed SARS-CoV-2 infection. A total of 103 patients with COVID-19 were enrolled and divided into an asymptomatic group, mild group, and moderate-to-severe group. The mean age was 12.2 ± 4.92 (range 1–17) years and 52.4% (n = 54) were male. The prevalence of vitamin D deficiency in the asymptomatic, mild, and moderate-to-severe groups were 17.2%, 35.4%, and 70.6%, respectively. The moderate-to-severe group also had the lowest median 25-OH vitamin D levels and the highest level of inflammatory markers compared to the other groups. The mild and asymptomatic group had similar laboratory findings in terms of inflammatory and calcium metabolism markers. In terms of vitamin D, 55.8% (n=24) of the deficient group, 17.1%(n=1) of the insufficient group, and 15.8% (n=3) of the sufficient group had moderate-to-severe clinical disease (p<0.001). 25 OH vitamin D was positively correlated with lymphocyte count (r=0.375, p<0.001), and was negatively correlated with age (r= -0.496, p <0.001), C-reactive protein (r=-0.309, p=0.002), and fibrinogen levels (r=-0.381, p<0.001). Additionally, the authors found that vitamin D deficiency (OR 6.16; 95% CI 1.66–22.81; p = 0.006), D-dimer (OR 2.03; 95% CI 1.11–3.70; p = 0.02), and fibrinogen levels (OR 1.01; 95% CI 1.0–1.02; p = 0.004) at admission were independent predictors of moderate-to-severe clinical course. The authors suggest that in the context of lockdown measures, prophylactic vitamin D supplementation may be considered especially for the adolescent age group during the COVID-19 pandemic as a health policy.	The authors evaluated the relationship between vitamin D (25 OH vitamin D) levels, clinical severity, and inflammatory markers in pediatric patients with COVID-19. The moderate-to-severe clinical group had significantly higher inflammation markers and significantly lower vitamin D levels than the mild or asymptomatic groups. The authors suggest that in the context of lockdown measures, prophylactic vitamin D supplementation may be considered especially for the adolescent age group during the COVID-19 pandemic as a health policy.	Bayramoğlu E, Akkoç G, Ağbaş A, et al. The association between vitamin D levels and the clinical severity and inflammation markers in pediatric COVID-19 patients: single-center experience from a pandemic hospital. Eur J Pediatr. 2021 Mar 31:1–7. doi: 10.1007/s00431-021-04030-1. Epub. PMID: 33788001; PMCID: PMC8009933.
COVID-19; diagnosis; pediatric patients	31-Mar-21	<a href="#">Saliva as a Reliable Sample for COVID-19 Diagnosis in Paediatric Patients</a>	medRxiv	Preprint (not peer-reviewed)	The authors aimed to compare the performances of nasopharyngeal swabs (NPS) to saliva in the detection of SARS-CoV-2 in children in Brazil. The sample was recruited from children with suspected COVID-19 who attended public healthcare services in Sao Paulo, Brazil, and included 50 patients (54% girls, mean age = 10.24 years [range not given]). Saliva was collected after symptom presentation in all symptomatic children (mean time from symptoms = 4.76 days). Within the sample, 46 children reported symptoms (60% nasal mucosal inflammation, 57% cough, 46% sore throat), and 10 children tested positive for SARS-CoV-2 infection via NPS, saliva, or both. None of the reported symptoms were significantly associated with COVID-19 diagnosis (p > 0.05 for all symptoms). The authors tested concordance between saliva and NPS measures with a Kappa concordance test (k=0.70, p<0.001) and found 92% concordance between samples. As such, the authors conclude that saliva and NPS	The authors compared nasopharyngeal swabs (NPS) and saliva tests for the detection of SARS-CoV-2 in Brazilian children. They found high concordance that was statistically significant between the test types, and conclude that saliva is a viable alternative to NPS testing to improve surveillance, especially in pediatric populations.	Felix AC, de Paula AV, Ribeiro AC, et al. Saliva as a Reliable Sample for COVID-19 Diagnosis in Paediatric Patients. medRxiv. 2021. doi: 10.1101/2021.03.29.2124566

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					have similar test performance in detecting SARS-CoV-2 infection, and that saliva is a viable and less invasive alternative for this purpose. In children especially, use of salivary tests can promote more widespread testing and thereby prevent transmission of SARS-CoV-2.		
COVID-19, SARS-CoV-2, Household, Transmission, Children, Pediatric; age, School-aged	31-Mar-21	<a href="#">Pediatric Household Transmission of SARS-CoV-2 Infection</a>	medRxiv	Preprint (not peer-reviewed)	The authors of this study sought to compare the odds of household SARS-CoV-2 transmission for younger children compared to older children. Included individuals were those residing in private households (n=132,232 cases in 89,181 households) with laboratory-confirmed SARS-CoV-2 infections between June 1 and December 31, 2020 in Ontario, Canada. Age groups included were all <18 years of age (0-3, 4-8, 9-13, and 14-17 years). The results included a total of 6,280 households with pediatric index cases, and 1,717 (27.3%) of these households experienced secondary transmission. Children aged 0-3 years had the highest odds of being index cases for household transmission, compared to children aged 14-17 years (aOR 1.43, 95% CI: 1.17-1.75). Children aged 4-8 years and 9-13 years also had increased odds of being index cases for transmission (4-8 years: aOR 1.40, 95% CI: 1.18-1.67; 9-13 years: aOR 1.13, 95% CI: 0.97-1.32). The authors conclude that younger children are more likely to transmit SARS-CoV-2 infection compared to older children, and the highest odds of being index cases for transmission was observed for children aged 0-3 years.	The authors of this study sought to compare the odds of household SARS-CoV-2 transmission for younger children compared to older children. It was concluded that younger children are more likely to transmit SARS-CoV-2 infection compared to older children, and the highest odds of being index cases for transmission was observed for children aged 0-3 years (aOR 1.43, 95% CI: 1.17-1.75).	Paul LA, Daneman N, Schwartz KL, et al. Pediatric household transmission of SARS-CoV-2 infection. 2021. doi: 10.1101/2021.03.29.21254565
COVID-19; lockdown; pediatric emergency department; volumes; illness; injury	30-Mar-21	<a href="#">The injury-illness dichotomy of COVID-19 on the pediatric ED</a>	American Journal of Emergency Medicine	Article	The authors compared pediatric emergency department visits (PED) [no ages given] during the COVID-19 lockdown periods in Israel to the previous 3 years' averages. Israel had 3 lockdown periods: March 14-April 18, 2020; September 18-October 17, 2020; and December 27, 2020-February 7, 2021. There was a 28% decrease in patient volume from February 1, 2020- January 31, 2021, compared to the previous 3 years. In August 2020, patient volumes began to reach pre-pandemic levels, but the second lockdown in September 2020 caused a 50% decrease in PED visits. Pediatric admissions were decreased slightly from 19.6% in the previous 3 years to 18% during the pandemic. PED patient volumes were most pronounced in children 0-2 years old. There were 59 PED patients with positive RT-PCR for SARS-CoV-2 through January 31, 2021, and 43 of these occurred after September 1, 2020. As infectious disease diagnoses decreased during the lockdowns, injuries increased as the lockdowns progressed. Injuries including lacerations, dislocations, fractures, and open wounds exceed the prior years' averages from November 2020-January 2021. At the same time, head injuries increased by 56%. The severity of the injuries increased as the lockdowns progressed. The authors attribute the increase in injuries to "lockdown fatigue" and the lack of organized activities available.	The authors compared pediatric emergency department visits during the COVID-19 lockdown periods in Israel to the previous 3 years' averages. There was a 28% decrease in patient volume from February 1, 2020- January 31, 2021, compared to the last 3 years.	Scheier E, Levick N, Guri A, Balla U. The injury-illness dichotomy of COVID-19 on the pediatric ED. <i>Am J Emerg Med</i> . 2021. <a href="https://www.sciencedirect.com/science/article/pii/S0735675721002722">https://www.sciencedirect.com/science/article/pii/S0735675721002722</a> . doi: <a href="https://doi.org/10.1016/j.ajem.2021.03.086">https://doi.org/10.1016/j.ajem.2021.03.086</a>

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Inflammation, placenta, immunity, pregnancy, antibody	30-Mar-21	<a href="#">Pregnancy alters IL-1β expression and anti-viral antibody responses during SARS-CoV-2 infection</a>	American Journal of Obstetrics and Gynecology	Original Research	This study assessed the impact of SARS-CoV-2 infection during pregnancy on inflammatory and humoral responses in maternal and fetal samples and compared antibody responses among pregnant and non-pregnant women (age range 18-48 years) in the USA. Immune responses to SARS-CoV-2 were analyzed in 33 pregnant and 17 non-pregnant women who had either tested positive (pregnant n=22; non-pregnant n=17) or negative for SARS-CoV-2 (pregnant n=11). The authors measured pro-inflammatory and placental cytokine mRNAs, neonatal Fc receptor (FcRn) expression, and tetanus antibody transfer in maternal and cord blood samples. Additionally, they evaluated anti-spike (S) IgG, anti-S-receptor binding domain (RBD) IgG, and neutralizing antibody (nAb) responses to SARS-CoV-2 in serum or plasma collected from non-pregnant women, pregnant women, and cord blood. SARS-COV-2 positive pregnant women expressed more interleukin (IL)1β, but not IL6, in blood samples collected within 14 days versus >14 days after a confirmed SARS-CoV-2 test (p<0.05). Pregnant women with confirmed SARS-CoV-2 infection had reduced anti-S-RBD IgG titers and were less likely to have detectable nAb as compared with non-pregnant women (p<0.05). Although SARS-CoV-2 infection did not disrupt placental FcRn expression, maternal transfer of SARS-CoV-2 nAb was inhibited by infection during pregnancy. The authors conclude that SARS-CoV-2 during pregnancy was characterized by placental inflammation and reduced antiviral antibody responses.	The authors assessed the impact of SARS-CoV-2 infection during pregnancy on maternal and fetal inflammatory and humoral responses, and compared antibody responses to SARS-CoV-2 among pregnant and non-pregnant women. They found that pregnant women with SARS-CoV-2 had reduced anti-S-RBD IgG titers and were less likely to have detectable nAb as compared with non-pregnant women. Pregnant women also demonstrated increased IL1β within 14 days of confirmed infection. The authors conclude that SARS-CoV-2 during pregnancy was characterized by placental inflammation and reduced antiviral antibody responses.	Sherer ML, Lei J, Creisher P, et al. Pregnancy alters IL-1β expression and anti-viral antibody responses during SARS-CoV-2 infection. Am J Obstet Gynecol. 2021;S0002-9378(21)00208-8. doi:10.1016/j.ajog.2021.03.028
COVID-19; children; coronavirus; innate immunity; SARS-CoV-2; pandemic; MIC-S	30-Mar-21	<a href="#">The Relationship between COVID-19 and Innate Immunity in Children: A Review</a>	Children (Basel)	Review	This review article aims to analyze the potential influence of children's innate immune systems, with regard to the risk of contracting SARS-CoV-2, transmission, development of symptomatic COVID-19, and complications related to infection. The clinical presentation of SARS-CoV-2 infection in children is often mild; hypotheses exist surrounding the reasons for this and include the type of immune response in children, the varying levels of expression of the ACE2 receptors in children, and the competitive action of other respiratory viruses that colonize the nasopharyngeal mucosa. In addition to the expression of ACE2 in children, susceptibility of infection in children may be affected by anatomical mechanisms of the upper airways or the greater regenerative capacity of lungs in children. Altering complement systems and cytokines, which can lead to a reduction in type 1 interferon production and cause altered communication between innate and adaptive immunity, may play a role in improved immune efficacy of children. Still other factors, including the role of mast cells, lymphocytes, and eosinophils, may provide some explanation as to the differences in immune response between children and adults. It has also been studied that children who develop MIS-C have a distinct antibody response compared to adults with severe COVID-19. The authors report that further investigation is needed to study the relationship between the underlying immune profile and	The authors discussed the potential influence of children's innate immune systems, with regard to the risk of contracting the virus, transmission, development of symptomatic disease and complications related to infection. Further investigation is needed to study the relationship between the underlying immune profile and susceptibility to infection, disease severity, and development of long COVID in order to identify if children are most at risk of contracting the virus and experiencing worsening clinical outcomes.	Valentini P, Sodero G, Buonsenso D. The Relationship between COVID-19 and Innate Immunity in Children: A Review. Children (Basel). 2021;8(4):266. Published 2021 Mar 30. doi:10.3390/children8040266

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					susceptibility to infection, disease severity, and development of long COVID; this will aid in identifying which children are most at risk of contracting the virus and experiencing worsening clinical outcomes.		
SARS-CoV-2, B117 variant, children, school reopening, reproduction number, USA	30-Mar-21	<a href="#">Implications of a highly transmissible variant of SARS-CoV-2 for children</a>	Archives of Disease in Childhood	Letter	This letter responds to a recent article by Viner et al., which found no evidence that children are more likely to transmit SARS-CoV-2 than adults, thus concluding that social distancing measures can be relaxed in this group. The authors of this letter show that their own analysis reached similar conclusions. When looking at the reproduction number (R) among USA-based students, they found an R <1 at the population level in children and teens. Further, children aged 0-9 years contributed <5% of spread, while teens 10-19 years contributed <10%. However, the novel B117 variant is expanding globally, and predicted R values for this variant remain slightly <1 for children and around 1 for teens. Thus, the B117 variant could qualitatively change the nature of SARS-CoV-2 spread in schools, but data does not indicate that transmission will become exponential. The authors urge expansion of SARS-CoV-2 testing in schools, and state that more stringent mitigation measures may become necessary where the B117 variant is spreading. The authors argue that the best course of action is to vaccinate high-risk individuals as rapidly as possible to prevent COVID-19 deaths and hospitalizations, and then to vaccinate adults aged 20–49 to reduce spread.	This letter responds to a recent article by Viner et al., which found no evidence that children are more likely to transmit SARS-CoV-2 than adults, thus concluding that social distancing measures can be relaxed in this group. The authors of this letter show predictive data indicating that the B117 variant will qualitatively change the nature of SARS-CoV-2 spread in schools, but likely will not cause exponential transmission. The authors urge expansion of SARS-CoV-2 testing in schools, and state that more stringent mitigation measures may become necessary where the B117 variant is spreading.	Ratmann O, Bhatt S, Flaxman S. Implications of a highly transmissible variant of SARS-CoV-2 for children [published online ahead of print, 2021 Mar 30]. Arch Dis Child. 2021. doi:10.1136/archdischild-2021-321903
COVID-19; breastfeeding; immune response	30-Mar-21	<a href="#">High Levels of Interferon-Alpha Expressing Macrophages in Human Breast Milk During SARS-CoV-2 Infection: A Case Report</a>	Breastfeeding Medicine	Case Study	This case study in the United States analyzed the immune composition of human milk before and after the subject contracted SARS-CoV-2. Samples of expressed breast milk were collected from a mother at 1 month (January 2020) and 7 months post-delivery (after confirmed COVID-19 diagnosis). Leukocytes, lymphoid, and myeloid cells from the samples were sorted and investigated. There was a notable increase in the percentage of macrophages expressing IFN $\alpha$ (1% to 8%). This indicates that the virus did not infect breast cells, or that the infection had progressed past the immune silencing stage. Dendritic cells had reduced IFN $\alpha$ expression after SARS-CoV-2 infection [no statistics given], and there was no significant difference in the leukocytes (CD45+) between samples. The authors state that the increase in macrophages expressing IFN $\alpha$ is most likely due to the presence of active SARS-CoV-2 infection. They conclude that their results provide evidence that infants could receive protection from SARS-CoV-2 infection from drinking milk expressed by mothers with COVID-19.	This case study in the United States analyzed the immune composition of human milk before and after the subject contracted SARS-CoV-2. The authors argue that the observed increase in IFN $\alpha$ + macrophages during SARS-CoV-2 infection could provide infants with protection from the virus.	Yu JC, Khodadadi H, Salles EL et al. High Levels of Interferon-Alpha Expressing Macrophages in Human Breast Milk During SARS-CoV-2 Infection: A Case Report. Breastfeeding Medicine. 2021. doi: https://doi.org/10.1089/bfm.2020.0369

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
COVID-19; pediatric; imaging; United States	30-Mar-21	<a href="#">Pediatric radiologic manifestations of COVID-19</a>	Clinical Imaging	Article	The authors evaluated and described the radiologic imaging findings of a pediatric cohort at a hospital in the United States. All patients aged 0-21 years with SARS-CoV-2 based on PCR or immunoglobulin testing between 12 March-1 July 2020 were identified. Imaging was reviewed by the authors and presence of abnormalities determined by consensus. Out of 130 SARS-CoV-2-positive patients (mean age=12.2 years, range=4 months-21 years; 45% male), 24 underwent imaging, including 21 chest radiographs and 4 chest CT scans. Chest X-rays were normal in 33% of patients. Patchy or streaky opacities were the most common radiographic abnormality, each seen in 38% of patients. CT findings were similar to those reported in adults and included ill-defined or geographic ground glass opacities, dense opacities, septal thickening and crazy paving, and small pleural effusions. Radiologic findings of COVID-19 in pediatric patients range from normal to severe acute respiratory distress syndrome-type appearance. During the pandemic, these radiographic signs can be useful for evaluating disease status and guiding care, particularly in those with comorbidities.	The authors evaluated and described the radiologic imaging findings of a pediatric cohort at a hospital in the United States. Radiologic findings of COVID-19 in pediatric patients were similar to those seen in adults, and may range from normal to severe acute respiratory distress syndrome-type appearance.	Romberg EK, Menashe SJ, Kronman MP, et al. Pediatric radiologic manifestations of COVID-19. <i>Clin. Imaging.</i> 2021. doi:10.1016/j.clinimag.2021.03.032.
COVID-19; pregnancy; stress; depression; United States	30-Mar-21	<a href="#">Pregnancy during the pandemic: The impact of COVID-19-related stress on risk for prenatal depression</a>	Psychological Medicine	Original Research	The authors examined the impact of stress and adversity related to the COVID-19 pandemic among pregnant women in California, United States, in a survey-based study between March-May 2020. 333 pregnant women (mean age=33.69 ± 4.38 years; mean gestational age=26.79 ± 8.81 weeks) were included in the analysis. The study participants' (COVID-19 cohort) self-reported depressive symptoms were compared to women (pre-pandemic cohort) matched on demographic factors and history of mental health difficulties, who were pregnant before the pandemic between February 2017-May 2019 (n=88; mean age=32.55 ± 5.04 years; mean gestational age=24.44 ± 5.47 weeks). The results showed that whereas 25% of participants in the pre-pandemic cohort had possible depression, 51% of participants in the COVID-19 cohort had possible depression, corresponding to a relative risk ratio of 1.81, 95% CI[1.20, 2.75]. Higher depressive symptoms were associated with distress about social interaction disruptions (Spearman's $\rho=0.35$ ), distress about reduced access to resources ( $\rho=0.34$ ), impacts on employment and finances ( $\rho=0.18$ ), and changes to prenatal care ( $\rho=0.14$ ). The findings suggest that pregnant women experienced elevated depressive symptoms in response to the pandemic. In addition to policies that mitigate disruptions to the environment due to the pandemic, treatments that focus on cognitions about self and the environment may help to alleviate depressive symptoms in pregnant women.	The authors examined the impact of stress and adversity related to the COVID-19 pandemic among pregnant women in California, United States, in a survey-based study between March-May 2020. Women who were pregnant during the pandemic were nearly twice as likely to have possible depression than were matched women who were pregnant before the pandemic. In addition to policies that mitigate disruptions to the environment due to the pandemic, treatments that focus on cognitions about self and the environment may help to alleviate depressive symptoms in pregnant women.	King LS, Feddoes DE, Kirshenbaum JS, et al. Pregnancy during the pandemic: The impact of COVID-19-related stress on risk for prenatal depression. <i>Psychol Med.</i> 2021:1-32. doi:10.1017/S003329172100132X.

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
COVID-19; children; DNA methylation; prognostic markers; United States	29-Mar-21	<a href="#">DNA methylation architecture of the ACE2 gene in nasal cells of children</a>	Scientific Reports	Original Research	The authors investigated DNA methylation (DNAm) architecture of the ACE2 gene in nasal cells of children in the United States. Nasal swabs from anterior nares of 547 children (50.6% male; mean age=12.95 ± 0.65 yrs, range=11.8-15.4 yrs; 67.1% White) were collected and DNAm was measured. ACE2 CpGs were differentially methylated by sex, with 12 sites having lower DNAm (mean=12.71%) and 3 sites greater DNAm (mean=1.45%) among females relative to males. Differential DNAm at 5 CpGs was observed for Hispanic females (mean absolute difference=3.22%) and lower DNAm at 8 CpGs for Black males (mean absolute difference=1.33%), relative to White participants. Longer DNAm telomere length was associated with greater ACE2 DNAm at 11 and 13 CpGs among males (mean absolute difference=7.86%) and females (mean absolute difference=8.21%), respectively. All findings were significant at FDR<0.05. These nasal ACE2 DNAm differences could contribute to the understanding of COVID-19 severity and disparities reflecting upstream environmental and social influences.	The authors investigated DNA methylation (DNAm) architecture of the ACE2 gene in nasal cells of children in the United States. The results demonstrate that ACE2 nasal DNAm reflects differences by sex and race/ethnicity. The nasal epigenetic architecture of the ACE2 gene could contribute to the understanding of COVID-19 severity and disparities reflecting upstream environmental and social influences.	Cardenas A, Rifas-Shiman SL, Sordillo JE, et al. DNA methylation architecture of the ACE2 gene in nasal cells of children. <i>Sci Rep.</i> 2021;11(1):7107. doi:10.1038/s41598-021-86494-7.
COVID-19; academic medical centers; coronavirus; program implementation; telehealth	29-Mar-21	<a href="#">Implementation of telehealth during COVID-19: Implications for providing behavioral health services to pediatric patients</a>	Journal of Child Health Care	Original Research	The authors examined the use of telehealth among 23 behavioral health providers in a pediatric setting during the COVID-19 pandemic (dates not specified) in the United States. Questionnaires were distributed prior to and three weeks following the implementation of the telehealth program. Most providers (n = 18, 72%) did not have prior experience using telehealth for providing care, and 12 (48%) had no previous training on telehealth. Most of the providers noted an increase in their confidence in providing services via telehealth in the first month of program implementation (r = .44, 95% CI [-.05, .93]). Technology issues were noted as the most prominent barrier to providing services via telehealth (n = 22, 96%), and most (n = 19, 83%) indicated a preference for in-person service delivery due to these barriers and better opportunities for rapport-building, observation of behavior, and reducing distractions. Despite these limitations, most of the providers surveyed plan to use telehealth going forward for some services. The authors provide several suggestions for future research on the use of telehealth for pediatric behavioral health services, implications for practice, and suggested policy changes for clinicians to continue to use telehealth to provide mental and behavioral health services.	This article examined the use of telehealth among pediatric behavioral health providers in the United States during the COVID-19 pandemic. Most of the providers did not have prior experience using telehealth but noted an increase in confidence in providing services via telehealth going forward. The authors provide suggestions for future research, practice, and policy on the use of telehealth for pediatric behavioral health services.	Frye WS, Gardner L, Campbell JM, Katzenstein JM. Implementation of telehealth during COVID-19: Implications for providing behavioral health services to pediatric patients [published online, 2021 Mar 29]. <i>J Child Health Care.</i> 2021;13674935211007329. doi:10.1177/13674935211007329
ARDS; COVID-19; SARS-CoV-2; children; pneumonia; respiratory involvement; respiratory system	29-Mar-21	<a href="#">COVID-19 in Children: Respiratory Involvement and Some Differences With the Adults</a>	Frontiers in Pediatrics	Review	In this review, the authors summarize mechanisms and findings distinguishing adult from pediatric COVID-19 with respect to respiratory involvement, taking into account the physiopathology, diagnosis, clinical presentation, severity, treatment, and control of disease. With respect to immunology, the availability of a greater number of B and T lymphocytes observed in children can prevent an excessive inflammatory response thereby resulting in a less severe course of illness. Additionally, coagulation and endothelial function are more preserved in children possibly reducing the risk of vasculitis or thrombotic issues. Viral coinfections with SARS-CoV-2	The authors summarized mechanisms and findings distinguishing adult from pediatric COVID-19 with respect to respiratory involvement, taking into account the physiopathology, diagnosis, clinical presentation, severity, treatment, and control of disease. The authors suggest that	Jurado Hernández JL, Álvarez Orozco IF. COVID-19 in Children: Respiratory Involvement and Some Differences With the Adults. <i>Front Pediatr.</i> 2021;9:622240. Published 2021 Mar 29. doi:10.3389/fped.2021.622240

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					<p>seem to play a protective role in children by reducing replication of the virus. For the majority of children, the child was found to have had contact with a confirmed case, and this usually occurred at home. In pediatric cases, fever and cough are the most common symptoms while dyspnea is most common in pneumonia and acute respiratory distress syndrome. Compared to adults, children present with other symptoms such as fatigue and muscle pain. The progression to severe forms of COVID-19 is infrequent in children. Compared to adults, children have a more peripheral, and often unilateral, distribution of lesions on chest imaging. Most children with COVID-19 have normal laboratory findings compared with adults. Pediatric treatment focuses on supportive care by respiratory support with supplemental oxygen and invasive or non-invasive ventilation, fluid and electrolyte support, and use of empiric antibiotics. Unlike adults, anticoagulation seems to be used less frequently in children. The authors suggest that knowledge gaps in the pediatric COVID-19 discussion still exist and it is imperative to continue comprehensive and specific investigations to reduce morbidity and mortality in this population.</p>	<p>knowledge gaps in the pediatric COVID-19 discussion still exist and it is imperative to continue comprehensive investigations to reduce morbidity and mortality in this population.</p>	
COVID-19; MIS-C; pediatric	29-Mar-21	<a href="#">Paediatric multisystem inflammatory syndrome and COVID-19: another novel syndrome?</a>	Hong Kong Medical Journal	Letter to the Editor	<p>The authors discuss multisystem inflammatory syndrome in children potentially associated with COVID-19, reported from studies conducted in the United States and the United Kingdom. They suggest the following definitions for MIS-C: persistent fever, inflammation, evidence of single or multi-organ dysfunction; fulfilling full or partial criteria for Kawasaki disease; positive/negative SARS-CoV-2 PCR test, and other microbial causes excluded. 50% of the patients had no microbiological evidence of COVID-19, suggesting a statistically significant correlation between COVID-19 and Kawasaki Disease (<math>p=0.0048</math>) as per previous reports. The authors note that the presentations may reflect a cytokine storm due to hyperinflammatory processes or vasculitic in nature- the latter due to similarities in the presentations of COVID-19 and other sepsis syndromes. They also note that although this phenomenon is reported in Western countries, the majority of cases are non-Caucasians. They hypothesize that SARS-CoV-2 may happen to be one of the many respiratory viruses that can cause a multisystem inflammatory syndrome in children, with the ‘novel phenomenon’ being septic or toxic shock syndrome associated with virus-triggered inflammation. They also caution against the loose coining of too many confusing abbreviations or syndromes associated with SARS-CoV diseases, such as SARS, MERS, COVID-19, MIS-C, PIMS/PIMS-TS, COVID toe syndrome, and COVID-skin syndrome.</p>	<p>The authors discuss multisystem inflammatory syndrome in children potentially associated with COVID-19, reported from studies conducted in the United States and the United Kingdom. They hypothesize that SARS-CoV-2 may happen to be one of the many respiratory viruses that can cause a multisystem inflammatory syndrome in children, with the ‘novel phenomenon’ being septic or toxic shock syndrome associated with virus-triggered inflammation. They also caution against the loose coining of too many confusing abbreviations or syndromes associated with SARS-CoV diseases.</p>	<p>Leung KKY, Hon KL, Wang MHT, Ng DKK, Ip P. Paediatric multisystem inflammatory syndrome and COVID-19: another novel syndrome? [published online, 2021 Mar 29]. Hong Kong Med J. 2021;10.12809/hkmj208681. doi:10.12809/hkmj208681</p>

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COVID-19; obstetric; pregnancy; acute respiratory distress syndrome; India	29-Mar-21	<a href="#">A Clinical Study on Initial Experience of COVID-19 ARDS in Obstetric Patients at a Tertiary Care Centre in India</a>	Case Reports in Obstetrics and Gynecology	Case Series	The authors reported a case series of 4 SARS-CoV-2-positive obstetric patients who presented with severe acute respiratory distress syndrome (ARDS) in a tertiary care hospital in India. The cases included a 26-year-old female who presented with shortness of breath 5 days postpartum; a 34-year-old female at 39 weeks' gestation who presented with fever, cough and breathlessness for 5 days; a 30-year-old female at 37 weeks + 2 days of gestation with gestational hypertension who presented with breathlessness for 2 days; and a 26-year-old female at 37 weeks + 5 days' gestation with hypothyroidism who was admitted for leaking amniotic fluid, progressed to full-term vaginal delivery, and had breathing difficulty and cough on postnatal day 2. All 4 women underwent chest X-rays revealing peripheral patchy infiltrates in bilateral lungs, and had increased inflammatory markers (serum ferritin, interleukin 6, C-reactive protein, and LDH). 2 had findings consistent with COVID-19 pneumonia, while the other 2 were diagnosed with ARDS owing to pulmonary edema. All women tested positive for SARS-CoV-2 and were administered steroids from day 1 with good response. 3 had live births; 1 was a diagnosed intra-uterine death. 1 neonate (Case 1) tested positive for SARS-CoV-2, and was discharged after 7 days in a healthy condition. Vertical transmission could not be documented due to no testing of breast milk, placenta, cord blood, and amniotic fluid. These cases highlight the importance of prevention, early diagnosis, and timely management of pneumonia in pregnant females with COVID-19.	The authors reported a case series of 4 SARS-CoV-2-positive obstetric patients who presented with severe acute respiratory distress syndrome (ARDS) in a tertiary care hospital in India. These cases highlight the importance of prevention, early diagnosis, and timely management of pneumonia in pregnant females with COVID-19.	Marwah S, Kanwar R, Naghma S, et al. A Clinical Study on Initial Experience of COVID-19 ARDS in Obstetric Patients at a Tertiary Care Centre in India. Case Rep Obstet Gynecol. 2021. doi:10.1155/2021/5591041.
SARS-CoV-2, pregnancy, sexually dimorphic effect, male infants, COVID-19, placental interferon stimulated genes, Fc-receptor expression	29-Mar-21	<a href="#">Sexually dimorphic placental responses to maternal SARS-CoV-2 infection</a>	bioRxiv	Preprint (not peer-reviewed)	In this article, the researchers explored placental interferon stimulated genes (ISGs), Fc-receptor expression, and SARS-CoV-2 antibody transfer in 68 pregnancies, 38 of whom had SARS-CoV-2 infection during pregnancy; 34 of the fetuses were female and 34 were male. There were no significant differences between groups with respect to maternal age, parity, obesity, diabetes, hypertension, or gestational age at delivery. Women with SARS-CoV-2 infection during pregnancy were more likely to be Hispanic (p=0.01). Sexually dimorphic placental expression of ISGs (p-values varied by gene) and Fc receptors (p-values varied by receptor) was observed following maternal SARS-CoV-2 infection, with upregulation in males. There was a sexually dimorphic effect of maternal SARS-CoV-2 infection on the expression of anti-inflammatory factor interleukin-10 (IL10) (p<0.01), driven by significantly increased expression in SARS-CoV-2-exposed male placentas. Reduced maternal SARS-CoV-2-specific antibody titers and impaired placental antibody transfer were noted in pregnancies with a male fetus. These results demonstrate fetal sex-specific maternal and placental adaptive and innate immune responses to SARS-CoV-2. The authors conclude that their findings of sexually dimorphic placental innate immune responses to infection, coupled with sex differences in transfer of maternal humoral immunity, may	The researchers examined the intersection of SARS-CoV-2-induced placental interferon responses, maternal-fetal antibody transfer, and fetal sex. Reduced maternal SARS-CoV-2-specific antibody titers and impaired placental antibody transfer were noted in pregnancies with a male fetus. The authors conclude that their findings of sexually dimorphic placental innate immune responses to infection, coupled with sex differences in transfer of maternal humoral immunity, may reveal broader vulnerabilities contributing to higher morbidity and mortality in male infants.	Bordt EA, Shook LL, Atyeo C, et al. Sexually dimorphic placental responses to maternal SARS-CoV-2 infection. bioRxiv. 2021. doi:10.1101/2021.03.29.437516

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					reveal broader vulnerabilities contributing to higher morbidity and mortality in male infants.		
MIS-C; COVID-19; Kawasaki disease; inflammation; intravenous immunoglobulin (IVIG)	29-Mar-21	<a href="#">The innate and adaptive immune landscape of SARS-CoV-2-associated Multisystem Inflammatory Syndrome in Children (MIS-C) from acute disease to recovery</a>	medRxiv	Preprint (not peer-reviewed)	This study aimed to identify the immunological changes in MIS-C patients and their relation to other pediatric inflammatory conditions to understand MIS-C pathogenesis. Between late April and October 2020 at Birmingham Women and Children's Hospital, 16 children meeting the MIS-C diagnostic criteria established by the UK Royal College of Pediatrics and Child Health with SARS-CoV-2 antibodies were recruited along with 2 children with Kawasaki Disease (KD) under the age of 5 who did not have SARS-CoV-2 antibodies. Patients' length of hospital stay ranged between 5 to 16 days, and 88% of MIS-C patients were admitted to the pediatric ICU from 2 to 8 days. Of the 16 MIS-C patients, 13 received IVIG, with 3 MIS-C patients (and 1 KD patient) receiving a second IVIG infusion due to ongoing inflammation. 8 MIS-C patients received IV methylprednisolone, and 1 patient received anti-IL6 therapy. All 18 patients survived without long-term cardiac complications at the time of the last follow-up. 2 days after IVIG treatment, MIS-C patients had increased CD163 expression on monocytes, expansion of a novel population of immature neutrophils, and decreased levels of pro-and anti-inflammatory cytokines in the blood accompanied by a transient increase in arginase in some patients. These results show that MIS-C and KD share substantial immuno-pathology and identify potential new mechanisms of action for IVIG, a widely used anti-inflammatory drug used to treat MIS-C, KD and other inflammatory diseases.	This study aimed to identify the immunological changes in MIS-C patients and their relation to other pediatric inflammatory conditions such as Kawasaki Disease to understand MIS-C pathogenesis related to COVID-19. The results show that MIS-C and KD share substantial immuno-pathology and identify potential new mechanisms of action for IVIG, a widely used anti-inflammatory drug used to treat MIS-C, KD and other inflammatory diseases.	Syrimi E, Fennell E, Richter A, et al. The innate and adaptive immune landscape of SARS-CoV-2-associated Multisystem Inflammatory Syndrome in Children (MIS-C) from acute disease to recovery. <i>medRxiv</i> . 2021. doi: 10.1101/2020.08.06.20164848
Infants, birth rate, lockdown, reproductive services	29-Mar-21	<a href="#">The first Italian COVID-19 lockdown reduced births and voluntary terminations by just under a fifth</a>	Acta Paediatrica	Brief Report	In this brief report, the authors describe a cross-sectional observational study conducted at the Institute for Maternal and Child Health, Trieste, Italy, which compared live births occurring from August 7, 2020-February 20, 2021 (24-42 weeks after the start of the COVID-19 lockdown), with the same period in the previous year. 308 infants were born in the pre-COVID study period, and 247 infants were born during the COVID-19 lockdown study periods, for a ~20% decrease in births overall. The authors hypothesize this may have been due to economic recession, concerns about healthcare and pregnancy complications, or closure of reproductive services during the pandemic. In assessment of secondary outcomes, the authors did not observe a significant difference in preterm delivery rate, C-section rate or ICU admissions, unlike previous reports. The authors conclude that their data suggests that effective policies are needed to support the Italian birth rate during the COVID-19 pandemic.	The authors describe a cross-sectional study conducted at a single institution in Italy, which compared live births occurring from August 7, 2020-February 20, 2021 (24-42 weeks after the start of the COVID-19 lockdown), with the same period in the previous year. They observed a ~20% decrease in live births, with no significant change in preterm delivery rates, C-sections rates, or ICU admissions. The authors call for policies to support the Italian birth rate during the COVID-19 pandemic.	Trombetta A, Travan L, Elefante P, et al. The first Italian COVID-19 lockdown reduced births and voluntary terminations by just under a fifth. <i>Acta Paediatr</i> . 2021; doi:10.1111/apa.15862

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Pregnancy, COVID-19, chronic disease, primary care providers	29-Mar-21	<a href="#">Preventing Chronic Diseases After Complicated Pregnancies in the COVID-19 Era: a Call to Action for PCPs</a>	Journal of General Internal Medicine	Viewpoint	This article discusses the need, barriers, and potential solutions regarding primary care providers (PCPs) and pregnancy-related chronic disease risk during and beyond the COVID-19 pandemic. Transitioning from obstetric to primary care after delivery helps to manage pregnancy-related chronic disease risk, and systematic planning for this postpartum care transition is needed. Virtual health care delivery can include this transition support, as well as patient-centered interventions like prenatal counseling, delivery discharge checklists, and patient navigation programs. Timely and longitudinal primary care is essential for women post-pregnancy. Checklists, templates, and best practice reminders can help PCPs to collect, document, and incorporate pregnancy complications into primary care management. In addition, tele-health and self-monitoring tools may help promote equity in postpartum care, when focused on patients with limited social and financial supports. PCPs need comprehensive guidance on pregnancy-related chronic disease risk. Therefore, medical school and residency curricula should teach about obstetric history as an essential consideration in chronic disease care. Lastly, population-specific research is needed to understand barriers and facilitators to primary care after pregnancy, and to develop and pilot test interventions addressing them. COVID-19 has increased the urgency of this work, by potentiating a future pandemic of preventable chronic diseases.	This article discusses the need, barriers, and potential solutions regarding primary care providers (PCPs) and pregnancy-related chronic disease risk during and beyond the COVID-19 pandemic. PCPs must work with obstetric care providers to ensure smooth and systematic postpartum care transitions; incorporate obstetric history into chronic disease risk assessment and management; and teach and train future PCPs to do the same. COVID-19 has increased the urgency of this work, by potentiating a future pandemic of preventable chronic diseases.	Murray Horwitz ME, Molina RL, Battaglia TA. Preventing Chronic Diseases After Complicated Pregnancies in the COVID-19 Era: a Call to Action for PCPs [published online ahead of print, 2021 Mar 29]. J Gen Intern Med. 2021;1-3. doi:10.1007/s11606-021-06734-4
COVID-19; human milk bank; breastfeeding; donor human milk; pasteurization; regional network	29-Mar-21	<a href="#">Human milk banks in the response to COVID-19: a statement of the regional human milk bank network for Southeast Asia and beyond</a>	International Breastfeeding Journal	Commentary	This paper reviews the COVID-19 guidelines on pregnancy, intrapartum, and postpartum care from 33 countries, including 7 in Southeast Asia, collected between March 21-April 30, 2020. Countries in Southeast Asia had inconsistent recommendations for mother-infant separation, direct breastfeeding, early initiation of breastfeeding, and skin-to-skin contact during the COVID-19 pandemic. As of December 2020, there were 35 human milk banks operating in 5 Southeast Asian countries, which are vital for providing donor human milk for vulnerable infants during the pandemic. The authors argue that WHO guidelines for the operation of human milk banks must be accelerated at this time, in order to increase coverage of milk bank services or establish milk banks in unserved countries. They provide the following 5 recommendations. First, revisit and update guidelines that recommend separation of infants from mothers with suspected or confirmed COVID-19. Second, ensure WHO recommendations, which prioritize breastfeeding and feeding with mother's expressed milk, are followed and promoted. Third, adapt human milk bank operations to meet the needs of the COVID-19 pandemic and strengthen supply for the long-term. Fourth, document experiences and lessons learned from the current human milk bank response. Fifth, maintain active engagement with regional and global communities of milk bank leaders.	The authors review COVID-19 guidelines on pregnancy, intrapartum, and postpartum care from 7 countries in Southeast Asia, and conclude that there is an unmet need for human milk bank service in this area during the COVID-19 pandemic. They urge that the WHO guidelines for the operation of human milk banks must be accelerated, and provide future recommendations.	Olonan-Jusi, E., Zambrano, P.G., Duong, V.H. et al. Human milk banks in the response to COVID-19: a statement of the regional human milk bank network for Southeast Asia and beyond. Int Breastfeed J 16, 29 (2021). <a href="https://doi.org/10.1186/s13006-021-00376-2">https://doi.org/10.1186/s13006-021-00376-2</a>

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
COVID-19, vaccine acceptability, pregnancy	29-Mar-21	<a href="#">Attitudes toward COVID-19 illness and COVID-19 vaccination among pregnant women: a cross-sectional multicenter study during August-December 2020</a>	medRxiv	Preprint (not peer-reviewed)	This study evaluates pregnant women’s attitudes toward COVID-19 illness and vaccination and identifies factors associated with vaccine acceptability. 939 women (aged 18-50 years old and <28 weeks gestation) enrolled in a prospective COVID-19 cohort study across 3 US sites were surveyed between August 9 – December 10, 2020 regarding concerns about COVID-19 and likelihood of getting COVID-19 vaccine if one were available during pregnancy. Of 939 eligible pregnant women, 915 (97%) consented to participate (39% White, 23% Black, 33% Hispanic, and 4% Other). 62% received an influenza vaccine last season. 72% worried about getting sick with COVID-19 (95% CI: 69%-75%). If they were to get sick, 92% worried about harm to their pregnancy (95% CI: 91%-94%) and 80% about harm to themselves (95% CI: 77%-82%). 41% reported they would get a vaccine. Of women unlikely to get vaccinated, the most frequently cited concern was vaccine safety for their pregnancy (82%) (95% CI: 78%-85%). Non-Hispanic Black and Hispanic women had lower odds of accepting a vaccine compared with non-Hispanic White women (adjusted odds ratios (aOR) 0.4, 95%CI 0.2–0.6 for both). Receipt of influenza vaccine during the previous season was associated with higher odds of vaccine acceptability (aOR 2.1, 95%CI 1.5-3.0). Although most pregnant women worried about COVID-19 illness, <50% were willing to get vaccinated during pregnancy. Racial and ethnic disparities in plans to accept COVID-19 vaccine highlight the need to prioritize strategies to address perceived barriers among groups at high risk for COVID-19.	This study evaluates pregnant women’s attitudes toward COVID-19 illness and vaccination and identifies factors associated with vaccine acceptability. Although most pregnant women worried about COVID-19 illness, <50% were willing to get vaccinated during pregnancy. Racial and ethnic disparities in plans to accept COVID-19 vaccine highlight the need to prioritize strategies to address perceived barriers among groups at high risk for COVID-19.	Battarbee AN, Stockwell MS, Varner M, et al. Attitudes toward COVID-19 illness and COVID-19 vaccination among pregnant women: a cross-sectional multicenter study during August-December 2020. medRxiv. doi/10.1101/2021.03.26.21254402
COVID-19; pediatric nephrology; telemedicine; United States	28-Mar-21	<a href="#">Telemedicine for Pediatric Nephrology: Perspectives on COVID-19, Future Practices, and Workflow Changes</a>	Kidney Medicine	Article	The authors addressed the lack of standardized workflows to assess and treat for various nephrotic conditions, symptoms, treatment modalities and transition processes in the pediatric population, due to the rapid implementation of telemedicine during the COVID-19 pandemic. In order to provide a foundation/suggestion for future standardized workflows, they developed standardized workflows via the Delphi method. These workflows were developed based on results from cross-sectional surveys of 400 patients [no demographic information provided] and 197 pediatric nephrologists in the United States between 28 February-30 June 2020. Most patients and providers were satisfied, 87% and 71% respectively, with telemedicine visits. Common concerns with the use of telemedicine included difficulty obtaining physical laboratory results and a lack of personal warmth during telemedicine visits. The workflows created on dialysis, acute nephrotic syndrome, glomerular disease management, chronic kidney disease, urinary tract infection, pediatric transplant telemedicine, home hemodialysis and remote peritoneal dialysis based on these suggestions will both enhance safety in treating patients and allow for the best possible care.	The authors addressed the lack of standardized workflows to assess and treat for various nephrotic conditions, symptoms, treatment modalities and transition processes in the pediatric population due to the rapid implementation of telemedicine during the COVID-19 pandemic. They created workflows based on suggestions from patients and providers, which will both enhance safety in treating patients and allow for the best possible care.	Raina R, Nair N, Sharma A, et al. Telemedicine for Pediatric Nephrology: Perspectives on COVID-19, Future Practices, and Workflow Changes. Kidney Med. 2021. doi:10.1016/j.xkme.2021.01.007.

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
COVID-19, pediatric, gastro-enterology, virtual consultation	27-Mar-21	<a href="#">Launch of a virtual pediatric gastroenterology consultation prior to the COVID-19 epidemic: A pioneering pilot project</a>	Annals of Pediatrics	Scientific Letter	This scientific letter details the launch of a pediatric gastro-enterology virtual consultation (VC) prior to the COVID-19 pandemic in Malaga, Spain. The VC is a tool that allows primary care (PC) pediatricians to consult with hospital-based pediatric specialists. The authors present the results of a pilot project between the Department of Pediatric Gastroenterology and Nutrition of the Hospital Regional Universitario de Málaga and 13 PC centers in the District of Malaga from October 2019 – March 2020. 77 VCs were held in 28 weeks, corresponding to 10.1% of total first visits (763). A clear improvement was found in the first visits to successive visits ratio, which decreased from 2.95 at start of program to 2.28 at the end. Follow up questionnaires were completed by 17 pediatricians to assess PC satisfaction. More than 75% reported being satisfied or very satisfied with, and had a positive perception of, certain aspects of the VCs. In 64 cases (83.1%) the primary concern was resolved. In those patients that required referral to in-person care, use of diagnostic tests decreased by 18.4%. The authors believe the COVID-19 pandemic has heightened patients' and providers' awareness of the need to introduce initiatives of this kind and believe the current situation may be a unique opportunity to do so.	This scientific letter details the launch of a pediatric gastro-enterology virtual consultation prior to the COVID-19 pandemic in Malaga, Spain. The authors believe the COVID-19 pandemic has heightened patients' and providers' awareness of the need to introduce initiatives of this kind and believe the current situation may be a unique opportunity to do so.	Martín-Masot R, Torcuato Rubio E, Núñez Cuadros E, Navas-López VM, Urda Cardona AL. Launch of a virtual pediatric gastroenterology consultation prior to the COVID-19 epidemic: A pioneering pilot project [published online ahead of print, 2021 Mar 27]. <i>An Pediatr (Engl Ed)</i> . 2021;10.1016/j.anpede.2020.07.015. doi:10.1016/j.anpede.2020.07.015
COVID-19; children; oral mucosa; taste; Italy	27-Mar-21	<a href="#">Non-specific oral and cutaneous manifestations of Coronavirus Disease 2019 in children</a>	Medicina Oral, Patología Oral y Cirugía Bucal	Article	This retrospective cross-sectional study investigated oral and cutaneous manifestations in children affected by COVID-19 in Italy. Medical records of children with laboratory evidence of COVID-19 admitted to a pediatric clinic from March-April 2020 were reviewed. 27 pediatric patients (70.4% male; mean age=4.2 years ± 1.7 years, range=3 months to 14 years) were analyzed. 63% of patients had a history of COVID-19 in the family. The clinical presentation of the disease mainly included elevated body temperature >37°C (92.5%) and cough (37%). The following oral lesions were recorded: oral pseudo-membranous candidiasis (7.4%), geographic tongue (3.7%), coated tongue (7.4%) and hyperemic pharynx (37%). Taste alteration was reported by 3 patients (11.1%). 6 patients (22.2%) had cutaneous flat papular lesions. COVID-19 appeared to be associated with non-specific oral and cutaneous manifestations in this pediatric sample.	This retrospective cross-sectional study investigated oral and cutaneous manifestations in children affected by COVID-19 in Italy. COVID-19 appeared to be associated with non-specific oral and cutaneous manifestations in this pediatric sample.	Bardellini E, Bondioni MP, Amadori F, et al. Non-specific oral and cutaneous manifestations of Coronavirus Disease 2019 in children. <i>Med Oral Patol Oral Cir Bucal</i> . 2021;24461. doi:10.4317/medoral.24461.
End of life, oncology, pediatrics, telemedicine, communication	27-Mar-21	<a href="#">The invisible barrier: Providing end of life support to pediatric oncology families during COVID-19</a>  <a href="#">[Free Access to Abstract Only]</a>	Journal of Psychosocial Oncology	Perspective	This article provides an overview of unique challenges psychosocial providers experienced in offering end of life support to pediatric oncology patients and their families during COVID-19 in the USA, as well as lessons learned and recommendations for other psychosocial providers during COVID-19. Therapeutic pauses are often well-received when supporting patients and families face-to-face; however, the effect was often lost and led to confusion when providing end of life care remotely. Subtle non-verbal communication effectively utilized when supporting patients and families in-person was often lost through a screen. In addition, one important way in which psychosocial providers are typically able to support patients and families as their child is at end of life is through	In this article, the authors describe the challenges psychosocial providers experienced in offering end of life support to pediatric oncology patients and their families during COVID-19 in the USA. They offer the following recommendations: 1) Address the elephant in the room and acknowledge that the setting is different. 2) Embrace technology. 3) Give yourself	Jones A, Anderst A, Harman J. The invisible barrier: Providing end of life support to pediatric oncology families during COVID-19. <i>J Psychosoc Oncol</i> . 2021;1-3. doi:10.1080/07347332.2021.1902453

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					a hug or supportive touch. Not being able to provide support in this way felt unnatural for some. The authors provide the following recommendations when considering these challenges: 1) Address the elephant in the room and acknowledge that the setting is different. 2) Embrace technology. 3) The importance of giving yourself grace. The authors conclude that it is imperative to recognize we are all doing the best we can in this new and different situation.	grace. The authors conclude that it is imperative to recognize we are all doing the best we can in this new and different situation.	
Italy, adolescent, obesity, COVID-19, lockdown, physical activity, sedentary behavior, weight gain, BMI	27-Mar-21	<a href="#">Adolescent males suffered from reduced physical activity and increased BMI during COVID-19 pandemic</a>	Cardiovascular Diseases	Short Communication	This article seeks to determine how social restriction has contributed to weight changes in obese adolescents, as well as evaluate parameters influencing weight changes. COVID-19 pandemic-related lockdowns have forced a decrease in physical activity (PA) and an increase in sedentary behavior (SB). Parameters of 51 (31 males, 20 females) obese adolescents (10-18 years old, female mean age = 14.7±2.1 years, male mean age = 14.8±2.0 years) in Italy were compared within 2 months before March 8 (lockdown start) and within 40 days after May 18th (lockdown end). PA and SB are expressed in metabolic equivalents (METs), where moderate intensity activities had 3-6 METs and vigorous activity had >6 METs. Mean weight gain during lockdown was 2.8±3.7 kg (p <0.001). Weight increase was higher in males than in females (3.8±3.4 kg vs 1.2±3.7 kg, p=0.02). The hours dedicated to SB increased (+2.9±2.8 hours/day; p<0.001) while the hours of PA decreased (-1.0±1.6 hours/week; p<0.001). Males spent more hours in SB than females (+3.8±2.7 hours/day vs +1.5±2.5 hours/day; p=0.003). There were minor changes in diet during lockdown. The most significant variables influencing both change in BMI and waist/height ratio increase were hours devoted to SB during lockdown and differences in mild and moderate PA before and after lockdown. The authors conclude that lockdown has worsened BMI and central obesity in adolescents with obesity, mainly due to reduced PA.	This article seeks to determine how social restriction has contributed to weight changes in obese adolescents in Italy, as well as evaluate parameters influencing weight changes. COVID-19 pandemic-related lockdowns have forced a decrease in physical activity (PA) and an increase in sedentary behavior (SB). In 51 obese adolescents, authors found that there was mean weight gain during lockdown, and SB hours increased. The authors conclude that lockdown has worsened BMI and central obesity in adolescents with obesity, mainly due to reduced PA.	Maltoni G, Zioutas M, Deiana G, Biserni GB, Pession A, Zucchini S. Adolescent males suffered from reduced physical activity and increased BMI during COVID-19 pandemic. Nutrition, Metabolism and Cardiovascular Diseases. March 2021. doi:10.1016/j.numecd.2021.03.018
Pregnancy, maternal health, C-section, preterm birth	27-Mar-21	<a href="#">Obstetrical and Newborn Outcomes among Patients with SARS-CoV-2 during Pregnancy</a>	Journal of Obstetrics and Gynaecology Canada	Original Research	In this multicenter, retrospective, matched cohort study the authors evaluated whether positive testing for SARS-CoV-2 during pregnancy was associated with any major adverse pregnancy outcomes. 45 pregnant women who delivered between March 22- July 31, 2020 at 2 sites in Canada who tested positive for SARS-CoV-2 on RT-PCR were included and matched to 225 pregnant patients who did not test positive for SARS-CoV-2 during pregnancy and delivered within one day at the same center. Nearly all patients with SARS-CoV-2 (44/45; 98%) were diagnosed in the 3rd trimester. 16% of patients with SARS-CoV-2 delivered preterm, compared with 9% of patients without SARS-CoV-2 (p = 0.28). Median gestational age at delivery (39.3 [interquartile range [IQR] 37.7–40.4] weeks vs. 39.1 [IQR 38.3–40.1] weeks) and median infant birthweight (3250 [IQR 2780–3530] grams vs. 3340 [IQR 3025–3665] grams) were similar between groups. Overall rates of C-section delivery and emergency cesarean were 29% (13/45) and 20% (8/40) among patients with SARS-CoV-2	In this study, the authors compared pregnancy outcomes between 45 pregnant women with SARS-CoV-2 during pregnancy and 225 controls. They did not find a significant difference in preterm birth, median age of gestation at delivery, median infant birthweight, C-section delivery, or emergency cesarean between the two groups. They conclude that in this cohort, they did not find any important differences in outcomes associated with SARS-CoV-2 during pregnancy.	Trahan MJ, Malhamé I, O'Farrell P, et al. Obstetrical and Newborn Outcomes among Patients with SARS-CoV-2 during Pregnancy. J Obstet Gynaecol Can. 2021;S1701-2163(21)00298-X. doi:10.1016/j.jogc.2021.03.012

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					respectively, compared to 34% (76/225) and 22% (43/192) among patients without SARS-CoV-2 (p=0.45 and p=0.74). The authors concluded that they did not find important differences in outcomes associated with SARS-CoV-2 during pregnancy.		
Asthma, COVID-19 lockdown, Exacerbations, Lung function test, Peak expiratory flow	27-Mar-21	<a href="#">Real-life Impact of COVID-19 Pandemic Lockdown on the Management of Pediatric and Adult Asthma: A Survey by the EAACI Asthma Section</a>	Allergy	Article	The authors of this study aimed to evaluate the management of adults and children with asthma during the COVID-19-related lockdown. A survey was launched by the European Academy of Allergy and Clinical Immunology (EAACI) via email, website, and social media to EAACI members and members of peer societies. The results showed that the survey was completed by 339 healthcare professionals from 52 different countries. The results showed that 79% of follow-up consultations were replaced by telephone calls, whereas 49% of newly referred patients attended the clinic. 62%, 76%, 66%, 76%, and 87% of responders did not conduct spirometry, impulse oscillometry, bronchodilator test, fractional exhaled nitric oxide measurement, or methacholine provocation, respectively, for asthma diagnosis in adults. The numbers were similar in children. 73% of respondents based the initial asthma diagnosis and the prescription of inhaled therapy on clinical parameters only. Pulmonary function tests were used in 29% of cases to monitor worsening asthma, and only 56% of respondents recommended ambulatory peak expiratory flow measurements to their patients. Using a scale from 1 (not at all) to 5 (very much), the respondents reported that the quality of health care provided and that the patients' asthma status had deteriorated during the lockdown with 3.2 points and 2.8 points, respectively. These results suggest that all necessary resources should be allocated to ensure the performance of lung function tests for initial diagnosis, whereas digital remote monitoring should be reinforced for the follow-up of children and adults with asthma.	The authors of this study aimed to evaluate the management of adults and children with asthma during the COVID-19-related lockdown via a survey sent to members of the European Academy of Allergy and Clinical Immunology and members of peer societies. 73% of respondents based the initial asthma diagnosis and the prescription of inhaled therapy on clinical parameters only, and pulmonary function tests were used in 29% of cases to monitor worsening asthma. These results suggest that all necessary resources should be allocated to ensure the performance of lung function tests for initial diagnosis, whereas digital remote monitoring should be reinforced for the follow-up of children and adults with asthma.	Eguiluz-Gracia I, van den Berge M, Boccabella C, et al. Real-life impact of COVID-19 pandemic lockdown on the management of pediatric and adult asthma: a survey by the EAACI Asthma Section [published online ahead of print, 2021 Mar 27]. Allergy. 2021;10.1111/all.14831. doi:10.1111/all.14831
COVID-19; neonate; neuroradiologic abnormality; Turkey	26-Mar-21	<a href="#">COVID-19-Associated Cerebral White Matter Injury in a Newborn Infant With Afebrile Seizure</a>	The Pediatric Infectious Disease Journal	Brief Report	The authors presented a case of neuro-radiologic abnormality associated with COVID-19 in a neonate with afebrile seizure in Turkey [date not specified]. The 4-day-old male born full-term by C-section without complications, presented to the emergency room with atypical movements of the right leg and arm without fever. There were no signs of neurologic deficit or other signs of meningeal irritation. The patient was admitted to the ICU with the diagnosis of afebrile seizure. Phenobarbital was administered. Brain MRI and cranial ultrasound revealed a radiologic pattern consistent with neonatal viral encephalopathy. The patient also tested positive for SARS-CoV-2 by nasopharyngeal RT-PCR on day 4 and day 11, although SARS-CoV-2 in cerebro-spinal fluid was negative. A nasopharyngeal swab sample was inoculated in cell culture (for SARS-CoV-2) which grew positive for SARS-CoV-2. On day 15, a nasopharyngeal swab for SARS-CoV-2 PCR was negative. Cranial ultrasound and brain MRI on day 15 no longer exhibited the previous neuro-radiologic findings. Throughout his hospitalization,	The authors presented a case of neuro-radiologic abnormality associated with COVID-19 in a neonate with afebrile seizure in Turkey. This case underlines the possible neurologic involvement of SARS-CoV-2 in children.	Yildiz H, Yarci E, Bozdemir SE, et al. COVID-19-Associated Cerebral White Matter Injury in a Newborn Infant With Afebrile Seizure. <i>Pediatr Infect Dis J</i> . 2021. doi:10.1097/INF.0000000000003143.

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					the patient did not show any notable respiratory symptoms. The patient was discharged on day 16 without any neurologic deficit. This case underlines the possible neurologic involvement of SARS-CoV-2 in children.		
Birth, midwives, birth centers, safety, economics	26-Mar-21	<a href="#">Pivoting to Childbirth at Home or in Freestanding Birth Centers in the US During COVID-19: Safety, Economics and Logistics</a>	Frontiers in Sociology	Original Article	During the COVID-19 pandemic, child bearers increasingly made the decision to be supported during labor in their homes. In this article, the authors examined the intersection of the safety and economic efficiency of birth in private homes and freestanding birth centers in the United States. In 2018, midwives attended 10.2% of births, with a home birth rate of <2%. Two recent meta-analyses examining perinatal outcomes for birthing people with low-risk pregnancies in high-income countries have demonstrated similar levels of safety for hospital and planned, midwife-attended births in private homes or freestanding birth centers, especially when midwives are well integrated into the health services. The average charge by a midwife for an uncomplicated home birth is \$2,870, and in hospitals, the average cost for an uncomplicated vaginal birth is \$12,156. If an additional 5% of deliveries occurred in private homes rather than in a hospital, the savings would be \$1.811 billion annually. Increased access to credentialed maternity-care providers requires new legislation for licensure and extended public insurance for home and freestanding birth center settings. The authors conclude that midwife-attended births in private homes and freestanding birth centers are the long overdue response to the shortage of appropriate services that existed even before COVID-19.	In this article, the authors examined the intersection of the safety and economic efficiency of birth in private homes and freestanding birth centers in the United States, which have increasingly occurred during the COVID-19 pandemic. They estimate that an additional 5% of deliveries in private homes rather than in a hospital would result in savings of \$1.811 billion annually without compromising safety. They conclude that midwife-attended births in private homes and freestanding birth centers are the long overdue response to the shortage of appropriate services that existed even before COVID-19.	Daviss BA, Anderson DA, Johnson KC. Pivoting to Childbirth at Home or in Freestanding Birth Centers in the US During COVID-19: Safety, Economics and Logistics. Front Sociol. 2021;6:618210. Published 2021 Mar 26. doi:10.3389/fsoc.2021.618210
COVID-19; children; MIS-C; chemokines; Italy	26-Mar-21	<a href="#">Plasmacytoid Dendritic Cells Depletion and Elevation of IFN-γ Dependent Chemokines CXCL9 and CXCL10 in Children With Multisystem Inflammatory Syndrome</a>	Frontiers in Immunology	Original Research	The authors investigated the pathogenesis of SARS-CoV-2-related clinical manifestations in COVID-19 pediatric patients with (n=9; median age=10 yrs, IQR 4-11 yrs) and without MIS-C (n=10; median age=2.7 yrs, IQR 0.25-11 yrs), in Italy between April-May 2020. Patients with MIS-C showed higher plasma levels of C-reactive protein (p= 0.0051), myeloperoxidase (p= 0.035), IL-6 (p= 0.043), and pro-inflammatory chemokines CXCL8 (p=0.018) and CCL2 (p= 0.008) than COVID-19 children. In addition, they displayed higher levels of the chemokines CXCL9 (p= 0.003) and CXCL10 (p= 0.018), mainly induced by IFN-γ. In contrast, IFN-α was detected in the plasma of children with COVID-19, but not in patients with MIS-C (p= 0.021). This observation was consistent with the increase of ISG15 and IFIT1 mRNA in COVID-19 patients (p=0.057 and p=0.028, respectively), while ISG15 and IFIT1 mRNA were detected in MIS-C patients at levels comparable to healthy controls. Moreover, the number of plasmacytoid dendritic cells were profoundly depleted in MIS-C, but not in COVID-19 (p=0.01). The results suggested type I interferon activation in COVID-19 children, while an active Th1-type immune response occurred in MIS-C. Immunological events, together with neutrophil activation, may be crucial in inducing the multisystem and cardiovascular damage observed in MIS-C.	The authors investigated the pathogenesis of SARS-CoV-2-related clinical manifestations in COVID-19 pediatric patients with and without MIS-C in Italy between April-May 2020. The results suggested type I interferon activation in COVID-19 children, while an active Th1 type immune response in MIS-C. The immunological events, together with neutrophil activation, may be crucial in inducing the multisystem and cardiovascular damage observed in MIS-C.	Caldarale F, Giacomelli M, Garrafa E, et al. Plasmacytoid Dendritic Cells Depletion and Elevation of IFN-γ Dependent Chemokines CXCL9 and CXCL10 in Children With Multisystem Inflammatory Syndrome. Front Immunol. 2021;12:654587. doi:10.3389/fimmu.2021.654587.

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COVID-19; pediatric; outpatient; cancer; solid organ transplantation ; Brazil	26-Mar-21	<a href="#">Screening of COVID-19 in outpatient children with cancer or solid organ transplantation: preliminary report</a>	European Journal of Pediatrics	Article	The authors presented the seroprevalence and clinical features of SARS-CoV-2 infection in a prospective cohort of 114 immunosuppressed children and adolescents in Brazil from 30 June-28 August 2020. 3 groups were considered: kidney transplantation (n=50), liver transplantation (n=22), and cancer (n=42) patients. Among the 35 (30.7%) patients who had a positive serological test for SARS-CoV-2 (majority in the liver transplant group), 77% did not report previous symptoms, and none of them developed MIS-C or any complications of SARS-CoV-2 infection after >30 days of follow-up. Among those who were symptomatic, diarrhea, fever, and cough were the most common findings. In this preliminary report, the seroprevalence for SARS-CoV-2 infection in immunocompromised pediatric patients was found to be higher than previously published data.	The authors presented the seroprevalence and clinical features of SARS-CoV-2 infection in a prospective cohort of 114 immunosuppressed children and adolescents in Brazil from 30 June-28 August 2020. In this preliminary report, the seroprevalence for SARS-CoV-2 infection in immunocompromised pediatric patients was found to be higher than previously published data.	Cleto-Yamane TL, Rodrigues-Santos G, de Magalhães-Barbosa MC, et al. Screening of COVID-19 in outpatient children with cancer or solid organ transplantation: preliminary report. <i>Eur J Pediatr.</i> 2021;1-5. doi:10.1007/s00431-021-04044-9.
lung ultrasound; COVID-19; pneumonia; pregnant women	26-Mar-21	<a href="#">Application of quantitative lung ultrasound instead of CT for monitoring COVID-19 pneumonia in pregnant women: a single-center retrospective study</a>	BioMed Central (BMC) Pregnancy and Childbirth	Research article	The authors conducted a study to determine the value of bedside lung ultrasound (LUS) as an alternative to computed tomography (CT) to detect COVID-19 lung involvement in pregnant women. 39 pregnant patients (median age 30 years, range 24-40 years) admitted to a hospital in China from January 28-April 15, 2020 were included in this study; 29 had a positive SARS-CoV-2 test by RT-PCR and the other 10 were diagnosed with COVID-19 clinically. All patients had a CT exam before admission; 6 had mild disease with normal lung CT findings, 29 had a 'common' type of the disease, and 4 were severe. Comparison of CT findings by disease severity showed ground-glass opacity (0% of mild vs 86.2% common vs 100% severe cases; p=0.0), consolidation (0% vs 41.4% vs 100%; p=0.004), crazy-paving patterns (0% vs 27.6% vs 75%; p=0.031), and pleural effusions (0% vs 51.7% vs 100%; p=0.003) to be significantly more prevalent in severe than common or mild cases. All patients underwent LUS exams a median of 3 times (range 1-6 times). Comparison of LUS by disease severity showed thickening and irregularity of pleural lines (16.7% of mild vs 79.3% common vs 100% severe cases; p=0.009), increased B-lines (16.7% vs 96.6% vs 100%; p=0.000), confluent B-lines (0% vs 58.6% vs 100%; p=0.002), small consolidations limited to the subpleural space (0% vs 37.9% vs 75%; p=0.049), and pleural effusions (0% vs 69.2% vs 100%; p=0.002) to be significantly more prevalent in severe cases than in common and mild cases. The authors report a good linear correlation between the LUS and the chest CT for SARS-CoV-2 and lung involvement severity. Therefore, they recommend quantitative LUS scoring instead of CT to detect and monitor COVID-19 pneumonia in pregnant women in order to protect fetuses from ionizing radiation.	The authors conducted a study to determine the value of bedside lung ultrasound (LUS) as an alternative to computed tomography (CT) to detect COVID-19 lung involvement in pregnant women. The authors report a good linear correlation between the LUS and the chest CT for SARS-CoV-2 and lung involvement severity. Therefore, they recommend quantitative LUS scoring instead of CT to detect and monitor COVID-19 pneumonia in pregnant women in order to protect fetuses from ionizing radiation.	Deng Q, Cao S, Wang H, et al. Application of quantitative lung ultrasound instead of CT for monitoring COVID-19 pneumonia in pregnant women: a single-center retrospective study. <i>BMC Pregnancy Childbirth.</i> 2021;21(1):259. Published 2021 Mar 26. doi:10.1186/s12884-021-03728-2
family integrated care; family-centered care; SARS-CoV-	26-Mar-21	<a href="#">Supporting parents as essential care partners in</a>	Acta Paediatrica	Review	The authors reviewed studies on family integrated care during the COVID-19 pandemic and how hospital policies affected families and healthcare professionals. 7 articles were identified consisting of 854 healthcare professionals, 442 parents, 364 infants within 286	The authors reviewed published studies on family integrated care implemented or restricted due to hospital policies during the	van Veenendaal NR, Deierl A, Bacchini F, O'Brien K, Franck LS; International Steering Committee for Family

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
2; COVID-19; neonatal; parent		<a href="#">neonatal units during the SARS-CoV-2 pandemic</a>			neonatal units from the US, UK, China, and Italy. Changes included hospital policies affecting family access and patient care, risk of SARS-CoV-2 transmission, impact on breastfeeding, parental bonding, participation in caregiving, parental mental health, and staff stress. The authors report that prolonged parental presence was reduced, with some hospitals completely refusing parents' entry during the pandemic. There have been no reports of in-hospital transmission of SARS-CoV-2 between neonatal patients. Mothers reported a lack of support to provide skin-to-skin care or breastfeed, including not enough information on expressing breastmilk or breastfeeding support. In one UK study, 19.4% (20/103) of parents were not permitted to see their infant in the neonatal ICU (NICU). Parents reported a lack of bonding with their infants and insufficient information about their infants. Psychological impacts on parents were not assessed after the initiation of visitor restrictions, but parents reported an effect on their mental health by not being with their infant. Healthcare professionals' stress was reported as high during the pandemic due to lack of PPE, prioritization of PPE and workers to adult units, and the lack of parental involvement. The authors state that it is time to reinstate evidence-based-family-centered care in neonatal units, despite the ongoing pandemic. They provide recommendations to support parental presence during the COVID-19 pandemic, including the rooming-in of mothers and infants and both parents' ability to be with their infants in NICUs when not symptomatic for SARS-CoV-2.	COVID-19 pandemic and how they affected families and healthcare professionals. Changes identified included hospital policies affecting family access and patient care, risk of SARS-CoV-2 transmission, impact on breastfeeding, parental bonding, participation in caregiving, parental mental health, and staff stress.	Integrated Care. Supporting parents as essential care partners in neonatal units during the SARS-CoV-2 pandemic [published online ahead of print, 2021 Mar 26]. <i>Acta Paediatr.</i> 2021;10.1111/apa.15857. doi:10.1111/apa.15857
Child; Coronavirus infections; COVID-19; health care quality, access, and evaluation; health impact assessment; pandemics; pediatrics	26-Mar-21	<a href="#">The impact of the COVID-19 pandemic on children's health in Portugal: The parental perspective</a>	Acta Medica Portuguesa	Original article	The authors conducted an online survey from March 16- May 17, 2020, to assess the impact of COVID-19 on children's health, wellbeing, and access to medical care in Portugal. 19,745 children (mean age of children 6.29 years, SD=4.84) were included in the survey, with 20.6% of parents reporting at least one sick child during the pandemic. Of the 2552 children that were ill, 31.8% were taken to an emergency department (ED). 33.9% of the respondents stated they would have taken their child earlier to the ED if not for the pandemic. 1% of the children were hospitalized during the study period, and 3.2% underwent invasive procedures. 49.6% of parents were extremely concerned for their child to contract SARS-CoV-2. Children in high-risk categories (including asthmatic, premature, and newborn) were 3.44x more likely to undergo an invasive procedure or be hospitalized (p<0.001) and have a higher level of parental concern for contracting the virus (p<0.001). Of 5984 previously scheduled health care appointments, 54.2% were postponed or canceled by the healthcare institution, leading to greater parental perceptions of negative impacts on their child's health than with family cancellations of appointments. 2747 children were scheduled for vaccination appointments in line with the Portuguese immunization program, and 21.6% (594 children) missed these	The authors conducted an online survey from March 16- May 17, 2020, to assess the impact of COVID-19 on children's health, wellbeing, and access to medical care in Portugal. 49.6% of parents surveyed were extremely concerned for their child to contract SARS-CoV-2.	Poppe M, Aguiar B, Sousa R, Oom P. The Impact of the COVID-19 Pandemic on Children's Health in Portugal: The Parental Perspective [published online ahead of print, 2021 Mar 26]. <i>Acta Med Port.</i> 2021;10.20344/amp.14805. doi:10.20344/amp.14805

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
					appointments. 11.6% were due to family preference, and 10.0% were due to healthcare institutions' postponement or cancellation of the vaccine appointment. As the COVID-19 pandemic progresses, the authors state that efforts should be made to clearly communicate the recommendations for not postponing medical evaluations and prioritize vaccination appointments.		
COVID-19; pediatric; pulmonary embolism; prevalence; treatment; risk-factors	26-Mar-21	<a href="#">COVID-19 Associated Pulmonary Embolism in Pediatric Patients</a>	Hospital Pediatrics	Original Article	The authors performed a study of children <18 years with SARS-CoV-2 infection for the prevalence of pulmonary embolism (PE), evaluating patient-specific characteristics and treatments. 24,723 pediatric patients were found to have a diagnosis of COVID-19 from 41 healthcare institutions (predominantly in the US). 8 (1.2% of those requiring hospitalization, 8/693) of these patients were also found to also have a PE diagnosis as of January 15, 2021. Further investigation found 42 (0.11%) with venous thromboembolism and 69 (0.18%) required a computed tomography of the chest with contrast due to PE concerns. Of the 8 with PE, 6 (75%) were female, the median age was 16.5 years, and the median body mass index (BMI) was 22.1. 6 were diagnosed with both COVID-19 and PE on the same day, 1 was diagnosed with PE 21 days after the COVID-19 diagnosis, and one was diagnosed with PE 24 hours before the COVID-19 diagnosis. 5 of the patients had known risk factors for PE, 2 (25%) obesity, 1 (12.5%) oral contraceptive use, 2 (25%) recent surgical procedures, and 1 (12.5%) malignancy. 5 (62.5%) of the patients were hospitalized, all patients received an anti-thrombolytic (heparin, enoxaparin, or apixaban), 3 (37.5%) required critical care, 1 (12.5%) received mechanical ventilation, and no deaths were reported. The authors state that although a PE diagnosis is rare in children (pre-pandemic 2-6 hospitalized children/10,000 discharges), it appears to be more frequent in children hospitalized with COVID-19 (8 of 693 hospitalized children).	The authors performed a study of children <18 years diagnosed with SARS-CoV-2 for the prevalence of pulmonary embolism, evaluated patient-specific characteristics and treatments. The authors state that although PE is rare in children, it appears to be more frequent in children hospitalized with COVID-19.	Chima M, Williams D, Thomas NJ, et al. COVID-19 Associated Pulmonary Embolism in Pediatric Patients. Hosp Pediatr. 2021; doi: 10.1542/hpeds.2021-005866
COVID-19, pandemic, mental health, children	26-Mar-21	<a href="#">Mental Health of Children and Adolescents Amidst COVID-19 and Past Pandemics: A Rapid Systematic Review</a>	International Journal of Environmental Research and Public Health	Review	This study aims to identify the impact of the COVID-19 pandemic on children's and adolescents' mental health and evaluate the effectiveness of different mental health interventions employed during the pandemic. The authors conducted a systematic review of the literature (1990-July 25, 2020) and included 18 articles about COVID-19 and past pandemics. The most-reported outcome in these studies was the negative impact of a pandemic/epidemic on psychological health, which the researchers measured as anxiety, depression, fear, stigma, and post-traumatic stress symptoms [statistics not included]. Only 2 articles reported on mental health intervention efficacy in children, and one (Kamara et al., 2017) found that training nurses to manage mental health issues is an effective measure to strengthen the mental health of children [p-value not given]. Overall, although the number of children and adolescents affected by COVID-19 is small, disease containment measures such as social distancing, school closure, and isolation have negatively impacted the mental health and well-being of	This study aims to identify the impact of the COVID-19 pandemic on children's and adolescents' mental health and evaluate the effectiveness of different mental health interventions employed during the pandemic. The authors conducted a systematic review of the literature regarding COVID-19 and past pandemics. Most study outcomes confirmed a negative impact of a pandemic/epidemic on psychological health, and few articles focused on successful intervention strategies. As the COVID-19 pandemic continues, its impact on child and adolescent	Meherali S, Punjani N, Louie-Poon S, et al. Mental Health of Children and Adolescents Amidst COVID-19 and Past Pandemics: A Rapid Systematic Review. Int J Environ Res Public Health. 2021;18(7):3432. Published 2021 Mar 26. doi:10.3390/ijerph18073432

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
					children and adolescents. As the COVID-19 pandemic continues, its impact on child and adolescent mental health must be monitored. Solutions should be targeted to improve mental health outcomes of this population in the current or future pandemics.	mental health must be monitored. Solutions should be targeted to improve mental health outcomes of this population in the current or future pandemics.	
COVID-19; Family support; Internet use; Lockdown; Maternal depressive symptoms; Pregnant women	26-Mar-21	<a href="#">The impact of lockdown policy on depressive symptoms among pregnant women in China: mediating effects of internet use and family support</a>	Global Health Research and Policy	Original Research	The authors examined the impact of COVID-19 lockdown on depressive symptoms of pregnant women (n = 1266) in China, March 30-April 26, 2020. Mean participant age was 29.95 years (SD 9.042) [gestational ages not included]. A questionnaire was administered to a cross-sectional sample of pregnant women in Wuhan City, which was more impacted by lockdown, and Lanzhou City, which was less impacted. 527 women (41.63%) had depressive symptoms, and the lockdown was negatively associated with depressive symptoms ( $\beta = -0.925$ , 95% CI = -1.510, -0.360). Higher risk of depressive symptoms was experienced by those with unplanned pregnancies (p = 0.009), lower household income (p = 0.002), greater financial loss during the COVID-19 pandemic (p = 0.001), and those who were less affected by the lockdown policy (p < 0.001). Internet use ( $\beta = 1.589$ , 95% CI = 0.730, 2.807) and family support ( $\beta = -0.162$ , 95% CI = -0.341, -0.017) partially mediated depressive symptoms, and they together accounted for 42.67% of the effect on depressive symptoms. Those living in the area more affected by the lockdown policy had longer daily duration of internet use (p < 0.001) and more family support (p < 0.001 spouse support, p = 0.009 parent support), which may have mediated the lower risk of depressive symptoms. The results demonstrate that the lockdown policies were experienced differently by pregnant women based on internet use and family support, and suggest that analysis of the effects of lockdown policies should consider the different experiences of subgroups.	This article examined the impact of COVID-19 lockdown on the depressive symptoms of pregnant women in China. Higher depressive symptoms were experienced by women with unplanned pregnancies, lower household income, greater financial loss during the COVID-19 pandemic, and those less affected by the lockdown policy. Internet use and family support partially mediated depressive symptoms.	Zhou Y, Wang R, Liu L, et al. The impact of lockdown policy on depressive symptoms among pregnant women in China: mediating effects of internet use and family support. <i>Glob Health Res Policy</i> . 2021;6(1):11. Published 2021 Mar 26. doi:10.1186/s41256-021-00193-4
lung ultrasound; COVID-19; pneumonia; pregnant women	26-Mar-21	<a href="#">Application of quantitative lung ultrasound instead of CT for monitoring COVID-19 pneumonia in pregnant women: a single-center retrospective study</a>	BioMed Central (BMC) Pregnancy and Childbirth	Research article	The authors conducted a study to determine the value of bedside lung ultrasound (LUS) as an alternative to computed tomography (CT) to detect COVID-19 lung involvement in pregnant women. 39 pregnant patients (median age 30 years, range 24-40 years) admitted to a hospital in China from January 28-April 15, 2020 were included in this study; 29 had a positive SARS-CoV-2 test by RT-PCR and the other 10 were diagnosed with COVID-19 clinically. All patients had a CT exam before admission; 6 had mild disease with normal lung CT findings, 29 had a 'common' type of the disease, and 4 were severe. Comparison of CT findings by disease severity showed ground-glass opacity (0% of mild vs 86.2% common vs 100% severe cases; p=0.0), consolidation (0% vs 41.4% vs 100%; p=0.004), crazy-paving patterns (0% vs 27.6% vs 75%; p=0.031), and pleural effusions (0% vs 51.7% vs 100%; p=0.003) to be significantly more prevalent in severe than common or mild cases. All patients underwent LUS exams a median of 3 times (range 1-6 times).	The authors conducted a study to determine the value of bedside lung ultrasound (LUS) as an alternative to computed tomography (CT) to detect COVID-19 lung involvement in pregnant women. The authors report a good linear correlation between the LUS and the chest CT for SARS-CoV-2 and lung involvement severity. Therefore, they recommend quantitative LUS scoring instead of CT to detect and monitor COVID-19 pneumonia in pregnant women in	Deng Q, Cao S, Wang H, et al. Application of quantitative lung ultrasound instead of CT for monitoring COVID-19 pneumonia in pregnant women: a single-center retrospective study. <i>BMC Pregnancy Childbirth</i> . 2021;21(1):259. Published 2021 Mar 26. doi:10.1186/s12884-021-03728-2

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
					Comparison of LUS by disease severity showed thickening and irregularity of pleural lines (16.7% of mild vs 79.3% common vs 100% severe cases; p=0.009), increased B-lines (16.7% vs 96.6% vs 100%; p=0.000), confluent B-lines (0% vs 58.6% vs 100%; p=0.002), small consolidations limited to the subpleural space (0% vs 37.9% vs 75%; p=0.049), and pleural effusions (0% vs 69.2% vs 100%; p=0.002) to be significantly more prevalent in severe cases than in common and mild cases. The authors report a good linear correlation between the LUS and the chest CT for SARS-CoV-2 and lung involvement severity. Therefore, they recommend quantitative LUS scoring instead of CT to detect and monitor COVID-19 pneumonia in pregnant women in order to protect fetuses from ionizing radiation.	order to protect fetuses from ionizing radiation.	
family integrated care; family-centered care; SARS-CoV-2; COVID-19; neonatal; parent	26-Mar-21	<a href="#">Supporting parents as essential care partners in neonatal units during the SARS-CoV-2 pandemic</a>	Acta Paediatrica	Review	The authors reviewed studies on family integrated care during the COVID-19 pandemic and how hospital policies affected families and healthcare professionals. 7 articles were identified consisting of 854 healthcare professionals, 442 parents, 364 infants within 286 neonatal units from the US, UK, China, and Italy. Changes included hospital policies affecting family access and patient care, risk of SARS-CoV-2 transmission, impact on breastfeeding, parental bonding, participation in caregiving, parental mental health, and staff stress. The authors report that prolonged parental presence was reduced, with some hospitals completely refusing parents' entry during the pandemic. There have been no reports of in-hospital transmission of SARS-CoV-2 between neonatal patients. Mothers reported a lack of support to provide skin-to-skin care or breastfeed, including not enough information on expressing breastmilk or breastfeeding support. In one UK study, 19.4% (20/103) of parents were not permitted to see their infant in the neonatal ICU (NICU). Parents reported a lack of bonding with their infants and insufficient information about their infants. Psychological impacts on parents were not assessed after the initiation of visitor restrictions, but parents reported an effect on their mental health by not being with their infant. Healthcare professionals' stress was reported as high during the pandemic due to lack of PPE, prioritization of PPE and workers to adult units, and the lack of parental involvement. The authors state that it is time to reinstate evidence-based-family-centered care in neonatal units, despite the ongoing pandemic. They provide recommendations to support parental presence during the COVID-19 pandemic, including the rooming-in of mothers and infants and both parents' ability to be with their infants in NICUs when not symptomatic for SARS-CoV-2.	The authors reviewed published studies on family integrated care implemented or restricted due to hospital policies during the COVID-19 pandemic and how they affected families and healthcare professionals. Changes identified included hospital policies affecting family access and patient care, risk of SARS-CoV-2 transmission, impact on breastfeeding, parental bonding, participation in caregiving, parental mental health, and staff stress.	van Veenendaal NR, Deierl A, Bacchini F, O'Brien K, Franck LS; International Steering Committee for Family Integrated Care. Supporting parents as essential care partners in neonatal units during the SARS-CoV-2 pandemic [published online ahead of print, 2021 Mar 26]. <i>Acta Paediatr.</i> 2021;10.1111/apa.15857. doi:10.1111/apa.15857
Child; Coronavirus infections; COVID-19;	26-Mar-21	<a href="#">The impact of the COVID-19 pandemic on children's health</a>	Acta Medica Portuguesa	Original article	The authors conducted an online survey from March 16- May 17, 2020, to assess the impact of COVID-19 on children's health, wellbeing, and access to medical care in Portugal. 19,745 children (mean age of children 6.29 years, SD=4.84) were included in the	The authors conducted an online survey from March 16- May 17, 2020, to assess the impact of COVID-19 on children's health,	Poppe M, Aguiar B, Sousa R, Oom P. The Impact of the COVID-19 Pandemic on Children's Health in Portugal:

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health care quality, access, and evaluation; health impact assessment; pandemics; pediatrics		<a href="#">in Portugal: The parental perspective</a>			survey, with 20.6% of parents reporting at least one sick child during the pandemic. Of the 2552 children that were ill, 31.8% were taken to an emergency department (ED). 33.9% of the respondents stated they would have taken their child earlier to the ED if not for the pandemic. 1% of the children were hospitalized during the study period, and 3.2% underwent invasive procedures. 49.6% of parents were extremely concerned for their child to contract SARS-CoV-2. Children in high-risk categories (including asthmatic, premature, and newborn) were 3.44x more likely to undergo an invasive procedure or be hospitalized (p<0.001) and have a higher level of parental concern for contracting the virus (p<0.001). Of 5984 previously scheduled health care appointments, 54.2% were postponed or canceled by the healthcare institution, leading to greater parental perceptions of negative impacts on their child's health than with family cancellations of appointments. 2747 children were scheduled for vaccination appointments in line with the Portuguese immunization program, and 21.6% (594 children) missed these appointments. 11.6% were due to family preference, and 10.0% were due to healthcare institutions' postponement or cancellation of the vaccine appointment. As the COVID-19 pandemic progresses, the authors state that efforts should be made to clearly communicate the recommendations for not postponing medical evaluations and prioritize vaccination appointments.	wellbeing, and access to medical care in Portugal. 49.6% of parents surveyed were extremely concerned for their child to contract SARS-CoV-2.	The Parental Perspective [published online ahead of print, 2021 Mar 26]. <i>Acta Med Port.</i> 2021;10.20344/amp.14805. doi:10.20344/amp.14805
COVID-19; pediatric; pulmonary embolism; prevalence; treatment; risk-factors	26-Mar-21	<a href="#">COVID-19 Associated Pulmonary Embolism in Pediatric Patients</a>	Hospital Pediatrics	Original Article	The authors performed a study of children <18 years with SARS-CoV-2 infection for the prevalence of pulmonary embolism (PE), evaluating patient-specific characteristics and treatments. 24,723 pediatric patients were found to have a diagnosis of COVID-19 from 41 healthcare institutions (predominantly in the US). 8 (1.2% of those requiring hospitalization, 8/693) of these patients were also found to also have a PE diagnosis as of January 15, 2021. Further investigation found 42 (0.11%) with venous thromboembolism and 69 (0.18%) required a computed tomography of the chest with contrast due to PE concerns. Of the 8 with PE, 6 (75%) were female, the median age was 16.5 years, and the median body mass index (BMI) was 22.1. 6 were diagnosed with both COVID-19 and PE on the same day, 1 was diagnosed with PE 21 days after the COVID-19 diagnosis, and one was diagnosed with PE 24 hours before the COVID-19 diagnosis. 5 of the patients had known risk factors for PE, 2 (25%) obesity, 1 (12.5%) oral contraceptive use, 2 (25%) recent surgical procedures, and 1 (12.5%) malignancy. 5 (62.5%) of the patients were hospitalized, all patients received an anti-thrombotic (heparin, enoxaparin, or apixaban), 3 (37.5%) required critical care, 1 (12.5%) received mechanical ventilation, and no deaths were reported. The authors state that although a PE diagnosis is rare in children (pre-pandemic 2-6 hospitalized children/10,000 discharges), it appears to be more frequent in children hospitalized with COVID-19 (8 of 693 hospitalized children).	The authors performed a study of children <18 years diagnosed with SARS-CoV-2 for the prevalence of pulmonary embolism, evaluated patient-specific characteristics and treatments. The authors state that although PE is rare in children, it appears to be more frequent in children hospitalized with COVID-19.	Chima M, Williams D, Thomas NJ, et al. COVID-19 Associated Pulmonary Embolism in Pediatric Patients. <i>Hosp Pediatr.</i> 2021; doi: 10.1542/hpeds.2021-005866

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COVID-19, pandemic, mental health, children	26-Mar-21	<a href="#">Mental Health of Children and Adolescents Amidst COVID-19 and Past Pandemics: A Rapid Systematic Review</a>	International Journal of Environmental Research and Public Health	Review	This study aims to identify the impact of the COVID-19 pandemic on children's and adolescents' mental health and evaluate the effectiveness of different mental health interventions employed during the pandemic. The authors conducted a systematic review of the literature (1990-July 25, 2020) and included 18 articles about COVID-19 and past pandemics. The most-reported outcome in these studies was the negative impact of a pandemic/epidemic on psychological health, which the researchers measured as anxiety, depression, fear, stigma, and post-traumatic stress symptoms [statistics not included]. Only 2 articles reported on mental health intervention efficacy in children, and one (Kamara et al., 2017) found that training nurses to manage mental health issues is an effective measure to strengthen the mental health of children [p-value not given]. Overall, although the number of children and adolescents affected by COVID-19 is small, disease containment measures such as social distancing, school closure, and isolation have negatively impacted the mental health and well-being of children and adolescents. As the COVID-19 pandemic continues, its impact on child and adolescent mental health must be monitored. Solutions should be targeted to improve mental health outcomes of this population in the current or future pandemics.	This study aims to identify the impact of the COVID-19 pandemic on children's and adolescents' mental health and evaluate the effectiveness of different mental health interventions employed during the pandemic. The authors conducted a systematic review of the literature regarding COVID-19 and past pandemics. Most study outcomes confirmed a negative impact of a pandemic/epidemic on psychological health, and few articles focused on successful intervention strategies. As the COVID-19 pandemic continues, its impact on child and adolescent mental health must be monitored. Solutions should be targeted to improve mental health outcomes of this population in the current or future pandemics.	Meherali S, Punjani N, Louie-Poon S, et al. Mental Health of Children and Adolescents Amidst COVID-19 and Past Pandemics: A Rapid Systematic Review. Int J Environ Res Public Health. 2021;18(7):3432. Published 2021 Mar 26. doi:10.3390/ijerph18073432
COVID-19; Family support; Internet use; Lockdown; Maternal depressive symptoms; Pregnant women	26-Mar-21	<a href="#">The impact of lockdown policy on depressive symptoms among pregnant women in China: mediating effects of internet use and family support</a>	Global Health Research and Policy	Original Research	The authors examined the impact of COVID-19 lockdown on depressive symptoms of pregnant women (n = 1266) in China, March 30-April 26, 2020. Mean participant age was 29.95 years (SD 9.042) [gestational ages not included]. A questionnaire was administered to a cross-sectional sample of pregnant women in Wuhan City, which was more impacted by lockdown, and Lanzhou City, which was less impacted. 527 women (41.63%) had depressive symptoms, and the lockdown was negatively associated with depressive symptoms ( $\beta = -0.925$ , 95% CI = -1.510, -0.360). Higher risk of depressive symptoms was experienced by those with unplanned pregnancies ( $p = 0.009$ ), lower household income ( $p = 0.002$ ), greater financial loss during the COVID-19 pandemic ( $p = 0.001$ ), and those who were less affected by the lockdown policy ( $p < 0.001$ ). Internet use ( $\beta = 1.589$ , 95% CI = 0.730, 2.807) and family support ( $\beta = -0.162$ , 95% CI = -0.341, -0.017) partially mediated depressive symptoms, and they together accounted for 42.67% of the effect on depressive symptoms. Those living in the area more affected by the lockdown policy had longer daily duration of internet use ( $p < 0.001$ ) and more family support ( $p < 0.001$ spouse support, $p = 0.009$ parent support), which may have mediated the lower risk of depressive symptoms. The results demonstrate that the lockdown policies were experienced differently by pregnant women based on internet use and family support, and suggest that	This article examined the impact of COVID-19 lockdown on the depressive symptoms of pregnant women in China. Higher depressive symptoms were experienced by women with unplanned pregnancies, lower household income, greater financial loss during the COVID-19 pandemic, and those less affected by the lockdown policy. Internet use and family support partially mediated depressive symptoms.	Zhou Y, Wang R, Liu L, et al. The impact of lockdown policy on depressive symptoms among pregnant women in China: mediating effects of internet use and family support. Glob Health Res Policy. 2021;6(1):11. Published 2021 Mar 26. doi:10.1186/s41256-021-00193-4

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
					analysis of the effects of lockdown policies should consider the different experiences of subgroups.		
COVID-19; maternal health; prenatal care; utilization; barriers; prevention	26-Mar-21	<a href="#">Maternal health care services utilization amidst COVID-19 pandemic in West Shoa zone, central Ethiopia</a>	PLoS One	Original Research	The authors assessed maternal care service utilization among 844 pregnant women or women who have given birth in the last 6 months in the West Shoa zone of Ethiopia from July 1-July 30, 2020, during the COVID-19 pandemic. 64.8% of the women interviewed had used maternal health services during the COVID-19 pandemic, and service utilization was higher among those with primary (AOR = 2.16, 95% CI 1.29-3.60), secondary (AOR = 1.97, 95% CI 1.13-3.44), and college and above education (AOR = 2.89, 95% CI 1.34-6.22), compared to those with low literacy. Those traveling 30-60 minutes (AOR = 0.37, 95% CI 0.23-0.59) and 60-90 minutes (AOR = 0.10, 95% CI 0.05-0.19) for maternal services had lower odds of utilization than those living <30 minutes from the facility. Higher odds of using health services were demonstrated for women with higher income (AOR = 2.66 95% CI 1.52-4.64), low fear of SARS-CoV-2 (AOR = 2.79, 95% CI 1.85-4.20), those not needing permission from their husbands to visit the health facility (AOR = 7.24, 95% CI 2.65-19.75), and those practicing prevention measures against SARS-CoV-2 infection (AOR = 5.82, 95% CI 3.87-8.75). The authors suggest that health authorities work to help women overcome barriers to accessing maternal health services amidst the COVID-19 pandemic.	This article examined maternal service utilization among pregnant and postpartum women in Ethiopia during the COVID-19 pandemic. 64.8% of women had used maternal services during the COVID-19 pandemic. Higher education, shorter travel time, higher income, low fear of SARS-CoV-2, not needing husband's permission to attend appointments, and practicing prevention measures against SARS-CoV-2 infection were associated with higher odds of using maternal health services during the study period.	Temesgen K, Wakgari N, Debelo BT, et al. Maternal health care services utilization amidst COVID-19 pandemic in West Shoa zone, central Ethiopia. PLoS One. 2021;16(3):e0249214. Published 2021 Mar 26. doi:10.1371/journal.pone.0249214
Participative arts; Parent-infant; Arts in health; Well-being; Attachments; Connection	26-Mar-21	<a href="#">Art boxes supporting parents and infants to share creative interactions at home: an art-based response to improve well-being during COVID-19 restrictions</a>	Public Health	Research Article	Lockdown procedures during the COVID-19 pandemic cancelled art therapy sessions for parent-infant dyads in Dundee, Scotland, designed to strengthen attachment. Beginning May 2020, parents were instead sent boxes of art resources and activity guides to complete at home with their child (age range: 0-3 years [no mean given]). This article investigated the impact of these boxes through 10 semi-structured in-depth interviews with parents. Thematic analysis raised the following subjects: disconnecting experiences during the COVID-19 pandemic; how art materials supported connections between parent and infant; parents' increased capacity to offer connection; positive change observed in infants connected to art making; connection building within the parent-infant dyad; and building connections with those beyond the dyad. The researchers conclude that, although the art material boxes may not be as beneficial as in-person parent-infant art therapy, they are useful in creating positive impact during the COVID-19 pandemic. They note that in the future they will expound upon the themes explored in this study with additional quantitative and image data.	This article investigated the impact of art material and activity boxes shipped to parent-infant dyads in Dundee, Scotland during the COVID-19 pandemic. The researchers conclude that, although the art material boxes may not be as beneficial as in-person parent-infant art therapy, they are useful in creating positive impact during lockdown measures.	Armstrong VG, Ross J. Art boxes supporting parents and infants to share creative interactions at home: an art-based response to improve well-being during COVID-19 restrictions. Public Health. April 2021. doi: https://doi.org/10.1016/j.puhe.2021.01.031
pregnancy; COVID-19; antenatal depression	26-Mar-21	<a href="#">Factors associated with antenatal depression during the COVID-19 (SARS-CoV2) pandemic:</a>	Perspectives in Psychiatric Care	Original Research	This cross-sectional study assessed the effect of the COVID-19 pandemic on antenatal depression symptoms in pregnant women in Turkey. 497 participants (16.7% in 1st trimester, 44.7% in 2nd, 38.6% in 3rd) completed an online questionnaire between May-July 2020. Mean depression scores increased as pregnancy progressed (F = 4.069, p < 0.02). Depression scores also increased among women who were fearful of giving birth in the hospital, those who	This cross-sectional study assessed the effect of the COVID-19 pandemic on antenatal depression symptoms in pregnant women in Turkey. Several factors are associated with antenatal depression during the COVID-19	Korukcu O, Ozkaya M, Boran OF et al. Factors associated with antenatal depression during the COVID-19 (SARS-CoV2) pandemic: A cross-sectional study in a cohort of Turkish pregnant women.

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
		<a href="#">A cross-sectional study in a cohort of Turkish pregnant women</a>			reduced or increased the frequency of antenatal check-ups, those who feared breastfeeding, and those who sought to improve their lifestyle habits due to the COVID-19 pandemic (all at $p < 0.0001$ ). In addition, depression scores increased among women who reported more concern due to consuming social media and news related to the COVID-19 pandemic ( $p < 0.0001$ ). The average depression score of those who requested an elective C-section due to fear of COVID-19 ( $\bar{X}(SD) = 17.54(5.17)$ ) was higher than scores of those that did not request the procedure ( $\bar{X}(SD) = 11.79(7.97)$ ; $p < 0.0001$ ). The researchers conclude that antenatal depression has an effect on requests for an elective C-section during the COVID-19 pandemic, and interventions are needed to address pregnant women's mental health and well-being at this time.	pandemic, and interventions are needed to address pregnant women's mental health and well-being at this time.	Perspectives in Psychiatric Care. 26 March 2021. doi: <a href="https://doi.org/10.1111/ppc.12778">https://doi.org/10.1111/ppc.12778</a>
SARS-Cov-2; gestation; glucocorticoids; oligohydramnios; remdesivir	26-Mar-21	<a href="#">Pharmacological treatment in pregnant women with moderate symptoms of coronavirus disease 2019 (COVID-19) pneumonia [Free Access to Abstract Only]</a>	The Journal of Maternal-Fetal & Neonatal Medicine	Original Research	The authors report clinical outcomes of pregnant women with moderate COVID-19 who were treated with a 5-day course of remdesivir, antibiotics, and/or glucocorticoids. The study population was 35 pregnant women (mean age 32 years, range 16–44; median gestational age 29-2 weeks, range 6-4 to 40-0) who were hospitalized with moderate COVID-19 symptoms at 2 hospitals from 1 April - 31 December 2020 in the United States. The authors measured clinical recovery (breathing on ambient air and/or hospital discharge) as the primary outcome on hospital day 7 (HD7) and performed Cox regression analysis to evaluate which variables were associated with the primary outcome. 17 patients received remdesivir within 48 hours of hospitalization, and all of them achieved clinical recovery on HD 7. 7 women received remdesivir >48 hours following admission after they began treatment with glucocorticoids +/- antibiotics and worsened to severe or critical disease. 11 women were treated with antibiotics +/- glucocorticoids but no remdesivir, and 3/11 achieved clinical recovery on HD7. Clinical recovery was significantly different among treatment groups ( $p < 0.001$ ). Delaying remdesivir for >48 hours after admission (HR 2.32, 95%CI 1.45-4.16) and > 4-day duration of symptoms before hospitalization (HR 1.65, 95% CI 1.27-3.50) had an inverse association with clinical recovery. Incidental oligohydramnios was seen in 3/24 women (12.5%) within 5 days of completing remdesivir treatment. Ultrasound evaluation of the amniotic fluid in patients recovering from COVID-19 hospitalizations should be considered.	Prompt initiation of remdesivir (within 48 hours of admission) in pregnant women hospitalized with moderate symptoms of COVID-19 prevented worsening disease and allowed a clinical recovery by hospital day 7 in the United States. Deferring remdesivir for >48 hours after hospitalization and duration of symptoms >4 days before admission were independently associated with delayed clinical recovery.	Nasrallah S, Nguyen AQ, Hitchings L, et al. Pharmacological treatment in pregnant women with moderate symptoms of coronavirus disease 2019 (COVID-19) pneumonia. J Matern Fetal Neonatal Med. 2021 Mar 26;1-8. doi: <a href="https://doi.org/10.1080/14767058.2021.1903426">10.1080/14767058.2021.1903426</a> . PMID: 33771091.
Children's environmental health, COVID-19, Combined exposures, SARS-CoV-2	26-Mar-21	<a href="#">The interplay between environmental exposures and COVID-19 risks in the health of children</a>	Environmental Health	Review	This review evaluates the current knowledge about COVID-19 in children and compares it to data surrounding environmental exposures, in order to estimate how they may interact. Epidemiological evidence has found that environmental exposures such as air pollution may impact the rate and severity of COVID-19 through pathways such as: oxidative stress; immune suppression in the lungs; pollution-induced inflammation; and that PM2.5 may carry SARS-CoV-2 deeper into the lungs. Associations between air pollution levels (specifically PM2.5) and increased COVID-19 severity	This review evaluates the current knowledge about COVID-19 in children and compares it to data surrounding environmental exposures, in order to estimate how they may interact. The authors stress that they have identified several gaps in research surrounding COVID-19 in children	Sly PD, Trottier BA, Bulka CM, et al. The interplay between environmental exposures and COVID-19 risks in the health of children. Environ Health. 2021;20(1):34. Published 2021 Mar 26. doi:10.1186/s12940-021-00716-z

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					and mortality has been observed in adults, but not children. Children with a skewed immune micro-environment may be protected from severe COVID-19 because of immune and inflammatory suppression. In addition, exposure to common mild or asymptomatic infections from other coronaviruses may be a protective factor for children against severe COVID-19. Environmental exposures that suppress antiviral immune responses could possibly increase children's risk of severe COVID-19, especially for children with low innate responses, and increase the possibility of chronic health impact after SARS-CoV-2 infection. The authors stress that they have identified several gaps in research surrounding COVID-19 in children and environmental exposures, and call for research funding specific to this area.	and environmental exposures, and call for research funding specific to this area.	
Pregnancy, abortion, telemedicine, safety, obstetrics	26-Mar-21	<a href="#">Expansion of a direct-to-patient telemedicine abortion service in the United States and experience during the COVID-19 pandemic</a>	Contraception	Original Research	This article presents data on safety, efficacy and acceptability of the TelAbortion Project, a direct-to-patient telemedicine abortion service, and describes how the service functioned during the COVID-19 pandemic. Data was collected from May 2016- September 2020 at 10 institutions across the USA. There were 1356 participants during the study period (ages 15-47 years). Of the 1157 abortions with outcome information, 95% were complete abortions without a procedure. The majority of complete abortions were confirmed using a method that did not require a visit to a facility; 59% relied on urine pregnancy tests, and 5% depended on patient history. 10 serious adverse events (SAEs) occurred, including 5 transfusions (0.4%), however none were attributable to the service delivery method. During the COVID-19 pandemic, 52% (346/669) of abortions occurred without a screening ultrasound. Urine pregnancy tests were increasingly used as a follow-up method, increasing from 67% (144/214) to 90% (602/669) during the pandemic. Enrollment also increased dramatically after March 2020; compared to January and February, monthly enrollment more than tripled in April, May and June of 2020. Participants were overwhelmingly satisfied with the service. 85% would choose TelAbortion again. The authors conclude that direct-to-patient telemedicine abortion service was safe, effective, and acceptable and helped protect patient safety during the COVID-19 pandemic.	In this article, the authors discuss safety, efficacy, and acceptability of a telemedicine abortion service in the USA, and describe changes during the COVID-19 pandemic. During the pandemic, more abortions occurred without a screening ultrasound, urine pregnancy tests were used more as a follow-up method, and enrollment increased. Participants reported high satisfaction overall with the service. The authors conclude that direct-to-patient telemedicine abortion service was safe, effective, and acceptable and helped protect patient safety during the COVID-19 pandemic.	Chong E, Shochet T, Raymond E, et al. Expansion of a direct-to-patient telemedicine abortion service in the United States and experience during the COVID-19 pandemic. Contraception. 2021;S0010-7824(21)00091-3. doi:10.1016/j.contraception.2021.03.019
COVID-19; emergency preparedness; pediatric considerations	26-Mar-21	<a href="#">Coronavirus disease 2019 in the pediatric emergency department: unique considerations in preparation and response</a>	Current Opinion in Pediatrics	Review	The authors reviewed the adaptations and challenges surrounding the preparation and response for pediatric emergency department (PED) patients in Canada, with a specific focus on operational modifications, evolving PPE needs, protected resuscitation responses, clinical characteristics, and the unintended effects on patients. PEDs experienced reduced clinical volumes through the pandemic, with relatively increased acuity and delayed presentations to care. Operational and logistical adaptations in PEDs required changes in staffing, screening, testing, consistent and effective use of PPE, role allocation, and a protected resuscitation response. Simulation has been key to the successful implementation	The authors reviewed the adaptations and challenges surrounding the preparation and response for pediatric emergency department (PED) patients in Canada, with a specific focus on operational modifications, evolving PPE needs, protected resuscitation responses, clinical characteristics, and the unintended effects on patients.	Beno S, Ross C, Principi T. Coronavirus disease 2019 in the pediatric emergency department: unique considerations in preparation and response. Curr Opin Pediatr. 2021. doi:10.1097/MOP.0000000000001010.

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					of many of these strategies. Successful launching of rapid virtual care models and advances in the utilization of existing technologies occurred. Future challenges include optimizing communication strategies through protected resuscitation responses. Family-centered care required careful consideration and was maintained in PEDs during the pandemic but requires further systematic exploration to enhance and optimize for both patients and caregivers.	Family-centered care required careful consideration and was maintained in PEDs during the pandemic but requires further systematic exploration to enhance and optimize for both patients and caregivers.	
COVID-19; SARS-CoV-2; coronavirus 2019; pregnancy; universal screening.	26-Mar-21	<a href="#">Clinical characteristics and risk factors for SARS-CoV-2 infection in pregnant women attending a third level reference center in Mexico City</a>	The Journal of Maternal-Fetal and Neonatal Medicine	Original Research	The authors conducted a cross-sectional study from April 22 to December 15, 2020, to describe the clinical characteristics and risk factors for SARS-CoV-2 infection in pregnant women attending the largest maternity hospital in Latin America. All women who attended the hospital in Mexico City were tested for SARS-CoV-2 by RT-PCR test regardless of symptoms (n=1880, mean age 28 years, mean gestational age 37.1 weeks). Among the 1880 women, 30.74% (n=578) had a positive SARS-CoV-2 PCR result with 2.7% (n=50) being symptomatic and 28.1% (n=528) being asymptomatic. After adjusting for age and risk factors, the number of pregnancies (aOR: 3.19; 95%CI 2.15-4.91) and history of hyperthyroidism (aOR: 1.94; 95%CI 1.16-3.16) were associated with a positive SARS-CoV-2 result. Women with a positive SARS-CoV-2 PCR result were more likely to have a headache (adjusted Odds Ratio (aOR): 2.40; 95%CI 1.20-4.8), dyspnea (aOR 20.26; 95%CI 1.09-377), or myalgia (aOR 20.26; 95%CI 1.09-377). Despite the higher prevalence of SARS-CoV-2-positive women compared to other countries, only 2.7% were symptomatic, suggesting that the prevalence of symptoms do not necessarily increase. The frequent COVID-19 symptoms in this study, such as headache and fatigue, could be misinterpreted as a normal finding during pregnancy. Careful examination of these symptoms is critical in identifying SARS-CoV-2-positive patients, especially in low resource settings with high prevalence.	The authors conducted a cross-sectional study from April 22 to December 15, 2020, to describe the clinical characteristics and risk factors for SARS-CoV-2 infection in pregnant women attending the largest maternity hospital in Latin America. Women with a positive SARS-CoV-2 PCR result were more likely to have headaches, dyspnea, or myalgia. Careful examination of these symptoms is critical in identifying SARS-CoV-2-positive patients, especially in low resource settings with high prevalence.	Hernández-Cruz RG, Sánchez-Cobo D, Acevedo-Gallegos S, et al. Clinical characteristics and risk factors for SARS-CoV-2 infection in pregnant women attending a third level reference center in Mexico City. <i>J Matern Fetal Neonatal Med.</i> 2021 Mar 26;1-5. doi: 10.1080/14767058.2021.1902500. Epub. PMID: 33771080.
COVID-19; Distal radius; Epidemiology; Fracture; Lock-down; Pandemic	26-Mar-21	<a href="#">Epidemiology of distal radius fractures in children and adults during the COVID-19 pandemic - a two-center study</a>	BioMed Central (BMC) Musculoskeletal Disorders	Original Research	This study examines the impact of the COVID-19 pandemic on distal radius fractures (DRFs) in both children and adults in Poland. This study compared the treatment of DRFs at 2 trauma centers in Poland in the period of the COVID-19 pandemic (March 15 - October 15, 2020) and the corresponding period prior to the pandemic (March 15 - October 15, 2019). The authors found an insignificant decrease in number of children with DRF between 2019 (n=80, mean age 10 years 6 months) and 2020 (n=77, mean age 9 years 8 months) (p=0.31). There was an insignificant decrease in the number of children treated conservatively between 2019 (n=69) and 2020 (n=64) (p=0.37679) and an insignificant increase in number of children treated surgically from 2019 (n=11, 13.8%) to 2020 (n=13, 16.9%) (p=0.37679). However, a significant decrease in average length of hospitalization for surgically treated children was observed from 2019 (3.82 days) to 2020 (3.38 days) (p=0.03857). The authors expected to see a trend towards lower numbers of DRF patients due	This study examines the impact of the COVID-19 pandemic on distal radius fractures (DRFs) in both children and adults in Poland. The authors expected to see a trend towards lower numbers of DRF patients due to social distancing measures and instances of self-quarantine, which altered people's behaviors and lifestyles; however, the number of low-energy fractures remained essentially unchanged.	Olech J, Ciszewski M, Morasiewicz P. Epidemiology of distal radius fractures in children and adults during the COVID-19 pandemic - a two-center study. <i>BMC Musculoskeletal Disord.</i> 2021;22(1):306. Published 2021 Mar 26. doi:10.1186/s12891-021-04128-5

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					to social distancing measures and instances of self-quarantine, which altered people's behaviors and lifestyles; however, the number of low-energy fractures remained essentially unchanged.		
acute respiratory distress syndrome, COVID-19, pediatrics, prone position	26-Mar-21	<a href="#">Prone positioning in children with respiratory failure because of coronavirus</a>  <a href="#">[Free access to abstract only]</a>	Current Opinion in Pediatrics	Review	This review explores the use of prone positioning in children with respiratory failure due to COVID-19. Acute respiratory distress syndrome (ARDS) is a common manifestation of severe COVID-19. Prone positioning has been used successfully in adult patients with ARDS and has been shown to decrease mortality. The efficacy of prone positioning in pediatric ARDS is less clear. There are limited published data on prone positioning in respiratory failure because of COVID-19. The use of proning in non-intubated adults with COVID-19 may improve oxygenation and dyspnea but has not been associated with improved outcomes. Initial studies of intubated adults undergoing prone positioning in severe ARDS related to COVID-19 have shown an improvement in mortality. Although the use of proning in children with severe COVID-19 is recommended, data supporting its use are scarce. Determining the efficacy of prone positioning in respiratory failure because of COVID-19 in children is challenging because of the low incidence of severe disease and variation in clinical practice across sites. Additional studies are needed to provide evidence for or against this treatment strategy in children. The authors advocate for collaborative research efforts across pediatric centers to promote the greatest opportunity to develop a data driven approach to make use of this potential therapy.	This review explores the use of prone positioning in children with respiratory failure due to COVID-19. Determining the efficacy of prone positioning in respiratory failure because of COVID-19 in children is challenging because of the low incidence of severe disease and variation in clinical practice across sites. Additional studies are needed to provide evidence for or against this treatment strategy in children.	Leroue MK, Maddux AB, Mourani PM. Prone positioning in children with respiratory failure because of coronavirus disease 2019 [published online ahead of print, 2021 Mar 26]. <i>Curr Opin Pediatr</i> . 2021;10.1097/MOP.0000000000001009. doi:10.1097/MOP.000000000001009
COVID-19; children; adolescents; physical activity; mental health; Japan	26-Mar-21	<a href="#">Mental Health and Physical Activity among Children and Adolescents during the COVID-19 Pandemic</a>	The Tohoku Journal of Experimental Medicine	Review	This review described the impact of the COVID-19 pandemic on physical activity and psychological status of Japanese children/adolescents during school closure and government-mandated activity restrictions. PubMed search in November 2020 was used to identify relevant articles. For children, data from 2 studies found an association between physical activity and mental health, while 1 other study reported that sedentary time caused deterioration in mood. For adolescents, there were 9 studies that reported a correlation between physical activity and psychological health and 4 studies that reported no correlation between physical activity and psychological health. Of the studies that reported a correlation, 7 reported that physical activity improves psychological health. The findings indicate that physical activity may help reduce mental health problems among Japanese children and adolescents affected by school restrictions due to the pandemic. Thus, stakeholders in the mental health of children and adolescents worldwide should recommend physical activity, because it is a feasible and helpful form of long-term psychological support.	This review described the impact of the COVID-19 pandemic on physical activity and psychological status of Japanese children/adolescents during school closure and government-mandated activity restrictions. The findings indicate that physical activities may help reduce mental health problems among Japanese children and adolescents affected by school restrictions due to the pandemic. Thus, stakeholders in the mental health of children and adolescents worldwide should recommend physical activity, because it is a feasible and helpful form of long-term psychological support.	Okuyama J, Seto S, Fukuda Y, et al. Mental Health and Physical Activity among Children and Adolescents during the COVID-19 Pandemic. <i>Tohoku J Exp Med</i> . 2021;253(3):203-215. doi:10.1620/tjem.253.203.
sleep, race, ethnicity, disparities,	26-Mar-21	<a href="#">Racial/ethnic disparities in sleep in mothers</a>	medRxiv	Preprint (not peer-reviewed)	In this prospective cohort study, the authors aimed to quantify the association between race/ethnicity and maternal and infant self-reported sleep health at 4 months, exploring the role of maternal	This study aimed to quantify the association between race/ethnicity and maternal and	Lucchini M, Kyle M, Pini N, et al. Racial/ethnic disparities in sleep in mothers and infants

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infant, mother, post-partum, COVID-19		<a href="#">and infants during the COVID-19 pandemic</a>			depression, stress, and symptoms of trauma related to the COVID-19 pandemic as potential mediators. 238 participants were recruited as part of the COVID-19 Mother Baby Outcomes (COMBO) cohort at Columbia University in the United States (N=71 non-Hispanic White, N=14 African American (AA), N=113 Hispanic, N=40 other/declined). All infants included in the analysis were born between February and September 2020. Data on infant sleep were collected at 4 months postpartum. A subset of 149 women also completed questionnaires assessing maternal mental health and sleep. Multivariable regressions were used to separately estimate associations of race/ethnicity and mental health with multiple sleep domains for infants and mothers adjusting for individual-level covariates. Compared to non-Hispanic White, Hispanic infants slept less at night ( $\beta = -101.7 \pm 17.6$ , $p < 0.0001$ ) and AA and Hispanic infants went to bed later (respectively $\beta = 1.9 \pm 0.6$ , $p < 0.0001$ , $\beta = 1.7 \pm 0.3$ , $p < 0.0001$ ). Hispanic mothers were less likely to perceive infant sleep as a problem ( $\beta = 1.0 \pm 0.3$ , $p = 0.006$ ). Compared to non-Hispanic White mothers, Hispanic mothers reported worse maternal sleep latency ( $\beta = 1.2 \pm 0.4$ , $p = 0.002$ ), and efficiency ( $\beta = 0.8 \pm 0.4$ , $p = 0.03$ ), but better subjective sleep quality ( $\beta = -0.7 \pm 0.4$ , $p = 0.05$ ), and less daytime dysfunction ( $\beta = -0.8 \pm 0.4$ , $p = 0.04$ ). Maternal mental health scores were statistically significant predictors of multiple domains of maternal sleep but did not mediate the association between race/ethnicity and sleep. These results highlight opportunities to invest resources and develop strategies in postpartum women experiencing health inequities during the COVID-19 pandemic.	infant self-reported sleep health at 4 months, including stressors and trauma related to the COVID-19 pandemic in the US. Maternal mental health scores were statistically significant predictors of multiple domains of maternal sleep but did not mediate the association between race/ethnicity and sleep. These results highlight opportunities to invest resources and develop strategies in postpartum women experiencing health inequities during the COVID-19 pandemic.	during the COVID-19 pandemic. medRxiv. 2021. doi: 10.1101/2021.03.22.21254093
COVID-19; school reopening; outbreaks; children; adolescents	26-Mar-21	<a href="#">COVID-19 in Primary and Secondary School Settings During the First Semester of School Reopening — Florida, August–December 2020</a>	Morbidity and Mortality Weekly Report (MMWR)	Brief Report	In this publication, the U.S. Centers for Disease Control and Prevention (CDC) reviewed descriptive statistics for 67 county-based school districts in Florida, USA. Data was collected between August 10–December 21, 2020, after Florida reopened kindergarten through grade 12 (K-12) public and private schools for in-person learning. During that time, a total of 63,654 cases of COVID-19 were reported to the Florida Department of Health among children and adolescents 5-17 years old. 39.4% of these cases were classified as school-related. 62 (93%) of 67 school districts followed reported school-based outbreaks (695 outbreaks involving 4,370 cases, total). Less than 11% of K-12 schools in Florida reported outbreaks, and less than 1% of registered students were identified as having school-related COVID-19. Higher rates among students were observed in smaller districts, districts without mandatory mask-use policies, and districts with a lower proportion of students participating in remote learning. District incidences among students correlated with the background disease incidence in the county; resumption of in-person education was not associated with a proportionate increase in COVID-19 among school-aged children. These findings highlight the importance of implementing both community-level and school-based strategies to reduce the spread of COVID-19 and suggest that	To assess the occurrence of COVID-19 in Florida schools after the resumption of in-person instruction, the CDC reviewed school-related cases and outbreaks during August–December 2020. District incidences among students correlated with the background disease incidence in the county, and resumption of in-person education was not associated with a proportionate increase in COVID-19 among school-aged children. These findings highlight the importance of implementing both community-level and school-based strategies to reduce the spread of COVID-19 and suggest that school reopening can be achieved without resulting	Doyle T, Kendrick K, Troelstrup T, et al. COVID-19 in Primary and Secondary School Settings During the First Semester of School Reopening — Florida, August–December 2020. MMWR Morb Mortal Wkly Rep 2021;70:437–441. DOI: <a href="http://dx.doi.org/10.15585/mmwr.mm7012e2">http://dx.doi.org/10.15585/mmwr.mm7012e2</a>

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					school reopening can be achieved without resulting in widespread illness among students in K–12 school settings.	in widespread illness among students in K–12 school settings.	
COVID-19; transmission; secondary transmission; elementary schools; school reopening; children	26-Mar-21	<a href="#">Low SARS-CoV-2 Transmission in Elementary Schools — Salt Lake County, Utah, December 3, 2020–January 31, 2021</a>	Morbidity and Mortality Weekly Report (MMWR)	Brief Report	The U.S. Centers for Disease Control and Prevention (CDC) investigated secondary transmission of SARS-CoV-2 in 20 reopened elementary schools (kindergarten through grade 6) in Salt Lake County, Utah, between December 3, 2020–January 31, 2021. All schools reported implementing measures to decrease disease transmission. 51 index COVID-19 patients were identified from 48 classrooms across the sample, consisting of 40 students (median age = 9.5 years; range = 5–12 years) and 11 staff members who had attended school while contagious. 735 identified susceptible school contacts (students and staff members exposed to SARS-CoV-2 in school) of the index patients were tested for SARS-CoV-2 by RT-PCR. 12 (1.6%) of these contacts tested positive for SARS-CoV-2, of which 5 cases from 5 separate classrooms were school-related. 4 of the 5 school-associated cases were attributed to student-to-student transmission, and 1 to student-to-teacher transmission. The secondary attack rate among tested school contacts was 0.7%. Mask use among students was high (86%), and the median distance between students' seats in classrooms was 3 ft. Despite high community incidence and an inability to maintain ≥6 ft of the distance between students at all times, SARS-CoV-2 transmission was low in these elementary schools. These findings add to evidence that in-person elementary schools can be opened safely with minimal in-school transmission when critical prevention strategies, including mask use, are implemented, even though maintaining ≥6 ft between students' seats might not be possible.	The U.S. Centers for Disease Control and Prevention (CDC) investigated secondary transmission of SARS-CoV-2 in 20 reopened elementary schools (kindergarten through grade 6) in Salt Lake County, Utah, between December 3, 2020–January 31, 2021. Despite high community incidence and an inability to maintain ≥6 ft of the distance between students at all times, SARS-CoV-2 transmission was low in these elementary schools. These findings add to the increasing evidence that in-person learning can be achieved with minimal SARS-CoV-2 transmission risk when multiple measures to prevent transmission are implemented.	Hershov RB, Wu K, Lewis NM, et al. Low SARS-CoV-2 Transmission in Elementary Schools — Salt Lake County, Utah, December 3, 2020–January 31, 2021. MMWR Morb Mortal Wkly Rep 2021;70:442–448. DOI: <a href="http://dx.doi.org/10.15585/mmwr.mm7012e3">http://dx.doi.org/10.15585/mmwr.mm7012e3</a>
COVID-19; school reopening; secondary transmission; children; adolescents; transmission prevention	26-Mar-21	<a href="#">Pilot Investigation of SARS-CoV-2 Secondary Transmission in Kindergarten Through Grade 12 Schools Implementing Mitigation Strategies — St. Louis County and City of Springfield, Missouri, December 2020</a>	Morbidity and Mortality Weekly Report (MMWR)	Brief Report	The U.S. Centers for Disease Control and Prevention (CDC) conducted a 2-week pilot investigation into the secondary transmission of SARS-CoV-2 in kindergarten through grade 12 (K-12) schools in Springfield, Missouri, and in St. Louis County, Missouri, between December 7–18, 2020. Schools in both locations implemented COVID-19 mitigation strategies; however, Springfield implemented a modified quarantine policy permitting student close contacts aged ≤18 years who had school-associated contact with a person with COVID-19 and met masking requirements during their exposure to continue in-person learning. 70% of students among all schools attended in-person school at least part-time. Participating students, teachers, and staff members with COVID-19 (n = 37) from 22 schools and their school-based close contacts (n = 156) were interviewed, and contacts were offered SARS-CoV-2 testing. Among 102 school-based contacts who received testing, 2 (2%) had positive test results indicating probable school-based SARS-CoV-2 secondary transmission. Both contacts were in Springfield and did not meet the criteria to participate in the modified quarantine. In Springfield, 42 student contacts were permitted to continue in-person learning under the modified quarantine; among the 30 who were	The U.S. Centers for Disease Control and Prevention (CDC) conducted a 2-week pilot investigation into the secondary transmission of SARS-CoV-2 in kindergarten through grade 12 (K-12) schools in Springfield, Missouri, and in St. Louis County, Missouri, between December 7–18, 2020. Despite high community transmission, SARS-CoV-2 transmission in schools implementing COVID-19 mitigation strategies was lower than that in the community. K–12 schools should continue implementing CDC-recommended mitigation measures to minimize secondary transmission in schools offering in-person learning.	Dawson P, Worrell MC, Malone S, et al. Pilot Investigation of SARS-CoV-2 Secondary Transmission in Kindergarten Through Grade 12 Schools Implementing Mitigation Strategies — St. Louis County and City of Springfield, Missouri, December 2020. MMWR Morb Mortal Wkly Rep 2021;70:449–455. DOI: <a href="http://dx.doi.org/10.15585/mmwr.mm7012e4external icon">http://dx.doi.org/10.15585/mmwr.mm7012e4external icon</a>

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					interviewed, 21 were tested, and none received a positive test result. Despite high community transmission, SARS-CoV-2 transmission in schools implementing COVID-19 mitigation strategies was lower than that in the community. Until additional data are available, K–12 schools should continue implementing CDC-recommended mitigation measures and follow CDC isolation and quarantine guidance to minimize secondary transmission in schools offering in-person learning.		
Antibodies, breastfeeding, breast milk, cord blood, COVID-19, vaccine, maternal immunity, mRNA, neonatal immunity, pregnancy	26-Mar-21	<a href="#">COVID-19 Vaccine Response in Pregnant and Lactating Women: a Cohort Study</a>	American Journal of Obstetrics and Gynecology - Maternal and Fetal Medicine	Original Research	The authors aimed to evaluate the immunogenicity and reactogenicity of COVID-19 mRNA vaccinations in pregnant and lactating women compared to non-pregnant women and natural SARS-CoV-2 infection in pregnancy. The study enrolled 131 reproductive-age vaccine recipients, including 84 pregnant women, 31 lactating women, and 16 non-pregnant women, at 2 academic medical centers in the United States. SARS-CoV-2 spike and RBD IgG, IgA, and IgM antibodies were quantified at baseline, second vaccine dose, 2-6 weeks post-second vaccine, and delivery. Umbilical cord sera titers were also assessed at delivery (n=10). Titers were compared to those of pregnant women 4-12 weeks after natural SARS-CoV-2 infection (n=37). The results showed that vaccine-induced antibody titers were equivalent in pregnant and lactating compared to non-pregnant women (median [IQR]: 5.59 [4.68-5.89] pregnant, 5.74 [5.06-6.22] lactating, 5.62 [4.77-5.98] non-pregnant, p = 0.24). All titers were significantly higher than those induced by natural infection (p<0.0001). Vaccine-generated antibodies were present in all umbilical cord blood and breastmilk samples. Neutralizing antibody titers were lower in umbilical cord compared to maternal sera, although this finding did not achieve statistical significance (median [IQR] 104.7 [61.2-188.2] maternal sera, 52.3 [11.7-69.6] cord sera, p=0.05). The second vaccine dose increased SARS-CoV-2-specific IgG, but not IgA, in maternal blood and breastmilk. No differences were noted in reactogenicity across the groups. The authors concluded that COVID-19 mRNA vaccines generate a robust humoral immune response in pregnant and lactating women, with immunogenicity and reactogenicity similar to that observed in non-pregnant women. Vaccine-induced immune responses were significantly higher than the response to natural infection, and immune transfer to neonates occurred via placenta and breastmilk.	The authors aimed to evaluate the immunogenicity and reactogenicity of COVID-19 mRNA vaccinations in pregnant and lactating women compared to non-pregnant women and natural SARS-CoV-2 infection in pregnancy. The results showed that vaccine-induced antibody titers were equivalent in pregnant and lactating compared to non-pregnant women, and all titers were significantly higher than those induced by natural infection. The authors concluded that COVID-19 mRNA vaccines generate a robust humoral immune response in pregnant and lactating women, with immunogenicity and reactogenicity similar to that observed in non-pregnant women.	Gray KJ, Bordt EA, Atyeo C, et al. COVID-19 vaccine response in pregnant and lactating women: A cohort study. <i>Obstet Gynecol.</i> 2021. doi: <a href="https://doi.org/10.1016/j.ajog.2021.03.023">https://doi.org/10.1016/j.ajog.2021.03.023</a> .
COVID-19, SARS-CoV-2, risk, pregnancy, pregnant women	26-Mar-21	<a href="#">Pregnancy and Risk of COVID-19</a>	medRxiv	Preprint (not peer-reviewed)	This study aimed to examine whether pregnant women were at a higher risk of SARS-CoV-2 infection or to be in contact with specialist healthcare services for SARS-CoV-2, compared to non-pregnant women, using data from the Norwegian National Population Registry from March 1, 2020, to February 28, 2021. The authors included data from all women in Norway between 15 and 45 years of age (n=1,033,699). The results showed that compared to non-pregnant women, pregnant women had a similar risk of a positive	This study aimed to examine whether pregnant women were at a higher risk of SARS-CoV-2 infection or to be in contact with specialist healthcare services for SARS-CoV-2, compared to non-pregnant women in Norway. The authors concluded that pregnant	Magnus MC, Oakley L, Gjessing HK, et al. Pregnancy and risk of COVID-19. <i>medRxiv.</i> 2021. doi: <a href="https://doi.org/10.1101/2021.03.22.21254090">10.1101/2021.03.22.21254090</a> .

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
					SARS-CoV-2 test (adjusted HR: 0.99; 95% CI: 0.92-1.07), a higher risk of a SARS-CoV-2 diagnosis in specialist care (HR: 3.46; 95% CI: 2.89-4.14), and to be hospitalized (HR: 4.70; 95% CI: 3.51-6.30). Pregnant women were, in general, not more likely to be tested for SARS-CoV-2. Pregnant women born outside Scandinavia were less likely to be tested but were at a higher risk of a positive test (HR: 2.37; 95% CI: 2.51-8.87) and of hospitalization with SARS-CoV-2 (HR: 4.72; 95% CI: 2.51-8.87) than pregnant Scandinavian born women. In conclusion, pregnant women were not at higher risk of SARS-CoV-2 infection. However, pregnancy increased the risk of specialist care and hospitalization for SARS-CoV-2 compared to non-pregnant women of the same age. Pregnant women born outside of Scandinavia were of a particularly increased risk, and increased surveillance in this group is warranted.	women were not at higher risk of SARS-CoV-2 infection; however, pregnancy increased the risk of specialist care and hospitalization for SARS-CoV-2 compared to non-pregnant women of the same age. Pregnant women born outside of Scandinavia were of a particularly increased risk, and increased surveillance in this group is warranted.	
COVID-19; wastewater-based epidemiology; schools;	26-Mar-21	<a href="#">Monitoring occurrence of SARS-CoV-2 in school populations: a wastewater-based approach</a>	medRxiv	Preprint (not peer-reviewed)	In this study, the authors aim to investigate the use of a wastewater-based epidemiology approach to identify the presence of SARS-CoV-2 in primary and secondary school wastewater in England. 17 sites (including 10 primary schools, 5 secondary, one post-16 school, and one other location), all located in diverse populations, took part in this study. Wastewater sampling began on October 20, 2020, 6 weeks following the start of the 2020-2021 school year, and samples were initially collected twice weekly. The frequency of sampling increased over the lunchtime periods, and then to 4 days weekly in November, 2020. A total of 296 samples were analysed. 47.3% of the 296 samples collected returned positive for one or both the N1 or E gene; 129 (43.6%) were positive for the N1 gene and 75 (25.3%) samples were positive for the E gene, while 63 samples were positive for both N1 and E genes (21.3%). 80.4% of the samples collected during the first week of December returned positive. This percentage remained around 56% and 51% during the 2nd and 3rd week of December. Early in the study period, the rate of test positivity collected in primary schools was higher than in secondary schools. From week 5 on, the rate of positivity was consistently higher in samples from secondary schools settings, with a positive rate of 88.9% in the 1st week of December (compared to 68.4%). Data suggest that the virus was circulating in schools during the autumn and early winter, and that the frequency intensified with the increase in new cases in the community. Data collected confirm that the presence of SARS-CoV-2 within the school setting can be identified, and suggests that the use of wastewater epidemiology in schools can play a valuable role in monitoring and motivating rapid action.	In this study, the authors investigated the use of wastewater-based epidemiology to identify the presence of SARS-CoV-2 in primary and secondary schools in England. Data collected confirm that the presence of SARS-CoV-2 within the school setting can be identified, and that the use of wastewater testing in schools can play a valuable role in monitoring and motivating rapid action.	Gutierrez VC, Hassard F, Vu M, et al. Monitoring occurrence of SARS-CoV-2 in school populations: a wastewater-based approach. medRxiv 2021.03.25.21254231

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
COVID-19; children; home school; social isolation; Norway	26-Mar-21	<a href="#">The impact of school closure and social isolation on children in vulnerable families during COVID-19: a focus on children's reactions</a>	European Child and Adolescent Psychiatry	Original Research	The authors assessed the impact of school closure and social isolation on children in vulnerable families in Norway during the COVID-19 pandemic. A total of 442 children (mean age=11.43 ± 2.59 years) from the longitudinal FamilieForSK-study were surveyed between April 1 to May 25, 2020, to see how COVID-19-related variables, namely, home school experience, child perceived family stress and instability, screen time use, missing friends and worry about virus infection were associated with children's emotional, somatic/cognitive and worry reactions. The majority of the children (78%) reported that they missed their friends, and 51.25% worried about being infected or infecting others. Over half the children reported that their daily screen time usage was 4+ hrs. The results also showed significant associations between all COVID-19 related predictors, except screen time use and the three outcomes. Family stress and instability had the strongest effects with standardized betas ranging from 0.356 to 0.555, and collectively, predictors explained between 20.7 and 44.1% of the variance in outcomes. Furthermore, several associations were moderated by age, and older children were more negatively impacted (i.e., higher level of reported reactions). This study provides more conclusive evidence of the effects of home school and social isolation during the pandemic on children. It also highlights the importance of focusing on children's reactions more broadly, as there was evidence that children on average had fewer emotional reactions compared to before the pandemic.	The authors assessed the impact of school closure and social isolation on children in vulnerable families in Norway during the COVID-19 pandemic. Results showed significant associations between COVID-19-related variables, including home school experience, child perceived family stress and instability, missing friends and worry about viral infection, and the outcomes of children's emotional, somatic/cognitive, and worry reactions. These findings provide more conclusive evidence of the effects of home school and social isolation during the pandemic on children and highlight the importance of focusing on children's reactions more broadly.	Larsen L, Helland MS, Holt T. The impact of school closure and social isolation on children in vulnerable families during COVID-19: a focus on children's reactions. Eur Child Adolesc Psychiatry. 2021. doi:10.1007/s00787-021-01758-x.
COVID-19; vaccine; antibody; lactation; breast milk	26-Mar-21	<a href="#">The vaccine-elicited immunoglobulin profile in milk after COVID-19 mRNA-based vaccination is IgG-dominant and lacks secretory antibodies</a>	medRxiv	Preprint (not peer-reviewed)	The authors analyzed the antibody response in breast milk of lactating patients who had completed an mRNA-based COVID-19 vaccine regimen (n=10) at Mount Sinai Hospital, USA. Samples (obtained 1 day before dose 1, and 14 days after dose 2) were assayed for specific IgA, IgG, and secretory antibodies against the SARS-CoV-2 spike protein, and control milk samples from December 2019 were used to establish positive cut-off values for each assay. 5/6 of the IgA-positive samples exhibited positive IgA endpoint binding titers compared to a previously determined cut-off value (83%), 1 of which was high-titer (>5x the cut-off). Overall, 50% (n=5) of the post-vaccine milk samples contained spike-specific IgA exhibiting a significant endpoint binding titer. 0% of the undiluted pre-vaccine samples and 50% (n=5) of the undiluted post-vaccine samples contained spike-specific secretory antibodies, with 90% of them (n=4) binding at or above the positive cut-off. 60% (n=3) of positive samples showed significant secretory antibody endpoint binding, with no high-titer responses. Overall, 30% (n=3) of post-vaccine milk samples contained spike-specific secretory antibodies exhibiting a significant endpoint binding titer. 100% of post-vaccine and 0% of pre-vaccine samples contained spike-specific IgG. 100% of the diluted post-vaccine samples exhibited positive endpoint binding titers, with 80% (n=8) being high titer, with no differences in	The authors analyzed antibodies in the breast milk of lactating patients (n=10), 14 days after their second dose of an mRNA-based COVID-19 vaccine, using positive cut-off values established using breast milk samples obtained in 2019. 10/10 samples contained significant levels of post-vaccine IgG, with 80% (n=8) having significant endpoint titers. 6/10 samples were positive for spike-specific IgA, 1 of which had a high IgA endpoint titer.	Fox A, Norris C, Amanat F, et al. The vaccine-elicited immunoglobulin profile in milk after COVID-19 mRNA-based vaccination is IgG-dominant and lacks secretory antibodies. medRxiv. January 2021. doi:10.1101/2021.03.22.21253831

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
school; transmission; COVID-19; remote; on-site learning; mitigation	26-Mar-21	<a href="#">SARS-CoV-2 Acquisition and Immune Pathogenesis Among School-Aged Learners in Four K-12 Schools</a>	medRxiv	Preprint (not peer-reviewed)	In this study, the authors aimed to directly measure SARS-CoV-2 infection in 4 US schools with either remote or on-site learning, and understand the serological and cellular mechanisms in the pediatric population in response to SARS-CoV-2 infection. Schools A, B, & C all had primarily remote instruction, with schools A & B serving low-income Hispanic students, school C serving students with special needs, and school D serving mostly white students via predominantly on-site instruction. The study was divided into 2 stages: in the fall of 2020 and 6-8 weeks later during a surge in COVID-19 cases in the United States. 181 and 300 students aged 7-17 years were included in both stages, respectively, and underwent COVID-19 symptom screening, SARS-CoV-2 tests, other respiratory viral antigen tests, and at stage 2, optional additional tests for serological and other immunologic markers of SARS-CoV-2 infection. The authors also collected data on regional SARS-CoV-2 infection rates and observed adherence to physical distancing and mask wearing at the 4 schools. 0 and 17 learners were SARS-CoV-2 positive during the respective stages. School A (97% remote) had the highest infection rate (9/70, 12.9%, p<0.01) and IgG positivity rate (13/70, 18.6% [p-value not reported]). School D had the lowest infection and IgG positive rate (1/86, 1.2%). Mitigation compliance [physical distancing (mean 87.4%) and face covering (91.3%)] was high at all schools. Learners with documented SARS-CoV-2 infection had neutralizing antibodies (94.7%), broad and robust IFN- $\gamma$ T cell responses, reduced frequencies of monocytes, and lower levels of circulating inflammatory mediators. Reduced monocyte and immune mediator concentrations coupled with robust humoral and cellular immunity may explain the generally milder symptoms in school-aged children. Despite a very small sample size, infection in the schools reflected regional rates rather than remote or onsite learning modalities, suggesting some potential for strong mitigation strategies that reduce transmission and case counts at schools.	The authors aimed to directly measure SARS-CoV-2 infection in 4 US schools with either remote or on-site learning at 2 stages of the COVID-19 pandemic in the United States. Reduced monocyte and immune mediator concentrations coupled with robust humoral and cellular immunity may explain the generally milder symptoms in school-aged children. Infection in the schools reflected regional rates rather than remote or on-site learning modalities, suggesting that schools can perhaps implement successful mitigation strategies across a range of incomes, school-types, and student diversity.	Cooper DM, Messaoudi IR, Aizik S, et al. SARS-CoV-2 Acquisition and Immune Pathogenesis Among School-Aged Learners in Four K-12 Schools. <i>medRxiv</i> . 2021. doi: 10.1101/2021.03.20.21254035
SARS-CoV-2, schools, incidence	26-Mar-21	<a href="#">A cross-sectional and prospective cohort study of the role of schools in the SARS-CoV-2 second wave in Italy</a>	The Lancet Regional Health - Europe	Original Research	This Italian cross-sectional and prospective cohort study during the 2nd COVID-19 wave (September 30, 2020 - February 28, 2021) determined whether schools were early COVID-19 amplifiers. The authors used databases from the Italian Ministry of Education and schools' secondary cases tracing to compare SARS-CoV-2 incidence in students/school staff and general population, and incidence across age groups. The incidence of SARS-CoV-2 infection among students was lower than that in the population (community incidence: 108/10,000); elementary and middle school incidence was 66/10,000 (38.9% lower than the general population), and high school incidence was 98/10,000 (9% lower than the general population). Rates of secondary infections at school were <1%, and clusters of $\geq 2$ SARS-CoV-2 cases occurred in 5–7% of the schools.	This Italian cross-sectional and prospective cohort study during the 2nd COVID-19 wave (September 30, 2020 - February 28, 2021) investigated whether schools were early COVID-19 amplifiers. The incidence of SARS-CoV-2 infection among students was lower than that in the general population, and secondary infections at school were rare. The authors concluded that this analysis does not	Gandini S, Rainisio M, Iannuzzo ML, et al. A cross-sectional and prospective cohort study of the role of schools in the SARS-CoV-2 second wave in Italy. <i>The Lancet Regional Health - Europe</i> . 2021;5:100092. doi:10.1016/j.lanepe.2021.100092

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					Incidence among teachers was comparable to the population of similar age (P = 0.23). When the secondary case was a teacher, the index case was more frequently a teacher than a student (P =0.007). Before and around the date of school opening in the region of Veneto, SARS-CoV-2 incidence grew maximally in people aged 20–29 and 45–49-years, not among students. The lag between school opening dates and the increase in regional COVID-19 effective reproductive number (Rt) was not uniform across Italian regions with different school opening dates. Finally, school closures in 2 regions where closures were implemented before other measures did not affect Rt decrease. The authors concluded that this analysis does not support the role of school opening as a driver of the second COVID-19 wave in Italy.	support the role of school opening as a driver of the second COVID-19 wave in Italy.	
SARS-CoV-2; school closures	26-Mar-21	<a href="#">Re-opening schools in a context of low COVID-19 contagion: Consequences for teachers, students and their parents</a>	medRxiv	Preprint (not peer-reviewed)	The authors conducted a study of the effects of re-opening schools in Norway on incidence rates of SARS-CoV-2 for students, parents of students, and teachers. School lockdowns were imposed on March 12, 2020; preschool and elementary students in grades 1-4 were allowed back to school on April 27, and schools re-opened for older students on May 11, 2020. Re-opening guidelines included self-isolation when sick, intensification of basic hygiene measures (handwashing, cleaning of facilities), and physical distancing. Mask wearing was not mandated or encouraged for children. The study compared groups directly affected by school re-openings with those not affected: students (aged 17-19 years) with young adults (aged 20-22 years) above school age, teachers with non-teacher professionals of similar socio-economic status, and parents of high schoolers (youngest child is 17-19 years) with parents of young adults (youngest child is 20-22 years). The authors note a lower rate of confirmed SARS-CoV-2 infection in 17-19-year-olds than in adults 20-22 years-old [rates and p-values not reported]. Incidence rates comparing the parental groups and professional groups did not vary. The authors note a relative increase in infection rates 2-3 weeks after re-opening; this is not statistically significant and peaks at about 10 infected teachers per 100,000. No statistically significant effect was found between parents of either age group. The impact on teachers varied with grade level taught. High-school teachers had an increased SARS-CoV-2 infection rate by 4.3 per 100,000 (p<0.05). The authors compared the Oslo region, which had a higher infection rate, to other counties and found no indication of increased SARS-CoV-2 rates with re-opening in Oslo. The authors conclude that when infection rates are low, school re-openings can be done safely, but defining a low incidence rate may be difficult.	The authors conducted a study of the effect of schools re-opening in Norway on incidence rates of SARS-CoV-2 for students, parents of students, and teachers. The authors note a lower rate of confirmed SARS-CoV-2 infection in 17–19-year-olds than adults 20-22-years-old.	Godoy A, Grotting MW, Hart RK. Re-opening schools in a context of low COVID-19 contagion: Consequences for teachers, students and their parents. <i>MedRxiv</i> . doi:https://doi.org/10.1101/2021.03.25.21254219

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
COVID-19, SARS-CoV-2, Asthma, Children	25-Mar-21	<a href="#">Asthma May Not Be A Risk Factor for Severe COVID-19 in Children</a>	The Journal of Allergy and Clinical Immunology	Original Research	This retrospective study aimed to evaluate whether asthma could be a risk factor for a severe form of COVID-19 or whether COVID-19 could worsen asthma control in children. A cluster of COVID-19 cases was identified in September 2020 at a residential pneumo-pediatric rehabilitation center for children with chronic lung disease in La Guisane, Briancon, France. The center managed 51 asthmatic children (mean age 14.14 +/- 2.38 years) tested after the first case, using quantitative RT-PCR tests for SARS-CoV-2. A comparison between FEV1 before and after the infection was performed. The mean FEV1 at baseline was 97 ± 13%. 31.4% received a 4- to 5-step treatment according to GINA (associated with long-acting β2-agonists for 51%, and/or montelukast for 23.5%). 2 children (3.9%) received omalizumab as a long-term add-on therapy. All of the children had controlled asthma during the 4 weeks preceding the cluster of COVID-19 cases. 22 children (43.1%) presented with mild and transient symptoms, and none presented with severe symptoms. Of the 46/51 children (90.2%) who were positive for SARS-CoV-2 at least once, 29 (56.9%) remained asymptomatic. No difference was found in terms of test positivity or symptomatology between allergic and non-allergic children. Asthma remained controlled in all patients, and mean FEV1 measured 1 month later showed no significant difference from baseline. These findings suggest that children with asthma may not experience a severe form of COVID-19 and that COVID-19 does not appear to worsen short-term asthma control.	This retrospective study aimed to evaluate whether asthma could be a risk factor for a severe form of COVID-19 or whether COVID-19 could worsen asthma control in children. Favorable outcomes were noted in the study, suggesting that children with asthma may not experience a severe form of COVID-19 and that COVID-19 does not appear to worsen short-term asthma control.	Amat F, Delaisi B, Labbé JP, Leonardi J, Houdouin V. Asthma may not be a risk factor for severe COVID-19 in children [published online, 2021 Apr 19]. J Allergy Clin Immunol Pract. 2021;S2213-2198(21)00432-3. doi:10.1016/j.jaip.2021.03.046
COVID-19, neonatal mortality, pandemic impact, northern Ghana, newborn care	25-Mar-21	<a href="#">Decrease in Admissions and Change in the Diagnostic Landscape in a Newborn Care Unit in Northern Ghana During the COVID-19 Pandemic</a>	Frontiers in Pediatrics	Original Research	This comparative study described how the COVID-19 pandemic impacted newborn care in the neonatal ICU at the Tamale Teaching Hospital in Ghana. The study included 2,901 neonates admitted to the unit before COVID-19 (March 1-August 31, 2019) and 1,285 admitted during the pandemic (March 1-August 31, 2020). Compared to before the COVID-19 pandemic, referrals to the center from other facilities increased by 11% (p<0.0001), neonate admissions from within the hospital decreased by 11% (p<0.0001), and those born at home decreased by 3% (p=0.002) during the pandemic. Admissions due to prematurity or complications increased by 3%, those due to jaundice increased by 4%, admissions due to neonatal infections decreased by 9%, and mean age at discharge decreased from 11 to 9.7 days (all at p<0.0001). Neonatal mortality before the COVID-19 pandemic was predicted by: low birth weight (OR = 2.8, 95% CI 1.78-4.56), congenital anomalies (OR = 2.5, 95% CI 1.32-4.83), and birth asphyxia (OR = 1.9, 95% CI 1.16-3.23; p<0.05 for all). During the pandemic, mortality was predicted by: being referred from other facilities (OR = 3.3, 95% CI 2.18-4.92), low birth weight (OR = 2.8, 95% CI 1.61-4.72), birth asphyxia (OR = 2.0, 95% CI 1.14-3.55), and spontaneous vaginal delivery (OR = 1.6, 95% CI 1.08-2.42; p<0.05 for all). The researchers note that the	This comparative study described how the COVID-19 pandemic impacted newborn care in the neonatal ICU at the Tamale Teaching Hospital in Ghana. The researchers noted increases in referrals from other facilities during the pandemic, and changes in the reasons for admittance and predictors of neonatal mortality before and during the COVID-19 pandemic.	Abdul-Mumin A, Cotache-Condor C, Bimpong KA, et al. Decrease in Admissions and Change in the Diagnostic Landscape in a Newborn Care Unit in Northern Ghana During the COVID-19 Pandemic. Front Pediatr. 2021;9:642508. Published 2021 Mar 25. doi:10.3389/fped.2021.642508

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					increase in referrals could be due to some facilities suspending operations during the COVID-19 pandemic.		
COVID-19; pregnancy; fetus; vertical transmission; Mexico	25-Mar-21	<a href="#">Fetal and placental infection with SARS-CoV-2 in early pregnancy</a>	Journal of Medical Virology	Article	The authors examined the placenta and fetal organs from an early pregnancy miscarriage with a SARS-CoV-2 maternal infection (28-year-old woman with a 13-week di-amniotic twin pregnancy) on 8 April 2020 in Mexico. Immunohistochemical, RT-qPCR, immunofluorescence, and electron microscopy methods were used. SARS-CoV-2 nucleocapsid protein, viral RNA, and particles consistent with coronavirus were found in the placenta and fetal tissues, accompanied by RNA replication revealed by double-stranded RNA (dsRNA)-positive immune-stain. Prominent damage of the placenta and fetal organs were associated with a hyperinflammatory process identified by histological examination and immunohistochemistry. The findings suggest that congenital SARS-CoV-2 infection is possible during the first trimester of pregnancy and that fetal organs, such as lung and kidney, are targets for coronavirus. The infection and multi-organic fetal inflammation produced by SARS-CoV-2 during early pregnancy should alert clinicians in the assessment and management of pregnant women for possible fetal consequences and adverse perinatal outcomes.	The authors examined the placenta and fetal organs from an early pregnancy miscarriage with a SARS-CoV-2 maternal infection (28-year-old woman with a 13-week di-amniotic twin pregnancy) on 8 April 2020 in Mexico. The findings suggest that congenital SARS-CoV-2 infection is possible during the first trimester of pregnancy and that fetal organs, such as lung and kidney, are targets for coronavirus.	Valdespino-Vázquez MY, Helguera-Repetto CA, León-Juárez M, et al. Fetal and placental infection with SARS-CoV-2 in early pregnancy. J Med Virol. 2021. doi:10.1002/jmv.26965.
COVID-19; SARS-CoV-2; children; pediatric; drug management	25-Mar-21	<a href="#">Biological drugs in paediatric COVID-19 infection: what patients, which drug, how much and how long</a>	Clinical and Experimental Rheumatology	Letter to the Editor	The authors respond to the article “Mortality in tocilizumab-treated patients with COVID-19: a systematic review and meta-analysis” by Berardicurti et al. (2020) which reports encouraging data about the use of tocilizumab in severe forms of COVID-19. The onset of MIS-C, a condition characterized by fever, inflammation, and multiorgan dysfunction, may represent a life-threatening condition requiring the prompt use of biological drugs together with intensive-care support. To this regard, 3 consensus guidelines by the United Kingdom PIMS-TS National Consensus Management Study Group, by the American College of Rheumatology, and the Paediatric Section of the European Society of Emergency Medicine and European Academy of Paediatrics provided recommendations about the management MIS-C patients. The clinical guidelines highlight the role of a multidisciplinary team, and therapy type and initiation should be modulated based on the patient’s clinical conditions at the first evaluation. Previous adopted drugs for MIS-C were anakinra in 80 patients, tocilizumab in 69 cases, infliximab in 17 subjects and rituximab in 2 cases. These therapeutic approaches proved effective in almost all cases (96.3% data available in 82 patients), although dose, administration route and duration therapy were rarely specified. Further studies are needed to clarify whether tocilizumab or anakinra appears most appropriate and at which dosage and administration route both as acute phase treatment and as maintenance therapy.	The authors respond to the article “Mortality in tocilizumab-treated patients with COVID-19: a systematic review and meta-analysis” by Berardicurti et al. which reports encouraging data about the use of tocilizumab in severe COVID-19. The authors describe current guidelines and previous therapeutic approaches and conclude that further studies are needed to clarify whether tocilizumab or anakinra appears most appropriate and at which dosage and administration route.	Mastrolia MV, Maccora I, Marrani E, Pagnini I, Simonini G. Biological drugs in paediatric COVID-19 infection: what patients, which drug, how much and how long [published online 2021 Mar 25]. Clin Exp Rheumatol. 2021.

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
Pediatrics, asthma, emergencies, influenza, children, shutdown, lockdown	25-Mar-21	<a href="#">Evaluating the impact of COVID-19 on asthma morbidity: a comprehensive analysis of potential influencing factors</a>  <a href="#">[Free Access to Abstract Only]</a>	Annals of Allergy, Asthma & Immunology	Original Research	This study characterized the effect of the COVID-19 pandemic on pediatric asthma in Orange County, California, USA. Hospital and emergency department (ED) encounters of patients, after the first diagnosis of asthma, were selected between 2017-2020 and changes in outcomes during the pandemic were compared to historical data. There were a total of 18,912 pediatric asthma patients treated during the study period, 49.7% were of Hispanic origin. Average age at first encounter was 9.6 years (SD=4.6, range 2-18). The authors observed a 78% decrease in the hospitalization rate, a 90% decrease in ED visit rate, and a 68% decrease in oral corticosteroid use rate per 1000 patients/month during the COVID-19 shutdown (April-June of 2020) compared to January-March of the same year (p<0.05), significantly greater changes than the same time period 2017 – 2019 (p<0.05). In addition, there were significant reductions in albuterol and inhaled corticosteroid usage (p <0.05). Particulate matter (PM2.5) in Orange County and influenza rates were also significantly reduced during the pandemic (p<0.05). The authors conclude that the study indicates better asthma control during the COVID-19 pandemic, associated with a significant increase in telehealth visits and reductions in PM2.5 and influenza infections.	In this article, the authors assessed the effects of the COVID-19 pandemic on pediatric asthma in Orange County, California, USA. They observed a 78% decrease in the hospitalization rate, a 90% decrease in ED visit rate, and a 68% decrease in oral corticosteroid use rate per 1000 patients/month during the COVID-19 shutdown, with significant reductions in albuterol and inhaled corticosteroid usage along with reduced local particulate matter and influenza rates. The authors conclude that the study indicates better asthma control during the COVID-19 pandemic.	Guijon OL, Morpew T, Consulting M, Ehwerhemuepha L, Galant SP. Evaluating the impact of COVID-19 on asthma morbidity: a comprehensive analysis of potential influencing factors. Ann Allergy Asthma Immunol. 2021;S1081-1206(21)00219-2. doi:10.1016/j.anai.2021.03.018
COVID-19; children; MIS-C	25-Mar-21	<a href="#">COVID-19 and Treatment and Immunization of Children-The Time to Redefine Pediatric Age Groups is Here</a>	Rambam Maimonides Medical Journal	Review	This review revealed the necessity for redefining pediatric age groups to rapidly establish recommendations for optimal prevention and treatment of COVID-19 in minors. The United States CDC defined MIS-C as occurring in individuals aged <21 years. However, post-pubertal MIS-C adolescent patients are no longer children physiologically. Furthermore, MIS also occurs in adults, termed "MIS-A". Hence, the authors recommend that there should be no differentiation between MIS-C and MIS-A: the term should be "MIS" only. United States and European Union drug approval is handled separately for children, defined as <18-year-olds, ascribing non-existent physical characteristics up to the 18th birthday. This blur between the administrative and the physiological meanings for the term "child" is causing flawed demands for pediatric studies in all drugs and vaccines, including those against COVID-19. Effective treatment of all conditions, including COVID-19, should be based on actual physiological need. The flawed definition for "children" in the development of drugs and vaccines and their approval is negatively impacting prevention and treatment of COVID-19 in minors.	This review revealed the necessity for redefining pediatric age groups to rapidly establish recommendations for optimal prevention and treatment of COVID-19 in minors. The authors state that effective treatment of all conditions, including COVID-19, should be based on actual physiological need. They report that the flawed definition for "children" in the development of drugs and vaccines and their approval is negatively impacting prevention and treatment of COVID-19 in minors.	Rose K, Grant-Kels JM, Ettienne EB, et al. COVID-19 and Treatment and Immunization of Children-The Time to Redefine Pediatric Age Groups is Here. Rambam Maimonides Med J. 2021. doi:10.5041/RMMJ.10433.
USA, live birth, preterm birth, low birth weight, cesarean delivery, COVID-19	25-Mar-21	<a href="#">Changes in live births, preterm birth, low birth weight, and cesarean deliveries in the United States</a>	medRxiv	Preprint (not peer-reviewed)	The authors of this study seek to identify how the COVID-19 pandemic has impacted childbearing and a broad set of perinatal health indicators in the USA. National monthly counts of total births, and rates per 100 births of preterm birth (early, late, and total preterm), low birth weight (<2500g), very low birth weight (<1500g), and C-section were acquired for the years 2015-2020. Total births, as well as 5/6 indicators (all but rate of C-section) were significantly lower in 2020 than in previous years. Declines in preterm birth and	The authors of this study seek to identify how the COVID-19 pandemic has impacted childbearing and a broad set of perinatal health indicators in the USA. National monthly counts of total births, and rates per 100 births of preterm birth (early,	Gemmill A, Casey JA, Catalano R, et al. Changes in live births, preterm birth, low birth weight, and cesarean deliveries in the United States during the SARS-CoV-2 pandemic. medRxiv. March 2021.

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		<a href="#">during the SARS-CoV-2 pandemic</a>			low birth weight were largest in magnitude in both early and later stages of the 2020 pandemic, while those for live births occurred at the end of the year. The authors indicate that their findings provide some of the first national evidence of substantial reductions in livebirths and adverse perinatal outcomes during the SARS-CoV-2 pandemic. Only C-sections appeared unaffected. These declines were not uniform across the pandemic, and the authors suggest that several mechanisms, which require further study, may explain these patterns.	late, and total preterm), low birth weight (<2500g), very low birth weight (<1500g), and C-section were acquired for the years 2015-2020. Total births, as well as 5/6 indicators (all but rate of C-section) were significantly lower in 2020 than in previous years.	doi:10.1101/2021.03.20.21253990
COVID-19, Children, Hypoxia, Mechanical ventilation, Shock	25-Mar-21	<a href="#">The Severity and Atypical Presentations of COVID-19 Infection in Pediatrics</a>	BioMed Central (BMC) Pediatrics	Original Research	The authors of this observational cohort study aimed to explore the severity and atypical manifestations of SARS-CoV-2 infections in children. 398 children with RT-PCR confirmed SARS-CoV-2 infections were included in this study from March to November 2020. Patients were subdivided into two groups based on the severity of their SARS-CoV-2 clinical presentation. Group 1 (non-severe SARS-CoV-2) was admitted into wards, and Group 2 (severe SARS-CoV-2) was admitted into the pediatric ICU. The results showed that 295 cases (74.1%) were non-severe and 103 cases (25.9%) were severe. There was a significant difference between the affected children's age groups (p<0.001) with a median of 0-15 years. Boys (52%) were found to be more affected than girls (48%), with significant differences (p<0.001). 68.6% of confirmed cases had a contact history with family members infected with SARS-CoV-2. 41.7% of severe cases required mechanical ventilation, and 20.4% of severe cases died. In COVID-19 patients, fever, headache, fatigue, and shock were the most common clinical presentations. 3.5% of children showed atypical presentations, with 1.5% presenting with acute pancreatitis, 1.25% with deep venous thrombosis, and 1.0% with MIS-C. Multivariate regression analysis showed that COVID-19 severity in children was significantly higher among children with hypoxia, shock, mechanical ventilation, and higher levels of D-dimer. Therefore, most children had a non-severe type of COVID-19. The authors highlight the importance of pediatricians giving thought to extrapulmonary manifestations as a differential diagnosis of SARS-CoV-2 infection in pediatric patients, especially during the COVID-19 pandemic.	The authors of this observational cohort study aimed to explore the severity and atypical manifestations of SARS-CoV-2 infections in children. Most children had a non-severe type of COVID-19, and COVID-19 severity was significantly higher among children with hypoxia, shock, mechanical ventilation, and higher levels of D-dimer. The authors highlight the importance of pediatricians giving thought to extrapulmonary manifestations as a differential diagnosis of SARS-CoV-2 infection in pediatric patients, especially during the COVID-19 pandemic.	Saleh NY, Aboelghar HM, Salem SS, et al. The severity and atypical presentations of COVID-19 infection in pediatrics. BMC Pediatr. 2021;21(1):144. Published 2021 Mar 25. doi:10.1186/s12887-021-02614-2
symptoms; COVID-19; maternal health; pregnancy	25-Mar-21	<a href="#">Symptoms and syndromes associated with SARS-CoV-2 infection and severity in pregnant women from two community cohorts</a>	Nature Scientific Reports	Original Research	The authors tested whether pregnant and non-pregnant women differ in COVID-19 symptom profile and severity, and extended previous investigations on hospitalized pregnant women to those who did not require hospitalization. Two female community-based cohorts (18–44 years) provided longitudinal (smartphone application, n= 1,170,315, n= 79 pregnant tested positive) and cross-sectional (web-based survey, n= 1,344,966, n= 134 pregnant tested positive) data, prospectively collected through self-participatory citizen surveillance in the United Kingdom, Sweden, and the United States. Pregnant and non-pregnant women positive for SARS-CoV-2 infection did not differ in COVID-19 severity, except for a higher	The authors examined differences in COVID-19 symptoms between pregnant and non-pregnant women in multiple longitudinal and cross-sectional participatory citizen surveillance cohorts in the United Kingdom, Sweden, and the United States. Pregnant women with comorbidities appear to be at increased risk for severe disease,	Molteni E, Astley CM, Ma W, et al. Symptoms and syndromes associated with SARS-CoV-2 infection and severity in pregnant women from two community cohorts. <i>Sci Rep.</i> 2021;11(1):6928. Published 2021 Mar 25. doi:10.1038/s41598-021-86452-3

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					frequency of gastro-intestinal symptoms in pregnant women. Pregnant women were more likely to have received testing, despite reporting fewer symptoms. Pre-existing lung disease was most closely associated with syndromic severity in pregnant hospitalized women, while heart and kidney diseases and diabetes increased risk. The most frequent symptoms among non-hospitalized women were anosmia (63% pregnant, 92% non-pregnant) and headache (72%, 62%). Cardiopulmonary symptoms, including persistent cough (80) and chest pain (73%), were more frequent among pregnant who were hospitalized. Pregnant women with comorbidities thus appear to be at increased risk for severe disease, consistent with evidence from COVID-19 in the general population, and should be carefully monitored in the case of SARS-CoV-2 infection.	consistent with evidence from COVID-19 in the general population, and should be carefully monitored in the case of SARS-CoV-2 infection.	
COVID-19, schools, epidemiological modeling	25-Mar-21	<a href="#">In the long shadow of our best intentions: Model-based assessment of the consequences of school reopening during the COVID-19 pandemic</a>	PloS One	Original Research	The researchers used epidemiological modeling, focusing on the US, to explore the feasibility and consequences of school re-opening (grades Kindergarten-12) in the face of differing rates of COVID-19 prevalence and transmission. Based on age-structured estimates of symptomatic COVID-19 rates, they assumed students develop symptoms in 21% of cases, a 2.3 day delay from start of infectiousness to symptom onset, a 0.7 day delay before seeking a test, and a delay in test results for an additional 4 days. They demonstrate the potential for a large discrepancy between detected cases and true infections in schools, due to the combination of high asymptomatic rates in children, coupled with delays in testing and results. The findings indicate that, regardless of the initial prevalence of the disease, and in the absence of robust surveillance testing and contact-tracing, most schools in the United States can expect to remain open for 20–60 days without the emergence of sizeable disease clusters. Even if schools choose to close after outbreaks occur, COVID-19 cases will be seeded from these school clusters and amplified into the community. They conclude that the risks to student safety and benefits of in-person learning frame a false dual choice. Re-opening schools without surveillance testing and contact tracing measures in place, they argue, will lead to spread within the schools and within the communities that would eventually force a return to remote learning and leave a trail of infection in its wake.	The researchers used epidemiological modeling, focusing on the US, to explore the feasibility and consequences of school reopening (grades Kindergarten-12) in the face of differing rates of COVID-19 prevalence and transmission. They concluded that re-opening schools without surveillance testing and contact tracing measures in place will lead to spread within the schools and within the communities that would eventually force a return to remote learning and leave a trail of infection in its wake. .	Johnson KE, Stoddard M, Nolan RP, et al. In the long shadow of our best intentions: Model-based assessment of the consequences of school reopening during the COVID-19 pandemic. PLoS One. 2021;16(3):e0248509. Published 2021 Mar 25. doi:10.1371/journal.pone.0248509
Pregnancy, vaccination, clinical trials, immunization, safety	24-Mar-21	<a href="#">Future vaccinations in pregnancy</a>	Best Practice and Research. Clinical Obstetrics and Gynaecology	Original Article	At present, vaccination in pregnancy relies upon the following principles: Evidence of safety of the vaccination for the mother and fetus, evidence of maternal vaccination providing protection to the fetus and newborn, transplacental passage of IgG antibodies that are triggered or boosted by immunization and cause seropositivity in newborns and infants, and evidence that newborns and infants do not produce a rapid antibody titer following active immunization. The author discusses how vaccinations targeting illnesses that increase morbidity and mortality in both pregnancy and the newborn period are ideal candidates for future vaccinations in	In this article the author discusses current principles of vaccination in pregnancy and candidates for future maternal vaccination that would impact maternal morbidity and mortality. However, pregnant women have historically been excluded from vaccine trials, as was evident with the recent development of vaccines against	Vress D. Future vaccinations in pregnancy. Best Pract Res Clin Obstet Gynaecol. 2021;S1521-6934(21)00048-1. doi:10.1016/j.bpobgyn.2021.03.009

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					pregnancy and may change the landscape of child and maternal health. They discuss the possibility of future vaccines for Group B Streptococcus, Respiratory Syncytial Virus, Cytomegalovirus, Zika Virus, Malaria, Ebola, and SARS-CoV-2. However, pregnant and breastfeeding women have historically and automatically been excluded from any clinical trials, including vaccination trials, as was evident in the recent development of SARS-CoV-2 vaccines. The author concludes that research into how vaccines work in pregnancy is imperative to further understanding on efficacy, dosing, and side effects, and states that pregnant women and their unborn fetuses have a right to evidence-based, scientifically sound health care from inclusion in such vaccine trials.	SARS-CoV-2. The author concludes that research into how vaccines work in pregnancy is imperative to further understanding on efficacy, dosing, and side effects, and states that pregnant women and their unborn fetuses have a right to evidence-based, scientifically sound health care from inclusion in such vaccine trials.	
SARS-CoV-2; COVID-19; encephalitis; children	24-Mar-21	<a href="#">Two Paediatric patients with encephalopathy and concurrent COVID-19 infection: Two sides of the same coin?</a>	Case Reports in Neurological Medicine	Case Report	The authors report on 2 cases of neuro-inflammatory involvement of SARS-CoV-2 in children in the UK. Case 1 was a 13-month-old female child with altered consciousness, seizures, and a 3-day history of fevers. She was transferred to the Critical Care Unit (CCU) after requiring intubation due to decorticate posturing and a Glasgow Coma Scale of 5. Electroencephalography (EEG) showed diffused slow-wave background activity. She was positive for SARS-CoV-2 and adenovirus initially and remained SARS-CoV-2 positive for 2 weeks. A SARS-CoV-2 RNA analysis of the cerebrospinal fluid (CSF) was negative. A magnetic resonance imaging (MRI) done on day 4 showed bilateral widespread white matter high signal abnormalities with a splenial lesion. She was treated with steroids for acute disseminated encephalomyelitis (ADEM). Case 2 was a 10-year-old female child who presented with 2-days of vomiting, lethargy, and fever. She had a positive SARS-CoV-2 PCR test by nasopharyngeal swab, and on day 10 she stopped speaking, mobilising, or using her right arm. At the CCU, she had autonomic disturbance with hypertension and was intubated. An MRI completed on day 12 was normal, but CSF showed a raised white cell count of 6075/mm <sup>3</sup> , and the CSF SARS CoV-2 RNA test was negative. 50 days after illness onset, a repeat MRI showed asymmetric bilateral high-signal lesions in the basal ganglia and the subcortical white matter in the front and temporal lobes. Although Case 1 had the splenial lesion consistent in children with PIMS-TS, the authors state that neither child had PIMS-TS. Since a virus can trigger ADEM, it is important to consider COVID-19 in children with ADEM. The MRI changes in case 2 showed a neuro-inflammatory process triggered by SARS-CoV-2. Lymphocytic pleocytosis is common in ADEM, but case 2 had a high white cell count, which has been reported in patients with PIMS-TS and encephalopathy. The authors report that the detection of anti-SARS-CoV-2 antibodies in the CSF could help support a diagnosis of COVID-19 with encephalitis, but it was unavailable to them.	The authors report on 2 contrasting cases of neuroinflammatory involvement of SARS-CoV-2 in children and that the detection of anti-SARS-CoV-2 antibodies in cerebrospinal fluid could help support a diagnosis of COVID-19 with encephalitis, but it was unavailable to them.	Vraka K, Ram D, West S, et al. Two Paediatric Patients with Encephalopathy and Concurrent COVID-19 Infection: Two Sides of the Same Coin?. <i>Case Rep Neurol Med.</i> 2021;2021:6658000. Published 2021 Mar 24. doi:10.1155/2021/6658000

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brain-based development disorder; co-morbidities; pediatric; COVID-19	24-Mar-21	<a href="#">COVID-19 in Children with Brain-based Developmental Disabilities: A Rapid Review Update</a>	medRxiv	Preprint (not peer-reviewed)	The authors performed a literature search to determine if children with brain-based developmental disabilities (BBDD) are more likely to develop COVID-19, develop complications, or have a poorer prognosis from COVID-19. Children ≤18 years were included that had BBDD or were at risk for developing BBDD. 29 articles were included in the review, the mean age of children with BBDD or at risk was 4 years [no range given], and the most common symptoms were breathing difficulties in 56% and fever in 48%. 52 children (9 with Down syndrome, 26 with congenital heart disease, and 27 premature; non-mutually exclusive) were included in the case reports and series. Of these, 67% with Down syndrome, 58% with congenital heart disease, and 67% with prematurity were admitted to an ICU. Acute respiratory distress syndrome (ARDS) was the most common complication. In the cases, 7 children died. Cohort studies included 451 children with or at risk of BBDD in 6 studies. A study from China had 1 premature case discharged from the ICU. 12 out of 19 children and adolescents were identified with comorbidities in a US study. 14 of the 19 were admitted to the ICU, and 2 died from unspecified comorbidities. 4 infants with BBDD were included in a study in Turkey, and one of these with Down syndrome died from ARDS. Another study from the US included 20 children with a disability out of 627 with COVID-19. Those with the most severe cases were more likely to have chromosomal abnormalities (p<0.001), and nervous system disease (p<0.001). A study from Europe included 145 with disabilities (25% of COVID-19 pediatric cases). The odds of ICU admission were higher for children with neurologic (OR=2.8, p=0.037) and congenital heart diseases (OR=2.9, p=0.029). A review of medical records included 916 children; 125 had a disability. The authors state there is a greater risk of developing severe COVID-19 in children with BBDD, pre-existing comorbidities, and younger children.	The authors performed a literature review to determine if children with brain-based developmental disabilities (BBDD) are more likely to develop COVID-19, are more likely to develop complications, or are more likely to have a poorer prognosis from COVID-19. The authors state there is a greater risk of developing severe COVID-19 in children with BBDD, pre-existing comorbidities, and younger children.	Dugas M, Stefan T, Lepine J. et al. COVID-19 in Children with Brain-based Developmental Disabilities: A rapid review update. MedRxiv. 2021; <a href="https://doi.org/10.1101/2021.03.17.21253283">https://doi.org/10.1101/2021.03.17.21253283</a>
Kawasaki disease; COVID-19; pediatric health	24-Mar-21	<a href="#">SARS-CoV-2 infection triggering recurrence of Kawasaki disease in a 10-year-old child</a>	British Medical Journal (BMJ) Case Reports	Case Report	This case report detailed the hospital admittance of a 10-year-old boy with recurrent Kawasaki disease (KD) in India [dates not given]. The patient was admitted with a high-grade fever, fronto-temporal headache, erythematous maculopapular rash, and altered sensorium presenting as irritability and disoriented speech for 3 days. He had a history of KD at 4 years old, which was treated with IV immunoglobulin (IVIG). The patient had tested positive for SARS-CoV-2 4 weeks before the current hospitalization, and a current MRI of the brain showed diffuse encephalitis. Neurological symptoms improved after 24 hours of hospitalization, but the fever persisted, and he also developed conjunctival congestion, dry cracked lips and peeling of skin from the back. He eventually recovered after IVIG treatment. A diagnosis of MIS-C was considered for this patient, but the authors instead hypothesized that the SARS-CoV-2 infection triggered recurrent KD. They conclude that additional research is	This case report detailed the hospital admittance of a 10-year-old patient with recurrent Kawasaki disease (KD) in India, with acute SARS-CoV-2 infection. A diagnosis of MIS-C was considered, but the authors instead hypothesized that the SARS-CoV-2 infection triggered recurrent KD.	Renganathan A, Garg A, Chowdhary S, et al. SARS-CoV-2 infection triggering recurrence of Kawasaki disease in a 10-year-old child. BMJ Case Reports. 2021; 14(3). doi: <a href="http://dx.doi.org/10.1136/bcr-2020-240972">http://dx.doi.org/10.1136/bcr-2020-240972</a> .

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					needed to understand the clinical similarities between MIS-C and KD.		
COVID-19; neonate; ophthalmia neonatorum; United States	24-Mar-21	<a href="#">Ophthalmia neonatorum as the presenting sign of SARS-CoV-2</a>	Journal of the American Association for Pediatric Ophthalmology and Strabismus	Case Report	The authors report a case of ophthalmia neonatorum as the presenting sign of COVID-19 in a patient in the United States [date not specified]. The 4-day-old female was born via spontaneous vaginal delivery at 38.6 weeks of gestation and presented for evaluation of mucopurulent discharge. Culture samples were collected, and IV ceftriaxone, oral azithromycin, and erythromycin ointment were administered. Nasopharyngeal and conjunctival SARS-CoV-2 PCR tests were positive. During admission, vital signs remained stable, and no evidence of systemic disease was noted. The conjunctivitis resolved within 8 days. At that time, the mother tested positive for SARS-CoV-2. The authors hypothesize that transmission of SARS-CoV-2 to the infant potentially occurred via the birth canal of the mother, or by respiratory transmission after delivery. During earlier admission to labor and delivery, both the mother and father had tested negative for COVID-19. The acute conjunctivitis was deemed secondary to COVID-19, given the positive nasal PCR for the virus, concomitant positive testing from the conjunctival specimens, lack of any other identifiable pathogen on extensive testing, and the well-documented propensity for SARS-CoV-2 to affect the conjunctiva. This case highlights the importance of considering COVID-19 as a cause of ophthalmia neonatorum during the COVID-19 pandemic, particularly in the setting of no other established infectious etiology.	The authors report a case of ophthalmia neonatorum as the presenting sign of COVID-19 in a patient in the United States. The acute conjunctivitis was deemed secondary to COVID-19, given the positive nasal PCR for the virus, concomitant positive testing from the conjunctival specimens, lack of any other identifiable pathogen on extensive testing, and the well-documented propensity for SARS-CoV-2 to affect the conjunctiva. This case highlights the importance of considering COVID-19 infection as a cause of ophthalmia neonatorum during the COVID-19 pandemic, particularly in the setting of no other established infectious etiology.	Mechel E, Trinh M, Kodsi S, et al. Ophthalmia neonatorum as the presenting sign of SARS-CoV-2. J AAPOS. 2021:S1091-8531(21)00056-2. doi:10.1016/j.jaapos.2021.03.001.
COVID-19; diagnostics; contact tracing	24-Mar-21	<a href="#">Differential clinic in children infected by SARS-CoV-2, traceability of contacts and cost-effectiveness of diagnostic tests: Cross-sectional observational study</a>	Anales de Pediatría	Original Research	The authors aimed to identify differential clinical features of SARS-CoV-2 infections and other seasonal infections. They also investigated the modes of transmission in settings with low community transmission and the role of children in household transmission in Spain. The study population included children aged 0-15 years (n=126; infected = 33 and uninfected = 93; male sex 66.7% and 59.1% respectively) who underwent an RT-PCR test for SARS-CoV-2. The authors noted a difference in the ages of infected vs. non-infected children (8.4 years, 95% CI: 6.8-10 vs. 6.5 years 95% CI: 5.7-7.4; p=0.035). Fever was the most frequent manifestation in the 2 groups (p=0.389), followed by breathing difficulties and rhinorrhea in the infected group and chills and diarrhea in the uninfected group. Infected children had a significantly higher frequency of headache (p=0.009) and anosmia (0.029), while uninfected children had a higher frequency of fever (0.008), vomiting (p=0.011), and abdominal pain (p=0.012). There were no differences in the duration of the symptoms between the infected and uninfected groups (3 vs. 4 days). Household transmission was most frequent, and adults were the source of household spread in nearly every case in the infected group, with the onset of symptoms in adults preceding the onset in children by 2 weeks. The mean number of affected relatives 3.8 (95% CI, 3.4–4.2) in the infected	The authors assessed the differential clinical features of pediatric SARS-CoV-2 from other seasonal infections. Fever was the most common symptom in infected and uninfected patients, and infected children had a significantly higher frequency of headache (p=0.009) and anosmia (0.029). The authors highlight the substantial nonspecificity of the clinical manifestations associated with infection by SARS-CoV-2, the difficulty in detecting specific symptoms in younger children, and the low frequency of transmission in the household by children in the context of a lockdown.	Fiel-Ozores A, González-Durán ML, Novoa-Carballal R, et al. Differential clinic in children infected by SARS-CoV-2, traceability of contacts and cost-effectiveness of diagnostic tests: Cross-sectional observational study. An Pediatr (English Ed). 2021. doi:https://doi.org/10.1016/j.apede.2020.12.011

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					group compared to 2.6 (95% CI, 0.9–4.4) in the uninfected group (P = .026). 22 patients had positive SARS-CoV-2 RT-PCR had IgG antibody results, and 11 had positive IgG antibody results and negative PCR results. The authors highlight the substantial nonspecificity of the clinical manifestations associated with infection by SARS-CoV-2, the difficulty in detecting specific symptoms in younger children, and the low frequency of transmission in the household by children in the context of a lockdown.		
addictive behaviors; COVID-19; internet; pandemic; psychological distress; social media; video games	24-Mar-21	<a href="#">The Relationship Between Children's Problematic Internet-related Behaviors and Psychological Distress During the Onset of the COVID-19 Pandemic: A Longitudinal Study [Free access to abstract only]</a>	Journal of Addiction Medicine	Original Research	This study examined whether the COVID-19 pandemic and subsequent lockdown may have impacted problematic smartphone use (PSU), problematic gaming (PG), and psychological distress, specifically the pattern of relationships between PSU, PG, and psychological distress in schoolchildren in China. Longitudinal data on psychological distress, PSU, and PG were collected from 575 children aged 8-12 years attending 3 primary schools in a province in China in 3 waves: October-November 2019 (pre-COVID outbreak); January 6-9, 2020 (COVID-19 endemic period in China); and March 4-16, 2020 (COVID-19 declared a pandemic). The average participant age in wave 1 was 10.8 years (sd=0.75 years), and all children had access to 1 or more smartphones and gaming devices throughout all 3 waves in the study period. The authors measured participants' psychological distress via the Depression, Anxiety, Stress Scale-21 (DASS-21), PSU via the Smartphone Application-Based Addiction Scale (SABAS), and PG via the Internet Gaming Disorder Scale-Short Form (IGDS9-SF). The results showed that higher levels of PSU were not significantly related prospectively to greater psychological distress before the COVID-19 pandemic, but this prospective relationship became significant during the COVID-19 pandemic. Whereas PG was associated with psychological distress ( $p < 0.001$ ) before the COVID-19 pandemic (between waves 1 & 2), this association became non-significant ( $p=0.31$ ) during the COVID-19 lockdown (between waves 2 & 3). The authors suggest that future research should examine whether restrictions on or information provided to schoolchildren may exacerbate PSU's effects on psychological distress and help understand how to limit children's psychological distress.	This longitudinal study examined the impact of the COVID-19 pandemic and subsequent lockdown on problematic smartphone use (PSU), problematic gaming (PG), and psychological distress in Chinese schoolchildren. The authors found that the COVID-19 pandemic seemed to change the prospective relationships between PSU and psychological distress and PG and psychological distress in schoolchildren. Future research should examine whether restrictions on or information provided to schoolchildren may exacerbate PSU's effects on psychological distress.	Chen CY, Chen IH, Hou WL, et al. The Relationship Between Children's Problematic Internet-related Behaviors and Psychological Distress During the Onset of the COVID-19 Pandemic: A Longitudinal Study. <i>J Addict Med</i> . 2021;10.1097/ADM.0000000000000845. doi:10.1097/ADM.0000000000000845
children; adolescents; mental health; COVID-19	24-Mar-21	<a href="#">Mental Health of Children Amid COVID-19 Pandemic in Bangladesh: An Exploratory Observation</a>	Asia Pacific Journal of Public Health	Letter	This observational article summarizes how the COVID-19 pandemic has affected the mental health of children in Bangladesh, and possible future directions. Schools in Bangladesh were shut down during lockdown from March 17, 2020 to the date of the article. The authors state that little value is placed on the mental health of children in the country, and mental health expenditure by Bangladesh is <0.5% of the national health care budget. However, a recent study found mental health disturbances among Bangladeshi children as high as 43% at the sub-threshold range, and 7.2% for severe disturbance. The authors argue that fear of COVID-19,	This observational article summarizes how the COVID-19 pandemic has affected the mental health of children in Bangladesh, and possible future directions. Researchers recommend that parents should consider increasing positive interactions with their children, introducing a daily routine,	Islam MR, Qusar MMAS, Islam MS. Mental Health of Children Amid COVID-19 Pandemic in Bangladesh: An Exploratory Observation. <i>Asia Pacific Journal of Public Health</i> . March 2021. doi:10.1177/10105395211004371

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					monotony, lack of personal space, domestic violence, family financial loss and the location and condition of living spaces could have a negative impact on children's mental health. Although the Bangladeshi government has made Internet-based mental health resources available, many rural residents are unable to access these services because of a lack of information and communication technology. In order to mitigate these observed trends, parents should consider increasing positive interactions with their children, introducing a daily routine, managing stress, and discussing COVID-19 with their children.	managing stress, and discussing COVID-19 with their children to prevent negative mental health impacts due to the pandemic.	
pediatric dermatology; COVID-19; SARS-CoV-2; Multisystem Inflammatory Syndrome	24-Mar-21	<a href="#">Mucocutaneous Manifestations in Hospitalized Children with COVID-19</a>	The Journal of the American Academy of Dermatology	Original Research	This study described the cutaneous manifestations of hospitalized children with COVID-19. 50 children with a diagnosis of COVID-19, aged 0-18 years [mean/median age not reported], were enrolled in Madrid, Spain; the patients' hospital admission dates were from March 1 to November 30, 2020. 44 patients (88%) had a positive RT-PCR for SARS-CoV-2 and 6 (12%) met the clinical suspicion criteria and had a negative RT-PCR with a positive IgG serology. The primary reason for admission included respiratory illness (40%) and MIS-C (40%). Mucocutaneous symptoms were found in 21 patients (42%) and included an exanthem (n=18), conjunctival hyperemia without secretion (n=17) and red, cracked lips or strawberry tongue (n=9). In the 18 patients with rash, all were described as maculopapular, with macules and papules that were either diffuse or reticulated - and all presented with exanthem on admission. The limbs (78%) and trunk (72%) were most frequently involved. Patients with mucocutaneous symptoms were older than those without skin involvement and presented with poor general status, had tachycardia, and more often had fever and gastro-intestinal symptoms; 86% fulfilled criteria of MIS-C. These patients also had elevated c-reactive protein and d-dimer levels and were more often admitted to the pediatric ICU (PICU) (OR 10.24, 95% confidence interval: 2.23-46.88; P=0.003). Mucocutaneous lesions, prominent in children admitted to the hospital for COVID-19, often fulfill MIS-C criteria; therefore, these patients will often have a higher probability of PICU admission and a longer duration of stay.	In this study, the authors described the cutaneous manifestations of hospitalized children with COVID-19. Mucocutaneous lesions, prominent in children admitted to the hospital for COVID-19, often fulfill MIS-C criteria; therefore, these patients will often have a higher probability of pediatric ICU admission and a longer duration of stay.	Andina-Martinez D, Montserrat N, Alonso-Cadenas JA, et al. Mucocutaneous Manifestations in Hospitalized Children with COVID-19. J Am Acad Dermatol. 2021; doi:10.1016/j.jaad.2021.03.083
COVID-19; school; daycare; cleaning; disinfection; fomite; transmission; United States	24-Mar-21	<a href="#">Risk for Fomite-Mediated Transmission of SARS-CoV-2 in Child Daycares, Schools, Nursing Homes, and Offices</a>	Emerging Infectious Diseases	Research Letter	The authors used a transmission model to explore the potential for fomite-mediated transmission of SARS-CoV-2 by location (child daycares, schools, nursing homes, and offices), disinfection strategy, and surface type (cloth, plastic, stainless steel) in the United States. Although precise values likely vary on a case-by-case basis, child daycares are assumed to have higher frequency of fomite touching ( $\rho$ T) and higher fraction of surfaces susceptible to contamination ( $\lambda$ ) than offices, whereas schools are likely intermediate for both factors. Nursing homes are assumed to have similar amounts of surfaces susceptible to contamination as offices, but higher fomite touching rates. Surface cleaning and disinfection frequencies considered were every 8 hours (1x/workday), every 4 hours	The authors used a transmission model to explore the potential for fomite-mediated transmission of SARS-CoV-2 by location (child daycares, schools, nursing homes, and offices), disinfection strategy, and surface type (cloth, plastic, stainless steel) in the United States. The model indicates that fomite transmission might be an important source of risk for SARS-CoV-2. However, both mask	Kraay ANM, Hayashi MAL, Berendes DM, et al. Risk for Fomite-Mediated Transmission of SARS-CoV-2 in Child Daycares, Schools, Nursing Homes, and Offices. Emerg Infect Dis. 2021;27(4):1229-1231. doi:10.3201/eid2704.203631.

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					(2x/workday), and hourly. The fomite basic reproduction number (R0) ranged from 10 in low-risk venues (offices) to ~25 in high-risk settings such as child daycares. Hourly cleaning and disinfection alone could interrupt fomite transmission in some office settings, particularly when combined with reduced shedding, but would be inadequate in child daycares and schools. If shedding is reduced through mask wearing, transmission from surfaces became unlikely, even with infrequent decontamination. Unlike plastic and steel, decay rates on cloth were high and were unlikely to sustain transmission. Therefore, fomite transmission might be an important source of risk for SARS-CoV-2. However, both mask wearing and frequent cleaning and disinfection can reduce this risk.	wearing and frequent cleaning and disinfection can reduce this risk.	
COVID-19; pediatric; telemedicine; United States	24-Mar-21	<a href="#">Telemedicine in the Coronavirus Disease 2019 Pandemic: A Pediatric Rehabilitation Perspective</a>	American Journal of Physical Medicine and Rehabilitation	Article	This article described the national legislative response of the United States to the COVID-19 pandemic and the opportunities and challenges of implementing telemedicine in pediatric rehabilitation outpatient settings, consultations, and physician and patient education. The feasibility of performing a remote pediatric musculoskeletal and neurological tele-evaluation was also discussed. Although challenges exist, telemedicine has demonstrated its potential and has proven to be a practical system. It has not only helped sustain patient healthcare but also made a tremendous impact on continued medical education during the pandemic. The future of telemedicine will rely on technological developments, supportive governmental and third-party payer policies and funding, resolution of HIPAA issues, clarification on liabilities, and overcoming state-to-state regulations. With the continued support of new legislation, governmental agencies, payers, and hospital administration, telemedicine can optimize patient care and become one of the most effective tools of coordinated healthcare systems for years to come.	This article described the national legislative response of the United States to the COVID-19 pandemic and the opportunities and challenges of implementing telemedicine in pediatric rehabilitation outpatient settings, consultations, and physician and patient education. The feasibility of performing a remote pediatric musculoskeletal and neurological tele-evaluation was also discussed. With the continued support of new legislation, governmental agencies, payers, and hospital administration, telemedicine can optimize patient care and become one of the most effective tools of coordinated healthcare systems for years to come.	Chen Y, Kathirithamby DR, Li J, et al. Telemedicine in the Coronavirus Disease 2019 Pandemic: A Pediatric Rehabilitation Perspective. Am J Phys Med Rehabil. 2021;100(4):321-326. doi:10.1097/PHM.0000000000001698.
Bradycardia; COVID-19; SARS-COV-2; child	24-Mar-21	<a href="#">A case of bradycardia during SARS CoV-2 infection in a 14-year-old child [free access to abstract only]</a>	Infectious Diseases	Case Report	This is the case of a 14-year-old male who presented with abdominal pain, fatigue, and bradycardia with a heart rate ranging between 43 and 60 per minute [time and location are not given]. The patient's grandmother recently tested positive for SARS-CoV-2 [time is not specified], and the patient also tested positive for SARS CoV-2. The heart sounds were normal, and the patient and his family have no known history of the cardiological disorder. His laboratory findings were unremarkable except for elevated CRP and mildly elevated D-Dimer. ECG revealed sinus bradycardia, yet no pathology was found. The patient had bradycardia until the 4 <sup>th</sup> day of hospitalization and was discharged on the 8 <sup>th</sup> day. The patient's case is consistent with the most common SARS-CoV-2-associated sinus bradycardia that is reported worldwide.	The authors present a case of a SARS-CoV-2-positive 14-year-old male who presented with abdominal pain, fatigue, and sinus bradycardia. Aside from bradycardia, the patient had normal cardiac and laboratory tests throughout the course and was discharged on the 8 <sup>th</sup> day of hospitalization.	Kilicaslan O, Isancil DK, Ulutas OY, et al. A case of bradycardia during SARS CoV-2 infection in a 14-year-old child. Infect Dis (Lond). 2021 Mar 24;1-4. doi: 10.1080/23744235.2021.1903549. Epub ahead of print. PMID: 33760677.

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COVID-19; Kawasaki disease; MIS-C; children; Chile	24-Mar-21	<a href="#">Multisystem Inflammatory Syndrome in Children, Chile, May–August 2020</a>	Emerging Infectious Diseases	Article	This study analyzed 26 children (57.7% male; median age=6.5 years, IQR 2-10.5 years) with MIS-C in the pediatric ICU (PICU) of Roberto del Río Hospital in Santiago, Chile from 11 May-30 August, 2020. 16 (61.5%) of these 26 patients met the criteria for Kawasaki disease. 22 (84.6%) patients tested positive for SARS-CoV-2 infection, 7 (26.9%) by RT-PCR and 15 (57.6%) by serologic assay. These findings suggest that MIS-C might be caused by a hyperinflammatory response after asymptomatic SARS-CoV-2 infection, rather than direct cell injury from active viral replication. The other 4 (15.3%) patients tested negative for SARS-CoV-2 but had a COVID-19 exposure. The most frequent symptoms were fever (26, 100%), shock (24, 92.3%), abdominal pain (17, 65.4%), diarrhea (16, 61.5%), vomiting (12, 46.2%), rash (16, 61.5%), and conjunctivitis (15, 57.7%). 10 (38.5%) children required mechanical ventilation; 13 (50%) required inotropic support. In addition, 18 (69.2%) patients had echocardiographic abnormalities. 20 (76.9%) patients received IV immunoglobulin and 23 (88.5%) received corticosteroids. Immunomodulatory agents were prescribed for 4 (15.4%) patients: tocilizumab for 3 patients and infliximab for 1. The median duration of PICU stay was 5 days (IQR 2-7 days). No patients died. These findings were similar to those reported in other countries.	This study analyzed children with MIS-C in the pediatric ICU of Roberto del Río Hospital in Santiago, Chile from 11 May-30 August, 2020. Nearly all patients had laboratory-confirmed SARS-CoV-2 infection, however only 26.9% tested positive by PCR. These findings suggest that MIS-C might be caused by a hyperinflammatory response after asymptomatic SARS-CoV-2 infection, rather than direct cell injury from active viral replication.	Niño-Taravilla C, Otaola-Arca H, Lara-Aguilera N, et al. Multisystem Inflammatory Syndrome in Children, Chile, May-August 2020. Emerg Infect Dis. 2021;27(5). doi:10.3201/eid2705.204591.
COVID-19, SARS-CoV-2, testing, age distribution, children, young adults	24-Mar-21	<a href="#">Continued proportional age shift of confirmed positive COVID-19 incidence over time to children and young adults: Washington State March-August 2020</a>	PLoS One	Original Research	This is a longitudinal cohort analysis of Washington State (USA) Department of Health COVID-19-confirmed case age distribution over 2 periods: March–April 2020 (n=13,934) and March–August (n=76,032). From 1 March to 19 April 2020, COVID-19 age distribution shifted, with a 10% decline in cases among those ≥60 years old, and a 20% increase in those 0-19/20-39 years old (p<0.001). Number of cases during the initial analysis were 0-19 years (n=515), 20-39 years (n=4,078), 40-59 years (n=4,788), 60-79 years (n=3,221), 80+ years (n=1,332). After the peak on 22 March 2020, incidence declined in older age groups and increased among age 0-19 and 20-39 groups from 20% to 40% of total cases by 9 April, and 50% by 3 May. Testing expanded, with more testing among older age groups and less testing among younger age groups, while case positivity shifted toward younger groups. Percent positive cases of those 0-19/20-39 years old through August 2020 increased to a consistent average of 60%, indicating the absence of a true decline in COVID-19 cases. Multiple studies have demonstrated a similar trend of increased incidence among younger age groups, which could create a possible reservoir of disease, with spillover risk to more vulnerable persons. As initial public warnings targeted the older age groups and those with underlying conditions, a misconception that only older age groups were at risk for COVID-19 may have been prevalent. Early recognition of disease in all age groups and age-appropriate risk mitigation messaging is critical for infection control during a pandemic.	The longitudinal cohort analysis of COVID-19-confirmed cases in Washington State (USA) in 2020 revealed an increased sustained proportion of COVID-19 incidence among children (age 0-19) and young adults (age 20-39). Such a trend indicates an elevated role of these age groups in disease spread during the pandemic and creates a possible reservoir of disease with spillover risk to more vulnerable older persons and those with comorbidities.	Malmgren J, Guo B, Kaplan HG. Continued proportional age shift of confirmed positive COVID-19 incidence over time to children and young adults: Washington State March-August 2020. PLoS One. 2021 Mar 24;16(3):e0243042. doi: 10.1371/journal.pone.0243042 . PMID: 33760808.

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COVID 19; reopened private schools; children, SARS-CoV-2	24-Mar-21	<a href="#">Coronavirus Disease 2019 (COVID-19) prevalence rates in reopened private schools in New York City: impact of diagnostic methods</a>	Acta Paediatrica	Original Research	The authors analyzed COVID-19 prevalence rates in 9 private schools in New York City (USA) during the re-opening school phase (Fall-Winter 2020-2021) and the COVID-19 diagnostic methods used. SARS-CoV-2 testing was conducted using RT-PCR or antigen tests from October 2020 to February 2021, and test data were collected from 9 private schools that re-opened in micro-cluster zones. The average prevalence rate of the schools was 0.83%. The total number of RT-PCR tests performed was 7816, with 30 (0.38%) positive test results. The total number of antigen tests performed was 2478, with 9 (0.36%) positive results. The positivity rates in the community were higher than the rates reported in the schools, suggesting children's limited role in virus transmission. The heterogeneity of tests used made it difficult to compare data from different schools. Guidance should include consistent and specific instructions for COVID-19 screening. Lower positive prevalence rates were observed in schools that used antigen tests compared to schools that used RT-PCR. Timing of collection, time after symptom onset, and different populations are all important factors to consider for optimal diagnostic sensitivity. Diagnostic COVID-19 tests with higher sensitivity and specificity need to be developed.	This is an analysis of the COVID-19 prevalence rates in 9 private schools in New York City (USA) from October 2020 to February 2021. Heterogeneity of test methods is problematic for data comparison, and timing of collection and time after symptom onset are important factors to consider for optimal diagnostic sensitivity.	Smith-Norowitz TA, Kohlhoff S, Hammerschlag MR. Coronavirus Disease 2019 (COVID-19) prevalence rates in reopened private schools in New York City: impact of diagnostic methods. Acta Paediatr. 2021 Mar 24. doi: 10.1111/apa.15853. PMID: 33760250.
thromboembolic risk; pregnancy; COVID-19; thromboprophylaxis	24-Mar-21	<a href="#">COVID-19, Virchow's triad and thromboembolic risk in obese pregnant women</a>	Clinical Cardiology	Letter to the Editor	In this letter to the editor, the authors discuss their support of thromboprophylaxis in pregnant women with COVID-19. They note that the 3 factors of Virchow's triad, endothelial dysfunction, hypercoagulability and venous stasis, all increase risk of thromboembolism (TE) in patients with COVID-19. Specifically, in pregnant women, venous stasis is present owing to compression of veins by the gravid uterus; secondly, a hypercoagulable state is present in late gestation and can be seen with elevated D-dimer levels; and lastly, cytokines and growth factors may contribute to the endothelial dysfunction. This can be seen especially in obese women and thromboembolic risk related to a gestational state in obese pregnant women is elevated. The adjusted odds of antepartum and postpartum TE increase progressively with increasing BMI. Obesity is not only a risk factor for TE during pregnancy, but is a risk factor for the progression of worsening COVID-19. Prior studies have shown that coagulopathy occurs early in the disease. Additionally, they note that some medical committees recommend that all hospitalized COVID-19 patients receive thromboprophylaxis. The authors suggest that there is available data that show that overweight/obesity in pregnant women is a risk factor for TE and severe COVID-19 and that low-molecular-weight-heparin should be started in this population at the onset of diagnosis.	This letter to the editor discusses the authors' support of thromboprophylaxis in pregnant women with COVID-19. The authors suggest that there is available data that show that overweight/obesity in pregnant women is a risk factor for TE and severe COVID-19 and that low-molecular-weight-heparin should be started in this population at the onset of diagnosis.	Carbillon L, Feraut M, Benbara A, et al. COVID-19, Virchow's triad and thromboembolic risk in obese pregnant women [published online ahead of print, 2021 Mar 24]. Clin Cardiol. 2021;10.1002/clc.23602. doi:10.1002/clc.23602

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COVID-19; adolescent; mental health; access to care; resilience	24-Mar-21	<a href="#">Addressing the Clinical Impact of COVID-19 on Pediatric Mental Health</a>	Journal of Pediatric Health Care	Article	The authors reviewed emerging evidence on the impact of the COVID-19 pandemic on mental health in children and discussed practical steps and interventions that can be used in primary care to foster resilience in youth and their families. The COVID-19 pandemic has increased the risk and clinical presentation of mental health issues among children while presenting providers with new challenges as social effects and stress impacts are felt universally. These issues can increase as a result of disruption in mental health support, virtual learning challenges, financial insecurity of caregivers, social isolation, etc. Pediatric providers have a unique opportunity to work collaboratively with families and children to identify mental health concerns. Addressing these concerns with anticipatory guidance and routine screenings can provide opportunity for early identification and access to evidence-based care. There is hope in the partnerships between pediatric primary care and developmental, behavioral health, and psychiatric providers to help community recovery. Innovative profession and patient-based supports are part of the solution to the ongoing stress and risk to the mental health of children during the pandemic and recovery process.	The authors reviewed emerging evidence on the impact of the COVID-19 pandemic on mental health in children and discussed practical steps and interventions that can be used in primary care to foster resilience in youth and their families. Innovative profession and patient-based supports are part of the solution to the ongoing stress and risk to the mental health of children during the pandemic and recovery process.	Bartek N, Peck JL, Garzon D, et al. Addressing the Clinical Impact of COVID-19 on Pediatric Mental Health. J Pediatr Health Care. 2021. doi:10.1016/j.pedhc.2021.03.006.
COVID-19; vaccination; pediatric dentistry; vaccine acceptance; United States	24-Mar-21	<a href="#">Caregiver acceptance of an anticipated COVID-19 vaccination</a>	The Journal of the American Dental Association	Article	This study examined parental acceptance of an anticipated COVID-19 vaccination in the United States. A 41-item questionnaire utilizing the Health Belief Model was administered to caregivers of children receiving dental care in a dental clinic in an urban, pediatric teaching hospital from 28 September-10 November 2020. Demographic, health-seeking, and health behavior questions were assessed. 99 caregivers (83.9% female; mean 38.8 ± 9.1 years of age; range 24-63 years) with an average of 2.8 ± 1.6 children (range: 1-11 children) completed the survey, although not all questions were completed by all 99 participants. The majority of caregivers (76%, 73/96) reported that their children did not have any medical issues. Only 21.6% (21/97) of caregivers would accept a COVID-19 vaccine for their child while 39.2% (38/97) would not. Many caregivers (93.8%, 91/97) themselves received childhood vaccinations. History of childhood vaccinations for the caregiver was not predictive of acceptance of a COVID-19 vaccination for themselves or their child (OR 1; 95% CI 0.197-5.1). However, 52.2% said that a healthcare professional could influence this decision. Dentists, intimately aware of the suggested risks of aerosol generating procedures, can play a critical role in educating the public about the importance of accepting a COVID-19 vaccine.	This study examined parental acceptance of an anticipated COVID-19 vaccination in the United States. While many caregivers themselves had received childhood vaccination, few reported that they would accept a COVID-19 vaccine for their child; however, this decision could be influenced by a healthcare professional. The authors conclude that dentists can play a critical role in educating the public about the importance of accepting a COVID-19 vaccine.	Marquez RR, Gosnell ES, Thikkurissy S, et al. Caregiver acceptance of an anticipated COVID-19 vaccination. J Am Dent Assoc. 2021. doi:10.1016/j.adaj.2021.03.004.

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
COVID-19; pediatric; functional gastrointestinal disorders; liver disease; inflammatory bowel disease	24-Mar-21	<a href="#">Implications of SARS-COV-2 infection in the diagnosis and management of the pediatric gastrointestinal disease</a>	Italian Journal of Pediatrics	Review	This review assessed the implications of SARS-COV-2 infection in the diagnosis and management of pediatric gastro-intestinal disease. To date, it is unclear if immunosuppression in patients with inflammatory bowel disease and chronic liver disease represents a risk factor for adverse outcomes from SARS-CoV-2 infection. Scheduled outpatient follow-up visits may be postponed, especially in patients in remission. Conversely, telemedicine services are strongly recommended. The introduction of new therapeutic regimens should be made on an individual basis, discussing the benefits and risks with each patient. Furthermore, psychological care in all children with chronic disease and their parents should be ensured. All non-urgent and elective endoscopic procedures may be postponed as they must be considered at high risk of viral transmission. Finally, until SARS-CoV-2 vaccination becomes available, strict adherence to standard social distancing protocols and the use of PPE should continue to be recommended.	This review assessed the implications of SARS-COV-2 infection in the diagnosis and management of the pediatric gastro-intestinal disease. It is unclear if immunosuppression represents a risk factor for adverse outcomes. Until SARS-CoV-2 vaccination becomes available, strict adherence to standard social distancing protocols and the use of PPE should continue to be recommended.	Dipasquale V, Passanisi S, Cucinotta U, et al. Implications of SARS-COV-2 infection in the diagnosis and management of the pediatric gastrointestinal disease. Ital J Pediatr. 2021;47(1):71. doi:10.1186/s13052-021-01020-9.
COVID-10; children; immunization; vaccine; Italy	24-Mar-21	<a href="#">Pediatric routine vaccinations in the COVID 19 lockdown period: the survey of the Italian Pediatric Society</a>	Italian Journal of Pediatrics	Article	The authors investigated the reduced adherence to the national children vaccination schedule during the COVID-19 lockdown period in Italy. Through social channels, the Italian Pediatric Society conducted a survey among Italian families on children vaccination from 28 April-8 June 2020. 1474 respondents with children aged 0-11 years were included. 34% respondents skipped the vaccine appointment as they were afraid of SARS-CoV-2 (44%), vaccination services postponed the appointment (42%), or services were closed to public (13%). Even if the COVID-19 pandemic impacted North Italian regions more than South, the proportion of parents who missed children's immunization appointment during lockdown was slightly higher in the South (40% versus 34% in the North and 26% in the Center). Reduction in routine immunization coverage may represent a serious life-threatening problem for unvaccinated or under-vaccinated children. Information on national and local preventive measures including physical distancing, handwashing, and proper coughing/sneezing hygiene should be spread among families in order to contrast vaccine hesitancy and maintain adequate coverage levels during COVID-19 pandemic period.	The authors investigated the reduced adherence to the national children vaccination schedule during the COVID-19 lockdown period in Italy. Reduction in routine immunization coverage was observed which may represent a serious life-threatening problem for unvaccinated or under-vaccinated children.	Russo R, Bozzola E, Palma P, et al. Pediatric routine vaccinations in the COVID 19 lockdown period: the survey of the Italian Pediatric Society. Ital J Pediatr. 2021;47(1):72. doi:10.1186/s13052-021-01023-6.
Mental Health, COVID-19, pandemic, pregnant women, depression, anxiety	24-Mar-21	<a href="#">Mental Health and Preventive Behaviour of Pregnant Women in China during the Early Phase of the COVID-19 Period</a>	Infectious Diseases of Poverty	Research Article	The authors conducted a cross-sectional online survey to examine the frequency of washing hands with soap and wearing face masks when going out, the prevalence of depression and anxiety, and identified their associated factors among pregnant women between February 24 and March 3, 2020. A total of 15 428 pregnant women who were using maternal health care services in China completed a questionnaire that assessed their sociodemographic and pregnancy-related characteristics, contextual, cognitive, and social factors related to COVID-19, frequency of washing hands and wearing face masks, and depression and anxiety. The results showed that the prevalence of anxiety and depression was 28.2% and 43.6%, respectively. 19.8% reported always wearing face masks when going	The authors conducted a cross-sectional online survey to examine the frequency of washing hands with soap and wearing face masks when going out, the prevalence of depression and anxiety, and identified their associated factors among pregnant women in China. They concluded that the mental health and preventive behaviors of pregnant women during the	Wang Q, Mo PKH, Song B, et al. Mental health and preventive behaviour of pregnant women in China during the early phase of the COVID-19 period. Infect Dis Poverty. 2021;10(1):37. Published 2021 Mar 24. doi:10.1186/s40249-021-00825-4

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					out, and 19.1% reported washing hands with soap more than 10 times a day. Older age was associated with lower levels of depression and anxiety (OR=0.42-0.67) and a higher frequency of washing hands (OR=1.57-3.40). A higher level of education was associated with probable depression and a higher frequency of wearing face masks. After adjusting for significant sociodemographic and pregnancy-related factors, place of residence on lockdown (aOR=1.10-1.11), being quarantined (aOR=1.42-1.57), personally knowing someone infected with SARS-CoV-2 (aOR=1.80-1.92), and the perception that SARS-CoV-2 would pose long term physical harm (aOR=1.25-1.28) were associated with higher levels of depression and anxiety. The authors concluded that the mental health and preventive behaviors of pregnant women during the COVID-19 pandemic were associated with a range of sociodemographic, pregnancy-related, contextual, cognitive, and social factors. Interventions to mitigate their mental health problems and to promote preventive behaviors are highly warranted.	COVID-19 pandemic were associated with a range of sociodemographic, pregnancy-related, contextual, cognitive, and social factors. Interventions to mitigate their mental health problems and to promote preventive behaviors are highly warranted.	
COVID-19, SARS-CoV-2, SARS-CoV-2 RNA, breastfeeding, human milk, infant	24-Mar-21	<a href="#">Investigation of SARS-CoV-2 RNA in Milk Produced by Women with COVID-19 and Follow-Up of Their Infants: A Preliminary Study</a>	International Journal of Clinical Practice	Article	The authors of this prospective observational study investigated the presence of SARS-CoV-2 RNA in human breastmilk samples from 15 mothers with COVID-19 and in the throat samples of their infants. All of the infants underwent clinical follow-up during their 14-day isolation period, and their throat swab samples were tested for SARS-CoV-2 RNA. The results showed that of the 15 mothers with COVID-19, SARS-CoV-2 RNA was detected in milk samples from 4 mothers. The throat swab samples from these mothers' infants were found to be positive for SARS-CoV-2 RNA. 3 of the 4 mothers were breastfeeding. In addition, during the 14-day isolation period, all but 3 of the mothers breastfed their infants. Of the 12 breastfed infants, 6 tested negative for SARS-CoV-2 RNA in throat swab samples, while the other 6 infants, who had mild COVID-19 symptoms, tested positive for SARS-CoV-2 RNA. Clinical outcomes for all of the mothers and infants were uneventful. In conclusion, these results suggest that SARS-CoV-2 can be transmitted in human breastmilk. However, the authors believe that the benefits of breastfeeding may outweigh the risk of SARS-CoV-2 infection in infants.	The authors of this prospective observational study investigated the presence of SARS-CoV-2 RNA in human breastmilk samples from 15 mothers with COVID-19 and in the throat samples of their infants. Of the 12 breastfed infants, 6 tested positive for SARS-CoV-2 RNA in throat swab samples, suggesting that SARS-CoV-2 can be transmitted in human breastmilk. However, the authors believe that the benefits of breastfeeding may outweigh the risk of SARS-CoV-2 infection in infants.	Kilic T, Kilic S, Kirci Berber N, Gunduz A, Ersoy Y. Investigation of SARS-CoV-2 RNA in Milk Produced by Women with COVID-19 and Follow-Up of Their Infants: A Preliminary Study [published online, 2021 Mar 24]. Int J Clin Pract. 2021;e14175. doi:10.1111/ijcp.14175
COVID-19; maternal anxiety; maternal depression; longitudinal cohort;	24-Mar-21	<a href="#">Maternal depressive and anxiety symptoms before and during the COVID-19 pandemic in Canada: a</a>	The Lancet Psychiatry	Original Research	The authors studied a longitudinal cohort of mothers to assess changes in the prevalence of maternal depression and anxiety symptoms as a result of the COVID-19 pandemic. 1,301 women participated in this study from May 20 - July 15, 2020 in Canada [mean age and range not reported]. Women completed the COVID-19 Impact Survey and had completed one previous mental health survey (at a 3-year, 5-year and/or 8-year period after the birth of their child). Data on depression were collected using the CES-D-10 scale (with a cutoff score of 10 or higher used to identify clinically significant levels of depressive symptoms) and the STAI-SF was used	The authors studied a longitudinal cohort of mothers to assess changes in the prevalence of maternal depression and anxiety symptoms as a result of the COVID-19 pandemic. They report the prevalence of depression and anxiety in this cohort increased during the pandemic and named financial	Racine N, Hetherington E, McArthur BA, et al. Maternal depressive and anxiety symptoms before and during the COVID-19 pandemic in Canada: a longitudinal analysis. Lancet Psychiatry. 2021 Mar 24. doi:10.1016/S2215-0366(21)00074-2

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
		<a href="#">longitudinal analysis</a>			to measure self-reported symptoms of anxiety (with a score 1 SD above the mean at the 8-year timepoint to define clinically significant anxiety at all timepoints; total anxiety score $\geq 14$ ). During the COVID-19 survey period, a higher proportion of mothers had clinically significant depression (35.21%, 95% CI 32.48–38.04 vs 19.01% at 8-year timepoint) and anxiety symptoms (31.39%, 95% CI 28.76–34.15 vs 18.28% at 8-year timepoint) than at all previous data collection timepoints. The mean depression score (8.31) and anxiety score (11.90) at the COVID-19 timepoint were higher than previous data collection waves at the 3-year, 5-year and 8-year timepoints (mean depression score 5.05, 5.43, and 5.79 respectively) and mean anxiety score 9.51, 9.49, 10.26 respectively). Within-person depression scores increased by a mean of 2.30 points (95% CI 1.95–2.65) and anxiety scores by a mean of 1.04 points (95% CI 0.65–1.43). The authors report that the prevalence of maternal depression and anxiety among mothers in this cohort increased during the pandemic and named financial support, childcare provision, and avoiding school closures, as priorities for preventing future increases in maternal psychological distress.	support, childcare provision, and avoiding school closures, as priorities for preventing future increases in maternal psychological distress.	
COVID-19; SARS-CoV-2; pregnancy; breastfeeding; counseling; maternity care; community health services; public health; primary health care; vaccine hesitancy	24-Mar-21	<a href="#">Vaccine Willingness and Impact of the COVID-19 Pandemic on Women's Perinatal Experiences and Practices—A Multinational, Cross-Sectional Study Covering the First Wave of the Pandemic</a>	International Journal of Environmental Research and Public Health	Original Research	The authors conducted a multinational study between April 10 -July 14, 2020, to assess pregnant and breastfeeding women's (n = 16,063, n=6661 pregnant, n = 9402 breastfeeding) beliefs about SARS-CoV-2 and COVID-19 vaccine willingness and to assess the impact of the pandemic on perinatal experiences and practices. All women surveyed were over 18 years old and were pregnant or breastfeeding up to three months postpartum. Women were recruited through an online anonymous web survey. The countries where the women resided included Belgium (44%), Norway (18%), Netherlands (16%), Switzerland (11%), Ireland (10%), and United Kingdom (3%). 40-50% of respondents indicated COVID-19 vaccine hesitancy. Less than 1% of those surveyed had ever tested positive for SARS-CoV-2. 52% of those who had a previous pregnancy (n = 2044) stated that the pandemic had a significant impact on their current pregnancy experience when compared to previous pregnancy due to absence of partner during appointments, less medical follow-up, increased anxiety and stress, social isolation, less support, and being cautious when interacting with other people. 59% (n = 3844) of pregnant women and 54% of breastfeeding women (n = 4865) indicated that the COVID-19 pandemic had disrupted access to pregnancy and breastfeeding services. 54% of women agreed that a SARS-CoV-2 infection during pregnancy could affect an unborn child's development, and 86% believed this was this case with severe COVID-19. The authors suggest increased attention to maintaining access to health services during emergencies and tailoring information on COVID-19 vaccines to pregnant and breastfeeding women to support shared decision-making.	The authors conducted a multinational study between April 10 -July 14, 2020, to assess pregnant and breastfeeding women's beliefs about SARS-CoV-2 and COVID-19 vaccine willingness and assess the pandemic's impact on perinatal experiences and practices. 40-50% of respondents indicated COVID-19 vaccine hesitancy, and 59% of pregnant women and 54% of breastfeeding women agreed that the COVID-19 pandemic had disrupted their access to health services. The authors suggest increased attention to maintaining access to health services during emergencies and tailoring information on COVID-19 vaccines to pregnant and breastfeeding women to support shared decision-making.	Ceulemans M, Foulon V, Panchaud A, et al. Vaccine Willingness and Impact of the COVID-19 Pandemic on Women's Perinatal Experiences and Practices—A Multinational, Cross-Sectional Study Covering the First Wave of the Pandemic. International Journal of Environmental Research and Public Health. 2021;18(7). doi:10.3390/ijerph18073367.

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Treatment; hydroxychloroquine; antivirals; perterm birth; antibiotics; mechanical ventilation; ICU admission; maternal death; adverse pregnancy outcomes; meta-analysis; cesarean section	24-Mar-21	<a href="#">Current trends and geographical differences in therapeutic profile and outcomes of COVID-19 among pregnant women - A systematic review and meta-analysis</a>	BioMed Central (BMC) Pregnancy and Childbirth	Systematic Review	The authors analyzed data from 66 studies (available before August 27, 2020) involving 1239 pregnant women with COVID-19 to assess geographical differences and clinical care trends. Studies were divided between case series and case reports. Case series had an average maternal age of 30.6 years (range 25-37 years), average gestational age of 31.1 weeks (range 22-43 weeks), 89% were symptomatic for COVID-19, antibiotics were used in 36%, oxygen in 33%, antivirals in 33%, hydroxychloroquine (HCQ) in 10%, anticoagulants in 3%, and plasma in 2%, mechanical ventilation use 3%, with an ICU admission rate of 6%, the average hospital length of stay (HLOS) was 8.5 days, c-sections 62%, preterm births 26%, and fetal demise <1% with 20 maternal deaths. Case reports had an average maternal age of 31.1 years (range 22-44 years), gestational age of 32.7 weeks (range 21-40 weeks), 89% were symptomatic, antibiotics were used in 64%, oxygen support 53%, antivirals 45%, steroids 44%, HCQ 26%, zinc, and magnesium 21%, plasma 14%, anticoagulants 12%, and immunosuppressants in 10%, 35% required mechanical ventilation, with an ICU admission rate of 43%, an average HLOS of 14.6 days, c-section rate was 69%, preterm birth 50%, fetal demise 8%, and maternal death in 5% of cases, and neonatal deaths in 2%. In comparing geographic locations, 100% of Asian patients were symptomatic, 92% in Europe, and 54% in the US. Antibiotics were most common in Asia at 78%, the average HLOS was highest in Asia at 11.8 days and least in European studies at 7.34 days, preterm birth rates were 35% in Asia, 29% in Europe, and 13% in the US, and c-sections rates were also higher in Asia at 80% compared to US (46%) and European (53%) studies. They also found increased ICU admissions rates, preterm births, and longer HLOS with the use of immunosuppressants and antibiotics. Patients that received zinc and magnesium had shorter HLOS but an increase in preterm birth. The authors report that zinc and magnesium may be promising in COVID-19 in cases with a low risk of preterm birth.	The authors analyzed data from 66 studies (available before August 27, 2020) involving 1239 pregnant women with COVID-19 to assess geographical differences and clinical care trends. The authors report a decline in therapeutics use over time and preterm births and HLOS throughout the pandemic.	Dubey P, Thakur B, Reddy S, et al. Current trends and geographical differences in therapeutic profile and outcomes of COVID-19 among pregnant women - a systematic review and meta-analysis. <i>BMC Pregnancy Childbirth</i> . 2021;21(1):247. Published 2021 Mar 24. doi:10.1186/s12884-021-03685-w
Ultrasound, pediatrics, MIS-C, cardiology, shock, children, emergency	23-Mar-21	<a href="#">Point-of-Care Ultrasound Findings in Multisystem Inflammatory Syndrome in Children: A Cross-Sectional Study</a>	Pediatric Emergency Care	Original Research	In this retrospective cross-sectional study, the authors describe the point-of-care ultrasound (POCUS) findings in patients with MIS-C evaluated in the pediatric emergency department (ED) in New York, USA. 24 patients 2-20 years of age who had a POCUS performed in the ED between April 18-May 28, 2020 and diagnosed with MIS-C based on CDC criteria were included. 17 had a focused cardiac ultrasound performed, 9 had lung POCUS, 7 had pediatric modified rapid ultrasound for shock and hypotension, 1 had a focused assessment with sonography for trauma, 1 had POCUS for suspected appendicitis, and 1 had ocular POCUS performed. Point-of-care ultrasound identified impaired cardiac contractility in 5 patients, large intraperitoneal free fluid with inflamed bowel in 1 patient, and increased optic nerve sheath diameters with elevation of the optic discs in 1 patient. Trace or small pericardial effusions, pleural effusions, and intra-peritoneal free fluid were seen in 3 patients, 6	In this article, the authors describe point-of-care ultrasound (POCUS) findings in 24 patients with MIS-C. POCUS identified impaired cardiac contractility in 5 patients, large intraperitoneal free fluid with inflamed bowel in 1 patient, and increased optic nerve sheath diameters with elevation of the optic discs in 1 patient. Trace or small pericardial effusions, pleural effusions, and intra-peritoneal free fluid were seen in 3 patients, 6 patients, and 4 patients, respectively. The	Kennedy TM, Dessie A, Kessler DO, et al. Point-of-Care Ultrasound Findings in Multisystem Inflammatory Syndrome in Children: A Cross-Sectional Study. <i>Pediatr Emerg Care</i> . 2021; doi:10.1097/PEC.0000000000002410

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					patients, and 4 patients, respectively. The authors conclude that this study illustrates the spectrum of POCUS findings in patients with MIS-C and highlights that point-of-care ultrasound is a valuable tool that has the potential to enhance the bedside evaluation and management of patients with this severe inflammatory syndrome.	authors conclude that this study illustrates the spectrum of POCUS findings in patients with MIS-C and highlights POCUS as a valuable tool in bedside evaluation and management.	
American Indian/Alaska Native; COVID-19; Indigenous; childhood; coronavirus; mental health; youth	23-Mar-21	<a href="#">Development and Dissemination of a Strengths-Based Indigenous Children's Storybook: "Our Smallest Warriors, Our Strongest Medicine: Overcoming COVID-19"</a>	Frontiers in Sociology	Case Study	Collective traumatic memories of past infectious diseases and the current impact of the COVID-19 pandemic in many Indigenous communities point to the need for Indigenous strengths-based public health resources. Recent data suggest that COVID-19 is escalating mental health and psychosocial health inequities for Indigenous communities. Using a community-engaged process, the Johns Hopkins Center for American Indian Health collaborated with 14 Indigenous and allied child development, mental health, health communications experts and public health professionals, as well as a Native American youth artist to produce the storybook "Our Smallest Warriors, Our Strongest Medicine: Overcoming COVID-19." This book was adapted in part from "My Hero is You: How Kids Can Fight COVID-19!" which was written for children in the kindergarten to 5th grade aged group. In addition, parent resource materials, children's activities, and corresponding coloring pages were created. The book has been disseminated online for free ( <a href="https://bit.ly/NativeStrongMedicine">https://bit.ly/NativeStrongMedicine</a> ), and 42,364 printed copies were distributed to early childhood home visiting and tribal head start programs, Indian Health Service units, tribal health departments, intertribal, and urban Indigenous health organizations, Johns Hopkins Center for American Indian Health project sites in partnering communities, schools, and libraries. The demand for and response to this storybook demonstrates the desire for Indigenous storytelling and the elevation of cultural strengths to maintain physical, mental, emotional, and spiritual health during the COVID-19 pandemic.	To align with the intergenerational strengths of Indigenous communities, the Johns Hopkins Center for American Indian Health collaborated with 14 Indigenous and allied child development, mental health, health communications experts and public health professionals, as well as a Native American youth artist to produce the storybook "Our Smallest Warriors, Our Strongest Medicine: Overcoming COVID-19" for Indigenous children in the kindergarten to 5th grade age group.	O'Keefe VM, Maudrie TL, Ingalls A, et al. Development and Dissemination of a Strengths-Based Indigenous Children's Storybook: "Our Smallest Warriors, Our Strongest Medicine: Overcoming COVID-19". Front Sociol. 2021;6:611356. Published 2021 Mar 23. doi:10.3389/fsoc.2021.611356
COVID-19; pregnancy; cavernous malformation; hemorrhage; hydrocephalus; Iran	23-Mar-21	<a href="#">Acute Presentation of Third Ventricular Cavernous Malformation following COVID-19 Infection in a Pregnant Woman: A Case Report</a>	Neurochirurgie	Case Report	The authors described the case of a 29-year-old pregnant woman at 34 + 4 weeks gestation who was admitted to a hospital in Iran, with one-week history of severe headache, blurred vision, nausea, vomiting, and right-sided facial numbness [date not specified]. At presentation, she had sudden decreased level of consciousness with Glasgow Coma Scale equal to 4, and bilateral fixed pupils. A brain CT showed enlargement of both lateral ventricles with a 2.5cm round hemorrhagic lesion at the right posterior thalamic region. After medical stabilization and placement of an external ventricular drain, the patient was referred for neurosurgical intervention. MRI revealed a cavernous hemangioma adjacent to the right posterior wall of the third ventricle. After C-section, the mass was completely removed via an anterior interhemispheric trans-callosal approach. However, on post-operative day #3, she experienced mild hypoxia and dyspnea with fever. Chest CT showed bilateral consolidation.	The authors described the case of a 29-year-old pregnant woman in Iran with acute obstructive hydrocephalus associated with SARS-CoV-2 infection. This case highlights the possibility for COVID-19 to promote intracerebral hemorrhage from cerebral cavernous malformations, followed by obstructive hydrocephalus.	Saberi H, Tanha RR, Derakhshanrad N, et al. Acute presentation of third ventricular cavernous malformation following COVID-19 infection in a pregnant woman: A case report. Neurochirurgie. 2021:S0028-3770(21)00082-5. doi:10.1016/j.neuchi.2021.03.010.

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					SARS-CoV-2 infection was confirmed with positive nasopharyngeal RT-PCR. The patient was treated for COVID-19 pneumonia with atazanavir, azithromycin, and supportive care including oxygen therapy and respiratory physiotherapy. Symptoms improved on day 10 of the treatment. This case highlights the possibility for COVID-19 to promote intracerebral hemorrhage from cerebral cavernous malformations, followed by obstructive hydrocephalus.		
COVID-19; pediatric; oncology; United States	23-Mar-21	<a href="#">Successful Implementation of Routine SARS-CoV-2 Screening in Children With Cancer and Their Parents During the Pandemic in the United Kingdom [Free Access to Abstract Only]</a>	Journal of Pediatric Hematology/Oncology	Letter to the Editor	The authors described the adoption of a policy of screening all pediatric oncology patients and their parents before elective or emergency admissions for SARS-CoV-2 with nasopharyngeal swabs at a tertiary pediatric hematology-oncology center in the United Kingdom. From April-July 2020, 342 nasopharyngeal swabs were performed on 124 patients (median age=7.5 years, age range=6 months-15 years) and 163 parents [age not specified]. There were 67 patients with a diagnosis of acute leukemia (54%), 38 patients with solid tumors (31%), 15 patients with brain tumors (12%), and the remaining 4 children had other diagnoses (3%). 41.9% of patients attended the hospital for ongoing chemotherapy. The median time taken to process each swab was 6 hrs 37 mins (range=45 mins-46 hrs), and 95% of swabs were processed in <24 hrs. Among the 342 swabs from patients and parents over the study period, no positive results for SARS-CoV-2 were identified, possibly due to strict implementation of shielding due to the uncertainty about infection severity in the patient group. This study highlights the use of asymptomatic routine screening for SARS-CoV-2 before hospital admission for pediatric oncology patients and their parents as a standard practice.	The authors described the adoption of a policy of screening all pediatric oncology patients and their parents before elective or emergency admissions for SARS-CoV-2 with nasopharyngeal swabs at a tertiary pediatric hematology-oncology center in the United Kingdom. Among the 342 swabs from patients and parents over the study period, no positive results for SARS-CoV-2 were identified. This study highlights the use of asymptomatic routine screening for SARS-CoV-2 before hospital admission for pediatric oncology patients and their parents as a standard practice.	Odeleye E, Friar S, Bate J. Successful Implementation of Routine SARS-CoV-2 Screening in Children With Cancer and Their Parents During the Pandemic in the United Kingdom. J Pediatr Hematol Oncol. 2021. doi:10.1097/MPH.00000000000002145.
COVID-19; pregnancy; respiratory failure; Japan	23-Mar-21	<a href="#">Critical respiratory failure in pregnancy complicated with COVID-19: A case report</a>	Case Reports in Women's Health	Case Report	The authors reported the case of a 29-year-old primiparous woman in Japan who was SARS-CoV-2-positive at 34 weeks of gestation, and who developed severe acute respiratory distress syndrome. After a 4-day history of fever and mild dyspnea, she was referred to the hospital [date not specified]. Ciclesonide, dexamethasone, heparin sodium, and sulbactam/ampicillin were initiated, followed by remdesivir and tocilizumab. On the fourth day after admission (34 weeks 5 days of gestation), respiratory failure was observed, and an emergency C-section was performed. The neonate was negative for SARS-CoV-2. However, on the following day the patient's respiratory condition deteriorated and mechanical ventilation was initiated. Subsequently, her respiratory condition quickly improved and mechanical ventilation was terminated 4 days after intubation. She was discharged 12 days after C-section. This case provides additional evidence regarding the unfavorable maternal consequences of COVID-19 during pregnancy.	The authors reported the case of a 29-year-old primiparous woman in Japan who was SARS-CoV-2-positive at 34 weeks of gestation and who developed severe acute respiratory distress syndrome. This case provides additional evidence regarding the unfavorable maternal consequences of COVID-19 during pregnancy.	Chinen Y, Kinjyo Y, Mekaru K, et al. Critical respiratory failure in pregnancy complicated with COVID-19: A case report. Case Rep Womens Health. 2021. doi:10.1016/j.crwh.2021.e00309.
COVID-19; maternal; marital	23-Mar-21	<a href="#">Meaning in Life among New Mothers before</a>	Journal of Happiness Studies	Original Research	The authors compared levels of presence of meaning and search for meaning in life between 2 samples of mothers (n=1138; mean age=29.78 ± 3.86 years, range=21-39 years) of infants aged 3-12	The authors compared levels of presence of meaning and search for meaning in life between new	Chasson M, Ben-Yaakov O, Taubman-Ben-Ari O. Meaning in Life among New Mothers

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satisfaction; maternal perception of the infant		<a href="#">and during the COVID-19 Pandemic: The Role of Mothers' Marital Satisfaction and Perception of the Infant</a>			months (mean age=7.02 ± 2.74 months) in Israel. One sample was recruited before the outbreak of COVID-19 (August-May 2018, n=685), and the other during the pandemic (8-13 April 2020, n=453). In addition, they examined the associations between mother's marital satisfaction and perception of the infant, and the 2 aspects of meaning in life, investigating whether these variables mediate the link between research group and meaning in life. The results indicate that mothers reported significantly higher perception of infant's warmth (p<0.001) and presence of meaning (p<0.05) before than during the pandemic. Furthermore, they displayed greater marital satisfaction (p<0.001) and more search for meaning (p<0.05) during the pandemic than prior to it. For the whole sample, higher marital satisfaction and perception of infant's warmth were related to higher presence of meaning (p<0.001 for both), and lower marital satisfaction and perception of the infant's invasiveness were related to higher search for meaning (p<0.01 and p<0.001, respectively). Finally, mother's marital satisfaction and perception of the infant fully mediated the relationship between the research group and the presence of meaning (p<0.001 for both). These factors also mediated the relationship between the research group and the search for meaning (p<0.01 for both). These findings provide evidence for changes in meaning in life among new mothers in a crisis situation, along with the importance of their perceptions of their relationships with the infant and spouse under these circumstances.	mothers in Israel recruited before the outbreak of COVID-19 and during the pandemic. The results indicate that mothers reported significantly higher perception of infant's warmth and presence of meaning in life before than during the pandemic. Furthermore, they displayed greater marital satisfaction and more search for meaning during the pandemic than prior to it. The findings provide evidence for changes in meaning in life among new mothers in a crisis situation, along with the importance of their perceptions of their relationships with the infant and spouse under these circumstances.	before and during the COVID-19 Pandemic: The Role of Mothers' Marital Satisfaction and Perception of the Infant. J Happiness Stud. 2021;1-14. doi:10.1007/s10902-021-00378-1.
COVID-19; neonate; pneumothorax; vertical transmission; United States	23-Mar-21	<a href="#">Pneumothorax in Neonates Born to COVID-19-Positive Mothers: Fact or Fortuity?</a>	American Journal of Perinatology Reports	Case Report	The authors present 2 cases of pneumothorax in SARS-CoV-2-negative neonates born to mothers with COVID-19 in the United States [date not specified]. Case 1 is a 38-week gestational age female born to a 36-year-old mother with COVID-19 and rhinovirus infection via cesarean section for breech presentation. Case 2 is a 33-week gestational age preterm male born to a 26-year-old mother via cesarean section secondary to maternal COVID-19 pneumonia and acute respiratory failure. Both neonates were admitted to neonatal ICU for respiratory distress and subsequently developed pneumothoraces, revealed by chest X-ray and treated with tube thoracostomies. Both neonates subsequently recovered and were discharged on day of life 19 and 40, respectively. Nasopharyngeal swabs for SARS-CoV-2 PCR were negative for the first neonate at 24 hrs and at 5 days, while the second neonate had negative swabs at 24 hrs and 48 hrs. As diverse clinical presentations in various age groups are being described, it becomes difficult to differentiate the increased incidence of complications related to an underlying illness from COVID-19-related complications. It remains to be seen if neonates with in utero exposure to SARS-CoV-2 have an elevated inflammatory response with pneumonitis and exaggerated lung disease, similar to adult COVID-19 patients, due to in utero exposure. Until larger studies can provide conclusive evidence, the	The authors present 2 cases of pneumothorax in SARS-CoV-2-negative neonates (1 female and 1 male) born to COVID-19 mothers at 38 and 33 weeks, respectively, in the United States. It remains to be seen if neonates with in utero exposure to SARS-CoV-2 have an elevated inflammatory response with pneumonitis and exaggerated lung disease, similar to adult COVID-19 patients, due to in utero exposure. Until larger studies can provide conclusive evidence, the authors advise increased vigilance in neonates born to mothers with COVID-19 even when their SARS-CoV-2 PCR test is negative.	Kamity R, Nayak A, Dumpa V. Pneumothorax in Neonates Born to COVID-19-Positive Mothers: Fact or Fortuity? AJP Rep. 2021;11(1):e49-e53. doi:10.1055/s-0041-1726020.

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					authors advise increased vigilance in neonates born to mothers with COVID-19 even when their SARS-CoV-2 PCR test is negative.		
COVID-19 pandemic, COVID-19, SARS-CoV-2, Life satisfaction, Parent-child relationship, Psychological well-being, School-aged children	23-Mar-21	<a href="#">Daily Life Changes and Life Satisfaction among Korean School-Aged Children in the COVID-19 Pandemic</a>	International Journal of Environmental Research and Public Health	Article	This study aimed to examine how life satisfaction and its potential predictors have been affected by the COVID-19 pandemic among school-aged children in South Korea, and which factors would predict their life satisfaction during the pandemic. A total of 166 fourth-graders (9-10 years old) were surveyed in the Seoul metropolitan area to assess their psychological well-being and potentially related variables during the pandemic. The data were compared with those available from 2 pre-COVID-19 surveys - the 2018 Korean Children and Youth Panel Survey (n=1236) and the 2019 Korean Children and Youth Well-being Index Survey (n=334). The results showed that children had higher levels of stress during the COVID-19 pandemic; however, their level of life satisfaction remained unchanged when compared with data from the pre-COVID-19 surveys (p=0.854). The pandemic was also related to lower peer relationship quality (p=0.006) and higher susceptibility to smartphone addiction (p=0.002), but not perceived parenting style (p=0.796) nor academic engagement (p=0.220). Peer relationship quality was found to no longer predict life satisfaction during the pandemic. Instead, perceived parenting styles (p<0.001) and parent-child conversation time (p<0.05) predicted life satisfaction. In conclusion, the results suggest a central role of parent-child relationships in supporting the psychological well-being of school-aged children during the COVID-19 pandemic.	This study aimed to examine how life satisfaction and its potential predictors have been affected by the COVID-19 pandemic among school-aged children in South Korea, and which factors would predict their life satisfaction during the pandemic. In conclusion, the results suggest a central role of parent-child relationships in supporting the psychological well-being of school-aged children during the COVID-19 pandemic.	Choi J, Park Y, Kim HE, et al. Daily Life Changes and Life Satisfaction among Korean School-Aged Children in the COVID-19 Pandemic. Int J Environ Res Public Health. 2021;18(6):3324. Published 2021 Mar 23. doi:10.3390/ijerph18063324
coronavirus; COVID-19; preconception; pregnancy planning; survey; women's health care	23-Mar-21	<a href="#">The Impact of the COVID-19 Pandemic on Pregnancy Planning Behaviors</a>	Women's Health Reports	Original Research	This article aimed to investigate how the COVID-19 pandemic has influenced pregnancy planning behaviors. An online survey consisting of closed- and open-ended questions concerning pregnancy planning behaviors and behavioral changes was completed between January and July 2020, by 504 women planning pregnancy in the UK [precise age median/range not given]. Results indicated that while 92% of surveyed women were still planning a pregnancy, 72% of these women were deliberately postponing their pregnancies. Reasons for postponing included concerns about changes in antenatal care, fear of adverse effects of the SARS-CoV-2 virus on the mother and infant, lack of services to remove contraceptive devices, and lack of fertility treatment. 27% of surveyed women expressed desire to move forward with their planning, stating that they re-calibrated their priorities or changed other plans. The authors concluded that the alterations of plans for women planning pregnancy could impact the health and wellbeing of these women, as well as cause important implications for health care services worldwide.	The authors of this article from the UK determined that the COVID-19 pandemic influenced pregnancy-planning behaviors, with many women reporting postponement of pregnancy. Reported causes of postponement included changes in antenatal care and fear of adverse effects of the SARS-CoV-2 virus.	Flynn AC, Kavanagh K, Smith AD, et al. The Impact of the COVID-19 Pandemic on Pregnancy Planning Behaviors. Women's Health Reports. 2021 Mar 23;2(1):71-77. doi: 10.1089/whr.2021.0005.
COVID-19; child health; developmental disabilities;	23-Mar-21	<a href="#">Exploring parental experiences of virtual paediatric</a>	Irish Journal of Medical Science	Brief Report	This study examined the experiences of families of children attending a neurodevelopmental service after a transition to virtual consultations in Ireland due to the COVID-19 pandemic. Anonymous questionnaires were posted to parents of children [age not	This study examined the experiences of families of children attending a neurodevelopmental service after	Finnegan R, Flynn A, Flanagan O. Exploring parental experiences of virtual paediatric

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patient satisfaction; telemedicine; Ireland		<a href="#">neurodevelopmental consultations</a>			specified] registered in virtual clinics over a 10-week period [date not specified]. 30 parental questionnaires were completed. Parents reported a very high level of satisfaction (8.2/10) with previous face-to-face clinic appointments and virtual consultations (8.2/10). Individual aspects of virtual consultations received very positive ratings; 97% felt they received adequate time during the consultation and 90% felt they were contacted at an appropriate time of day. Similarly, 86% of respondents felt their concerns were managed well and received adequate and correct information when sought. Overall, 77% of parents highlighted a future preference for a combined service of both virtual and face-to-face consultations. The findings indicate high level of parental satisfaction with the service, but especially satisfaction with the unplanned transition to virtual clinics. In response, an integrated outpatient service was developed involving both forms of consultation to potentiate satisfaction and adapt to the needs of the patients.	a transition to virtual consultations in Ireland due to the COVID-19 pandemic. The findings indicate high level of parental satisfaction with the service, but especially satisfaction with the unplanned transition to virtual clinics. A majority of parents indicated a future preference for a combined service of both virtual and face-to-face consultations.	neurodevelopmental consultations. Ir J Med Sci. 2021;1-2. doi:10.1007/s11845-021-02583-6.
COVID-19; children; mental health; management system; China	23-Mar-21	<a href="#">Building the mental health management system for children post COVID-19 pandemic: an urgent focus in China</a>	European Child and Adolescent Psychiatry	Letter to the Editor	In this letter, the authors described the top-down and bottom-up mental health care management system (4-level model based on China's existing medical system) to address urgent mental health requirements of children in China due to the COVID-19 pandemic. The top level consists of one National Center for Children's Health and one National Center for Mental Health, which are mainly responsible for involvement in international research, formulation of national clinical guidelines, establishment of a national training system for child psychiatry, and mental health policies. The second level consists of 5 National Regional Centers for Children's Health and 34 Provincial Mental Health Centers, which execute relevant policies and guidelines for childhood mental health issues at the top level. A total of 879 municipal medical institutions will serve as the third level's basic framework, responsible for the diagnosis and treatment of childhood mental disorders in local regions. A great number of primary medical care centers and mental health centers in primary/middle schools form the fourth level. Their function is to perform the screening of high-risk children and assessments of children with mental disorders. The referral system for children with mental disorders follows the bottom-up strategy. This model will provide a framework for the government to formulate childhood mental health development plans in the future.	In this letter, the authors described the top-down and bottom-up mental health care management system (4-level model based on China's existing medical system) to address urgent mental health requirements of children in China due to the COVID-19 pandemic. This model will provide a framework for the government to formulate childhood mental health development plans in the future.	Li Y, Deng H, Wang H, et al. Building the mental health management system for children post COVID-19 pandemic: an urgent focus in China. Eur Child Adolesc Psychiatry. 2021. doi:10.1007/s00787-021-01763-0.
COVID-19; pediatric; solid organ transplant recipient; United States	23-Mar-21	<a href="#">Multisystem Inflammatory Syndrome in Children (MIS-C) Associated with SARS-CoV-2 in a Solid Organ Transplant Recipient</a>	American Journal of Transplantation	Article	The authors presented the case of MIS-C associated with SARS-CoV-2 in a pediatric solid organ transplant (SOT) recipient in the United States. The patient was a 3-year-old African American female liver transplant patient with a history of Caroli disease. She was initially admitted with new onset oliguric renal failure, supra-therapeutic tacrolimus levels and hyponatremia [date not specified]. Hours after admission, she developed fever and tested positive for SARS-CoV-2 by RT-PCR. The patient eventually developed an erythematous rash over her trunk, neck, and face with desquamation of the perineal	The authors presented the case of MIS-C associated with SARS-CoV-2 in a pediatric solid organ transplant (SOT) recipient in the United States. The findings indicate that MIS-C could be a potential complication of SARS-CoV-2 infection in SOT recipients and may have a negative	Petters LM, Vogel TP, Munoz FM, et al. Multisystem Inflammatory Syndrome in Children (MIS-C) Associated with SARS-CoV-2 in a Solid Organ Transplant Recipient. Am J Transplant. 2021. doi:10.1111/ajt.16572.

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					area, and oral mucosal changes consistent with a “strawberry tongue”. She also had peri-ocular swelling and eyelid edema without conjunctivitis. She developed abdominal distention after several episodes of diarrhea. Based on clinical and laboratory findings, she was ultimately diagnosed with MIS-C complicated by portal vein thrombosis. She was treated with IV immunoglobulin (IVIG) 2 g/kg and enoxaparin, and underwent re-cannulation of the main portal vein by interventional radiology. She was discharged on day 26 when all abnormalities had resolved. The findings indicate that MIS-C could be a potential complication of SARS-CoV-2 infection in SOT recipients and may have a negative outcome on transplant graft function.	outcome on transplant graft function.	
MIS-C; COVID-19; fecal inflammatory biomarkers; fecal calprotectin; children	23-Mar-21	<a href="#">Fecal calprotectin in children with Multisystem Inflammatory Syndrome (MIS-C): a pilot case control study</a>  <a href="#">[Free Access to Abstract Only]</a>	Acta Paediatrica	Original Research	In this observational study, the authors aim to investigate the role of fecal inflammatory biomarkers in MIS-C. This study was carried out in pediatric patients between one month and 18 years in 3 tertiary teaching hospitals in Spain from March 1 - June 3, 2020. A total of 6 inpatient, pediatric patients (median age 10.8 years; range 6.5-12.5 years) diagnosed with MIS-C were compared to 5 age and gender matched inpatients (median age 12.4 years; range 10.1-17.2 years) hospitalized with COVID-19, without previously diagnosed chronic digestive disease. A stool culture was performed in 4 of 6 patients with MIS-C and all were negative. Patients with MIS-C had significantly higher fecal calprotectin (FC) than controls (median: 219.5 range: 89-2482 vs median 42 Range : 20-82 mcg/g; p=0.0061) and in all cases, FC was greater than 50 mcg/g (the lower detection limit of the assay was 50 mcg/g). 5 out of 6 patients with MIS-C had FC between 90 and 260 mcg/g. The FC of patients without MIS-C who presented with diarrhea was 20 mcg/g. The authors state that although the true value of FC in COVID-19 is currently unknown in children, data in adults suggest that patients with severe COVID-19 have elevated FC; data regarding intestinal inflammation may be helpful in differentiating MIS-C from other syndromes.	The authors investigate the role of fecal inflammatory biomarkers in MIS-C. Although fecal calprotectin in COVID-19 is currently unknown in children, data regarding intestinal inflammation may be helpful in differentiating MIS-C from other syndromes.	Gonzalez Jimenez D, Velasco Rodríguez-Belvis M, Domínguez Ortega G, et al. Fecal calprotectin in children with Multisystem Inflammatory Syndrome (MIS-C): a pilot case control study [published online ahead of print, 2021 Mar 23]. Acta Paediatr. 2021;10.1111/apa.15856. doi:10.1111/apa.15856
COVID-19; children; sleep disorders; Turkey	23-Mar-21	<a href="#">Evaluation of the Effect of the COVID-19 Pandemic on Sleep Disorders and Nutrition in Children</a>	International Journal of Clinical Practice	Article	This study evaluated the possible changes in sleep behavior and nutrition in children in Turkey during the COVID-19 pandemic. 114 parents aged 18 years and over and who had children between the ages of 6-16 years (56% female; mean age 11.32 ± 3.017 years) were included in the study. A survey was carried out using a questionnaire that included socio-demographic information and nutritional characteristic questions as well as the "Sleep Disturbance Scale for Children" (SDSC). 33.3% of the children had SARS-CoV-2 infection. There was no statistically significant relationship between COVID-19 status and variables such as nutritional change, change in eating frequency, weight change and dietary applications for protection (intake of fruits, vitamins, increased feeding or recommended dietary supplements). The proportion of participants who stated that if the pandemic period was prolonged, COVID-19 would not change their diet was found to be statistically significant	This study evaluated the possible changes in sleep behavior and nutrition in children in Turkey during the COVID-19 pandemic. The findings indicate that the nutrition status of children did not show a significant change during the pandemic period. However, sleep disorders were found to be more common in girls, highlighting the need for parents to be more attentive to these issues.	Fidancı İ, Aksoy H, Yengil Tacı D, et al. Evaluation of the Effect of the COVID-19 Pandemic on Sleep Disorders and Nutrition in Children. Int J Clin Pract. 2021:e14170. doi:10.1111/ijcp.14170.

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					(p=0.038). The SDSC score was found to be significantly high in girls (p<0.05), indicating more sleep disturbance. The findings indicate that the nutrition status of children did not show a significant change during the pandemic period. However, sleep disorders were found to be more common in girls, highlighting the need for parents to be more attentive to these issues. Sleep problems increasing especially with an accompanying anxiety state may lead to developmental problems as well as deepening psychological disorders.		
COVID-19; pregnancy; outcomes; neonate; Iran	23-Mar-21	<a href="#">Clinical and obstetric characteristics of pregnant women with Covid-19: A case series study on 26 patients</a>	Taiwanese Journal of Obstetrics and Gynecology	Article	This study evaluated the clinical characteristics and outcomes of 26 pregnant women (mean age=30.6 ± 6.5 years) with SARS-CoV-2 infection at a university hospital in Iran during the COVID-19 pandemic from March-May 2020. The mean gestational age of the patients at admission and delivery was 31.8 ± 5.2 and 36.3 ± 3.4 weeks, respectively. The most common symptoms were fever (96.2%) followed by dyspnea and cough (30.8%). The findings of lung CT scan showed abnormalities confirming pneumonia in 22 patients (84.6%). C-section was performed in 69.2% of the mothers. The most common maternal-fetal outcome was preterm delivery (38%). The mean length of hospital stay was 7.1 ± 8.3 days. 2 mothers were transferred to the ICU due to deterioration in clinical condition and they underwent mechanical ventilation without any maternal death. The most common outcomes in neonates (57.7% male) were prematurity (38%) and low birth weight (34.6%). No cases of confirmed COVID-19 were observed in the neonates, although there were 2 deaths (one due to sepsis, kidney failure and disseminated intravascular coagulation, and the other due to labor arrest and fetal distress). The findings indicate that that there was no evidence of maternal-fetal vertical transmission in these patients.	This study evaluated the clinical characteristics and outcomes of pregnant women with SARS-CoV-2 infection at a university hospital in Iran during the COVID-19 pandemic from March-May 2020. The most common maternal-fetal outcome was preterm delivery but no confirmed COVID-19 cases was observed among the neonates. The findings indicate that that there was no evidence of maternal-fetal vertical transmission in these patients.	Paediatric multisystem inflammatory syndrome temporally associated with SARS-CoV-2 (PIMS-TS): Prospective, national surveillance, United Kingdom and Ireland, 2020,
COVID-19; pregnancy; vaccination; Italy	23-Mar-21	<a href="#">Pregnant women perspectives on SARS-COV-2 vaccine: Condensation: Most of Italian pregnant women would not agree to get the SARS-COV-2 vaccine, irrespective of having features of high risk themselves, or being high-risk pregnancies</a>	American Journal of Obstetrics and Gynecology - Maternal and Fetal Medicine	Article	This study evaluated attitudes toward COVID-19 vaccination in pregnant and breastfeeding women in Italy. A survey was conducted on pregnant and breastfeeding women asking their perspectives on the available vaccines after reading the recommendations issued by the national Obstetrics, Gynecology and Neonatology societies [date not specified]. 142 women (median age=34 years, IQR=31-37.25 years) were included, 83.8% of whom were pregnant and 16.2% in early post-partum period. Most of the women did not agree to receive COVID-19 vaccine during pregnancy (n=40, 28.2% vs 102, 71.8%). Being pregnant was considered a determinant factor to refuse the vaccine prophylaxis (n=99, 69.7% vs 43, 30.3%; $\chi^2=24.187$ , p<0.001), even if a very large percentage declared to be generally in favor of vaccines (n=128, 90.1% vs 14, 9.9%; $\chi^2=6.091$ , p=0.014) and most of them confirmed they received or would receive other recommended vaccines during pregnancy (n=75, 52.8% vs 67, 47.2%; $\chi^2=10.996$ , p=0.001). Among respondents who stated they would not take the COVID-19 vaccine during pregnancy,	This study evaluated the attitude to COVID-19 vaccination in pregnant and breastfeeding women in Italy. Most women did not agree to receiving the vaccine during pregnancy. The results are the first report from a patient's point of view that reinforce the need for urgent data from vaccine trials in which women should be included to avoid the current uncertainty and denial.	Carbone L, Mappa I, Sirico A, et al. Pregnant women perspectives on SARS-COV-2 vaccine: Condensation: Most of Italian pregnant women would not agree to get the SARS-COV-2 vaccine, irrespective of having features of high risk themselves, or being high-risk pregnancies. Am J Obstet Gynecol MGM. 2021;100352. doi:10.1016/j.ajogmf.2021.100352.

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					the two most frequent answers were “fear of baby’s health consequences” in 61 (59.8%) of cases and “too short time from development to commercialization” in 41 (40.2%) of cases. These results are the first report from a patient’s point of view that reinforce the need for urgent data from vaccine trials in which women should be included to avoid the current uncertainty and denial.		
COVID-19; Kawasaki disease; mitigation; respiratory transmission; social distancing	23-Mar-21	<a href="#">The Impact of Social Distancing for COVID-19 Upon Diagnosis of Kawasaki Disease</a>	Journal of the Pediatric Infectious Disease Society	Article	In this article, the authors aim to investigate if the transmission of an unidentified respiratory agent that causes Kawasaki disease (KD) may be reduced during the period of coronavirus mitigation in children, thereby leading to a decrease in the number of cases of KD during this time. Records were accessed for cases of KD from two time periods; January 1 - March 2020 (pre-social distancing) and April 1 - December 31, 2020 (social distancing) from the Center for Kawasaki Disease in Chicago, IL (USA). The number of cases of KD diagnosed during the pre-social distancing period was 13 which was comparable to the corresponding period in 2012-2019 (95% CI from 2012 to 2019, 13.0, 21.7). The number of KD cases diagnosed during the social distancing period was significantly lower, with 15 cases, than the number of cases diagnosed annually from April to December in 2012-2019 (2012-2019 mean = 46.6; 95% CI: 41.5, 51.7; P = 0.01). To further take into account the slight decrease in KD cases during the pre-social distancing period as compared to previous years, the ratio of incidence from April-December cases divided by January to March cases also showed a significant decrease in 2020 cases with the incidence ratio of 1.15 (95% CI from 2012 to 2019 ratios is 1.86, 4.15; P = 0.008). The authors suggest that these findings support their hypothesis that the etiologic agent of KD occurs via the respiratory route and that this transmission was reduced by coronavirus mitigation practices.	The authors investigated if the transmission of an unidentified respiratory agent that causes Kawasaki disease (KD) may be reduced during the period of coronavirus mitigation in children. The authors suggest that their findings support their hypothesis that the transmission of the etiologic agent of KD reduced by coronavirus mitigation practices.	Shulman S, Geevarghese B, Kim KY, et al. The Impact of Social Distancing for COVID-19 Upon Diagnosis of Kawasaki Disease [published online ahead of print, 2021 Mar 23]. J Pediatric Infect Dis Soc. 2021;piab013. doi:10.1093/jpids/piab013
COVID-19, adverse effects, pregnancy, vaccine	23-Mar-21	<a href="#">Anti-SARS-CoV-2 vaccination strategy for pregnant women in Japan</a>	Journal of Obstetrics and Gynaecology Research	Article	This article details the anti-SARS-CoV-2 vaccination strategy for pregnant women in Japan. The authors collected worldwide indications for vaccination, including women who are pregnant or who wish to become pregnant, and reports of adverse reactions to COVID-19 vaccination. The Japan Society of Obstetrics and Gynecology and the Japanese Society of Infectious Diseases in Obstetrics and Gynecology have published recommendations for the vaccination of pregnant women with a COVID-19 vaccine. The guidelines are as follows: (1) pregnant women should not be excluded from vaccination; (2) informed consent should be obtained before vaccination; (3) healthcare workers and pregnant women with complications such as diabetes, hypertension, and obesity should be vaccinated preferentially; (4) vaccination should be avoided until 12 weeks of gestation during organogenesis; (5) spouses and family members should be vaccinated to prevent infection in the household; and (6) there is no evidence to indicate	This article details the anti-SARS-CoV-2 vaccination strategy for pregnant women in Japan. The authors conclude generalized vaccination is the most essential way to control the current COVID-19 pandemic and that it is essential to educate people including pregnant and nursing mothers with correct official information by government and academies.	Hayakawa S, Komine-Aizawa S, Takada K, Kimura T, Yamada H. Anti-SARS-CoV-2 vaccination strategy for pregnant women in Japan [published online ahead of print, 2021 Mar 23]. J Obstet Gynaecol Res. 2021;10.1111/jog.14748. doi:10.1111/jog.14748

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					that nursing mothers are adversely affected by vaccination against COVID-19. This policy has been adopted in government guidelines. Additional efforts should be made to protect pregnant women from infection and severe illness with COVID-19 by eliminating vaccine hesitancy. The authors conclude generalized vaccination is the most essential way to control the current COVID-19 pandemic and that it is essential to educate people including pregnant and nursing mothers with correct official information by government and academics.		
neonatal, Multisystem Inflammatory Syndrome in Children, MIS-C, COVID-19	23-Mar-21	<a href="#">Presumptive Neonatal Multisystem Inflammatory Syndrome in Children Associated with Coronavirus Disease 2019</a>  <a href="#">[Free Access to Abstract Only]</a>	American Journal of Perinatology	Case Report	This study aimed to alert the neonatal community to the possibility of multisystem inflammatory syndrome in children (MIS-C) like disease in critically ill neonates born to mothers with COVID-19. The authors present a case report of a neonate born to a mother with COVID-19 found to have severely depressed ventricular function and coronary artery dilation. A diagnosis of MIS-C-like disease was pursued after echocardiography showed severely depressed ventricular function and pathological coronary artery dilation in the setting of medically refractory multisystem organ failure and maternal COVID-19. The neonate did not respond to standard medical therapy, and there was no alternative disease that could explain the clinical course. A high index of clinical suspicion coupled with a low risk of intravenous immunoglobulin (IVIG) prompted the authors to pursue IVIG administration even though the neonate did not meet classic criteria for MIS-C. Following treatment with IVIG, there was a rapid clinical improvement. Ventricular function improved within 15 hours and coronary artery dilation resolved in 8 days. There was no recurrence of the disease during follow-up. The authors highlight the high index of suspicion for MIS-C in critically ill neonates born to mothers with COVID-19 and the role of echocardiology to provide critical diagnostic information and narrow the differential diagnosis.	The authors present a case report of a neonate born to a mother with COVID-19, who presented with multiorgan system failure, including ventricular dysfunction and coronary artery dilation. The neonate was diagnosed with MIS-C-like disease and fully recovered with IVIG treatment. The authors highlight the high index of suspicion for MIS-C in critically ill neonates born to mothers with COVID-19 and the role of echocardiology to provide critical diagnostic information and narrow the differential diagnosis.	Divekar AA, Patamasucon P, Benjamin JS. Presumptive Neonatal Multisystem Inflammatory Syndrome in Children Associated with Coronavirus Disease 2019. Am J Perinatol. 2021 Mar 23. doi: 10.1055/s-0041-1726318. Epub. PMID: 33757142.
breastfeeding; infant care; neonatal health; family-centered care	23-Mar-21	<a href="#">Care of hospitalized infants and their families during the COVID-19 pandemic: an international survey</a>	Journal of Perinatology	Article	This study explored changes in family-centered care practices for hospitalized infants and families due to the COVID-19 pandemic. An online survey was distributed to health care professionals working with hospitalized infants and families May-July 2020. 96 participants responded from 22 countries, answering questions related to family presence and participation in infant care, skin-to-skin holding, breastfeeding, and psychological support. Prior to the COVID-19 pandemic, 87% of units allowed families unrestricted access to infants and 92% encouraged skin-to-skin care. During the pandemic, family presence was restricted in 83% of units and participation in infant care was restricted in 32%. Medium-sized (20-40 beds) units applied less restriction than small (<20 beds) units (p = 0.03). Units with single-family rooms that did not restrict parental presence, implemented fewer restrictions regarding parents' active participation in care (p = 0.02). 12.5% reported restricted breastfeeding practices and 12.7% reported restricted use of	This study surveyed health care professionals across 22 countries to explore changes in family-centered care practices for hospitalized infants and families due to the COVID-19 pandemic. During the pandemic, family presence was restricted in 83% of units and participation in infant care was restricted in 32%. 12.5% reported restricted breastfeeding practices. The authors conclude by urging hospitals to use innovative approaches to actively engage parents in infant care during the COVID-19 pandemic.	Litmanovitz I, Silberstein D, Butler S, Vittner D. Care of hospitalized infants and their families during the COVID-19 pandemic: an international survey [published online ahead of print, 2021 Mar 23]. J Perinatol. 2021;1-7. doi:10.1038/s41372-021-00960-8

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					mother's expressed milk [conditions of restriction not elaborated]. Restrictions to families did not appear to be related to local infection rates or health care professionals' level of education on developmental care. 36% of respondents provided additional qualitative responses describing initiatives to support families during the pandemic. Respondents described interventions to foster family-infant connectedness (e.g., sharing photos and videos of the infant with the family), to enhance family-staff communication (e.g., increased briefings with parents), and to create additional resources for families in the unit (e.g., increased support from social work, additional nursing staff). The authors conclude by urging hospitals to use innovative approaches to actively engage parents in infant care during the COVID-19 pandemic.		
COVID-19; postpartum health; postpartum stress; depression	23-Mar-21	<a href="#">Psychological stress associated with the COVID-19 pandemic in postpartum women in Yokohama, Japan</a>	Journal of Obstetrics and Gynaecology Research	Original Research	This retrospective study investigated how the COVID-19 pandemic affected the psychological stress of postpartum women in Japan. 279 women who experienced a live birth at Yokohama City University Medical Center during March-June 2020 were compared to a pre-pandemic group (N=339) who gave birth at the Center March-June 2019. Evaluations were conducted on all women approximately one month after delivery. There was no observed significant difference between the groups for positive depression screenings, rate of high depression scores, rate of self-injury, or rate of post-discharge psychological interventions. Several other studies have found an increase in psychological stress among pregnant women since the beginning of the COVID-19 pandemic. The researchers hypothesize that they may not have found similar results because they were based in a single center, and could not represent impact of the pandemic due to the retrospective nature of the study. Additionally, the depression assessment administered during the postpartum period may not have accounted for all stressors experienced or interventions required during pregnancy. They recommend that future studies investigate this topic in a large scale, multicenter setting.	This retrospective study investigated how the COVID-19 pandemic affected the psychological stress of postpartum women in Japan. There were no significant differences found between women who gave birth during the pre-pandemic and pandemic time periods. These results differ from other studies that have reported increased psychological stress among pregnant women due to the COVID-19 pandemic.	Hiragi K, Obata S, Misumi T et al. Psychological stress associated with the COVID-19 pandemic in postpartum women in Yokohama, Japan. Journal of Obstetrics and Gynaecology Research. 2021. doi: <a href="https://doi.org/10.1111/jog.14776">https://doi.org/10.1111/jog.14776</a>
COVID-19; Childhood Systemic Lupus Erythematosus; Australia	22-Mar-21	<a href="#">Childhood Systemic Lupus Erythematosus and COVID-19</a>	Journal of Paediatrics and Child Health	Letter to the Editor	The authors described a study to assess the impact of the COVID-19 pandemic on patients with Childhood Systemic Lupus Erythematosus (cSLE) in Australia. 18 cSLE patients and parents were recruited prospectively across 2 tertiary sites and asked about the impact of COVID-19, as part of a larger study examining quality of life determinants. Questionnaires were completed between 1 July-18 November 2020. Median age of children was 15 yrs (IQR 13-16), and 88.9% were female. Median duration of SLE was 25.5 months (IQR 11-57). Prednisone dosing ranged from 0.05-0.19 mg/kg/day. 88.2% of children and 93.3% of parents reported being worried that the patient would be unwell because of lupus, if they caught coronavirus. Common themes expressed included higher anxiety levels and the need to modify family behaviors during the pandemic. 1 respondent stated COVID-19 had influenced a	The authors described a study to assess the impact of the COVID-19 pandemic on patients with Childhood Systemic Lupus Erythematosus (cSLE) in Australia. Common themes expressed included higher anxiety levels and the need to modify family behaviors during the pandemic. Based on the findings, the authors suggest that children with chronic health conditions requiring immunosuppression, such as SLE, should receive	Mackie FE, Hahn D, Chaitow J, et al. Childhood Systemic Lupus Erythematosus and COVID-19. J Paediatr Child Health. 2021. doi:10.1111/jpc.15451.

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					major family move, while another identified their child falling behind peers because of exclusion from school and social events. Only 1 (6.7%) had difficulty obtaining hydroxychloroquine; 20% believed their routine health care had been impacted. Based on these findings, the authors suggest that children with chronic health conditions requiring immunosuppression, such as SLE, should receive psychological assessment and support as an important part of the COVID-19 health response.	psychological assessment and support as an important part of the COVID-19 health response.	
Brazil, epidemiology, COVID-19, Child, Cities, SARS-CoV-2, Spatial Analysis	22-Mar-21	<a href="#">COVID-19 in children in the state of Pernambuco: Spatial analysis of confirmed severe cases and the Human Development Index</a>	Revista da Sociedade Brasileira de Medicina Tropical	Original Research	This ecological study included individuals <10 years old with confirmed severe COVID-19, between March 1 - August 29, 2020, in Pernambuco, Brazil. A case was considered “severe” if the individual was hospitalized with dyspnea or persistent pressure in the chest, oxygen saturation <95% in room air, or signs of respiratory discomfort. A total of 551 severe cases (39.4 cases/100,000 inhabitants) was initially concentrated in the metropolitan area, with later interiorization. The bivariate analysis revealed regions with higher rates of severe COVID-19 in children, in less developed municipalities (I=0.341; p=0.001). This data reinforced that the pandemic course involved not only the transmission and susceptibility characteristics of COVID-19 but also different severities and impairments resulting from social inequality; precarious living, work, income, housing and sanitation conditions; low educational level; and difficulty in accessing water and health services, especially for families residing in urban settings or rural areas far from health facilities and with limited transport infrastructures. The distribution of pediatric COVID-19 did not occur homogeneously among the municipalities in Pernambuco. The high rates correlated with the areas where children live. The authors conclude that these factors together revealed the lack of effective social protection policies, as well as access limitations to family emergency aid from the federal government.	This ecological study included individuals <10 years old with confirmed severe COVID-19, between March 1 - August 29, 2020, in Pernambuco, Brazil. The distribution of pediatric COVID-19 did not occur homogeneously among the municipalities in Pernambuco. The high rates correlated with the areas where children live and those with greater social vulnerability. The authors conclude that these factors together revealed the lack of effective social protection policies, as well as access limitations to family emergency aid from the federal government.	Silva APSC, Holanda ER, Abreu PD, et al. COVID-19 in children in the state of Pernambuco: Spatial analysis of confirmed severe cases and the Human Development Index. Rev Soc Bras Med Trop. 2021;54:e0782. Published 2021 Mar 22. doi:10.1590/0037-8682-0782-2020
COVID-19, SARS-CoV-2, Psychological support, Needs, Difficulties, Resources	22-Mar-21	<a href="#">The Lègami/Legàmi Service-An Experience of Psychological Intervention in Maternal and Child Care during COVID-19</a>	Pediatric Reports	Article	This retrospective study describes the Lègami/Legàmi service, a free psychological support service offered via internet and telephone, initiated by the Italian Society of Pediatric Psychology during the COVID-19 pandemic. Consultations were conducted by psychotherapists, who provided 4 psychological interviews, which in some cases led to a referral to regional healthcare services. The professional interviews, which included social support, psychological rehabilitation, and psycho-education, aimed to redefine users’ relationships with themselves and others. Study dates were April-June 2020. Researchers investigated the configuration of indicators identified, as well as possible correlations between them. 193 individuals used the service, 160 (79% female) of whom continued to psychological interviews beyond the initial intake. (Exact age descriptors not given, but lowest age group was 10-13 years and highest was 70-85 years.) Users who called due to personal problems were most often single people, very young people (10–18	This retrospective study describes the Lègami/Legàmi service, a free psychological support service offered via internet and telephone, initiated by the Italian Society of Pediatric Psychology during the COVID-19 pandemic. Researchers investigated the configuration of indicators identified, as well as possible correlations between them. This study highlighted the importance of psychological intervention under the conditions of a pandemic via online support,	Perricone G, Rotolo I, Beninati V, et al. The Lègami/Legàmi Service-An Experience of Psychological Intervention in Maternal and Child Care during COVID-19. Pediatr Rep. 2021;13(1):142-161. Published 2021 Mar 22. doi:10.3390/pediatric13010021

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					years old), and middle-aged and older people (58–69 years old) ( $p < 0.001$ ). On the other hand, users 36–57 years old mainly called for reasons linked to their children’s problems. Most of the referrals internal to the service concerned pre-adolescents (10–13 years old) and young people (19–24 years old) ( $p = 0.048$ ). This study highlighted the importance of psychological intervention under the conditions of a pandemic via online support, which can foster wide participation.	which can foster wide participation.	
quarantine; COVID-19; coping; stress; youth	22-Mar-21	<a href="#">Coping Behaviors and Psychological Disturbances in Youth Affected by the COVID-19 Health Crisis</a>	Frontiers in Psychology	Research	In this study, the authors aim to examine the coping strategies used by children and adolescents during the COVID-19 pandemic, analyze differences in these behaviors in three countries, and examine the relationship between different coping modalities and adaptation. 1,480 participants were enrolled; participants were parents of children and adolescents in three countries including Italy ( $n = 712$ ), Spain ( $n = 431$ ) and Portugal ( $n = 335$ ). Average age of participating parents was 42.26 years ( $SD = 5.92$ ) and 87.8% were female. Children of the participants were between 3 and 18 years ( $M = 9.15$ , $SD = 4.27$ ), and 47.2% were female. Participants received an online survey starting 15 days after the lockdown which collected sociodemographic information, parental perception of how the quarantine emotionally affected their children and of coping strategies. Acceptance was the most frequently used coping strategy reported by 58.9% of parents; others included ignoring the problem (35.5%) and highlighting the advantages of being at home (35.1%). Compared to Italian and Spanish children, Portuguese children used humor more frequently when their parents talked about the situation; while in Spanish children, acting as if nothing happened and seeking comfort from others were more frequent responses. Task-oriented and avoidance-oriented styles were related to better psychological adaptation. The authors suggest that many coping strategies, including acceptance, can be protective for coping and mental health challenges during the COVID-19 pandemic.	The authors examined the coping strategies used by children and adolescents during the COVID-19 pandemic, analyzed differences in these behaviors in three countries, and examine the relationship between different coping modalities and adaptation. The authors suggest that many coping strategies, including acceptance, can be protective for coping and mental health challenges during the COVID-19 pandemic.	Orgilés M, Morales A, Delvecchio E, et al. Coping Behaviors and Psychological Disturbances in Youth Affected by the COVID-19 Health Crisis. <i>Front Psychol.</i> 2021;12:565657. Published 2021 Mar 22. doi:10.3389/fpsyg.2021.565657
Cardiology, children, MIS-C, ventricular dysfunction, aneurysm	22-Mar-21	<a href="#">Cardiac abnormalities due to multisystem inflammatory syndrome temporally associated with Covid-19 among children: A systematic review and meta-analysis</a>	International Journal of Cardiology Heart and Vasculature	Systematic Review	This systematic review assessed the incidence of cardiac abnormalities in children with MIS-C. Medline, Web of knowledge, Google scholar, Scopus, and Cochrane databases were searched by 2 blinded investigators for all eligible studies [dates not provided] and 21 studies were included in the analysis describing 916 children (3–14 years of age). Various cardiac abnormalities related to MIS-C were identified, with a pooled prevalence of 38.0% (95%CI: 34.6%-41.5%) for significant left ventricular dysfunction, 20.0% (95%CI: 17.2%-23.1%) for coronary aneurysm or dilatation, 28.1% (95%CI: 24.4%-32.1%) for electrocardiogram (ECG) abnormalities or cardiac arrhythmias, 33.3% (95%CI: 29.1%-37.8%) for raised serum troponin level and 43.6% (95%CI: 39.2%-48.1%) for raised proBNP/BNP (brain natriuretic peptide) level. The statistical heterogeneity was significant for all event assessed with $I^2$ values ranging from 75.456-	In this review, the authors assessed the incidence of cardiac abnormalities in 916 children with MIS-C. They observed a pooled prevalence of 38.0% for significant left ventricular dysfunction, 20.0% for coronary aneurysm or dilatation, 28.1% for ECG abnormalities or cardiac arrhythmias, 33.3% for raised serum troponin level and 43.6% for raised proBNP/BNP level across 21 studies. They concluded that cardiac abnormalities among	Haghighi Aski B, Manafi Anari A, Abolhasan Choobdar F, Zareh Mahmoudabadi R, Sakhaie M. Cardiac abnormalities due to multisystem inflammatory syndrome temporally associated with Covid-19 among children: A systematic review and meta-analysis. <i>Int J Cardiol Heart Vasc.</i> 2021; doi:10.1016/j.ijcha.2021.100764

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
					97.249 (p < 0.001). The authors speculated that the heterogeneities were likely due to differences in the interpretation of the ECG or echocardiography by specialists, and the lack of calibration of the instruments used. The authors concluded that cardiac abnormalities among children with MIS-C are common and therefore potentially serious and life threatening.	children with MIS-C are common and potentially serious and life threatening.	
SARS-CoV-2 vaccination, COVID-19, coronavirus, vaccine intention, omission bias	22-Mar-21	<a href="#">Demographic, psychological, and experiential correlates of SARS-CoV-2 vaccination intentions in a sample of Canadian families</a>	Vaccine X	Original Research	This exploratory study examined factors that predicted the intention of parents in Canada to have their family vaccinated against COVID-19. 455 parents of 1+ children <18 years old (N=858; [no age statistics given]) completed an online questionnaire between 15 May- 9 June 2020. Parents in the Prairie provinces were 8.3 times more likely to intend on having their children vaccinated than parents from other provinces (p=0.02). Other predictors for higher intention for child vaccination included: increased parental age (p=0.02), more complete parent and child vaccination history (p<0.001 and p=0.02, respectively), lower perceived danger of vaccination (p=0.04), and lower omission bias (p<0.001). In addition, living in the Prairie provinces, lower perceived danger of vaccination (p<0.001), higher trust in authority (p=0.02), lower omission bias (p<0.001), and higher levels of avoidance (p=0.03) predicted faster intended speed of child vaccination. Having a child in the family with health risk(s) related to COVID-19 predicted a slower intended speed (p=0.04). The authors note that socio-economic status was not associated with vaccination likelihood or speed, and suggest that this may be because of Canada's publicly funded healthcare system.	This exploratory study examined factors that predicted the intention of parents in Canada to have their family vaccinated against COVID-19. Province, perceived danger of vaccination, trust in authority, previous vaccination history, and several more psychological and experiential factors were predictive of vaccination likelihood and/or speed.	Lackner CL, Wang CH. Demographic, psychological, and experiential correlates of SARS-CoV-2 vaccination intentions in a sample of Canadian families [published online ahead of print, 2021 Mar 22]. Vaccine X. 2021. doi:10.1016/j.jvacx.2021.100091
COVID-19; mental health; children; young adults; isolation	22-Mar-21	<a href="#">Editorial Perspective: Cabin fever - the impact of lockdown on children and young people</a>	Child and Adolescent Mental Health	Editorial	In this editorial perspective, the author describes how the COVID-19 pandemic and resulting confinement during lockdown periods can have deleterious effects on the mental health of children and young adults. He suggests that disruptions in education, strained relationships within the family unit, challenging social changes, isolation and hampered transitions for young adults can be associated with mental health challenges such as increased anxiety, depression, self-harm and even suicidality. The author refers to the notion of 'cabin fever' to describe a syndrome that combines irritability, anxiety, boredom, dissatisfaction and lack of stimulation. Further, one subjected to cabin fever may experience sleeplessness, paranoia, and difficulty in rational decision-making. Previous studies have shown that social confinement and deprivation of meaningful human interaction among prisoners in the US penal system can lead to a profound impact on mental health; though not the same, some researchers believe that prolonged periods of lockdown at home may have some similar effects. The author also references a National Health Service Digital report that found that mental health problems now affect 1 in 6 children and young adults compared with 1 in 9 in 2017. Accessing outdoor space, social connectedness, exercise, good nutrition and engaging through creativity are	In this editorial perspective, the author described how the COVID-19 pandemic and resulting confinement during lockdown periods can have deleterious effects on the mental health of children and young adults. Medical and mental health practitioners will need to focus on the mental health challenges faced by children and young people as a result of isolation and lockdown due to the COVID-19 pandemic.	Crawford P. Editorial Perspective: Cabin fever - the impact of lockdown on children and young people [published online ahead of print, 2021 Mar 22]. Child Adolesc Ment Health. 2021;10.1111/camh.12458. doi:10.1111/camh.12458

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					potential antidotes to ‘cabin fever’. Medical and mental health practitioners will need to focus on the mental health challenges faced by children and young people as a result of isolation and lockdown due to the COVID-19 pandemic.		
COVID-19; Child welfare system; Corrections; Early childhood education Mental Health; Incarceration; Maternal and child health; Policymaking; Public health; United States	22-Mar-21	<a href="#">Promoting Children's Mental, Emotional, and Behavioral (MEB) Health in All Public Systems, Post-COVID-19</a>	Administrati on and Policy in Mental Health	Commentary	The authors provide a review of the impact of the COVID-19 pandemic on the mental, emotional, and behavioral health of children and adolescents in the United States as of March 2021. A proposed program called the Children-First Marshall Plan that is designed to promote children's mental, emotional, and behavioral health is outlined and described by the authors, inspired by the Marshall Plan in Europe following the Second World War. The program would prioritize children's wellbeing as a social objective by reconstructing upstream, public safety-net systems for youth, including early education, maternal and child health, child welfare, and corrections. The change would be facilitated through coalition-building and contracting by state systems. Suggestions and action steps within each of these sectors are described, with reference to supporting evidence. Overall, the authors note that evidence-informed services, policies, and programs would prevent disabilities and promote health, preserve families and neighborhoods, and facilitate quality care.	This article describes the impact of the COVID-19 pandemic on the mental, emotional, and behavioral health of children and adolescents during the COVID-19 pandemic in the United States. The authors present a new policy proposal, called the Children-First Marshall Plan, for reconstructing social safety-net systems to better meet the growing needs of youth.	Hoagwood KE, Gardner W, Kelleher KJ. Promoting Children's Mental, Emotional, and Behavioral (MEB) Health in All Public Systems, Post-COVID-19 [published online ahead of print, 2021 Mar 22]. Adm Policy Ment Health. 2021;1-9. doi:10.1007/s10488-021-01125-7
COVID-19; pediatric; respiratory infections; viral infections; appendicitis	22-Mar-21	<a href="#">COVID-19 and complicated bacterial pneumonia in children</a>	European Respiratory Journal	Letter to the Editor	The authors characterized the impact of the COVID-19 pandemic on bacterial infections in the pediatric population in Victoria, Australia, from March - August 2020. They assessed admissions to the Royal Children's Hospital in Melbourne for thoracic empyema, bronchiolitis, and appendicitis, compared with the same periods in 2017-2019. Patients with empyema aged 0–18 years were identified by International Classification of Disease (10th revision) discharge diagnosis. Discharge coding for bronchiolitis (0–12 months) and appendicitis (0–18 years) was validated for a subgroup of patients and found to be >95% accurate. The authors observed a significant reduction in the number of cases of empyema ( $p < 0.001$ ) and bronchiolitis ( $p = 0.004$ ) during the lockdown period. However, there was no significant change in the number of admissions for appendicitis ( $p = 0.288$ ), leading the authors to suggest that their findings were unlikely due to changes in hospital presentation. The authors concluded that during the lockdown period, there was a significant reduction in viral and bacterial respiratory tract infections. Further studies may determine the extent to which the reduction in empyema observed may be attributed to decreased bacterial transmission or a decisive role for viral infection in the pathogenesis of complicated bacterial pneumonia.	The authors noted a statistically significant decrease in children reporting to the hospital for empyema and bronchiolitis, but not for appendicitis at the Royal Children's Hospital in Melbourne, Australia, during the COVID-19 pandemic compared to the same periods in 2017-2019. There was a significant reduction in bacterial and viral respiratory tract infections during the lockdown. Further studies may determine the extent to which the reduction in empyema observed may be attributed to decreased bacterial transmission or a decisive role for viral infection in the pathogenesis of complicated bacterial pneumonia.	Kaddour M, Simeonovic M, Osowicki J, et al. COVID-19 and complicated bacterial pneumonia in children. ERJ Open Res. 2021 Mar 22;7(1):00884-2020. doi: 10.1183/23120541.00884-2020. PMID: 33778043; PMCID: PMC7942221.

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COVID-19; vaccination; newborn; cord blood; maternal	22-Mar-21	<a href="#">Newborn antibodies to SARS-CoV-2 detected in cord blood after maternal vaccination- a case report</a>	BioMed Central (BMC) Pediatrics	Case report	The authors present a case of a pregnant woman [no age given] receiving 1 dose of the Moderna SARS-CoV-2 vaccination at 36 weeks 3 days gestation. The mother was then tested for SARS-CoV-2 by RT-PCR upon admission for labor and delivery to the hospital and was negative. A spontaneous vaginal delivery occurred without complications 3 weeks after the first dose of the Moderna vaccine. A healthy full-term female newborn was delivered at 39 weeks 3 days gestation. Under aseptic conditions, cord blood sampling was done before delivering the placenta, with 0.5ml drawn into a red-tube for serum to be sent for a SARS-CoV-2 antibody test. The cord blood was found to have IgG antibodies to SARS-CoV-2 at the level of 1.31U/ml. After delivery, the mother breastfed and received the 2nd dose of the Moderna vaccine at the 28-day protocol timeline. Like other vaccines, the authors state that the SARS-CoV-2 vaccine theoretically will be safe in pregnancy as other vaccines are. Further research is needed to inform the amounts of viral neutralizing antibodies in infants born to vaccinated mothers and the length of protection for infants from vaccinated mothers.	The authors present a case of a pregnant woman receiving 1 dose of the Moderna SARS-CoV-2 vaccination. After delivering a healthy infant using aseptic techniques, cord blood was sampled and tested positive for SARS-CoV-2 antibodies.	Paul G, Chad R. Newborn antibodies to SARS-CoV-2 detected in cord blood after maternal vaccination - a case report. <i>BMC Pediatr.</i> 2021;21(1):138. Published 2021 Mar 22. doi:10.1186/s12887-021-02618-y
COVID-19; children; education; United States	22-Mar-21	<a href="#">Our Children Are Not "Behind" Due to the COVID-19 Pandemic, but Our Institutional Response Might Be</a>	Journal of School Health	Commentary	The authors discussed the negative impact of pressuring students to “snap back” to pre-COVID expectations, accelerate their learning beyond what is developmentally reasonable, or rapidly recover from being wrongly labeled as “behind” due to the COVID-19 pandemic in the United States. Demanding children to rapidly return to normal can deny the reality of children's experiences and set them up for a recovery in which there is no opportunity to actually recover. Students who have been labeled in the past as being behind often feel diminished self-worth, are pressured to “catch up,” struggle to remain motivated, and frequently fall further behind. Parents, educators, and policymakers should instead be responsive to evolving conditions and pro-actively redirect time, energy, and resources toward what is most essential for students in the present moment and most likely to maximize student recovery, both academically and developmentally. Now is the time to fully and formally recognize that the mission of schools is not just to educate students, but also to care for their health and well-being. It is important to refortify, strengthen, and integrate the education and health institutions in a manner that ensures schools will be ready to meet the needs of children today and prepared to meet the challenges of tomorrow.	The authors discussed the negative impact of pressuring students to “snap back” to pre-COVID expectations, accelerate their learning beyond what is developmentally reasonable, or rapidly recover from being wrongly labeled as “behind” due to the COVID-19 pandemic in the United States. Students who have been labeled in the past as being behind often feel diminished self-worth, are pressured to “catch up,” struggle to remain motivated, and frequently fall further behind. Parents, educators, and policymakers should instead be responsive to evolving conditions and pro-actively redirect time, energy, and resources toward what is most essential for students in the present moment and most likely to maximize student recovery, both academically and developmentally.	Mann MJ, Smith ML, Kristjansson AL, et al. Our Children Are Not "Behind" Due to the COVID-19 Pandemic, but Our Institutional Response Might Be. <i>J Sch Health.</i> 2021. doi:10.1111/josh.13016.

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COVID-19; pediatric; telemedicine; United States	22-Mar-21	<a href="#">Pediatric subspecialty telemedicine use from the patient and provider perspective</a>	Pediatric Research	Article	This mixed-methods study described telemedicine use at the height of the COVID-19 pandemic (23 March-5 May 2020) from both a provider and patient perspective, in 4 different pediatric subspecialties (pediatric endocrinology, nephrology, orthopedic surgery, and rheumatology) at a large children's hospital in the United States. Deductive analysis was used to review observational data from 40 video visits. Providers and patients/caregivers were surveyed around areas of satisfaction and communication. 31 female and 9 male patients participated (mean age 13.7 ± 4 years). Adaptations of telemedicine were observed, including shared-screen use and provider-guided parent procedures, among others. All providers (n=22) felt that it was safest for their patients to conduct visits by video, and 72.7% reported completing some component of a clinical exam. Patients rated the areas of being respected by the clinical staff/provider and showing care and concern highly, and the mean overall satisfaction was 86.7 ± 19.3%. Overall, the findings indicate the patients were satisfied with the telemedicine visits during this stressful time and that providers were able to innovate during visits. Telemedicine can be successfully adapted to patient and provider needs, but further studies are needed to fully explore its integration in pediatric subspecialty care.	This mixed-methods study described telemedicine use at the height of the COVID-19 pandemic (23 March-5 May 2020) from both a provider and patient perspective, in 4 different pediatric subspecialties (pediatric endocrinology, nephrology, orthopedic surgery, and rheumatology) at a large children's hospital in the United States. Overall, the findings indicate the patients were satisfied with the telemedicine visits during this stressful time and that providers were able to innovate during visits.	Pooni R, Pageler NM, Sandborg C, et al. Pediatric subspecialty telemedicine use from the patient and provider perspective. <i>Pediatr Res.</i> 2021;1-6. doi:10.1038/s41390-021-01443-4.
COVID-19; severity; risk factors	22-Mar-21	<a href="#">Risk profiles of severe illness in children with COVID-19: a meta-analysis of individual patients</a>	Pediatric Research	Meta-analysis	The authors prepared a meta-analysis from case reports of children with COVID-19 to identify potential risk factors for developing severe illness. 52 case reports were included in the meta-analysis of 203 children (mean age 5.46 years [range not reported]). 26 (12.94%) were asymptomatic, 160 (79.60%) mild/moderate, and 15 (7.46%) severe. The authors state that after adjusting for age and sex, 11 factors were found to be significantly associated with the risk of severe illness relative to asymptomatic or mild/moderate illness [reference category not specified]. These factors are: comorbidity (aOR 2.76, p<0.001), fever (aOR 2.64, p<0.001), temperature (aOR 2.15, p=0.002), cough (aOR 2.27, p<0.001), phlegm/sputum (aOR 2.89, p=0.002), dyspnea/tachypnea (aOR 6.61, p<0.001), diarrhea (aOR 1.95, p=0.004), abnormal chest x-ray (aOR 3.33, p<0.001), ground-glass opacity on computed tomography (aOR 1.63, p=0.001), elevated c-reactive protein (aOR 2.17, p=0.011), and elevated lactate dehydrogenase (aOR 1.60, p=0.017). The authors then created a nomogram model for predicting severe illness in children with COVID-19, using some of these factors. This model is available in Figure 1 of the article. The authors state that this is a starting point for determining factors that lead to severe illness in children with COVID-19.	The authors prepared a meta-analysis from case reports of children with COVID-19 to identify potential risk factors for developing severe illness. The authors state that after adjusting for age and sex, fever, temperature, cough, phlegm/sputum, dyspnea/tachypnea, diarrhea, abnormal chest x-ray, ground glass opacity, elevated C-reactive protein, and elevated lactate dehydrogenase were significantly associated with the risk of severe illness.	Zhou B, Yuan Y, Wang S, et al. Risk profiles of severe illness in children with COVID-19: a meta-analysis of individual patients [published online ahead of print, 2021 Mar 22]. <i>Pediatr Res.</i> 2021;1-6. doi:10.1038/s41390-021-01429-2

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PIMS-TS, MIS-C, pediatric, Ireland, UK	22-Mar-21	<a href="#">Pediatric inflammatory multisystem syndrome temporally associated with SARS-CoV-2 (PIMS-TS) in the United Kingdom and Ireland: What is new?</a>	The Lancet Regional Health - Europe	Commentary	This commentary summarizes a recent article by Flood et al. The researchers had gathered pediatric clinical data from March 1-June 15, 2020 in the United Kingdom and the Republic of Ireland on PIMS-TS, also known as MIS-C. [Data collection information not given in this commentary.] The data were compared to what has been reported in the literature. The data confirmed some of what has been reported, namely latency from suspected/confirmed SARS-CoV-2 infection or exposure, age distribution, male predisposition, symptoms, low case fatality, and lower number of patients of Asian descent than in Kawasaki disease. However, compared to current literature, this dataset showed a lower proportion of patients with cardiovascular involvement requiring admission to ICU, and that most patients who tested positive for SARS-CoV-2 via PCR had no anti-viral antibodies in their blood. The authors also provide patient groupings: individuals suffering from isolated PIMS-TS, subjects sharing features of PIMS-TS and Kawasaki disease, those with PIMS-TS and toxic shock syndrome, and others with all 3 phenotypes together. It is the opinion of the original article authors that this way of grouping will help clinicians manage patients presenting with such a variety of signs and symptoms.	This commentary summarizes a recent article by Flood et al., comparing existing literature to pediatric clinical data from the United Kingdom and the Republic of Ireland on PIMS-TS, also known as MIS-C. The authors outline important similarities and differences in clinical presentation between this dataset and previous reports. The authors present possible patient groupings based on clinical presentation as a potential tool for clinicians to use in managing diagnosis and treatment.	Bassareo PP. Pediatric inflammatory multisystem syndrome temporally associated with SARS-CoV-2 (PIMS-TS) in the United Kingdom and Ireland: What is new? The Lancet Regional Health - Europe. 2021;3:100090. doi:10.1016/j.lanep.2021.100090
Africa; COVID 19; fetal; maternal mortality; pregnancy	22-Mar-21	<a href="#">Maternal mortality from COVID 19 among South African pregnant women</a>	The Journal of Maternal-Fetal and Neonatal Medicine	Short Report	This study sought to determine the COVID 19-related maternal deaths among pregnant women at Ekurhuleni health district in South Africa and compare these findings with similar studies. The authors reviewed all maternal deaths from April-September 2020 in the region; data included total live births, maternal mortality ratio (MMR), age, ethnicity, place of admission, parity, pregnancy status, antenatal complications, gestational age (GA) at delivery, GA at COVID-19 diagnosis, GA at death, symptoms, comorbidity, laboratory investigations, and fetal outcomes. 103 pregnant women had COVID-19 [method of confirmation not specified], of which 6 women (5.8%) died. The proportion of COVID 19 maternal deaths to total maternal deaths was (6/33) 18%. The proportion of maternal COVID-19 deaths to deaths in the general population (6/785) was higher than in other studies. Among these 6 women who died from COVID-19, the mean age was 33.5 (SD ± 4.3) years (range 26-38 years), and the majority (n=5, 83%) were multiparous. The mean GA at the time of diagnosis was 35 (± 5.8) weeks. All had dyspnea at presentation, and 3 (50%) had hypertension. HIV rate (50%) was higher than the national rate (30%). Elevated lactic dehydrogenase (LDH) was the most common laboratory abnormality. 3 women died after spontaneous vaginal delivery, and 2 (66%) delivered macerated stillborns. The authors conclude that hypertensive women may be at increased risk of death and should be routinely tested for SARS-CoV-2. The high HIV rate and LDH count should alert health care workers to perform these tests among all pregnant women with COVID-19.	This study sought to determine the COVID 19-related maternal deaths among pregnant women at Ekurhuleni health district in South Africa and compare these findings with similar studies. The proportion of maternal deaths due to COVID-19 to deaths in the general population was higher than in other studies. The rate of HIV among the women who died was higher than in the general population, and elevated lactic dehydrogenase (LDH) was the most common finding. The authors recommend testing pregnant women with COVID-19 for HIV and high LDH count.	Basu JK, Chauke L, Magoro T. Maternal mortality from COVID 19 among South African pregnant women [published online, 2021 Mar 22]. J Matern Fetal Neonatal Med. 2021;1-3. doi:10.1080/14767058.2021.1902501

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COVID-19; pregnancy; maternal health; neonate; obstetrics; patient safety	22-Mar-21	<a href="#">Maintaining Maternal-Newborn Safety During the COVID-19 Pandemic</a>	Nursing for Women's Health	Article	The authors described the changes made at a tertiary care center in Wisconsin, United States to maintain safe care for women and newborns during the COVID-19 pandemic. The hospital established an obstetric COVID-19 unit for women and newborns, developed guidelines for visitation and for use of PPE, initiated universal COVID-19 testing, and provided health education to emphasize shared decision-making. Collaboration of multidisciplinary teams helped promote consistency amidst the chaos of continually changing guidelines and information during the global pandemic with a novel virus. Rapid action by nursing leadership to coordinate with maternity and newborn care providers helped create an atmosphere conducive to best practices. The plan-do-study-act (PDSA) cycle was used to continually evaluate proposed and standard practices. Patient satisfaction survey score was 84.7% and 88.4% in quarters 1 and 2 of 2020 respectively, which was higher than observed in 2019 (66% in quarter 4) indicating increased satisfaction. This unexpected positive response at this time of uncertainty and decreased number of visitors allowed in the hospital indicated that the changes implemented by the hospital were favorable for the patients.	The authors described the changes made at a tertiary care center in Wisconsin, United States to maintain safe care for women and newborns during the COVID-19 pandemic. The hospital established an obstetric COVID-19 unit for women and newborns, developed guidelines for visitation and for use of PPE, initiated universal COVID-19 testing, and provided health education to emphasize shared decision-making. Patient satisfaction survey score showed an improvement in 2020 compared to 2019.	Patrick NA, Johnson TS. Maintaining Maternal-Newborn Safety During the COVID-19 Pandemic. Nurs Womens Health. 2021. doi:10.1016/j.nwh.2021.03.003.
COVID-19; pregnancy; neonate	22-Mar-21	<a href="#">Relationship of COVID-19 with Pregnancy</a>	Taiwanese Journal of Obstetrics and Gynecology	Review Article	The author discussed SARS-CoV-2 infection during pregnancy. Due to physiological adaptive changes and immunosuppressive condition in pregnancy which make them more susceptible to respiratory tract infection and pneumonia, pregnant women are at high risk of COVID-19. There is scarce information available on COVID-19 during pregnancy and no reliable evidence for vertical transmission. During late pregnancy, SARS-CoV-2 infection may present risks of adverse obstetrical outcomes. There is a concern regarding neonatal risk from postpartum contamination, highlighting the need for a 14-day period of precautionary isolation. A multidisciplinary team is needed to manage disease by close supervision, isolated negative pressure room, and routinely fetal monitoring. The timing and mode of delivery depend on the condition of the mother and fetus. Repeated testing, contact tracing, and self-isolation may control the spread of SARS-CoV-2 until specific treatment either by vaccine or drugs are available.	The author discussed SARS-CoV-2 infection during pregnancy. Due to physiological adaptive changes and immunosuppressive condition in pregnancy which make them more susceptible to respiratory tract infection and pneumonia, pregnant women are at high risk of COVID-19. The timing and mode of delivery depend on the condition of the mother and fetus.	Salma U. Relationship of COVID-19 with Pregnancy. Taiwanese Journal of Obstetrics and Gynecology. 2021. doi:10.1016/j.tjog.2021.03.005.
COVID-19; Novel coronavirus; breastfeeding; family-centered care; neonates; nosocomial infection; parental satisfaction	22-Mar-21	<a href="#">Family-centered care management strategies for term and near-term neonates with brief hospitalization in a level III NICU in Shenzhen, China during the time</a>	The Journal of Maternal-Fetal and Neonatal Medicine	Short Report	Adopting the family-centered care (FCC) approach in neonatal care has been shown to improve breastfeeding rates and parental satisfaction. To minimize the transmission of SARS-CoV-2, family visits in neonatal ICUs (NICUs) were suspended in China. In order to maintain the benefits of FCC, the Hong Kong University-Shenzhen Hospital NICU modified FCC strategies pertaining to triage, screening, management of suspected infections, breastfeeding promotion, and family communication. This study evaluated the effects of these new strategies by comparing the demographic and clinical data of neonates, rates of breastfeeding at discharge, nosocomial infection and parental satisfaction before (open group;	This study evaluated the effects of family-centered care strategies modified at a single neonatal ICU in China due to the COVID-19 by comparing the demographic and clinical data of neonates, rates of breastfeeding at discharge, nosocomial infection and parental satisfaction before and after implementation. The authors conclude that this site's	Yi YZ, Su T, Jia YZ, et al. Family-centered care management strategies for term and near-term neonates with brief hospitalization in a level III NICU in Shenzhen, China during the time of COVID-19 pandemic [published online, 2021 Mar 22]. J Matern Fetal Neonatal Med. 2021;1-4.

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		<a href="#">of COVID-19 pandemic</a>			December 2019-January 2020; n=144 neonates) and after (closed group; February-March 2020; n=108) the implementation of alternative FCC management strategies. The nosocomial infection rate and parental satisfaction for open and closed groups were not different (p=1.00; p=0.80, respectively). Breastfeeding rate at discharge decreased but the difference was not significant (80% open vs. 74% closed; p=0.29). Based on these results, the authors conclude that this site's alternative FCC strategies were feasible and maintained high parental satisfaction without increased nosocomial infection rate; however, additional support for breastfeeding is needed.	alternative FCC strategies were feasible and maintained high parental satisfaction without increased nosocomial infection rate; however, additional support for breastfeeding is needed.	doi:10.1080/14767058.2021.1902499
COVID-19; newborn; patient care team; personal protective equipment	22-Mar-21	<a href="#">Preparedness strategies in neonatology units during the COVID-19 pandemic: A survey conducted at maternity centers in Argentina</a>	Archivos Argentinos de Pediatría	Original Article	The objective of this cross-sectional study was to analyze available resources, guidelines in use, and preparedness to care for infants at maternity centers in Argentina during the COVID-19 pandemic. A survey was administered to medical and nursing staff of Argentine facilities with >500 annual births (58% from the public sector) between May 24 - June 9, 2020; in total, 104/147 facilities answered (71%). All had guidelines for care during the pandemic, and 93% indicated they had been trained on their use. A companion was not allowed during childbirth in 26% of private facilities nor in 60% of public ones (p<0.01). Deferred cord clamping was recommended in 87%; rooming-in with asymptomatic newborns (in case of confirmed/suspected maternal COVID-19) was promoted in 62%; breastfeeding using protective measures was recommended in 70%; feeding expressed breast milk using a bottle was recommended in 23%; and feeding with formula was recommended in 7%. In 94%, family visiting in the Neonatology Unit was restricted. Difficulties included the lack of individual rooms for symptomatic infants and a potential shortage of health care staff and PPE. The authors conclude all facilities are aware of national guidelines to fight the pandemic and most have the resources to comply with recommended protective measures. However, there is uncertainty as to whether PPE, staff, and physical space available would be enough if cases increased significantly.	This study analyzed available resources, guidelines in use, and preparedness to care for infants at maternity centers in Argentina during the COVID-19 pandemic. The authors conclude that while all facilities are aware of national guidelines to fight the pandemic and most have the resources to comply with recommended protective measures, there is uncertainty as to whether resources would be enough if cases increased significantly.	Geffner SC, Ávila AS, Etcharrán ML, et alE. Preparedness strategies in neonatology units during the COVID-19 pandemic: A survey conducted at maternity centers in Argentina. Estrategias de preparación en unidades de neonatología durante la pandemia de COVID-19: Encuesta en maternidades de la Argentina. Arch Argent Pediatr. 2021;119(2):76-82. doi:10.5546/aap.2021.eng.76
COVID-19; children; MIS-C; idiopathic ventricular rhythm; shock; United States	22-Mar-21	<a href="#">COVID-19-associated multisystem inflammatory syndrome in children presenting uniquely with sinus node dysfunction in the setting of shock</a>	Cardiology in the Young	Case Report	The authors present the first pediatric case of idiopathic ventricular cardiac rhythm while in uncompensated shock with MIS-C in the United States during the COVID-19 pandemic. A 13-year-old Hispanic male presented to the emergency department with several days of fevers, listlessness, abdominal pain, vomiting, diarrhea, headache, and rash [date not specified]. He was hypothermic and hypotensive in uncompensated shock with a heart rate of 92 beats per minute. His initial electrocardiogram showed an idiopathic ventricular rhythm with left axis deviation and with no discernible P waves, and laboratory results indicated myocardial inflammation. He had a negative SARS-CoV-2 PCR, negative SARS-CoV-2 IgM antibody, and positive SARS-CoV-2 IgG and IgA antibodies. Following intravenous immunoglobulin treatment, his cardiac markers improved and he	The authors presented the first pediatric case of idiopathic ventricular cardiac rhythm while in uncompensated shock with MIS-C in the United States during the COVID-19 pandemic. The patient fully recovered following intravenous immunoglobulin. This case highlights the need for clinicians caring for children with MIS-C to be mindful of possible abnormalities in sinus node function that are disparate from	Tomlinson LG, Cohen MI, Leverson RE, et al. COVID-19-associated multisystem inflammatory syndrome in children presenting uniquely with sinus node dysfunction in the setting of shock. Cardiol Young. 2021;1-3. doi:10.1017/S1047951121000354.

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
					clinically recovered. His transthoracic echocardiogram at discharge showed no coronary artery dilation, mildly dilated left ventricle with left ventricular ejection fraction of 53%, and persistent dilated aortic valve annulus and aortic root. The electrocardiogram on the day of discharge revealed sinus rhythm and a normal QRS axis. This case highlights the need for clinicians caring for children with MIS-C to be mindful of possible abnormalities in sinus node function that are disparate from the typical tachycardia response seen in pediatric shock.	the typical tachycardia response seen in pediatric shock.	
SARS-CoV-2; children, adolescents, young adults, antibody response	22-Mar-21	<a href="#">Association of Age With SARS-CoV-2 Antibody Response</a>	Journal of the American Medical Association (JAMA) Network Open	Original Research	This study examines the association of age with the quantity and quality of SARS-CoV-2 antibody responses. 31,426 antibody test results from pediatric and adult patients were collected from a New York City hospital between April 9 - August 31, 2020 (19,797 [63.0%] female patients), with 1,194 pediatric patients (mean [SD] age, 11.0 [5.3] years) and 30,232 adult patients (mean [SD] age, 49.2 [17.1] years). The seroprevalence in the pediatric (197 [16.5%; 95% CI, 14.4%-18.7%]) and adult (5,630 [18.6%; 95% CI, 18.2%-19.1%]) patient populations was similar. SARS-CoV-2 IgG level, total antibody (TAB) level, surrogate neutralizing antibody (SNAb) activity, and antibody binding avidity were compared between children (aged 1-10 years), adolescents (aged 11-18 years), and young adults (aged 19-24 years). The SARS-CoV-2 IgG level showed a negative correlation with age in the pediatric population ( $r = -0.45$ , $P < 0.001$ ) and a moderate but positive correlation with age in adults ( $r = 0.24$ , $P < 0.001$ ). Patients aged 19 to 30 years exhibited the lowest IgG levels (e.g., aged 25-30 years vs 1-10 years: 99 [44-180] relative fluorescence units [RFU] vs 443 [188-851] RFU). In the subset cohort aged 1 to 24 years, IgG, TAB, SNAb and avidity were negatively correlated with age (e.g., IgG: $r = -0.51$ ; $P < 0.001$ ). Results of this study suggest that SARS-CoV-2 viral specific antibody response profiles are distinct in different age groups and age-targeted strategies for disease screening and management as well as vaccine development may be warranted.	This study examines the association of age with the quantity and quality of SARS-CoV-2 antibody responses. Results of this study suggest that SARS-CoV-2 viral specific antibody response profiles are distinct in different age groups and age-targeted strategies for disease screening and management as well as vaccine development may be warranted.	Yang HS, Costa V, Racine-Brzostek SE, et al. Association of Age With SARS-CoV-2 Antibody Response. JAMA Netw Open. 2021;4(3):e214302. Published 2021 Mar 1. doi:10.1001/jamanetworkopen.2021.4302
Women's experience; COVID-19; Pandemic; Social support; Psychological wellbeing; Pregnancy	21-Mar-21	<a href="#">Becoming a mother in the 'new' social world in Australia during the first wave of the COVID-19 pandemic</a>	Midwifery	Original Research	This paper presents the secondary analysis results of the second phase of a cross-sectional study designed to describe women's experiences of becoming a mother during the COVID-19 pandemic in Australia. Semi-structured interviews with 27 mothers were conducted between March-June 2020. 67% of participants had given birth since the onset of the pandemic, and all described having an isolating maternity experience. Common themes that arose from the interviews were: feelings of loneliness from attending health appointments alone or reduced visitors and social support, women feeling compelled to advocate for themselves or others through peer support and searching for reliable health information, women changing their expectations of a maternity experience to accommodate COVID-19 restrictions, increased risk perception of contracting infectious diseases. The researchers recommend that	This paper presents the secondary analysis results of the second phase of a cross-sectional study designed to describe women's experiences of becoming a mother during the COVID-19 pandemic in Australia. Unanimous reports of isolating maternal experiences lead researchers to recommend that public health initiatives should consider the need childbearing women have for support and	Sweet L, Bradfield Z, Vasilevski V et al. Becoming a mother in the 'new' social world in Australia during the first wave of the COVID-19 pandemic. Midwifery. 2021; 98. doi: https://doi.org/10.1016/j.midw.2021.102996

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					public health initiatives should consider the need childbearing women have for support and reassurance during the COVID-19 pandemic.	reassurance during the COVID-19 pandemic.	
Maternal health, healthcare delivery, child, immunization, prenatal care	21-Mar-21	<a href="#">Rapid assessment on the utilization of maternal and child health services during COVID-19 in Rwanda</a>	Public Health Action	Original Research	To assess the change in the utilization of maternal and child health (MCH) services during the COVID-19 outbreak in Rwanda, the authors conducted a cross-sectional quantitative study using data from the Rwanda Health Management Information System (HMIS). They compared data from March-April, 2019 (before the COVID-19 outbreak) to March-April, 2020. 30 MCH indicators were categorized into four groups: Antenatal care (7 indicators such as attending the first prenatal visit), facility delivery (3 indicators such as delivering at a health facility), postnatal care (4 indicators such as attending postpartum visit), and immunization (16 indicators such as child polio vaccination). Of the 30 indicators, 15 significantly decreased in utilization and 3 significantly increased in utilization during the pandemic (p<0.05). Of those that decreased, most were related to health facility deliveries and child vaccinations services. When the data was assessed regionally, the authors observed that the Northern and Western Provinces had the most MCH services that decreased in utilization, with 9 and 12 services experiencing a significant decrease in utilization respectively. The authors concluded that access and utilization of basic MCH services were considerably affected during the COVID-19 outbreak in Rwanda.	In this article, the authors assessed utilization of maternal child health (MCH) services across Rwanda during the COVID-19 outbreak. They observed a decrease in utilization for many services, especially those related to health facility deliveries and child vaccinations. The Northern and Western Provinces were most affected. The authors concluded that access and utilization of basic MCH services were considerably affected during the COVID-19 outbreak in Rwanda.	Wanyana D, Wong R, Hakizimana D. Rapid assessment on the utilization of maternal and child health services during COVID-19 in Rwanda. Public Health Action. 2021;11(1):12-21. doi:10.5588/pha.20.0057
COVID-19; children; diabetes; diabetic ketoacidosis; Canada	21-Mar-21	<a href="#">Diabetic Ketoacidosis at Type 1 Diabetes Diagnosis in Children during the COVID-19 Pandemic</a>	Pediatric Diabetes	Article	The authors evaluated whether the rate of severe presentations of new onset type 1 diabetes (DM1) such as diabetic ketoacidosis (DKA) changed since the COVID-19 public health measures were enacted in Canada. A retrospective chart review of children aged <18 years presenting with new onset DM1 during the pandemic period of 17 March-31 August 2020 was conducted at 2 tertiary care pediatric hospitals in Alberta. Rates of DKA and severe DKA were compared to the same time period in the year 2019 (pre-pandemic control). The number of children presenting with newly diagnosed DM1 was similar during the pandemic year of 2020 compared to 2019 (n=107 children, 43% male, mean age at diagnosis=9.62 years in 2020 vs. n=114, 41.2% male, mean age at diagnosis=9.43 years in 2019; p>0.05). The frequency of DKA at DM1 onset was significantly higher in the pandemic period (68.2% vs 45.6%; p<0.001) and incidence of severe DKA was also higher (27.1% in 2020 vs 13.2% in 2019; p=0.01). The findings indicate the need for educating health care professionals and families to be aware of the symptoms of hyperglycemia and the importance of early diagnosis and treatment even during public health measures for COVID-19.	The authors evaluated whether the rate of severe presentations of new onset type 1 diabetes (DM1) such as diabetic ketoacidosis (DKA) changed since the COVID-19 public health measures were enacted in Canada. The frequency of DKA at DM1 onset and incidence of severe DKA were significantly higher in the pandemic period. The findings indicate the need for educating health care professionals and families to be aware of the symptoms of hyperglycemia and the importance of early diagnosis and treatment even during public health measures for COVID-19.	Ho J, Rosolowsky E, Pacaud D, et al. Diabetic Ketoacidosis at Type 1 Diabetes Diagnosis in Children during the COVID-19 Pandemic. Pediatr Diabetes. 2021. doi:10.1111/pedi.13205.

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COVID-19; pediatric; PIMS-TS; India	21-Mar-21	<a href="#">Fresh Per Rectal Bleeding in Pediatric Inflammatory Multisystem Syndrome Temporally Associated with SARS-CoV-2 (PIMS-TS)</a>	Indian Journal of Pediatrics	Scientific Letter	The authors described a case of fresh rectal bleeding in pediatric inflammatory multisystem syndrome temporally associated with SARS-CoV-2 (PIMS-TS) in India. The 4-month-old female infant presented with fever, vomiting, lethargy, and fresh blood in stool [date not specified]. There was no abdominal distension, but bowel sounds were sluggish. She presented in compensated shock and needed fluid resuscitation, and respiratory and inotropic support. Investigations showed neutrophilic leukocytosis, raised inflammatory and cardiac markers, and sterile blood culture. RT-PCR for SARS-CoV-2 was negative, while IgG antibodies were positive. She had 3 episodes of fresh blood in stool and hemoglobin dropped to 8 g/dL, requiring transfusion. CT revealed dilated jejunum and proximal ileum, suggestive of obstruction. Exploratory laparotomy showed extensively congested ileum and a 2.5-cm fibrous band crossing from the anti-mesenteric border to mesentery in the proximal ileum. No obvious volvulus was seen. The authors state that the tiny band could not have caused ischemic changes unless accompanied by volvulus. The patient was treated with piperacillin-tazobactam, amikacin, immunoglobulin, and methylprednisolone, after which inflammatory markers decreased and she was subsequently discharged. On follow-up, she had good weight gain. In summary, the authors recommend awareness of unusual manifestations of PIMS-TS.	The authors described a case of fresh rectal bleeding in pediatric inflammatory multisystem syndrome temporally associated with SARS-CoV-2 (PIMS-TS) in India. In summary, the authors recommend awareness of unusual manifestations of PIMS-TS.	Lad SS, Suryawanshi PB, Jadhav P, et al. Fresh Per Rectal Bleeding in Pediatric Inflammatory Multisystem Syndrome Temporally Associated with SARS-CoV-2 (PIMS-TS). Indian J Pediatr. 2021. doi:10.1007/s12098-021-03728-2.
COVID-19; SARS-CoV-2; ZIP code tabulation areas; health disparities; neighborhood characteristics; social determinants of health; socioeconomic conditions	21-Mar-21	<a href="#">Social Determinants of Health and Coronavirus Disease 2019 in Pregnancy: Condensation: Social determinants of health, including neighborhood characteristics such as household income and educational attainment, are associated with SARS-CoV-2 infection and severity of COVID-19 in pregnancy</a>	American Journal of Obstetrics and Gynecology - Maternal and Fetal Medicine	Original Research	This is a cross-sectional study that evaluated the association of social determinants of health with SARS-CoV-2 infection and the severity of COVID-19 illness in hospitalized pregnant patients in New York (USA) during the pandemic. The study population included all pregnant patients who delivered and had SARS-CoV-2 PCR testing between 15 March-15 June 2020 at 7 hospitals within the largest academic health system in New York (n=4873; mean age 30.5 +/- 5.8 years). For each patient, the ZIP code was used as a proxy for neighborhood and for determining socio-economic characteristics. Specific variables of interest included mean persons per household, median household income, percent unemployment, and percent with less than high school education. Overall, the PCR test positivity rate was 11% (n=544). Among this group, 359 patients (66%) were asymptomatic or pre-symptomatic, 115 (21%) had mild or moderate COVID-19, and 70 (13%) had severe or critical COVID-19. Multiple logistic regression modeling demonstrated that pregnant patients who tested positive for SARS-CoV-2 were more likely to be younger, of higher parity, belong to minoritized racial and ethnic groups, have public health insurance, have limited English proficiency, and/or live in low-income neighborhoods with less educational attainment. On ordinal logit regression modeling, obesity, income, and education were significantly associated with COVID-19 severity.	The cross-sectional study of pregnant patients in New York (USA) between March and June 2020 revealed that social and physical determinants of health play a significant role in determining the risk of SARS-CoV-2 infection. The severity of COVID-19 illness was not associated with race/ethnicity but was associated with maternal obesity and neighborhood-level characteristics including educational attainment and household income.	Prasannan L, Rochelson B, Shan W, et al. Social Determinants of Health and Coronavirus Disease 2019 in Pregnancy: Condensation: Social determinants of health, including neighborhood characteristics such as household income and educational attainment, are associated with SARS-CoV-2 infection and severity of COVID-19 in pregnancy. Am J Obstet Gynecol MFM. 2021 Mar 21:100349. doi: 10.1016/j.ajogmf.2021.100349 . PMID: 33757936; PMCID: PMC7981575.

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COVID-19; anxiety; paediatric anaesthesia; perioperative anxiety; personal protective equipment	20-Mar-21	<a href="#">Effect of personal protective equipment on perioperative anxiety in children and young people</a>	British Journal of Anaesthesia	Letter to the Editor	This letter to the editor reports on a prospective observational cohort study that investigated the impact of PPE on peri-operative fear and anxiety among children and adolescents in Liverpool, United Kingdom. Families of pediatric patients (n=63; median age = 9 years; IQR = 1-12 years) completed a post-operative survey between June 22- July 5, 2020. 64% of families reported that their child was scared/anxious about coming into a hospital. 65% of children used “happy” and “safe” to describe how PPE made them feel; no child selected “anxious,” “nervous,” or “scared.” The authors note that there is little information about coming to a hospital during the COVID-19 pandemic, but that PPE does not contribute to peri-operative anxiety in pediatric patients. They recommend psychological interventions such as distraction, with videos and interactive games as examples.	This letter to the editor reports on a prospective observational cohort study that investigated the impact of PPE on peri-operative fear and anxiety among children and adolescents in Liverpool, United Kingdom. The authors note that there is little information about coming to a hospital during the COVID-19 pandemic, but that PPE does not contribute to peri-operative anxiety in pediatric patients.	Berwick C, Benison E, Masters J, et al. Effect of personal protective equipment on perioperative anxiety in children and young people. Br J Anaesth. 2021 Mar 20:S0007-0912(21)00167-7. doi: 10.1016/j.bja.2021.03.006.
COVID-19, Coronavirus, SARS-CoV-2, Pneumonia, Public health surveillance, Electronic health records, Primary care	20-Mar-21	<a href="#">Divergences on expected pneumonia cases during the COVID-19 epidemic in Catalonia: a time-series analysis of primary care electronic health records covering about 6 million people</a>	BioMed Central (BMC) Infectious Diseases	Research Article	Since pneumonia can be a complication of COVID-19, the authors of this study used primary care electronic health records (EHR) to analyze trends of pneumonia during 2 waves of the COVID-19 pandemic, in order to use it as a clinical surveillance system and an early indicator of COVID-19 severity. They conducted a time series analysis of pneumonia cases from January 2014 to December 2020. They collected pneumonia diagnoses from the primary care EHR covering >6 million people in Catalonia, Spain. Between March 4–May 5, 2020, there was an excess of 11,704 cases of pneumonia, compared to the previous years (95% CI: 9909 to 13,498). They also observed a 20% excess of pneumonia cases from January to March 2020 in the population >15 years old. Additionally, there were 1377 excess cases of pneumonia from October 22 to November 15, 2020 (95% CI: 665 to 2089). In contrast, there were 2 major periods with reductions of pneumonia cases in children, accounting for 131 days and 3534 less pneumonia cases (95% CI: 1005 to 6064) from March to July 2020, and 54 days and 1960 less pneumonia cases (95% CI: 917 to 3002) from October to December 2020, compared to previous years. The authors observed 2 waves of COVID-19 cases coinciding with 2 pneumonia peaks in the population > 15 years old. The authors conclude that diagnoses of pneumonia from the EHR could be used as an early and low-cost surveillance system to monitor the spread of SARS-CoV-2.	The authors of this study used primary care electronic health records (EHR) to analyze trends of pneumonia during 2 waves of the COVID-19 pandemic in order to use it as a clinical surveillance system and an early indicator of disease severity. The results showed that between March 4 and May 5, 2020, there was an excess of 11,704 cases of pneumonia, and also a 20% excess of pneumonia cases from January to March 2020 in the population >15 years old. In contrast, there were 2 major periods with reductions of pneumonia cases in children. The authors concluded that the diagnosis of pneumonia from the EHR could be used as an early and low-cost surveillance system to monitor the spread of SARS-CoV-2.	Coma E, Méndez-Boo L, Mora N, et al. Divergences on expected pneumonia cases during the COVID-19 epidemic in Catalonia: a time-series analysis of primary care electronic health records covering about 6 million people. BMC Infect Dis. 2021;21(1):283. Published 2021 Mar 20. doi:10.1186/s12879-021-05985-0
COVID-19; artificial insemination; pregnancy; skin rash neonate; Mexico	20-Mar-21	<a href="#">A 34-Year-Old Woman with a Diamniotic Dichorionic Twin Pregnancy Presenting with an Erythematous and Papular Skin Rash Associated</a>	American Journal of Case Reports	Case Report	The authors described the case of a 34-year-old woman with a diamniotic dichorionic twin pregnancy presenting with dermatological manifestations, namely an erythematous and papular skin rash, associated with SARS-CoV-2 infection in Mexico [date not specified]. The patient had undergone ovulation induction with intra-uterine insemination (sperm supplied by a sperm bank) and achieved a dichorionic diamniotic twin pregnancy, which was confirmed in the first trimester. At 29.5 weeks of gestation, the patient reported odynophagia, earache, and fatigue, but no	The authors described the case of a 34-year-old woman with a diamniotic dichorionic twin pregnancy presenting with dermatological manifestations, namely an erythematous and papular skin rash, associated with SARS-CoV-2 infection in Mexico. Serum antibodies against SARS-	Oropeza Chávez L, Sánchez Tinajero Á, Martínez Orozco JA, et al. A 34-Year-Old Woman with a Diamniotic Dichorionic Twin Pregnancy Presenting with an Erythematous and Papular Skin Rash Associated with SARS-CoV-2 Infection. Am

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		<a href="#">with SARS-CoV-2 Infection</a>			breathing difficulty or fever. The patient tested positive for SARS-CoV-2 on RT-PCR via nasopharyngeal swab. Fetal ultrasound was normal. 9 days later, she presented with disseminated dermatosis predominantly on the abdomen and anterior thighs, characterized by maculopapular lesions and pruritic hives. Laboratory tests showed mixed dyslipidemia without other alterations. Total remission of symptoms, including the rash, occurred 3 weeks after symptom onset. 1 month later, SARS-CoV-2 RT-PCR was negative, with normal fetal ultrasound results. The patient underwent C-section at 36.4 weeks of gestation due to uterine activity and both twins occupying a transverse lie. Serum antibodies against SARS-CoV-2 in twin 1 were positive for IgG, while negative in twin 2. This report highlighted the importance of performing a reliable diagnostic test for SARS-CoV-2 infection in patients who present with a skin rash, particularly pregnant women.	CoV-2 in one of her twins were positive for IgG, while negative in the other. This report highlighted the importance of performing a reliable diagnostic test for SARS-CoV-2 infection in patients who present with a skin rash, particularly pregnant women.	J Case Rep. 2021;22:e929489. doi:10.12659/AJCR.929489.
COVID-19; children; long-COVID symptoms; Spain	20-Mar-21	<a href="#">Long-term symptoms of COVID-19 in children</a>	Acta Paediatrica	Letter to the Editor	In this letter, the authors expressed interest in the article by Jonas F. Ludvigsson [doi:10.1111/apa.15673] reporting 5 cases of children with prolonged symptoms after diagnosis of mild SARS-CoV-2 infection. During the first pandemic wave in Spain (March-June 2020), the authors of this letter performed telephone consultations for the follow-up of children with COVID-19 or high suspicion of SARS-CoV-2 infection. SARS-CoV-2 infection was demonstrated in 40 of 72 children (55.5%), but there was limited availability of diagnostic tests. A group of 8 patients (median 142 months, IQR 117.8 – 166.8; 50% female) stood out from the rest due to the long duration of constitutional symptoms (most frequent manifestations were persistent low-grade fever, intense asthenia, and severe headache). Median duration of symptoms in the 8 patients was 60 days (IQR 37 – 70). None required hospitalization. Only 2 of the 8 patients had confirmed SARS-CoV-2 infection. Other children had a positive parvovirus serology test (IgM and IgG). For the remaining children, the authors were unable to obtain a diagnosis, possibly due to delays obtaining RT-PCR and test shortage. This group of children could possibly be diagnosed with long-COVID syndrome. The authors reiterated the importance of continuing to report similar cases, in order to confirm its linkage to SARS-CoV-2 infection, to describe the clinical manifestations, and to develop clinical guidelines for necessary medical care.	In this letter, the authors expressed interest in the article by Jonas F. Ludvigsson [doi:10.1111/apa.15673] reporting 5 cases of children with prolonged symptoms after being diagnosed with mild SARS-CoV-2 infection. The authors reiterated the importance of continuing to report similar cases, in order to confirm its linkage to SARS-CoV-2 infection, to describe the clinical manifestations, and to develop clinical guidelines for necessary medical care.	Nogueira López J, Grasa C, Calvo C, et al. Long-term symptoms of COVID-19 in children. Acta Paediatr. 2021. doi:10.1111/apa.15849.
USA, pregnancy, delivery, partner, SARS-CoV-2, COVID-19	20-Mar-21	<a href="#">Partner Testing of SARS-CoV-2 Positive Women Presenting for Delivery</a>	American Journal of Obstetrics and Gynecology - Maternal and Fetal Medicine	Research Letter	This study seeks to identify the SARS-CoV-2 infection rate of partners of pregnant women who are SARS-CoV-2-positive at the time of delivery. The study included women who delivered at Northwestern Memorial Hospital (USA) from April 8, 2020-February 20, 2021. Of 153 women who tested positive upon admission or within 10 days prior to delivery, 100 of their partners were tested. 33 (33%, 95% CI 24.7% - 44.3%) were positive or presumptively positive for SARS-CoV-2. Their findings demonstrated that the rate of infection among partners of pregnant women who test positive	This study seeks to identify the SARS-CoV-2 infection rate of the partners of pregnant women who are SARS-CoV-2-positive at the time of delivery. Researchers found that of the 153 women who were positive for SARS-CoV-2 near delivery, 33/100 partners tested (33%, 95% CI 24.7% -	Sakowicz MA, Rosati MJ, Caldarelli LA, et al. Partner Testing of SARS-CoV-2 Positive Women Presenting for Delivery [published online ahead of print, 2021 Mar 20]. Am J Obstet Gynecol MFM. 2021.

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					for SARS-CoV-2 was higher than 16.3%, which is the reported rate of household contacts in the general population. The majority of the families received public insurance, and racial and ethnic minority populations were disproportionately represented in these data. The authors emphasize that offering universal partner testing of SARS-CoV-2-positive women should be integrated into obstetric care delivery in order to provide comprehensive, holistic care for the health of the entire family unit.	44.3%) were positive or presumptively positive for SARS-CoV-2. The authors emphasize that offering universal partner testing of SARS-CoV-2-positive women should be integrated into obstetric care delivery in order to provide comprehensive, holistic care for the health of the entire family unit.	doi:10.1016/j.ajogmf.2021.100361
COVID-19; pediatric; dermatology; acral change; United States; Canada	20-Mar-21	<a href="#">Acral Changes in pediatric patients during COVID 19 pandemic: Registry report from the COVID 19 response task force of the society of pediatric dermatology (SPD) and pediatric dermatology research alliance (PeDRA)</a>	Pediatric Dermatology	Article	This study investigated pediatric-specific trends in demographics, clinical features, laboratory findings, and histopathology of acral pernio-like skin rashes in COVID-19 patients. A pediatric-specific dermatology registry was created by the Pediatric Dermatology COVID-19 Response Task Force of the Society for Pediatric Dermatology (SPD) and Pediatric Dermatology Research Alliance (PeDRA) and was managed by Children's Hospital of Philadelphia using REDCap. Data from 378 children (60.6% male; mean age=13 ± 3.6 years) entered into the registry between April 13 and July 17, 2020, were analyzed. Most participants lived in the United States (69.6%) or Canada (23.3%). Only 6 children (1.6%) tested positive by PCR or antibody testing for SARS-CoV-2. 47.4% confirmed they had no SARS-CoV-2 testing. Pedal lesions (often with pruritus and/or pain) were present in 96%, and 30% had COVID-19 symptoms (including fever and dry cough) during the 30 days prior to presentation. The lesions lasted an average of 21.6 days and were mostly on the feet (96.3%). Some subjects also had lesions on the hands (11.9%) or head/neck (11.4%). The skin changes were largely described as pink or red macules/patches (91.3%), bullae (6.1%), vesicles (11.6%), erosions (14.8%), and ulcers (3.7%). In 5.3% (20/378), desquamation was noted. Most (69%) had no other symptoms and an uneventful clinical course with complete recovery. These findings suggest that acral changes may be a late phase reaction in COVID-19 patients.	This study investigated pediatric-specific trends in demographics, clinical features, laboratory findings, and histopathology of acral pernio-like skin rashes in COVID-19 patients, mostly from the United States and Canada. The lesions lasted an average of 21.6 days and were mostly on the feet (96.3%). Most patients had no other symptoms and an uneventful course with complete recovery. These findings suggest that acral changes may be a late phase reaction in COVID-19 patients.	Castelo-Soccio L, Lara-Corrales I, Paller AS, et al. Acral Changes in pediatric patients during COVID 19 pandemic: Registry report from the COVID 19 response task force of the society of pediatric dermatology (SPD) and pediatric dermatology research alliance (PeDRA). <i>Pediatr Dermatol</i> . 2021. doi:10.1111/pde.14566.
breastfeeding; rooming in; perinatal transmission; vertical transmission; horizontal transmission; India	20-Mar-21	<a href="#">Outcomes of Neonates Born to Mothers with Coronavirus Disease 2019 (COVID-19) - National Neonatology Forum (NNF) India COVID-19 Registry</a>	Indian Pediatrics	Research Paper	This prospective cohort study in India evaluated the clinical outcomes and risk factors for perinatal transmission in neonates born to mothers with perinatal SARS-CoV-2 infection confirmed by RT-PCR within 2 weeks before or 2 days after birth [date range not specified]. Among 1,713 neonates, SARS-CoV-2 infection status was available for 1,330 intramural and 104 extramural neonates (transferred to the participating hospital after birth). Among the 1,330 intramural neonates who were tested, 10.8% (n=143) were SARS-CoV-2 positive. 68 (5.1%) tested positive on day 1, 106 (8%) tested positive within 72 hours of birth (presumed perinatal transmission) and 21 (1.5%) tested positive beyond 72 hours (presumed horizontal transmission). The risk of transmission was not associated with the mode of delivery or whether the mother	This prospective cohort study in India evaluated the clinical outcomes and risk factors for perinatal transmission in neonates born to mothers with perinatal SARS-CoV-2 infection. The authors found a marginally higher incidence of SARS-CoV-2 transmission among infants who roomed-in with their mothers, which the authors attribute to incomplete adherence to suggested IPC precautions.	More K, Chawla D, Murki S, et al. Outcomes of Neonates Born to Mothers with Coronavirus Disease 2019 (COVID-19) - National Neonatology Forum (NNF) India COVID-19 Registry [published online, 2021 Mar 20]. <i>Indian Pediatr</i> . 2021;S097475591600300.

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					breastfed the infant. Neonates who roomed-in with their mother had a marginally higher transmission risk (RR 1.16, 95%CI 1.1 to 2.4; P=0.01); however, the authors attribute this finding to incomplete adherence to the suggested IPC precautions. Premature birth (<37 weeks) was more likely among SARS-CoV-2 positive neonates (20.7%) than SARS-CoV-2 negative neonates (10.2%) (RR 1.8, 95%CI 1.2-2.7; P=0.01). The majority (79%) of neonates positive for SARS-CoV2 were asymptomatic, highlighting the importance of universal testing. Amongst symptomatic neonates, most morbidities were related to prematurity and perinatal events. The authors conclude that these data confirm perinatal transmission of SARS-CoV-2. Breastfeeding and rooming-in appear to be safe in the context of maternal SARS-CoV-2 infection as long as necessary precautions are adhered to.	Breastfeeding and mode of delivery were not associated with increased transmission risk.	
Kawasaki disease, SARS-CoV-2, coronary artery abnormalities, Multi inflammatory syndrome-children (MIS-C), shock	19-Mar-21	<a href="#">Kawasaki Disease Shock Syndrome in Japan and Comparison With Multisystem Inflammatory Syndrome in Children in European countries</a>	Frontiers in Pediatrics	Research Article	This observational study aimed to identify clinical features in children presenting with Kawasaki disease shock syndrome (KDSS) in Japan over a 5-year period and to describe the similarities and differences between KDSS and MIS-C based on patient demographics, clinical symptoms, lab results, risk scores, treatment, and outcomes. KDSS was identified in 6 (1.1%) of 552 patients with Kawasaki disease (KD) treated at an institution in Japan between 2015 and 2020. The median age of these 6 patients with KDSS was 3.5 years, while the median age of KDSS patients worldwide was 5 years and 8 years for those patients with MIS-C. KDSS patients both in Japan and worldwide were more likely to have a diagnosis of complete KD than patients with MIS-C (70% vs. 6.3%); the frequency of patients who met KD criteria in MIS-C was significantly lower than that in KDSS (p < 0.01). Additionally, KDSS patients had a greater requirement for vasoactive agents than patients with MIS-C (67% vs. 43%), mostly due to circulatory shock. 3 of the 6 (50%) patients with KDSS in Japan had coronary artery abnormalities (CAAs) while patients with MIS-C had a frequency of CAAs at 11% (among 482 patients). There were no deaths from KDSS in Japan, whereas 6.7% of patients with KDSS in this study worldwide and 1.7% of MIS-C patients died. While there are some similarities between KDSS and MIS-C, including similarities in clinical symptoms, the authors suggest that in light of the diagnostic criteria for KD and the presence of CAAs, they are unlikely to be the same disease entity.	This study investigated the clinical features in children presenting with Kawasaki disease shock syndrome (KDSS) in Japan over a 5-year period and described the similarities and differences between KDSS and MIS-C. Similarities between KDSS and MIS-C do exist with regard to clinical symptoms; however, the authors suggest that in light of the diagnostic criteria for KD and the presence of coronary artery abnormalities, they are unlikely to be the same disease entity.	Suzuki J, Abe K, Matsui T, et al. Kawasaki Disease Shock Syndrome in Japan and Comparison With Multisystem Inflammatory Syndrome in Children in European countries. Front Pediatr. 2021;9:625456. Published 2021 Mar 19. doi:10.3389/fped.2021.625456
COVID-19; pediatric; kidney conditions; quality of life; United Kingdom	19-Mar-21	<a href="#">COVID-19: experiences of lockdown and support needs in children and young adults with kidney conditions</a>	Pediatric Nephrology	Article	The authors assessed experiences of lockdown and support needs in children and young adults (CYA) with kidney conditions in the United Kingdom during the COVID-19 pandemic. An online survey was conducted in May 2020 amongst CYA aged 12-30 years, or parents of children aged <18 years, with any long-term kidney condition. 118 CYA (median age=21 years, age range=12-30 years) and 197 parents of children (median age=10 years, age range=0-18 years) responded. Predominant concerns from CYA were heightened vigilance about viral (68%) and kidney symptoms (77%) and	The authors assessed experiences of lockdown and support needs in children and young adults (CYA) with kidney conditions in the United Kingdom during the COVID-19 pandemic. CYA in the shielded group (instruction from UK Government to stay isolated) reported greater negative	Tse Y, Darlington AE, Tyerman K, et al. COVID-19: experiences of lockdown and support needs in children and young adults with kidney conditions. Pediatr Nephrol. 2021. doi:10.1007/s00467-021-05041-8.

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					detrimental impact on education or work opportunities (70%). Parents feared the virus more than CYA (71% vs. 40%) and had concerns that their child would catch the virus from them (64%) and would have an adverse impact on other children at home (65%). CYA thematic analysis revealed strong belief of becoming seriously ill if they contracted SARS-CoV-2, lost educational opportunities, socialization and career development, and frustration with the public for not following social distancing rules. Positive outcomes included improved family relationships and community cohesion. Subgroup analysis identified greater negative psychological impact in the shielded group (instruction from UK Government to stay isolated) compared to non-shielded group (anxiety about feeling isolation 55% vs. 25%, p=0.035; isolation inducing negative memories 73% vs. 27%, p=0.01). The findings indicate substantial concern and need for accurate tailored advice for CYA based on individualized risks to improve shared decision making.	psychological impact. The findings indicate substantial concern and need for accurate tailored advice for CYA based on individualized risks to improve shared decision making.	
COVID-19; pregnancy; maternal health; Ireland; United Kingdom; United States	19-Mar-21	<a href="#">Prenatal stress, health, and health behaviours during the COVID-19 pandemic: An international survey</a>	Women and Birth	Article	The authors examined pregnant women's levels of stress, mental and physical health, and health behaviors during the COVID-19 pandemic. A cross-sectional survey was conducted online, with recruitment via online pregnancy/parenting communities and data collection occurring between 16 June-17 July 2020. 573 pregnant women (mean age=32.38 ± 4.6 years) participated in the survey. Participants were most commonly residents in the US (42.6%, n=243), Ireland (41.2%, n=235) or the UK (10%, n=57). The majority (80.0%, n=457) were married and educated to degree level or above (79.3%, n=453). Pregnant women reported high levels of pregnancy-specific and COVID-19-related stress, and low levels of mental and physical health, during the pandemic. Encouragingly, pregnant women generally reported high levels of adherence to public health advice and pregnancy health behaviors. General stress (beta=-0.41, p<0.001) and pregnancy-specific stress (beta=0.17, p=0.002) predicted COVID-19-related stress. Wearing a mask was associated with country of residence ( $\chi^2(3)=87.30$ , p<0.001), with women in the US more likely to report wearing a mask than their counterparts in Ireland or the UK. Going to crowded places was associated with education ( $\chi^2(5)=22.92$ , p<0.001), women with a postgraduate degree being least likely to go to crowded places; and with country of residence ( $\chi^2(3)=24.34$ , p<0.001), women in Ireland being most likely to go to crowded places. The findings highlight the need for prenatal mental health support that target pregnancy- and COVID-19-specific concerns.	The authors examined pregnant women's levels of stress, mental and physical health, and health behaviors during the COVID-19 pandemic. Pregnant women reported high levels of pregnancy-specific and COVID-19-related stress, and low levels of mental and physical health, during the pandemic. Encouragingly, pregnant women generally reported high levels of adherence to public health advice and pregnancy health behaviors.	Pope J, Olander EK, Leitao S, et al. Prenatal stress, health, and health behaviours during the COVID-19 pandemic: An international survey. Women Birth. 2021. doi:10.1016/j.wombi.2021.03.007.

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COVID-19; neonate; model; molecular neuroscience, stem cells	19-Mar-21	<a href="#">Umbilical cord blood-derived microglia-like cells to model COVID-19 exposure</a>	Translational Psychiatry	Article	This study aimed to generate patient-derived microglial-like cell models unique to each neonate from reprogrammed umbilical cord blood mononuclear cells, adapting and extending a novel methodology previously validated for adult peripheral blood mononuclear cells. The authors demonstrated that umbilical cord blood mononuclear cells can be used to create microglial-like cell models morphologically and functionally similar to microglia observed in vivo. They illustrated the application of this approach by generating microglia from cells exposed and unexposed to maternal SARS-CoV-2 infection. Both SARS-CoV-2-exposed and -unexposed umbilical cord blood-derived microglia-like cells express canonical microglial markers IBA1, CX3CR1, PU.1, and P2RY12, and demonstrate a range of morphologies with varying degrees of ramification, potentially reflecting a range of activation states that can be perturbed in experimental systems. This ability to create personalized neonatal models of fetal brain immune programming enables non-invasive insights into fetal brain development and potential childhood neurodevelopmental vulnerabilities for a range of maternal exposures, including SARS-CoV-2. These models provide the potential for quantifiable endpoints that can be used to assess microglial programming in the setting of various maternal exposures and later can be used to test the efficacy of potential therapies to ameliorate in utero priming of microglia toward a pro-inflammatory phenotype.	This study aimed to generate patient-derived microglial-like cell models unique to each neonate from reprogrammed umbilical cord blood mononuclear cells. This ability to create personalized neonatal models of fetal brain immune programming enables non-invasive insights into fetal brain development and potential childhood neurodevelopmental vulnerabilities for a range of maternal exposures, including SARS-CoV-2. These models provide the potential for quantifiable endpoints that can be used to assess microglial programming in the setting of various maternal exposures and may enable investigation of targeted therapeutic strategies.	Sheridan SD, Thanos JM, De Guzman RM, et al. Umbilical cord blood-derived microglia-like cells to model COVID-19 exposure. <i>Transl Psychiatry</i> . 2021;11(1):179. doi:10.1038/s41398-021-01287-w.
COVID-19; digestive symptoms; pediatric	19-Mar-21	<a href="#">Digestive system symptoms and function in children with COVID-19: A meta-analysis</a>	Medicine (Baltimore)	Meta Analysis	The authors conducted a systematic review and meta-analysis of studies investigating gastro-intestinal symptoms, liver injury, and prognosis of COVID-19 in the pediatric population between January 2, 2020-June 17, 2020. In the 19 retrospective studies included, the sample size ranged from 8-1353 patients, and an overall 3907 patients from China (12 studies), the USA (5 studies), and Italy (2 studies) were included in the meta-analysis. The pooled prevalence of diarrhea was 10% (95% CI: 7-14%) in 16 studies (comprising total n=3210). The pooled prevalence of nausea or vomiting was 7% (95% CI: 5-11%) from 12 studies (n=2466), while an additional 4 studies reported a pooled prevalence of 4% (95% CI: 2-9%). The pooled incidence of increased alanine aminotransferase (ALT) was 8% (95% CI: 5-15%) from 8 studies (n=405). The pooled incidence for increased aspartate aminotransferase (AST) was 15% (95% CI: 9-26%) from 7 studies (n=385). The authors also found a pooled recovery rate of 97% (95% CI: 94-100%) from 5 studies (n=400) and a pooled death rate of 1% (95% CI: 1-4%; n=1753). For their subgroup analysis, they created 2 groups: >50% of samples aged ≥5 years, and 50% samples <5 years. They found that a higher proportion of “>50% ≥5 years” presented with diarrhea and increased AST than “50% <5 years”. There was a higher prevalence of nausea or vomiting in the “50% <5 years” group compared to the “>50% ≥5 years” group. They found that the prevalence of diarrhea	The authors conducted a meta-analysis of the incidence of gastro-intestinal symptoms and liver function in 19 studies. The pooled prevalence of diarrhea and nausea/vomiting was 10% (95% CI: 7–14%) and 7% (95% CI: 5–11%), respectively. The pooled incidence of increased alanine aminotransferase (ALT) and aspartate aminotransferase (AST) were 8% (95% CI: 5–15%) and 15% (95% CI: 9–26%), respectively. Finally, the pooled rate of recovery was 97% (95% CI: 94–100%), while that of death was 1% (95% CI: 1–4%).	Wang J, Yuan X. Digestive system symptoms and function in children with COVID-19: A meta-analysis. <i>Medicine (Baltimore)</i> . 2021;100(11):e24897. doi:10.1097/MD.00000000000024897

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					and nausea or vomiting ( $p < 0.01$ ) was higher in China than in Europe/America. They also found a higher proportion of patients with increased AST in China compared to Europe and the USA ( $p = 0.02$ ), with a similar proportion of patients with increased ALT in the 2 subgroups ( $p = 0.05$ ).		
COVID-19, school, in-person, virtual, combined, hybrid, mental health, emotional health	19-Mar-21	<a href="#">Association of Children's Mode of School Instruction with Child and Parent Experiences and Well-Being During the COVID-19 Pandemic - COVID Experiences Survey, United States, October 8-November 13, 2020</a>	Morbidity and Mortality Weekly Report (MMWR)	Original Research	This study examined differences in child and parent experiences and indicators of well-being according to children's mode of school instruction (in-person only [in-person], virtual-only [virtual], or combined virtual and in-person [combined]) using data from the COVID Experiences nationwide survey. From October 8-November 13, 2020, parents of children aged 5-12 years ( $n = 1,290$ ) were surveyed using the NORC at the University of Chicago AmeriSpeak panel, a probability-based panel designed to be representative of the U.S. household population. Among 1,290 respondents with a child enrolled in school, 45.7% reported virtual instruction, 30.9% reported in-person classes, and 23.4% reported combined instruction. Parents of children receiving virtual instruction were more likely than parents of children receiving in-person instruction to report that their children experienced decreased physical activity (62.9% versus 30.3%), time spent outside (58.0% versus 27.4%), in-person time with friends (86.2% versus 69.5%), virtual time with friends (24.3% versus 12.6%), and worsened mental or emotional health (24.9% versus 15.9%). Parents of children receiving combined instruction were also more likely than were those of children receiving in-person instruction to report that their children experienced decreased physical activity (52.1% versus 30.3%), time spent outside (42.4% versus 27.4%), in-person time with friends (84.1% versus 69.5%), and worsened mental or emotional health (24.7% versus 15.9%). These findings suggest that children not receiving in-person instruction and their parents might experience an increased risk for negative mental, emotional, or physical health outcomes and might need additional support to mitigate pandemic effects. Community-wide actions to reduce COVID-19 incidence and support mitigation strategies in schools are critically important to support students' return to in-person learning.	This study examined differences in child and parent experiences and well-being indicators during the COVID-19 pandemic, according to children's mode of school instruction (in-person, virtual, or combined virtual and in-person using data from the COVID Experiences nationwide survey in the United States. Findings suggest that virtual instruction might present more risks than in-person instruction related to child and parental mental and emotional health and some health-supporting behaviors.	Verlenden JV, Pampati S, Raspberry CN, et al. Association of Children's Mode of School Instruction with Child and Parent Experiences and Well-Being During the COVID-19 Pandemic - COVID Experiences Survey, United States, October 8-November 13, 2020. MMWR Morb Mortal Wkly Rep. 2021;70(11):369-376. Published 2021 Mar 19. doi:10.15585/mmwr.mm7011a1
COVID-19, Social Determinants of Health, children, asthma	19-Mar-21	<a href="#">COVID-19 Impacts on Families of Color and Families of Children With Asthma</a>	Journal of Pediatric Psychology	Original Research	This cross-sectional study quantified differences in (a) social determinants of health during the COVID-19 pandemic and (b) COVID-19 psychosocial impacts across 4 groups of parents ( $n = 321$ ): (a) non-Hispanic White (NHW) parents of children with asthma ( $n = 62$ , 18.7%), (b) Black, Indigenous, or other People of Color (BIPOC) parents of healthy children ( $n = 91$ , 27.5%), (c) BIPOC parents of children with asthma ( $n = 100$ , 30.2%), and (d) NHW parents of healthy children (referent) ( $n = 68$ , 20.5%). Parents (mean age = 36 years, children mean age = 8 years) were recruited from June – August 2020 and completed questions about COVID-19 family impacts on employment, income, access to food and healthcare, and psychosocial functioning, including discrimination. BIPOC	This cross-sectional study quantified differences in social determinants of health during the COVID-19 pandemic and COVID-19 psychosocial impacts across 4 groups of parents: non-Hispanic White (NHW) parents of children with asthma, Black, Indigenous, or other People of Color (BIPOC) parents of healthy children, BIPOC parents of children with asthma and NHW parents of	Clawson AH, Nwankwo CN, Blair AL, et al. COVID-19 Impacts on Families of Color and Families of Children With Asthma [published online, 2021 Mar 19]. J Pediatr Psychol. 2021;jsab021. doi:10.1093/jpepsy/jsab021

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					families experienced greater food insecurity and discrimination relative to NHW parents of healthy children (p<0.001). When compared with the NHW healthy group, COVID-19 resulted in greater parent-reported resource losses for both BIPOC groups (p=0.01) and greater reductions in healthcare access for both asthma groups (NHW p=0.03; BIPOC p=0.045). Children with asthma (NHW p=0.01, BIPOC p≤0.001) and BIPOC children (p=0.01) had greater distress surrounding COVID-19. BIPOC (healthy children p=0.06, children with asthma p=0.02) and NHW parents of children with asthma (p=0.17) reported greater worries about resource losses due to COVID-19. The authors conclude the results highlight the need for interventions that address the needs of underserved communities to reduce health inequities during and after COVID-19.	healthy children. The authors conclude the results highlight the need for interventions that address the needs of underserved communities to reduce health inequities during and after COVID-19.	
MRI, Neonates, SARS-CoV-2	19-Mar-21	<a href="#">Effects of SARS-CoV-2 infection on neuroimaging and neurobehavior in neonates</a>	World Journal of Pediatrics	Original Research	This case-control study aims to examine the neurological manifestations and imaging characteristics of neonates with SARS-CoV-2 in Wuhan, China from January - July 2020. A total of 5 neonates (median gestational age 39 weeks, range 21-40 weeks, 2 males) with RT-PCR confirmed SARS-CoV-2 were matched with 15 normal neonate controls according to gestational age. All included neonates had a neurological exam and head MRI to provide comparison of the brain volumes of different brain regions. On neonatal neurological examination, the median reflex scores were 2 points lower in the infected group than in the control group (P = 0.0094), and the median orientation and behavior scores were 2.5 points lower in the infected group than in the control group (P = 0.0008). There were also significant differences between the two groups in the total scale score (P = 0.0426). The caudate nucleus (CN), parahippocampal gyrus (PHG), and thalamus had the strongest correlations with the Hammersmith neonatal neurologic examination (HNNE) score, and the absolute correlation coefficients between the gray matter volumes and each part of the HNNE score were all almost greater than 0.5. The authors believe this data suggests that SARS-CoV-2 may affect neurobehavioral changes in neonates by affecting the CN, PHG, and thalamus. The authors acknowledge a small sample size and lack of follow-up neuroimaging and neurological examinations of the neonates as a limitation of the study and advocate for additional studies of functional and structural aspects of SARS-CoV-2 in the central nervous system in the future.	This case-control study aims to examine the neurological manifestations and imaging characteristics of neonates with SARS-CoV-2 in Wuhan, China. The authors conclude that SARS-CoV-2 may affect neurobehavioral changes in neonates by affecting the caudate nucleus, parahippocampal gyrus, and the thalamus and advocate for additional studies of functional and structural aspects of SARS-CoV-2 in the central nervous system in the future.	Yan K, Xiao FF, Jiang YW, et al. Effects of SARS-CoV-2 infection on neuroimaging and neurobehavior in neonates [published online, 2021 Mar 19]. World J Pediatr. 2021;10.1007/s12519-021-00423-2. doi:10.1007/s12519-021-00423-2
school closures, lockdown, COVID-19, transmission, testing	19-Mar-21	<a href="#">Testing for SARS-CoV-2 infection: a key strategy to keeping schools and universities open</a>	Lancet Child and Adolescent Health	Commentary	In this commentary, the authors discuss the importance of testing for SARS-CoV-2 as an important way to promote school and university openings, specifically through asymptomatic testing and other public health measures. The authors cite several existing studies on testing in the school and university settings that have identified the importance of case detection and the application of stringent public health measures, which have limited asymptomatic transmission of SARS-CoV-2 in schools and mitigated the risk of	The author discusses the importance of asymptomatic testing, case detection, contact tracing, and eliminating access barriers to maintain school and university settings as safe settings that can remain open during the COVID-19 pandemic. Using	Archana K, Nicholas W, Kristine M. Testing for SARS-CoV-2 infection: a key strategy to keeping schools and universities open. The Lancet Child & Adolescent Health.

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					students and staff acquiring infections. The use of RT-PCR testing for SARS-CoV-2 among all symptomatic and asymptomatic individuals in these settings, along with the timely reporting of test results and subsequent public health action (quarantining, isolation, etc.), can effectively limit transmission. The authors also note cost and access to testing as key barriers to this transmission interruption, especially given the high cost of RT-PCR tests and the reduced sensitivity of less expensive alternatives such as rapid antigen tests. The author argues that the implementation and evaluation of tailored testing, contact tracing, and isolation need to continue. Providing practical assistance to middle-income and low-income communities needs to be prioritized to help ensure schools can remain open and safe.	examples from prior studies, the author demonstrates specific ways in which asymptomatic testing in particular a valuable asset in keeping schools open.	2021, ISSN 2352-4642, <a href="https://doi.org/10.1016/S2352-4642(21)00087-0">https://doi.org/10.1016/S2352-4642(21)00087-0</a> . ( <a href="https://www.sciencedirect.com/science/article/pii/S2352464221000870">https://www.sciencedirect.com/science/article/pii/S2352464221000870</a> )
Children, co-infection, bacteria, pediatrics, disease severity	19-Mar-21	<a href="#">Co-infections of SARS-CoV-2 with multiple common respiratory pathogens in infected children</a>	Medicine (Baltimore)	Original Research	In this retrospective study, the authors evaluated 81 cases of children hospitalized with COVID-19 in Wuhan Children's Hospital, China from January 21-February 16, 2020 to assess for co-infections in children with SARS-CoV-2 [mean age 76.55 ± 9.64 months, range not provided]. All patients had a common respiratory virus panel at the time of SARS-CoV-2 testing. 27 (33%) children had co-infections, and the most frequent pathogen was mycoplasma pneumoniae (20/81, 25%), followed by viral infections (6/81, 7%), and other bacterial infections (4/81, 5%). Viruses included influenza A (1/81, 1%), influenza B (2/81, 2%), RSV (1/81, 1%), and adenovirus (1/81, 1%). Other bacterial infections included moraxella catarrhalis (3/81, 4%), and streptococcus pneumoniae (1/81, 1%). Most clinical characteristics and laboratory examinations were not different between patients with co-infections and those with single infection, however co-infected patients showed lower levels of leukocytes (p=0.002), lymphocytes (p=0.024), and neutrophils (p=0.006). Compared with the patients with single infection, chest imaging of those with co-infections showed lung consolidation in more cases (29.6% vs 11.1%, p= 0.038). The authors conclude that co-infection was relatively common in children hospitalized with COVID-19, however co-infection did not cause a significant exacerbation in clinical manifestations.	The authors evaluated 81 children hospitalized with COVID-19 in Wuhan, China for presence of co-infections, which were found in 27 (33%) children. The most common co-infection was mycoplasma pneumoniae (25%). Those with co-infections had lower levels of leukocytes, lymphocytes, and neutrophils, and showed more lung consolidations on chest imaging than children with single infection. However, other indicators of clinical severity were not significantly different. The authors conclude that co-infection was relatively common in children hospitalized with COVID-19, however did not cause significant exacerbation in clinical manifestations.	Li Y, Wang H, Wang F, et al. Co-infections of SARS-CoV-2 with multiple common respiratory pathogens in infected children: A retrospective study. Medicine (Baltimore). 2021;100(11):e24315. doi:10.1097/MD.00000000000024315
COVID-19; SARS-COV-2; antibiotics; stewardship	19-Mar-21	<a href="#">High rates of Antibiotic prescriptions in children with COVID-19 or Multisystem Inflammatory Syndrome: a multinational experience in 990 cases from Latin America</a>	Acta Paediatrica	Article	This study assessed rates of antibiotic prescriptions and its determinants in children (<18 years old) with COVID-19 or MIS-C in 5 Latin American countries (Peru, Costa Rica, Argentina, Colombia, and Mexico). A total of 990 children were included (median age 3 years; IQR 1-9 years; range 2 days-17 years). 921 (93%) had COVID-19 without MIS-C, and 69 (7.0%) met criteria for MIS-C. The prevalence of antibiotic use was 24.5% (n=243). The following indicators were independently associated with increased use of antibiotics: MIS-C with (OR=45.48; p=0.011) or without (OR=10.35; p=0.05) cardiac involvement, provision of intensive care (OR=9.60; p<0.001), need for hospital care (OR=6.87; p<0.001), pneumonia and/or acute respiratory distress syndrome detected through chest X-rays (OR=4.40; p<0.001), administration of systemic	This evaluation of antibiotic prescriptions to children with COVID-19 or MIS-C across 5 Latin American countries showed a high rate of antibiotic prescriptions, in particular to children with severe COVID-19 or MIS-C. There was significant variation in the reasons for antibiotic use and type of chosen therapies across hospitals, highlighting the lack of guidelines for the recognition and	Yock-Corrales A, Lenzi J, Ulloa-Gutiérrez R, et al. High rates of Antibiotic prescriptions in children with COVID-19 or Multisystem Inflammatory Syndrome: a multinational experience in 990 cases from Latin America [published online, 2021 Mar 19]. Acta Paediatr. 2021;10.1111/apa.15847. doi:10.1111/apa.15847

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		<a href="#">[Free Access to Abstract Only]</a>			corticosteroids (OR=4.39; p<0.001), oxygen support, mechanical ventilation, or continuous positive airway pressure (OR=2.21; p=0.05), pyrexia (OR=1.84; p=0.011), and female sex (OR=1.50; p=0.04). There was significant variation in the reasons for antibiotic use and type of chosen therapies across hospitals, highlighting the lack of guidelines for the recognition and management of bacterial infections in pediatric COVID-19.	management of bacterial infections in pediatric COVID-19.	
neonatal care; COVID-19; neonatal nurse	19-Mar-21	<a href="#">Neonatal nursing during the COVID-19 global pandemic; A thematic analysis of personal reflections</a>	The Journal of Neonatal Nursing	Research Paper	The authors conducted a thematic analysis of COVID-19 reflections written by neonatal nurses from 10 countries. There were 4 themes identified: 1) protector, 2) challenges to the human quality of care, 3) nurse vulnerability, and 4) nurse resilience. The protector theme prioritized the nurses' protection of the infants in their care, followed by other staff and their own families. Challenges to the quality of care were that social distancing and PPE compromised the care provided for the babies and their parents. Nurses were also distressed over policies to restrict parental access to their infants that went against a philosophy of family-centered care. The nurses were also concerned that COVID-19 restrictions impacted the infants' development due to a lack of human contact and inability to see facial expressions. The third theme of vulnerability was focused on worries about providing the best care during the pandemic and feeling unprepared. The final theme identified was resilience that mainly focused on new interaction and learning methods, specifically video platforms. The authors note the disruption that neonates' families must have encountered and emphasized that parents are a central part of any care provided.	The authors conducted a thematic analysis of COVID-19 reflections written by neonatal nurses from 10 countries. There were 4 themes identified: 1) protector, 2) challenges to the human quality of care, 3) nurse vulnerability, and 4) nurse resilience.	Shaw C, Gallagher K, Petty J, Mancini A, Boyle B. Neonatal nursing during the COVID-19 global pandemic: A thematic analysis of personal reflections. Journal of Neonatal Nursing. 2021. doi: <a href="https://doi.org/10.1016/j.jnn.2021.03.011">https://doi.org/10.1016/j.jnn.2021.03.011</a>
COVID-19; cardiomyopathy; pregnancy	19-Mar-21	<a href="#">Severe acute respiratory syndrome coronavirus 2- or pregnancy-related cardiomyopathy, a differential to be considered in the current pandemic: a case report</a>	Journal of Medical Case Report	Case Report	The authors report on a 38-year-old Iranian postpartum woman without any history of cardiac disease, diabetes, or hypertension with severe dyspnea during the COVID-19 pandemic. She delivered by c-section due to severe preeclampsia and was discharged home without any complaints. 12 days after her c-section, she was readmitted with severe dyspnea and sweating with an oxygen saturation level of 80% on room air. She had audible crackles in the lower area of both lungs and a left ventricular ejection fraction of 40% with a normal left ventricle size and mild to moderate mitral valve regurgitation. She was diagnosed with postpartum cardiomyopathy and treated with bisoprolol, captopril, and furosemide. On day 3 of her 2nd admission, she had no leg edema but complained of a severe dry cough. Laboratory results at that time revealed elevated lactate dehydrogenase (564U/L), C-reactive protein (3+), leukopenia (WBC count 3400), erythrocyte sedimentation rate (50mm/hour), and mildly elevated troponin and d-dimer levels. A chest radiograph was not consistent with pulmonary edema, so a chest CT was done. The CT showed peripheral patchy ground-glass opacities suggestive of COVID-19. A nasopharyngeal swab for SARS-CoV-2 by RT-PCR was done and was positive. On the 12th day of her second admission, she was	The authors report on a 38-year-old Iranian postpartum woman without any history of cardiac disease, diabetes, or hypertension with severe dyspnea during the COVID-19 pandemic. 12 days after her c-section, she was readmitted with severe dyspnea and sweating with an oxygen saturation level of 80% on room air and subsequently tested positive for SARS-CoV-2.	Nejadrahim R, Khademolhosseini S, Kavandi H, Hajizadeh R. Severe acute respiratory syndrome coronavirus-2- or pregnancy-related cardiomyopathy, a differential to be considered in the current pandemic: a case report. <i>J Med Case Rep.</i> 2021;15(1):143. Published 2021 Mar 19. doi:10.1186/s13256-021-02751-3

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					discharged after her symptoms resolved, and 30 days after discharge, she was seen at a clinic with mild exertional dyspnea. The authors stress the need to consider SARS-CoV-2 with pregnant women presenting with cardiomyopathies.		
Pregnancy, maternal health, neonate, preterm birth, preeclampsia, stillbirth, diabetes, C-section	19-Mar-21	<a href="#">The impact of COVID-19 on pregnancy outcomes: a systematic review and meta-analysis</a>	Canadian Medical Association Journal (CMAJ)	Review	To determine the association between SARS-CoV-2 infection and adverse pregnancy outcomes, the authors performed a systematic review and meta-analysis of maternal, fetal and neonatal outcomes among 438,548 pregnant patients with SARS-CoV-2. They searched MEDLINE, Embase, ClinicalTrials.gov, medRxiv and Cochrane databases up to January 29, 2021 and included 42 observational studies. Compared with no infection, SARS-CoV-2 infection in pregnancy was associated with preeclampsia (OR 1.33, 95% CI 1.03-1.73), preterm birth (OR 1.82, 95% CI 1.38-2.39), stillbirth (OR 2.11, 95% CI 1.14-3.90), ICU admission (OR 4.78, 95% CI 2.03-11.25), lower birth weight (grams; mean difference -68.96, 95% CI -130.22 to -7.69) and neonatal ICU admission (OR 3.69, 95% CI 1.39-9.82). Compared with mild COVID-19, severe COVID-19 was strongly associated with preeclampsia (OR 4.16, 95% CI 1.55-11.15), preterm birth (OR 4.29, 95% CI 2.41-7.63), gestational diabetes (OR 1.99, 95% CI 1.09-3.64) and low birth weight (OR 1.89, 95% CI 1.14-3.12). Compared with asymptomatic COVID-19, symptomatic COVID-19 in pregnancy was associated with increased risk of preterm birth (OR 2.29, 95% CI 1.49-3.53) and cesarean delivery (OR 1.57, 95% CI 1.32-1.85). The authors conclude that SARS-CoV-2 infection in pregnancy was associated with several adverse maternal and neonatal outcomes.	In this review, the authors assessed maternal, fetal, and neonatal outcomes among 38,548 pregnant patients with SARS-CoV-2. SARS-CoV-2 was associated with higher odds of preeclampsia, preterm birth, stillbirth, ICU admission, lower birth weight, and neonatal ICU admission. Severe infection was associated with higher odds of preeclampsia, preterm birth, gestational diabetes, and low birth weight compared to mild infection. Symptomatic infection was associated with higher odds of preterm birth or cesarean delivery compared to asymptomatic infection.	Wei SQ, Bilodeau-Bertrand M, Liu S, Auger N. The impact of COVID-19 on pregnancy outcomes: a systematic review and meta-analysis. CMAJ. 2021; doi:10.1503/cmaj.202604
infants; COVID-19; management; surgery; d-TGA-IVS; remdesivir	18-Mar-21	<a href="#">Successful Management of a COVID-19 Positive Infant With Transposition of the Great Arteries</a>  <a href="#">[Free Access to Abstract Only]</a>	World Journal for Pediatric and Congenital Heart Surgery	Case Report	The authors present the case of a 6-week-old infant with SARS-CoV-2 infection and diagnosed with dextro-transposition of the great arteries, intact ventricular septum, features of left ventricular deconditioning, and abnormal coronary arteries. He was presented to his local hospital in the UK [date unknown] with rhinitis, respiratory distress, and cyanosis. Pre- and post-ductal oxygen saturation was 50% to 60% without improvement with oxygen, his heart rate was 125 beats per minute, and blood pressure 94/56 mm Hg. Treatment with prostaglandin E1 (100 ng/kg/min) and balloon atrial septostomy were insufficient, necessitating extracorporeal membrane oxygenation (ECMO). SARS-CoV-2 RNA was detected in endotracheal tube aspirate [method not specified]; however, the infant was afebrile with low inflammatory markers. The arterial switch operation was delayed by 8 days because of COVID-19. Although stable on ECMO, the infant was treated with remdesivir for 5 days in an attempt to shorten COVID-19 recovery. ECMO was not required postoperatively with chest closure on day 2 and extubation on day 5. It remains unknown if SARS-CoV-2 added to the severity at presentation; however, its detection complicated management in this case. The decision to operate on a patient who is SARS-CoV-2 positive requires an individual assessment of risks and	The authors present the case of a 6-week-old infant in the UK with SARS-CoV-2 infection and diagnosed with dextro-transposition of the great arteries. The arterial switch operation was delayed by 8 days because of the infant's SARS-CoV-2 infection; he was treated for 5 days in an attempt to shorten COVID-19 recovery. The authors concluded that the risk of surgery was decreased by the absence of inflammatory features and a negative SARS-CoV-2 PCR result, at which point they proceeded with surgery.	Nabialek TJ, Puppala NK, Riordan A, Ramaraj R, Duong P, Guerrero R. Successful Management of a COVID-19 Positive Infant With Transposition of the Great Arteries [published online ahead of print, 2021 Mar 18]. World J Pediatr Congenit Surg. 2021;21501351211000687. doi:10.1177/21501351211000687

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					benefits. The authors concluded that the risk of surgery was decreased by the absence of inflammatory features and a negative SARS-CoV-2 PCR result, at which point they proceeded with surgery.		
COVID-19; children; Kawasaki Disease-like	18-Mar-21	<a href="#">Characteristics of Children With Kawasaki Disease-Like Signs in COVID-19 Pandemic: A Systematic Review</a>	Frontiers in Pediatrics	Systematic Review	This systematic review assessed the demographic, laboratory, and clinical characteristics of children with Kawasaki Disease (KD)-like syndrome during the COVID-19 pandemic and evaluated efficacy of treatments and patient outcomes. A comprehensive search was performed systematically through PubMed, Scopus, Web of Science (from their inception until 1 July 2020), medRxiv, and bioRxiv (between 1 January-12 July 2020) by 2 reviewers independently. 378 studies were identified, of which 25 studies involving a total of 599 patients (57.92% male; age range=6 months-16.6 years) were included. 52% of studies were case reports or case series, 48% were cohort studies. In 19 studies, patients were diagnosed with MIS-C. In 16 studies, COVID-19 was diagnosed in all patients based on PCR, serological, or CT results. Higher C-reactive protein and erythrocyte sedimentation rate levels were the most prevalent laboratory findings of KD-like syndrome. In most studies, patients had leukopenia with marked lymphopenia, hypo-albuminemia, and increased ferritin, as well as hypo-natremia. Abnormal echocardiography and respiratory outcomes were the most common clinical outcomes. In 11 studies, all patients required ICU admission. These findings show that the incidence of KD-like syndrome in the COVID-19 pandemic increased significantly. Moreover, this study offers new insights into the pathogenesis and clinical spectrum of KD-like syndrome during the COVID-19 pandemic.	This systematic review assessed the demographic, laboratory, and clinical characteristics of children with Kawasaki Disease (KD)-like syndrome during the COVID-19 pandemic and evaluated efficacy of treatments and patient outcomes. The findings show that the incidence of KD-like syndrome in the COVID-19 pandemic increased significantly. Moreover, this study offers new insights into the pathogenesis and clinical spectrum of KD-like syndrome during the COVID-19 pandemic.	Mardi P, Esmaeili M, Iravani P, et al. Characteristics of Children With Kawasaki Disease-Like Signs in COVID-19 Pandemic: A Systematic Review. <i>Front Pediatr</i> . 2021;9:625377. doi:10.3389/fped.2021.625377
COVID-19; vaccine hesitancy; pediatric vaccines; parental hesitancy	18-Mar-21	<a href="#">Addressing Parental Vaccine Hesitancy and Other Barriers to Childhood/Adolescent Vaccination Uptake During the Coronavirus (COVID-19) Pandemic</a>	Frontiers in Immunology	Review	The review seeks to address barriers to pediatric vaccine uptake behaviors, including the implications of parental vaccine hesitancy/delay during the COVID-19 pandemic. The authors discussed the impact of the COVID-19 precautionary and quarantine measures, including sub-optimal vaccine delivery exacerbated by an overwhelmed healthcare system, inequalities in healthcare delivery, delayed vaccine appointments due to SARS-CoV-2 exposure concerns; and limited provider communication due to limited in-person office visits. Additionally, fears of multiple vaccine administrations in children, misinformation campaigns, and unverified sources may dissuade parents from seeking child vaccination services. They highlight the unique role of pediatricians in promoting vaccines, suggesting the usage of interventions and training to empower healthcare providers to disseminate evidence-based advice on vaccines. Furthermore, they recommended using best practices facilitating the adherence to standardized safety protocols, beneficence, and non-transmission of SARS-CoV-2. Overall, the authors recommend that clinicians work synergistically with other healthcare workers to maximize scheduled wellness/immunization visits and other medical checkups, especially	The review seeks to address barriers to pediatric vaccine uptake behaviors, including the implications of parental vaccine hesitancy/delay during the COVID-19 pandemic. The authors discuss the impact of the COVID-19 precautionary and quarantine measures and the factors affecting parental vaccine hesitancy. They provide recommendations, including the use of Machine Learning and Artificial Intelligence to facilitate linkages between healthcare systems and ensure timely access to accurate health information crucial for effective decision-making regarding vaccine access and allocation services.	Olusanya OA, Bednarczyk RA, Davis RL, Shaban-Nejad A. Addressing Parental Vaccine Hesitancy and Other Barriers to Childhood/Adolescent Vaccination Uptake During the Coronavirus (COVID-19) Pandemic. <i>Front Immunol</i> . 2021;12:663074. Published 2021 Mar 18. doi:10.3389/fimmu.2021.663074

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					in rural areas. They conclude by recommending the use of Machine Learning and Artificial Intelligence to facilitate linkages between healthcare systems and ensure timely access to accurate health information crucial for effective decision-making regarding vaccine access and allocation services.		
COVID-19; lockdown; admissions; mortality; infants; children	18-Mar-21	<a href="#">Effect of COVID-19 lockdown on hospital admissions and mortality in rural KwaZulu-Natal, South Africa: interrupted time series analysis</a>	British Medical Journal (BMJ) Open	Observational study	The authors investigated the effects of the COVID-19 lockdown on hospital admissions and deaths compared to pre-lockdown levels in a rural referral hospital in South Africa from January 1- October 20, 2020. Level 5 lockdowns in South Africa occurred from March 26-April 30, 2020, and were the most restrictive, with business and schools closed and transportation restricted. During the level 5 lockdown, daily admissions for infants, children 1-5 years, and respiratory diseases all decreased significantly. During the same time, all-cause daily admissions did not change significantly. The incidence rate ratios for infants were 0.63 (95% CI 0.44-0.90), for children 1-5 years 0.43 (95% CI 0.28-0.65) and for respiratory diagnosis was 0.57 (95% CI 0.36-0.90). Infants and children 1-5 years admissions did not recover to pre-pandemic levels at the time of level 1 (September 21, 2020- onwards/the end of the study). Infants had a pre-pandemic incidence rate of 1.46 admissions per day, which was 0.42 during the level 1 lockdown. Children 1-5 years had an incidence rate of 1.07 admissions per day pre-pandemic, 0.43 admissions during level 5, and 0.61 admissions per day at level 1. Among hospitalized patients, the odds of dying were halved during lockdown (aOR: 0.48; 95% CI 0.28-0.83), which was not affected by age, sex, or diagnosis, and then gradually increased to pre-lockdown levels. The authors state that the most vulnerable populations appeared to be the most affected by the COVID-19 lockdowns with an inability to reach the hospital. Possible theories presented are a lack of transportation and caregivers' concern to contract COVID-19 while at the hospital.	The authors investigated the effects of the COVID-19 lockdown on hospital admissions and deaths compared to pre-lockdown levels in a rural referral hospital in South Africa. During the lockdown, daily admissions for infants, children 1-5 years, and respiratory diseases all decreased significantly.	McIntosh A, Bachmann M, Siedner MJ, Gareta D, Seeley J, Herbst K. Effect of COVID-19 lockdown on hospital admissions and mortality in rural KwaZulu-Natal, South Africa: interrupted time series analysis. <i>BMJ Open</i> . 2021;11(3):e047961. Published 2021 Mar 18. doi:10.1136/bmjopen-2020-047961
COVID-19; anxiety; depression; self-efficacy	18-Mar-21	<a href="#">Psychological effects of the COVID-19 outbreak on nurses working in tertiary women's and children's hospitals from Sichuan, China: A cross-sectional study</a>	International Journal of Disaster Risk Reduction	Article	The authors conducted a cross-sectional survey of nurses working in women's and children's hospitals at the height of the COVID-19 pandemic (January 28-February 11, 2020) in China to determine self-efficacy, anxiety, and depression rates. The authors used 3 questionnaires in Chinese: the 7-item anxiety scale (GAD-7), the 9-item Patient Health Questionnaire (PHQ-9) on depression, and the General Self-efficacy Scale (GSES). 1934 nurses completed the questionnaires with an average age of 30.42 years (age range 18-56 years) and an average length of employment of 8.28 years. 29.3% of the participants were identified as having mild or severe anxiety, and 22.7% with mild or severe depression symptoms. The nurses' median GSES scores were 30, which the authors' state is higher than the public. Nurses with longer years of employment were more likely to have anxiety and depressive symptoms, as were nurses working in pediatric wards compared to gynecological wards. Nurses that reported cold-like symptoms also reported higher levels of	The authors conducted a cross-sectional survey of nurses working in women's and children's hospitals at the height of the COVID-19 pandemic in China to determine self-efficacy, anxiety, and depression rates. Nurses with longer years of employment were more likely to have anxiety and depressive symptoms, as were nurses working in pediatric wards compared to gynecological wards.	He Q, Ren J, Wang G, Zhang J, Xiang J, He D. Psychological effects of the COVID-19 outbreak on nurses working in tertiary women's and children's hospitals from Sichuan, China: A cross-sectional study [published online ahead of print, 2021 Mar 18]. <i>Int J Disaster Risk Reduct</i> . 2021;58:102188. doi:10.1016/j.ijdrr.2021.102188

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					stress and anxiety. The authors note that nurses' psychological state had not been affected by the COVID-19 pandemic, although risk factors of length of employment and department could help administrators target helpful strategies.		
COVID-19; pregnancy; co-morbidities; maternal medicine; prenatal care	18-Mar-21	<a href="#">Maternal medicine in the COVID era</a>	Best Practice and Research Clinical Obstetrics and Gynaecology	Article	In this review, the authors summarized the current evidence on the impact of the COVID-19 pandemic on high-risk pregnant women and neonates and service modifications proposed by national guidelines for their care in the UK. The pandemic has directly and indirectly impacted pregnant women with co-morbidities or antenatal medical complications, through vulnerability to the severe effects of COVID-19 and service reconfiguration. Women with diabetes or hypertension in pregnancy are at higher risk of admission to intensive care, need for invasive ventilation and death from COVID-19. Suggested service modifications specific to maternal medicine services include home measurement of blood glucose or blood pressure, the use of risk calculators, adaptations to screening criteria for gestational diabetes and monitoring of obstetric cholestasis. Neither the added risk of COVID-19 on pregnant women with medical co-morbidities, nor the impact of maternal medicine service modifications has yet been established. Many of the service modifications have been pragmatic given the urgency of the scenario. Reversion to pre-pandemic care is recommended as soon as safe.	In this review, the authors summarize current evidence on the impact of the COVID-19 pandemic on high-risk pregnant women and neonates and service modifications proposed by national guidelines for their care in the UK. Suggested service modifications specific to maternal medicine services include home measurement of blood glucose or blood pressure, the use of risk calculators, adaptations to screening criteria for gestational diabetes and monitoring of obstetric cholestasis.	Relph S, Thangaratinam S. Maternal medicine in the COVID era. Best Pract Res Clin Obstet Gynaecol. 2021. doi:10.1016/j.bpobgyn.2021.03.003.
COVID-19; children; childcare center; school; modeling; Canada	18-Mar-21	<a href="#">Model-based projections for COVID-19 outbreak size and student-days lost to closure in Ontario childcare centres and primary schools</a>	Scientific Reports	Article	In this article, the authors developed an agent-based model of SARS-CoV-2 transmission within a childcare center and households in Canada. Scenarios varied the student-to-educator ratio (15:2, 8:2, 7:3), family clustering (siblings together vs. random assignment) and time spent in class. They also evaluated a primary school setting (with student-educator ratios 30:1, 15:1 and 8:1), including cohorts that alternate weekly. In the childcare center setting, grouping siblings significantly reduced outbreak size and student-days lost. The authors identified an intensification cascade specific to classroom outbreaks of respiratory viruses with pre-symptomatic infection. In both childcare and primary school settings, each doubling of class size from 8 to 15 to 30 more than doubled the outbreak size and student-days lost (increases by factors of 2-5, depending on the scenario). Based on the model, proposals for childcare and primary school re-opening could be enhanced for safety by switching to smaller class sizes and grouping siblings.	In this article, the authors developed an agent-based model of SARS-CoV-2 transmission within a childcare center and households in Canada. Based on the model, proposals for childcare and primary school reopening could be enhanced for safety by switching to smaller class sizes and grouping siblings.	Phillips B, Browne DT, Anand M, et al. Model-based projections for COVID-19 outbreak size and student-days lost to closure in Ontario childcare centres and primary schools. Sci Rep. 2021;11(1):6402. doi:10.1038/s41598-021-85302-6.
eating disorder; depression; mental health; maternal health; COVID-19	18-Mar-21	<a href="#">2019-nCoV distress and depressive, anxiety and OCD-type, and eating disorder symptoms among</a>	Archives of Women's Mental Health	Original Research	This study compared postpartum and control women on depressive, anxiety, and obsessive-compulsive disorder (OCD)-type symptoms, and eating disorder symptoms during the COVID-19 pandemic and evaluated if associations between COVID-19 distress and these mental health symptoms differed for postpartum compared to control women. A community sample of women, ages 18–39 years, who had either given birth in the past 12 months (n=232) or had no pregnancy history (n=137; controls), was recruited to complete an	The study identified associations between COVID-19 distress and depressive, anxiety, and OCD-type symptoms in 232 postpartum and 137 control (no pregnancy history) women in the United States. The authors find that postpartum women may be	Thompson KA, Bardone-Cone AM. 2019-nCoV distress and depressive, anxiety and OCD-type, and eating disorder symptoms among postpartum and control women. Arch Womens Ment Health. 2021;1-

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		<a href="#">postpartum and control women</a>			online survey about their depressive, anxiety, OCD, and eating disorder symptoms. Participants were virtually recruited in the United States between March and June 2020 as a subset of a larger study sample. Average age was 30 years in both groups, and between 80-90% of women identified as white race in both groups. Postpartum women reported greater OCD-type symptoms related to concerns about both contamination and responsibility for harm (p<0.05 for all) compared to controls. After controlling for general stress and mental health history, the association between COVID-19 distress and OCD-type symptoms related to concerns about contamination was stronger among postpartum compared to control women (p<0.002 for all). For all women, COVID-19 distress was positively related to general anxiety symptoms, total OCD-type symptoms, and OCD-type symptoms related to concerns about responsibility for harm after controlling for general stress and mental health history (p<0.03 for all). As such, the mental health and wellness of pregnant and postpartum women must be paid attention to during the current pandemic and in other health crises.	at elevated risk for OCD-type symptoms during COVID-19 pandemic, and pandemic distress is associated with anxiety and OCD-type symptoms among postpartum women more so than women with no pregnancy history.	10. doi:10.1007/s00737-021-01120-9
psychological distress; mental health; maternal health; COVID-19	18-Mar-21	<a href="#">Resilience and psychological distress in pregnant women during quarantine due to the COVID-19 outbreak in Spain: a multicentre cross-sectional online survey [Free access to abstract only]</a>	Journal of Psychosomatic Obstetrics and Gynecology	Original Research	The authors examine the prevalence of depressive and anxiety symptoms and the corresponding risk factors among pregnant women during the confinement due to the COVID-19 outbreak in Spain. Between 15 April and 14 May 2020, a multi-center cross-sectional survey was performed to study depression, anxiety and resilience in a sample of 514 Spanish pregnant women during the lockdown set up by the Spanish government in response to COVID-19 pandemic. The authors designed a metric that included the Spanish validated versions of the Edinburgh Postpartum Depression Scale (EPDS), the State-Trait Anxiety Inventory (STAI) and the Connor-Davidson Resilience 10- items Scale (CD-RISC-10). 72.8% of the participating women had been confined <40 days and 27.2% between 41 and 60 days. 182 (35.4%) participants scored over 10 (above the EPDS cutoff point for depression), with 21.3% scoring over 13 (75th Percentile) in depressive symptoms rates. The authors found high trait and anxiety scores, with 223 (43.4%) and 227 (44.2%) pregnant women scoring over the trait and state mean scores. Neither depression, anxiety, nor resilience levels showed any significant correlation with the length of confinement. Resilience scores were also low in the sample, and resilience was negatively correlated with anxiety and depression. Overall, despite a lack of correlation between length of home confinement and psychological distress levels, anxiety and depression were elevated in this sample during confinement. The authors suggest that strategies to increase resilience should be employed in these women during the pandemic.	The authors examined the prevalence of anxiety and depression and their risk factors among 514 pregnant women during COVID-19-related confinement in Spain. Despite a lack of correlation between length of home confinement and psychological distress levels, anxiety and depression were elevated in this sample. The authors suggest that strategies to increase resilience should be employed in these women during the pandemic.	Lubián López DM, Butrón Hinojo CA, Arjona Bernal JE, et al. Resilience and psychological distress in pregnant women during quarantine due to the COVID-19 outbreak in Spain: a multicentre cross-sectional online survey. <i>J Psychosom Obstet Gynaecol.</i> 2021;1-8. doi:10.1080/0167482X.2021.1896491

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child health; abuse; pandemic; lockdown; SARS-CoV-2; education; poverty	18-Mar-21	<a href="#">Protecting children during the COVID-19 pandemic [Free access to abstract only]</a>	British Journal of Nursing	Comment	In this short commentary, the authors discuss the various effects of the COVID-19 pandemic on children, specifically in the UN's identified priority areas of poverty, education, threats to survival and health, and risks to safety from the perspective of Northern Ireland. Contrary to UK policies, Northern Ireland has taken a more cautious approach, continuing a current lockdown in 2021, but committing to keeping child health services, childcare facilities, and some educational settings open, especially for children with special needs. The authors recognize, however, that high poverty rates limit the ability of online education to be accessed and given equitably to all children. To prioritize the mental and physical health and well-being of children and young people, Northern Ireland's government -- the Northern Island Executive -- has drafted and adopted legislation to prevent domestic violence and abuse during the pandemic. The Executive has attempted to align the disparate influences associated with its unique position as a member of the UK and the authors suggest that its response appears, at this time, to be proportional to the magnitude of the risks outlined by the UN. Despite the recent launch of an annual 6.5 million euro commitment to the "Children and Young People's Emotional Health and Wellbeing in Education Framework," the authors express concern about the ability of such a commitment to successfully care and provide for vulnerable populations in Northern Ireland during the pandemic.	The authors discuss the various effects of the COVID-19 pandemic on children, specifically in the UN's identified priority areas of poverty, education, threats to survival and health, and risks to safety from the perspective of Northern Ireland. Though the Northern Island Executive government has implemented several strategies, legislation, and policies to combat these risk areas, the authors highlight areas where these goals may remain unachieved, and where access to services may remain inequitable.	Brown J, Carson P. Protecting children during the COVID-19 pandemic. <i>Br J Nurs.</i> 2021;30(5):264. doi:10.12968/bjon.2021.30.5.264
breastfeeding; lactation; lactation counseling; public health; social support	18-Mar-21	<a href="#">Breastfeeding During a Pandemic: The Influence of COVID-19 on Lactation Services in the Northeastern United States</a>  <a href="#">[Free Access to Abstract Only]</a>	Journal of Human Lactation	Research Article	This study was conducted in June 2020 to determine changes to breastfeeding support services in the US during the COVID-19 pandemic according to trained lactation providers. The secondary aim was to assess the strengths and limitations of telehealth services. 39 participants completed the survey, and the majority (69.2%; n=27) were providing only telehealth services. Of the 31 providing any telehealth services who responded to telehealth questions, 58.1% (n=18) found that virtual lactation support was moderately effective compared to in-person support. However, 70% (n=26) of those conducting groups felt they were less effective compared to in-person groups. Limitations of virtual support included technical and logistical difficulties, challenges assisting with latching and accurately assessing infant growth, and difficulty reading body language. Strengths of virtual support included the flexibility and convenience of home-based support, expanded communication strategies, and safety from virus exposure. Overall, visits with a lactation professional decreased significantly during the pandemic (p<0.001). Limited in-hospital and pediatrician support was also noted, particularly among groups without access to telehealth resources. Based on these results, the authors warn that breastfeeding disparities may be further exacerbated among those without equitable access to lactation support during the COVID-19 pandemic.	This US study examined changes to breastfeeding support services during the COVID-19 pandemic according to 39 trained lactation providers. Overall, visits with a lactation professional decreased significantly during the COVID-19 pandemic. The authors warn that breastfeeding disparities may be exacerbated due to inadequate access to lactation support.	Schindler-Ruwisch J, Phillips KE. Breastfeeding During a Pandemic: The Influence of COVID-19 on Lactation Services in the Northeastern United States [published online, 2021 Mar 18]. <i>J Hum Lact.</i> 2021;8903344211003898. doi:10.1177/08903344211003898

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COVID-19; infant; hypoplastic left heart syndrome; United States	18-Mar-21	<a href="#">CASE REPORT – COVID-19 Infection in Infant with Severe Congenital Heart Disease</a>	Cardiology in the Young	Case Report	The authors described a case of SARS-CoV-2 infection in a 2-month-old infant with severe congenital heart disease (CHD) in the United States. The patient with hypoplastic left heart syndrome (mitral and aortic atresia) presented to the Emergency Department with fever and vomiting [date not specified]. History revealed his father was ill and later tested positive for SARS-CoV-2. The patient's vital signs in the emergency room were significant for tachycardia (169 beats/minute), fever (38.7°C), tachypnea (65 breaths/min), and SpO <sub>2</sub> 77%. He was ill-appearing on examination with poor perfusion when crying. Chest x-ray showed clear lungs and no change in the size of the cardiac silhouette. The standard viral panel was negative, but SARS-COV-2 RNA was positive. He underwent treatment with supplemental oxygen, heparin, and dexamethasone. After a 6-day hospitalization period, he recovered remarkably well without major adverse effects. While this case is not predictive for other patients with CHD presenting with SARS-CoV-2 infection, it demonstrates that these children can survive without major adverse effects from the infection.	The authors described a case of SARS-CoV-2 infection in a 2-month-old infant with severe congenital heart disease (CHD) in the United States. The patient underwent treatment with supplemental oxygen, heparin, and dexamethasone and recovered well after a 6-day hospitalization period. While this case is not predictive for other patients with CHD presenting with SARS-CoV-2 infection, it demonstrates that these children can survive without major adverse effects from the infection.	Pexton N, Svenson A, Bhat D. CASE REPORT - COVID-19 Infection in Infant with Severe Congenital Heart Disease. <i>Cardiol Young</i> . 2021;1-5. doi:10.1017/S1047951121001384.
COVID-19; women's health; gynecological services; prioritization; consent; pandemic response; United Kingdom	18-Mar-21	<a href="#">COVID-19 in Women's Health: Pre-operative gynaecological assessment and shared decision making</a>	Best Practice & Research Clinical Obstetrics & Gynaecology	Article	The authors discussed women's health during the COVID-19 pandemic in the United Kingdom. The National Health Service (NHS) response to the COVID-19 pandemic brought about rapid and innovative changes to surgical care in gynecology, and shared decision making around operative procedures and pre-operative gynecological pathways. Short term changes have redeployed resources away from elective gynecology; longer term changes include accelerating the streamlining of treatments, as well as telemedicine and education in patient self-management. The speed and recency of the response does not yet permit the creation of a large evidence base for effective and acceptable interventions, apart from anecdotal observations of 'what works well,' and guidance from the Royal Colleges and the National Institute for Health and Care Excellence (NICE). Implementation was rapid, but now the interventions require rigorous testing and input from user groups to ensure they are effective, acceptable, sustainable, and do not discriminate against service users (through language barriers, for instance).	The authors discussed women's health during the COVID-19 pandemic in the United Kingdom. The National Health Service (NHS) response to the COVID-19 pandemic brought about rapid and innovative changes to surgical care in gynecology, and shared decision making around operative procedures and pre-operative gynecological pathways. The interventions now require rigorous testing and input from user groups to ensure they are effective, acceptable, sustainable, and do not discriminate against service users.	Ball E, Willmott F, Rivas C, et al. COVID-19 in Women's Health: Pre-operative gynaecological assessment and shared decision making. <i>Best Pract Res Clin Obstet Gynaecol</i> . 2021. doi:10.1016/j.bpobgyn.2021.03.001.
COVID-19; maternal outcomes; neonatal outcomes; mortality; ICU admission	18-Mar-21	<a href="#">Effects of the COVID pandemic on pregnancy outcomes</a>	Best Practice & Research Clinical Obstetrics & Gynaecology	Article	The authors discussed findings from several studies on the effects of the COVID-19 pandemic on pregnancy outcomes. Pregnant women and neonates are often categorized as being at high risk during the pandemic. Numerous studies have demonstrated that disease characteristics in pregnant women and non-pregnant women are very similar. However, pregnant women with COVID-19 in the third trimester are more likely than their non-pregnant counterparts to require intensive care, though this may reflect a lower threshold for intervention in pregnant women, rather than more serious disease. Compared with pregnant women without COVID-19, pregnant women with symptomatic COVID-19 requiring admission to hospital	The authors discussed findings from several studies on the effects of the COVID-19 pandemic on pregnancy outcomes. While disease characteristics in pregnant women and non-pregnant women are very similar, pregnant women with COVID-19 in the third trimester are more likely than their non-pregnant counterparts to require intensive	Elsaddig M, Khalil A. Effects of the COVID pandemic on pregnancy outcomes. <i>Best Pract Res Clin Obstet Gynaecol</i> . 2021. doi:10.1016/j.bpobgyn.2021.03.004.

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
					have worse maternal outcomes, including death, although the absolute risk remains very low. Outcomes of neonates born to women with COVID-19 are generally very good, though iatrogenic preterm birth is more common. Findings from these studies highlight the need for further monitoring of the outcomes of pregnant and post-partum women, according to trimester, during this pandemic.	care, though this may reflect a lower threshold for intervention in pregnant women, rather than more serious disease. Findings from these studies highlight the need for further monitoring of the outcomes of pregnant and post-partum women, according to trimester, during this pandemic.	
COVID-19, SARS-CoV-2, vaccination, pregnancy, pandemic, safety, efficacy	18-Mar-21	<a href="#">Benefits and Potential Harms of COVID-19 Vaccination During Pregnancy: Evidence Summary for Patient Counseling</a>	Ultrasound in Obstetrics and Gynecology	Opinion	Historically, pregnant women have been excluded from most drug and vaccine trials, and this includes the initial SARS-CoV-2 vaccine trials. Only a small number of women who were unknowingly pregnant or became pregnant soon after vaccination have been included and are currently being followed up as part of the original trials. Due to lack of evidence around the safety of these vaccines in pregnancy, international societies have taken a cautious approach, recommending that vaccination of pregnant women should be evaluated on a case-by-case basis. Most pregnant women with SARS-CoV-2 remain asymptomatic or have mild disease, and severe disease and death are rare. However, pregnant women that are hospitalized with SARS-CoV-2 are more likely to be admitted to the ICU compared to non-pregnant infected women. It seems reasonable to counsel pregnant women with risk factors including obesity, advanced age, or significant chronic conditions, that they are at increased risk of severe SARS-CoV-2 infection, and therefore, are more likely to benefit from vaccination. Of the currently available SARS-CoV-2 vaccines, animal studies of the mRNA vaccines have demonstrated safety, efficacy, and potential benefit in pregnant women. Furthermore, vaccination is likely to protect not only the pregnant woman, but also the fetus and neonate. In conclusion, pregnant women should be provided with a clear risk-benefit assessment of SARS-CoV-2 infection and vaccinations in order to make an informed decision regarding vaccination.	Data on safety and efficacy of the currently available SARS-CoV-2 vaccines is limited. Pregnant women should be provided with a clear risk-benefit assessment of SARS-CoV-2 infection and vaccinations in order to make an informed decision regarding SARS-CoV-2 vaccination.	Kalafat E, O'Brien P, Heath PT, et al. Benefits and potential harms of COVID-19 vaccination during pregnancy: evidence summary for patient counseling [published online ahead of print, 2021 Mar 18]. <i>Ultrasound Obstet Gynecol.</i> 2021. doi:10.1002/uog.23631
COVID-19, SARS-CoV-2, inflammatory syndrome, thrombi	18-Mar-21	<a href="#">Major Left Ventricular Thrombi in an Adolescent with COVID-19-Associated Inflammatory Syndrome</a>	European Heart Journal	Case Report	This is a case report of a 17-year-old male with a recent history of a mild COVID-19 who was subsequently admitted to a regional hospital with a 6-day history of fever, diarrhea, elevated C-reactive protein, fibrinogen, d-dimer, troponin T, NT-proBNP, and SARS-CoV-2 antibodies. His initial echocardiography showed impaired left ventricular (LV) function with an ejection fraction of 37% without any electrocardiographic signs of acute myocardial infarction. Inotropic support was started, and IV immunoglobulins 2 g/kg, corticosteroids, and a preventive dose of nadroparin were administered. Repeat echocardiography 42 hours later showed normalization of LV function and multiple thrombi in the LV apex. Heparin was started, and bilateral carotid filters were inserted with the administration of alteplase. Embolized thrombi were	This is a case report of a 17-year-old male with a recent history of a mild SARS-CoV-2 infection who was subsequently admitted to a regional hospital with a 6-day history of fever, diarrhea, elevated inflammatory and coagulation markers, and SARS-CoV-2 antibodies. On echocardiography, he was initially found to have decreased LV function, which subsequently resolved. He required multiple	Materna O, Koubský K, Pádr R, et al. Major left ventricular thrombi in an adolescent with COVID-19-associated inflammatory syndrome [published online ahead of print, 2021 Mar 18]. <i>Eur Heart J.</i> 2021. doi:10.1093/eurheartj/ehab165

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					subsequently extracted from one filter and the right femoral artery. On day 4, residual thrombus embolized into the right medial cerebral artery, and he subsequently underwent urgent interventional recanalization within 60 minutes. Two more vascular surgical procedures for peripheral embolus extraction were required later. A second repeat echocardiogram showed no resident LV thrombi; however, the patient was left with partial left-sided paresis. To the author's knowledge, this is the first described case of LV thrombi in an adolescent associated with COVID-19-associated inflammatory syndrome without myocardial infarction.	vascular surgical procedures for peripheral embolus extraction with resulting partial left-sided paresis.	
SARS-CoV-2, COVID-19, living with children, risk of mortality	18-Mar-21	<a href="#">Association between living with children and outcomes from covid-19: OpenSAFELY cohort study of 12 million adults in England</a>	British Medical Journal (BMJ)	Original Research	This population-based cohort study investigated whether risk of SARS-CoV-2 infection and outcomes of COVID-19 differed between adults living with and without children during the first 2 waves of the UK pandemic. 2 cohorts of adults (>18 years) were registered at a general practice on 1 February (n= 9,334,392) and 1 September (n= 9,266,919), 2020. Study end was 31 August for wave 1 and 18 December for wave 2. Among adults aged <65 years during wave 1, living with children was not associated with increased risks of recorded SARS-CoV-2 infection, nor COVID-19-related hospital or intensive care admission. In wave 2, among adults aged <65 years, living with children of any age was associated with an increased risk of recorded SARS-CoV-2 infection (HR 1.06, 95% CI 1.05 - 1.08) and COVID-19-related hospital admission (HR 1.18, 95% CI 1.06 - 1.31). Living with children aged 0-11 years was associated with reduced risk of death from COVID-19 in both waves; living with children of any age was also associated with lower risk of dying from non-COVID-19 causes. In conclusion, the authors found some increased risk of reported SARS-CoV-2 infection and COVID-19-related hospitalization among adults living with children during wave 2. However, this did not translate into increased risk of COVID-19 mortality, and absolute increases in risk were small.	This population-based cohort study investigated whether risk of infection with SARS-CoV-2 and outcomes of COVID-19 differed between adults living with and without children during the first 2 waves of the UK pandemic. The authors found some increased risk of reported SARS-CoV-2 infection and COVID-19-related hospitalization among adults living with children during wave 2. However, this did not translate into increased risk of COVID-19 mortality, and absolute increases in risk were small.	Forbes H, Morton CE, Bacon S, et al. Association between living with children and outcomes from covid-19: OpenSAFELY cohort study of 12 million adults in England. <i>BMJ</i> . 2021;372:n628. Published 2021 Mar 18. doi:10.1136/bmj.n628
healthcare workers; COVID-19; transmission; children; risk	18-Mar-21	<a href="#">Sharing a household with children and risk of COVID-19: a study of over 300,000 adults living in healthcare worker households in Scotland</a>	BMJ Archives of Disease in Childhood	Original Research	This prospective cohort study sought to understand if adult contact with children affects the risk of COVID-19 using administrative data from the All National Health Service Scotland between March and October 2020. Of the 310,097 Scottish adults identified as living in a healthcare worker household, 241,266 (78%), 41,198 (13%), 23,783 (7.8%), and 3850 (1.2%) shared their household with 0, 1, 2, and 3 or more young children, respectively. Compared with adults living with no young children, those living with children were less likely to live in the most deprived areas, were more likely to be of non-white ethnicity, and were less likely to have comorbidities. Compared to adults living with 0, 1, or 2 children (6-7%), a higher proportion of adults living with 3 or more young children tested positive for SARS-CoV2 (9.2%). Over the study period, the risk of COVID-19 requiring hospitalization was reduced progressively with increasing numbers of household children (aHR: 0.93 per child (95% CI 0.79 to 1.10)). The risk of any COVID-19 was similarly reduced, with the association	The results of this cohort study demonstrated that living with young children was associated with an attenuated risk of any COVID-19 or COVID-19 requiring hospitalization among adults living in healthcare worker households in Scotland between March and October 2020. There was no evidence that living with young children increased adults' risk of COVID-19, including during the period after schools reopened.	Wood R, Thomson E, Galbraith R, et al. Sharing a household with children and risk of COVID-19: a study of over 300 000 adults living in healthcare worker households in Scotland [published online ahead of print, 2021 Mar 18]. <i>Arch Dis Child</i> . 2021;archdischild-2021-321604. doi:10.1136/archdischild-2021-321604

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					being statistically significant (aHR per child 0.93; 95% CI 0.88 to 0.98). After schools and nurseries reopened to all children in Scotland in August 2020, no association was seen between exposure to young children and risk of any COVID-19 (aHR per child 1.03; 95% CI 0.92 to 1.14). The authors concluded that there was no evidence that living with young children increased adults' risk of COVID-19, including during the period after schools reopened.		
covid-19; diabetic ketoacidosis; pediatric type 1 diabetes mellitus	17-Mar-21	<a href="#">Diabetic Ketoacidosis at Onset of Pediatric Type-1 Diabetes Triggered by Covid-19: An Original Case Report</a>	Cureus	Case Report	The authors report on a case involving a three-year old male who presented to a health facility in Morocco with diabetic ketoacidosis (DKA) likely triggered by SARS-CoV-2 infection. The patient presented to the Emergency Department after the onset of acute dyspnea, asthenia, vomiting and abdominal discomfort. According to his parents, he had a two week history of polyuria, polydipsia and asthenia in addition to a 2kg weight loss over one month. His oxygen saturation was 93% on 3L of oxygen and presented with signs of respiratory distress. Laboratory results showed capillary blood glucose reaching 16,67 mmol/L, and his urine ketone and glucose levels each were 3+. Additionally, he was found to have hypokalemia and lymphocytopenia. In the ICU, the patient received isotonic fluids and continuous insulin infusion. Chest CT revealed bilateral ground-glass opacities, specifically in the subpleural region with left sided consolidations. After stabilization, the patient was moved from the ICU to the COVID-19 care unit and was initiated on a basal bolus insulin regimen; he was ultimately discharged after 10 days of hospitalization with a HbA1c level of 10.3%. The authors suggest that further research is needed to understand the correlation between diabetes and COVID-19 in the pediatric population.	The authors report on a case involving a three-year old male who presented to a health facility in Morocco with diabetic ketoacidosis likely triggered by SARS-CoV-2 infection. The authors suggest that further research is needed to understand the correlation between diabetes and COVID-19 in the pediatric population.	Benyakhlef S, Abdellaoui W, Tahri A, Rouf S, Latrech H. Diabetic Ketoacidosis at Onset of Pediatric Type-1 Diabetes Triggered by Covid-19: An Original Case Report. Cureus. 2021;13(3):e13958. Published 2021 Mar 17. doi:10.7759/cureus.13958
COVID-19; twin pregnancy; inflammatory response	17-Mar-21	<a href="#">SARS-CoV-2 Infection and Inflammatory Response in a Twin Pregnancy</a>	International Journal of Environmental Research and Public Health	Original Research	This report analyzed the immunologic response against SARS-CoV-2 infection and virus tissue tropism in a twin pregnancy in Italy [date not specified]. The patient was a 36-year-old Italian female with congenital hypothyroidism and cholestasis of pregnancy, who presented with positive nasopharyngeal SARS-CoV-2 results at 34 weeks gestation. She delivered her twins at 36 +2 weeks gestation by cesarean section for transverse presentation, and neither neonate displayed any perinatal complications at birth. The mother's nasopharyngeal viral load dropped at the delivery time, and no virus sequences were found in the placenta, rectal, and vaginal swabs. The vaginal microbiome at the time of diagnosis did not show consistent alteration of resident bacteria composition. Funicular blood and nasopharyngeal samples from the neonates tested negative for SARS-CoV-2. Conversely, the inflammatory cytokine profile in sera from both the mother and funicular blood of the twins was consistent with an increased inflammatory status. IgG-specific antibodies against SARS-CoV-2 were detected in the sera and funicular blood, confirming their presence after the 15th day of infection, demonstrating a protective role against the virus's	This report analyzed the immunological response against SARS-CoV-2 infection and virus tissue tropism in a twin pregnancy in Italy. The inflammatory cytokine profile in sera from both the mother and funicular blood of the twins was consistent with increased inflammatory status, and analysis of the vaginal microbiome did not show relevant signs of alteration. This case report highlights the potential role of the host inflammatory response in preserving the fetus from SARS-CoV-2 vertical transmission, suggesting that pregnancy status does not influence the specific	Trombetta A, Comar M, Tommasini A, et al. SARS-CoV-2 Infection and Inflammatory Response in a Twin Pregnancy. Int J Environ Res Public Health. 2021;18(6):3075. doi:10.3390/ijerph18063075.

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					vertical transmission to the twins. This case report highlights the potential role of the host inflammatory response in preserving the fetus from SARS-CoV-2 vertical transmission, suggesting that pregnancy status does not influence the specific pathway of innate response against this virus. Elucidating the immune system's contributions in pregnancy and fetal development can provide important insights into the pathogenesis underlying maternal and fetal diseases and suggest possible targets for therapy, including modifying the composition of the microbiome of non-pregnant women infected by SARS-CoV-2.	pathway of innate response against this virus.	
COVID-19; pediatric; digital health; e-health; implementation; telehealth; telemedicine; Ireland	17-Mar-21	<a href="#">Barriers and Facilitators for Implementing Paediatric Telemedicine: Rapid Review of User Perspectives</a>	Frontiers in Pediatrics	Systematic Review	The authors conducted a rapid mixed-methods evidence synthesis to identify barriers, facilitators, and stakeholder experiences of implementing pediatric telemedicine, to inform the COVID-19 pandemic response. A systematic search was undertaken in MEDLINE for relevant studies. All identified records were blind double-screened by 2 reviewers. Implementation-related data were extracted, and studies were quality appraised using the Mixed-Methods Appraisal Tool. 27 eligible studies (19 quantitative, 5 mixed-methods, 3 qualitative) were identified. Important challenges highlighted from the perspective of healthcare providers included problems with information and communication technology (ICT) proficiency, lack of confidence in the quality/reliability of the technology, connectivity issues, concerns around legal issues, increased administrative burden, and/or fear of inability to conduct thorough examinations with reliance on subjective descriptions. Facilitators included clear dissemination of the aims of ICT services, involvement of staff throughout planning and implementation, sufficient training, and cultivation of telemedicine champions. Families often expressed preference for in-person visits, but those who had tried tele-consultations, lived far from clinics, or perceived increased convenience with technology considered telemedicine more favorable. Concerns from parents included the responsibility of describing their child's condition in the absence of an in-person examination. The findings suggest that healthcare providers and families who have experienced tele-consultations generally report high satisfaction and usability for such services.	The authors conducted a rapid mixed-methods evidence synthesis to identify barriers, facilitators, and stakeholder experiences of implementing pediatric telemedicine, to inform the COVID-19 pandemic response. The findings suggest that healthcare providers and families who have experienced tele-consultations generally report high satisfaction and usability for such services. Concerns from parents included the responsibility of describing their child's condition in the absence of an in-person examination.	Tully L, Case L, Arthurs N, et al. Barriers and Facilitators for Implementing Paediatric Telemedicine: Rapid Review of User Perspectives. <i>Front Pediatr.</i> 2021;9:630365. doi:10.3389/fped.2021.630365
Poland, COVID-19, SARS-CoV-2, convalescent plasma, pediatric, children	17-Mar-21	<a href="#">Effects and Safety of Convalescent Plasma Administration in a Group of Polish Pediatric Patients with COVID-19: A Case Series</a>	Life	Original Research	The authors of this study describe a series of 13 pediatric patients (mean age 10.4 years, range 5 months – 17 years) in Poland treated with convalescent plasma for COVID-19 therapy, in order to assess efficacy. SARS-CoV-2 infection was confirmed via nasopharyngeal RT-PCR test. Patients were each given a single transfusion of 5–10 mL/kg of convalescent plasma. The mean hospitalization time was 22.6 days (median 20, IQR 15-31). Median time from symptom onset to convalescent plasma transfusion was 10.6 days (median 7 days, IQR=5-12). 6 patients (46.2%) had viral clearance on nasopharyngeal RT-PCR within 3 days of transfusion, while in the remaining patients the mean elimination time was 12.1 days	The authors of this study describe a series of 13 pediatric patients (mean age=10.4 years) in Poland treated with convalescent plasma for COVID-19 therapy, in order to assess efficacy. Patients were each given a single transfusion of 5–10 mL/kg of convalescent plasma, which resulted in a mean hospitalization time of 22.6 days. 6 patients (46.2%) had viral	Matecki P, Faltin K, Mania A, et al. Effects and Safety of Convalescent Plasma Administration in a Group of Polish Pediatric Patients with COVID-19: A Case Series. <i>Life.</i> 2021;11(3):247. Published 2021 Mar 17. doi:10.3390/life11030247

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					(median 6 days). No difference in the effects of convalescent plasma administrations were observed in the children receiving transfusion within 7 days from the onset of symptoms (n=3), and the group who obtained the therapy after a longer period of time (n=10; Fisher's exact test, p = 0.197). Clinical improvement was achieved in all patients; no adverse effects were found in any of the cases. The authors conclude that convalescent plasma may be a promising treatment for COVID-19 in children.	clearance within 3 days of transfusion, while the remaining patients had mean elimination time of 12.1 days (median 6 days). Given that clinical improvement was achieved in all patients and no adverse effects were found, the authors conclude that convalescent plasma may be a promising treatment for COVID-19 in children.	
COVID-19; fetus; maternal; newborn; pregnancy	17-Mar-21	<a href="#">A Comprehensive Analysis of Maternal and Newborn Disease and Related Control for COVID-19</a>	SN Comprehensive Clinical Medicine	Review	This narrative review summarized contemporary and cumulative publications that detail maternal/fetal/newborn SARS-CoV-2 infection as well as management and prevention of COVID-19. Maternal SARS-CoV-2 infections commonly occur. The spectrum of maternal infection is variable and includes both asymptomatic infection and advanced multisystem disease, with potential for maternal demise. The propensity to severe maternal disease is often associated with co-morbidities. COVID-19 in pregnancy is associated with preterm delivery and a higher incidence of C-section delivery. Maternal infection carries risk for placental vascular abnormalities with potential adverse outcome for the fetus. Potential for congenital infection is likely, but it occurs in a minority of infected pregnancies, most often near term. Most maternal infections do not result in subsequent newborn infection. Newborn infections can be both early- (detected soon after delivery) and late-onset (between days 4 and 90 of life), and disease manifestations are generally mild if they occur. Both infected pregnant women and infected newborns can serve as vectors for further SARS-CoV-2 transmission. Prevention in the maternal-newborn context must consider the specific healthcare context, depend on the prevalence of infection in that population, and should be sensitive to both caregiver and patient priorities.	This narrative review summarized contemporary and cumulative publications that detail maternal/fetal/newborn SARS-CoV-2 infection as well as management and prevention of COVID-19. The propensity to severe maternal disease is often associated with co-morbidities. Prevention in the maternal-newborn context must consider the specific healthcare context, depend on the prevalence of infection in that population, and should be sensitive to both caregiver and patient priorities.	Cimolai N. A Comprehensive Analysis of Maternal and Newborn Disease and Related Control for COVID-19. SN Compr Clin Med. 2021:1-23. doi:10.1007/s42399-021-00836-0.
COVID-19; children; asthma; risk communication ; school	17-Mar-21	<a href="#">School Attendance, Asthma Risk, and COVID-19 in Children</a>	The Journal of Allergy and Clinical Immunology: In Practice	Rostrum	This Rostrum examines the actual risk of in-person learning among children with asthma during COVID-19, the discrepancy between perceived and actual risk, the contributing factors to this discrepancy, and possible solutions to narrow this divide. Overall, the evidence does not support that children with asthma are at an increased risk of COVID-19 morbidity or mortality compared to children without asthma. Asthma medications do not appear to contribute to incidence or severity of COVID-19. However, there is a high perceived risk of in-person learning that is partially related to how it is portrayed in the media. There is little guidance regarding transitioning asthmatic children back to school and how to properly counsel on mediation of risk. There are differences regionally and locally around school re-opening, exemptions, and their implementation. It is essential that information regarding the risk of	This Rostrum examines the actual risk of in-person learning among children with asthma during COVID-19, the discrepancy between perceived and actual risk, the contributing factors to this discrepancy, and possible solutions to narrow this divide. Overall, the evidence does not support that children with asthma are at an increased risk of COVID-19 morbidity or mortality compared to children without asthma.	Abrams EM, Shaker M, Greenhawt M. School Attendance, Asthma Risk, and COVID-19 in Children. J Allergy Clin Immunol Pract. 2021. doi:10.1016/j.jaip.2021.03.006

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					in-person learning (or lack thereof) for children with asthma be conveyed regularly, through multiple channels, and in an age-appropriate way to ensure that families have the best information available when facing decisions on how to care for their children and ensure their ongoing development.		
SARS-CoV-2, COVID-19, pregnancy, second trimester, third trimester, neonates, newborns, immunity, IgG, IgM	17-Mar-21	<a href="#">Detectable Antibodies Against SARS-CoV-2 in Newborns from Mothers Infected with COVID-19 at Different Gestational Ages</a>	Pediatrics and Neonatology	Short Communication	This study examined SARS-CoV-2 IgM and IgG antibody levels in 6 newborns born to mothers with a history of SARS-CoV-2 infection. Throat and blood samples were collected from all pregnant women at delivery and their newborns at birth. After delivery, all 6 mothers with their newborns were followed-up for 6 months and were re-tested for IgG and IgM antibodies monthly. 3 women with COVID-19 were in the third trimester of pregnancy, and their 3 newborns were delivered during the acute phase of infection. Another 3 women with COVID-19 were in the second trimester of pregnancy and delivered 3 newborns at 37, 56, and 111 days after recovery from COVID-19. After delivery, none of the mothers nor their infants had positive PCR results, symptoms, or evidence of COVID-19. All women in the third trimester of pregnancy had detectable IgM and IgG levels at delivery, and their newborns at birth had apparent IgG, and one had IgM. Of their 3 newborns, 1 had detectable IgG levels for 60 days, while the other 2 had it for 120 days. Upon delivery, the 3 women with COVID-19 in the second trimester with their newborns were asymptomatic with negative PCR results. However, their results were positive for IgG but negative for IgM. 6 months later, these mothers still had high IgG titers reaching a >4-fold increase above the cut-off value. Detectable levels of IgG in their 3 newborns lasted for 150, 180, and 180 days, respectively. In conclusion, maternal antibodies may protect the fetus from maternal in utero SARS-CoV-2 transmission. More research is needed to understand SARS-CoV-2 immunity in infants because it is unclear what level of antibody titers in infants are considered protective against infection.	This study examined SARS-CoV-2 IgM and IgG antibody levels in 6 newborns born to mothers with a history of SARS-CoV-2 infection. After delivery, women in the second trimester of pregnancy and their neonates had a longer duration of detectable IgG than women in the third trimester of pregnancy and their neonates. The authors concluded that maternal antibodies may protect the fetus from maternal in utero SARS-CoV-2 transmission.	Mo H, Wang M, Wang M, Han Y, Zhang Y, Hu K. Detectable antibodies against SARS-CoV-2 in newborns from mothers infected with COVID-19 at different gestational ages. Pediatrics & Neonatology. 2021. doi: <a href="https://doi.org/10.1016/j.pedneo.2021.03.011">https://doi.org/10.1016/j.pedneo.2021.03.011</a> .
SARS-CoV-2, COVID-19, contact tracing, epidemiology, household	17-Mar-21	<a href="#">Role of asymptomatic children in community SARS-CoV-2 transmission</a>	Journal of Infectious Disease	Letter to the Editor	This letter is in response to a recent publication by Goldstein et al., who reviewed the limited evidence suggesting that children are less susceptible to SARS-CoV-2 infection and have reduced infectivity. However, there is a concern about the potential role of children in mediating undetected SARS-CoV-2 transmission. The authors of this letter utilized the comprehensive contact tracing system and low rates of community transmission outside worker dormitories in Singapore to investigate this further. They included SARS-CoV-2 positive (pharyngeal swab) households with asymptomatic children (n=16, aged 28 days-18 years). They classified households as "linked" (definite epidemiological link to other COVID-19 cases) or "unlinked" (no epidemiological link to other COVID-19 cases). 89% of linked households had children who tested positive for SARS-CoV-2, while there were no SARS-CoV-2 positive children in unlinked households (p=0.02). There were no differences in other	This letter is in response to a recent publication by Goldstein et al., who reviewed the evidence that children are less susceptible to SARS-CoV-2 infection and have reduced infectivity. Using contact tracing efforts in Singapore, the authors of this letter found that children in SARS-CoV-2 positive homes are significantly (p=0.02) more likely to test positive themselves if the household is epidemiologically linked to other COVID-19 cases. The authors agree with Goldstein et al. that	Lu L, Koh CT, Lim YH, et al. Role of asymptomatic children in community SARS-CoV-2 transmission [published online, 2021 Mar 17]. J Infect Dis. 2021;jiab138. doi:10.1093/infdis/jiab138

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					characteristics between linked and unlinked households apart from a shorter interval between index case diagnosis and serological testing in unlinked compared to linked households (Median: 28 vs. 53 days, p=0.026). The authors concluded that these findings argue against the role of children as a major community reservoir of SARS-CoV-2 infection and underscores the importance of quarantining children with strong epidemiological risk factors regardless of symptoms or RT-PCR results. They suggest that careful contact tracing to identify these children may be more effective than blanket school closures.	children are less likely to play major roles as community reservoirs of infection, and contact tracing is key to identify children with strong epidemiological risk of infection.	
Surveillance; primary school; incidence; seroconversion; SARS-CoV-2	17-Mar-21	<a href="#">SARS-CoV-2 infection and transmission in primary schools in England in June–December, 2020 (sKIDs): an active, prospective surveillance study</a>	The Lancet Child and Adolescent Health	Original Research	This prospective surveillance study aimed to estimate the incidence of SARS-CoV-2 infection, seroprevalence and seroconversion in staff and students in English public primary schools from June–December 2020. Primary schools underwent convenience sampling and were sorted into 2 groups: one that received weekly swabbing to estimate incidence of infections and one that received both nasal swabbing and blood sampling at 3 distinct time points (beginning and end of summer term and end of fall term) to assess for previous infection. A total of 11,966 participants across 131 schools were recruited in June 2020. Student age range was 4–12 years [no median given]. The authors estimated a SARS-CoV-2 infection rate of 4.1 (95% CI 0.1–22.8 [p-value not given]) per 100 000 students and 12.5 (1.5–45.0 [p-value not given]) per 100 000 staff per week of testing during the summer half-term. Of those seronegative participants in round 1 that were followed up in round 2, only 5 (0.4%, 95% CI 0.1 to 0.9 [p-value not given]) seroconverted. By December 2020, 55 (5.1%; 95% CI 3.8–6.5 [p-value not given]) of 1085 participants who were seronegative at recruitment in June 2020 had seroconverted. The authors report that infection rates were low during the summer term and higher during the autumn term. The authors conclude that primary schools were not sites of significant transmission. However, with the emergence of the new SARS-CoV-2 variants in the UK, additional research is needed to examine their transmission in educational settings.	This surveillance study in primary schools in England measured the incidence of SARS-CoV-2 infections, seroprevalence and seroconversion among staff and students after the lockdown ended in June 2020. The authors report higher incidence during the autumn term than summer, but conclude that primary schools were not sites of significant SARS-CoV-2 transmission.	Ladhani, S., Baawuah, F., Beckmann, J., et al. SARS-CoV-2 infection and transmission in primary schools in England in June–December, 2020 (sKIDs): an active, prospective surveillance study. The Lancet Child & Adolescent Health, 2021. <a href="https://doi.org/10.1016/S2352-4642(21)00061-4">https://doi.org/10.1016/S2352-4642(21)00061-4</a> .
COVID-19; children; mild infection	17-Mar-21	<a href="#">Claims and reasons about mild COVID-19 infection in children</a>	New Microbes and New Infections	Letter to the Editor	The authors discussed possible factors and mechanisms suggested for less severe SARS-CoV-2 infection in children compared to adults. Expression of angiotensin-converting enzyme 2 (ACE2), the SARS-CoV-2 receptor, in the respiratory tract of children appears to be less than that of adults. The soluble ACE2 in children has a protective role. Children generally have healthy vasculature and less endothelial damage, making them less vulnerable to disease. An important risk factor for severe COVID-19 is underlying diseases, and the prevalence of underlying diseases is higher in adults than in children. The authors also state that the frequency of childhood vaccinations causes trained immunity in this period. Children have more natural antibodies than adults; these antibodies cause a faster response to infectious agents. It is also possible that common cold	The authors discussed possible factors and mechanisms suggested for less severe SARS-CoV-2 infection in children compared to adults. Although there are several possible reasons for less severe infection in children, especially age-related difference in immune responses and different endothelial system function or physiology, the exact mechanisms/determinants of COVID-19 outcome between	Falahi S, Abdoli A, Kenarkoobi A. Claims and reasons about mild COVID-19 infection in children. New Microbes New Infect. 2021;100864. doi:10.1016/j.nmni.2021.100864.

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					coronaviruses in children have caused cross-immunity against SARS-CoV-2. "Inflame-aging" is an elderly-related conversion in immune response, which can correlate with severe outcome of SARS-CoV-2 infection in older adults. Although there are several possible reasons for less severe infection in children, especially age-related difference in immune responses and different endothelial system function or physiology, the exact mechanisms/determinants of COVID-19 outcome between children and adults remain unclear.	children and adults remain unclear.	
mental health; children; adolescents; COVID-19; outbreaks	17-Mar-21	<a href="#">Review: The mental health implications for children and adolescents impacted by infectious outbreaks - a systematic review</a>	Child and Adolescent Mental Health Early View	Systematic Review	This systematic review aims to review available research on the psychological implications for children and adolescents directly or indirectly exposed to an infectious outbreak and to provide recommendations for future research, practice and policy regarding children during pandemics. This study included 11 articles and the mean age based on 8 studies was 8.9 years (range 50 days-18 years). Upon review, it was found that children and adolescents reported fear, anxiety, and disruptions to their daily routines as a result of outbreaks. Further, parental mental health concerns also appeared to be associated with children's mental health. Practices that increased resilience in children included communicating regularly with parents, experiencing clear and sensitive communication from healthcare workers, and reporting that it was the responsibility of everyone to prevent the spread of infectious disease. This review reported that children who experience growth following adverse events are more aware of their own strengths and are better able to exert control and choice in situations of uncertainty and distress. The authors suggest that pandemics have an impact on the well-being of young people, even in the absence of children and adolescents directly experiencing the illness, and provide guidance around how to respond to children and adolescents during COVID-19 and future outbreaks.	This systematic review looked at available research on the psychological implications for children and adolescents directly or indirectly exposed to an infectious outbreak. The authors suggest that pandemics have an impact on the well-being of young people, even in the absence of directly experiencing the illness, and provide guidance around how to respond to children and adolescents during COVID-19 and future outbreaks.	Berger E, Jamshidi N, Reupert A, Jobson L, Miko A. Review: The mental health implications for children and adolescents impacted by infectious outbreaks - a systematic review [published online ahead of print, 2021 Mar 17]. Child Adolesc Ment Health. 2021;10.1111/camh.12453. doi:10.1111/camh.12453
COVID-19, SARS-CoV-2, Pregnancy, Universal screening	17-Mar-21	<a href="#">Samba II PCR Testing for COVID-19 in Pregnant Women: A Retrospective Cohort Study and Literature Review</a>	BioMed Central (BMC) Pregnancy and Childbirth	Research Article	The authors of this retrospective cohort study sought to ascertain the impact of rapid isothermal nucleic acid-based testing for SARS-CoV-2 in an unselected cohort of pregnant women in a large tertiary maternity unit. The authors also assessed the correlation between community prevalence and asymptomatic carriage of SARS-CoV-2. Data was collected over a 4-week period using hospital records. Literature searches were also performed across multiple repositories, and SARS-CoV-2 prevalence was subsequently extracted. 407 articles were screened, and 17 universal screening studies were selected to assess if the prevalence of SARS-CoV-2 positive pregnant women correlated with local prevalence rates. Results included nasopharyngeal and oropharyngeal swabs from 457/465 (98%) women during the study period. The median turnaround time for results was 5.3 hours (IQR 2.6-8.9 hours), with 92% of the results returned within 24 hours. Only one woman tested positive for SARS-CoV-2 (positive rate of 0.22%, 95% CI: 0.04-1.23%). One woman who tested negative developed a fever	The authors of this retrospective cohort study sought to ascertain the impact of rapid isothermal nucleic acid-based testing for SARS-CoV-2 in an unselected cohort of pregnant women in a large tertiary maternity unit over a 4-week study period. The authors also assessed the correlation between community prevalence and asymptomatic carriage of SARS-CoV-2. The authors concluded that testing using the SAMBA-II machine was acceptable to most pregnant women requiring admission and had a low turnaround time. There	Xu R, Pauley TA, Missfelder-Lobos H, Haddon RJ, Gupta RK, Chong HP. Samba II PCR testing for COVID-19 in pregnant women: a retrospective cohort study and literature review. BMC Pregnancy Childbirth. 2021;21(1):212. Published 2021 Mar 17. doi:10.1186/s12884-021-03653-4

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					postnatally following discharge but was lost to follow-up. No correlation between asymptomatic carriage in pregnant women and the reported regional prevalence of SARS-CoV-2 was identified from the literature review. The authors concluded that testing using the SAMBA-II machine was acceptable to most pregnant women requiring admission and had a low turnaround time. Asymptomatic carriage is low but not correlated to community prevalence rates. Screening pregnant women on admission will remain an important component in order to minimize nosocomial infection.	was no correlation between asymptomatic carriage in pregnant women and the reported regional prevalence of SARS-CoV-2.	
COVID-19; pregnancy; prenatal screening; survey; Japan	17-Mar-21	<a href="#">Mentality of pregnant women and obstetric healthcare workers about prenatal SARS-CoV-2 testing: A regional survey over the first wave of the COVID-19 pandemic in Japan</a>	Journal of Obstetrics and Gynaecology Research	Original Research	The authors assessed the mentality of pregnant women and obstetric healthcare workers regarding prenatal SARS-CoV-2 screening testing in Japan. A multicenter survey about prenatal SARS-CoV-2 screening testing was conducted among pregnant women, midwives, and nurses (M&Ns), and obstetricians at all delivery facilities in Fukui Prefecture, Japan, between June 30 - July 22, 2020. Of 297 pregnant women (87.2% between the ages 25-40 years, 150 (50.5%) underwent prenatal SARS-CoV-2 PCR testing, and all received negative results. 107 (71.3%) pregnant women reported that they could give birth with relief because of prenatal SARS-CoV-2 PCR tests, whereas 145 (48.8%) were concerned about the disadvantages of receiving positive prenatal PCR results. Of 287 M&Ns, 151 (52.6%) reported that prenatal PCR screening testing could reduce their anxiety about the infection, and this belief was more common among M&Ns working at the non-reception facility than among those at COVID-19 reception facilities (60.7% vs. 47.1%, p=0.02). Of 57 obstetricians, 31 (54.4%) agreed to prenatal SARS-CoV-2 PCR screening testing, which was significantly higher among obstetricians at non-reception facilities than those at COVID-19 reception facilities (70.3% vs. 25.0%, P< 0.01). 14 obstetricians (24.6%) were concerned about excessive medical treatment for asymptomatic pregnant women with false-positive PCR results. These findings indicate that pregnant women experience anxieties during the COVID-19 pandemic, and prenatal SARS-CoV-2 screening may reduce their anxiety to some extent. However, obstetrics staff at COVID-19 reception facilities are aware of the limits of prenatal screening and are concerned about excessive medical intervention due to false-positive results.	The authors assessed the mentality of pregnant women and obstetric healthcare workers regarding prenatal SARS-CoV-2 screening testing in Japan. The findings indicate that pregnant women experience anxieties during the COVID-19 pandemic, and prenatal SARS-CoV-2 screening may reduce their anxiety to some extent. However, obstetrics staff at COVID-19 reception facilities are aware of the limits of prenatal screening and are concerned about excessive medical intervention due to false-positive results.	Kawamura H, Orisaka M, Yoshida Y. Mentality of pregnant women and obstetric healthcare workers about prenatal SARS-CoV-2 testing: A regional survey over the first wave of the COVID-19 pandemic in Japan. J Obstet Gynaecol Res. 2021. doi:10.1111/jog.14740.
COVID-19; neonates; mothers; Delivery; congenital transmission; vertical transmission	17-Mar-21	<a href="#">Outcomes of newborns to mothers with COVID-19</a>	Infectious Diseases Now	Article	This study examined the medical records of 30 neonates born to women with COVID-19 between January-December 2020 in Morocco to provide information on maternal-fetal SARS-CoV-2 transmission and infant outcomes. Out of the 30 newborns, 28 had negative PCR test results for SARS-CoV-2. Among their mothers (n=30), 15 had fever, 9 had cough, 5 had anosmia, 1 had pneumonia, 2 were admitted to the ICU, and 1 died; the other 15 were asymptomatic. 20 delivered by C-section. The median birth term was 37 weeks and 2 days gestation. Most of the neonates were asymptomatic, except for 3 who presented with shortness of	This study in Morocco examined the medical records of 30 neonates born to women with COVID-19 to provide information on maternal-fetal SARS-CoV-2 transmission and infant outcomes. Out of the 30 newborns, 2 had positive RT-PCR results for SARS-CoV-2. The authors conclude that one of	Ghema K, Lehlmi M, Toumi H, et al. Outcomes of newborns to mothers with COVID-19. Infectious Diseases Now. 2021. https://www.sciencedirect.com/science/article/pii/S2666991921000658. doi: https://doi.org/10.1016/j.idnw.2021.03.003.

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					breath. Of the 2 infected neonates, the authors conclude that one represents a probable case of congenital SARS-CoV-2 infection. In this case, a female infant was born at 38 + 4 weeks gestation and immediately taken to the neonatal ICU without skin-to-skin contact with the mother or breastfeeding. 2 days later, the infant presented with a fever but normal leucocyte, neutrophil, platelets, D-dimer, and thoracic CT. Testing of nasopharyngeal swabs obtained 32 hours after birth resulted positive for SARS-CoV-2. The infant was treated with ceftriaxone, aminoglycoside, and azithromycin and discharged on day 6 with good outcomes. The authors conclude that in-utero SARS-CoV-2 vertical transmission is possible but occurs rarely.	these cases was likely the cause of in-utero vertical transmission.	
maximal oxygen peak; children; physical activity; lockdown, COVID-19	17-Mar-21	<a href="#">Cardiorespiratory fitness in adolescents before and after the COVID-19 confinement: a prospective cohort study</a>	European Journal of Pediatrics	Original Research	This study aims to evaluate cardiorespiratory fitness changes after the COVID-19 confinement among adolescents. 89 Spanish children (12 – 14 years old, mean age 13.3 years, at baseline; 49.8% female) had maximal oxygen intake (VO <sub>2</sub> max) levels estimated using the 20-m shuttle run test before and after the COVID-19 confinement. Baseline data was collected between Nov 20 – 22, 2019 and reassessed from Nov 18 – 20, 2020. Paired t-tests estimated an overall decrease in VO <sub>2</sub> max of – 0.5 ml.kg <sup>-1</sup> . min <sup>-1</sup> (SD 0.3, p = 0.12), with the most significant reductions in VO <sub>2</sub> max observed in girls aged 14 years (– 1.5 ml.kg <sup>-1</sup> . min <sup>-1</sup> (SD 0.6, p < 0.05)). Boys aged 12 years also presented an important decrease in VO <sub>2</sub> max (– 1.2 ml.kg <sup>-1</sup> . min <sup>-1</sup> (SD 0.7, p = 0.14)). Healthy Fitness Zone levels also decreased in the group by 3.4% over the examined period. While the findings indicate a lower impact than expected of the COVID-19 confinement over VO <sub>2</sub> max of schooled teenagers, the authors report all examined subgroups showed lower levels in relation to a normal VO <sub>2</sub> max rate development. The authors conclude the COVID-19 confinement might delay the normal development of VO <sub>2</sub> max in adolescents and that strategies to tackle this concerning decline are warranted.	This study aims to evaluate cardiorespiratory fitness changes after the COVID-19 confinement among Spanish adolescents. The authors conclude the COVID-19 confinement might delay the normal development of VO <sub>2</sub> max in adolescents and that strategies to tackle this concerning decline are warranted.	López-Bueno R, Calatayud J, Andersen LL, et al. Cardiorespiratory fitness in adolescents before and after the COVID-19 confinement: a prospective cohort study [published online, 2021 Mar 17]. Eur J Pediatr. 2021;1-7. doi:10.1007/s00431-021-04029-8
COVID-19, household food insecurity, pregnancy, rapid surveys, validity	17-Mar-21	<a href="#">A self-applied valid scale for rapid tracking of household food insecurity among pregnant women in Sri Lanka</a>	Maternal and Child Nutrition	Original Article	This study reports the validation of the Latin American and Caribbean Food Security Scale (Escala Latinoamericana y Caribena de Seguridad Alimentaria [ELCSA]) among pregnant women in Sri Lanka. The 8-item adult version of the ELCSA was translated from English to Sinhala and Tamil. Cognitive testing (on 10 pregnant women and five local experts) and psychometric validation of the self-administered household food insecurity (HFI) tool were conducted among pregnant women (n = 269) attending the special clinics of the Rajarata Pregnancy Cohort in Anuradhapura, Sri Lanka in February 2020. Concurrent validity was tested using psychological distress. The scale was internally consistent (Cronbach's alpha = 0.79) and had a good model fit (Rasch items in fit statistic range: 0.85 to 1.07). Item 8 ('did not eat for the whole day') was removed from the model fit analysis, as it was not affirmed by respondent. Item severity scores ranged from -2.15 for 'not eating a diverse diet' to 4.43 for 'not eating during the whole day'. Concurrent validity	This study reports the validation of the Latin American and Caribbean Food Security Scale (Escala Latinoamericana y Caribena de Seguridad Alimentaria [ELCSA]) among pregnant women in Sri Lanka. The authors conclude the self-applied version of ELCSA-pregnancy in Sri Lanka is a valid and feasible valid tool and endorse it to track household food insecurity among pregnant women in lower income countries during the COVID-19 pandemic.	Agampodi TC, Hromi-Fiedler A, Agampodi SB, et al. A self-applied valid scale for rapid tracking of household food insecurity among pregnant women in Sri Lanka [published online, 2021 Mar 17]. Matern Child Nutr. 2021;e13165. doi:10.1111/mcn.13165

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					between HFI and psychological distress was confirmed ( $r = 0.15$ , $p < 0.05$ ). The authors conclude the self-applied version of ELCSA-pregnancy in Sri Lanka is a valid and feasible valid tool and endorse it to track HFI among pregnant women in lower income countries during the COVID-19 pandemic.		
COVID-19; pediatric infectious disease; immunization; immunology	17-Mar-21	<a href="#">COVID-19 symptom surveillance in immunocompromised children and young people in the UK: a prospective observational cohort study</a>	British Medical Journal (BMJ) Open	Original Research	Through this prospective cohort study, the authors aimed to describe the frequency of symptoms compatible with SARS-CoV-2 infection and patient/parent anxiety in immunocompromised children and young people in the UK during the COVID-19 pandemic. A total of 1490 immunocompromised patients under 18 years of age (median age = 11 years; 54% female) were recruited from 46 UK hospitals and administered weekly online questionnaires regarding symptoms, test results, hospital admission, and impact on daily life. Over 16 weeks during the first wave of the COVID-19 pandemic (the study period spanned March-July 2020), 0 SARS-CoV-2 infections were diagnosed in the cohort. However, 922 (67%) patients reported at least 1 symptom consistent with suspected infection over the study period. Most commonly reported symptoms included joint pain, fatigue, headache, nausea, and muscle pain. Nearly 62% of patients reported high levels of anxiety (scores of 7–10 out of 10) at the start of the study, with anxiety levels remaining high throughout the study period. The authors concluded that symptom-based screening to facilitate early detection of SARS-CoV-2 infection might not be helpful in immunocompromised patients < 18 years old.	The authors describe the frequency of symptoms compatible with SARS-CoV-2 infection and patient/parent anxiety in immunocompromised children and young people in the UK during the COVID-19 pandemic. Although symptoms related to SARS-CoV-2 infection in children were common, there were no positive tests in this large immunocompromised cohort, and anxiety levels were high. Symptom-based screening to facilitate early detection of SARS-CoV-2 infection may not be helpful in these individuals.	Shaunak M, Patel R, Driessens C, et al. COVID-19 symptom surveillance in immunocompromised children and young people in the UK: a prospective observational cohort study. <i>BMJ Open</i> . 2021;11(3):e044899. Published 2021 Mar 17. doi:10.1136/bmjopen-2020-044899
seroprevalence; SARS-CoV-2; schools; COVID-19	17-Mar-21	<a href="#">Clustering and longitudinal change in SARS-CoV-2 seroprevalence in school children in the canton of Zurich, Switzerland: prospective cohort study of 55 schools</a>	British Medical Journal (BMJ)	Original Research	This prospective cohort study examined longitudinal changes in SARS-CoV-2 seroprevalence and clustering patterns of children attending schools in Zurich, Switzerland, between June and November 2020. A total of 2603 children in June-July 2020 (summer) and 2552 children in October-November 2020 (autumn) were enrolled in the study, representing 275 classes across 55 randomly chosen, unique schools (age range: 6-16 years). Overall SARS-CoV-2 seroprevalence was 2.4% (95% CI: 1.4% to 3.6%) in the summer and 4.5% (95% CI: 3.2% to 6.0%) in late autumn in children who were not previously seropositive, leading to an estimated 7.8% (95% CI: 6.2% to 9.5%) of children who were ever seropositive. Seroprevalence did not differ among age groups (6-9; 9-13; 12-16 years). Among the 2223 children who had serology tests at both testing rounds, 28/70 (40%) who were previously seropositive became seronegative, and 109/2153 (5%) who were previously seronegative became seropositive. At least one newly seropositive child was detected in 47 of 55 schools and in 90 of 275 classes. Class level and school level (lower, middle, or upper) together explained 32% of the variance in seropositivity. Clustering of seropositive children occurred only in a few classes despite an increase in overall seroprevalence during a period of moderate to high community SARS-CoV-2 transmission. These findings, though subject to change	In this cohort study, the authors identified clusters and longitudinal changes in SARS-CoV-2 seropositivity among 2603 school children in Zurich, Switzerland. Seroprevalence increased from 2.4% in June-July to 7.8% in October-November 2020. Seroprevalence did not differ by students' age group, and clustering was generally rare within classes, supporting the potential for school safety during the COVID-19 pandemic.	Ulyte A, Radtke T, Abela IA, et al. Clustering and longitudinal change in SARS-CoV-2 seroprevalence in school children in the canton of Zurich, Switzerland: prospective cohort study of 55 schools. <i>BMJ</i> . 2021;372:n616. Published 2021 Mar 17. doi:10.1136/bmj.n616

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					in the face of viral variants, hold promise in the safe re-opening and maintenance of in-person schooling.		
risk factor; COVID-19; pediatrics; ICU	17-Mar-21	<a href="#">Characteristics and risk factors for SARS-CoV-2 among children in Italy: a cross-sectional study in 20 pediatric centers</a>	medRxiv	Preprint (not peer-reviewed)	This risk factor analysis of 2494 children tested for SARS-CoV-2 across 20 pediatric hospital centers in Italy sought to understand the clinical characteristics and risk factors for SARS-CoV-2 infection. Cases aged 0-18 years who tested positive for SARS-CoV-2 infection between February 23 and May 24, 2020, identified through hospital screening programs, were included in the study. Around 86% of the sample had COVID-19-suggestive symptoms, 54% of children were in the 10-18 years category, and 52% of participants were female. Nearly 80% of participants who tested positive had reported contact with another SARS-CoV-2-positive individual, and 72% reported having relatives with respiratory symptoms. Clinical presentation of SARS-CoV-2 included bedside fever (82%), respiratory symptoms (60%), gastrointestinal (18%), neurological (19%), cutaneous (4%), and other flu-like presentations (18%). In a multivariable analysis, the authors found exposure history (OR: 39.83, p<0.01), cardiac disease (OR: 3.10, p<0.01), fever (OR: 3.05, p<0.01), and anosmia/ageusia (OR: 4.08, p<0.01) as significant risk factors for SARS-CoV-2 infection. In a subset of 190 SARS-CoV-2-positive children, only 4 (2%) required respiratory support for COVID-19, and 2 (1%) were admitted to the ICU, while all children recovered from COVID-19. The authors suggest that guidelines for SARS-CoV-2 testing be updated based on the evidence on the clinical presentation of the disease in children and adults, including the significant risk factors identified here.	The authors identify the clinical characteristics and risk factors for SARS-CoV-2 among children across 20 pediatric hospital centers in Italy. The majority of cases reported bedside fever and respiratory symptoms. Exposure history, fever, and anosmia/ageusia are strong risk factors for SARS-CoV-2 infection and COVID-19 in children, and could be implemented in guidelines for SARS-CoV-2 testing in children.	Lazzerini M, Sforzi I, Trapani S, et al. Characteristics and risk factors for SARS-CoV-2 among children in Italy: a cross-sectional study in 20 pediatric centers. <i>medRxiv</i> . Published 2021 Mar 17. doi: 10.1101/202.03.17.21253610
COVID-19; adolescents; STI testing; United States	19-Mar-21	<a href="#">The impact of the COVID-19 pandemic on STI/HIV testing among adolescents in a large pediatric primary care network [Free Access to Abstract Only]</a>	Sexually Transmitted Diseases	Original Research	The authors assessed the impact of the COVID-19 pandemic on sexually transmitted infections (STI) and HIV testing among adolescents in a large pediatric primary care network in the United States. STI testing encounters for patients aged 15-21 years were compared between the pandemic period (March 1 - October 31, 2020) and a comparable pre-pandemic period (March 1 - October 31, 2019). The median age of patients was 17 years, 71.9% were Black or African American, and 54.6% used public insurance. The results showed that during the pandemic, STI test counts decreased (3476 STI testing encounters among 2770 unique patients in 2020 vs. 4699 STI testing encounters among 3723 unique patients in 2019). Despite the reductions in testing volume, the raw case count of infections identified was relatively stable from the pre-pandemic period to the pandemic period (chlamydia: 453 vs. 398; gonorrhea: 72 vs. 103; syphilis: 2 vs. 3; HIV: 2 vs. 1). There was a significant increase in test positivity rate for chlamydia (10.4% vs. 12.7%, p=0.003) and gonorrhea (1.7% vs. 3.4%, p<0.001) during the pandemic period. The findings highlight that although the total volume of testing decreased, adolescents continue to be highly vulnerable to STIs and their sequelae during the pandemic.	The authors assessed the impact of the COVID-19 pandemic on sexually transmitted infections (STI) and HIV testing among adolescents in a large pediatric primary care network in the United States. STI test counts decreased, and test positivity increased during the pandemic period. The findings highlight that although the total volume of testing decreased, adolescents continue to be highly vulnerable to STIs and their sequelae during the pandemic.	Bonett S, Petsis D, Dowshen N, et al. The impact of the COVID-19 pandemic on STI/HIV testing among adolescents in a large pediatric primary care network. <i>Sex Transm Dis</i> . 2021. doi:10.1097/OLQ.0000000000001427.

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Mental Health, Children, COVID-19, Pandemic	19-Mar-21	<a href="#">Mental health of children and young people during pandemic</a>	British Medical Journal (BMJ)	Editorial	This editorial explores whether COVID-19 restrictions have precipitated an epidemic of mental health conditions among children and adolescents. While children are at lowest risk of death from COVID-19, concerning signals remain about the pandemic's effects on their mental health, which are unevenly experienced across different age groups and socioeconomic circumstances. Many studies have reported fluctuating mental health and suicide risk during the pandemic, but few focused on children and adolescents <18 years. Interpretation of studies is difficult because of differences in sampling frame, respondent (parent or child), response rates, timing of data collection, and underlying trends in the prevalence of mental health conditions. Known triggers for self-harm and poor mental health are aggravated by pandemic restrictions, including separation from friends, arguments with parents, unresolvable arguments on social media, strained finances, academic stress, and feelings of isolation. Mental health deterioration is clearest for families facing other adversities. While the long-term clinical implications of COVID-19 are uncertain, education has been disrupted and many young people now face an uncertain future. The authors advocate for policy makers to recognize the importance of education to social and mental health outcomes of children and adolescents during the COVID-19 pandemic.	This editorial explores whether COVID-19 restrictions have precipitated an epidemic of mental health conditions among children and adolescents. The authors advocate for policy makers to recognize the importance of education to social and mental health outcomes of children and adolescents during the COVID-19 pandemic.	Ford T, John A, Gunnell D. Mental health of children and young people during pandemic [published correction appears in BMJ. 2021 Mar 19;372:n765]. <i>BMJ</i> . 2021;372:n614. Published 2021 Mar 10. doi:10.1136/bmj.n614
COVID-19; pregnancy; transitory fetal skin edema; Spain	16-Mar-21	<a href="#">Transitory Fetal Skin Edema in a Pregnant Patient with a Mild SARS-CoV-2 Infection</a>	Case Reports in Obstetrics and Gynecology	Case Report	The authors described a case of transitory fetal skin edema and polyhydramnios in a pregnant patient with COVID-19 in Spain, after a negative SARS-CoV-2 RT-PCR result [date not specified]. The 22-year-old woman (28 3/7 weeks of gestation) presented to the emergency department with a 3-day history of mucus [sic] and shortness of breath, but no fever or cough. Her partner had been admitted to the hospital 24 hours earlier, due to pneumonia and a positive RT-PCR test for SARS-CoV-2. The pregnant patient also tested positive for SARS-CoV-2 RT-PCR on nasopharyngeal swabs. A chest radiograph was unremarkable, and the fetal ultrasound was reassuring. The woman's symptoms lasted for 10 days, after which she tested negative for SARS-CoV-2 RT-PCR at 32 6/7 weeks' gestation. However, obstetric ultrasound at 36 3/7 weeks gestation revealed fetal skin edema and polyhydramnios. These conditions resolved spontaneously in utero. The patient underwent a spontaneous vaginal delivery at 39 4/7 weeks of pregnancy, and the neonate did not present any abnormal findings (although neither cord blood PCR nor antibodies were assessed). The authors state that these findings support the need for close monitoring of women who have had SARS-CoV-2 infection during pregnancy, in order to fully understand fetal impact.	The authors described a case of transitory fetal skin edema and polyhydramnios in a pregnant patient with COVID-19 in Spain, after a negative SARS-CoV-2 RT-PCR result. The 2 conditions resolved spontaneously in utero. The authors state that these findings support the need for close monitoring of women who have had SARS-CoV-2 infection during pregnancy, in order to fully understand fetal impact.	Martínez-Varea A, Desco-Blay J, Monfort S, et al. Transitory Fetal Skin Edema in a Pregnant Patient with a Mild SARS-CoV-2 Infection. <i>Case Rep Obstet Gynecol</i> . 2021. doi:10.1155/2021/5552877.
COVID-19; Stress; Life change;	16-Mar-21	<a href="#">The COMET study: Examining the effects of</a>	Appetite	Original Research	The cross-sectional COMET (Effect of COVID-19 on Maternal Feeding Practices) Study explored the effects of the COVID-19 pandemic on eating and child feeding behaviors of mothers in Los Angeles	The cross-sectional COMET (Effect of COVID-19 on Maternal Feeding Practices) Study explored	Wang SD, Devjani S, Chillakanti M et al. The COMET study: Examining the effects of

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Mother; Reward feeding; Dysregulated eating; Child feeding practices		<a href="#">COVID-19-related perceived stress on Los Angeles Mothers' dysregulated eating behaviors, child feeding practices, and body mass index</a>			County, United States. 197 mothers and female legal guardians (child age range: 5-11 years [no mean given]) completed an online survey between May 19-June 17, 2020. Increased COVID-related stress was associated with: reported loss of work hours ( $p = 0.04$ ), loss of job ( $p = 0.02$ ), reduced ability to afford childcare ( $p = 0.04$ ) and reduced ability to afford rent/mortgage ( $p = 0.03$ ). The most common coping mechanism with COVID-related stress was eating comfort foods such as candy and chips (58.7%). Mothers' BMI was negatively associated with rewarding their child's eating ( $r = -0.19$ , $p = 0.03$ ), and positively associated with mothers' emotional eating ( $r = 0.30$ , $p < 0.01$ ) and COVID-related stress ( $r = 0.18$ , $p = 0.04$ ). The number of life changes due to COVID-19 were positively associated with rewarding child's eating ( $r = 0.20$ , $p = 0.03$ ) and rewarding behavior with food ( $r = 0.24$ , $p < 0.01$ ). The researchers conclude that their results indicate that the COVID-19 pandemic has had an extensive impact on mothers' eating and child feeding practices.	the effects of the COVID-19 pandemic on eating and child feeding behaviors of mothers in Los Angeles County, United States. Researchers conclude that the pandemic has impacted mothers' BMI, emotional eating, and use of food as a reward for their children.	COVID-19-related perceived stress on Los Angeles Mothers' dysregulated eating behaviors, child feeding practices, and body mass index. Appetite. 1 August 2021. doi: <a href="https://doi.org/10.1016/j.appet.2021.105209">https://doi.org/10.1016/j.appet.2021.105209</a>
COVID-19; child and adolescent mental health; research priorities	16-Mar-21	<a href="#">Editors' Note and Special Communication: Research Priorities in Child and Adolescent Mental Health Emerging From the COVID-19 Pandemic</a>	Journal of the American Academy of Child and Adolescent Psychiatry	Original Research / Editorial	This survey of child and adolescent development and pediatric mental health professionals was conducted by the Senior Editors for the Journal of the American Academy of Child & Adolescent Psychiatry, with the goal of identifying recommendations for research priorities during the COVID-19 pandemic. An online survey was published between June 30-July 26, 2020, and received answers from a majority United States (69%) and urban/suburban (91%) population. Professionals were most concerned with the following possible impacts of the COVID-19 pandemic on children: increased stress in families; increased rates of abuse/domestic violence; impact of the pandemic on child development, especially social development; impacts on child and adolescent mental health. They wished to explore the following areas of support for children during the pandemic: material support for families; parents and children learning more about each other; access to health care; flexibility to spend time with family; more quality time for children and their families. The top areas of research questions professionals wanted to see addressed were: mental health (vulnerability); families and childhood; service delivery/support; social isolation; impact on education; developmental effects. The editors present their results in hope that they can assist ongoing research and analysis during the COVID-19 pandemic.	This survey of child and adolescent development and pediatric mental health professionals was conducted by the Senior Editors for the Journal of the American Academy of Child & Adolescent Psychiatry with the goal of identifying recommendations for research priorities during the COVID-19 pandemic. Their results identify areas of concern, research, and support that professionals wish to see addressed through research.	Novins DK, Stoddard J, Althoff RR et al. Editors' Note and Special Communication: Research Priorities in Child and Adolescent Mental Health Emerging From the COVID-19 Pandemic. Journal of the American Academy of Child & Adolescent Psychiatry. March 16 2021. doi: <a href="https://doi.org/10.1016/j.jaac.2021.03.005">https://doi.org/10.1016/j.jaac.2021.03.005</a>
COVID-19; children; risk factors; epidemiology	16-Mar-21	<a href="#">Epidemiology, Clinical Features and Prognostic Factors of Pediatric SARS-CoV-2 Infection: Results From an Italian Multicenter</a>	Frontiers in Pediatrics	Original Research	This study investigated the epidemiological, clinical and therapeutic characteristics of SARS-CoV-2 infection in a pediatric population, focusing on risk factors for complicated and critical disease. As of September 15, 2020, 759 subjects, <18 years old, with a positive RT-PCR for SARS-CoV-2, were enrolled from 11 exclusively pediatric hospitals, 51 pediatric units and general pediatricians across Italy. The mean age was 7.3 years; of those, 160 (21.2%) were infants and 40 were neonates. 91 (12%) children were asymptomatic; of the 88% of symptomatic children, fever was the most common	The authors investigated the epidemiological, clinical and therapeutic characteristics of SARS-CoV-2 infection in a pediatric population, focusing on risk factors for complicated and critical disease. Overall, the authors suggest that complications of COVID-19 in	Garazzino S, Lo Vecchio A, Pierantoni L, et al. Epidemiology, Clinical Features and Prognostic Factors of Pediatric SARS-CoV-2 Infection: Results From an Italian Multicenter Study. Front Pediatr. 2021;9:649358.

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
		<a href="#">Study</a>  <a href="#">[Free Access to Abstract Only]</a>			symptom (81.9%), followed by cough and rhinitis. Respiratory disturbances were reported in 347 patients (51.9%), with dyspnea in 62. 388/759 patients were hospitalized; the median duration of hospital stay was 6 days (IQR 4;11, mean 8.72 days). The hospitalization rate was significantly higher among ex-preterm infants ( $p = 0.014$ ) and among children with co-morbidities or immunodeficiency ( $p < 0.01$ and $0.009$ , respectively). Respiratory complications were reported in 123 children (16.2%) and included pneumonia ( $n = 109$ ), severe acute respiratory illness ( $n = 50$ ) and acute respiratory distress syndrome ( $n = 5$ ). MIS-C occurred as a complication of SARS-CoV-2 infection in 30 children (3.9%) with a median age of 6.6 years (IQR 3.4; 9.6). 30 children (4.0%) required intensive care support for COVID-19. ICU admission in the MIS-C group was 6 times higher than in other children: 20.0% (6/30) vs. 3.3% (24/729, $p < 0.01$ ), respectively. Further, viral co-infection was statistically related to ICU admission ( $p = 0.009$ ). Overall, the authors suggest that complications of COVID-19 in children are related to comorbidities, viral co-infections are additional risk factors for disease progression, and the length of hospital stay and the risk of complications increase with age.	children are related to comorbidities, viral co-infections are additional risk factors for disease progression, and the length of hospital stay and the risk of complications increase with age.	Published 2021 Mar 16. doi:10.3389/fped.2021.649358
COVID-19; deaths; childhood vaccination; immunity; MCV, BCG, HAQI	16-Mar-21	<a href="#">Association between live childhood vaccines and COVID-19 outcomes: a national-level analysis</a>	Epidemiology and Infection	Short Paper	The authors conducted an ecological study of 140 countries to assess the association between live childhood vaccines (Bacillus Calmette–Guérin (BCG) or measles-containing virus (MCV)) and a reduction in the risk of COVID-19. They used publicly available national-level data through July 13, 2020, and the data on MCV and BCG coverage from 1970-2018 obtained from the WHO/UNICEF website. They also used the Healthcare access and quality index (HAQI), a single metric of population health, to include the high-dimensional highly correlated predictors while isolating the causal factors to construct linear regression models. Using cumulative vaccine coverage indices, the authors found that the variation of BCG coverage (BCG index 2005 with 136 countries: median: 0.24, range: 0–0.5) was wider than that of MCV coverage (MCV index 2005 with 138 countries: median 0.23, range 0.11–0.47). They also noted a wide variation of HAQI among 140 countries (median: 68.1, range: 18.6–97.1). The association of BCG with fewer reported-COVID-19 deaths remained after adjusting for HAQI ( $p=0.021$ ), and the interaction between BCG and COVID-19 death rates increased as a function of HAQI ( $p=0.038$ ). The interaction between MCV and fewer reported COVID-19 deaths was not statistically significant after adjusting for HAQI( $p=0.091$ ). COVID-19 testing rate was associated with higher HAQI. COVID-19 testing rate and other markers of better health infrastructure (life expectancy, number of hospitals per population) were negatively associated with BCG index 2005 and MCV index 2005. Furthermore, both COVID-19 testing rate and life expectancy were associated with higher COVID-19-related mortality rates. These relationships between healthcare metrics,	The authors conducted an ecological study of 140 countries to assess the association between live childhood vaccines (Bacillus Calmette–Guérin (BCG) or measles-containing virus (MCV)) and a reduction in the risk of COVID-19. The magnitude of association between BCG coverage and COVID-19 death rate varied according to HAQI, and MCV coverage had little effect on the association between BCG and COVID-19 deaths. These relationships between healthcare metrics, vaccine coverage, and COVID-19-related mortality rates suggest that several healthcare system metrics (frequency of COVID-19 testing, life expectancy) are inversely associated with vaccine coverage but positively associated with reported COVID-19 death rates.	Ogimi C, Qu P, Boeckh M, et al. Association between live childhood vaccines and COVID-19 outcomes: a national-level analysis. Epidemiol Infect. 2021 Mar 16;149:e75. doi: 10.1017/S0950268821000571. PMID: 33722335; PMCID: PMC8010281.

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					vaccine coverage, and COVID-19-related mortality rates suggest that several healthcare system metrics (frequency of COVID-19 testing, life expectancy) are inversely associated with vaccine coverage but positively associated with reported COVID-19 death rates.		
Coronary artery abnormalities; Hypotension; Kawasaki disease; Multisystem inflammatory syndrome associated with coronavirus disease; Myocarditis; Pediatric inflammatory multisystem syndrome-temporally associated to SARS-CoV-2 infection; SARS-CoV-2	16-Mar-21	<a href="#">Defining Kawasaki disease and pediatric inflammatory multisystem syndrome-temporally associated to SARS-CoV-2 infection during SARS-CoV-2 epidemic in Italy: results from a national, multicenter survey</a>	Pediatric Rheumatology Online Journal	Original Research	While there is growing evidence of PIMS-TS or MIS-C, the extent of the clinical spectrum of the disease and the exact pathophysiology are still unknown. The Rheumatology Study Group of the Italian Pediatric Society launched a national, online survey on 24 April 2020 to better characterize Kawasaki disease (KD) and KD-like multisystem disease during the COVID-19 pandemic. The study population was 149 children hospitalized between 1 February and 31 May 2020 with a clinical diagnosis of KD (Kawasaki Disease Group-KDG, n=96) or KD-like multi-inflammatory syndrome (Kawacovid Group-KCG, n=53). Patients' demographic, clinical, laboratory data, treatment information, and outcomes are presented in a table. The KCG group tested positive for SARS-CoV-2 more frequently (75.5% vs 20%; p<0.0001). KCG children were significantly older (7 years; IQR 4.5-11 years vs 2 years; IQR 1-4 years; p<0.0001), and cardiac involvement was more common (60.4% myocarditis, 37.8% hypotension/non-cardiogenic shock in the KCG group). Lymphopenia, higher C-Reactive Protein levels, elevated ferritin and troponin-T characterized KCG. The KDG group received IV immunoglobulin and acetylsalicylic acid (ASA) more frequently (81.3% vs 66%; p=0.04 and 71.9% vs 43.4%, p=0.001, respectively). The KCG group received glucocorticoids more frequently (56.6% vs 14.6%; p<0.0001). Short-term follow-up data showed minor complications and no deaths. Clinical or laboratory characteristics between a historic cohort of Italian KD patients and KDG patients were not different, suggesting that SARS-CoV-2-triggered KD does not determine specific disease features.	The retrospective, observational, multicenter study conducted in Italy in April 2020 revealed that SARS-CoV-2 infection might be related to 2 distinct inflammatory diseases in children: Kawasaki Disease (KD) and PIMS-TS, the latter of which is characterized by an older age onset and clinical peculiarities including myocarditis. The study subjects had excellent outcomes with few complications and no death.	Cattalini M, Della Paolera S, Zunica F, et al. Rheumatology Study Group of the Italian Pediatric Society. Defining Kawasaki disease and pediatric inflammatory multisystem syndrome-temporally associated to SARS-CoV-2 infection during SARS-CoV-2 epidemic in Italy: results from a national, multicenter survey. <i>Pediatr Rheumatol Online J</i> . 2021 Mar 16;19(1):29. doi: 10.1186/s12969-021-00511-7. PMID: 33726806; PMCID: PMC7962084.
COVID-19; corticosteroids; prednisolone; pregnancy; preterm birth	16-Mar-21	<a href="#">Corticosteroids Use in Pregnant Women with COVID-19: Recommendations from Available Evidence</a>	Journal of Multidisciplinary Healthcare	Review	The authors described recommendations based on evidence related to the use of corticosteroids in pregnant women with COVID-19. The RECOVERY trial (University of Oxford) deduced that low-dose dexamethasone (6mg) reduced mortality by up to one-third among COVID-19 patients on mechanical ventilation and one-fifth among those who received supplemental oxygen. Pregnant women in this trial received either oral prednisolone or IV hydrocortisone. Based on the RECOVERY trial findings, the Royal College of Obstetricians and Gynecologists recommends that pregnant women with moderate-to-severe COVID-19 receive oral prednisolone or IV hydrocortisone. These two drugs are not only cheaper in most resource-limited settings, but also readily available. However, the WHO currently does not explicitly specify which corticosteroid to use among pregnant women with moderate-to-severe COVID-19. There is also some evidence favoring the use of methylprednisolone over prednisolone among pregnant women with severe COVID-19. When preterm delivery is imminent, the patient can receive the	The authors described recommendations based on evidence related to the use of corticosteroids in pregnant women with COVID-19. The Royal College of Obstetricians and Gynecologists recommends that pregnant women with moderate-to-severe COVID-19 receive oral prednisolone or IV hydrocortisone. However, the WHO currently does not explicitly specify which corticosteroid to use among pregnant women with moderate-to-severe COVID-19.	Magala Ssekandi A, Sserwanja Q, Olal E, et al. Corticosteroids Use in Pregnant Women with COVID-19: Recommendations from Available Evidence. <i>J Multidiscip Healthc</i> . 2021;14:659-663. doi:10.2147/JMDH.S301255.

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					short course of dexamethasone to accelerate fetal lung maturation. She can then continue methylprednisolone treatment for the duration as stipulated by the country-specific COVID-19 guidelines.		
COVID-19, SARS-CoV-2, pregnancy, cord blood mononuclear cells, fetal immune response	16-Mar-21	<a href="#">Single-cell immunophenotyping of the fetal immune response to maternal SARS-CoV-2 infection in late gestation</a>	Research Square	Preprint (not peer-reviewed)	The authors investigate the fetal immune response to maternal SARS-CoV-2 infection by performing single-cell RNA sequencing and T-cell receptor (TCR) sequencing on umbilical cord blood mononuclear cells (CBMC) from newborns of mothers with SARS-CoV-2 in the third-trimester (cases) or without SARS-CoV-2 infection. They sought to investigate innate and adaptive fetal immune transcriptional changes in pregnancies in the absence of vertical transmission. CBMC were obtained from 3 infants born to mothers with mild SARS-CoV-2 but without neonatal infection, and 3 controls (mothers without disease) matched for co-morbidities. None of the 3 infants born to mothers with SARS-CoV-2 were positive for SARS-CoV-2 postnatally, had detectable SARS-CoV-2 mRNA in the placenta, or developed any neonatal morbidity. All mothers with COVID-19 in the third trimester were classified as having mild disease without respiratory support. The authors identified widespread gene expression changes in CBMC from cases, including upregulation of interferon-stimulated genes and Major Histocompatibility Complex genes in CD14 + monocytes; transcriptional changes suggestive of activation of plasmacytoid dendritic cells, and activation and exhaustion of NK cells and CD8 + T-cells. They also observed fetal T-cell antigen receptor expansion in cases. As none of the infants were infected with SARS-CoV-2, these results suggest that SARS-CoV-2 maternal infection might modulate the fetal immune system in the absence of vertical transmission. The authors highlight the need for additional studies to characterize the fetal immune responses in pregnancies affected by SARS-CoV-2 infection.	The authors undertook a very detailed analysis of cord blood mononuclear cells (CBMC) and T-cell receptor sequencing from newborns of mothers infected with and without SARS-CoV-2 (cases versus controls). They identified widespread gene expression changes in CBMC from cases, transcriptional changes, and fetal T-cell antigen receptor expansion in cases. As none of the infants were infected with SARS-CoV-2, these results suggest that SARS-CoV-2 maternal infection might modulate the fetal immune system in the absence of vertical transmission.	Matute J, Finander B, Pepin D, et al. Single-cell immunophenotyping of the fetal immune response to maternal SARS-CoV-2 infection in late gestation. Preprint. <i>Res Sq.</i> 2021;rs.3.rs-311000. Published 2021 Mar 16. doi:10.21203/rs.3.rs-311000/v1
COVID-19; pediatric; IgG; IgM; MIS-C; nucleocapsid; PIMS-TS; S glycoprotein; United Kingdom	16-Mar-21	<a href="#">SARS-CoV-2-specific IgG1/IgG3 but not IgM in children with Pediatric Inflammatory Multi-System Syndrome</a>	Pediatric Allergy and Immunology	Letter to the Editor	The authors discussed antibody response to SARS-CoV-2 infection with PIMS-TS in pediatric patients in the UK. Antibody responses in sera from 8 patients of mixed ethnicity (n=5 male; median age=9 years, range 7-14 years) admitted to a hospital between 28 April-8 May 2020 were examined. In all cases PCR tests for SARS-CoV-2 infection were negative. 7 patients had overlapping features of hyper-inflammation with either typical or atypical Kawasaki disease, and 1 patient had overlapping features of hyper-inflammation and toxic shock syndrome. All patients had fever and at least 1 gastrointestinal symptom (abdominal pain, vomiting and diarrhea), whereas 6 patients had a rash and non-exudative conjunctivitis. 4 children showed mucosal and peripheral changes and only 2 children presented with lymphadenopathy. The findings showed that the children had antibodies against SARS-CoV-2, specifically IgG1, IgG3 and IgA, in absence of maintained IgM responses. Since children with PIMS-TS can be PCR-negative for SARS-CoV-2, understanding these antibody responses to SARS-CoV-2 in these	The authors discussed antibody response to SARS-CoV-2 infection with PIMS-TS in pediatric patients in the UK. The findings showed that the children had antibodies against SARS-CoV-2, specifically IgG1, IgG3 and IgA, in absence of maintained IgM responses. Since children with PIMS-TS can be PCR-negative for SARS-CoV-2, understanding these antibody responses may help develop diagnostic strategies and help understand the nature of the immune response.	Perez-Toledo M, Faustini SE, Jossi SE, et al. SARS-CoV-2-specific IgG1/IgG3 but not IgM in children with Pediatric Inflammatory Multi-System Syndrome. <i>Pediatr Allergy Immunol.</i> 2021. doi:10.1111/pai.13504.

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					children may help develop diagnostic strategies and help understand the nature of the immune response.		
Pregnancy, C-section, delivery, intubation, prone	16-Mar-21	<a href="#">Prone positioning for severe ARDS in a postpartum COVID-19 patient following caesarean section</a>	British Medical Journal (BMJ) Case Reports	Case Report	In this case report, a 31-year-old female at 36 weeks' gestation presented with a 3-day history of malaise, myalgia, cough, dyspnea, anosmia, and subjective fever in the USA. She was febrile and saturating 92% on room air, tachypneic, and tachycardic. Chest X-ray was concerning for pneumonia. Laboratory results were significant for lymphopenia, neutrophilia, anemia, and elevated C-reactive protein. SARS-CoV-2 infection was confirmed via nasopharyngeal swab, and she was admitted. Ceftriaxone and azithromycin were started, but the patient developed worsening hypotension and tachypnea that was refractory to supplemental oxygen via high-flow nasal cannula. Steroids were initiated and after a brief period of improvement, her respiratory status declined. Chest X-ray demonstrated progression of bilateral opacities. Fetal monitoring identified repeated heart rate deceleration and tachycardia. Convalescent plasma was administered, but treatment with remdesivir and tocilizumab was declined because of their unknown impact on the fetus. The consensus from a multi-disciplinary discussion was to proceed with delivery. After intubation, the infant was delivered via C-section without complications. Post-operatively, the patient remained intubated. Prone positioning was implemented along with remdesivir, heparin, and tocilizumab. The patient was liberated from the ventilator after 14 days and was discharged after ~3 weeks. Her infant was COVID-19 negative without evidence of vertical transmission. This case report adds to the literature regarding complications of COVID-19 affecting pregnancy and evidence-based treatment strategies.	This case report highlights a 31-year-old pregnant woman in the USA who presented with symptomatic COVID-19, which was complicated by progressive hypoxemia requiring intensive care and emergent delivery by C-section. Afterward, she was successfully supported with mechanical ventilation and prone positioning and ultimately recovered. This case report adds to the literature regarding complications of COVID-19 affecting pregnancy and evidence-based treatment strategies.	Roddy JT, Collier WS, Kurman JS. Prone positioning for severe ARDS in a postpartum COVID-19 patient following caesarean section. <i>BMJ Case Rep.</i> 2021;14(3):e240385. doi:10.1136/bcr-2020-240385
COVID-19 vaccines; immunity; children; clinical trials	16-Mar-21	<a href="#">Covid vaccine could be rolled out to children by autumn</a>	British Medical Journal (BMJ)	News	While most children are not at high risk of severe COVID-19, they may have an important role in community transmission. In Israel, the health ministry recommended vaccinating older children with underlying conditions that may put them at increased risk. Around 600 children in Israel aged 12-16 years have received the Pfizer vaccine, and early reports have indicated no serious side effects. Trials are currently testing the Pfizer, Moderna, and Oxford-AstraZeneca vaccines in children. Pfizer has enrolled >2,000 children aged 12-15 years for a trial announced in October 2020, and expects to run another trial in children aged 5-11 years. Pfizer's chief executive stated in March 2021 that he expected younger teens to be eligible for COVID-19 vaccination in the fall, and primary school children by the end of 2021. In December, Moderna announced that it would be testing its vaccine in 3,000 young people aged 12-17 years; the Oxford research group also began a vaccine trial in children aged 6-17 years in February 2021 and plans to enroll 300. Beate Kampmann, director of the London School of Hygiene and Tropical Medicine's Vaccine Centre, stated, "The more adults we can protect with the vaccines the less the vaccination of children would	This news article briefly describes efforts to test the Pfizer, Moderna, and Oxford-AstraZeneca COVID-19 vaccines in children 5-17 years old.	Mahase E. Covid vaccine could be rolled out to children by autumn. <i>BMJ.</i> 2021;372:n723. Published 2021 Mar 16. doi:10.1136/bmj.n723

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					matter." Still, others point out that children with underlying comorbidities could directly benefit from COVID-19 vaccination, so it is important to establish its safety and efficacy in establishing a robust immune response.		
Adverse perinatal outcomes; Behavioral medicine; Birth; COVID-19 pandemic; Pandemic-related stress; Pregnancy; Prenatal maternal stress	16-Mar-21	<a href="#">Adverse Perinatal Outcomes Predicted by Prenatal Maternal Stress Among U.S. Women at the COVID-19 Pandemic Onset</a>	Annals of Behavioral Medicine	Article	This study aimed to determine whether stress experienced by pregnant women at the beginning of the COVID-19 pandemic was associated with a greater prevalence of adverse perinatal outcomes. Pregnant women across the USA aged ≥18 years enrolled in a prospective cohort study during the pandemic onset (T1) in April-May 2020. This report focuses on the 1,367 participants (mean age 31.5± 4.4 years; no ranges reported) who gave birth prior to completing a 2nd questionnaire in July-August 2020 (T2). Hierarchical logistic regression models were used to predict preterm birth, unplanned operative delivery, and whether infants were small for gestational age based on levels of stress, sociodemographic, and medical factors reported at T1. After controlling for sociodemographic and medical factors, prenatal maternal stress increased the risk of preterm birth by 40% (OR 1.40; 95% CI 1.03-1.90; p<0.05). Delivering an infant small for gestational age was predicted by interpersonal violence (OR 2.31; 95% CI 1.15-4.63; p<0.05) and by stress related to being unprepared for birth due to the pandemic (OR 1.66; 95% CI 1.23-2.23; p<0.01). Unplanned operative delivery was predicted by alterations to prenatal appointments (OR 1.51; 95% CI 1.08-2.21; p<0.05), experiencing a major stressful life event (OR 1.45; 95% CI 1.03-2.05), and stress related to being unprepared for the birth due to the pandemic (OR 1.31; 95% CI 1.05-1.67; p<0.05). Independent of these associations, African American women were more likely than other groups to deliver preterm (p<0.05).	This prospective cohort study in the USA found that pregnant women experiencing high stress during the COVID-19 pandemic were at increased risk of poorer perinatal outcomes such as preterm birth, unplanned operative delivery, and having an infant small for gestational age, after controlling for other sociodemographic and medical factors. Independent of these associations, African American women were also at increased risk of delivering preterm.	Preis H, Mahaffey B, Pati S, Heiselman C, Lobel M. Adverse Perinatal Outcomes Predicted by Prenatal Maternal Stress Among U.S. Women at the COVID-19 Pandemic Onset [published online, 2021 Mar 16]. Ann Behav Med. 2021;kaab005. doi:10.1093/abm/kaab005
COVID-19; SARS-CoV-2; breastfeeding; vaccination	16-Mar-21	<a href="#">Breastfeeding and COVID-19 Vaccine: Yes We Can</a>  <a href="#">[Free Access to Abstract Only]</a>	Journal of Human Lactation	Letter to the Editor	The authors respond positively to the letter "COVID-19 Vaccines and Breastfeeding" (Saus-Ortega, 2021), arguing that it is safe for breastfeeding women to be vaccinated against COVID-19, giving their perspectives as breastfeeding mothers. They cite evidence that SARS-CoV-2 antibodies produced by the mother pass on to the milk and may provide immune protection to the infant. One of the authors contacted their local milk bank to confirm that vaccination against COVID-19 would not exclude her from donating breastmilk, as there is no evidence that the vaccine is harmful to the breastfeeding mother or infant. However, the authors provide as a supplemental file an example of a consent form for COVID-19 vaccination that states that breastfeeding is contraindicated, which the authors consider misleading as it simply reflects the fact that breastfeeding women were excluded from clinical trials. In their cases, one author chose not to disclose that she was breastfeeding to obtain her vaccine, while the other was encouraged to postpone vaccination. The authors express concern that many breastfeeding women may either be excluded from COVID-19 vaccination, choose	In this letter to the editor, the authors offer their perspectives as breastfeeding mothers navigating conflicting information regarding the safety of COVID-19 vaccination while breastfeeding. They urge clinicians responsible for COVID-19 vaccination to allow breastfeeding patients to make their own decisions based on current and verified information.	Mayo S, Monfort S. Breastfeeding and COVID-19 Vaccine: Yes We Can [published online, 2021 Mar 16]. J Hum Lact. 2021;8903344211004443. doi:10.1177/08903344211004443

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					to stop breastfeeding, or choose not to disclose their breastfeeding status, thus missing the opportunity to have their progress recorded. They conclude by urging clinicians responsible for vaccination to give breastfeeding patients updated and verified information so they can make informed decisions.		
Pregnancy; COVID-19; prenatal care; reproductive health care; perinatal mental health	16-Mar-21	<a href="#">The impact of COVID-19 on prenatal care in the United States: Qualitative analysis from a survey of 2519 pregnant women</a>	Midwifery	Article	This study surveyed pregnant women to explore changes to prenatal care as a result of the COVID-19 pandemic and the impact of those changes. The survey was distributed online between April 3 - 24, 2020, with open-ended prompts, and 2,519 pregnant women from 47 US states responded, 88.4% of whom had at least one previous birth. 290 additional responses came from outside the USA, the results of which are not described in this article. Mean age was 32.7 years [range not reported], mean weeks pregnant was 24.3 weeks, and mean number of prenatal visits was 6.5. Structural changes within the healthcare system were a predominant theme reported by 2,075 respondents, including shifts to virtual visits, changes in office locations, changes to the frequency of appointments, and social distancing in clinical spaces. 429 respondents described behavioral changes among pregnant women and their providers, such as redefining "necessary vs. unnecessary" procedures and heightened self-monitoring for warning signs during pregnancy. Emotional consequences of the pandemic were reported by 503 respondents, including increased fear and anxiety, perceived lack of support, feelings of abandonment, and questioning their healthcare. Examples of impacts on quality of care included changing providers, limited appointments, and canceled breastfeeding and birthing courses without referral to alternatives. Perceived changes to quality of care varied widely, with some women perceiving their quality of care to be extremely compromised while others perceived improved quality of care due to the pandemic. These inconsistencies highlight the need for local, state, national, and global recommendations for the care of pregnant women during future pandemics.	This study surveyed pregnant women to explore changes to prenatal care as a result of the COVID-19 pandemic and reports the qualitative analysis of 2,519 responses from the USA. Responses varied widely regarding perceived impact to quality of care, which the authors argue highlights the need for standardized local, state, national, and global recommendations for obstetric care during future pandemics.	Javadi S, Barringer S, Compton SD, et al. The impact of COVID-19 on prenatal care in the united states: Qualitative analysis from a survey of 2519 pregnant women. Midwifery. 2021;102991. doi: <a href="https://doi.org/10.1016/j.midw.2021.102991">https://doi.org/10.1016/j.midw.2021.102991</a> .
Children, antibodies, immunology, seropositive, pediatrics	16-Mar-21	<a href="#">Virological and immunological features of SARS-CoV-2-infected children who develop neutralizing antibodies</a>	Cell Reports	Original Research	This study aimed to define humoral and cellular responses in SARS-CoV-2-infected children. The authors analyzed anti-SARS-CoV-2 antibodies and their neutralizing activity via the plaque reduction neutralization test (PRNT) in 66 SARS-CoV-2-infected children (mean age 6.9 years [range not provided]) in Italy at 7 ( $\pm 2$ ) days after symptom onset [dates not provided]. Specifically, they investigated the neutralizing antibody (Nab) activity in SARS-CoV-2-infected children and its impact on the viral load in nasopharyngeal swabs, explored antigen-specific T and B cells defined as CD4+CD40L+ and SARS-CoV-2 Spike (S1+S2)-positive switched B cells, and provided a comprehensive proteomic profile focusing on the differences between SARS-CoV-2-infected individuals with differential neutralizing ability. They demonstrated that the frequencies of SARS-CoV-2-specific CD4+CD40L+ T cells and Spike-specific B cells	In this study assessing the humoral and cellular responses in SARS-CoV-2-infected children in Italy, the authors found that the frequencies of SARS-CoV-2-specific CD4+CD40L+ T cells and Spike-specific B cells were associated with anti-SARS-CoV-2 antibodies and the magnitude of neutralizing activity. The plasma proteome confirmed the association between cellular and humoral SARS-CoV-2 immunity. The authors conclude that this	Cotugno N, Ruggiero A, Bonfante F, et al. Virological and immunological features of SARS-CoV-2-infected children who develop neutralizing antibodies. Cell Rep. 2021;34(11):108852. doi:10.1016/j.celrep.2021.108852

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					were associated with the anti-SARS-CoV-2 antibodies and the magnitude of neutralizing activity ( $p < 0.01$ ). The plasma proteome confirmed the association between cellular and humoral SARS-CoV-2 immunity, and PRNT+ patients showed higher levels of viral signal transduction molecules (SLAMF1, CD244, CLEC4G) ( $p < 0.01$ ). The authors conclude that this work sheds light on cellular and humoral anti-SARS-CoV-2 responses in children, which may drive future vaccination trial endpoints and quarantine policies.	work sheds light on cellular and humoral anti-SARS-CoV-2 responses in children, which may drive future vaccination trial endpoints and quarantine policies.	
COVID-19; Coronavirus; SARS-CoV-2; infection; pregnancy	16-Mar-21	<a href="#">Counseling in maternal-fetal medicine: SARS-CoV-2 infection in pregnancy</a>	Ultrasound in Obstetrics and Gynecology	Review	This review discusses SARS-CoV-2 infection during pregnancy, organized by common clinical questions. Fever and cough (40%), lymphopenia (35%), and raised C-reactive protein levels (49%) are the most common symptoms and laboratory signs of SARS-CoV-2 infection in pregnancy. Fever has been found to be less frequent in pregnant patients, which may explain relatively high rates of asymptomatic cases (75-90%). Pregnancy carries a higher risk of severe COVID-19 (including pneumonia, ICU admission, and death) compared to the non-pregnant population. The risk of miscarriage does not appear to be increased by SARS-CoV-2 infection. Evidence is conflicting on the risk of preterm birth and perinatal mortality, but these risks are generally higher only in symptomatic, hospitalized women. The risk of vertical transmission is generally low (about 3.2%). Fetal invasive procedures are generally safe in women with SARS-CoV-2 infection although evidence is limited. Steroids should not be avoided if clinically indicated and NSAIDs can be used if there are no other contra-indications. Pregnant women hospitalized with severe COVID-19 should undergo prophylactic thromboprophylaxis. Hospitalized women who have recovered from serious or critical COVID-19 should be offered a fetal growth scan 14 days after recovery. In women with no or few symptoms, management of labor should follow routine guidelines; there is no clear consensus on proper timing of delivery for critically ill women. Regardless of COVID-19, mothers should breastfeed, practice skin-to-skin contact and kangaroo mother care, and room in with their newborns while applying necessary IPC measures. COVID-19 vaccination should be offered after counselling on both the potential risk of a severe COVID-19 and the unknown risk of fetal exposure to the vaccine.	This review discusses SARS-CoV-2 infection during pregnancy, organized by common clinical questions. Compared to the nonpregnant population, pregnant women with COVID-19 have a higher risk of pneumonia, ICU admission, and death, and there may be an increased risk of preterm birth and perinatal mortality among symptomatic, hospitalized pregnant women with COVID-19.	Di Mascio D, Buca D, Berghella V, et al. Counseling in maternal-fetal medicine: SARS-CoV-2 infection in pregnancy [published online ahead of print, 2021 Mar 16]. <i>Ultrasound Obstet Gynecol.</i> 2021;10.1002/uog.23628. doi:10.1002/uog.23628
China, COVID-19, pregnancy, transmission, duplicated data	15-Mar-21	<a href="#">Coronavirus disease 2019 in pregnancy</a>	International Journal of Infectious Diseases	Letter to the Editor	This letter responds to an article by Qiancheng, et al., who compared clinical courses and outcomes between pregnant and non-pregnant women with COVID-19 in China and assessed the vertical transmission potential of COVID-19 in pregnancy. The authors of this letter express concern that the article may contain some duplicated data that has been used by other researchers. The authors of the letter found that 2 published articles from the same hospital used by Qiancheng, et al. had the same recruitment period. Further, at least one pregnant woman and neonate had identical characteristics between articles. Of the 3 articles, 2 reported that 3 pregnant women terminated pregnancy in the first trimester,	This letter responds to an article by Qiancheng, et al., who compared clinical courses and outcomes between pregnant and non-pregnant women in China with COVID-19 and assessed the vertical transmission potential of COVID-19 in pregnancy. The authors of this letter express concern that the article may contain some duplicated data	Tang M, Zhang H, Cai J. Coronavirus disease 2019 in pregnancy [published online ahead of print, 2021 Mar 15]. <i>Int J Infect Dis.</i> 2021;105:721. doi:10.1016/j.ijid.2021.03.027

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					including one set of twins. The corresponding author is the same person in 2 of the 3 articles, and all 3 papers were received and published on very similar dates. The authors express concern as reporting duplicates in different articles creates an inaccurate scientific record, introduces significant bias into a systematic review, and affects understanding of COVID-19 and its epidemiology. Thus, researchers must identify if any patients in any submitted manuscript have been reported in any previous submissions or publications.	that has been used by other researchers. They argue that reporting duplicates in different articles creates an inaccurate scientific record, introduces significant bias into a systematic review, and affects understanding of COVID-19 and its epidemiology.	
COVID-19; RCT; clinical trial; coronavirus; methodology; pandemic; research methods, nutrition	15-Mar-21	<a href="#">New Methodologies for Conducting Maternal, Infant, and Child Nutrition Research in the Era of COVID-19</a>	Nutrients	Commentary	The authors describe adaptations of protocols for nutrition research with pregnant women, infants, and children during the COVID-19 pandemic in Australia. Modifications made to study methods to facilitate social distancing are described, including identifying and recruiting potential participants, gaining informed consent, conducting appointments, and collecting outcome data. Specific changes to study protocols during the pandemic noted by the authors include obtaining consent virtually, virtual appointments, and sending research study materials via mail. Traditional methods, methods modified during the COVID-19 pandemic, and implications of the methodology changes are discussed for each of these elements. The authors note that while these changes have required some adjustment, the modifications may be useful after the COVID-19 pandemic. These modifications may include research trials conducted entirely virtually or a hybrid or decentralized model for research study delivery, including using telemedicine and virtual tools when possible. Some drawbacks to these virtual models for study protocols include inaccuracies and biases due to subject self-rating, requiring sensitivity analysis to understand the effects of subjective assessments. However, these revised protocols have the capacity to expand geographic recruitment for studies and to facilitate more rapid completion of study protocols.	This article describes changes to study protocols for nutrition research with pregnant women, infants, and children during the COVID-19 pandemic. Specific changes to study protocols during the pandemic noted by the authors include obtaining consent virtually, virtual appointments, and sending research study materials via mail. The authors note that while these changes have required some adjustment, the modifications may be useful after the COVID-19 pandemic.	Gould JF, Best K, Netting MJ, Gibson RA, Makrides M. New Methodologies for Conducting Maternal, Infant, and Child Nutrition Research in the Era of COVID-19. <i>Nutrients</i> . 2021;13(3):941. Published 2021 Mar 15. doi:10.3390/nu13030941
COVID-19; anxiety; cesarean section rates; China	15-Mar-21	<a href="#">Alternations of cesarean section rates in a non-infected population after the outbreak of COVID-19: a cross-sectional study</a>	Psychology, Health and Medicine	Article	This study explored whether C-section rates significantly increased in China after the start of the COVID-19 pandemic. Labor data (28-42 weeks' gestation) with C-section rates in a tertiary maternity center from January-March 2020 was compared with pre-epidemic parallel months in 2019 by using a Z-score test for proportions. A statistically significant increase in the C-section rate was observed in the first quarter of 2020 compared to 2019 (48.35% vs. 45.97%, p<0.05). A significant increase was found in March 2020 compared to March 2019 (51.9% vs. 46.7%, p<0.05). The top 3 indications for C-section in both March 2020 and March 2019 were scarred uterus (previous C-section or fibroid surgery), fetal distress, and macrosomia. In conclusion, even though none of the staff or included patients suffered from COVID-19 in the hospital, C-section rates slightly increased in this non-infected population after the outbreak of COVID-19.	This study explored whether C-section rates significantly increased in China after the start of the COVID-19 pandemic. Even though none of the staff or included patients suffered from COVID-19 in the hospital, C-section rates slightly increased in this non-infected population after the outbreak of COVID-19.	Xue RH, Li J, Chen L, et al. Alternations of cesarean section rates in a non-infected population after the outbreak of COVID-19: a cross-sectional study. <i>Psychol Health Med</i> . 2021;1-7. doi:10.1080/13548506.2021.1893768.

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COVID-19; telehealth; telemedicine; kidney disease; children	15-Mar-21	<a href="#">Providing Medical Services Online to Children With Chronic Kidney Disease During the COVID-19 Pandemic</a>	Indian Pediatrics	Commentary	The authors describe challenges in their pediatric center in Kerala, India for providing care for children with chronic kidney disease during the COVID-19 pandemic as of March 2021. These challenges include diversion of child care areas and professionals to management of COVID-19 cases in government hospitals, and inability of immunocompromised patients to attend in-person appointments. The adaptation of follow-up for pediatric renal disease to digital is described, including use of WhatsApp by social workers to liaise between caregivers and clinicians, and by providers to communicate information on prescriptions, laboratory findings, and vital signs. Acute problems are assessed via text messages, voice messages, and images. Patients are provided educational information and instructions digitally, and a Google Form is used to track compliance with treatment and medications. Reproductive and Child Health Officers serve as liaisons to bring prescriptions to rural districts. The overall number of visits to the authors' institution increased during the COVID-19 pandemic, from 391 physical visits in 2019 to 633 digital visits in 2020. Overall, the article describes low-cost actions for providing remote patient care.	This article describes the challenges experienced in Kerala, India during the COVID-19 pandemic for providing care for children with chronic kidney disease, and digital adaptations made to deliver care remotely. These adaptations include using text messaging for patient communication, case assessment, and sharing health information; digital delivery of educational information and instructions; and use of a Google Form to track compliance with treatment and medications.	Menon J, Kannankulangara A. Providing Medical Services Online to Children With Chronic Kidney Disease During the COVID-19 Pandemic. Indian Pediatr. 2021;58(3):291.
COVID-19; suicide; mental health; students; children and adolescents	15-Mar-21	<a href="#">Increase in suicide following an initial decline during the COVID-19 pandemic in Japan</a>	Nature	Original Research	This study reviewed nation-wide evidence to compare suicide fatalities during the COVID-19 pandemic in Japan compared to corresponding times from previous years. From February-June 2020, the overall suicide rate declined by 14% (IRR = 0.86; 95% CI: 0.82, 0.90), and from July-October 2020, the rate increased by 16% (IRR = 1.16; 95% CI: 1.11, 1.21), compared to previous years. The increase in suicide rate seen later in the pandemic was driven by child and adolescent deaths (IRR = 1.49; 95% CI: 1.12, 1.98) toward the end of the nationwide school closure. The authors note that this is an age group that experienced greater unemployment during the COVID-19 pandemic. During school closures, suicide deaths among students decreased by 49% (IRR = 0.51; 95% CI: 0.34, 0.77), and the authors hypothesize that the stress of returning to school may have been exacerbated by the time away during the pandemic. This study distinguished children and adolescents from students because of the variety in ages of students, and because some adolescents are employed full-time. The authors state that because the COVID-19 pandemic disproportionately affects the psychological health of children and adolescents, future interventions should target this population.	This study reviewed nation-wide evidence to compare suicide fatalities during the COVID-19 pandemic in Japan, compared to corresponding times from previous years. An observed increase in suicide rate later in the pandemic was driven by child and adolescent deaths, which the authors hypothesize could be because of high unemployment rates, or the end of school closures.	Tanaka, T., Okamoto, S. Increase in suicide following an initial decline during the COVID-19 pandemic in Japan. Nat Hum Behav 5, 229–238 (2021). <a href="https://doi.org/10.1038/s41562-020-01042-z">https://doi.org/10.1038/s41562-020-01042-z</a>
Admissions; COVID-19; Corona; ED visits; Lockdown; Pediatrics; SARS-CoV-2	15-Mar-21	<a href="#">The impact of lockdown on pediatric ED visits and hospital admissions during the COVID19</a>	European Journal of Pediatrics	Original Research	The authors quantified the impact of lockdown during the COVID-19 pandemic on pediatric emergency department (ED) utilization in the Netherlands from January 2020-June 2020. Hospital admission data (n = 47,648 admissions, 126,198 emergency department visits) from January 2016-June 2020 for patients <18 years old were obtained from 8 general hospitals in the Netherlands. The data were summarized by diagnosis group and data from 2016-2019, and January 2020-June 2020 were compared to observe the relative	This article provides an analysis of pediatric emergency department utilization and pediatric admissions during the COVID-19 pandemic in the Netherlands and compares the utilization rates to previous years. A significant reduction was observed in both	Kruizinga MD, Peeters D, van Veen M, et al. The impact of lockdown on pediatric ED visits and hospital admissions during the COVID19 pandemic: a multicenter analysis and review of the literature. Eur J Pediatr. 2021 Mar 15:1–9. doi:

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		<a href="#">pandemic: a multicenter analysis and review of the literature</a>			reduction in utilization. A 59% reduction in ED visits was observed between the two time periods, along with a 56% reduction in ED admissions. Among diagnostic groups the greatest decline was observed in communicable infections, with a 76% reduction in ED visits and a 77% reduction in admissions. There was a 36% reduction in ED visits and 37% reduction in admissions for noninfectious diagnoses. Confidence intervals and p values for these reductions are not available in the article. No change in the mean ratio between admissions and ED visits was observed between the two time periods, suggesting that there was not a substantial change in the level of acuity of diagnoses. This reduction can be attributed to a decrease in incidence of communicable infectious disease, but may also indicate care avoidance. The authors note that these findings are consistent with reductions in pediatric care utilization observed elsewhere, with a reduction range of 30-89% for ED visits and 19-73% for admissions in other countries during the COVID-19 pandemic.	admissions and emergency department utilization during the COVID-19 pandemic, with a larger reduction for communicable infections. The findings are consistent with similar analyses performed in other countries.	10.1007/s00431-021-04015-0. PMID: 33723971; PMCID: PMC7959585.
local response; systemic response; COVID-19; epithelium; airway; inflammatory response; COVID-19	15-Mar-21	<a href="#">The local and systemic response to SARS-CoV-2 infection in children and adults</a>	medRxiv	Preprint (not peer-reviewed)	The authors aimed to understand the difference between local and systemic response to SARS-CoV-2 infection in children and adults, to improve characterization of infection pathogenesis. They assembled a cohort of 30 healthy children from the five WHO age ranges: neonates (0-30 days; n=6), infants (1-24 months; n=6), young children (2-6 years; n=8), children (6-12 years; n=5), adolescents (12-18 years; n=5), and profiled the cellular landscape in the upper airways (nasal and tracheal brushings) and matching peripheral blood mononuclear cells (PBMCs) from blood using single cell RNA sequencing. They then contrasted the healthy references with equivalent data from severe pediatric and adult COVID-19 patients (total n=27), from the same 3 types of samples: upper and lower airways and blood. They found that, compared to adults with COVID-19, children with COVID-19 had a higher proportion of innate lymphoid and non-clonally expanded naive T-cells in peripheral blood. In the airway epithelium, the authors identified the highest viral load in goblet and ciliated cells, and describe a novel inflammatory epithelial cell population that represent a transitional regenerative state between secretory and ciliated cells. These cells were enriched in all studied COVID-19 patients. Epithelial cells display an antiviral and neutrophil-recruiting gene signature that is weaker in severe pediatric versus adult COVID-19. These results improve the understanding of spatial infection dynamics of SARS-CoV-2 and highlight the SARS-CoV-2 pathogenesis in children with COVID-19.	The authors aimed to understand the difference between local and systemic response to SARS-CoV-2 infection in children and adults, to improve characterization of infection pathogenesis. Comparing upper and lower airways and blood cellular landscapes between children and adults both with and without COVID-19, the authors found that, compared to adults with COVID-19, children with COVID-19 had a higher proportion of innate lymphoid and non-clonally expanded naive T-cells in peripheral blood.	Yoshida M, Worlock KB, Huang N, et al. The local and systemic response to SARS-CoV-2 infection in children and adults. medRxiv. 2021. doi: 10.1101/2021.03.09.21253012
COVID-19; influenza; SARS-CoV-2; pediatrics	15-Mar-21	<a href="#">Characteristics of Severe Acute Respiratory Syndrome Coronavirus-2</a>	Critical Care Explorations	Original Research	The authors describe the nationwide UK pediatric ICU (PICU) experience during the first wave of the COVID-19 pandemic and compare this with the critical care course of the 2019 influenza cohort. In a prospective nationwide cohort study of characteristics of SARS-CoV-2-positive children, the authors collected data from the	The authors describe the nationwide UK pediatric ICU (PICU) experience during the first wave of the COVID-19 pandemic, compared to the critical care	Kanthimathinathan HK, Buckley H, Lamming C, et al. Characteristics of Severe Acute Respiratory Syndrome Coronavirus-2 Infection and

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		<a href="#">Infection and Comparison With Influenza in Children Admitted to U.K. PICUs</a>			Pediatric Intensive Care Audit Network from all PICUs in the UK between March-June 2020. The sample included 73 PICU admissions among 73 children with PCR-confirmed SARS-CoV-2, and 243 children with influenza admission between January-December 2019. Prevalence of ICU admissions for those with SARS-CoV-2 per million was 5.2 for children, versus 260 for adults. 17 children (23%) had MIS-C. 17 (23%) had co-infections. Invasive ventilation was required in 7 of the 17 children (41%) with MIS-C, versus 38 of 56 other SARS-CoV-2-positive children (68%), with 77% requiring vasoactive support versus 43%, respectively. 7 children (10%) died. Compared to the influenza cohort, children with SARS-CoV-2 were older (median [interquartile range]: 10 yr [1–13 yr] vs 3 yr [1–8 yr]), were more often Black or Asian (52% v 18%), had higher mean weight z score (0.29 [–0.80 to 1.62] vs –0.41 [–1.37 to 0.63]), and had higher mean Townsend deprivation index score (3.3 [–1 to 6.3] vs 1.2 [–1.8 to 4.4]). Co-morbidities, frequency of organ support interventions, and length of stay were similar. This nationwide study confirms that PICU admissions with SARS-CoV-2 infections were infrequent in the UK. The authors' report highlights important clinical characteristics and potential risk factors, and provides information that may guide the management of these children.	course of the 2019 influenza cohort. The authors report similarities and differences in sociodemographic characteristics, organ support interventions, and outcomes of children affected by SARS-CoV-2 and influenza infections. Co-morbidities, frequency of organ support interventions, and length of stay were similar in both groups. The report provides valuable information to guide these children's treatment and management.	Comparison With Influenza in Children Admitted to U.K. PICUs. <i>Crit Care Explor.</i> 2021;3(3):e0362. Published 2021 Mar 15. doi:10.1097/CCE.0000000000000362
COVID-19; Kawasaki disease; hydrogen gas inhalation	15-Mar-21	<a href="#">Chemical and Biochemical Aspects of Molecular Hydrogen in Treating Kawasaki Disease and COVID-19</a>	Chemical Research in Toxicology	Review	This review reported the chemical and biochemical aspects of hydrogen gas inhalation in treating Kawasaki disease (KD) and COVID-19. Hydrogen gas (H <sub>2</sub> ) is a stable and efficient antioxidant, which has a positive effect on oxidative damage, inflammation, cell apoptosis, and abnormal blood vessel inflammation. Currently, at least 4 clinical trials with inhalational hydrogen for treating COVID-19 have been registered on ClinicalTrials.gov. Furthermore, hydrogen inhalation resulting in a major amelioration of dyspnea in most patients with COVID-19 has been reported in a pilot investigation. However, no clinical trial has yet been carried out anywhere in the world for hydrogen inhalation therapy in patients with KD. The use of H <sub>2</sub> may alleviate the shock syndrome and the destruction caused by the cytokine storm in patients with both COVID-19 and KD, thus reducing the incidence of critically ill patients. In the future, more large-scale randomized evidence is needed to verify the efficacy and safety of this clinical intervention and move beyond trials to improve medical care in these areas.	This review reported the chemical and biochemical aspects of hydrogen gas inhalation in treating Kawasaki disease (KD) and COVID-19. The use of H <sub>2</sub> may alleviate the shock syndrome as well as the destruction caused by the cytokine storm in patients with both COVID-19 and KD, thus reducing the incidence of critically ill patients. In the future, more large-scale randomized evidence is needed to verify the efficacy and safety of this clinical intervention and move beyond trials to improve medical care in these areas.	Chen KD, Lin WC, Kuo HC. Chemical and Biochemical Aspects of Molecular Hydrogen in Treating Kawasaki Disease and COVID-19. <i>Chem Res Toxicol.</i> 2021. doi:10.1021/acs.chemrestox.0c00456.
COVID-19; BMI; child mental health; anxiety	15-Mar-21	<a href="#">BMI status and associations between affect, physical activity and anxiety among U.S. children during COVID-19</a>	Pediatric Obesity	Original Research	This cohort study examined how the COVID-19 pandemic affected lifestyle behaviors, emotional regulation, and anxiety for children in California who were overweight/obese compared to those of a healthy weight. 64 children (age range: 9-15 years [overall mean not given]) who were part of the ongoing BrainChild cohort study participated in 2 interviews via phone or video call between April 22-July 29, 2020. Participants reported increased state anxiety (p<0.001), increased sedentary minutes per day (p<0.001), and fewer children met leisure screen time guidelines (p<0.001)	This cohort study examined how the COVID-19 pandemic affected lifestyle behaviors, emotional regulation, and anxiety for children in California who were overweight/obese compared to those of a healthy weight. The researchers conclude that physical activity may be	Alves JM, Yunker AG, DeFendis A. BMI status and associations between affect, physical activity and anxiety among U.S. children during COVID-19. <i>Pediatric Obesity.</i> 2021. doi: https://doi.org/10.1111/ijpo.12786

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					compared to prior study observations. Compared to before the pandemic, children who were overweight/obese had lower positive affect (p=0.04) and higher negative affect (p=0.02) during the study period; children with healthy weight did not change. Higher state anxiety scores were associated with decreases in positive affect ( $\beta$ (95% CI) = -0.51 (-0.77, -0.25); p<0.05) and physical activity ( $\beta$ (95% CI) = -0.45 (-0.74, -0.16); p<0.05). Increases in negative affect were associated with increases in sedentary time (R = 0.50; p<0.05) and screen time (R=0.62; p<0.05). Screen time was negatively associated with positive affect (R=0.38; p<0.05). The researchers conclude that physical activity may be important for the emotional wellbeing of children who are overweight or obese, and limits to leisure screen time might reduce negative affect.	important for the emotional wellbeing of children who are overweight/obese, and limits to leisure screen time might reduce negative affect.	
Vaccination coverage, children, COVID-19, Ethiopia, 2020	15-Mar-21	<a href="#">Impact of COVID-19 Pandemic on Vaccination Coverage Among Children Aged 15 to 23 Months at Dessie Town, Northeast Ethiopia, 2020</a>	Human Vaccines and Immunotherapeutics	Original Research	This community-based, cross-sectional study aimed to assess the impact of the COVID-19 pandemic on vaccination coverage among children aged 15-23 months. 633 children and their mothers/caregivers were interviewed via a pre-tested, structured questionnaire between July 22 and August 7, 2020, in Dessie town, Ethiopia (96.4% response rate). The results showed that based on the vaccination card and recall, 350 (57.4%) of children finished all of their recommended vaccines. Before the COVID-19 pandemic, the age-eligible vaccination rate was 79.2% (95% CI: 72.7-85.7). During the COVID-19 pandemic, the age-eligible vaccination rate was 66.7% (95% CI: 61.02-72.38). Therefore, the age-eligible vaccination coverage during the COVID-19 pandemic was 12.5% (95% CI: -27.08-2.08) lower than before the pandemic. Having a father as the primary caregiver, mother/caregiver who can write and read, and mother/caregiver who educated from grade 1 to 8 mother/caregiver who is divorced, mother/caregiver who spend more than 30 minutes to reach health institution, and mother/caregiver who aware about the benefit of vaccination, about the campaign, and knowledge of COVID-19 each shows statistically significant association with full vaccination status of children. In conclusion, full vaccination coverage among children aged 15-23 months remains low in Dessie town, further decreasing during the COVID-19 pandemic. Hence, measures should be taken to increase consciousness about vaccination and the COVID-19 pandemic.	This community-based, cross-sectional study aimed to assess the impact of the COVID-19 pandemic on vaccination coverage among children aged 15-23 months in Dessie town, Ethiopia. The results showed that the age-eligible vaccination coverage during the COVID-19 pandemic was 12.5% (95% CI: -27.08-2.08) lower than before the pandemic. The authors concluded that full vaccination coverage among children aged 15-23 months remains low in Dessie town, further decreasing during the COVID-19 pandemic.	Miretu DG, Asfaw ZA, Addis SG. Impact of COVID-19 pandemic on vaccination coverage among children aged 15 to 23 months at Dessie town, Northeast Ethiopia, 2020 [published online, 2021 Mar 15]. Hum Vaccin Immunother. 2021;1-9. doi:10.1080/21645515.2021.1883387
COVID-19; Biomedical engineering, Public health, Environmental impact; sensors; asthma;	15-Mar-21	<a href="#">Use of wearable sensors to assess compliance of asthmatic children in response to lockdown measures for the</a>	Scientific Reports	Original Research	The authors assessed the compliance of school children with asthma (n = 108, mean age 9.7 years, SD = 1.7) living in Cyprus (n = 53) and Greece (n = 55) with public health interventions to prevent SARS-CoV-2 transmission. Location and physical activity were tracked on wearable sensors as part of an ongoing project from February 3 - April 26, 2020. Public health intervention policy types were grouped into three levels of intensity: simple isolation of disease carriers, quarantine of contacts and hand hygiene measures to ban mass gatherings, social distancing, and finally to complete lockdown and	This article examined the compliance of children with asthma living in Cyprus and Greece with public health interventions to limit the transmission of SARS-CoV-2 using wearable sensors in use for an ongoing project. An increase in mean time spent at home for	Kouis P, Michanikou A, Anagnostopoulou P, Galanakis E, Michaelidou E, Dimitriou H, Matthaiou AM, Kinni P, Achilleos S, Zacharatos H, Papatheodorou SI, Koutrakis P, Nikolopoulos GK, Yiallourous PK. Use of wearable sensors to assess compliance of asthmatic

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
lockdown; children		<a href="#">COVID-19 epidemic</a>			community quarantine. A significant mean increase in the fraction of time spent at home was observed for level 1 interventions (41.4% Cyprus, 14.3% Greece), level 2 interventions (48.7% Cyprus and 23.1% Greece), and level 3 interventions (45.2% Cyprus and 32.0% Greece). Declines in mean steps per day were observed in both countries with a range of decline of 1,191-3,655 steps. Changes in weekend schedules, age, humidity, and gender had an independent effect on physical activity. Overall the results showed that the children were compliant with public health measures. The authors suggest that wearable technology is a source of objective, continuous, and real-time location and activity data to assess compliance with public health interventions during a pandemic.	various intensities of public health interventions was observed, along with a decrease in mean steps per day, supporting that the children had complied with the public health measures. The authors suggest that wearable technology is a source of objective, continuous, and real-time location and activity data to assess compliance with public health interventions during a pandemic.	children in response to lockdown measures for the COVID-19 epidemic. Sci Rep. 2021 Mar 15;11(1):5895. doi: 10.1038/s41598-021-85358-4. PMID: 33723342; PMCID: PMC7971022.
Adolescents; COVID-19; Children; Glycemic control; Time in range; Type 1 diabetes	15-Mar-21	<a href="#">Impact of lockdown during COVID-19 emergency on glucose metrics of children and adolescents with type 1 diabetes in Piedmont, Italy</a>	Acta Diabetologica	Original Article	The aim of the study was to explore the impact of the COVID-19 lockdown on children with type 1 diabetes mellitus (T1DM) using continuous glucose monitoring (CGM), as well as the effect of remote consultations on glucose metrics. 66 patients (<18 years old, mean age 11.6 ± 4.5 years) with T1DM in Italy were enrolled. Time spent in glucose range (TIR; 70–180 mg/dL), below range (TBR; <70 mg/dL), above range (TAR; >180 mg/dL), coefficient of variation (CV), and glucose management index (GMI) were extracted during 90 days of lockdown (February 24–May 24, 2020) and compared with those measurements 90 days before (November 25, 2019–February 23, 2020). No participant reported SARS-CoV-2 infection during the study. Before lockdown, participants showed a mean glucose of 168±61 mg/dL, while during lockdown the mean was 165±58 mg/dL (p<0.05). TIR increased from 59.7±13% to 62.5±14% (p=0.001), while TAR decreased from 37.8±14% to 35.2±15% (p=0.004). No significant differences were detected for TBR (from 2.5±2.3% to 2.3±2.5%, p=0.177) and GMI (from 7.5±0.9% to 7.4±0.8%, p=0.05). CV decreased from 36±5% to 35±5% (p=0.003). Physical activity per week reduced from 6.1±3.3 h to 2.7±3.1 h (p<0.001). CGM use increased from 87±17% to 92±10% of time (p=0.006). The authors conclude that during the COVID-19 lockdown period, children and adolescents using CGM were able to adjust insulin therapy adequately, despite less physical activity and a different lifestyle.	The aim of the study was to explore the impact of the COVID-19 lockdown on patients with type 1 diabetes mellitus (T1DM) using continuous glucose monitoring (CGM), and the effect of remote consultations on glucose metrics. The authors conclude that during the COVID-19 lockdown period, children and adolescents with T1DM using CGM were able to adjust insulin therapy to maintain blood glucose management, despite less physical activity and a different lifestyle.	Tinti D, Savastio S, Grosso C, et al. Impact of lockdown during COVID-19 emergency on glucose metrics of children and adolescents with type 1 diabetes in Piedmont, Italy [published online 2021 Mar 15]. Acta Diabetol. 2021;1-3. doi:10.1007/s00592-021-01702-0
SARS-CoV-2, COVID-19, school, children, education, in person, long COVID	15-Mar-21	<a href="#">Children and the return to school: how much should we worry about covid-19 and long covid?</a>	British Medical Journal (BMJ)	Views and Reviews	This perspective discusses the relative risk of SARS-CoV-2 infection and "long-COVID" in children returning to in-person learning. The author discusses the relatively unknown role that children play in community transmission of SARS-CoV-2. The data seems to be inconsistent, with some reports showing little spread, while others suggest that teachers conducting in-person learning have twice the infection risk of those teaching virtually. Furthermore, the data indicate that jumps in the virus R-value have followed term date restarts in countries where children have been at school during the pandemic. The author argues that the biggest unknown is the	This perspective discusses the relative risk of SARS-CoV-2 infection and "long-COVID" in children returning to in-person learning. The author discusses the relatively unknown role that children play in community transmission as well as the risk of children developing long COVID, both of which have conflicting	Altmann DM. Children and the return to school: how much should we worry about covid-19 and long covid?. BMJ. 2021;372:n701. Published 2021 Mar 15. doi:10.1136/bmj.n701

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					evaluation of the risk of developing long-COVID during asymptomatic spread in a school setting. Until more detailed studies are completed, evidence of the total long-COVID caseload appears to lie somewhere between the Office for National Statistics (ONS) estimate of around 10% and some research cohort studies that tend to put it considerably higher. The ONS data also indicate that around 79,000 of those in the UK with long-COVID are under the age of 19. Given the strong imperative to get children back into full-time, face-to-face teaching after the past year's disruptions, the key challenge is to maximally offset the risks of community transmission and pediatric cases of COVID-19 and long-COVID.	reports in the literature. Given the strong imperative to get children back into full time, face-to-face teaching after the disruptions of the past year, the key challenge is to maximally offset the risks of community transmission and pediatric cases of COVID-19 and long-COVID.	
Pregnancy, anxiety, depression, COVID-19, virtual, prenatal care	15-Mar-21	<a href="#">Stay Home, Stay Connected: A virtual model for enhanced prenatal support during the COVID-19 pandemic and beyond</a>	International Journal of Gynecology and Obstetrics	Brief Communication	This paper discusses a virtual prenatal support program for pregnant women with increased anxiety and depression due to the COVID-19 pandemic in the United States. Pregnant women (n=180, mean age=32.1 years) were divided into groups of 8-12 based on gestational age. Groups met monthly with maternity care providers and attended wellness and coping lectures on off weeks. Participants completed an entry survey and a satisfaction survey one month after the program launch. The results showed that the depression and anxiety rates were high (depression: 8/162, (5%); anxiety: 61/162, (37%); any mood/anxiety disorder: 42% (69/162)). Thematic coding of free-text responses revealed that participants joined the program for more robust pregnancy education, a sense of community during social distancing, and mental health support. One month into the program, 61/118 (52%) active participants completed the satisfaction survey. 93.4% (57/61) of patients indicated that the program addressed anticipatory guidance needs and helped them feel supported by other pregnant patients (60/61, 98.3%). Over 95% (67/68) reported that lectures were helpful. In free-text responses, participants reported benefitting from anticipatory guidance from providers, reassurance, and education regarding COVID-19, and sharing experiences with other pregnant patients. The authors concluded that this creative method of delivering anticipatory guidance and psychosocial support in prenatal care could benefit pregnant patients facing barriers to these services even beyond the COVID-19 pandemic.	This paper discusses a virtual prenatal support program for pregnant women with increased anxiety and depression due to the COVID-19 pandemic in the United States. Pregnant women (n=180, mean age=32.1 years) were divided into groups of 8-12 based on gestational age, met monthly with maternity care providers, and had access to wellness and coping lectures on off weeks. Overall, participants reported benefitting from anticipatory guidance from providers, reassurance, and education regarding COVID-19, and sharing experiences with other pregnant patients.	Ramirez Biermann C, Choo MS, Carman K, Siden JY, Minns A, Peahl A. Stay Home, Stay Connected: A virtual model for enhanced prenatal support during the COVID-19 pandemic and beyond [published online, 2021 Mar 15]. Int J Gynaecol Obstet. 2021;10.1002/ijgo.13676. doi:10.1002/ijgo.13676
COVID-19, SARS-CoV-2, cancer, outcomes, mortality, clinical presentation, treatment	15-Mar-21	<a href="#">Clinical presentations and outcomes of children with cancer and COVID-19: A systematic review</a>	Pediatric Blood and Cancer	Review	This paper is a systemic review of the available published literature on children with cancer affected by COVID-19. The last date of the study search was October 20, 2020, and 33 studies (from Peru, Italy, USA, Spain, Mexico, Egypt, Switzerland, Austria, Poland, the UK, Brazil, India, Georgia, China, and France) comprising 226 children (< 18 years old) were included for the final analysis. Patients with hematological malignancies were more in number (120) vs. 76 solid malignancies. Males and children on intensive treatment were more frequently affected, and fever was the most common symptom (41.8%). 48% had asymptomatic/mild disease, while 9.6% had severe disease. Consolidation (n=6) and peribronchial cuffing (n=4),	This paper is a systemic review of the available published literature on children with cancer affected by COVID-19. 226 children (<18 years) were included in the analysis, and the study outlines the most common symptoms, disease severity, imaging findings, treatments, and mortality rate. This information can help in risk	Prasad Meena J, Kumar Gupta A, Tanwar P, Ram Jat K, Mohan Pandey R, Seth R. Clinical presentations and outcomes of children with cancer and COVID-19: A systematic review [published online, 2021 Mar 15]. Pediatr Blood Cancer. 2021;e29005. doi:10.1002/pbc.29005

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					and consolidation with ground-glass opacities were the most common imaging findings. Hydroxychloroquine was the most frequently used drug for COVID-19 (n=41). About 10% of children required intensive care, and about 32% had oxygen requirements. The percentage of children who died due to COVID-19 was 4.9%, representing increased mortality compared to the general pediatric population. This information can help in risk stratification for the management of COVID-19.	stratification for the management of COVID-19.	
Children, pediatrics, transmission, schools, obesity	15-Mar-21	<a href="#">COVID-19 in childhood: Transmission, clinical presentation, complications and risk factors</a>	Pediatric Pulmonology	Review	This literature review was conducted on the transmission, clinical presentation, complications, and risk factors of COVID-19 in the pediatric population [0-18 years of age]. PubMed, MedRxiv, and the Johns Hopkins "COVID-19, Maternal and Child Health, Nutrition" repository were searched from January-December 2020 [number of articles not reported]. Based on current evidence, children are rarely the primary source of secondary transmission in household or school settings. Higher transmission rates are observed in older children (10–19 years old) compared with younger children (<10 years old). While increasing incidence of COVID-19 in neonates raises the suspicion of vertical transmission, it is unlikely that breast milk is a vehicle for transmission from mother to infant. The vast majority of clinical cases of COVID-19 in children are mild, but rare cases have developed complications such as MIS-C, which often presents with severe cardiac symptoms requiring intensive care. Childhood obesity is associated with a higher risk of infection and a more severe clinical presentation. Although immediate mortality rates among children are low, long-term implications of the disease remain unknown. The authors conclude that children should remain a focus during the pandemic, given the potential for developmental implications from SARS-CoV-2.	In this literature review, the authors discuss the transmission, clinical presentation, complications, and risk factors of COVID-19 in the pediatric population. Vertical transmission may be possible, but it is unlikely that breast milk is a vehicle for transmission from mother to infant. Childhood obesity is associated with higher risk of more severe infection. Although immediate mortality rates among children are low, long-term implications of the disease remain unknown. The authors conclude that children should remain a focus, given the potential for developmental implications.	Siebach MK, Piedimonte G, Ley SH. COVID-19 in childhood: Transmission, clinical presentation, complications and risk factors. <i>Pediatr Pulmonol.</i> 2021; doi:10.1002/ppul.25344
Basic healthcare; COVID-19; LMICs; MNCH	15-Mar-21	<a href="#">The effect of COVID-19 on maternal newborn and child health (MNCH) services in Bangladesh, Nigeria and South Africa: call for a contextualised pandemic response in LMICs</a>	International Journal for Equity in Health	Commentary	This commentary explores the contextual factors influencing maternal, neonatal, and child health (MNCH) care in Bangladesh, Nigeria, and South Africa during the COVID-19 pandemic. Comparison of MNCH service utilization in March-May 2020 to the same months in 2019 showed a decline in attendance for formal antenatal care in all 3 countries. Reduced visits for family planning and child vaccination were also observed in Bangladesh and Nigeria; data for these services were not available from South Africa. The authors argue that reduced utilization of MNCH services in these countries stemmed from: a) the implementation of lockdowns and fear of COVID-19 deterring people from accessing basic MNCH care; b) a shift of focus towards pandemic response at the cost of other health services; and c) resource constraints. The authors offer a 4-point mitigation plan to safeguard MNCH care during the pandemic: 1) local MNCH care providers should be consulted on the impact of COVID-19 response measures in order to design measures that are appropriate to the local context; 2) COVID-19 mitigation plans should be specific to each tier of the health system (e.g., primary,	This commentary explores factors influencing reductions in maternal, neonatal, and child health (MNCH) care utilization in Bangladesh, Nigeria, and South Africa during the COVID-19 pandemic. The authors offer a 4-point COVID-19 mitigation plan to safeguard MNCH care during the pandemic.	Ahmed T, Rahman AE, Amole TG, et al. The effect of COVID-19 on maternal newborn and child health (MNCH) services in Bangladesh, Nigeria and South Africa: call for a contextualised pandemic response in LMICs. <i>Int J Equity Health.</i> 2021;20(1):77. Published 2021 Mar 15. doi:10.1186/s12939-021-01414-5

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					secondary, or tertiary) so they can be operationalized according to each specific context; 3) community-based education, SARS-CoV-2 testing, and training should be implemented to promote the continued provision of MNCH services; and 4) COVID-19 mitigation strategies should be integrated within a country's existing health management information systems to facilitate data collection used to inform policy decisions, resource allocation, and provision of MNCH and other essential health services.		
Coronavirus disease 2019, COVID-19, SARS-CoV-2, Pandemic, Pregnancy, Pregnancy-related anxiety, anxiety	15-Mar-21	<a href="#">Pregnancy-Related Anxiety and its Associated Factors during COVID-19 Pandemic in Iranian Pregnant Women: A Web-Based Cross-Sectional Study</a>	BioMed Central (BMC) Pregnancy and Childbirth	Research Article	The authors of this web-based cross-sectional study aimed to assess pregnancy-related anxiety (PRA) and its associated factors during the COVID-19 pandemic. The study included 318 pregnant women recruited from primary healthcare centers in Sari and Amol, Iran, between April 17 and May 31, 2020. Data were collected using different depression and anxiety screening tools, including the Pregnancy-Related Anxiety Questionnaire, to assess pregnancy-related fears and concerns. All of the screening tools were provided to participants through social media or were completed over the telephone. The results showed that around 21% of the study participants had PRA, 42.1% had depression, and 4.4% had COVID-19 anxiety. The significant predictors of PRA were the number of pregnancies (p=0.0008), practice regarding COVID-19 (p<0.001), COVID-19 anxiety (p<0.001), and social support (p=0.025), which explained 19% of the total variance. Depression and COVID-19 anxiety increased the odds of PRA by four times and 13%, respectively, while good practice regarding COVID-19 decreased the odds by 62%. These findings can be used to develop appropriate strategies for managing mental health problems in pregnancy during the COVID-19 pandemic.	The authors of this web-based cross-sectional study aimed to assess pregnancy-related anxiety (PRA) and its associated factors during the COVID-19 pandemic. Findings showed that around 21% of pregnant women suffered from PRA during the COVID-19 pandemic. The significant predictors of PRA during the pandemic included the number of pregnancies, practices regarding COVID-19, COVID-19 anxiety, depression, and social support.	Hamzehgardeshi Z, Omidvar S, Amoli AA, Firouzbakht M. Pregnancy-related anxiety and its associated factors during COVID-19 pandemic in Iranian pregnant women: a web-based cross-sectional study. BMC Pregnancy Childbirth. 2021;21(1):208. Published 2021 Mar 15. doi:10.1186/s12884-021-03694-9
COVID-19; SARS CoV-2; newborn; neonate; nursery; mother–infant dyad; breastfeeding	15-Mar-21	<a href="#">Management and Early Outcomes of Neonates Born to Women with SARS-CoV-2 in 16 U.S. Hospitals</a>  <a href="#">[Free Access to Abstract Only]</a>	American Journal of Perinatology	Original Article	This case series describes the demographic and clinical characteristics, clinical management, and neonatal outcomes of infants born to women with SARS-CoV-2 infection. Using a structured case template, 16 US hospitals contributed 70 cases involving neonates born at ≥35 weeks of gestation to mothers who tested positive for SARS-CoV-2 via RT-PCR before delivery. 88% of women were 20–40 years old [mean ages and ranges not reported]. Birth hospitalizations were uncomplicated for 66 (94%) neonates and 4 (6%) required admission to a neonatal ICU. All who were tested for SARS-CoV-2 were negative (n=57). Outpatient follow-up data were available for 13 neonates, all of whom remained asymptomatic. Half of the 66 dyads without complications were co-located (n=33 [inconsistent with number in abstract]), while the other half were separated (n=33), and 40% were directly breastfed (n=28). The decision to separate was cited as hospital COVID-19 rooming policy for 29 dyads (mostly in the US Northeast) and due to shared decision-making between parents and providers for 4 dyads. Of the 42 infants who were not directly breastfed, 37 were exclusively fed formula or donor milk, 4 were fed a combination of	In this multisite case series of 70 neonates born to women with SARS-CoV-2 infection in the US, clinical outcomes were overall good, and there were no documented neonatal SARS-CoV-2 infections. However, the low rates of indirect breastfeeding with expressed milk among separated mother–infant dyads are in conflict with recommendations to preserve breastfeeding during separation.	Congdon JL, Kair LR, Flaherman VJ, et al. Management and Early Outcomes of Neonates Born to Women with SARS-CoV-2 in 16 U.S. Hospitals [published online, 2021 Mar 15]. Am J Perinatol. 2021. doi:10.1055/s-0041-1726036

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					expressed milk plus supplementation, and 1 was exclusively fed expressed breast milk. The authors report that clinical management was largely inconsistent with US COVID-19 guidelines. In particular, the low rates of indirect breastfeeding with expressed milk among separated mother-infant dyads are in conflict with recommendations by the American Academy of Pediatrics and the US CDC to preserve breastfeeding during separation.		
Pregnancy, birth, health care delivery, preparedness	15-Mar-21	<a href="#">Perspectives of pregnant women during the COVID-19 pandemic: A qualitative study</a>	Women and Birth	Original Research	This qualitative descriptive study provides insights into the perspectives of pregnant women regarding their care during the COVID-19 pandemic in Australia. 15 pregnant women (mean age 31 years, range 20-36) participated in semi-structured interviews from June 1-19, 2020 in Melbourne, Australia. The average gestational age was 30 weeks (range 19-36). The interview guide covered topics such as the impact of the pandemic on participants' pregnancy experience and birth preferences, concerns related to COVID-19, and questions on health care delivery. Four overarching themes were developed through data analysis: 1) support for a positive experience (including seeking inclusion of partner or support person and value for peer and inter-generational support), 2) impact on preparedness in pregnancy and beyond (including changes to birthing and parenting education and concerns around early discharge), 3) facing uncertainty of a pandemic (including disruption to the "normal" pregnancy experience, perceived risk of acquiring infection, and concerns with telehealth), and 4) retaining resilience and optimism. The authors conclude that directly addressing these concerns expressed by women may not only positively influence their pregnancy experience but may also enhance long-term psychosocial wellbeing.	This qualitative study of pregnant women's perspectives in Australia regarding their care during the COVID-19 pandemic identified four major themes: support for a positive experience, impact on preparedness in pregnancy and beyond, facing uncertainty of a pandemic, and retaining resilience and optimism. The authors conclude that directly addressing these concerns expressed by women may not only positively influence their pregnancy experience but may also enhance long-term psychosocial wellbeing.	Atmuri K, Sarkar M, Obudu E, et al. Perspectives of pregnant women during the COVID-19 pandemic: A qualitative study. Women Birth. 2021; doi:https://doi.org/10.1016/j.wombi.2021.03.008
COVID-19; pregnancy; thyroid function; guidelines	15-Mar-21	<a href="#">Following SARS-CoV-2 in the first trimester of pregnancy, what should we do in the 2nd, 3rd trimesters, and postpartum in terms of thyroid assessment?</a>	Endocrine	Letter to the Editor	The authors reported results from studies investigating the association between COVID-19 and thyroid function. In particular, they highlighted a retrospective study by Lin et al. (2020), which found that pregnant women during the COVID-19 pandemic have had significantly higher serum free triiodothyronine (FT3) and lower free thyroxine (FT4) compared to women pregnant before the pandemic. Indicating that COVID-19 may act as a trigger for thyroid abnormalities and affect thyroid hormones through physiological pathways, the authors recommended the following: a reassessment of thyroid status, signs, and symptoms of euthyroid pregnant women infected with SARS-CoV-2 in their 1st trimester, especially those at high risk for thyroid dysfunction or with previous history of thyroid disease; provision of telehealth consultation for women severely affected by COVID-19 in their 1st trimester or with early diagnosis of thyroid dysfunction; investigation of short- and long-term obstetric and fetal outcomes in euthyroid women infected with SARS-CoV-2 in their 1st trimester of pregnancy, and with thyroid dysfunction after infection.	In this letter, the authors, citing findings highlighting the association between COVID-19 and thyroid dysfunction, recommended the following: a reassessment of women at high risk for thyroid dysfunction infected with SARS-CoV-2 in their 1st trimester, telehealth consultations for detecting thyroid dysfunction in pregnant women with SARS-CoV-2 infection, and investigation of short-term and long-term maternal and fetal outcomes in euthyroid women with SARS-CoV-2 infection in their 1st trimester.	Sarahian N, Saei Ghare Naz M, Ramezani Tehrani F. Following SARS-CoV-2 in the first trimester of pregnancy, what should we do in the 2nd, 3rd trimesters, and postpartum in terms of thyroid assessment? [published online ahead of print, 2021 Mar 15]. Endocrine. 2021;1-2. doi:10.1007/s12020-021-02678-1

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Mental health, psychology, lockdown, parents, distress	15-Mar-21	<a href="#">The COVID-19 lockdown and psychological distress among Italian parents: Influence of parental role, parent personality, and child difficulties</a>	International Journal of Psychology	Original Research	This study assessed socio-demographic and psychological variables for parental well-being during the COVID-19 lockdown in Italy. An online survey was administered from April 6-11, 2020 to 917 parents ages 23–67 years with up to six children, ages 3–13 years. The survey included: 14 demographic questions, the Big Five Inventory (BFI-10, which measured parent personality characteristics), the Emotional Symptoms and Hyperactivity-Inattention subscales of the Strength and Difficulties Questionnaire (SDQ-P, assessed for hyperactivity and emotional symptoms in children), and the General Health Questionnaire (GHQ-12). Multiple moderated linear regression analyses were then performed. Motherhood, higher levels of education, higher neuroticism, lower extroversion, and more child emotional and hyperactivity-inattention symptoms were found to be significant predictors of parent distress (p<0.05). Furthermore, a significant two-way interaction between child emotional problems and parent extroversion was found (p<0.001), with child emotional problems affecting psychological distress of parents with both high and low extroversion. The authors conclude that overall, parents showed high rates of psychological distress, signaling severe difficulties during the lockdown.	In this online study assessing socio-demographic and psychological variables for parental well-being during the COVID-19 lockdown in Italy, the authors discovered that motherhood, higher levels of education, higher neuroticism, lower extroversion, and more child emotional and hyperactivity-inattention symptoms were found to be significant predictors of parent distress. Overall, parents showed high rates of psychological distress, signaling severe difficulties during the lockdown.	Mazza C, Marchetti D, Ricci E, et al. The COVID-19 lockdown and psychological distress among Italian parents: Influence of parental role, parent personality, and child difficulties. <i>Int J Psychol.</i> 2021; doi:10.1002/ijop.12755
COVID-19; SARS-CoV-2; breastfeeding; maternal mental health; mothers; postpartum; social support	14-Mar-21	<a href="#">Breastfeeding during COVID-19: A Narrative Review of the Psychological Impact on Mothers</a>	Behavioral Sciences	Review	This review summarized evidence regarding the impact of COVID-19 on breastfeeding plans and how these relate to women's psychological outcomes. Searches were conducted on PubMed and Web of Science for studies in English, Spanish, and Portuguese between January 2020 and January 2021. All study designs and pre-prints were considered; 12 studies were included. Reports suggest that COVID-19 impacted breastfeeding frequency and duration and maternal mental health outcomes. Among women who reported changes in frequency in the reviewed studies, more women reported increases (e.g. due to being at home more or for promoting the infant's immunity) rather than decreases in frequency (eg. due to increased workload, caregiving responsibilities, or reduced milk production). Positive breastfeeding experiences have been observed when mothers perceive that they have more time for motherhood, which may be associated with better mental health outcomes. Negative breastfeeding experiences have been observed when mothers are separated from their newborns, when mothers struggle with breastfeeding, or when mothers perceive decreased family and professional support, which seems to be associated with worse mental health outcomes. Although current guidelines formulated during the COVID-19 pandemic strongly recommend the maintenance of breastfeeding practices parents frequently opted for formula and expressed breastmilk, expressing concerns about the safety of breastfeeding. The authors emphasize that health management services must	This review summarized evidence regarding the impact of COVID-19 on breastfeeding plans and how these relate to women's psychological outcomes. Overall, studies showed that the COVID-19 pandemic impacted expectations regarding breastfeeding, both positively (e.g. more time to enjoy motherhood) and negatively (e.g. reduced support and increased work and childcare burden), which in turn affected mothers' mental health. The authors emphasize the harmful impact of separating mothers and infants on breastfeeding success and maternal mental health.	Pacheco F, Sobral M, Guiomar R, de la Torre-Luque A, Caparros-Gonzalez RA, Ganho-Ávila A. Breastfeeding during COVID-19: A Narrative Review of the Psychological Impact on Mothers. <i>Behav Sci (Basel).</i> 2021;11(3):34. Published 2021 Mar 14. doi:10.3390/bs11030034

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neonatal care; COVID-19 pandemic; SARS-CoV-2; Kangaroo mother care; personal protective equipment	14-Mar-21	<a href="#">Small and sick newborn care during the COVID-19 pandemic: global survey and thematic analysis of healthcare providers' voices and experiences</a>	British Medical Journal (BMJ) Global Health	Original Research	consider the harmful impact of separating mothers and infants on breastfeeding success and maternal mental health.  The authors surveyed neonatal healthcare providers from 62 countries between July 13- October 13, 2020, on disruptions to small and sick newborn care due to the COVID-19 pandemic. The availability of SARS-CoV-2 testing was a significant challenge, with 36.2% stating that testing was routinely available for pregnant women at admissions for delivery, and 30.7% saying testing was available for symptomatic women or women with known contact history. Testing was unavailable according to 21.9% of respondents from Africa. Delays in care such as Kangaroo Mother Care (KMC) and specialized newborn care were due to waiting for SARS-CoV-2 results before providing services. An inadequate supply of PPE was noted, with 61.4% having consistent access to hand sanitizer and 59.9% for gloves. N95 masks and eye shields were less available, with 27.6% and 27.3%, respectively, regularly reporting access to these supplies. Access to information was limited, with 16.3% reporting very clear knowledge of care during the pandemic and 23.1% reported receiving information from their institutions. Neonatal healthcare providers reported fear and stress levels higher than usual for 85.9% and 89.3%, respectively. Reductions by 25% were reported for hospital births (25% of respondents) and neonatal admission (20% of respondents). Follow-up care was also impacted, with 73.3% of respondents stating that families were reluctant to schedule an appointment due to COVID-19 fears. KMC care was disrupted with a change from 85% using the practice routinely to 55% during the pandemic. The authors stress the many disruptions in care for newborns during the COVID-19 pandemic and state that the global community must act to protect the most vulnerable.	The authors surveyed neonatal healthcare providers from 62 countries between July 13- October 13, 2020 on disruptions to small and sick newborn care due to the COVID-19 pandemic. The availability of SARS-CoV-2 testing was a significant challenge, with 36.2% stating that testing was routinely available for pregnant women at admissions for delivery, and 30.7% saying testing was available for symptomatic women or women with known contact history.	Rao SPN, Minckas N, Medvedev MM, et al. Small and sick newborn care during the COVID-19 pandemic: global survey and thematic analysis of healthcare providers' voices and experiences. <i>BMJ Glob Health</i> . 2021;6(3):e004347. doi:10.1136/bmjgh-2020-004347
COVID-19; systemic lupus erythemastous; lupus; pregnancy	14-Mar-21	<a href="#">Systemic lupus erythematosus and COVID-19 during pregnancy</a>	Lupus	Case Report	The authors present the cases of 2 pregnant patients with systemic lupus erythematosus (SLE) in the Netherlands [dates not given]. Case 1 was a 31-year-old G1P0 being treated with azathioprine, hydroxychloroquine, prednisone, and prophylactic acetyl sialic acid, which was initiated after confirmation of pregnancy. She was admitted at 38 + 1 weeks and induced after testing positive for SARS-CoV-2 with mild respiratory symptoms. She delivered a healthy female (5-minute APGAR score 9/10, weight: 2880g), and both were discharged, with the mother making full recovery. Case 2 (39 years old, G2P1) had an obstetric history of pre-eclampsia. She was being treated with hydroxychloroquine, azathioprine, and etanercept, with prophylactic acetyl sialic acid started after pregnancy confirmation. At 19 weeks' gestation, she presented to the emergency room with dyspnea and coughing, tested positive for SARS-CoV-2, and azathioprine and etanercept were discontinued. 9 days after the positive test, she reported arthralgia, after which azathioprine was restarted. 6 days later, etanercept was restarted and oligo-arthritis was confirmed, for which she was given	The authors highlighted 2 cases of pregnant women with systemic lupus erythematosus (SLE) and COVID-19. For both, COVID-19 treatment was not initiated, and both delivered healthy children. Case 2, for whom her SLE medications were discontinued, displayed a flare in SLE symptoms, which was not seen in Case 1.	Smeele HT, Perez-Garcia LF, Grimminck K, et al. Systemic lupus erythematosus and COVID-19 during pregnancy [published online ahead of print, 2021 Mar 14]. <i>Lupus</i> . 2021. doi:10.1177/09612033211002270

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					triamcinolone acetonide injections. She gave birth to a healthy male at 38 + 5 weeks (5-minute APGAR score 9/10, 4205g), but a placenta accreta resulted in massive hemorrhage treated with IV sulprostone, tranexamic acid, as well as 2 units of packed cells, and she was discharged 3 days after delivery.		
COVID-19 pre-procedural testing strategy and early outcomes at a large tertiary care children's hospital	14-Mar-21	<a href="#">COVID-19 pre-procedural testing strategy and early outcomes at a large tertiary care children's hospital</a>	Pediatric Surgery international	Original Report	This report describes the experience of a US children's hospital (Children's Wisconsin, CW) in developing a universal pre-procedural COVID-19 testing protocol. On March 15, 2020, the existing CW Surgical Executive Committee re-organized to create a multi-disciplinary COVID-19 procedural taskforce, charged with developing a strategy for pre-procedural COVID-19 testing that (1) maximized patient safety in the rapidly changing environment, (2) prevented patient care-associated viral transmission, (3) conserved resources (PPE, testing supplies, blood products), and (4) allowed for resumption of procedural care within institutional capacity. All patients underwent COVID-19 exposure risk and symptom screening, and all pre-procedural patients underwent Simplexa™ COVID-19 Direct testing. Hospitalized patients requiring an aerosol generating procedure had an updated COVID-19 test within 72 h of the scheduled procedure whenever possible. Of 11,209 general anesthetics performed from March 16-October 31, 2020, 11,150 patients (99.5%) underwent pre-procedural COVID-19 testing. 1.4% of pre-procedural patients tested positive for COVID-19. By June 2020, CW was operating at near-normal procedural volume and there were no documented cases of in-hospital viral transmission. Only 0.5% of procedures were performed under augmented COVID-19 precautions (negative pressure and highest-level PPE). The authors conclude that the institution successfully developed a pre-procedural COVID-19 testing protocol that limited in-hospital viral transmission and resource use.	This report describes how a US children's hospital developed a universal pre-procedural COVID-19 testing protocol that sought to (1) maximize patient safety, (2) prevent in-hospital viral transmission, (3) conserve resources, and (4) allow for resumption of procedural care within institutional capacity. 1.4% of pre-procedural patients tested positive for COVID-19 and there were no documented cases of in-hospital viral transmission. The testing protocol enabled resumption of near-normal procedural volume while limiting in-hospital viral transmission and resource use.	Bence CM, Jarzembowski JA, Belter L, et al. COVID-19 pre-procedural testing strategy and early outcomes at a large tertiary care children's hospital. <i>Pediatr Surg Int.</i> 2021; 04878-2. doi:10.1007/s00383-021-04878-2
Placenta, immunology, histology, vertical transmission, inflammation	13-Mar-21	<a href="#">Placental Immune Responses to Viruses: Molecular and Histo-Pathologic Perspectives</a>	International Journal of Molecular Sciences	Review	In this article, the authors review the role of the placenta in pregnancy-related immune responses, mechanisms of placental viral infections, and the clinical pathophysiology of specific infections in pregnancy, including SARS-CoV-2. SARS-CoV-2 enters cells through the ACE2 receptor. Reported sites of ACE2 expression in the placenta have included the villi, extravillous trophoblasts (EVTs) and decidual cells, and ACE2 is highly abundant in the early gestational placenta. However, S-protein requires proteolytic cleavage, and single cell data of placental tissue from each trimester has demonstrated that TMPRSS2 expression is low, which likely explains why in-utero infection has rarely been reported. Single cell RNAseq from placental cells of COVID-19 hospitalized mothers demonstrated that although no viral transmission occurred, there was altered gene expression which included increased expression of inflammatory cytokines, innate immune pathways and proteins critical for cytotoxicity compared to uninfected controls. Histopathological findings of SARS-CoV-2 infection in the placenta	In this article, the authors review the role of the placenta in pregnancy-related immune responses, mechanisms of placental viral infection, and the clinical pathophysiology of SARS-CoV-2 in pregnancy. Although ACE2 is expressed in the placenta, TMPRSS2 expression is low, which is likely why in-utero transmission is low. However histopathologic and molecular changes in the placenta have been reported with SARS-CoV-2 infection. The authors conclude that understanding placental molecular, immunologic and	Narang K, Cheek EH, Enninga EAL, Theiler RN. Placental Immune Responses to Viruses: Molecular and Histo-Pathologic Perspectives. <i>Int J Mol Sci.</i> 2021;22(6):2921. Published 2021 Mar 13. doi:10.3390/ijms22062921

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					have included features of fetal vascular malperfusion (35.3%), maternal vascular malperfusion (46%), villitis (8.7%), chorio-amnionitis (6%) and intervillitis (5.3%). The authors conclude that the understanding of placental molecular, immunologic and histopathic pathways is paramount to the care provided during pregnancy and to defining risks of vertical transmission from emerging infections (like SARS-CoV-2).	histopathic pathways is paramount to the care provided during pregnancy and to defining risks of vertical transmission.	
COVID-19; obesity; children; lifestyle; detrimants; diet; physical activity; sedentary behavior; COV-EAT	13-Mar-21	<a href="#">Lifestyle changes and determinants of children's and adolescents' body weight increase during the first COVID-19 lockdown in Greece: The COV-EAT study</a>	Nutrients	Article	The authors conducted a study from April 30- May 24, 2020 of children's and adolescents' (2-18 years) lifestyle behaviors during the first COVID-19 lockdown in Greece. 397 dyads of parents (mothers mean age 39.8 years $\pm$ SD 5.3; fathers mean age 43.2 years $\pm$ SD 6.4) and children (mean age 7.8 years $\pm$ SD 4.1) participated. 66.9% of parents reported a reduction in their child's physical activity, and 35% reported that their child's body weight increased. The consumption of fruits and fruit juices, vegetables, dairy products, pasta, sweets, total numbers of snacks, and breakfast increased significantly ( $p < 0.05$ ) while fast-food consumption decreased ( $p < 0.001$ ). Bodyweight increases were found to be associated with increased consumption of salty snacks ( $p < 0.001$ ) and prepackaged juices and sodas ( $p < 0.001$ ). Lifestyle determinants that were associated with increased body weight were sweet consumption ( $p < 0.001$ ), snack consumption ( $p < 0.001$ ), breakfast frequency ( $p = 0.001$ ), increased screen time ( $p < 0.001$ ), and decrease in physical activity ( $p < 0.001$ ). The authors report that a normal body weight change for children's growth is about 0.5kg [undefined time frame], while this study revealed an abnormal mean weight gain of 2kg. Furthermore, as the survey revealed unfavorable changes in lifestyle behaviors for children and adolescents during the COVID-19 pandemic, the authors suggest effective e-health and m-health strategies must be employed to prevent excessive weight gains.	The authors conducted a study from April 30- May 24, 2020, of children's and adolescents' lifestyle behaviors during the first COVID-19 lockdown in Greece. Bodyweight increases were found to be associated with increased consumption of salty snacks and prepackaged juices and sodas.	Androutsos O, Perperidi M, Georgiou C, Chouliaras G. Lifestyle Changes and Determinants of Children's and Adolescents' Body Weight Increase during the First COVID-19 Lockdown in Greece: The COV-EAT Study. <i>Nutrients</i> . 2021;13(3):930. Published 2021 Mar 13. doi:10.3390/nu13030930
Arab children; COVID-19; behavioral/emotional; daily routines; isolation; lockdown	13-Mar-21	<a href="#">Impact of COVID-19 Pandemic on Behavioral and Emotional Aspects and Daily Routines of Arab Israeli Children</a>	International Journal of Environmental Research and Public Health	Original Research	This study examines the effects of the COVID-19 pandemic on psychological aspects and daily routines of Arab-Israeli children. An online survey assessing social-emotional patterns including use of screens, sleep, and physical activities was administered to Arab-Israeli parents of $\geq 1$ child (aged 5 - 11 years) free of psychological or physical impairments, between December 4-10, 2020. 382 parent participants were included in the study (57.9% 36-45 years old, range 22-59 years; 86.1% female). 382 children were assessed (21.2% in kindergarten, range pre-K through 4th grade; 51% males; 11.8% diagnosed with COVID-19; 43.5% isolated due to known COVID-19 exposure). Results suggest that during the COVID-19 outbreak, 55.8% of children asked to sleep in their parents' bed and 45% expressed fears they did not have before. Most children showed increased irritability, constant mood swings and nervousness about limits and messages, and 41.4% showed sleep difficulties. More than 50% of parents reported their child became more thoughtful, lazier, or was able to adapt to the limits and	This study examines the effects of the COVID-19 pandemic on psychological aspects and daily routines of Arab-Israeli children. Results showed increased screen time, sleep, and decreased physical activity. The authors conclude children are vulnerable to the psychological effects of the COVID-19 outbreak and advocate for programs supporting the mental health of children, particularly in national minorities such as Arab-Israeli children.	Ghanamah R, Eghbaria-Ghanamah H. Impact of COVID-19 Pandemic on Behavioral and Emotional Aspects and Daily Routines of Arab Israeli Children. <i>Int J Environ Res Public Health</i> . 2021;18(6):2946. Published 2021 Mar 13. doi:10.3390/ijerph18062946

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					restriction of the COVID-19 outbreak. Children significantly increased their time using screens and sleeping, and were less active physically (all $p < 0.001$ ). The authors conclude children are vulnerable to the psychological effects of the COVID-19 outbreak and advocate for programs supporting the mental health of children, particularly in national minorities such as Arab-Israeli children.		
COVID-19; lung ultrasound; diagnostic measures	13-Mar-21	<a href="#">Quantitative assessment of COVID-19 pneumonia in neonates using lung ultrasound score</a>	Pediatric Pulmonology	Original Research	The authors retrospectively surveyed lung ultrasound (LUS) findings of Chinese neonates born to SARS-CoV-2-positive mothers (n=60) in Wuhan Children's Hospital from January 31-March 31, 2020 to determine ultrasonic features of COVID-19 pneumonia. 11 neonates were SARS-CoV-2-positive (3 males; median age: 3.8 +/- 5.2 days), and were compared to 11 age- and gender-matched controls. 5 of the neonates (45%) tested positive for SARS-CoV-2 by nasopharyngeal swab, and the remaining tested positive for IgG/IgM. LUS images were acquired, and the semi-quantitative Lung Ultrasound Score (LUSS) was assessed by 2 experienced reviewers, with higher LUSS indicating greater loss of lung aeration. In the COVID-19 group, 9 neonates were born preterm, with most experiencing shortness of breath, vomiting, bucking and lethargy, and 2 of them with a low-grade fever. Most neonates showed an elevated creatinine kinase myocardial band (83.5 +/- 39.5 U/L). 62.8% (n=83) of the 132 regions reviewed in the COVID-19 group depicted abnormalities (12 regions per subject). Each COVID-19 patient showed lesions in bilateral lungs and different regions, with an average involvement of 7.5 regions involved per patient. The global LUSS was higher in the COVID-19 group compared to the control group ( $p < 0.001$ ), and regions with higher scores were located primarily in inferior and posterior regions. The authors noted high inter- and intra-observer replicability (interclass correlation coefficients= 0.854 and 0.933, respectively). Hence, they recommended the use of LUS, particularly in the neonate population, in conjunction with other clinical assessments to comprehensively assess for COVID-19 pneumonia.	The authors presented the diagnostic value of lung ultrasound (LUS) and lung ultrasound scores (LUSS) for the semi-quantitative assessment of pneumonia in a cohort of COVID-19 pediatric patients (n=11). They found that 83/132 regions of the lungs were abnormal on LUS, with the COVID-19 group reporting higher LUSS compared to the control group. All COVID-19 patients had bilateral lung lesions, primarily located in the posterior and inferior regions. They concluded by recommending the use of LUS, particularly in the neonate population, in conjunction with other clinical assessments to comprehensively assess for COVID-19 pneumonia.	Li W, Fu M, Qian C, et al. Quantitative assessment of COVID-19 pneumonia in neonates using lung ultrasound score [published online ahead of print, 2021 Mar 13]. <i>Pediatr Pulmonol</i> . 2021. doi:10.1002/ppul.25325
COVID-19; anaesthesia; perioperative outcomes; complications	13-Mar-21	<a href="#">Anesthetic outcomes in pediatric patients with COVID-19: A matched cohort study</a>	Pediatric Anaesthesia	Brief Report	The authors conducted a retrospective case-control study to investigate the peri-operative and anesthetic risks associated with concurrent pediatric SARS-CoV-2 infection for patients under general anesthesia in the USA. Cases were 1:2 matched to controls by age and type of procedure, with 35 cases (16 female) and 70 controls (35 female) assessed between January 3 - September 24, 2020. The median age of cases and controls was 3.7 years (IQR: 1-6) and 3.6 years (0.9-6.5), respectively. Among SARS-CoV-2 cases, the first positive SARS-CoV-2 test was a mean of 2.6 days (95% CI: 1.3-4.0 days) before anesthesia. 26% of SARS-CoV-2 patients had post-anesthesia complications, compared to 1% of controls (OR: 18.00; 95% CI: 2.49-788.96, $p = 0.0007$ ). Post-operative complications included the diagnosis of systemic inflammatory response	In this retrospective case-control study assessing the peri-operative and anesthetic complications in pediatric patients with SARS-CoV-2, the investigators found that the odds of anesthesia complications in SARS-CoV-2 patients was 18 times that of age- and-procedure matched controls. Additionally, they were also more likely to display pre-operative symptoms of upper respiratory tract infections compared to	Cronin JA, Nelson JH, Farquhar I, et al. Anesthetic outcomes in pediatric patients with COVID-19: A matched cohort study [published online ahead of print, 2021 Mar 13]. <i>Paediatr Anaesth</i> . 2021. doi:10.1111/pan.14177

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					syndrome, the need for prolonged invasive/non-invasive respiratory support, vasopressor requirement, clinically significant stridor, and a small pericardial effusion. Additionally, patients with SARS-CoV-2 infections were more likely to display pre-operative upper respiratory tract infection symptoms than controls (p=0.0001). There was no difference in the incidence of post-anesthesia complications in symptomatic (n=13) vs asymptomatic (n=22) SARS-CoV-2 patients (4 cases vs 5 cases, p=0.8869) or length-of-stay (11.3 vs 10.5 days, p=0.8733). SARS-CoV-2 status is important to consider in evaluating risk for post-anesthesia complications in this population.	controls (p=0.0001). SARS-CoV-2 status is important to consider in evaluating risk for post-anesthesia complications in this population.	
Pregnancy, postpartum, physical therapy, maternal health, surgery, C-section	13-Mar-21	<a href="#">Reducing Maternal Morbidity on the Frontline: Acute Care Physical Therapy After Cesarean Section During and Beyond the COVID-19 Pandemic</a>	Physical Therapy	Commentary	This commentary discusses the impact of COVID-19 on maternal recovery from C-sections and the role of acute care physical therapy in improving maternal post-surgical health in the USA. To reduce the risk of inadvertent exposure to SARS-CoV-2 in women postpartum, the American College of Obstetrics and Gynecology (ACOG) recommended that physicians consider expedited discharge after 2 days following a C-section, a reduction from an average of 3 days. The authors propose that acute care physical therapists are essential for expediting safe discharge during the pandemic to mitigate risks of maternal morbidity and to offer individualized instruction for postpartum recovery. They state this is especially important for women with high-risk conditions such as diabetes, obesity, or other movement restrictions after delivery. Acute care physical therapists can offer pre-surgical education and develop exercise programs to reduce deconditioning and optimize postpartum recovery. The goals are to reduce post-surgical wound complications, optimize respiratory function and endurance, decrease pain and surgical wound tension during bed mobility and transfers, and improve tolerance to activities. The authors conclude with a call to action for acute care physical therapists to provide early intervention for women in the immediate post-operative period (first 24 hours) following a C-section to improve maternal health and outcomes.	This commentary describes the potential role for acute physical therapists to improve maternal health following C-section delivery during the COVID-19 pandemic in the USA, especially for women with high-risk conditions such as diabetes or obesity. The goals of postpartum acute care physical therapy are to reduce post-surgical wound complications, optimize respiratory function and endurance, decrease pain and surgical wound tension during bed mobility and transfers, and improve tolerance to activities. The authors conclude with a call to action for early intervention from acute care physical therapists in the immediate postpartum period.	Segraves RL, Segraves JM. Reducing Maternal Morbidity on the Frontline: Acute Care Physical Therapy After Cesarean Section During and Beyond the COVID-19 Pandemic. Phys Ther. 2021. doi:10.1093/ptj/pzab093
Indian Ocean; Mayotte; MIS-C; SARS-CoV-2	13-Mar-21	<a href="#">Multisystem inflammatory syndrome associated with severe acute respiratory syndrome coronavirus 2 in children: A case series from Mayotte Island</a>	Journal of the Pediatric Infectious Diseases Society	Case Series	The authors describe the characteristics and management of 11 children (median age 9 years, age range 5-17 years) treated for MIS-C during the COVID-19 pandemic at the only hospital in Mayotte Island, an overseas department of France from April 14-August 14, 2020. All the children were native to Mayotte or Comoro Islands, and only one had any underlying disease, which was obesity. 10 presented with fever, and all suffered from acute gastro-intestinal problems, systemic arterial hypotension, decreased peripheral pulses, and increased blood lactate levels (>2mmol/L). Ferritin was abnormal in all 8 of the patients tested. The authors report the MIS-C cases occurred 4-6 weeks after the peak of SARS-CoV-2 cases in Mayotte. 6 of 11 patients had positive RT-PCR for SARS-CoV-2 via nasopharyngeal swab, and 9 had positive serology for IgG antibodies	The authors describe the characteristics and management of 11 children treated for MIS-C at the only hospital on Mayotte Island, an overseas department of France. 10 presented with fever. All suffered from acute gastro-intestinal problems, systemic arterial hypotension, decreased peripheral pulses and increased blood lactate levels (>2mmol/L).	Cattaneo C, Drean M, Subiros M, et al. Multisystem Inflammatory Syndrome Associated With Severe Acute Respiratory Syndrome Coronavirus 2 in Children: A Case Series From Mayotte Island [published online, 2021 Mar 13]. J Pediatric Infect Dis Soc. 2021;piab011. doi:10.1093/jpids/piab011

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					(4 were positive for both). All 11 patients tested negative for dengue by RT-PCR. 4 patients were treated with IV immunoglobulin (2g/kg), and 3 received IV methylprednisolone (2mg/kg/day). All patients recovered fully and were discharged home. The authors note a higher incidence of MIS-C on Mayotte at 8 cases per 100,000 children than in France with 12.5 cases per 1,000,000 children.		
Children, pediatrics, adolescents, disease severity, clinical characteristics	13-Mar-21	<a href="#">Clinical characteristics of COVID-19 in children and adolescents: a systematic review and meta-analysis</a>	medRxiv	Preprint (not peer-reviewed)	This systematic evaluation and meta-analysis evaluated the clinical characteristics of COVID-19 in children and adolescents. The authors searched PubMed, Embase, the Cochrane Library, Web of Science, CNKI (Chinese database), Clinical Trials.gov and chict.org.cn (China) until July 10, 2020 and included 49 studies involving 1627 patients (1-18 years of age). All patients were confirmed to be positive for SARS-CoV-2 by respiratory or blood sample. In the pooled data, the most common clinical symptoms were fever (56% [95% CI: 50-61]) and cough (45% [95% CI: 39-51]). The most common laboratory abnormalities were elevated procalcitonin (40% [95% CI: 23-57]), elevated lactate dehydrogenase (31% [95% CI: 19-43]), increased lymphocyte count (28% [95% CI: 17-42]), increased creatine kinase (28% [95% CI: 18-40]), and elevated C-reactive protein (26% [95% CI: 17-36]). The most common abnormalities determined by chest CT were lower-lobe involvement (56% [95% CI: 42-70]), ground-glass opacities (33% [95% CI: 25-42]), bilateral pneumonia (32% [95% CI: 24-40]), patchy shadowing (31% [95% CI: 18-45]), and upper lobe involvement (30% [95% CI: 20-41]). Of the 49 included studies, only 3 studies of critically ill children reported deaths, and no deaths were reported in the remaining studies. The authors conclude that disease severity among children and adolescents with COVID-19 was milder than what is reported for adult patients.	In this meta-analysis of the clinical characteristics of COVID-19 in 1627 children and adolescents, the authors found that fever and cough were the most common symptoms, while elevated procalcitonin, elevated lactate dehydrogenase, increased lymphocyte count, increased creatine kinase, and elevated C-reactive protein were the most common lab abnormalities. The most common chest CT finding was lower-lobe involvement. Only 3 case studies reported deaths of critically ill children. The authors conclude that disease severity among children and adolescents with COVID-19 was milder than what is reported for adult patients.	Lou L, Zhang H, Tang B, et al. Clinical characteristics of COVID-19 in children and adolescents: a systematic review and meta-analysis. medRxiv. 2021; doi.org/10.1101/2021.03.12.21253472
COVID-19; vaccination; eligibility; U.S. state policies	13-Mar-21	<a href="#">Prioritization of Pregnant Individuals in State Plans for COVID-19 Vaccination</a>	American Journal of Obstetrics and Gynecology	Article	The authors' objective was to determine how many US states prioritize pregnant women for COVID-19 vaccinations as of March 6, 2021. The authors found that most states 36/51 (73%) (including Washington D.C as a state) do include pregnancy as a priority group for vaccination; these states encompass 76% of the U.S. population. In 24/51 states (50%), pregnant women are currently eligible to receive the vaccine. 9/51 (18%) states prioritize groups at elevated risk for severe COVID-19 but do not specifically include pregnancy. However, the CDC does consider pregnant women to be at high risk for severe disease. 4 states use an age-descending approach to COVID-19 vaccination. With 2 states only identifying those currently or nearly eligible for the vaccine, neither includes pregnant women. The authors state that pregnant women deserve clear guidance from public health agencies on their eligibility and benefits versus risks of receiving the COVID-19 vaccine.	The authors' objective was to determine how many US states prioritize pregnant women for COVID-19 vaccinations as of March 6, 2021. The authors found that most states do include pregnancy as a priority group for vaccination.	Crane MA, Jaffe E, Beigi RH, et al. Prioritization of Pregnant Individuals in State Plans for COVID-19 Vaccination [published online ahead of print, 2021 Mar 13]. <i>Am J Obstet Gynecol</i> . 2021;S0002-9378(21)00167-8. doi:10.1016/j.ajog.2021.03.015

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COVID-19; pediatric; pancreatitis; Spain	13-Mar-21	<a href="#">Acute Pancreatitis in a Teenager With SARS-CoV-2 Infection</a>	The Pediatric Infectious Disease Journal	Brief Report	The authors described the case of a 14-year-old boy in Spain who presented with acute pancreatitis without any risk factors except for a SARS-CoV-2 infection. The patient presented to the Emergency Department after 5 hrs of severe abdominal pain of acute onset, located in the epigastrium and radiated toward the left hypochondrium and back [date not specified]. He had no history of fever, diarrhea, vomiting, or flu-like symptoms, and his family members were healthy and had been compliant with lockdown measurements during the COVID-19 pandemic. His laboratory and radiologic findings were consistent with acute pancreatitis (abdominal pain, elevated amylase, and lipase levels and magnetic resonance cholangiopancreatography showing normal-size pancreas with edematous changes), while SARS-CoV-2 PCR tested positive. His pain resolved with bowel rest, IV fluids, and analgesia, and laboratory markers of pancreatitis slowly trended down. His diet was then advanced as tolerated, and the patient was discharged home after 5 days. To the authors' knowledge, this is the first pediatric case with SARS-CoV-2 that presents with acute pancreatitis as the sole clinical manifestation. They recommend that SARS-CoV-2 infection be included in the differential diagnosis of patients with acute pancreatitis or elevation of lipase and amylase in the absence of other causes. Further reports will be necessary to confirm this possible association and better characterize and define this novel infection's characteristics and impact.	In this report, the authors described the case of a 14-year-old boy in Spain who presented with acute pancreatitis without any risk factors except for a SARS-CoV-2 infection. To the authors' knowledge, this is the first pediatric case with SARS-CoV-2 that presents with acute pancreatitis as the sole clinical manifestation.	Paz L, Eslava E, Ribes M, et al. Acute Pancreatitis in a Teenager With SARS-CoV-2 Infection. <i>Pediatr Infect Dis J</i> . 2021;40(4):e161-e162. doi:10.1097/INF.0000000000003046.
Pregnancy, malaria, co-infection, immunology, pneumonia, obstetrics	13-Mar-21	<a href="#">Pregnancy and COVID-19: Do not overlook malaria</a>  <a href="#">[Free Access to Abstract Only]</a>	International Journal of Obstetrics and Gynecology	Brief Communication	In this brief communication, the authors share a case of co-infection of malaria and SARS-CoV-2 in pregnancy. A 38-year-old woman was referred to the hospital in Italy in March 2020 at 22+2 weeks of gestation with a 2-day history of fever, cough, rhinitis, malaise, myalgia, retrosternal pain, and fatigue. History was notable for a trip to Burkina Faso 5 months earlier. SARS-CoV-2 RT-PCR resulted positive and lung ultrasound was consistent with viral pneumonia. Laboratory findings were normal, except for increased levels of C-reactive protein. She improved and was discharged on the 20th day. At 25+6 weeks gestation, she was re-admitted with fever, chills, and myalgia. Chest X-ray and SARS-CoV-2 swab were normal. Blood examination revealed non-falciparum trophozoites (plasmodium ovale); other findings were unremarkable, except for increased levels of C-reactive protein. She was treated with chloroquine for 3 days along with primaquine, with recovery. She delivered a healthy infant weighing 2664 g at 41+0 weeks of gestation. The authors conclude that she likely experienced a re-activation of latent malaria, since SARS-CoV-2 infection causes immune system impairment that leads to higher vulnerability to other infections and reactivation of latent infections. Other infectious diseases with similar clinical presentations to SARS-CoV-2 should not be overlooked.	In this case report, the authors present a 38-year-old woman diagnosed with SARS-CoV-2 in Italy and subsequently diagnosed with malaria (plasmodium ovale) during her pregnancy. This was likely a reactivation of a latent infection from her travel to Burkina Faso, since SARS-CoV-2 infection causes immune system impairment that leads to higher vulnerability to other infections and reactivation of latent infections. The authors conclude that other infectious diseases with similar clinical presentations to SARS-CoV-2 should not be overlooked.	Papaccio M, Castellani R, Zanardini C, Sartori E, Prefumo F, Sacconi B. Pregnancy and COVID-19: Do not overlook malaria. <i>Int J Gynaecol Obstet</i> . 2021;10.1002/ijgo.13670. doi:10.1002/ijgo.13670

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physical activity; screen time; qualitative; outdoor play; interview	12-Mar-21	<a href="#">"You can't go to the park, you can't go here, you can't go there": Exploring parental experiences of COVID-19 and its impact on their children's movement behaviors</a>	Children (Basel)	Article	The authors conducted interviews with Canadian parents of children (5-11 years) from June- July 2020 to explore how parents experienced the COVID-19 pandemics restrictions from March-May 2020 and how that impacted their children's movements. The interviews followed 3 themes: loss of structured activities and destinations for physical activity, limited outdoor play opportunities, and pandemic-related rises in sedentary behaviors. Regional differences between Ontario and British Columbia did not show major differences in parental perceptions of declines in physical activity and outdoor play. Early in the pandemic, families experienced the stress of adjusting to new roles and online school and further restrictions limited families' opportunities for physical activity. Before the pandemic, much physical activity had been through structured activities that were now closed. Parents struggled to find activities as parks and playgrounds closed and concerns over social distancing limited what children could do alone. Screen times increased as school was online, and the only method to socialize was via virtual means. The increase in screen times led to an increase in sedentary behaviors. The authors suggest that an inventory of family-oriented resources could help families achieve and maintain healthy behaviors in challenging circumstances.	The authors interviewed Canadian parents of children from June- July 2020 to explore how they experienced the COVID-19 pandemics restrictions and how these impacted their children's movements. Regional differences between Ontario and British Columbia did not show major differences in parental perceptions of declines in physical activity and outdoor play.	Riazi NA, Wunderlich K, Gierc M, et al. "You Can't Go to the Park, You Can't Go Here, You Can't Go There": Exploring Parental Experiences of COVID-19 and Its Impact on Their Children's Movement Behaviours. <i>Children (Basel)</i> . 2021;8(3):219. Published 2021 Mar 12. doi:10.3390/children8030219
COVID-19 pandemic, mental health, children, parents, Italy	12-Mar-21	<a href="#">Psychological Impact of the COVID-19 Pandemic on Adults and Their Children in Italy</a>	Frontiers in Psychiatry	Original Research	This article assesses the psychological impacts of the COVID-19 pandemic on adults and children. An online survey to determine the impact of events on mental health was conducted in Italy on March 20-26, 2020. Data were available from 2,419 adults (78.4% female, mean age 38.1 ± 13.1 years) and 786 children (8-18 years, 50.1% male, mean age 12.3 ± 3.2 years). Median (IQR) score of the Impact of Event Scale-Revised (IES-R, adult survey, scaled 0-40) was 30.0 (21.0–40.0), corresponding to mild psychological impact, with 33.2% reporting severe psychological impact. Median score of the Children Revised Impact of Event Scale-Revised-13 (CRIES-13, child survey scaled 0-65) was 21.0 (IQR 11.0–32.0), with higher scores indicating higher risk for post-traumatic stress disorder (PTSD); 30.9% of the children scored at high risk for PTSD. Children's ratings were correlated to those of their parents. Importantly, this finding held true for both single children and for siblings. Additionally, siblings' CRIES-13 were correlated, suggesting a possible "family effect" for distress. Given that about one-third of the surveyed children reported significant distress, and the close link between parent- and child-reported distress, findings suggest that interventions aimed at preventing and managing COVID-19-related anxiety in children should also address parental distress. Successful management of distress in parents may positively affect their children's mental health.	This article assesses the psychological impacts of the COVID-19 pandemic on adults and children via an online survey. The survey was conducted in Italy on adults and children (8-18 years) between March 20-26, 2020, and showed that of the 786 children surveyed, 30.9% were at high risk for post-traumatic stress disorder, based on the Children Revised Impact of Event Scale-Revised-13 (CRIES-13). These ratings correlated to those of their parents. The authors argue that successful management of distress in parents may positively affect their children's mental health.	Davico C, Ghiggia A, Marcotulli D, et al. Psychological Impact of the COVID-19 Pandemic on Adults and Their Children in Italy. <i>Front Psychiatry</i> . 2021;12:572997. Published 2021 Mar 12. doi:10.3389/fpsyt.2021.572997

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SARS-CoV-2; asymptomatic carrier; children; adults; school reopening	12-Mar-21	<a href="#">Frequency of asymptomatic carriers of SARS-CoV-2 among children and adults after school reopening</a>	Italian Journal of Pediatrics	Research	The authors investigate the frequency of asymptomatic SARS-CoV-2 carriers in children and adults during the re-opening of schools in Italy from October 1-31, 2020. Emergency department (ED) and Pediatric ED patients were eligible for the study if they were observed for at least 12 hours and were not symptomatic for SARS-CoV-2 infection. 69 children (median age 8.3 years; IQR 1-16 years) and 251 adults (median age 71 years; IQR 56-81 years) were eligible for the study. The frequency of positive SARS-CoV-2 testing was similar for children (1/69, 1.4%) and adults (4/251, 1.6%). Children had an odds ratio of 0.91 (95% CI 0.02-9.38) of being an asymptomatic carrier compared to adults. The odds ratio of children being a SARS-CoV-2 carrier was not significantly different during school re-opening than during the school closure period (OR 1.2, 95% CI 0.02-95.73). The authors note that as new SARS-CoV-2 variants are detected, the asymptomatic spread must be monitored among children and adults.	The authors investigate the frequency of asymptomatic SARS-CoV-2 carriers in children and adults during the re-opening of schools in Italy. The frequency of positive SARS-CoV-2 testing was similar for children and adults.	Milani GP, Marchisio P, Rocchi A, et al. Frequency of asymptomatic carriers of SARS-CoV-2 among children and adults after school reopening. <i>Ital J Pediatr.</i> 2021;47(1):65. Published 2021 Mar 12. doi:10.1186/s13052-021-01016-5
COVID-19, pediatric, antiviral therapy	12-Mar-21	<a href="#">Clinical and Therapeutic Approach to Hospitalized COVID-19 Patients: A Pediatric Cohort in Portugal</a>	Acta Medica Portuguesa	Original Research	The aim of this study was to describe the experience of a Level III hospital regarding the therapeutic management of hospitalized children with COVID-19 and to characterize clinical features and evaluation. Descriptive observations were collected from all pediatric patients with COVID-19 March - June 2020. The authors state that experimental drugs were administered according to the best scientific evidence of "off-label use" at the time. Results indicated that among the 200 children (median age 1 year, range 23 days – 18 years) admitted to the hospital with SARS-CoV-2 infection, 37 were admitted due to COVID-19 (18.5%). 43% (n=16) of these patients had comorbidities, and 54% (n=20) were treated with antiviral therapies. Hydroxychloroquine was administered in 13 patients, in monotherapy or combined with lopinavir/ritonavir or azithromycin. Lopinavir/ritonavir was administered in 8 patients, and 3 children were treated with remdesivir. The patients receiving these treatments had a range of concurrent diagnoses including pneumonia (14), MIS-C (2), sepsis (2), myocarditis (1), and acute respiratory distress syndrome (1). The authors concluded that even though several new treatments have been proposed for COVID-19, none of them have been proven effective/been approved for small children, and only remdesivir has been approved for children ages 12 years and older. They state that even though a majority of their pediatric patients were treated with antivirals, patients can recover from COVID-19 without them.	In this study, most pediatric COVID-19 patients at a Tier III hospital in Portugal were treated with antiviral therapies. The patients had a range of comorbidities. The authors state that patients can recover without antiviral treatments.	Saraiva BM, Garcia AM, Silva TM, et al. Clinical and Therapeutic Approach to Hospitalized COVID-19 Patients: A Pediatric Cohort in Portugal. <i>Acta Med Port.</i> 2021 Mar 12. doi: 10.20344/amp.15360.

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
pregnant women; SARS-CoV-2; procalcitonin; c-reactive protein	12-Mar-21	<a href="#">Case series of SARS-CoV-2 infection in pregnant African women: Focus on biological features</a>	Journal of Medical Virology	Case Series	The authors report on 4 pregnant women with SARS-CoV-2 in Gabon (no dates given). Case 1 was a 38-year-old multiparous healthy woman 31 weeks pregnant with triplets. She presented with irregular uterine contractions and a Baumgarten score of 4; she was hospitalized and placed on oxygen and tocolytic treatment. She developed a cough and was tested for SARS-CoV-2 with a positive RT-PCR test, c-reactive protein (CRP) level was 28mg/L, and procalcitonin (PCT) was 1ng/ml (above sepsis threshold of 0.5ng/ml). She was discharged after 10 days of treatment with persisting abdominal pains, and healthy triplets were delivered by urgent C-section. The mother died 2 months later from unknown causes. Case 2 is a 20-year-old who presented for flu-like symptoms in the end days of pregnancy; RT-PCR was negative for SARS-CoV-2. A healthy infant was delivered in normal childbirth. 2-weeks later, the patient re-presented with dyspnea, fever, and cough. Retesting for SARS-CoV-2 was positive with a PCT level of 41.1ng/ml and CRP of 207mg/mL. She was transferred to the COVID-19 unit but died before beginning treatment. The 3rd case was a 20-year-old, 20 weeks pregnant primigravida who presented for cough, fever, fatigue, and dyspnea. She was positive for SARS-CoV-2 and malaria, PCT was 0.41ng/ml, and CRP was 208mg/mL. She was discharged after 10 days, and gave birth at 38 weeks. The 4th case was 36 years old, multiparous at 22 weeks. She presented for cough and dyspnea a had positive RT-PCR for SARS-CoV-2. PCT was 0.2ng/ml and CRP was 294.3 mg/mL. She was discharged after 20 days, and gave birth at 40 weeks. The authors draw attention to the elevated PCT and CRP levels and that the 2 with PCT levels above sepsis levels had negative outcomes. The authors believe that pregnant women with SARS-CoV-2 should be monitored for weeks or months after birth.	The authors report on 4 pregnant women diagnosed with SARS-CoV-2 in Gabon and believe that pregnant women with SARS-CoV-2 should be monitored for weeks or months after birth due to potential complications.	Minkobame U, Nzoghe AM, Siawaya ACM, et al. Case series of SARS-COV-2 infection in pregnant African women: focus on biological features [published online ahead of print, 2021 Mar 12]. <i>J Med Virol.</i> 2021;10.1002/jmv.26927. doi:10.1002/jmv.26927
COVID-19; pediatric; cardiac arrest; cardiopulmonary resuscitation; Singapore	12-Mar-21	<a href="#">Interim Singapore guidelines for basic and advanced life support for paediatric patients with suspected or confirmed COVID-19</a>	Singapore Medical Journal	Article	The authors discussed interim recommendations for pediatric resuscitation (infants and children, excluding neonates) developed by the pediatric subcommittee of the Singapore Resuscitation and First Aid Council in Singapore during the COVID-19 pandemic, extrapolated from available literature, local expert consensus, and recommended institutional practice. Community first responders should provide rescue breaths in addition to chest compressions. The risk of the rescuer newly acquiring COVID-19 through the provision of rescue breaths is greatly outweighed by the chance of an improved outcome for children in asphyxial arrest who receive ventilations. When appropriate and available, rescuers should use PPE and should wash hands thoroughly with soap and water or use hand sanitizers to clean their hands as soon as possible after the casualty has been handed over to EMS providers. In-hospital resuscitation pediatric workflows should be designed according to the institution's setup and manpower availability. For critically ill children who require resuscitation, until their COVID-19 status is made known, healthcare responders should treat them as a	The authors discussed interim recommendations for pediatric resuscitation (infants and children, excluding neonates) developed by the pediatric subcommittee of the Singapore Resuscitation and First Aid Council in Singapore during the COVID-19 pandemic, extrapolated from available literature, local expert consensus and recommended institutional practice. These recommendations can provide a framework during this challenging period for improved outcomes in pediatric cardiac arrest patients, while taking into consideration the	Ong GY, Ng BHZ, Mok YH, Ong JS, Ngiam N, Tan J, Lim SH, Ng KC; Paediatric Subcommittee, Singapore Resuscitation and First-Aid Council. Interim Singapore guidelines for basic and advanced life support for paediatric patients with suspected or confirmed COVID-19. <i>Singapore Med J.</i> 2021. doi:10.11622/smedj.2021014.

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
					suspected case and don PPE. Early intubation is advised to secure the airway and reduce the risk of aerosolization risk. These recommendations can provide a framework during this challenging period for improved outcomes in pediatric cardiac arrest patients while taking into consideration the safety of all community first responders, medical frontline providers, and healthcare workers.	safety of all community first responders, medical frontline providers and healthcare workers.	
COVID-19, vaccination, human milk, antibodies	12-Mar-21	<a href="#">Immune response during lactation after anti-SARS-CoV2 mRNA vaccine</a>	medRxiv	Preprint (not peer-reviewed)	This prospective cohort study determined whether anti-COVID-19 mRNA-based vaccines administered during lactation illicit an immune response or the transfer of anti-SARS-CoV-2 antibodies into human milk. Plasma and milk samples were collected before 1st vaccine dose, on the day of the 2nd dose, and 4 weeks after the 2nd dose from 26 lactating individuals who received the mRNA-based vaccines for COVID-19 (Moderna, n=9; Pfizer, n=14) or who recovered from natural SARS-CoV-2 infection (n=3). Maternal plasma was evaluated for IgM and IgG antibodies. Human milk was evaluated for SARS-CoV-2-specific IgA antibodies. There was an increase (p<0.01) in plasma anti-SARS-CoV-2 IgM and IgG antibodies after the 1st and 2nd vaccines compared to pre-vaccine samples. There were higher levels (p<0.05) of anti-SARS-CoV-2 Receptor Binding Domain (RBD) IgA antibodies in milk samples after the first dose of both vaccines. 17/19 milk samples analyzed on the day of the 2nd vaccine dose were positive for anti-SARS-CoV-2 IgA antibodies. 13/15 milk samples analyzed 4 weeks after the 2nd dose were positive for anti-SARS-CoV-2 RBD IgA. Anti-SARS-CoV-2 RBD IgA antibody levels in milk samples from vaccinated individuals were not significantly different from samples collected after natural SARS-CoV-2 infection. The authors conclude administration of anti-COVID-19 mRNA vaccines during lactation leads to increased anti-SARS-CoV2 IgM and IgG levels in the plasma of lactating mothers and increased anti-SARS-CoV2-RBD IgA levels in human milk.	This prospective cohort study determined whether anti-COVID-19 mRNA-based vaccines administered during lactation illicit an immune response or the transfer of anti-SARS-CoV2 antibodies into human milk. The authors conclude administration of anti-COVID-19 mRNA vaccines during lactation leads to increased anti-SARS-CoV2 IgM and IgG levels in the plasma of lactating mothers and increased anti-SARS-CoV2 Receptor Binding Domain IgA levels in human milk.	Golan, Y., Prahl, M., Cassidy, A., et al. (2021). Immune response during lactation after anti-SARS-CoV2 mRNA vaccine. MedRxiv [preprint]. <a href="https://doi.org/10.1101/2021.03.09.21253241">https://doi.org/10.1101/2021.03.09.21253241</a>
COVID-19; pediatric; stroke; Turkey	12-Mar-21	<a href="#">Brain death in a child as a result of COVID-19-associated acute stroke: The first case</a>	Journal of Paediatrics and Child Health	Case Report	The authors describe the case of a 7 years 10 months old girl who suffered brain death due to COVID-19-associated acute stroke in Turkey. The child was brought to the hospital due to a generalized tonic-clonic seizure, which lasted for 3-4 minutes. Ceftriaxone and acyclovir treatment was initiated after she vomited twice. She awoke 4 hrs later but was transferred to the pediatric ICU due to listlessness and aphasia. Initial cranial CT revealed no pathological findings, and a complete blood count showed marked lymphopenia. 6 hrs after the transfer to the ICU, vital signs showed high blood pressure and bradycardia. The patient was assumed to have cerebral edema, and she received empiric treatment with 3% sodium chloride with elevated head positioning. She developed tachycardia, shallow respirations, and anisocoria. She was therefore intubated and connected to mechanical ventilation. Shortly after, her pupils became fixed and dilated, and no respiratory effort nor reflex response was observed. Cranial CT was performed 2 hrs after neurological deterioration and revealed a large infarcted area within	The authors describe the case of a 7 years 10 months old girl who suffered brain death due to COVID-19-associated acute stroke in Turkey. This case indicates that COVID-related pro-thrombotic events such as stroke, as seen in adult patients, can also occur in children.	Kanğın M, Talay MN, Kavak Ş, et al. Brain death in a child as a result of COVID-19-associated acute stroke: The first case. J Paediatr Child Health. 2021. doi:10.1111/jpc.15421.

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					the brain parenchyma. SARS-CoV-2 PCR test result was positive in the sample taken from the tracheal aspirate. A total cerebral circulatory arrest was detected on the second day, and local vascular occlusion could not be demonstrated angiographically. This case demonstrates that COVID-related pro-thrombotic events such as stroke, as seen in adult patients, can also occur in children.		
Antibodies; IgG; COVID-19 vaccine; neonatal immunity; placenta	12-Mar-21	<a href="#">Efficient maternofetal transplacental transfer of anti-SARS-CoV-2 spike antibodies after antenatal SARS-CoV-2 BNT162b2 mRNA vaccination</a>	medRxiv	Preprint (not peer-reviewed)	To assess maternal and neonatal SARS-CoV-2 antibody levels after antenatal SARS-CoV-2 BNT162b2 mRNA vaccination, this study collected maternal and cord blood sera from 20 mother/newborn dyads at a medical center in Jerusalem, Israel in February 2021. Spike protein (S) and receptor binding domain (RBD)- specific, IgG levels were measured in the collected samples. Median maternal age was 32 years (IQR 28-37 years; range not reported) and median gestational age was 39 3/7 weeks at the time of delivery. The median time lapsed from the 1st and 2nd vaccine doses to delivery was 33 (IQR 30-37) days and 11 (IQR 9-15) days, respectively. Of the 20 dyads, all women and infants were positive for anti S- and anti-RBD-specific IgG. Anti-S and anti-RBD-specific IgG levels in maternal sera were positively correlated to their respective concentrations in cord blood (P<0.001 for both). Anti-S and anti-RBD-specific IgG titers in cord blood were directly correlated with time since administration of the 1st vaccine dose (P=0.001 and P=0.004, respectively). The authors conclude that SARS-CoV-2 mRNA vaccine administered during pregnancy induced adequate maternal serologic response with efficient transplacental transfer of antibodies. These findings highlight that vaccination of pregnant women may provide maternal and neonatal protection from SARS-CoV-2 infection.	This study collected maternal and cord blood sera from 20 mother/newborn dyads at a medical center in Jerusalem, Israel to assess maternal and neonatal SARS-CoV-2 antibody levels after antenatal SARS-CoV-2 mRNA vaccination. Results showed adequate maternal serological response with efficient transplacental transfer of antibodies.	Rottenstreich A, Zarbiv G, Oiknine-Djian E, et al. Efficient maternofetal transplacental transfer of anti- SARS-CoV-2 spike antibodies after antenatal SARS-CoV-2 BNT162b2 mRNA vaccination. medRxiv. 2021:2021.03.11.21253352. doi: 10.1101/2021.03.11.21253352 .
COVID-19; children; probiotic; Species Interacting Groups	12-Mar-21	<a href="#">The administration of S. salivarius K12 to children may reduce the rate of SARS-CoV-2 infection</a>	Minerva Medica	Letter to the Editor	The authors discussed the potential benefit of S. salivarius K12 administration in children in reducing the rate of SARS-CoV-2 infection. A report by Iebba et al. profiled the oral microbiota of healthy controls and COVID-19-hospitalized patients (n=6 women aged 66 ± 16 years, n=20 men aged 66 ± 15 years) in Italy between April 10 - May 5, 2020. 4 different bacterial consortia called Species Interacting Groups (SIGs) were identified. In particular, SIG1 and SIG4, dominated mainly by Prevotella and Veillonella spp., were distinctive for COVID-19 pneumonia patients. Conversely, the same two taxa were not present in the SIGs distinctive of healthy controls, SIG2 and SIG3, which were instead characterized by the genus Streptococcus. Notably, the SIG2 consortium showed, among the others, the presence of S.salivarius, an abundant representative of the normal oral consortium, also available as an oral probiotic. Regarding cytokines, the authors observed that SIG1 and SIG4 (those characterizing the COVID-19 oral microbiota) correlated with the presence of IL-6, while SIG2 and SIG3 (those characterizing the healthy control oral microbiota) did not. These findings suggest that some bacterial species from the beneficial SIGs may be used as local	The authors discussed the potential benefit of S. salivarius K12 administration in children in reducing the rate of SARS-CoV-2 infection. The findings suggest that some bacterial species from the beneficial bacterial consortia Species Interacting Group may be used as local probiotics to restore the oral microbiota as an intervention during the COVID-19 pandemic.	Di Piero F, Colombo M. The administration of S. salivarius K12 to children may reduce the rate of SARS-CoV-2 infection. Minerva Med. 2021. doi:10.23736/S0026-4806.21.07487-5.

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
SARS-CoV-2, children, school	12-Mar-21	<a href="#">Transmission of SARS-CoV-2 infection among children in summer schools applying stringent control measures in Barcelona, Spain</a>	Clinical Infectious Diseases	Original Research	This article aimed to describe the transmission of SARS-CoV-2 among children and adult staff in summer schools during the summer of 2020. During the month of July 2020, both children (age 3 to 15 years old) and adult staff (older than 16 years) positive for SARS-CoV-2 and attending summer schools in Barcelona, Spain were recruited. All centers monitored infection by nasopharyngeal PCR and followed the following prevention protocols: bubble groups, hand washing, facemasks and conducting activities mostly outdoors. Results indicated that among over 2000 repeatedly screened patients, 30 children and 9 adults were identified as primary cases of SARS-CoV-2 infection. 253 close contacts of these positive primary cases (median of 9 per patient) were tested, revealing 12 new cases (4.7%) that were SARS-CoV-2-positive. The effective reproduction number (R*-rate) for this population was 0.3, compared to the contemporary rate of the general population in the same physical areas of Barcelona of 1.9. The authors concluded that the transmission rate of SARS-CoV-2 infection among children attending school-like facilities under strict prevention measures was lower than that reported for the general population. They state that this suggests that under preventive measures schools are unlikely amplifiers of SARS-CoV-2 transmission and supports current recommendations for school opening.	SARS-CoV-2 infection was analyzed in a population of both children and adults attending summer school in Barcelona, Spain. The authors conclude that the transmission in school-like facilities was lower than seen in the general population, and supported current recommendations for school opening.	Jordan I, de Sevilla MF, Fumado V, et al. Transmission of SARS-CoV-2 infection among children in summer schools applying stringent control measures in Barcelona, Spain. Clin Infect Dis. 2021 Mar 12. doi: 10.1093/cid/ciab227.
SARS-CoV-2, children, transmission, adults, household	12-Mar-21	<a href="#">Household SARS-CoV-2 transmission and children: a network prospective study</a>	Clinical Infectious Diseases	Original Research	This article's objective was to describe the epidemiological and clinical characteristics of children with COVID-19 in Catalonia, Spain, and investigate the dynamics of household transmission. The observational and multi-center study was performed July 1 - October 31, 2020, and included 1040 children under 16 years. Upon primary infection, a pediatric index case was defined, and a secondary case was defined when another household member tested positive for SARS-CoV-2 before the child. Results indicated that of the infected participants, 47.2% were asymptomatic, 10.8% had comorbidities, and 2.6% required hospitalization. Viral transmission between household family members occurred in 62.3% of cases. 70% of pediatric cases were secondary to an adult household member, whereas only 7.7% were pediatric primary index cases. The secondary attack rate was significantly lower in households with COVID-19 pediatric index cases during the school period relative to summer (p=0.02) and when compared to adults (p=0.006). The authors concluded that children are unlikely to cause household COVID-19 clusters or be major drivers of the pandemic, even when attending in-person school. They further stress that interventions aimed at children are not expected to reduce SARS-CoV-2 transmission significantly.	This article's objective was to describe the epidemiological and clinical characteristics of children with COVID-19 in Catalonia, Spain, and investigate the dynamics of household transmission. 70% of pediatric cases were secondary to an adult household member, whereas only 7.7% were pediatric primary index cases. The authors concluded that children are unlikely to cause household COVID-19 clusters or be major drivers of the pandemic, even when attending in-person school.	Soriano-Aranda A, Gatell A, Serrano P, et al. Household SARS-CoV-2 transmission and children: a network prospective study. Clin Infect Dis. 2021 Mar 12:ciab228. doi: 10.1093/cid/ciab228.

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
COVID-19 vaccines; pregnancy	12-Mar-21	<a href="#">Author Correction: Are COVID-19 vaccines safe in pregnancy?</a>	Nature Reviews Immunology	Published Erratum	The author makes a brief correction to their article "Are COVID-19 vaccines safe in pregnancy" published in Nature Reviews Immunology on 3 March, 2021: <a href="https://doi.org/10.1038/s41577-021-00525-y">https://doi.org/10.1038/s41577-021-00525-y</a> . There was an error in the third paragraph of text in the original article, which incorrectly stated that "53 pregnancies occurred across the trials of the three vaccines that have so far been approved in the UK"; the actual number of pregnancies is 57 and this has now been corrected online.	The author makes a correction to their article which incorrectly stated that 53 pregnancies occurred across trials of 3 vaccines approved in the UK. The actual number is 57 pregnancies and has been corrected online.	Male V. Author Correction: Are COVID-19 vaccines safe in pregnancy? [published online ahead of print, 2021 Mar 12]. Nat Rev Immunol. 2021;1. doi:10.1038/s41577-021-00533-y
fear, COVID-19, children, parents, indirect pathways	11-Mar-21	<a href="#">Don't Think That Kids Aren't Noticing: Indirect Pathways to Children's Fear of COVID-19</a>	Frontiers in Psychology	Original Research	This cross-sectional study from Serbia explored children's fear of COVID-19 using Rachman's 3-pronged model (modeling fear, threat information transmission, and direct conditioning). 376 parent-child dyads (child age range: 7-19 years; mean age (SD) = 12.77 (3.57) years) took part in an online survey between April 16 - May 6, 2020. Parental fear of COVID-19 directly related to children's fear of COVID-19 ( $\beta = 0.334$ , $p < 0.001$ ), and was indirectly associated with family information transmission ( $\beta = 0.313$ , $p < 0.001$ ) and modeling ( $\beta = 0.427$ , $p < 0.001$ ). Parental anxiety was associated with parental fear of COVID-19 ( $\beta = 0.379$ , $p < 0.001$ ), non-family information transmission ( $\beta = 0.145$ , $p < 0.002$ ), and modeling ( $\beta = 0.150$ , $p < 0.001$ ); it was negatively associated with children's fear of COVID-19 ( $\beta = -0.135$ , $p < 0.002$ ). Child age was negatively associated with fear of COVID-19 ( $\beta = -0.242$ , $p < 0.001$ ) and positively associated with non-family information transmission ( $\beta = 0.419$ , $p < 0.001$ ) and modeling ( $\beta = 0.154$ , $p < 0.001$ ). The authors conclude that Rachman's model explains their data, and that future interventions should focus on the way crisis is communicated to children.	This cross-sectional study from Serbia explored children's fear of COVID-19 using Rachman's 3-pronged model (modelling fear, threat information transmission, and direct conditioning). The authors conclude that Rachman's model explains their data, and that future interventions should focus on the way crisis is communicated to children.	Radanović A, Micić I, Pavlović S et al. Don't Think That Kids Aren't Noticing: Indirect Pathways to Children's Fear of COVID-19. Front Psychol. 2021;12:635952. Published 2021 Mar 11. doi:10.3389/fpsyg.2021.635952
COVID-19, SARS-CoV-2, Children, Liver disease, Liver transplantation	11-Mar-21	<a href="#">COVID-19 in Children With Liver Disease</a>	Frontiers in Pediatrics	Review	The authors aimed to report data concerning SARS-CoV-2 infection in children with chronic liver disease (CLD). A literature review using the online database PubMed was performed to summarize available findings on the association between pre-existing liver disease and COVID-19 infection in children. The results showed that the most common hepatic manifestation is an elevation in hepatic transaminases. Liver damage may be directly caused by a viral infection of liver cells, medications, or the chronic hypoxia seen in COVID-19 patients. A multicenter study reported that the majority of children with CLD remained healthy during the COVID-19 pandemic. Similarly, studies reported that children on immunosuppressive treatment, including patients with autoimmune liver disease (AILD) and liver transplantation (LT), maintained good health during the pandemic without experiencing major complications even if infected with SARS-CoV-2. The authors concluded that children with CLD, including those with AILD and post-LT, do not have an increased risk for a severe disease course of COVID-19 with little or no liver dysfunction. These data highlight the necessity to ensure normal standards of care while adhering to national Covid-19 guidelines, particularly to maintain immunosuppressive medication to prevent relapse or rejection.	This literature review aimed to report data concerning SARS-CoV-2 infection in children with chronic liver disease (CLD). They concluded that children with CLD, including those with AILD and post-LT, do not have an increased risk for a severe disease course of COVID-19 with little or no liver dysfunction. Further research is required to evaluate the differences in clinical course between immunosuppressed adults and children and, in particular, whether asymptomatic infection is a concern.	Di Giorgio A, Hartleif S, Warner S, Kelly D. COVID-19 in Children With Liver Disease. Front Pediatr. 2021;9:616381. Published 2021 Mar 11. doi:10.3389/fped.2021.616381

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
					Further research is required to evaluate the differences in clinical course between immunosuppressed adults and children and, in particular, whether asymptomatic infection is a concern.		
SARS-CoV-2; prevalence; pediatric	11-Mar-21	<a href="#">Bronchiolitis and SARS-CoV-2</a>	Archives of Disease in Childhood	Brief Report	The authors investigated whether SARS-CoV-2 was prevalent in Italy before official reports came in. They reported results from nasal swabs of 230 infants (<12 months of age; 123 males; median age: 4.9 months, IQR 2.5–9.2 months) with bronchiolitis reporting to a hospital in Milan, Italy, between 1 November 2019–13 April 2020. For controls, the authors used nasal swabs from 49 pediatric patients reporting to the pediatric emergency department without symptoms of infectious disease. 2/230 infants with bronchiolitis were SARS-CoV-2 positive, and a total of 106 were admitted to the regular ward and 14 to the ICU. 127/230 cases of bronchiolitis were caused by respiratory syncytial virus. SARS-CoV-2 was never detected in the 218 infants with bronchiolitis between November 2019 and February 2020. However, 2/12 infants who enrolled between March and April 2020 tested positive for SARS-CoV-2. One of the 2 infants (male, 39 weeks gestational age, 88% oxygen saturation, 9-day hospital stay) had severe bronchiolitis, and the second infant (male, 41 weeks gestational age, 89% oxygen saturation, 4-day hospital stay) had moderate bronchiolitis. None of the asymptomatic infants had a positive SARS-CoV-2 test. Hence, the authors concluded that their findings did not support their hypothesis of the presence of SARS-CoV-2 in infants with bronchiolitis and asymptomatic infants before the official outbreak of SARS-CoV-2.	The authors assessed nasopharyngeal swabs of pediatric patients at a hospital in Milan, Italy, between November 2019–April 2020. They reported that 2/230 bronchiolitis patients during the period were SARS-CoV-2 positive, with 127/237 of bronchiolitis cases caused by respiratory syncytial virus. Between November 2019–February 2020, none of the bronchiolitis patients tested positive for SARS-CoV-2, but 2 patients in March–April 2020 tested positive. Hence, the authors concluded that their findings did not support their hypothesis of the presence of SARS-CoV-2 in infants with bronchiolitis and asymptomatic infants before the official outbreak of SARS-CoV-2.	Milani GP, Bollati V, Ruggiero L, et al. Bronchiolitis and SARS-CoV-2 [published online ahead of print, 2021 Mar 11]. Arch Dis Child. 2021. doi:10.1136/archdischild-2020-321108
COVID-19; neonatal	11-Mar-21	<a href="#">Updates in neonatal coronavirus disease 2019: What can we learn from detailed case reports? (Review)</a>	Molecular Medicine Reports	Review	The authors reviewed 40 detailed nonoverlapping case reports on neonatal COVID-19 published as of July 15, 2020, to facilitate the clinical treatment, epidemic prevention and control of neonatal COVID-19. The youngest neonate with COVID-19 reported to date had a gestational age of 26 weeks and 4 days. The age at which they were diagnosed with COVID-19 was as early as the day of birth or as late as 27 days of life. Horizontal transmission is the main mode of transmission, and based on current evidence the authors consider it unclear if transmission can occur via placenta, amniotic fluid, cord blood, or breast milk. Of the 40 cases reviewed, 8 involved the testing of breast milk for SARS-CoV-2 RNA with only one positive result. Initial nasopharyngeal swabs collected from the neonate 8 and 10 hours after birth were negative for SARS-CoV-2 RNA but the infant tested positive on the 4th day of life after consumption of expressed and fresh breast milk. It is unclear if the infant was exposed to the virus by other means. Whether newborns are breastfed should be determined after weighing the pros and cons, and infants should be protected to eliminate potential horizontal transmission via droplets, aerosols, and close contact. Regardless of the clinical manifestations, laboratory examinations, or imaging findings of neonatal COVID-19, there is no obvious specificity, which	The authors reviewed 40 detailed case reports on neonatal COVID-19 published as of July 15, 2020, to facilitate the clinical treatment, epidemic prevention and control of neonatal COVID-19. Regardless of the clinical manifestations, laboratory examinations, or imaging findings of neonatal COVID-19, there is no obvious specificity, which makes the clinical diagnosis and epidemic prevention and control of neonatal COVID-19 difficult. Standardization and optimization of treatment are urgent.	Li X, Sun L, Li T. Updates in neonatal coronavirus disease 2019: What can we learn from detailed case reports? (Review). Mol Med Rep. 2021;23(5):351. doi:10.3892/mmr.2021.11990.

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
					makes the clinical diagnosis and prevention and control of neonatal COVID-19 difficult. The specific mechanism and prognosis of neonatal COVID-19 and the immune protection provided by the SARS-CoV-2 vaccine to neonates are still not very clear and urgently need to be studied.		
Depression; Intervention; Maternal health; Mental health; Mindfulness; Mobile health; Perinatal; Pregnancy; Prenatal	11-Mar-21	<a href="#">mHealth Mindfulness Intervention for Women with Moderate-to-Moderately-Severe Antenatal Depressive Symptoms: a Pilot Study Within an Integrated Health Care System</a>	Mindfulness	Original Research	The authors assessed the feasibility, acceptability, and effectiveness of mindfulness-based mhealth (mobile technology) intervention for pregnant women (n = 20, < 28 weeks gestation, age ≥18 years) with mild-to-moderate depression symptoms from March 2018-May 2019. A discussion of the applicability of the findings to the COVID-19 pandemic is provided. Study participants were asked to complete a self-paced, 6-week mindfulness medication program using a mobile application for 10-20 minutes per day. 55% (n = 11) of the participants used the app more than 50% of the days during the 6-week period. Participants indicated that they liked the convenience of the intervention and the convenience of not having to attend in-person classes or arrange childcare. Scores for depression symptoms (-6.0, p ≤ .01), perceived stress (-5.6, p ≤ .01), sleep disturbance (-1.9, p ≤ .05), and overall mindfulness (+10.6, p ≤ .01) improved significantly post-intervention compared to pre-intervention. The authors note that the results demonstrate that mhealth delivery of mindfulness interventions for pregnant women is feasible and acceptable, though larger-scale trials are needed to establish the efficacy and durability of mHealth mindfulness interventions in this population. Delivery of services in this manner can facilitate greater access to care during the COVID-19 pandemic, where there is an increasing need for mental health services, constrained mental health providers, and proliferation of online and telehealth interventions.	This article describes the implementation of a mhealth mindfulness-based intervention for pregnant women with mild-to-moderate depression in the United States. Results demonstrated that the intervention was feasible and acceptable and resulted in improved scores for depression symptoms, perceived stress, sleep disturbance, and overall mindfulness. Delivery of services in this manner can facilitate greater access to care during the COVID-19 pandemic, where there is an increasing need for mental health services, constrained mental health providers, and proliferation of online and telehealth interventions.	Kubo A, Aghaee S, Kurtovich EM, Nkemere L, Quesenberry CP Jr, McGinnis MK, Avalos LA. mHealth Mindfulness Intervention for Women with Moderate-to-Moderately-Severe Antenatal Depressive Symptoms: a Pilot Study Within an Integrated Health Care System. Mindfulness (N Y). 2021 Mar 11:1-11. doi: 10.1007/s12671-021-01606-8. Epub. PMID: 33723491; PMCID: PMC7947160.
COVID-19; Immunology; T cell receptor; MIS-C	11-Mar-21	<a href="#">HLA class I-associated expansion of TRBV11-2 T cells in Multisystem Inflammatory Syndrome in Children</a>	Journal of Clinical Investigation	Article	This study characterized the T cell receptor (TCR) repertoire of MIS-C patients. To determine if MIS-C is associated with TCR repertoire skewing, the authors collected blood samples from mild MIS-C (n=4; median age 10.5 years; IQR 2.5-18 years), severe MIS-C (n=16; median age 9 years; IQR 3.75-13.25 years) and age-matched febrile control patients (n=15; median age 12 years; IQR 5.5-18.5 years) [dates and location of study not reported]. The authors found a profound expansion of TCR Beta Variable gene (TRBV)11-2, with up to 24% of clonal T cell space occupied by TRBV11-2 T cells, which correlated with MIS-C severity and serum cytokine levels. J gene/CDR3 diversity of TRBV11-2 in MIS-C patients is compatible with a superantigen-like selection process. Patients with TRBV11-2 expansion showed HLA class I allele restriction to HLA-I A02, C35 and C04, indicating a novel mechanism for CDR3-independent T cell expansion. In silico modelling indicated that polyacidic residues in the Vβ chain encoded by TRBV11-2 strongly interact with the superantigen-like motif of SARS-CoV-2 spike glycoprotein, suggesting that unprocessed SARS-CoV-2 spike may directly mediate	The authors characterized the T cell receptor (TCR) repertoire of MIS-C patients and found a profound expansion of TCR Beta Variable gene (TRBV)11-2, with up to 24% of clonal T cell space occupied by TRBV11-2 T cells, which correlated with MIS-C severity and serum cytokine levels. The findings indicate that a CDR3-independent interaction between SARS-CoV-2 spike and TCR leads to T cell expansion and possibly activation, which may account for the clinical presentation of MIS-C.	Porritt RA, Paschold L, Noval Rivas M, et al. HLA class I-associated expansion of TRBV11-2 T cells in Multisystem Inflammatory Syndrome in Children. J Clin Invest. 2021:146614. doi:10.1172/JCI146614.

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					TRBV11-2 expansion. The findings indicate that a CDR3-independent interaction between SARS-CoV-2 spike and TCR leads to T cell expansion and possibly activation, which may account for the clinical presentation of MIS-C.		
Children; COVID-19; SARS-CoV-2 Thoracic imaging; Paediatric radiology; Chest X-ray indications	11-Mar-21	<a href="#">Chest radiograph in hospitalized children with COVID-19. A review of findings and indications</a>	European Journal of Radiology Open	Original Article	In this retrospective study, the authors discuss the appearance of chest radiographs in COVID-19 patients in a pediatric hospital and review the current chest X-ray indications in COVID-19. 44 hospitalized pediatric patients were included in this study which took place in Navarre, Spain between the months of March-December, 2020. The average age was 3.8 years old and 50% were males. 80% (35/44) of patients had chest-imaging performed during admission and 54% (19/35) had normal imaging. Of those patients with abnormal imaging, the most common findings were bilateral diffuse interstitial pattern (8/35) and unilateral diffuse interstitial pattern (3/35). Patients referred for chest radiography were more symptomatic (83% vs 17%) with more respiratory symptoms (83% vs 16%) and more fever (86% vs 13%) than their peers who did not have chest-imaging. All patients with pathologic x-rays reported fever and fever tended to be longer in duration than those with normal x-rays (fever duration: 4.25 vs. 2.46 days p=0.048). A literature review yielded consensus guidelines recommending that chest x-rays are indicated for patients with moderate to severe symptoms. The authors suggest that chest imaging should not be used as a screening tool or a routine test in pediatric COVID-19 patients, and should be reserved for those with specific clinical indications.	In this retrospective study, the authors discussed the appearance of chest radiographs in COVID-19 patients in a pediatric hospital and reviewed the current chest X-ray indications for COVID-19. The authors suggest that chest imaging should not be used as a screening tool or a routine test in pediatric COVID-19 patients, and should be reserved for those with specific clinical indications.	Ilundain López de Munain A, Jimenez Veintemilla C, Herranz Aguirre M, et al. Chest radiograph in hospitalized children with COVID-19. A review of findings and indications. Eur J Radiol Open. 2021;8:100337. doi:10.1016/j.ejro.2021.100337
COVID-19; pediatric; vaccination; United States	11-Mar-21	<a href="#">Considering Mandatory Vaccination of Children for COVID-19</a>	Pediatrics	Review	In this article, the authors highlight the importance of including children in the national COVID-19 immunization strategy in the United States. Currently, previously healthy adolescents and children are the lowest priority for vaccination. While widespread adult vaccination has a good chance of controlling the pandemic and reducing the risk of infection, success will depend on the ability of the COVID-19 vaccine to induce antibodies locally or systemically that mobilize to the mucosae to induce mucosal responses. Control and possible eradication of SARS-CoV-2 will also depend on nearly all people accepting vaccination. If vaccine coverage is incomplete in adults, a reservoir of virus in children will likely lead to repeated exposure of unprotected adults. Thus, the virus will persist in the form of sporadic cases and occasional outbreaks. To reduce viral circulation, the key step would be to mandate vaccination of children provided that the vaccine is demonstrated to be safe in pediatric trials. Pediatric COVID-19 in the form of MIS-C and death have also been described, underscoring the importance of pediatric vaccination.	In this article, the authors highlight the importance of including children in the national COVID-19 immunization strategy in the United States. To reduce viral circulation, the key step would be to mandate vaccination of children provided that the vaccine is demonstrated to be safe in pediatric trials. Pediatric COVID-19 in the form of MIS-C and death have also been described, underscoring the importance of pediatric vaccination.	Plotkin SA, Levy O. Considering Mandatory Vaccination of Children for COVID-19. Pediatrics. 2021:e2021050531. doi:10.1542/peds.2021-050531.
COVID-19; Caesarean section; Early	11-Mar-21	<a href="#">Early Essential Newborn Care can still be used</a>	Acta Paediatrica	Case Report	This article describes the first infant born to a woman with COVID-19 in Vietnam. The infant was born by C-section at 36 weeks and 5 days of gestation in July 2020. The mother and infant remained	This article describes the first infant born to a woman with COVID-19 in Vietnam. The mother	Tran HT, Thi Le H, Hoang Minh Le C, et al. Early Essential Newborn Care can still be used

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Essential Newborn Care; breastfeeding; skin-to-skin contact		<a href="#">with mothers who have COVID-19 if effective infection control measures are applied</a>			together during their hospital stay with prolonged skin-to-skin contact and early and exclusive breastfeeding. This was in line with the WHO's Early Essential Newborn Care (EENC) recommendations, the national Vietnamese standard of care since 2014. The mother wore medical masks when in close contact with the infant, which were changed every 4-6 hours or when they felt wet, and washed her hands before and after caring for her infant. The dyad shared the same bed to establish breastfeeding and the infant was periodically placed in a second bed 2 meters away from the mother. Extra breast cleaning with soap and water was recommended if the woman was coughing or producing evident secretions. RT-PCR testing of umbilical cord blood, placenta, amniotic fluid, and breast milks samples were negative for SARS-CoV-2. At 5 days postpartum the mother tested positive for SARS-CoV-2 antibodies (26 days after symptom onset). The infant tested negative at least 3 times during their stay, including at discharge 7 days postpartum, and remained virus-free throughout the 34-day postpartum follow-up according to 7 follow-up tests. Exclusive breastfeeding continued through the follow-up period. The authors conclude that EENC recommendations for prolonged skin-to-skin contact and early and exclusive breastfeeding should still be used with mothers who have COVID-19 if effective IPC measures are applied.	and infant remained together during their hospital stay with prolonged skin-to-skin contact and early and exclusive breastfeeding with appropriate IPC measures. The infant remained SARS-CoV-2 negative throughout 34-day postpartum follow-up.	with mothers who have COVID-19 if effective infection control measures are applied [published online, 2021 Mar 11]. Acta Paediatr. 2021;10.1111/apa.15837. doi:10.1111/apa.15837
COVID-19; diabetic; type 1 diabetes; pediatric diabetes, HbA1c, BMI, lockdown	11-Mar-21	<a href="#">HbA1c and BMI after lockdown for COVID-19 in children and adolescents with type 1 diabetes mellitus</a>	Acta Paediatrica	Original Research	To assess the effect of the COVID-19 lockdown on type-1 diabetes (T1D) and BMI in children, the authors collected pre-lockdown (December 6, 2019-March 8, 2020) and post-lockdown (May 4-August 5, 2020) information from pediatric patients (<18 years) with type 1 diabetes mellitus (T1DM) in India. Study participants (n=50) were 50% female, 62% utilizing continuous subcutaneous insulin infusion (CSII), 84% using continuous/flash glucose monitoring (CGM/FGM), with a median age of 15.0 years (IQR: 11.9-17.2 years), and the median duration of T1D of 7.3 years (IQR: 4.1-9.7 years). 36% of participants (all CSII users) underwent telehealth visits during the lockdown. There was a mean reduction of HbA1c by 2mmol/L (IQR: -5-4mmol/L) at the first visit after the lockdown, with an improvement of HbA1c in 58% of the cohort. The reduction in HbA1c was inversely associated with the pre-lockdown HbA1c (p=0.01). 52% of the cohort showed an increase in standardized BMI, and the trend of increasing median BMI (0.03[IQR: -0.08-0.14]) was not statistically significant. Children who reported an increase in the number of meals/snacks reported higher BMI changes than those who did not (median: 0.02 vs. 0.00, p=0.01). These findings suggest that an improvement of the HbA1c in an unselected population of pediatric T1DM subjects during the COVID-19 lockdown was independent of physical activity, telemedicine, and use of CSII and CGM/FGM.	The authors reported the effect of the COVID-19 lockdown on the HbA1C and BMI of a cohort of type-1 diabetic children in India. They found no significant overall increase in BMI during the lockdown. The improvement of HbA1c in the cohort during the lockdown period was independent of physical activity, telemedicine, or the use of CSII and CGM/FGM.	Cognigni M, D'Agostin M, Schiulaz I, et al. HbA1c and BMI after lockdown for COVID-19 in children and adolescents with type 1 diabetes mellitus [published online, 2021 Mar 11]. Acta Paediatr. 2021;10.1111/apa.15838. doi:10.1111/apa.15838

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Pregnancy, testing, Ct values,	11-Mar-21	<a href="#">The effect of real-time polymerase chain reaction cycle threshold values on perinatal outcomes of pregnant women with COVID-19</a>  <a href="#">[Free Access to Abstract Only]</a>	Journal of Maternal-Fetal and Neonatal Medicine	Original Research	This prospective cohort study evaluated the effect of cycle threshold (Ct) values on pregnancy outcomes of women with SARS-CoV-2. Ct values, the number of cycles in a RT-PCR assay needed to amplify viral RNA to a detectable level, have a negative correlation with viral load. 105 Pregnant women with SARS-CoV-2 (mean age 27, range not provided) followed at the Ministry of Health Ankara City Hospital, Turkey between March 11-August 13, 2020 were included. The study population was divided into 2 groups based on the 50th percentile Ct value of 22.9: (1) Cases with Higher Ct values (Ct > 22.9) (n = 50) and (2) Cases with lower Ct values (Ct ≤ 22.9) (n = 55). Obstetric complication rate was significantly higher in cases with lower Ct values (p < 0.001). A significantly lower lymphocyte count and higher ESR, procalcitonin and IL-6 values were observed in the cases with lower Ct values (p < 0.05). Additionally, higher neonatal ICU admission rates and longer hospital stays were present in cases with lower Ct values (p < 0.05). The receiver operating characteristic (ROC) curve with the best balance of sensitivity/specificity showed 85.7% sensitivity, 63.6% specificity. The authors concluded that lower Ct values may be associated with an increased rate of obstetric complications in pregnant women with SARS-CoV-2.	This comparison of cycle threshold (Ct) values on pregnancy outcomes of women with SARS-CoV-2 in Turkey showed that lower Ct thresholds were associated with higher obstetric complication rates, lower lymphocyte counts, higher ESR, procalcitonin, and IL-6 values, higher neonatal ICU admission rates, and longer hospital stays. Therefore, lower Ct values may be associated with an increased rate of complications in pregnant women with SARS-CoV-2.	Tanacan A, Anuk AT, Erol SA, et al. The effect of real-time polymerase chain reaction cycle threshold values on perinatal outcomes of pregnant women with COVID-19. J Matern Fetal Neonatal Med. 2021;1-8. doi:10.1080/14767058.2021.1900105
Children, influenza, symptoms, hospitalization, disease severity	11-Mar-21	<a href="#">Comparison of clinical severity and epidemiological spectrum between coronavirus disease 2019 and influenza in children</a>	Scientific Reports	Original Research	This prospective observational study analyzed clinical and epidemiologic aspects of COVID-19 in children, and compared COVID-19 with patients diagnosed with other illnesses, including influenza. 319 patients (ages 14 days-18 years) referred to the tertiary health care department in Warsaw, Poland between February 1-April 15, 2020 with a suspicion of COVID-19 were included. SARS-CoV-2 was confirmed in 15/319 (4.7%) of cases. 5 patients (33.3%) were asymptomatic and the remaining cases were mild-to-moderate. The most common symptom—fever—occurred in 46.7% of patients. 11 children required hospitalization, but none required pediatric ICU (PICU) care, oxygen therapy or mechanical ventilation. In comparison with other patients from the study group, significantly more children with COVID-19 had contact with an infected family member (100% vs. 9.2%, P < 0.001). Cough was less frequent in the COVID-19 group (40.0% vs. 84.3%, P = 0.009). COVID-19 patients also had less frequent fever and rhinitis (46.7% vs. 70.3%, P = 0.05; 6.7% vs. 19.4%, P = 0.06, respectively), and more frequent diarrhea (20.0% vs. 6.5%, P = 0.05). COVID-19 patients were more commonly hospitalized (73.3% vs. 37.1%, P = 0.005); however, a higher proportion were asymptomatic (33.3% vs. 7.2%, P = 0.0004). Influenza (32/319, 10%) and was more than twice as common as COVID-19. The authors concluded that in children suspected of having COVID-19, other infections should not be overlooked.	In this comparison of the clinical aspects of pediatric COVID-19 to children diagnosed with other illnesses (most commonly influenza), the authors found that children with COVID-19 were more likely to have had contact with an infected family member (100% vs. 9.2%, P < 0.001), less frequent cough, fever, and rhinitis, and more frequent diarrhea. The authors concluded that in children suspected of having COVID-19, other infections should not be overlooked.	Pokorska-Śpiewak M, Talarek E, Popielska J, et al. Comparison of clinical severity and epidemiological spectrum between coronavirus disease 2019 and influenza in children. Sci Rep. 2021;11(1):5760. Published 2021 Mar 11. doi:10.1038/s41598-021-85340-0
novel coronavirus pneumonia;	10-Mar-21	<a href="#">A retrospective study of the clinical</a>	medRxiv	Preprint (not peer-reviewed)	The authors conducted a retrospective study to analyze the clinical symptoms, laboratory results, chest CT findings, and treatment of children with laboratory-confirmed COVID-19 in China. The study	This is a retrospective study of 26 SARS-CoV-2-positive children in China from 16 Jan to 8 Feb 2020.	Tang A, Xu W, Shen M, et al. A retrospective study of the clinical characteristics of

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COVID-19; 2019-nCoV		<a href="#">characteristics of COVID-19 infection in 26 children</a>			population was children (mean age: 6.9 years old; age range 1-13 years; n=26) who were admitted to the National Infectious Disease Research Center from 16 Jan to 8 Feb 2020. None of the children had underlying diseases. 11 children (42%) had a fever and 12 had a cough (46%) on admission. Some patients had rhinorrhea (n=2), vomiting (n=2), and diarrhea (n=2). No severe complications such as acute respiratory distress syndrome (ARDS) or acute lung injury occurred in the cases. Most myocardial enzyme levels, including myoglobin, troponin kinase, and creatine kinase, were within normal limits. Procalcitonin was normal for all patients, and 5 patients (19%) had elevated C-reactive protein. Lymphocytopenia was rare (n=1). According to the authors, humoral immunity showed that IgA, IgG, and C3c were partially reduced, and IgM and C4 were normal. Chest X-ray and CT revealed 11 cases (42%) of unilateral pulmonary infiltration and 7 cases (27%) of bilateral pulmonary infiltration. Treatment regimens in the study sample included oseltamivir, ribavirin, interferon, Kaletra, and traditional Chinese medicine, and all patients had excellent outcomes after treatment. Overall, the children in this cohort had mild clinical symptoms without progressing to severe complications.	All of the study subjects had mild clinical symptoms with few abnormalities in the laboratory data, and the most common symptoms were fever and cough.	COVID-19 infection in 26 children. medRxiv. 2021. doi: <a href="https://doi.org/10.1101/2020.03.08.20029710">https://doi.org/10.1101/2020.03.08.20029710</a>
Vertical transmission, neonate, placenta, pregnancy, growth restriction	10-Mar-21	<a href="#">Vertical Transmission of SARS-CoV-2 in Second Trimester Associated with Severe Neonatal Pathology</a>	Viruses	Case Report	The authors present a case of a 2nd trimester pregnancy complicated by vertical transmission of SARS-CoV-2 infection that resulted in neonatal death. A 27-year-old at 21 weeks gestation was diagnosed with moderate SARS-CoV-2 infection. Previous ultrasound scan at 19 weeks gestation was unremarkable. The pregnant woman recovered fully following treatment. At 23 weeks gestation, fetal ultrasound detected fetal growth restriction, oligohydramnios, intraventricular hemorrhage, changes in the diffusion of lung parenchyma, hydrothorax, relative cardiomegaly, and hyperechogenic bowel with absent diastolic flow in the umbilical artery. C-section was performed at 26 weeks gestation after worsening fetal growth restriction (0.1 percentile) and anhydramnios. After delivery, examination revealed a small for gestational age neonate with congenital pneumonia, disseminated intravascular coagulation, antenatal intraventricular hemorrhage, congenital anemia and cardiomegaly. Neonatal antibodies (IgG) against SARS-CoV-2 were detected and the neonate died on day 2 of life. The authors conducted a thorough examination of the placenta. Macroscopic and microscopic examination of the placenta showed numerous old infarcts. Immuno-histochemical analysis showed strong positive cytoplasmic expression of SARS-CoV-2 Nucleocapsid and SARS-CoV-2 Spike (S1 subunit) in the cytotrophoblast and syncytiotrophoblast. PODTC9 NCAP-SARS2 Nucleoprotein of SARS-CoV-2 was one of over 1000 proteins identified in the placenta. The authors conclude that the case clearly showed that transplacental transmission of SARS-CoV-2 infection is possible in earlier stages of pregnancy.	In this case report, the authors present a case of moderate SARS-CoV-2 in the 2nd trimester of pregnancy that resulted in severe growth restriction, anhydramnios, multiple neonatal complications and neonatal death. Examination of the placenta revealed old infarcts, along with cytoplasmic expression of SARS-CoV-2 proteins in the cytotrophoblast and syncytiotrophoblast. The authors conclude that the case clearly showed that transplacental transmission of SARS-CoV-2 infection is possible in earlier stages of pregnancy.	Sukhikh G, Petrova U, Prikhodko A, et al. Vertical Transmission of SARS-CoV-2 in Second Trimester Associated with Severe Neonatal Pathology. Viruses. 2021;13(3):447. Published 2021 Mar 10. doi:10.3390/v13030447

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Pregnancy, exercise, hypertension, blood pressure, telemedicine, virtual	10-Mar-21	<a href="#">Effectiveness of a Virtual Exercise Program During COVID-19 Confinement on Blood Pressure Control in Healthy Pregnant Women</a>	Frontiers in Physiology	Original Research	This randomized clinical trial of 72 pregnant women (ages 8-45 years) with uncomplicated pregnancies in Madrid, Spain examined the influence of a virtual exercise program on maternal blood pressure during pregnancy during the COVID-19 pandemic [dates not provided]. The intervention group (IG, N=31) adhered to a virtual supervised exercise program between 8–10 and 38–39 weeks of pregnancy. 80–85 training sessions were planned for each participant, and a minimum of 80% adherence was required to be included in the analysis. The control group (CG, N=41) received general advice from their health care providers, including positive effects of physical activity or nutritional recommendations. No differences in systolic and diastolic blood pressure during the 1st, 2nd and 3rd trimesters were found between groups. Differences in systolic blood pressure were found immediately before delivery (IG = 119.83 ± 10.16 vs. CG = 125.6 ± 10.91; p = 0.047) and immediately after delivery (IG = 115.00 ± 11.18 vs. CG = 122.24 ± 15.71; p = 0.045). The authors conclude that a virtual exercise program throughout pregnancy during COVID-19 confinement can help to control systolic blood pressure before and immediately after delivery in healthy pregnant women.	In this randomized clinical trial of 72 pregnant women (ages 8–45 years) with uncomplicated pregnancies in Madrid, Spain, the authors examined the influence of a virtual exercise program throughout pregnancy during COVID-19 confinement on maternal blood pressure during pregnancy. The authors found that the virtual exercise program helped control systolic blood pressure before and immediately after delivery in healthy pregnant women.	Silva-Jose C, Sánchez-Polán M, Diaz-Blanco Á, Coterón J, Barakat R, Refoyo I. Effectiveness of a Virtual Exercise Program During COVID-19 Confinement on Blood Pressure Control in Healthy Pregnant Women. <i>Front Physiol.</i> 2021;12:645136. Published 2021 Mar 10. doi:10.3389/fphys.2021.645136
COVID-19; children; airway management; critical care; infection control; intubation; pediatric; respiratory insufficiency	10-Mar-21	<a href="#">Airway management in children with COVID-19</a>	Hong Kong Medical Journal	Article	The authors discussed airway management in children with COVID-19. Healthcare professionals have a particularly high risk of contracting SARS-CoV-2 while providing resuscitation and respiratory support, which may in turn result in grave consequences and even death. Although COVID-19 has been shown to cause milder disease in children, pediatricians and intensivists who provide care for children must be prepared to provide optimal respiratory support without putting themselves or other medical, nursing, and paramedical staff at undue risk. To minimize risk, intubation methods must be kept as straightforward as possible, and should include the provision of appropriate PPE to healthcare workers. The authors suggest that bag-mask ventilation should be avoided if possible, and that bacterial and viral filters should be placed in the respiratory circuit. The article includes a procedure guideline, complete with rescue plan and equipment list, for practitioners. This approach provides a framework for airway management that could benefit pediatric critical care practitioners who provide care for any children with a novel viral illness, with a focus on infection prevention during high-risk airway management procedures.	The authors discussed airway management in children with COVID-19. The authors suggest that bag-mask ventilation should be avoided if possible, and that bacterial and viral filters should be placed in the respiratory circuit. This approach provides a framework for airway management that could benefit pediatric critical care practitioners who provide care for any children with a novel viral illness, with a focus on infection prevention during high-risk airway management procedures.	Leung KKY, Ku SW, Fung RCM, et al. Airway management in children with COVID-19. <i>Hong Kong Med J.</i> 2021. doi:10.12809/hkmj208709.
Mexico, SARS-CoV-2, Guillain-Barre syndrome, optic neuritis, acute ischemic stroke,	10-Mar-21	<a href="#">Neurological manifestations temporally associated with SARS-CoV-2 infection in pediatric</a>	Child's Nervous System	Original Research	This article describes neurological symptoms in pediatric patients with SARS-CoV-2. The authors analyzed 23 patients reporting neurological symptoms at the Instituto Nacional de Pediatría in Mexico City from May-August 2020. Nasal swab PCR for SARS-CoV-2 was performed on 12 (52%) of the patients. Both IgG and IgM anti-SARS-CoV-2 antibodies were quantified in the serum of all 23 patients. In 15 [numerical discrepancy in article] patients, the	This article describes neurological symptoms in pediatric patients with SARS-CoV-2 from May-August 2020 in Mexico City. The following diagnoses were established among 10 patients with confirmed SARS-CoV-2: 3	Sánchez-Morales AE, Urrutia-Osorio M, Camacho-Mendoza E, et al. Neurological manifestations temporally associated with SARS-CoV-2 infection in pediatric patients in Mexico [published online

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myositis, rhabdomyolysis, acute cerebellar ataxia, anti-NMDA-R encephalitis, neurological symptom		<a href="#">patients in Mexico</a>			cerebrospinal fluid (CSF) was analyzed for anti-SARS-CoV-2 antibodies, and a PCR test was performed on the CSF of one patient as well. 10 (43%) had a confirmed SARS-CoV-2 infection. 2 of 6 symptomatic patients had mild respiratory symptoms, and 4 had unspecific symptoms. Among the 10 infected patients, 5 (50%) were males. Age range was 2–16 years (median 11.8 years). The following diagnoses were established: 3 cases of Guillain-Barre syndrome, 2 of optic neuritis, 2 of acute ischemic stroke, one of myositis with rhabdomyolysis, one of acute cerebellar ataxia, and one of anti-NMDA-Receptor encephalitis. In summary, these cases show that neurological manifestations temporally associated with SARS-CoV-2 infection are present in the pediatric population, even without respiratory symptoms. During this pandemic, the authors urge clinicians to consider SARS-CoV-2 infection as an etiology in patients with acute neurological symptoms, with or without previous respiratory manifestations, particularly in adolescents.	cases of Guillain-Barre syndrome, 2 of optic neuritis, 2 of acute ischemic stroke, one of myositis with rhabdomyolysis, one of acute cerebellar ataxia, and one of anti-NMDA-Receptor encephalitis. These cases show that neurological manifestations temporally associated with SARS-CoV-2 infection are present in the pediatric population even without respiratory symptoms, and that SARS-CoV-2 infection should be considered as a possible etiology in patients with acute neurological symptoms.	ahead of print, 2021 Mar 10]. Childs Nerv Syst. 2021;1-8. doi:10.1007/s00381-021-05104-z
COVID-19; pregnancy; neonate; Brazil	10-Mar-21	<a href="#">COVID-19 during pregnancy and adverse outcomes: Concerns and recommendations from The Brazilian Teratology Information Service</a>	Genetics and Molecular Biology	Article	The authors discuss the harmful potential of SARS-CoV-2 to pregnancy, highlighting symptoms, immunological changes during pregnancy and SARS-CoV-2 mutation rate (and the risks related to it). They also discuss recommendations for the scientific community and health care workers in Brazil to identify and manage potential risks to pregnant women and neonates. In order to better understand the relationship between COVID-19 and pregnancy, it is important to determine if and how the virus disrupts embryo development from different approaches. Clearly, more research in the epidemiological profile of mothers affected by COVID-19 must be performed, especially studies that allow to detect less evident congenital anomalies at birth. Surveillance and follow-up on miscarriage rate or children being born with low weight, immunological conditions, respiratory diseases and even minor congenital anomalies should be done. A long-term follow-up of children exposed to SARS-CoV-2 should be performed in order to identify if the virus has caused any functional anomaly. It is essential to perform a multidisciplinary approach focused on both mother and neonate, including a risk evaluation in a Teratogen Information Service.	The authors discuss the harmful potential of SARS-CoV-2 to pregnancy, highlighting symptoms, immunological changes during pregnancy and SARS-CoV-2 mutation rate. They also discuss recommendations for the scientific community and health care workers in Brazil to identify and manage potential risks to pregnant women and neonates.	Vianna FSL, Fraga LR, Abeche AM, et al. COVID-19 during pregnancy and adverse outcomes: Concerns and recommendations from The Brazilian Teratology Information Service. Genet Mol Biol. 2021;44(1 Suppl 1):e20200224. doi:10.1590/1678-4685-GMB-2020-0224.
inflammatory markers, MIS-C/PMIS/PIMIS-TS, COVID-19, SARS-CoV-2, pediatrics, meta-analysis	10-Mar-21	<a href="#">The inflammatory markers of Multisystem Inflammatory Syndrome in children (MIS-C) and adolescents associated with COVID-19: A Meta-analysis</a>	Journal of Medical Virology	Review	In this systematic review and meta-analysis, the authors characterized and compared the level of inflammatory markers in children with MIS-C vs severe COVID-19, severe MIS-C vs non-severe MIS-C and among children of different age groups with MIS-C. 21 studies (1,735 participants) were included based on inclusion criteria. 12 studies compared MIS-C and COVID-19 in addition to subgroup analyses of MIS-C and severe/non-severe COVID-19; 7 studies compared severe and non-severe MIS-C and 2 studies compared MIS-C across different age groups. 787 MIS-C patients were identified in the given studies. With regard to inflammatory markers, patients with MIS-C ( $p < 0.001$ ), c-reactive protein (CRP)	In this systematic review and meta-analysis, the authors aimed to characterize and compare the level of inflammatory markers in children with MIS-C vs severe COVID, severe MIS-C vs non-severe MIS-C and among children of different age groups with MIS-C. The authors suggest that levels of inflammatory markers might aid pediatricians in accurately	Zhao Y, Yin L, Jenil P, Tang L, Huang Y. The inflammatory markers of Multisystem Inflammatory Syndrome in children (MIS-C) and adolescents associated with COVID-19: A Meta-analysis [published online, 2021 Mar 19]. J Med Virol. 2021;10.1002/jmv.26951. doi:10.1002/jmv.26951

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					(p<0.001) compared to non-severe COVID-19 patients. Patients with MIS-C had lower lactate dehydrogenase (p<0.001), lower platelets (p<0.001) and higher erythrocyte sedimentation rate levels (p<0.005) as compared to severe COVID-19 patients. Compared to non-severe MIS-C patients, patients with severe MIS-C had higher levels of WBC, ANC, CRP, d-dimer and ferritin (p<0.01) than non-severe MIS-C patients. Further, for MIS-C, children ages 0-5 years had lower CRP (p<0.001) and ferritin (p<0.01) levels than older children and adolescents. The authors suggest that levels of inflammatory markers might aid pediatricians in accurately identifying and managing patients with MIS-C.	identifying and managing patients with MIS-C.	
Disparities, minority groups, equity, incidence	10-Mar-21	<a href="#">Racial and Ethnic Disparities in COVID-19 Incidence by Age, Sex, and Period Among Persons Aged &lt;25 Years — 16 U.S. Jurisdictions, January 1–December 31, 2020</a>	Morbidity and Mortality Weekly Report (MMWR)	Report	This CDC report highlights racial and ethnic disparities in COVID-19 incidence among persons aged <25 years in 16 U.S. jurisdictions across three periods during January 1–December 31, 2020 (total of 689,672 cases). During January–April, COVID-19 incidence was substantially higher among most racial and ethnic minority groups compared with that among non-Hispanic White (White) persons (rate ratio [RR] range = 1.09–4.62). During May–August, the RR increased from 2.49 to 4.57 among non-Hispanic Native Hawaiian and Pacific Islander (NH/PI) persons but decreased among other racial and ethnic minority groups (RR range = 0.52–2.82). Decreases in disparities were observed during September–December (RR range = 0.37–1.69); these decreases were largely because of a greater increase in incidence among White persons, rather than a decline in incidence among racial and ethnic minority groups. NH/PI, non-Hispanic American Indian or Alaska Native (AI/AN), and Hispanic or Latino (Hispanic) persons experienced the largest persistent disparities over the entire period. Incidence was higher among females than among males during all of 2020 and across periods. Ensuring equitable and timely access to preventive measures, including testing and vaccination when eligible, is important to address racial/ethnic disparities.	This CDC report highlights racial and ethnic disparities in COVID-19 incidence among persons aged <25 years in 16 U.S. jurisdictions across three periods during January 1–December 31, 2020 (total of 689,672 cases). Non-Hispanic Native Hawaiian and Pacific Islander, non-Hispanic American Indian or Alaska Native (AI/AN), and Hispanic or Latino (Hispanic) persons experienced the largest persistent disparities over the entire period. Ensuring equitable and timely access to preventive measures is important to address racial/ethnic disparities.	Van Dyke ME, Mendoza MC, Li W, et al. Racial and Ethnic Disparities in COVID-19 Incidence by Age, Sex, and Period Among Persons Aged <25 Years — 16 U.S. Jurisdictions, January 1–December 31, 2020. MMWR Morb Mortal Wkly Rep. DOI: <a href="http://dx.doi.org/10.15585/mmwr.mm7011e1">http://dx.doi.org/10.15585/mmwr.mm7011e1</a>
living systematic review; maternal health; pregnancy outcomes; COVID-19	10-Mar-21	<a href="#">Update to living systematic review on covid-19 in pregnancy</a>	British Medical Journal (BMJ)	Research Article	This article briefly announces an update (update 1) to a living systematic review on COVID-19 and pregnancy by Allotey et al. (BMJ 2020;370:m3320) originally published September 1, 2020. For the latest update, visit <a href="https://doi.org/10.1136/bmj.m3320">doi:10.1136/bmj.m3320</a> . This update adds 115 new studies to the original review, resulting in a total of 192 studies reviewed containing data on 64,676 pregnant and recently pregnant women. The prevalence of COVID-19 in pregnant and recently pregnant women remained unchanged between this update and the original version of the living systematic review. Pregnant women continue to be at increased risk of severe COVID-19 when compared to non-pregnant women of reproductive age. In addition to high body mass index and advancing maternal age, evidence suggests that non-white ethnic origin may also be a risk factor for severe COVID-19. Each cycle of this living systematic review involves weekly search updates, with analysis performed every 2-4 months; earlier	This article announces an update of 115 new studies to a living systematic review on COVID-19 and pregnancy by Allotey et al. published September 1, 2020. The authors' original findings remain that pregnant women are at increased risk of severe COVID-19 and additional risk factors include high body mass index, higher age, and non-white ethnic origin.	Update to living systematic review on covid-19 in pregnancy. BMJ. 2021;372:n615. Published 2021 Mar 10. doi:10.1136/bmj.n615

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					analysis may be done if new definitive evidence emerges. Updates may occur for up to 2 years from the date of original publication.		
Activities; Attitude; COVID-19; Education; Pandemic; School; Sleep	10-Mar-21	<a href="#">Students' attitude and sleep pattern during school closure following COVID-19 pandemic quarantine: a web-based survey in south of Iran</a>	Environment al Health and Preventative Medicine	Research Article	This study aimed to determine the impacts of lockdown and school closure on children's major lifestyle aspects, especially their leisure and sleep patterns during the COVID-19 pandemic in Iran. 20,697 students (mean age 13.76±2.50 years) completed an online questionnaire between March 14-31, 2020, about major activities, adherence to quarantine, attitude toward school closure, and sleep patterns. The main activities of students during school closure were mobile and computer games (30.1%), studying (26.6%), and watching television (13.8%). The majority of students adhered to social distancing, and there was also a significant correlation among education levels and desire for schools to be closed till the end of the semester (p=0.015), with the highest agreement rate in education levels 1-3, and the highest disagreement rates in levels 10-12. Regarding sleep patterns, the majority (53.5%) had above 12h of sleep throughout the day, 13.4% had 5 or fewer hours, 13% 6-8h, 12.8% 9-10h, and 7.3% 11-12h. The results indicate that the main consequences of school closures and lockdown during the COVID-19 pandemic were increased leisure, screen time, and sleep duration and pattern.	This study aimed to determine the impacts of lockdown and school closure on children's major lifestyle aspects, especially their leisure and sleep pattern during the COVID-19 pandemic in Iran. The results indicate that the main consequences of school closure and lockdown following COVID-19 pandemic were increased leisure, screen time, and sleep duration and pattern.	Ranjbar K, Hosseinpour H, Shahriarirad R, et al. Students' attitude and sleep pattern during school closure following COVID-19 pandemic quarantine: a web-based survey in south of Iran. Environ Health Prev Med. 2021;26(1):33. Published 2021 Mar 10. doi:10.1186/s12199-021-00950-4
COVID-19; SARS-CoV-2; mortality; children; neurology; MIS-C	10-Mar-21	<a href="#">Demographic and Clinical Profile of Mortality Cases of COVID-19 in Children in New Delhi</a>	Indian Journal of Pediatrics	Letter to the Editor	In this letter, the authors summarized the demographic and clinical profiles of 9 fatal cases of confirmed COVID-19 in children. Data were extracted from a hospital in New Delhi, India, between March 1-July 31, 2020. The median duration of symptoms was 7 days (IQR 3–11), and the median age at death was 4 years (IQR 1.5–9.5). The underlying illnesses were tuberculosis (n=3), spastic cerebral palsy (n=1) and chronic immune thrombocytopenic purpura (n=1). History of contact exposure was present in 2 cases. The most common symptoms were fever (n=6), seizures (n=6), altered sensorium (n=6), diarrhea (n=3), difficulty breathing (n=2), cough (n=2), rash (n=2), vomiting (n=1) and headache (n=1). 5 children had bilateral pneumonia, and 1 had unilateral pneumonia on chest radiographs. Laboratory parameters showed elevated leucocyte count (n=6), leucopenia (n=1), lymphopenia (n=4), thrombocytopenia (n=3), increased C-reactive protein and lactate dehydrogenase (n=6), and increased ALT and AST (n=4). 2 patients had increased ferritin, and 5 had elevated D-dimer levels. Most of the cases (n=6) met the case definition of MIS-C with COVID-19. The predominant neurological presentation in this series highlights the varied presentation of COVID-19 in children. It is imperative to have a high index of suspicion for COVID-19 in all children who are ill or have an atypical clinical course.	In this letter, the authors summarized the demographic and clinical profile of 9 fatal cases of confirmed COVID-19 in children (median age 4 years, IQR 1.5-9.5) in New Delhi, India. Most of the cases (n=6), met the case definition of MIS-C with COVID-19. The predominant neurological presentation in this series highlights the varied presentation of COVID-19 in children.	Singh A, Saini I, Meena SK, Gera R. Demographic and Clinical Profile of Mortality Cases of COVID-19 in Children in New Delhi [published online 2021 Mar 10]. Indian J Pediatr. 2021;1. doi:10.1007/s12098-021-03687-8

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Intrauterine fetal death; neonatal death; pregnancy; outcomes; SARS-CoV-2	10-Mar-21	<a href="#">Adverse Pregnancy Outcomes Among Individuals With and Without Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2): A Systematic Review and Meta-analysis</a>  <a href="#">[Free Access to Abstract Only]</a>	Obstetrics and Gynecology	Systematic Review	This systematic review and meta-analysis compared the risk of intra-uterine fetal death (20 weeks of gestation or later) and neonatal death between pregnant individuals who tested positive for SARS-CoV-2 compared with those who tested negative on admission for delivery. The search was conducted through October 21, 2020 and included publications comparing at least 20 cases of both pregnant patients with SARS-CoV-2 infection and without. Of the 941 articles identified, 6 studies met criteria, including 728 deliveries to patients who tested positive for SARS-CoV-2 and 3,836 contemporaneous deliveries to patients who tested negative. A greater proportion of pregnant individuals with SARS-CoV-2 were ≥35 years old (33.1% vs 26.9% p=0.007). Intra-uterine fetal death occurred in 8 of 728 (1.1%) patients who tested positive and 44 of 3,836 (1.1%) who tested negative (P=0.60). Neonatal death occurred in 0 of 432 (0.0%) patients who tested positive and 5 of 2,400 (0.2%) who tested negative (P=0.90). Preterm birth occurred in 95 of 714 (13.3%) patients who tested positive and 446 of 3,759 (11.9%) who tested negative (P=0.31). Maternal death occurred in 3 of 559 (0.5%) patients who tested positive and 8 of 3,155 (0.3%) who tested negative (P=0.23). The authors conclude the incidences of intra-uterine fetal death and neonatal death were similar between the two groups. Other immediate outcomes of the newborns were also similar.	This systematic review and meta-analysis compared the risk of intra-uterine fetal death and neonatal death between pregnant individuals who tested positive for SARS-CoV-2 compared with those who tested negative on admission for delivery. The authors conclude the incidences of intra-uterine fetal death and neonatal death were similar between the two groups.	Huntley B, Mulder IA, Di Mascio D, et al. Adverse Pregnancy Outcomes Among Individuals With and Without Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2): A Systematic Review and Meta-analysis [published online, 2021 Mar 10]. <i>Obstet Gynecol</i> . 2021;10.1097/AOG.00000000000004320. doi:10.1097/AOG.00000000000004320
COVID-19; child mortality	10-Mar-21	<a href="#">Children and young people remain at low risk of COVID-19 mortality</a>	The Lancet Child Adolescent Health	Correspondence	The authors analyzed COVID-19 child (0-14 years in US data; 0-19 years in 6 other countries) mortality data from 7 countries: US, UK, Italy, Germany, Spain, France, and South Korea. This correspondence is an update to previously collected data from February 2021. The updated data show that child mortality from COVID-19 is rare at 0.19 per 100,000 population, representing 0.54% of estimated total mortality from all causes in a typical year. The authors state that deaths in older children (5-14 years in the US; 10-19 years in 6 other countries) are relatively more frequent than younger children (0-4 years in the US; 0-9 in 6 different countries). The highest child mortality rates per 100,000 children were in Spain (0.64 for 0-9 years; 0.53 for 10-19 years) and the lowest rates were in South Korea, with 0 deaths in children 0-9 years and 10-19 years. The authors caution that as the virus changes, the evidence must be updated too.	The authors analyzed COVID-19 child mortality data from 7 countries: US, UK, Italy, Germany, Spain, France, and South Korea. The authors state that deaths in older children are relatively more frequent than in younger children.	Bhopal SS, Bagaria J, Olabi B, et al. Children and young people remain at low risk of COVID-19 mortality. <i>Lancet Child Adolescent Health</i> . 2021. DOI:https://doi.org/10.1016/S2352-4642(21)00066-3
COVID-19; pre-eclampsia; epidural; post-dural puncture headache; SARS-CoV-2; delivery	10-Mar-21	<a href="#">Epidural blood patch for a post-dural puncture headache in a COVID-19 positive patient following labor epidural analgesia</a>	International Journal of Obstetric Anesthesia	Case Report	The authors present the case of a 24-year old who was SARS-CoV-2 positive but asymptomatic, presenting with the induction of labor (BMI: 41.6kg/m2) and pre-eclampsia in Texas, USA. The patient was started on magnesium sulfate for seizure prophylaxis, and epidural placement was done at L2-3 interspace using a 17-gauge Tuohy needle. The patient complained of an 8/10 positional headache on day 1 post-partum, with an eventual diagnosis of post-dural puncture headache. She received butalbital, caffeine, and acetaminophen, providing partial relief, and was discharged from	The authors report the case of a 24-year old pregnant SARS-CoV-2 positive female with pre-eclampsia who developed a post-dural puncture headache after she received an epidural in labor. Her symptoms resolved with an epidural blood patch (EBP), and she did not develop neurological	M. Ibrahim, R. Darling, N. Oaks, R. Babazade, R. Vadhera, Epidural blood patch for a post-dural puncture headache in a COVID-19 positive patient following labor epidural analgesia, <i>International Journal of Obstetric</i>

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					the hospital. 3 days later, she was readmitted with a worsening headache, and repeat testing was positive for SARS-CoV-2. An epidural blood patch (EBP) was performed with 16mL of blood, with significant relief of headache and she was discharged. During the 12-week follow-up via telephone, she reported lower back pain and intermittent fever, both of which resolved within a few days of onset. She did not develop neurological complications during the follow-up. The authors recommend that clinicians weigh the risks versus the benefits before proceeding with an EBP and encourage further reporting of case studies of EBPs in SARS-CoV-2 positive patients.	complications during the follow-up. The authors recommend that clinicians weigh the risks versus the benefits before proceeding with an EBP and encourage further reporting of case studies of EBPs in SARS-CoV-2 positive patients.	Anesthesia,2021,102970,ISSN 0959-289X, <a href="https://doi.org/10.1016/j.ijoa.2021.102970">https://doi.org/10.1016/j.ijoa.2021.102970</a> .
COVID-19; pandemic; school closures; susceptibility	10-Mar-21	<a href="#">Are children and schools a COVID-19 threat?</a>	Public Health in Practice	Article	The authors offer commentary on how effective school closures are as a COVID-19 pandemic measure and state that rather than a safe or not-safe issue, school closures during the pandemic have a spectrum of risk. The evidence so far shows that children (no ages defined) are less susceptible to SARS-CoV-2 and shed viral RNA for less time, suggesting that children are less likely to account for viral transmission. The authors stress that susceptibility to infection is not the same as the propensity to infect others. School-based clusters may be community-acquired cases occurring in the same school without an actual school-related cause. Infection rates in schools will reflect the overall situation in the community. The risk for school outbreaks rises by 72% when the community incidence increases by 5 per 100,000. UK data suggest that teachers are not at increased risk of infection than other occupations. Studies from various countries found no or very low secondary attack rates within school settings. The authors also stress the many negative consequences of school closures on children and the social inequalities that have widened. Single-family households and low-income families struggle to provide at-home education. Children with disabilities lack access to support services, mental health challenges are increasing, as are domestic abuse and neglect, and parents are under greater stress levels. Finally, the authors state that school closures may be necessary when infection rates are very high in the community but should only be a last resort and to remember that schools and children are lower-risk, not no-risk.	The authors offer commentary on how effective school closures are as a COVID-19 pandemic measure and state that rather than a safe or not-safe issue, school closures during the pandemic are a spectrum of risk. The risk for school outbreaks rises by 72% when the community incidence increases by 5 per 100,000.	Lee ACK, Morling JR. Are children and schools a COVID-19 threat? Public Health in Practice. 2021:100102. doi: <a href="https://doi.org/10.1016/j.puhip.2021.100102">https://doi.org/10.1016/j.puhip.2021.100102</a>
COVID-19; infant; novel treatment; investigational drug; United States	9-Mar-21	<a href="#">Novel Treatment of Infant With COVID-19 With the Sialidase Fusion Protein, DAS181 [Free Access to Abstract Only]</a>	The Pediatric Infectious Disease Journal	Article	The authors discuss the use of a new nebulized antiviral agent, DAS181 (Ansun BioPharma, San Diego, CA, USA), to treat a patient with COVID-19. In May 2020, a hospitalized 10-month-old female in the United States with 22q11.2 deletion syndrome, double outlet right ventricle, and ventricular septal defect, and tracheomalacia with severe compression of bilateral mainstem bronchi, developed acute respiratory distress. Chest radiograph showed diffuse pulmonary airspace opacities without a focal consolidation. She was febrile and administered intravenous cefepime. She tested positive for SARS-CoV-2 by nasopharyngeal PCR. As the patient's respiratory status was not improving with supportive care, the FDA granted	The authors describe the use of a new nebulized antiviral agent, DAS181, to treat a 10-month-old female with respiratory distress secondary to COVID-19. The patient's respiratory distress and viral PCR positivity rapidly resolved after the initiation of therapy, but she subsequently passed away from a cardiac arrest. This case highlights the	Danziger-Isakov L, Khalil N, Divanovic A, et al. Novel Treatment of Infant With COVID-19 With the Sialidase Fusion Protein, DAS181. <i>Pediatr Infect Dis J</i> . 2021. doi:10.1097/INF.0000000000003122.

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					humanitarian use approval for the administration of DAS181, a sialidase catalytic domain/amphiregulin glycosaminoglycan binding sequence fusion protein. The patient's respiratory distress and viral PCR positivity rapidly resolved after the initiation of therapy. The patient tolerated the therapy well with minimal side effects. She was discharged after 8 days of treatment and appeared to be well during an outpatient visit 5 days later with no respiratory or systemic symptoms. However, the following day she passed away from a cardiac arrest. This case highlights the first successful treatment of a pediatric patient with respiratory distress secondary to SARS-CoV-2 infection with DAS181.	first successful treatment of a pediatric patient with respiratory distress secondary to SARS-CoV-2 infection with DAS181.	
Obesity; diabetes; health promotion; healthy lifestyle; youth; parenting	9-Mar-21	<a href="#">Primary disease prevention for southwest American Indian families during the COVID-19 pandemic: Camp in a box</a>	Frontiers in Sociology	Original Research	The authors created a Camp in a Box program to engage, educate, and empower American Indian (AI) families during the COVID-19 pandemic to improve their health and overall well-being. COVID-19 has underscored AI health disparities and the importance of primary prevention of co-morbid conditions. A residential summer camp program was previously developed to encourage AI youth (10-15 years) to make healthy lifestyle changes. The COVID-19 pandemic made the in-person camp inappropriate, but the authors felt the need to continue to address obesity prevention for AI youths and their families. The Camp in a Box program was a nine-week program sent through the mail. The first week was an intensive camp experience with daily activities that occurred Monday-Friday. It included all the materials needed for 4 hours of activities per day for the family. The remaining weeks had materials for 4 hours of activity per week to be done at the family's convenience. All activities were designed to encourage interaction among family members and focus on nutrition, physical activity, mental health, personal hygiene, arts and crafts, and parenting support. Activities were completed within the family's residences from July-September 2020; 14 families participated, consisting of 36 children (age range 2-18 years) and 32 adults (aged 19-56 years). 100% of families participated in week 1, and by the last week (8), 10 families remained (71%). One family was lost to follow up; 93% completed the camp evaluation. Parents reported that the family spent more time together due to the Camp in a Box activities. 20% of parental respondents stated they would incorporate all the camp lessons into their lives. The authors say their findings show that a health promotion program can be implemented during a pandemic without reliance on the internet.	The authors created a Camp in a Box program to engage, educate, and empower American Indian families during the COVID-19 pandemic to improve their health and overall well-being. The authors state their findings show that a health promotion program can be implemented during a pandemic without reliance on the internet.	Gachupin FC, Caston E, Chavez C, et al. Primary Disease Prevention for Southwest American Indian Families During the COVID-19 Pandemic: Camp in a Box. <i>Front Sociol.</i> 2021;6:611972. Published 2021 Mar 9. doi:10.3389/fsoc.2021.611972

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
Postpartum, pregnancy, mental health, mother-child attachment, separation	9-Mar-21	<a href="#">A multi-center survey on the postpartum mental health of mothers and attachment to their neonates during COVID-19 in Hubei Province of China</a>	Annals of Translational Medicine	Original Research	In this multi-center longitudinal study in Hubei Province, China, the authors compared postpartum mental health and mother-child attachment between mothers with confirmed or suspected COVID-19 and mothers without COVID-19. 71 women were included from February 10-April 1, 2020: 23 with confirmed COVID-19, 15 with suspected COVID-19, and 33 controls with non-COVID-19 perinatal diseases. Mother-child attachment was assessed using the Maternal Postnatal Attachment Scale (MPAS) in the 3 months following delivery. Postpartum anxiety and depression were assessed by the Zung Self-rating Anxiety Scale (SAS) and the Zung Self-rating Depression Scale (SDS). Mother-child separation among the confirmed group (33.9±20.9 days) was significantly longer than that of suspected (16.7±12.2 days) and control groups (10.7±8.4 days), p<0.001. The total MPAS score in mothers confirmed with COVID-19 (45.5±4.2) was significantly lower (indicating less mother-child attachment) than that in the suspected (50.5±4.7) and control (48.8±4.6) groups (p=0.003). A negative correlation was noted between the mother-child separation time and the MPAS scores (longer separation associated with lower attachment score) (Spearman's $\rho = -0.33$ , 95% CI: $-0.095$ to $-0.538$ , p=0.005). No significant difference was found for maternal postpartum anxiety and depression among the 3 groups. The authors conclude that decreased mother-child attachment among mothers confirmed with COVID-19 indicates that support for mother-child interaction is urgently needed during the COVID-19 pandemic.	The authors compared postpartum mental health and mother-child attachment between mothers with confirmed or suspected COVID-19 and mothers without COVID-19 in Hubei Province, China. Mothers with confirmed COVID-19 had longer separation times from their infants and lower attachment scores (less attachment). No significant difference was observed for postpartum anxiety and depression. The authors conclude that decreased mother-child attachment among mothers confirmed with COVID-19 indicates that support for mother-child interaction is urgently needed during the COVID-19 pandemic.	Peng S, Zhang Y, Liu H, et al. A multi-center survey on the postpartum mental health of mothers and attachment to their neonates during COVID-19 in Hubei Province of China. Ann Transl Med. 2021;9(5):382. doi:10.21037/atm-20-6115
Ultrasound, lung, imaging, pregnancy, safety	9-Mar-21	<a href="#">Does Lung Ultrasound Have a Role in the Clinical Management of Pregnant Women with SARS COV2 Infection?</a>	International Journal of Environmental Research and Public Health	Original Research	This prospective study assessed the role of lung ultrasound (LUS) in the evaluation of lung involvement from SARS-CoV-2 during pregnancy. 30 pregnant women with SARS-CoV-2 infection admitted at a hospital in Italy from March 1-November 30, 2020 were included (mean age 31.2 years (range 27-35 years), mean gestational age 33.8 weeks (range 28-38 weeks)). LUS was performed at the time of admission and the day after delivery by an experienced clinician using a portable ultrasound device and conducted according to the 12-zone method in the supine and lateral positions. The management of the patients was decided according to the LUS score (0-3 for each zone, total score 36 with higher score indicating worse lung involvement) and the clinical condition. During the hospitalization, 22 patients (73%) had a LUS score $\leq 6$ ; 8 patients (27%) had a score $\geq 7$ ; among these, 3 (10%) reached a score $\geq 20$ . In 9 cases with a high LUS score or persistent symptoms after delivery, a chest CT was then performed. CT confirmed the results of LUS, showing a significant positive correlation between the 2 techniques (p < 0.01). No neonatal complications occurred. The authors conclude that LUS seems a safe alternative to CT in pregnancy and may help in the management of these patients.	In this study assessing the role of lung ultrasound (LUS) in evaluation of lung involvement from SARS-CoV-2 during pregnancy, the authors found that LUS helped guide management for 30 pregnant women without any adverse neonatal complications. For pregnant women who also received a chest CT, there was a significant positive correlation between the two techniques. The authors conclude that LUS seems a safe alternative to CT in pregnancy.	Porpora MG, Merlino L, Masciullo L, et al. Does Lung Ultrasound Have a Role in the Clinical Management of Pregnant Women with SARS COV2 Infection?. Int J Environ Res Public Health. 2021;18(5):2762. doi:10.3390/ijerph18052762

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
COVID-19, childhood trauma, emotional dysregulation, psychological distress	9-Mar-21	<a href="#">Emotional dysregulation mediates the impact of childhood trauma on psychological distress: First Italian data during the early phase of COVID-19 outbreak</a>	Australian and New Zealand Journal of Psychiatry	Original Research	This cross-sectional study in Italy explored the relationship between childhood trauma (CT) and psychological distress experienced due to COVID-19. An online survey was completed by adults 18-75 years old (N=500) between April 10-13, 2020. After controlling for age and sex, those who reported stress due to COVID-19 were more likely to have had CT experiences of emotional abuse ( $p < 0.001$ ) and emotional neglect ( $p < 0.001$ ) than those that reported no stress. The relationship between emotional abuse and psychological distress due to COVID-19 was mediated by emotional dysregulation (indirect effect = 0.465; 95% CI: 0.345, 0.598; $p < 0.0001$ ), with no significant direct effect found. Emotional dysregulation also mediated the relationship between emotional neglect and psychological distress due to COVID-19 (indirect effect = 0.348; 95% CI = 0.247, 0.464; $p < 0.0001$ ), also with no significant direct effect. The researchers hypothesize that the above relationships could be explained by the “sensitization effect” of CT, in which CT exposure increases vulnerability to stress later in life. They recommend that future research investigate the long-term effects of the COVID-19 pandemic for those that have experienced CT.	This cross-sectional study in Italy explored the relationship between past childhood trauma (CT) and psychological distress experienced due to COVID-19. Their results indicated that emotional dysregulation mediated the significant relationship between psychological distress and experiences of emotional abuse or emotional neglect.	Janiri D, Moccia L, Dattoli L, et al. Emotional dysregulation mediates the impact of childhood trauma on psychological distress: First Italian data during the early phase of COVID-19 outbreak. Australian & New Zealand Journal of Psychiatry. March 2021. doi:10.1177/0004867421998802
pregnant women; fetal outcomes; infant outcomes; vaccination; vertical transmission	9-Mar-21	<a href="#">Pregnancy and COVID: what the data say</a>	Nature	News feature	This news feature was published in Nature on March 9, 2021. Research around the globe has concluded that pregnant women that contract SARS-CoV-2 are more likely to be hospitalized and experience severe disease than their peers who are not pregnant. Furthermore, pregnant women of racial and ethnic minority groups are at additional risk of severe disease and death. It is uncommon for infants to get sick, and studies that have analyzed blood and tissue samples from mothers and infants conclude that vertical transmission is rare. However, some research suggests that SARS-CoV-2 can damage the placenta, possibly injuring the fetus. Data are lacking surrounding whether pregnant women can safely receive a COVID-19 vaccine, but at this time there are no known specific risks to pregnant women. The WHO recommends that the mRNA vaccines made by Moderna and Pfizer/BioNTech be offered only to pregnant women at highest risk, and only after consultation with their providers. The majority of physicians contacted by Nature report that, after medical consultation, they would recommend that pregnant women be offered the COVID-19 vaccine. Due to the demonstrated gap in vaccination data, many researchers and advocacy groups are looking to change the standards of future clinical trials in order to include pregnant women more immediately.	This news feature published in Nature reports on the additional risk of hospitalization and severe disease to pregnant women with COVID-19. Although there are no conclusive data yet, both the WHO and physicians contacted by Nature recommend that pregnant women be offered the COVID-19 vaccine after medical consultation.	Subbaraman N. Pregnancy and COVID: what the data say. Nature. March 9 2021. Accessible from: <a href="https://www.nature.com/articles/d41586-021-00578-y">https://www.nature.com/articles/d41586-021-00578-y</a>

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Adolescents; COVID-19; Children; Psychological impact	9-Mar-21	<a href="#">COVID-19 quarantine: Psychological impact and support for children and parents</a>	Italian Journal of Pediatrics	Commentary	This commentary explores the psychological impact of the COVID-19 quarantine on children and parents. Many governments have imposed quarantine to control the spread of the virus. Quarantine is a sudden interruption to daily life, it breaks relationships and habits, resulting in disorientation and confusion. Research has shown that quarantine is a psychologically stressful experience. With respect to children, lack of school and interruptions to daily routines could have a negative impact on their physical and mental health. Parents may also pass their psychological distress to children and practice inappropriate parenting behaviors, which could contribute to the development of post-traumatic stress symptoms in children. The authors stress the importance of children receiving calm, balanced and stable parenting during quarantine. To prevent negative outcomes, governments must carefully consider any decision to impose quarantine and family social care services must work together with children's mental health services to ensure that the experience is as tolerable and safe as possible.	This commentary explores the psychological impact of the COVID-19 quarantine on children and parents. To prevent negative outcomes, governments must carefully consider any decision to impose quarantine and family social care services must work together with children's mental health services to ensure that the experience is as tolerable and safe as possible.	Demaria F, Vicari S. COVID-19 quarantine: Psychological impact and support for children and parents. Ital J Pediatr. 2021;47(1):58. Published 2021 Mar 9. doi:10.1186/s13052-021-01005-8
Pediatric, obesity, school closure, physical activity, COVID-19	9-Mar-21	<a href="#">COVID-19-related school closing aggravate obesity and glucose intolerance in pediatric patients with obesity</a>	Scientific Reports	Article	The authors present a retrospective observational study conducted at the Department of Pediatrics outpatient clinic of Samsung Medical Center in Korea between December 2019 and May 2020. The subjects included 90 pediatric patients between the ages of 6 and 18 years with obesity, of which 53 had non-alcoholic fatty liver disease (NAFLD). The children attended school and visited the outpatient clinic before and during the school closing period/lockdown due to the COVID-19 pandemic. The authors investigated the changes in weight, height, BMI, and other laboratory results associated with metabolism between the pre-school closing and during school closing. The mean age was 12.2 +/- 3.4 years, and 78% were male. The median interval between the first visit of the outpatient clinic (pre-school closing) and the second visit (during school closing) was 4.3 months. The results showed that body weight (67.2 ± 23.8 vs. 71.1 ± 24.2, p < 0.001) and BMI (26.7±4.6 vs. 27.7±4.6, p<0.001) increased significantly during school closing compared to pre-school closing. Furthermore, AST, ALT, and lipid profiles increased remarkably during school closing compared to pre-school closing. The NAFLD group had significantly higher mean blood pressure and HbA1c levels relative to the non-NAFLD group during the school closing period. The authors concluded that reduced physical activity due to social distancing during the COVID-19 pandemic exacerbated obesity among school-aged children and adolescents and negatively affects the HbA1C increase in NAFLD patients compared to non-NAFLD patients. Therefore, physicians should carefully monitor the development of glucose intolerance in pediatric NAFLD patients during physical inactivity periods caused by school closing during the COVID-19 pandemic.	This retrospective observational study of 90 obese children in Korea showed increased BMI and worsening metabolic labs during school closing due to the COVID-19 pandemic compared to pre-school closing. The NAFLD group had significantly higher mean blood pressure and HbA1c levels relative to the non-NAFLD group during the school closing period. The authors suggest that physicians should carefully monitor the development of glucose intolerance in pediatric NAFLD patients during physical inactivity periods caused by school closing during the COVID-19 pandemic.	Kim ES, Kwon Y, Choe YH, Kim MJ. COVID-19-related school closing aggravate obesity and glucose intolerance in pediatric patients with obesity. Sci Rep. 2021 Mar 9;11(1):5494. doi: 10.1038/s41598-021-84766-w. PMID: 33750841; PMCID: PMC7943757.

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DNA methylation, infant, influenza, viral infection, GWAS, SARS-CoV-2	9-Mar-21	<a href="#">High-resolution epigenome analysis in nasal samples derived from children with respiratory viral infections reveals striking changes upon SARS-CoV-2 infection</a>	medRxiv	Preprint (not peer-reviewed)	The researchers studied genome-wide DNA methylation in nasal samples from infants, applying whole-genome bisulfite sequencing (WGBS) to characterize epigenome response to 10 different respiratory viral infections, including SARS-CoV-2. They generated WGBS data on 11 pools of nasal samples collected from infants (<6 months old, n=86, median age for each cohort ranged from 1 – 4 months) with one of the 10 respiratory viruses, and age-matched non-infected infants who presented at the hospital with acute respiratory infection. They found a strong replication rate of influenza B (52%) and SARS-CoV-2 (42%) in differentially methylated regions (vDMR) of independent samples, indicating robust epigenome perturbation upon infection. They found that, while there is variability in the magnitude of methylome response to different viral infections, many of the identified DMRs are reproducibly identifiable between independent infections, indicating robust epigenome response to infection. Additionally, they demonstrated the important role of innate cells, specifically monocytes, in the antiviral response to influenza B and SARS-CoV-2. Lastly, the researchers demonstrated that an epigenomic signature of monocyte suppression may reflect predisposition to infection or viral replication, and may account for inter-individual differences in infection propensity and immune response.	The researchers studied genome-wide DNA methylation in nasal samples from infants (<6 months), applying whole-genome bisulfite sequencing (WGBS) to characterize epigenome response to 10 different respiratory viral infections, including SARS-CoV-2. They demonstrated that an epigenomic signature of monocyte suppression may reflect predisposition to infection or viral replication, and may account for inter-individual differences in infection propensity and immune response.	Winkley K, Koseva B, Banerjee D, et al. High-resolution epigenome analysis in nasal samples derived from children with respiratory viral infections reveals striking changes upon SARS-CoV-2 infection. medRxiv. 2021. doi:10.1101/2021.03.09.21253155
Children's mental health; Community survey: COVID-19; Epidemiology; Self-report	9-Mar-21	<a href="#">Risk and protective factors related to children's symptoms of emotional difficulties and hyperactivity/inattention during the COVID-19-related lockdown in France: results from a community sample</a>	European Child and Adolescent Psychiatry	Original Research	The authors assessed the correlates of children's emotional difficulties and symptoms of hyperactivity/inattention during the COVID-19 lockdown in a French community-based sample of 432 parents (aged 27-46 years) and their children (mean age = 6.8 yrs [range not reported]). Children's symptoms of emotional difficulties and hyperactivity/inattention were assessed using the parent-reported "Strengths and Difficulties Questionnaire" during the 5th week of home confinement in France starting in April 2020. Family socio-economic characteristics and parental mental health and substance use were assessed weekly during the first 5 weeks of home confinement. Nearly 7% of children presented symptoms of emotional difficulties and 25% presented symptoms of hyperactivity/inattention. Family financial difficulties and parental symptoms of anxiety and depression, as well as children's sleeping difficulties and screen time, were significantly associated with the presence of psychological difficulties (p<0.05 for each). Overall, children's symptoms of frequent psychological difficulties are associated with known risk factors of youth mental health problems. The authors' results substantiate the claim that children's emotional and behavioral difficulties are associated with parental mental health and socioeconomic difficulties. As such, special attention and care must be taken to children's mental health needs during the COVID-19 pandemic.	The authors analyzed the factors associated with children's hyperactivity and inattention in a survey of 432 parents and their children during the 5th week of the COVID-19 lockdown in France (April 2020). Children's symptoms of frequent psychological difficulties are associated with known risk factors of youth mental health problems, suggesting children's mental health be especially prioritized in this time.	Moulin F, El-Aarbaoui T, Bustamante JH, et al. Risk and protective factors related to children's symptoms of emotional difficulties and hyperactivity/inattention during the COVID-19-related lockdown in France: results from a community sample. <i>Eur Child Adolesc Psychiatry</i> . 2021;1-12. doi:10.1007/s00787-021-01752-3

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COVID-19; pediatric; disease management	9-Mar-21	<a href="#">COVID-19 Management In Pediatrics</a>	The Journal for Nurse Practitioners	Article	The authors discussed COVID-19 management for children and implications for nursing and advanced practice providers. Topics include SARS-CoV-2 screening, antibody screening, areas of controversy, pathophysiology, differential diagnosis, presentation, symptom management, and progress of studies evaluating safety and efficacy of COVID-19 vaccines in children. Children are at-risk for acquiring SARS-CoV-2 infections; those with premorbid conditions are at greatest risk. MIS-C is a life-threatening illness of COVID-19, resembling inflammatory symptoms of Kawasaki Disease and Toxic Shock Syndrome. No proven disease-specific therapies exist although various antiviral regimens offer some success. These include Remdesivir, Hydroxychloroquine/ Chloroquine with/ without Azithromycin, and Lopinavir/ Ritonavir. It is important for nurse practitioners to stay informed of evidence-based practices to prevent and mitigate SARS-CoV-2 and its mutations, while guiding the public in making safe decisions regarding schooling, sporting, and social activities that affect the participation of children.	The authors discussed COVID-19 management for children and implications for nursing and advanced practice providers. Topics include SARS-CoV-2 screening, antibody screening, areas of controversy, pathophysiology, differential diagnosis, presentation, symptom management, and progress of studies evaluating safety and efficacy of COVID-19 vaccines in children.	Alcindor ML, Alcindor F, Richard KE, et al. COVID-19 Management In Pediatrics. J Nurse Pract. 2021. doi:10.1016/j.nurpra.2021.02.010.
COVID-19, SARS-CoV-2, case report, Respiratory Failure, ECMO	9-Mar-21	<a href="#">Extracorporeal Membrane Oxygenation to treat a 15-year-old Patient with Severe COVID-19 Respiratory Failure</a>	JTCVS Techniques	Case Report	This is a case report of a 15-year-old female in the US with morbid obesity, hypertension, hypothyroidism, pre-diabetes, and asthma, who presented to the hospital with a cough, shortness of breath and fatigue. Upon presentation, she had an oxygen saturation of 55% on room air. Oxygen saturation increased to 88% on a 15L/min non-rebreather mask. She was diagnosed with severe hypoxic respiratory failure and was admitted to the pediatric ICU, where she was placed on mechanical ventilation. Chest x-ray revealed bilateral pulmonary parenchymal opacities, and nasopharyngeal PCR test was positive for SARS-CoV-2. She was started on IV antibiotics, dexamethasone, enoxaparin, inhaled nitric oxide, convalescent plasma therapy and remdesivir. She developed acute renal injury and diastolic hypotension requiring low-dose norepinephrine. Remdesivir was discontinued due to poor renal function. The patient was placed on extracorporeal membrane oxygenation (ECMO) for persistent P/F ratio <80. On day 1 of ECMO the patient was weaned off of vasopressors and she was extubated on day 2. Over the next 3 days she received diuretics and convalescent plasma. She also underwent therapeutic plasma exchange (TPE) on ECMO day 5. On ECMO day 9 she underwent a second session of TPE, which normalized her inflammatory markers. On ECMO day 10 she was weaned off gases and successfully decannulated, only requiring oxygen at 4L/min nasal cannula. She was transferred out of the ICU 2 days after ECMO decannulation, and was subsequently discharged home 7 days later, after 19 total days of hospitalization.	This is a case report of a 15-year-old female in the US with a history of morbid obesity, hypertension, hypothyroidism, pre-diabetes, and asthma, who presented to the hospital with a SARS-CoV-2 infection and acute respiratory failure requiring extracorporeal membrane oxygenation (ECMO). She was treated with dexamethasone, short-term remdesivir, IV antibiotics, and convalescent plasma therapy, and was able to be weaned off of ECMO. The patient was discharged on day 19 of hospitalization.	Kakuturu J, McCluskey C, Casey FL, et al. Extracorporeal membrane oxygenation to treat a 15-year-old patient with severe COVID-19 respiratory failure. JTCVS Techniques. 2021. doi: https://doi.org/10.1016/j.jtjc.2021.03.012.
COVID-19, SARS-CoV-2, schools, children, transmission,	9-Mar-21	<a href="#">Transmission of SARS-CoV-2 by children attending school. Interim report on</a>	medRxiv	Preprint (not peer-reviewed)	This study aimed to undertake sequential longitudinal sampling of infected children, their contacts, and the environment to determine SARS-CoV-2 transmission by children within schools in the UK. SARS-CoV-2 cases were identified through a statutory notification and matched to schools reporting cases. Cases and their contacts from	This study aimed to undertake sequential longitudinal sampling of infected children, their contacts, and the environment to determine SARS-CoV-2	Cordery R, Reeves L, Zhou J, et al. Transmission of SARS-CoV-2 by children attending school. interim report on an observational, longitudinal

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household contacts, pandemic		<a href="#">an observational, longitudinal sampling study of infected children, contacts, and the environment</a>			school and home were longitudinally sampled and tested for SARS-CoV-2 for up to 28 days. Surfaces and air in the home and school environment were also subject to longitudinal sampling and testing for SARS-CoV-2. The results from the first study period from October to December 2020 were analyzed. Results showed that onward transmission of SARS-CoV-2 to immediate classroom members who participated in the study was not detected. Evidence of more widespread transmission among children remaining in school was not identified, except for one unexpected cluster of three asymptomatic cases in one school. Children infected with SARS-CoV-2 shed viral RNA for up to 10 days from symptom onset, with levels peaking at 5-8 days. SARS-CoV-2 viral RNA was identified in the environment around children who were actively shedding the virus at home, but limited contamination was identified in schools. The variant of concern B.1.1.7 (VOC B.1.1.7) was identified in later cases studied. There was no evidence to suggest that SARS-CoV-2 is commonly transmitted by children within schools during the study period. A minority of infections may be subject to stochastic events that can lead to transmission. Further studies are required to identify factors associated with such events.	transmission by children within schools. During the 3-month study period, there was no evidence to suggest that SARS-CoV-2 is commonly transmitted by children within schools.	sampling study of infected children, contacts, and the environment. . 2021. doi: 10.1101/2021.03.08.21252839 .
COVID-19, MIS-C, children, adolescents,	9-Mar-21	<a href="#">Factors linked to severe outcomes in multisystem inflammatory syndrome in children (MIS-C) in the USA: a retrospective surveillance study</a>	The Lancet Child and Adolescent Health	Original Article	In this retrospective surveillance study, the authors aim to investigate the factors associated with severe disease in children and adolescents with MIS-C. Patients that met the CDC criteria for MIS-C, which included patients <21 yo, febrile, having positive inflammatory markers, admitted to the hospital, with multisystem involvement (greater than or equal to 2 organs involved), no alternative plausible diagnosis, and confirmed SARS-CoV-2 infection, were reported to the CDC. 1080 patients, with dates of onset of disease between March 11 and October 30, 2020, met the inclusion criteria and had sufficient clinical data for analysis. Of the study subjects, 602 (56%) were male, median age was 8 years (IQR 4–12; range 10 days to 21 years), 724 [77%] of 945 patients were either Hispanic or non-Hispanic Black, and 286 (26%) had obesity. 648 (60%) of patients were admitted to the ICU; 431 (67%) of those were admitted to the ICU on the same day as their hospital admission. ICU admission was more likely in patients aged 6–12 years (adjusted odds ratio 1.9 [95% CI 1.4–2.6] and patients aged 13–20 years (2.6 [95% CI 1.8–3.8]), compared with patients aged 0–5 years. Additionally, ICU admission was more likely in non-Hispanic Black patients, compared with non-Hispanic White patients (1.6 [95% CI 1.0–2.4]). ICU admission was more likely for patients with increased concentrations of inflammatory markers such as C-reactive protein, troponin, ferritin, D-dimer, and brain natriuretic peptide. The authors suggest that the ability to identify key demographic and clinical characteristics could aid in early recognition and prompt management of severe outcomes for patients with MIS-C.	This retrospective surveillance study investigated the factors associated with severe disease in children and adolescents with MIS-C. The authors suggest that the ability to identify key demographic and clinical characteristics could aid in early recognition and prompt management of severe outcomes for patients with MIS-C.	Abrams JY, Oster ME, Godfred-Cato DE et al, Factors linked to severe outcomes in multisystem inflammatory syndrome in children (MIS-C) in the USA: a retrospective surveillance study. The Lancet Child & Adolescent Health, 2021,ISSN 2352-4642, https://doi.org/10.1016/S2352-4642(21)00050-X

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COVID-19, neonate, encephalitis, seizure, hypoxia	9-Mar-21	<a href="#">MR imaging findings in a neonate with COVID-19 associated encephalitis</a>	Pediatric Neurology	Correspondence	This article aimed to detail the case report of a 9 day old male COVID-19 patient presenting with seizures and MRI evidence of viral encephalitis. The patient began to present with symptoms on day 6 of life, and the PCR test confirmed infection with SARS-CoV-2 on day 7 of life. Contact tracing revealed that the grandparents of the child were positive for SARS-CoV-2 infection. His head CT revealed minimal subdural hematoma, and MRI on day 9 of life revealed foci of restricted diffusion in the periventricular white matter and the corpus callosum with heterogeneous T2-weighted signal like that of a viral encephalitis. Treatment with anti-epileptics resolved the patient's seizures and hypoxia. The patient was discharged with normal vitals and had no persistent symptoms at the 2-month follow-up inspection. The authors suggest that this is the first report of intracranial imaging abnormality of a neonate with COVID-19 associated encephalitis.	This correspondence details the case report of a 9 day old neonate presenting with COVID-19 associated encephalitis. Treatment with anti-epileptics resolved the seizure and hypoxia symptoms.	Martin PJ, Felker M, Radhakrishnan R. MR imaging findings in a neonate with COVID-19 associated encephalitis. <i>Pediatr Neurol</i> . 2021. doi: <a href="https://doi.org/10.1016/j.pediatrneurol.2021.02.012">https://doi.org/10.1016/j.pediatrneurol.2021.02.012</a> .
MIS-C; treatment; outcomes; COVID-19; severity	9-Mar-21	<a href="#">Addressing fundamental questions on MIS-C</a>	The Lancet Child and Adolescent Health	Comment	In this article, the author discusses current evidence on the stratification, treatment, and prognosis of MIS-C patients. Emerging evidence on MIS-C indicates that medium-term follow-up is encouraging, with 33 (94%) of 35 MIS-C patients from one study having normal global longitudinal strain and 5 (14%) of 35 with mild coronary ectasia at 2 weeks. Long-term outcomes are unknown, but existing evidence points towards an acute condition with resolution. Because of the clinical overlap with Kawasaki disease (KD), treatments are aligned with those for KD. However, evidence shows substantial differences between MIS-C and KD so these treatments may not be appropriate. As evidence is rapidly updated, the author cautions clinicians to be open to new understandings of MIS-C. The UK RECOVERY trial is one of few trials randomly assigning patients with MIS-C to evaluate treatment options. The author also cautions that using ICU admission as a measure of MIS-C severity may only serve to validate admission policies; instead, researchers should compare clinical variables independent of admission. The author cites an article by Abrams et al. published 9 March, 2021 that addresses how to identify patients at highest risk of MIS-C at the time of their presentation based on evaluation of 1,080 patients. In this study, only the N-terminal pro B-type brain natriuretic peptide (pro-BNP) and IL-6 concentrations were significantly associated with coronary artery abnormalities, and the likelihood of shock was significantly associated with elevated D-dimer, troponin, BNP, pro-BNP, C-reactive protein, ferritin, and IL-6, and decreased platelet and lymphocyte counts. These findings can help aid in stratifying MIS-C patients based on the level of care needed.	This article discusses current evidence on the stratification, treatment, and prognosis of MIS-C patients. In particular, the author urges clinicians to be open to new understandings of MIS-C as new evidence emerges and cautions against using ICU admission as an indicator of disease severity. Laboratory markers that may predict worse outcomes are discussed.	Davies P. Addressing fundamental questions on MIS-C [published online, 2021 Mar 9]. <i>Lancet Child Adolesc Health</i> . 2021;S2352-4642(21)00059-6. doi:10.1016/S2352-4642(21)00059-6
children care; COVID-19; haemophilia; telemedicine	8-Mar-21	<a href="#">Care for children with haemophilia during COVID-19: Data of the</a>	Haemophilia	Letter to the Editor	The PedNet study group surveyed 31 haemophilia treatment centres (HTCs) from 18 countries from March 11-July 20, 2020, to investigate paediatric [no ages given] haemophilia care during the COVID-19 pandemic. 20 (64%) of the HTCs participated: 18 from Europe, 1 Canadian, and 1 Israeli. No HCT canceled all outpatient	The PedNet study group surveyed haemophilia treatment centres from 18 countries to investigate paediatric haemophilia care during the COVID-19 pandemic.	Álvarez-Román MT, Kurnik K; PedNet Study Group. Care for children with haemophilia during COVID-19: Data of the PedNet study group [published

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
		<a href="#">PedNet study group</a>			clinics during the COVID-19 pandemic, but telemedicine was utilized by 65% of the responding HCTs. Patients' families were most often contacted by phone (65%) for updates or changes in care. Prophylaxis care for children was continued in all HCTs. Clinical trials were affected in 35% of HCTs, and recruitment continued in 15%. Supportive care continued as usual in 40% of home care by nurses, physiotherapy continued in 15%, social work in 45%, and only 5% continued a summer camp. The authors state that although treatment was different for children with haemophilia during the pandemic, it did remain accessible. The areas most strongly impacted were in physiotherapy and social work.	The authors state that although treatment was different for children with haemophilia during the pandemic, it did remain accessible.	online ahead of print, 2021 Mar 8]. <i>Haemophilia</i> . 2021;10.1111/hae.14286. doi:10.1111/hae.14286
COVID-19; pediatric; oncology; safety; telehealth	8-Mar-21	<a href="#">Stepwise Strategic Mitigation Planning in a Pediatric Oncology Center During the COVID-19 Pandemic</a>	Journal of Pediatric Oncology Nursing	Article	The authors describe the timeline for planning mitigation during the first weeks of the COVID-19 pandemic in March 2020 and detail in a stepwise fashion the rationale and implementation of COVID-19 containment efforts in the context of a large pediatric oncology program in the United States. Implementation for infection mitigation and ongoing care of patients included: (1) the creation of a strategic planning team of physicians, advanced practice providers, nurses, and administrators to develop guidance and workflows, (2) continuous reassessment of patients' needs for hospital services and visit frequency, (3) the use of telemedicine to replace in-person visits, (4) the use of regional satellite centers to manage patients living outside NYC, (5) pre-screening of patients before visits for risks and symptoms of coronavirus disease 2019 (COVID-19) infection, (6) day-of-service screening for risks or symptoms of COVID-19 infection, (7) surveillance testing of children and their caregivers, and (8) creation of cohort plans for the management of COVID-19 positive and uninfected patients within the same institution, in both the outpatient and inpatient settings. This experience offers a model on which to base strategic planning efforts at other pediatric oncology centers worldwide for continued preparedness during the pandemic.	The authors describe the timeline for planning mitigation during the first weeks of the COVID-19 pandemic in March 2020 and detail in a stepwise fashion the rationale and implementation of COVID-19 containment efforts in the context of a large pediatric oncology program in the United States. This experience offers a model on which to base strategic planning efforts at other pediatric oncology centers worldwide for continued preparedness during the pandemic.	Szenes V, Bright R, Diotallevi D, et al. Stepwise Strategic Mitigation Planning in a Pediatric Oncology Center During the COVID-19 Pandemic. <i>J Pediatr Oncol Nurs</i> . 2021;1043454221992301. doi:10.1177/1043454221992301.
Children, Video games, Addiction, Anxiety, Italy, COVID-19	8-Mar-21	<a href="#">Online Videogames Use and Anxiety in Children during the COVID-19 Pandemic</a>	Children (Basel)	Original Research	This study aims to assess the prevalence of video game use and addiction in Italian children during the COVID-19 pandemic (September-November 2020) and their association with anxiety symptoms. 162 children (8-10 years, mean 9.4±0.7 years) completed the Video game Addiction Scale for Children (VASC, range=21-105 points, >90 indicates possible addiction), the Test of Anxiety and Depression (TAD, range=55-150, higher scores equal greater pathology), and the Children's Anxiety Meter-State (CAM-S, scaled on 10 levels, with higher level meaning greater anxiety). Overall, participants had a low risk of video game addiction (VASC score (mean ± SD): 46.7 ± 15.4), a moderate level of trait anxiety (TAD score (mean ± SD): 135 ± 16.8) and low state anxiety (CAM-S score (mean ± SD): 2.2 ± 2.1). In the regression analysis, state anxiety was a predictor of video game use and addiction (p = 0.01). Thus, it is important to monitor anxiety symptoms and their intensity in	This study aims to assess the prevalence of video game use and addiction in Italian children during the COVID-19 pandemic (September-November 2020) and their association with anxiety symptoms. Of the 162 children who took various questionnaires related to video game addiction and anxiety, most had a low risk of video game addiction, a moderate level of trait anxiety, and low state anxiety. Because the authors found that state anxiety is a predictor for video	De Pasquale C, Chiappedi M, Sciacca F, et al. Online Videogames Use and Anxiety in Children during the COVID-19 Pandemic. <i>Children</i> . 2021;8(3):205. Published 2021 Mar 8. doi:10.3390/children8030205

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					children as a preventive strategy. Further research is needed to confirm these data, and to maximize the developmentally positive effects of video games and prevent negative consequences.	game use and addiction, it is important to monitor anxiety symptoms and their intensity in children as a preventive strategy.	
COVID-19; Child mental health; China; Family environment; Lifestyle; Socioeconomic inequality	8-Mar-21	<a href="#">Socioeconomic inequality in child mental health during the COVID-19 pandemic: First evidence from China</a>	Journal of Affective Disorders	Original Research	The authors examined the socioeconomic inequalities and mental health of children (n = 21,526, ages 3-12) in China from March 15 - 29, 2020, during the COVID-19 pandemic. Family environment factors that were examined included sleep disturbances, physical activity, screen time, media exposure, parents' mental health, and strict parenting. The results showed that 32.31% of the children screened demonstrated mental health problems. Lower parental education increased the adjusted odds ratio for child mental health problems by 42% (aOR, 1.42; 95% CI, 1.29-1.57). Furthermore, lower provincial GDP per capita increased the aOR for child mental health problems by 41% (aOR, 1.41; 95%CI, 1.28-1.55). Significant associations were found between parental education and child mental health problems only for the lowest provincial GDP per capita group. Sleep disturbances, physical activity <1 h/day, media exposure ≥2 h/day, non-parental care, poor parental mental health, and harsh parenting were associated with increased risks for child mental health problems after adjusting for socioeconomic status (SES). These findings confirmed the increasing concerns that the COVID-19 pandemic disproportionately affected children from lower socioeconomic backgrounds and the exacerbated socioeconomic inequalities in child mental health. As an unhealthy lifestyle and unfavorable family environment were associated with more child mental health problems regardless of SES, prioritized interventions targeting these factors are needed to reduce socioeconomic inequality in child mental health problems.	This article examined child mental health during the COVID-19 pandemic and its association with family environment and socioeconomic inequalities. Low parent education and low GDP per capita were associated with child mental health problems. As an unhealthy lifestyle and unfavorable family environment were associated with more child mental health problems regardless of SES, prioritized interventions targeting these factors are needed to reduce socioeconomic inequality in child mental health problems.	Li W, Wang Z, Wang G, et al. Socioeconomic inequality in child mental health during the COVID-19 pandemic: First evidence from China [published online, 2021 Mar 8]. J Affect Disord. 2021;287:8-14. doi:10.1016/j.jad.2021.03.009
COVID-19, SARS-CoV-2, Children, Pediatric Rheumatology, Autoimmune disease, Inflammation, Treatment, Opinion poll	8-Mar-21	<a href="#">Therapeutic Approaches to Pediatric COVID-19: An Online Survey of Pediatric Rheumatologists</a>	Rheumatology International	Observational Research	The authors aimed to explore management strategies of pediatric rheumatologists regarding therapy for SARS-CoV-2 in immunocompetent and immunosuppressed children. An online survey was distributed regarding therapeutic approaches to SARS-CoV-2 in healthy children and children with autoimmune/inflammatory diseases (AID). The results showed that off-label therapies would be considered by 90.3% of the 93 participating respondents. In stable patients with SARS-CoV-2 on oxygen (stage I), respondents would recommend the use of remdesivir (48.3%), azithromycin (26.6%), oral corticosteroids (25.4%), and/or hydroxychloroquine (21.9%). In case of early signs of "cytokine storm" (stage II) or in critically ill patients (stage III), anakinra (79.5% stage II, 83.6% stage III) or tocilizumab (58.0% stage II, 87.0% stage III), corticosteroids (oral 67.2% stage II, intravenously 81.7% stage III), IV immunoglobulins (56.5% both stages), or remdesivir (46.7% both stages) would be considered by respondents. In AID, >94.2% of the respondents would not support a preventive adaptation of the immunomodulating therapy. In	The authors aimed to explore management strategies of pediatric rheumatologists regarding therapy of SARS-CoV-2 in immunocompetent and immunosuppressed children. The authors concluded that actual evidence on management of pediatric SARS-CoV-2 infections is incomplete, and continuous and critical expert opinion and knowledge exchange is helpful.	Janda A, Schuetz C, Canna S, et al. Therapeutic approaches to pediatric COVID-19: an online survey of pediatric rheumatologists. Rheumatol Int. 2021;41(5):911-920. doi:10.1007/s00296-021-04824-4

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					conclusion, actual evidence on management of pediatric SARS-CoV-2 infections is incomplete, and continuous and critical expert opinion and knowledge exchange is helpful.		
COVID-19; children; 25(OH)D3; Kawasaki syndrome-like; vitamin D	8-Mar-21	<a href="#">Vitamin D in Corona Virus Disease 2019 (COVID-19) Related Multisystem Inflammatory Syndrome in Children (MIS-C)</a>	Frontiers in Immunology	Review	The authors analyzed the immunomodulatory role of vitamin D in viral infections, specifically in COVID-19. They also examined current literature regarding the association of vitamin D with MIS-C and Kawasaki disease. The vitamin D was evaluated not only as a biomarker but also as a nutritional supplement. The findings indicate that vitamin D levels could be valuable in predicting severe forms of MIS-C and correction of abnormal levels in severe MIS-C may influence its evolution. Vitamin D modulates both innate and adaptive immunity and may potentially prevent or reduce the complications associated with SARS-CoV-2 infection by increasing concentrations of anti-inflammatory cytokines and reducing concentrations of pro-inflammatory cytokines. 25-hydroxyvitamin D3 [25(OH)D3] supplementation to raise serum [25(OH)D] concentrations potentially have a favorable effect in reducing the severity of MIS-C in certain circumstances. Further studies are needed to confirm these results.	The authors analyzed the immunomodulatory role of vitamin D in viral infections, specifically in COVID-19. They also examined current literature regarding the association of vitamin D with MIS-C and Kawasaki disease. The findings indicate that vitamin D levels could be valuable in predicting severe forms of MIS-C and correction of abnormal levels in severe MIS-C may influence its evolution.	Feketea G, Vlach A, Bocsan IC, et al. Vitamin D in Corona Virus Disease 2019 (COVID-19) Related Multisystem Inflammatory Syndrome in Children (MIS-C). Front Immunol. 2021;12:648546. doi:10.3389/fimmu.2021.648546.
COVID-19, ICU, Outcome predictors	8-Mar-21	<a href="#">Characteristics and outcomes of patients with COVID-19 admitted to hospital and intensive care in the first phase of the pandemic in Canada: a national cohort study</a>	Canadian Medical Association Journal Open	Original Study	The aims of this study were to describe adult and pediatric patients with COVID-19 admitted to hospital and receiving intensive care, and to investigate predictors of outcome to characterize disease. 811 pediatric and adult patients with confirmed COVID-19 via RT-PCR test from 32 Canadian hospitals between January 24 – July 7, 2020 were included in the analysis (median age = 64 (IQR 53-75) years, 495 (61.0%) were men, 46 (5.7%) were health care workers, 9 (1.1%) were pregnant, 26 (3.2%) were <18 years and 9 (1.1%) were <5 years). The authors found that age was an influential predictor of mortality (odds ratio per additional year of life 1.06, 95% CI 1.03-1.09). A limitation of the study is that given small numbers of children and pregnant women, the authors cannot make inferences about typical clinical characteristics or outcomes in these populations. The small proportion of children in this sample (3.2%) is comparable with findings elsewhere, where severe pediatric disease is relatively rare. Increasing age was associated with the development of critical illness and death; however, most critically ill patients in Canada, including those requiring mechanical ventilation, survived, and were discharged from hospital.	The aims of this study were to describe adult and pediatric patients with COVID-19 admitted to hospital and intensive care, and to investigate predictors of outcome to characterize disease. Due to small numbers of children and pregnant women in this study, the authors cannot make inferences about typical clinical characteristics or outcomes in these populations.	Murthy S, Archambault PM, Atique A, et al. Characteristics and outcomes of patients with COVID-19 admitted to hospital and intensive care in the first phase of the pandemic in Canada: a national cohort study. CMAJ Open. 2021;9(1):E181-E188. Published 2021 Mar 8. doi:10.9778/cmajo.20200250
COVID-19; hypercoagulability; pregnancy	8-Mar-21	<a href="#">Management and Perspective of Coronavirus Disease 2019 (COVID-19), Pregnancy, and Hypercoagulability</a>	SN Comprehensive Clinical Medicine	Mini Review	In this mini-review, the authors evaluated clinical and laboratory aspects of COVID-19 in pregnancy. Thrombocytopenia, lymphopenia, and leukopenia were the hematological findings associated with SARS-CoV-2 infection. They discussed a study citing that neutrophilia, leukocytosis, prolonged prothrombin time, increased interleukin (IL)-6 and IL-8, and increased D-dimer were indicative of disease progression. They reviewed the symptoms of COVID-19, with most symptoms being similar to those associated with a common cold, as well as loss of taste and/or smell, and/or	The authors summarized clinical and laboratory aspects of COVID-19 in pregnant patients, highlighting that common hematological findings were thrombocytopenia, lymphopenia, and leukopenia, with most symptoms being similar to those associated with a common cold,	Nasir U, Ahmad S. Management and Perspective of Coronavirus Disease 2019 (COVID-19), Pregnancy, and Hypercoagulability [published online ahead of print, 2021 Mar 11]. SN Compr Clin Med. 2021;1-4. doi:10.1007/s42399-021-00854-y

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					gastro-intestinal symptoms. One meta-analysis that found that fever was the most common symptom, and preterm birth (<37 weeks) the most common pregnancy outcome of COVID-19. The authors mentioned studies investigating the hematological considerations of COVID-19, concluding that the disruption of Virchow's triad in conjunction with physiological changes of pregnancy can lead to an increased formation of venous, arterial, and placental blood clots. They recommended the management of hyper-coagulable states in pregnant and non-pregnant people using unfractionated heparin or low-molecular-weight heparin. They also reviewed that current medical treatment for COVID-19 is mainly supportive, and discussed a study finding that remdesivir was safe in breastfeeding women. Finally, they highlighted the survival and mortality findings of various studies, concluding that there were few maternal, fetal, or neonatal deaths attributable to COVID-19.	as well as ageusia/anosmia and gastro-intestinal symptoms. Additionally, they underscored the increased risk of hypercoagulability in pregnant women due to physiological and hematological changes in pregnancy and SARS-CoV-2 infection.	
COVID-19 vaccination; pregnancy; neonatal immunity; antibodies; SARS-CoV-2	8-Mar-21	<a href="#">Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Antibodies in Neonatal Cord Blood After Vaccination in Pregnancy</a>	Obstetrics and Gynecology	Case Report	Pregnant patients have been excluded from SARS-CoV-2 vaccine trials, leading to uncertainty regarding safety, efficacy, and potential for neonatal passive immunity. This article presents the case of a 34-year-old multigravid patient in the US working in health care who received the Pfizer-BioNTech (BNT162b2) mRNA vaccine for SARS-CoV-2 in her 3rd trimester of pregnancy [dates not specified]. She received her 1st dose at 32 6/7 weeks of gestation and her 2nd dose at 35 2/7 weeks. The patient presented in spontaneous labor at 38 6/7 weeks of gestation and underwent an unmedicated vaginal delivery of a female neonate with Apgar scores of 9 and 9 without complication. The patient's blood as well as neonatal cord blood were evaluated for SARS-CoV-2-specific antibodies. Both the patient and the neonate were positive for IgG antibodies at a titer of 1:25,600. All test results were negative for the presence of SARS-CoV-2 during her pregnancy. The authors conclude that this case demonstrates transplacental transfer of SARS-CoV-2 antibodies to the neonate after vaccination in the 3rd trimester of pregnancy. Furthermore, this case suggests that a more robust immune response may be achieved after maternal vaccination than after natural infection with SARS-CoV-2.	This case report of a 34-year-old pregnant healthcare worker in the US shows evidence of transplacental transfer of SARS-CoV-2 antibodies after receiving the Pfizer-BioNTech mRNA vaccine for SARS-CoV-2 in the 3rd trimester of pregnancy.	Gill L, Jones CW. Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Antibodies in Neonatal Cord Blood After Vaccination in Pregnancy [published online, 2021 Mar 8]. <i>Obstet Gynecol</i> . 2021. doi:10.1097/AOG.0000000000004367
COVID-19, SARS-CoV-2, Air pollution, Asthma exacerbation, Prevention, Respiratory infection, Pandemic	8-Mar-21	<a href="#">Frequency of Asthma Exacerbation in Children during the Coronavirus Disease Pandemic with Strict Mitigative Countermeasures [Free Access to Abstract Only]</a>	Pediatric Pulmonology	Original Article	The authors of this cross-sectional study aimed to investigate associations before and during the SARS-CoV-2 pandemic, between the frequencies of asthma exacerbations and respiratory infections and air pollutants, all of which were related to countermeasures undertaken during the pandemic. The study compared children hospitalized in Guangzhou Women and Children's Hospital, China, with asthma exacerbations and respiratory infections from February to June 2016-2019 (before the pandemic) to similar case presentations from February to June 2020 (during the pandemic). The results showed that the number of asthma exacerbation cases per month before the pandemic (median: 13.5; range 0-48) and during the pandemic (median: 20, range: 0-34) were similar	The authors of this cross-sectional study aimed to investigate the associations before and during the SARS-CoV-2 pandemic, between the frequencies of asthma exacerbations and respiratory infections and air pollutants, all of which were related to countermeasures undertaken during the pandemic. The authors state that strict countermeasures	Fan HF, He CH, Yin GQ, et al. Frequency of asthma exacerbation in children during the coronavirus disease pandemic with strict mitigative countermeasures [published online ahead of print, 2021 Mar 8]. <i>Pediatr Pulmonol</i> . 2021. doi:10.1002/ppul.25335

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					(p>0.999). The frequency of severe asthma exacerbation cases per month decreased during the pandemic, whereas that of mild asthma exacerbation increased (p=0.004). The median number of patients hospitalized with infectious respiratory diseases decreased from 146 (range: 90-172) per month before the pandemic to 42 (range: 33-57) per month during the pandemic (p=0.04). Most pathogens and air pollutants decreased during the SARS-CoV-2 pandemic. The frequency of severe asthma exacerbations positively correlated to that of respiratory infections in children, but did not correlate to air pollutants. In conclusion, the authors state that strict countermeasures undertaken for the pandemic were associated with decreased frequency of infectious respiratory diseases and severe asthma exacerbations among urban children.	undertaken for the pandemic were associated with decreased frequency of infectious respiratory diseases and severe asthma exacerbations among urban children.	
immunization status; challenge; children 12-23-months-old; southwest Ethiopia	8-Mar-21	<a href="#">Immunization Status and Challenges During COVID-19 and Associated Factors Among Children Aged 10-23 months in South Region, Ethiopia 2020</a>	Pediatric Health, Medicine and Therapeutics	Original Research	The authors conducted a study to assess the status of routine childhood immunizations during the COVID-19 pandemic on children 10-23 months in southwestern Ethiopia. The respondents were mothers or primary caregivers, and their age range was 15-45 years (mean age 37.5 years) (SD± 2.5) with an average of 3.5 (SD± 1.2) children at home. The authors considered a lack of any 1 of 13 routine immunizations to be an incomplete immunization status, and the authors found 809/1300 (62.2%) (95% CI 59.5- 64.8) with incomplete immunizations. 190 (14.6%) of the children were not receiving any vaccinations. Qualitative analysis found 2 themes among the respondents. Theme 1 was a fear of SARS-CoV-2 transmission during transportation to the health facility. This included comments on an inability to access face masks and a lack of trust in face masks protecting them and their children. Theme 2 was challenges in the health facility and SARS-CoV-2 transmission. In this theme, the caregivers worried about the health professionals' dangerous profession and a belief that SARS-CoV-2 transmission was very high at the health facility. There was also a fear of individual-to-individual transmission while waiting in the health facility. Caregivers who waited more than 30 minutes at the health facility were 96% more likely to have children with incomplete immunization status than those waiting less than 30 minutes. The odds of incomplete immunization status were 2.34 times higher in women who had given birth at home than those delivered at a health facility. The authors state that the prevalence of incomplete immunization status is very high in this region of Ethiopia.	The authors conducted a study to assess the status of routine childhood immunizations during the COVID-19 pandemic on children 10-23 months in southwestern Ethiopia. The authors found 809/1300 (62.2%) with incomplete immunizations.	Wale Tegegne A, Kassie Gidafie A, Girma Mamo D, et al. Immunization Status and Challenges During COVID-19 and Associated Factors Among Children Aged 10-23 Months in South Region, Ethiopia 2020. Pediatric Health Med Ther. 2021;12:101-109. Published 2021 Mar 8. doi:10.2147/PHMT.S294739
breastfeeding; infant feeding; maternal-infant bonding; emotional support; midwives; Italy	8-Mar-21	<a href="#">In response to "COVID-19 is associated with traumatic childbirth and subsequent mother-infant</a>	Journal of Affective Disorders	Correspondence	The authors respond to the findings by Dekel et al (2021) that COVID-19 is a major stressor that disrupts bonding between mother and newborn and causes breastfeeding issues, noting that the impact of the pandemic is not limited to mothers with COVID-19. They share their experience at a hospital in northern Italy which belongs to the global "Baby-friendly Hospital Initiative," which aims to ensure mothers and infants receive timely and appropriate care through ongoing support of trained professionals. As part of this	The authors respond to the findings by Dekel et al (2021) that COVID-19 is a major stressor that disrupts bonding between mother and newborn and causes breastfeeding issues. They report that there was no statistically significant difference in outcomes	Inzoli A, Zanini A, Miglietta M, et al. In response to "COVID-19 is associated with traumatic childbirth and subsequent mother-infant bonding problems" [published online, 2021 Mar 8]. J Affect Disord.

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		<a href="#">bonding problems"</a>			initiative, midwives provided personalized assistance to pregnant women and the presence of the partner was guaranteed during labor and delivery. Their hospital recorded 590 childbirths for 2019 and 507 for 2020 [months not specified]. After comparing outcomes related to maternal-infant bonding and feeding during 2020 compared to 2019, they found no statistically significant differences in the odds of skin to skin contact for at least 1 hour (OR 1.04; 95% CI 0.69-1.56), early bonding to breast within first 2 hours (OR 0.85; 95% CI 0.58-1.26), exclusive breastfeeding upon discharge (OR 1.23; 95% CI 0.89-1.69), complementary feeding upon discharge (OR 0.87; 95% CI 0.60-1.25), or avoiding breastfeeding (OR 0.73; 95% CI 0.42-1.27). The authors hypothesize that the additional emotional support at their hospital lessened the impact of the COVID-19 pandemic on breastfeeding and maternal-infant bonding.	related to infant feeding and maternal-infant bonding between 2020 and 2019 at their institution, which they attribute to increased emotional support due to participation in the "Baby-friendly Hospital Initiative."	2021;286:239-240. doi:10.1016/j.jad.2021.02.072
COVID-19; Child maltreatment; Neglect; Pediatric emergency department	8-Mar-21	<a href="#">COVID-19: Differences in sentinel injury and child abuse reporting during a pandemic</a>  <a href="#">[Free Access to Abstract Only]</a>	Child Abuse and Neglect	Article	This retrospective review explored whether the incidence of child maltreatment increased during the COVID-19 pandemic. The study included children 0-18 years old presenting to a pediatric emergency department (ED) trauma center in Orange, CA (USA) from March-July of 2017, 2018, 2019, and 2020 who also had a child abuse report filing or a sentinel injury diagnosis (in infants <6 months) related to their visit. Among patients with child abuse reports (n=776), the mean ages were 6.815 years (SD=5.69 years) in the 2017-2019 group and 7.31 years (SD=6.03 years) in 2020; among infants with sentinel injuries (n=296), mean ages were 3.28 months (SD=1.84 months) in the 2017-2019 group and 4.32 months (SD=2.14) in the 2020 group (p=0.0005). Results demonstrated an overall shift in distribution of types of child maltreatment during the COVID-19 pandemic. There was a significant increase in the proportion of emotional/psychological abuse (2.52 % before the pandemic to 7% during the pandemic, p<0.0001) and non-medical neglect (31.5% vs 40%, p<0.0001). Differences in sentinel injuries between 2020 and preceding years were not significant overall, but there was a significant increase when comparing June 2020 with preceding years (p<0.001). These findings highlight the need for increased attention to children at risk for child abuse and neglect.	This US study explored whether the incidence of child maltreatment among patients presenting to a pediatric emergency department increased during the COVID-19 pandemic. Results demonstrated a shift in maltreatment types in 2020 compared to the previous 3 years with increased proportions of emotional/psychological abuse and non-medical neglect.	Sharma S, Wong D, Schomburg J, et al. COVID-19: Differences in sentinel injury and child abuse reporting during a pandemic. Child Abuse Negl. 2021;104990. doi: https://doi.org/10.1016/j.chia bu.2021.104990.
mRNA vaccine; immune response; breastmilk	8-Mar-21	<a href="#">BNT162b2 COVID-19 mRNA vaccine elicits a rapid and synchronized antibody response in blood and milk of breastfeeding women</a>	medRxiv	Preprint (not peer-reviewed)	This study conducted in Israel [dates not reported] studied the antibody response in the breastmilk and serum of a prospective cohort of 10 lactating healthcare providers (mean age 34.6 years; range 30-38 years) who received the 1st dose of the Pfizer-BioNTech COVID-19 mRNA vaccine BNT162b2 approximately 5 months postpartum (mean 154 days, range 68-382) and the 2nd dose 21 days later. The antibody response was rapid and highly synchronized between breastmilk and serum with substantial increases by 7 days following each dose, reaching stabilization 14 days after the 2nd dose. The predominant serum antibody was IgG. The response in the breastmilk included both IgG and IgA with SARS-CoV-2 neutralizing capacity. The authors conclude that these results	This article describes the vaccine-specific antibody response in the breastmilk and serum of 10 lactating women in Israel who received 2 doses of the Pfizer-BioNTech COVID-19 mRNA vaccine. The antibody response was rapid and highly synchronized between breastmilk and serum; breastmilk samples showed both IgG and IgA with neutralizing capacity	Friedman MR, Kigel A, Bahar Y, et al. BNT162b2 COVID-19 mRNA vaccine elicits a rapid and synchronized antibody response in blood and milk of breastfeeding women. medRxiv. 2021:2021.03.06.21252603. doi: 10.1101/2021.03.06.21252603 .

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					indicate the potential protection of breastfed infants against COVID-19 by administration of the BNT162b2 COVID-19 vaccine to the breastfeeding mother.		
immunity; mRNA vaccine; breastmilk; cord blood; IgG; IgA	8-Mar-21	<a href="#">COVID-19 vaccine response in pregnant and lactating women: a cohort study</a>	medRxiv	Preprint (not peer-reviewed)	Because pregnant and lactating women were excluded from initial COVID-19 vaccine trials, data to guide vaccine decision-making are lacking. 131 reproductive-age (18-45 years) COVID-19 mRNA vaccine recipients (84 pregnant, 31 lactating, and 16 non-pregnant) were enrolled in a prospective cohort study at 2 US medical centers December 2020 - February 2021. Mean ages were 38.4 years in non-pregnant women (SD 8.4 years), 34.1 years in pregnant women (SD=3.3 years) and 34.6 years in lactating women (SD=2.6 years). Titers of SARS-CoV-2 Spike and Receptor Binding Domain IgG, IgA and IgM were measured in participant sera (N=131), umbilical cord sera (N=10), and breastmilk (N=31) at baseline, 2nd vaccine dose, 2-6 weeks post 2nd vaccine, and delivery. Titers were compared to pregnant women 4-12 weeks from SARS-CoV-2 infection (N=37). Post-vaccination symptoms were also assessed. Results show vaccine-induced immune responses were equivalent in pregnant and lactating vs non-pregnant women. Vaccine-induced immune responses (for all titers) were significantly greater than the response to natural SARS-CoV-2 infection (p<0.001). Vaccine-generated antibodies were present in all umbilical cord blood and breastmilk samples. SARS-CoV-2 specific IgG, but not IgA, increased in maternal blood and breastmilk with vaccine boost. Together, these results suggest immune transfer to neonates can occur via placental and breastmilk and that 2 doses may be essential to optimize protection against COVID-19 in the infant.	This study found that COVID-19 mRNA vaccines generated robust immunity in pregnant and lactating women, with immunogenicity and reactogenicity similar to that observed in non-pregnant women. Vaccine-induced immune responses were significantly greater than the response to SARS-CoV-2 infection and vaccine-generated antibodies were present in all umbilical cord blood and breastmilk samples.	Gray KJ, Bordt EA, Atyeo C, et al. COVID-19 vaccine response in pregnant and lactating women: A cohort study. medRxiv. 2021:2021.03.07.21253094. doi: 10.1101/2021.03.07.21253094
COVID-19, MIS-C, Kawasaki disease, Macrophage activation syndrome, cardiac dysfunction, children	8-Mar-21	<a href="#">Letter by Loomba et al Regarding Article, "Acute Heart Failure in Multisystem Inflammatory Syndrome in Children in the Context of Global SARS-CoV-2 Pandemic"</a>	Circulation	Letter to the Editor	This letter is in response to a recent article by Belhadjer et al. (2020) regarding acute cardiac decompensation and response to intravenous immunoglobulin in children with MIS-C. Belhadjer et al. (2020) discuss the similarities and differences in what they refer to as MIS-C with the following differences noted: median age greater in their cohort and left ventricular dysfunction more prevalent with MIS-C. However, the authors of this letter question whether the differences are enough to warrant a new clinical entity. MAS is a condition in which macrophages are inappropriately activated, leading to a self-propagating cycle of increasing inflammation. The authors state that KD has been associated with MAS, a hyperinflammatory state that is highly similar to MIS-C. Therefore, the authors argue that by pushing to make MIS-C a new clinical entity, physicians delay diagnosis and management of the condition.	This letter is in response to a recent article by Belhadjer et al. regarding acute cardiac decompensation and response to intravenous immunoglobulin in children with MIS-C. The authors of this letter do not think that MIS-C warrants a new clinical entity given that it is similar to Kawasaki disease with macrophage activation syndrome, which has already been described.	Loomba RS, Villarreal EG, Flores S. Letter by Loomba et al Regarding Article, "Acute Heart Failure in Multisystem Inflammatory Syndrome in Children in the Context of Global SARS-CoV-2 Pandemic". Circulation. 2021;143(10):e755-e756. doi:10.1161/CIRCULATIONAHA.120.048968
SARS-CoV-2, COVID-19, MIS-C, Kawasaki Disease, myocardial	8-Mar-21	<a href="#">Letter by Navarro Castellanos and Dahdah Regarding Article, "Acute Heart Failure in Multisystem Inflammatory Syndrome in Children in the Context of Global SARS-CoV-2 Pandemic"</a>	Circulation	Letter to the Editor	This letter is in response to a recent article by Belhadjer et al. (2020) regarding acute heart failure in MIS-C in the context of the COVID-19 pandemic. The authors' main critique is that Kawasaki disease shock syndrome has been described previously and has a very similar presentation to what is now being called MIS-C. The authors suggest that the clinical criteria of Kawasaki disease be made	This letter is in response to a recent article by Belhadjer et al. regarding acute heart failure in MIS-C in the context of the COVID-19 pandemic. The authors' main critique is that Kawasaki	Navarro Castellanos I, Dahdah N. Letter by Navarro Castellanos and Dahdah Regarding Article, "Acute Heart Failure in Multisystem Inflammatory Syndrome in

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
dysfunction, children		<a href="#">Heart Failure in Multisystem Inflammatory Syndrome in Children in the Context of Global SARS-CoV-2 Pandemic</a> [Paid Access Only]			available in a table with possible associative statistics for patient outcomes. Belhadjer et al. stated that one main difference between patients with KD shock syndrome and patients with MIS-C is that the LV dysfunction was present in all patients with MIS-C compared with only one-third of the patients with KD shock syndrome. However, the authors of this letter argue that the difference is simply spurious and that other minor clinical or laboratory differences in the article could be the result of the small sample size. The authors outline that the paper lacks consistency in its definition of normal LV ejection fraction and does not clarify whether other important cardiac parameters such as strain were used to classify patients with myocardial dysfunction. Furthermore, the authors request that Belhadjer et al. clarify what criteria were used to place patients on extracorporeal mechanical support/mechanical assistance. Overall, the authors believe that this article was valuable to the field.	disease shock syndrome has been described previously and has very similar presentation to what is now being called MIS-C. The authors go on to state that although the paper brings value to the field, a few inconsistencies in data interpretation and presentation exist in the text and should be clarified.	Children in the Context of Global SARS-CoV-2 Pandemic". <i>Circulation</i> . 2021;143(10):e759-e760. doi:10.1161/CIRCULATIONAHA.120.049239
Qualitative research; Phenomenology; Women; Pregnancy; COVID-19	8-Mar-21	<a href="#">The lived experiences of pregnant women during COVID-19 pandemic: a descriptive phenomenological study</a>	BioMed Central (BMC) Pregnancy and Childbirth	Original Research	This qualitative study explored the experiences of pregnant women in Iran during the COVID-19 pandemic. Semi-structured in-depth interviews were conducted with 19 women who were pregnant at the beginning of the pandemic and at the time of the interview (between May 10 - 20, 2020). Analyzing transcripts of the interviews yielded 4 themes of experience during the COVID-19 pandemic: disruption of tranquility and daily routine, new challenges posed by the pandemic, resilience and strength, and adaptation to new conditions. 17 more sub-themes were found, including various dimensions of psychological and behavioral responses to the COVID-19 pandemic. Feelings of stress, fear, anxiety, and depression were common among the participants; however, their stress levels decreased over time. The researchers note that the decreased stress levels may be due to reductions in the rate of infections and the death toll after the mandatory quarantine period, the re-opening of the clinics and the resumption of visits to health centers, the re-opening of businesses, the relative normalization of life, and support provided during the lockdown. They recommend further research on how different supportive measures can best help pregnant women facing difficulties due to the COVID-19 pandemic.	This qualitative study explored the experiences of pregnant women in Iran during the COVID-19 pandemic, and found 4 themes through in-depth interviews. These themes included: disruption of tranquility and daily routine, new challenges posed by the pandemic, resilience and strength, and adaptation to new conditions.	Mortazavi, F., Ghardashi, F. The lived experiences of pregnant women during COVID-19 pandemic: a descriptive phenomenological study. <i>BMC Pregnancy Childbirth</i> 21, 193 (2021). <a href="https://doi.org/10.1186/s12884-021-03691-y">https://doi.org/10.1186/s12884-021-03691-y</a>
CPAP; infectious diseases; obstetrics and gynaecology; pregnancy; respiratory medicine	8-Mar-21	<a href="#">Successful use of CPAP in a pregnant patient with COVID-19 pneumonia</a>	British Medical Journal (BMJ) Case Reports	Case Report	The authors report the case of a 35-year-old nurse who was 27 weeks pregnant and admitted to a hospital in the UK in April 2020 with a 9-day history of fever, dry cough, sore throat, and breathlessness. She cared for patients with COVID-19 on the acute medical wards and had been self-isolating at home with her family following the development of her symptoms. She had mild lymphopenia, elevated C reactive protein, and bilateral mid and lower zone consolidation. Oral and nasopharyngeal swabs were positive for SARS-CoV-2 infection on real-time viral PCR. The patient had required a small amount of supplemental oxygen in the first 2 days of her admission. However, on the 3rd day of admission, her breathing further deteriorated, and she developed type 1	The authors report the case of a 35-year-old nurse who was 27 weeks pregnant and admitted to a hospital in the UK for COVID-19 pneumonia and respiratory failure. CPAP was used to avoid intubation and the patient fully recovered. This case highlights the potential for CPAP to be used as a means of avoiding mechanical ventilation and iatrogenic preterm birth in	Reindorf M, Newman J, Ingle T. Successful use of CPAP in a pregnant patient with COVID-19 pneumonia. <i>BMJ Case Rep</i> . 2021;14(3). Published 2021 Mar 8. doi:10.1136/bcr-2020-238055

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					respiratory failure with progressive COVID-19 pneumonia. She was given continuous positive airway pressure (CPAP) as a means of avoiding intubation and subsequent need for a preterm cesarean section. The patient tolerated CPAP well and made rapid clinical improvements on this therapy. She was quickly weaned off and fully recovered before being discharged home. This case highlights the potential for CPAP to be used as a means of avoiding mechanical ventilation and iatrogenic preterm birth in COVID-19 pneumonia in pregnancy.	COVID-19 pneumonia in pregnancy.	
breastmilk; COVID-19 vaccine; mRNA; breastfeeding	8-Mar-21	<a href="#">COVID-19 mRNA vaccine is not detected in human milk</a>	medRxiv	Preprint (not peer-reviewed)	Because no pregnant or lactating individuals were included in the Phase 3 clinical trials of COVID-19 vaccines, safety data are currently lacking for these groups. The authors describe the analysis of breast milk samples from 6 individuals within 4-48 hours of COVID-19 mRNA vaccination [dates and location not specified]. Human breast milk samples were collected fresh or frozen (immediately after milk was pumped). Total RNA was isolated from milk components (cells, milk supernatant and/or fat layer) using the RNeasy Mini Kit (Qiagen) according to the manufacturer's protocol. RT-qPCR was performed in triplicate using specific primers targeting the vaccines' mRNA for SARS-CoV-2 spike protein. mRNA-1273 (Moderna) vaccine was spiked into pre-vaccine milk sample before RNA isolation and served as a positive control for this assay. Pre-vaccine samples served as negative controls. Neither mRNA from anti-COVID BNT162b2 (Pfizer) nor mRNA-1273 (Moderna) vaccines were detected in any of the samples tested. These results strengthen the recommendations from the Academy of Breastfeeding Medicine and the WHO that lactating individuals who receive the anti-COVID-19 mRNA-based vaccine should continue to breastfeed their infants uninterrupted.	This analysis of breast milk samples from 6 individuals within 4-48 hours of COVID-19 mRNA vaccination found no evidence of mRNA from either Pfizer or Moderna vaccines. These results strengthen existing recommendations that lactating individuals who receive mRNA COVID-19 vaccines should continue to breastfeed their infants.	Golan Y, Prah M, Cassidy A, et al. COVID-19 mRNA vaccine is not detected in human milk. medRxiv. 2021:2021.03.05.21252998. doi: 10.1101/2021.03.05.21252998
COVID-19; hyperglycemia; gestational diabetes mellitus; pregnancy; diagnostic criteria	8-Mar-21	<a href="#">Alternative screening protocols may miss most cases of gestational diabetes mellitus during the COVID-19 pandemic</a>	The Medical Journal of Australia	Letter to the Editor	This letter is in response to an article published by Siru and colleagues, which raised potential concerns about the strategy recommended by the Australian Diabetes Society (ADS) and other peak bodies to diagnose gestational diabetes (GDM) during the COVID-19 pandemic. In Siru and colleagues' study, 46% of subjects diagnosed with GDM had a fasting blood glucose level (BGL) < 4.7 mmol/L but elevated post-load blood glucose levels, and would be missed by the ADS-recommended strategy. The authors of this letter present evidence from the Hyperglycemia and Adverse Pregnancy Outcome (HAPO) study, which suggests that such women do not have increased rates of pregnancy-associated complications. They found that the subgroups with the highest odds ratios for newborns who were large for gestational age had an elevated fasting BGL and any elevation of post-load BGL (odds ratio > 3). In contrast, subgroups having only elevated fasting or post-load BGL had a considerably lower odds ratio, equivalent to the diagnostic threshold for GDM of 1.75. Furthermore, women with a fasting BGL < 4.5 mmol/L had low rates of some complications irrespective of	This letter is in response to an article published by Siru and colleagues, which raised potential concerns about the strategy recommended by the Australian Diabetes Society and other peak bodies to diagnose gestational diabetes (GDM) during the COVID-19 pandemic. The authors summarized the HAPO study findings, which did not show any pregnancy-associated complications in women with a fasting BGL below the 75th percentile (4.6 mmol/L). When this strategy is used, women with a fasting BGL < 4.7 mmol/L are spared being labeled with GDM	d'Emden MC, Ungerer JP, de Jersey SJ. Alternative screening protocols may miss most cases of gestational diabetes mellitus during the COVID-19 pandemic [published online, 2021 Mar 8]. Med J Aust. 2021;10.5694/mja2.50974. doi:10.5694/mja2.50974

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					their post-load BGL. A subsequent analysis of 6128 patients from five centers involved in the HAPO study did not observe any pregnancy-associated complications in women with a fasting BGL below the 75th percentile (4.6 mmol/L). The authors conclude that these findings are reassuring. When this strategy is used, women with a fasting BGL < 4.7 mmol/L are spared being labeled with GDM and do not require education, monitoring, more frequent follow-up, or transfer to specialist services, freeing up valuable health care resources.	and do not require further intervention, freeing up valuable health care resources.	
COVID-19; children; lockdown; motor competence; Portugal	7-Mar-21	<a href="#">Effects of the COVID-19 Lockdown on Portuguese Children's Motor Competence</a>	Children (Basel)	Original Research	This study assessed the motor competence of 114 children aged 6-9 years (n=50 males; mean age=7 years) using the motor competence assessment (MCA) in Portugal before (December 2019) and after the COVID-19 lockdown (September 2020). The results indicated that, regardless of sex, motor performances after the lockdown in five of the six tests (except for jumping sideways in boys) were lower than before the lockdown. There was a significant difference between the results before and after the lockdown for the tests shifting platforms (p<0.001), standing long jump (both p=0.001), and kicking velocity (p=0.009) in males. A similar trend was observed in females regarding the results before and after the lockdown. For females, in addition to the tests mentioned above (all p < 0.001), throwing velocity also showed a significant difference between the two moments (p = 0.041). Children's performance, assessed by the MCA, was significantly lower after the lockdown in global motor competence (an average of 13 points in males vs. 16 points in females). Most children shifted from an upper to a lower quartile between the pre-and post-lockdown periods. Considering that motor competence levels during childhood positively influence physical activity levels along the lifespan, it is necessary to think about solutions to protect against sedentarism and minimize the immediate effect of the lockdown on children's motor competence.	This study assessed the motor competence of 114 children aged 6-9 years using the motor competence assessment (MCA) in Portugal before (December 2019) and after the COVID-19 lockdown (September 2020). The results indicated that, regardless of sex, motor performances after the lockdown in five of the six tests (except for jumping sideways in boys) were lower than before the lockdown. Considering that motor competence levels during childhood positively influence physical activity levels along the lifespan, it is necessary to think about solutions to protect against sedentarism and minimize the immediate effect of the lockdown on children's motor competence.	Pombo A, Luz C, de Sá C, et al. Effects of the COVID-19 Lockdown on Portuguese Children's Motor Competence. Children (Basel). 2021;8(3):199. doi:10.3390/children8030199.
Neonate, stillbirth, surveillance, data, birth	7-Mar-21	<a href="#">The usability of Jordan stillbirths and neonatal deaths surveillance (JSANDS) system: results of focus group discussions</a>	Archives of Public Health	Original Research	An electronic Jordan Stillbirths and Neonatal Deaths Surveillance system (JSANDS) was implemented in 5 hospitals in Jordan in August 2019. This study explored healthcare professionals' perceptions of the system. A descriptive qualitative approach, using focus group discussions, was conducted 1 year after implementation (23 participants, age range 25-50 years) [dates not provided]. Participants were also asked about the impact of COVID-19 on the birth and delivery process. All participants agreed on the usefulness of the data collected by the system. Participants perceived the data to be accurate and described instances when the system detected an increase in the number of neonatal deaths resulting in protocol modifications. During the pandemic, participants reported that the system's design, which does not to allow users to modify entries after 28 days' period, to be a limitation, since some were unable to work while in quarantine. In addition, participants reported the pandemic had both positive and	The authors assessed healthcare professionals' perceptions of the Jordan Stillbirths and Neonatal Deaths Surveillance system (JSANDS) along with the impact of COVID-19 on the birth and delivery process. Participants reported usefulness and accuracy of the JSANDS data. Some limitations were identified during the pandemic, such as the time limit on modification of entries while providers were in quarantine. Participants reported both positive (increased viral precautions) and negative (worse	Khader YS, Shattnawi KK, Al-Sheyab N, Alyahya M, Batieha A. The usability of Jordan stillbirths and neonatal deaths surveillance (JSANDS) system: results of focus group discussions. Arch Public Health. 2021;79(1):29. Published 2021 Mar 7. doi:10.1186/s13690-021-00551-1

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					negative impact on their work. On one hand, the outbreak improved quality of care due to increased viral precautions, however it negatively impacted care seeking behaviors of women leading to an increase in premature births. The authors conclude that while the users of JSANDS acknowledged many positive features, they also reported some limitations, which if addressed may enhance the system usability and sustainability.	health seeking behaviors) impacts of the pandemic on the delivery process in Jordan.	
Adolescents; COVID-19; Children; Emergency presentation; Pandemic; Self-harm	7-Mar-21	<a href="#">Pandemic-related emergency psychiatric presentations for self-harm of children and adolescents in 10 countries (PREP-kids): a retrospective international cohort study</a>	European Child and Adolescent Psychiatry	Original Article	This retrospective cohort study examined differences in hospital emergency psychiatric presentations for self-harm among children and adolescents during COVID-19 lockdowns in March-April 2020 compared with the same period in 2019. Researchers used electronic patient records of 2,073 acute presentations of 1,795 patients ≤18 years old (average age 15 years; no range reported) from 23 hospital emergency departments in 10 countries. Emergency psychiatric hospital presentations decreased from 1,239 in 2019 to 834 in 2020 (Incidence Rate Ratio 0.67, 95% CI 0.62-0.73; p<0.001). The proportion of children and adolescents presenting with self-harm increased from 50% in 2019 to 57% in 2020 (OR 1.33, 95% CI 1.07-1.64; p=0.009) but there was no difference in the proportion presenting with severe self-harm. Within the subpopulation presenting with self-harm, the proportion of patients presenting with emotional disorders increased from 58% to 66% in 2020 (OR 1.58, 95% CI 1.06-2.36; p=0.025). The proportion of patients admitted to an observation ward also decreased from 13% to 9% in 2020 (OR 0.52, 95% CI 0.28-0.96; p=0.036). The authors conclude that because there are likely to be fewer emergency psychiatric presentations during lockdowns, developing intensive community care services with virtual outreach capabilities should be prioritized.	This study compared hospital emergency psychiatric presentations for self-harm among children and adolescents in 10 countries during COVID-19 lockdowns in March-April 2020 compared with the same period in 2019. The authors found a noticeable decrease in emergency psychiatric presentations and an increased proportion of self-harm cases but no substantial increase of severe self-harm.	Ougrin D, Wong BH, Vaezinejad M, et al. Pandemic-related emergency psychiatric presentations for self-harm of children and adolescents in 10 countries (PREP-kids): a retrospective international cohort study [published online, 2021 Mar 7]. Eur Child Adolesc Psychiatry. 2021;1-13. doi:10.1007/s00787-021-01741-6
COVID-19; pregnancy; indirect effects; maternal health	7-Mar-21	<a href="#">Pandemics and maternal health: the indirect effects of COVID-19</a>	Anaesthesia	Review	In this review, the authors discussed the indirect effects of the COVID-19 pandemic on maternal health. Higher case fatality rates have been observed in men in most countries due to the pandemic. However, there is growing evidence that while organizational changes to healthcare delivery have occurred to protect those vulnerable to the virus (staff and patients), these changes may lead to indirect, potentially harmful consequences, particularly to vulnerable groups, including pregnant women. These encompass reduced access to antenatal and postnatal care, with a lack of in-person clinics impacting the ability to screen for physical, psychological, and social issues such as elevated blood pressure, mental health issues, and sex-based violence. Indirect consequences also encompass a lack of equity when considering the inclusion of pregnant women in COVID-19 research and their absence from vaccine trials, leading to a lack of safety data for breastfeeding and pregnant women. The risk-benefit analysis of these changes to healthcare delivery remains to be fully evaluated. However, the battle against COVID-19 cannot be at the expense of losing existing	The authors discussed the indirect effects of the COVID-19 pandemic on maternal health such as reduced access to antenatal and postnatal care, with a lack of in-person clinics impacting the ability to screen for physical, psychological and social issues such as elevated blood pressure, mental health issues and sex-based violence. Indirect consequences also encompass a lack of equity when considering the inclusion of pregnant women in COVID-19 research and their absence from vaccine trials, leading to a lack of safety data for	Lucas DN, Bamber JH. Pandemics and maternal health: the indirect effects of COVID-19. Anaesthesia. 2021;76 Suppl 4:69-75. doi:10.1111/anae.15408.

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					quality standards in other areas of healthcare, especially for maternal health.	breastfeeding and pregnant women.	
physical activity; COVID-19; school; mental health	7-Mar-21	<a href="#">The impact of the COVID-19 pandemic on physical activity in US children</a>	Journal of Sport and Health Science	Original Research	A cross-sectional survey was administered online to 1310 parents of children aged 3-18 years between April and June 2020 in the United States to assess the light and moderate-to-vigorous physical activity (MVPA) changes due to the COVID-19 pandemic. The survey was distributed through social media and assessed family/child socioeconomic demographics, child adaptability to the pandemic, community access, and pre-pandemic physical activity (PA) levels. The results showed that child PA and MVPA scores decreased significantly, by 12 points in both categories, during the pandemic ( $p \leq 0.001$ ). Age-based changes were seen in the quantity, variety, and intensity of PA, with the lowest pandemic-related impact seen in preschoolers and the highest in high-schoolers (-5 vs. -17, $p \leq 0.001$ ). Boys demonstrated a larger decrease in PA than did girls (-14 vs. -9, $p = 0.008$ ). Furthermore, community-based peer PA decreased across all age groups. The authors suggest that school districts continue to provide children adequate time for PA through physical education classes and recess. Safe indoor spaces should be created to encourage PA in children despite weather challenges. The authors also recommend that parents encourage children to get their recommended 60 minutes of MVPA each day, including parental co-participation or partitioning PA into breaks throughout the day.	The authors conducted a cross-sectional analysis of parent-reported physical activity (PA) levels in children aged 3-18 years during the COVID-19 pandemic. Findings showed that child PA levels decreased significantly during the pandemic ( $p < 0.001$ ). The authors provide suggestions for promoting increased levels of PA in children during the pandemic.	Tulchin-Francis K, Stevens W Jr, Gu X, et al. The impact of the COVID-19 pandemic on physical activity in US children [published online, 2021 Feb 28]. <i>J Sport Health Sci.</i> 2021;S2095-2546(21)00025-9. doi:10.1016/j.jshs.2021.02.005
children with cancer; infection prevention; SARS-CoV-2; school; day care center; home schooling	5-Mar-21	<a href="#">School and kindergarten attendance and home schooling of pediatric cancer patients before and during the SARS-CoV-2 pandemic: results of a survey of the German Society for Pediatric Oncology and Hematology</a>	GMS Hygiene and Infection Control	Research Article	The authors surveyed pediatric oncology centers (POCs) from July 7-August 8, 2020, on how they handle school attendance and how the COVID-19 pandemic impacted this. 41 pediatric oncologists from 36 POCs responded to the survey (response rate of 70.6%). 91% of those POCs provide in-hospital school, and 17% have a written standard regarding attendance, and 24% have no official policy for school attendance. The POCs who reported home-schooling practice as satisfactory dropped from pre-pandemic levels of 79% to 38% ( $p=0.0007$ ). The risk of SARS-CoV-2 infection in pediatric oncology patients was the most important argument against attending school (from 65% of POCs). Free answers in the survey discussed school attendance for siblings who might serve as an index person for SARS-CoV-2 transmission into the family. The authors state that in-hospital education and home-schooling options are standard among German POCs with 4-6 hours of instruction per week (range of 2-15 hours) in most POCs pre-pandemic. The hours provided during the pandemic have been lower due to the reduced availability of qualified teachers. Furthermore, the authors state that families need information and education on infection risks and prevention to make the best decisions regarding schooling for pediatric oncology patients. A majority of POCs routinely test for SARS-CoV-2 before admittance to the unit or require quarantine without a negative result. Thus, the authors state that teachers' reluctance to provide	The authors surveyed pediatric oncology centers (POCs) from July 7-August 8, 2020, on how they handle school attendance and how the COVID-19 pandemic impacted this. Most patients with hematopoietic recovery can attend school after intensive therapy; however, this has suffered a severe setback during the pandemic.	Simon A, Siebald B, Stamm W, et al. School and kindergarten attendance and home schooling of pediatric cancer patients before and during the SARS-CoV-2 pandemic: results of a survey of the German Society for Pediatric Oncology and Hematology. <i>GMS Hyg Infect Control.</i> 2021;16:Doc10. Published 2021 Mar 5. doi:10.3205/dgkh000381

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
					in-hospital education while using appropriate personal protective equipment is not rational. Most patients with hematopoietic recovery can attend school after intensive therapy; however, this has suffered a severe setback during the pandemic.		
COVID-19; children; pandemic; physical activity; physical distancing; screen time	5-Mar-21	<a href="#">Impact of COVID-19 Restrictions on Western Australian Children's Physical Activity and Screen Time</a>	International Journal of Environmental Research and Public Health	Original Research	This study described the changes in levels of physical activity (PA) and screen time among children from February to May 2020. Parents of 157 children aged 5 to 9 years [mean age: 6.9 years $\pm$ 1.7 years] from Western Australia were recruited through convenience sampling, and an online survey instrument that included validated measures of their children's PA (unstructured, organized, home-based, indoor/outdoor active play, dog play/walking), sociodemographic, and other potential confounders. Overall, weekly minutes of total PA did not change from before to during COVID-19 ( $p = 0.647$ ). However, frequency ( $p < 0.001$ ) and duration ( $p = 0.005$ ) of unstructured PA significantly increased. Outdoor play in the yard or street around the house ( $p < 0.001$ ), outdoor play in the park or playground or outdoor recreation area ( $p < 0.001$ ), and active indoor play at home ( $p < 0.001$ ) all significantly increased. Frequency ( $p < 0.001$ ) and total duration ( $p < 0.001$ ) of organized PA significantly declined during COVID-19 distancing. There was also a significant increase in leisure screen time during COVID-19 distancing ( $p < 0.001$ ), but there was no differences in sleep ( $p = 0.639$ ). During Western Australian COVID-19 restrictions, there was an increase in young children's unstructured PA and outdoor play and a decrease in organized PA. It remains to be seen whether children's increased PA has been sustained with the easing of physical distancing restrictions.	This study described the changes in levels of physical activity and screen time among children from February to May 2020. During Western Australian COVID-19 restrictions, there was an increase in young children's unstructured physical activity and outdoor play and a decrease in organized physical activity. There was also a significant increase in leisure screen time during COVID-19 distancing, but there were no differences in sleep.	Nathan A, George P, Ng M, et al. Impact of COVID-19 Restrictions on Western Australian Children's Physical Activity and Screen Time. <i>Int J Environ Res Public Health</i> . 2021;18(5):2583. Published 2021 Mar 5. doi:10.3390/ijerph18052583
SARS-CoV-2, COVID-19, pregnancy, pregnancy complications, pregnancy outcomes, newborns	5-Mar-21	<a href="#">SARS-CoV-2 in Pregnancy - The First Wave</a>	Medicina	Original Research	This study evaluates the obstetric results of 12 pregnant women (mean age 36 years, SD 4.100; mean gestational age 40 weeks, IQR 3; all pregnancies unifetal) with RT-PCR confirmed SARS-CoV-2 upon admission to a maternity hospital in Portugal from 16 March - 31 July 2020. 11 were hospitalized for induction of labor, corresponding to 0.64% of deliveries in the maternity hospital and 1 hospitalized for threatened abortion, culminating in a stillbirth at 20 weeks' gestation. 9 women were asymptomatic and 3 had mild illness (2 had cough and 1 headache). 3 had relevant exposure history with infected persons. None had severe or critical illness due to SARS-CoV-2. The following gestational complications were observed: 1 stillbirth, 1 preterm labor, 1 preterm pre-labor rupture of membranes, and 1 fetal growth restriction. 4 deliveries were eutocic, 2 vacuum assisted deliveries and 5 were C-sections. The average weight of newborns was 3121 g (SD 550.256), with an average APGAR index at 5th minute of 9.73 (SD 0.467). There were no cases of vertical transmission by SARS-CoV-2. The authors conclude that despite the benign presentation of SARS-CoV-2 infection in this sample, until further studies are available, concern about COVID-19 in pregnancy should remain, since previous	This study evaluates the obstetric results of 12 pregnant women with RT-PCR confirmed SARS-CoV-2 upon admission to a maternity hospital in Portugal. The authors conclude that despite the benign presentation of SARS-CoV-2 infection in this sample, until further studies are available, concern about COVID-19 in pregnancy should remain, since previous evidence with similar viruses has shown that the course can be severe and deadly.	de Vasconcelos Gaspar A, Santos Silva I. SARS-CoV-2 in Pregnancy-The First Wave. <i>Medicina (Kaunas)</i> . 2021;57(3):241. Published 2021 Mar 5. doi:10.3390/medicina57030241

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
					evidence with similar viruses has shown that the course can be severe and deadly.		
COVID-19; pediatric; neonate; clinical evolution	5-Mar-21	<a href="#">Clinical evolution of cases of COVID-19 infection in neopediatrics: a scoping review</a>	Revista Brasileira de Enfermagem	Review	This study aimed to map the knowledge about the clinical findings, treatment and outcome of neonates and children infected with SARS-CoV-2. The authors conducted a scoping review with search of 8 databases and electronic search engines in April 2020. 12 studies were analyzed, comprising a study population aged 0-17 years. Results showed that the main clinical findings in this population were nasal congestion, fever, respiratory distress, diarrhea, fatigue, dry cough, increased C-reactive protein, leukopenia, lymphopenia, thrombocytopenia, elevated procalcitonin, bilateral ground-glass opacity, pulmonary consolidation, and pneumonia. Antivirals, respiratory support, immunomodulatory therapy, glucocorticoids, antibiotics, and alpha interferon were used as treatment. In most included cases, patients required hospitalization but gained recovery and hospital discharge. When compared to adults, the authors conclude that children have mild or asymptomatic clinical manifestations.	This study aimed to map the knowledge about the clinical findings, treatment and outcome of neonates and children infected with SARS-CoV-2. When compared to adults, the authors conclude that children have mild or asymptomatic clinical manifestations.	Costa TMS, Santos KVG, Rocha RRA, et al. Clinical evolution of cases of COVID-19 infection in neopediatrics: a scoping review. Rev Bras Enferm. 2021;74Suppl 1(Suppl 1):e20200662. English, Portuguese. doi:10.1590/0034-7167-2020-0662.
COVID-19; precocious puberty; Italy	5-Mar-21	<a href="#">"Impact of COVID-19 pandemic lockdown on early onset of puberty: experience of an Italian tertiary center"</a>	Italian Journal of Pediatrics	Original Research	The authors retrospectively analyzed all the consultations for suspected precocious or early puberty recorded in the database of an outpatient clinic in Italy from March-September 2020 and compared them with the consultations recorded in the same database from March-September 2019. Most patients were Caucasian of European ancestry in both observation years (217/224 in 2020 and 90/93 in 2019). An increase in the prevalence of female cases was observed (n=215 subjects; 7.33 ± 0.86 in 2020 vs. n=87; 7.51 ± 1.07 patients in 2019), whereas no difference was observed in male patients (n=9; mean age=8.14 ± 1.12 in 2020 vs. n=6; mean age=7.97 ± 2.8 in 2019). Clinical regression of thelarche was described at the second observation in 15.1% of cases in 2019 and 17% of cases in 2020. The findings suggest a significant increase in precocious puberty cases in girls during the initial period of the COVID-19 pandemic. Further investigations in larger cohorts of children are needed to correlate the observed increase of precocious puberty with specific pathogenic factors.	The authors retrospectively analyzed all the consultations for suspected precocious or early puberty recorded in the database of an outpatient clinic in Italy from March-September 2020, and compared them with the consultations recorded in the same database from March-September 2019. The findings suggest a significant increase of precocious puberty cases in girls during the COVID-19 pandemic. Further investigations in larger cohorts of children are needed to correlate the observed increase of precocious puberty with specific pathogenic factors.	Verzani M, Bizzarri C, Chioma L, et al. "Impact of COVID-19 pandemic lockdown on early onset of puberty: experience of an Italian tertiary center". Ital J Pediatr. 2021;47(1):52. doi:10.1186/s13052-021-01015-6.
COVID-19; pediatric dentistry; self-medication; Turkey	5-Mar-21	<a href="#">Evaluation of parents' knowledge, attitudes, and practices regarding self-medication for their children's dental problems during the COVID-19</a>	BioMed Central (BMC) Oral Health	Original Research	The authors evaluated parents' knowledge, attitudes, and practices regarding self-medication for their children's dental problems during the COVID-19 pandemic in Northern Turkey. A cross-sectional survey was carried out in the pediatric dental clinic immediately after the COVID-19 lockdown ended. A total of 389 parents of children aged 0-12 years (47.6% between ages 5-8 years; 51.9% male) who agreed to participate in the study completed the questionnaire from July 1- October 1, 2020. 70.2% of parents practiced self-medication for their children's dental problems, and self-medication with previously prescribed medications was usually preferred by parents (n=179; 62.2%). Analgesics (98%) were the	The authors evaluated parents' knowledge, attitudes, and practices regarding self-medication for their children's dental problems during the COVID-19 pandemic in Northern Turkey. Findings indicated that the prevalence of self-medication practices for children's dental problems is high in Turkey during the COVID-19 pandemic.	Sen Tunc E, Aksoy E, Arslan HN, et al. Evaluation of parents' knowledge, attitudes, and practices regarding self-medication for their children's dental problems during the COVID-19 pandemic: a cross-sectional survey. BMC Oral Health. 2021;21(1):98. doi:10.1186/s12903-021-01466-7.

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		<a href="#">pandemic: a cross-sectional survey</a>			most commonly used medicines by parents in self-medication for their children's dental problems. 42.7% of parents had limited knowledge of side effects, and 87% of parents reported difficulty obtaining a dental consultation as the main reason for self-medication. These findings indicated that the prevalence of self-medication practices for children's dental problems is high in Turkey during the COVID-19 pandemic. Therefore, new healthcare services, such as tele-dentistry, may be helpful to overcome problems related to the self-medication of children during times when the ability to reach healthcare providers is limited, such as during pandemics.	Therefore, new healthcare services, such as tele-dentistry, may be helpful to overcome problems related to the self-medication of children during times when the ability to reach healthcare providers is limited, such as during pandemics.	
anaphylaxis; rhabdomyolysis, pediatric, COVID-19	5-Mar-21	<a href="#">Anaphylaxis and Rhabdomyolysis: A presentation of a Pediatric Patient With COVID-19 [Free Access to Preview Only]</a>	Clinical Pediatrics	Case Report	The authors describe the case of an adolescent (age not provided) who presented to a large tertiary care pediatric hospital with anaphylaxis and rhabdomyolysis and was found to be infected with SARS-CoV-2. On admission to the emergency department, he was extremely edematous and short of breath but experienced relief upon initial epinephrine administration. He did not have any fever, cough, emesis, abdominal pain, or diarrhea during this episode. The patient's medical history included an admission 6 months prior for idiopathic biphasic anaphylaxis with associated rhabdomyolysis requiring hospitalization after multiple administrations of IM epinephrine for anaphylaxis. The patient was morbidly obese (body mass index = 38.9 kg/m <sup>2</sup> ) with periorbital edema, lip swelling, mild edema in all extremities with erythematous overlying skin, as well as diffuse urticaria. After treatment with additional epinephrine, supplemental oxygen via nasal cannula, and enoxaparin, the patient improved and was discharged on day 9 with recommended antihistamine treatment. Viral-induced anaphylaxis and rhabdomyolysis could be cytokine-mediated and under-recognized COVID-19 complications, requiring monitoring in pediatric COVID-19 patients.	The authors describe the case of an adolescent who presented with anaphylaxis and rhabdomyolysis and was SARS-CoV-2-positive. The patient had a prior medical history of anaphylaxis and rhabdomyolysis, and his condition improved after pharmaceutical and supplemental oxygen treatment. This case suggests that viral-induced anaphylaxis and rhabdomyolysis may be complications of COVID-19 in pediatric patients.	Bach M, Lim PP, Azok J, Ruda Wessell K, Desai AP, Dirajlal-Fargo S. Anaphylaxis and Rhabdomyolysis: A Presentation of a Pediatric Patient With COVID-19 [published online, 2021 Mar 5]. Clin Pediatr (Phila). 2021;9922821999470. doi:10.1177/0009922821999470
COVID-19; art therapy; children; mental health; telehealth	6-Mar-21	<a href="#">Online art therapy in elementary schools during COVID-19: results from a randomized cluster pilot and feasibility study and impact on mental health</a>	Child and Adolescent Psychiatry and Mental Health	Original Research	The authors examined the impact of 2 mindfulness-based online group drawing interventions on the mental health of elementary school children (n = 22, mean age = 11.3 years, 11 female/11 male) during May-June 2020 of the COVID-19 pandemic in Canada. Participants were assigned to either an emotion-based directed drawing intervention or mandala drawing intervention for 45-minute sessions once per week for five weeks. The results showed that participants who received the emotion-based drawing intervention demonstrated lower inattention scores after the intervention when compared to students in the mandala group (P = 0.05). Both groups demonstrated a decrease from pre- to post-intervention scores for levels of hyperactivity for the complete sample (p = 0.05). The results demonstrate that delivery of these drawing interventions through online means is feasible, adequate for school-based settings, and may be beneficial to children's mental health, particularly for inattention and hyperactivity. Larger sample	This article examined the impact of 2 mindfulness-based online group drawing interventions on mental health for elementary school children during the COVID-19 pandemic in Canada. The results demonstrate that the online delivery of the interventions is feasible and may be beneficial to children's mental health, particularly for inattention and hyperactivity. Larger sample sizes and longitudinal data are needed to determine the long-term impacts of the interventions on children's mental health.	Malboeuf-Hurtubise C, Léger-Goodes T, Mageau GA, et al. Online art therapy in elementary schools during COVID-19: results from a randomized cluster pilot and feasibility study and impact on mental health. Child Adolesc Psychiatry Ment Health. 2021;15(1):15. Published 2021 Mar 6. doi:10.1186/s13034-021-00367-5

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					sizes and longitudinal data are needed to determine the long-term impacts of the interventions on children's mental health.		
COVID-19; angiotensin converting enzyme; Kawasaki Disease; PIMS-TS	6-Mar-21	<a href="#">Clinical Characteristics of Paediatric Hyperinflammatory Syndrome in the Era of Corona Virus Disease 2019 (COVID-19)</a>	Indian Journal of Clinical Biochemistry	Review	The authors discussed clinical characteristics of pediatric hyperinflammatory syndrome related to COVID-19 in pediatric patients. A small percentage of children develop a hyperinflammatory syndrome. Features of this newly recognized condition PIMS-TS with a phenotype resembling Kawasaki disease may include fever, hypotension, severe abdominal pain and cardiac dysfunction, evidence of inflammation, and single or multi organ dysfunction in the absence of other known infections. Children emerge to have mild symptoms compared to adults, perhaps due to reduced expression of the ACE-2 receptor (the target of SARS-CoV-2) gene, trained innate immunity, and a young and fit immune system. Some of these children may share features of Kawasaki disease, toxic shock syndrome or cytokine storm syndrome. They can deteriorate rapidly and may need intensive care support as well. The PCR test is more often negative although most of the children have antibodies to SARS-CoV-2. Although the pathogenesis is not clearly known, immune-mediated injury has been implicated. More information in understanding the pre-disposing factors and pathogenesis of PIMS-TS/MIS-C is necessary to suitably prevent and optimally control this condition.	The authors discussed clinical characteristics of pediatric hyperinflammatory syndrome related to COVID-19 in pediatric patients. Features of this newly recognized condition PIMS-TS with a phenotype resembling Kawasaki disease may include fever, hypotension, severe abdominal pain and cardiac dysfunction, evidence of inflammation, and single or multi organ dysfunction in the absence of other known infections.	Basu M, Das SK. Clinical Characteristics of Paediatric Hyperinflammatory Syndrome in the Era of Corona Virus Disease 2019 (COVID-19). Indian J Clin Biochem. 2021;1-12. doi:10.1007/s12291-021-00963-4.
COVID-19 pandemic; beliefs about birth; fear of birth; pandemic-related pregnancy stress; place of birth	6-Mar-21	<a href="#">The role of pandemic-related pregnancy stress in preference for community birth during the beginning of the COVID-19 pandemic in the United States</a>	Birth	Original Research	The authors quantitatively investigated factors related to birth setting preference for pregnant women in the United States from April 24-May 15 2020, during the COVID-19 pandemic. 3896 women anticipating a vaginal birth completed a questionnaire that included preferences for place of birth (hospital, home, birth center), and psychological constructs such as fear of childbirth, birth beliefs, pandemic-related stress related to birth preparation, and stress related to pandemic-related perinatal infection. Women who preferred a community birth (home or birth center) had less fear of childbirth, had stronger beliefs that childbirth is a natural process versus a medical process, and were less stressed about not being prepared for birth. Higher stress related to becoming infected with SARS-CoV-2 was associated with an increased likelihood of preferring a community birth, and this effect was stronger when there was more birth preparedness stress. The results demonstrate that preferences for birth setting were associated with risk perceptions, particularly for SARS-CoV-2 infection risk in hospitals. The authors note that policies should be targeted to increase access to safe in-hospital and out-of-hospital birth services.	This article describes a quantitative investigation of factors related to birth setting preference for pregnant women in the United States during the COVID-19 pandemic. Higher stress related to becoming infected with SARS-CoV-2 and views of childbirth as a natural versus medical process were associated with an increased likelihood of preferring a community birth.	Preis H, Mahaffey B, Lobel M. The role of pandemic-related pregnancy stress in preference for community birth during the beginning of the COVID-19 pandemic in the United States [published online ahead of print, 2021 Mar 6]. Birth. 2021. doi:10.1111/birt.12533

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COVID-19, tics, adolescents, tic-like attacks, social media	6-Mar-21	<a href="#">COVID-19 related increase in childhood tics and tic-like attacks</a>	British Medical Journal (BMJ)	Case Report	This paper discusses the increase in tic symptoms and onset of “tic-like” attacks in adolescent girls since the beginning of the COVID-19 pandemic, a case study, and possible causes for the increase. These new tic cases fall into two groups: individuals with a background diagnosis or vulnerability to motor and phonic tics that first present with explosive functional tic-like movements, and those with completely new, florid, tic-like disorders that appear functional. Both groups’ symptoms are likely precipitated by anxiety. The case example, AB, is a 14-year-old girl who experienced an explosive onset of motor and phonic tics in November 2020. She had a family history of autism, attention-deficit/hyperactivity disorder (ADHD) and Tourette syndrome, and was treated with reassurance and psycho-educational suggestions for selective attention strategies. The researchers hypothesize that the increase in tic symptoms in vulnerable youth is due to stress brought on by the COVID-19 pandemic. They recommend careful assessment, diagnosis, and reassurance, but do not recommend medical prescriptions for young patients. In the future, the researchers recommend exploring the role social media has had in sharing information about tics, and its potential for causing “contagion.”	This paper discusses the increase in tic symptoms and onset of “tic-like” attacks in adolescent girls since the beginning of the COVID-19 pandemic, and hypothesizes that stress and social media discussion of the condition may have contributed to the rise in cases.	Heyman I, Liang H, Hedderly T. COVID-19 related increase in childhood tics and tic-like attacks. Arch Dis Child. 2021 Mar 6. doi: 10.1136/archdischild-2021-321748.
health promotion; isolation; obesity; physical inactivity; public health policy	5-Mar-21	<a href="#">A COVID-19 Crisis in Child Physical Fitness: Creating a Barometric Tool of Public Health Engagement for the Republic of Slovenia</a>	Frontiers in Public Health	Perspective Article	This perspective article details the use of Slovenia’s “SLOfit Barometer,” an interactive indicator developed to monitor the implementation of countermeasures aimed at reducing sedentary behavior and poor physical activity (PA) in children during the COVID-19 pandemic. Despite aggressive campaigns to maintain PA at home, Slovenia has seen a tremendous decrease in child physical fitness during the period of March – May 2020 as self-isolation measures have been mandated by national authorities. A research team was assembled for creation of the SLOfit Barometer after processing preliminary data on 20,000 schoolchildren which found the greatest decline in child physical fitness since systematic testing began more than 30 years ago. Researchers found that only 2 months of self-isolation erased over 10 years of hard-fought health gains acquired from national public health policies and PA interventions. The authors assert this crisis in child fitness requires integrated community participation and a robust public health policy response, and with the SLOfit Barometer acting as a national surveillance system, it is envisioned that policy makers and the public will advocate for decisive actions to combat this national health emergency. This surveillance tool tracks government action to combat the increasing child physical inactivity and obesity trends brought on as a direct result of COVID-19 isolation regulations.	This perspective article details the use of Slovenia’s “SLOfit Barometer,” a surveillance tool which tracks government action to combat the increasing child physical inactivity and obesity trends brought on as a direct result of COVID-19 isolation regulations.	Jurak G, Morrison SA, Kovač M, et al. A COVID-19 Crisis in Child Physical Fitness: Creating a Barometric Tool of Public Health Engagement for the Republic of Slovenia. Front Public Health. 2021;9:644235. Published 2021 Mar 5. doi:10.3389/fpubh.2021.644235

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COVID-19; attachment style; children; emotion regulation; negative emotion; parent	5-Mar-21	<a href="#">Parent and Child's Negative Emotions During COVID-19: The Moderating Role of Parental Attachment Style</a>	Frontiers in Psychology	Original Research	This study aimed to find parental attachment style as a candidate to moderate the relation between parents' negative emotions and their perceptions of their children's negative emotions related to COVID-19. Between March 26 – April 5, 2020 parents (median age = 42.55 ± 6.56 years, 88.2% female) of 838 Italian children and adolescents aged 3 to 18 years participated in an online survey assessing parental attachment style, parents', and children's negative emotions. Parent attachment style was categorized as either secure, fearful, pre-occupied, or dismissing. Results suggest that parents' negative emotions affected children's negative emotions (p<0.01). Parents with a fearful attachment style had significantly higher negative emotions when facing COVID-19 than those with other attachment styles (p<0.001). Moreover, parents with a dismissing attachment style perceived fewer negative emotion in their children than parents with fearful and pre-occupied styles. At last, higher parents' negative emotions were associated with greater perception of children's negative emotions only in parents classified as secure and fearful. These findings suggest that parents with dismissing and fearful attachment styles and their children may be at higher risk during the COVID-19 pandemic and they should be given long-term attention. The authors conclude that these findings offer important implications in understanding and improving the mental health of children and adolescents under the influence of the COVID-19 pandemic.	This study aimed to find parental attachment style, categorized as either secure, fearful, pre-occupied, or dismissing, as a candidate to moderate the relation between parents' negative emotions and their perceptions of their children's negative emotions related to COVID-19. Results suggest that parents' negative emotions affected children's negative emotions, particularly among parents with fearful attachment styles.	Liang Z, Delvecchio E, Cheng Y, Mazzeschi C. Parent and Child's Negative Emotions During COVID-19: The Moderating Role of Parental Attachment Style. <i>Front Psychol.</i> 2021;12:567483. Published 2021 Mar 5. doi:10.3389/fpsyg.2021.567483
maternal mortality; COVID-19; high-income countries; middle-income countries; meta-analysis	5-Mar-21	<a href="#">Effect of COVID-19 on Mortality of Pregnant and Postpartum Women: A Systematic Review and Meta-Analysis</a>	Journal of Pregnancy	Systematic Review	This systematic review analyzed original studies published up to July 10, 2020 to investigate COVID-19 morbidity and mortality among pregnant and postpartum women. Meta-analyses of proportions were used to combine data and report pooled proportions. 117 studies with a total of 11,758 pregnant women (ages 15-48 years) were included. Most subjects were infected with SARS-CoV-2 in the 3rd trimester. Overall maternal mortality was 1.3% (153/11,758); however, mortality rate among pregnant women with COVID-19 was 0.19% in high-income countries and 8.51% in middle-income countries. 41.7% of the deceased patients were 35 years or older (advanced maternal age). In 100% of fatal cases with adequate data, fever alone or with cough was one of the presenting symptoms; dyspnea (58.3%) and myalgia (50%) were also common symptoms. The rate of comorbidities was 20% among COVID-19 deaths; 31.1% had diabetes, 21.9% were obese, 14.1% had cardiovascular disease, and 9.1% had a history of asthma. The majority (58.3%) of women with COVID-19 who died had a C-section, 25% had a vaginal delivery, and 16.7% of patients were not full term, according to the authors. The authors note that this study estimated a higher COVID-19 mortality rate among pregnant women than others, which they attribute either to the larger sample size or their inclusion of data from middle-income countries with higher mortality rates.	This systematic review analyzed original studies published up to July 10, 2020 to investigate COVID-19 morbidity and mortality among pregnant and postpartum women. Meta-analysis estimated that COVID-19 maternal mortality rates in middle-income countries were at least 6 times higher than in high-income countries.	Karimi L, Makvandi S, Vahedian-Azimi A, et al. Effect of COVID-19 on Mortality of Pregnant and Postpartum Women: A Systematic Review and Meta-Analysis. <i>J Pregnancy.</i> 2021. Published 2021 Mar 5. doi:10.1155/2021/8870129

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Molar pregnancy, oncology, hydatidiform mole, gynecology, womens health	5-Mar-21	<a href="#">A possible association between hydatidiform mole and the COVID-19 pandemic: A retrospective cohort study</a>	Gynecologic Oncology	Original Research	In this retrospective cohort study, the authors assessed whether the number of women with molar pregnancy increased during the COVID-19 pandemic at their single institution in Israel. All patients (n= 107) with complete or partial mole diagnosed between January 1, 2010- October 31, 2020, were included [age range not provided]. There was a significant increase in the number of molar pregnancies in 2020 compared to the last 10 years (odds ratio (OR) = 2.071, p-value not provided). In addition, the authors identified all women diagnosed with hydatidiform mole (HM) from January-October 2020 and compared them with a control group who underwent uterine evacuation for missed abortion of a singleton pregnancy during the same period. The mean gestational age at the time of diagnosis was smaller in the HM group than in the missed abortion group (6.3 ± 1.67 weeks vs 7.4 ± 2.4 weeks, p = 0.034), and the authors found that it took more time to diagnose molar pregnancy than missed abortion (22.38 ± 10.32 vs. 15.83 ± 7.83 days, p = 0.012). The authors conclude that there was a significant increase in the incidence of molar pregnancy during the COVID-19 pandemic and recommend continuing gynecological primary care services during a crisis.	In this retrospective study, the authors assessed for increases in molar pregnancies at their institution in Israel during the COVID-19 pandemic, and found a two-fold increase in 2020 compared with the prior ten years. They also found that it took longer to diagnose molar pregnancy during the pandemic than to diagnose missed abortion. They conclude that gynecological primary care services should be continued during a crisis.	Aiob A, Naskovica K, Sharon A, Bornstein J. A possible association between hydatidiform mole and the COVID-19 pandemic: A retrospective cohort study. Gynecol Oncol. 2021;S0090-8258(21)00192-X. doi:10.1016/j.ygyno.2021.02.035
SARS-CoV-2; pregnancy; newborn; maternal; breastfeeding	5-Mar-21	<a href="#">Impact of evolving practices on SARS-CoV-2 positive mothers and their newborns in the largest public healthcare system in America</a>	Journal of Perinatology	Original Research	This study aimed to assess the impact of evolving approaches for managing mother/infant dyads affected by maternal SARS-CoV-2 infection in 11 hospitals in New York City, USA. The retrospective cohort study identified mother-newborn dyads delivered from March 1-May 9, 2020. The study analyzed all dyads with a mother who tested positive for SARS-CoV-2 and further stratified them based on newborn test results as mother/newborn status: positive/positive (P/P), positive/ negative (P/N), and positive/untested (P/U). Of the 1198 women that were tested, 23.8% (N=286) tested positive for SARS-CoV-2. The average maternal age for SARS-CoV-2 positive mothers was 29 years and slightly higher (33 years; p = 0.1967) for P/P dyads. 89.7% of infants born to positive mothers were tested and 11 (4.2%) of those tested were positive. P/P newborns were more likely to be admitted to the NICU and their stay was significantly longer (7.5 days) than those of P/N (5 days) or P/U newborns (2.5 days) (p=0.004). Breastfeeding among positive mothers was lower than the health system's baseline (57% versus 87%), as was the rate of skin-to-skin contact (36% versus 60%). The breastfeeding rate for P/P dyads was higher (81%) than P/N (55%) and P/U (70%) dyads. The authors conclude that high-risk populations can be safely and effectively treated in resource-limited environments.	The authors aimed to assess the impact of the COVID-19 pandemic on management practices of mother/infant dyads in 11 hospitals in New York City, USA, from March-May 2020. They report that breastfeeding was lower among positive mothers than the general population, and that SARS-CoV-2-positive mothers with SARS-CoV-2-positive infants had higher rates of breastfeeding than positive mothers with negative or untested infants.	Malhotra, Y., Knight, C., Patil, U. P., et al. (2021). Impact of evolving practices on SARS-CoV-2 positive mothers and their newborns in the largest public healthcare system in America. Journal of Perinatology. https://doi.org/10.1038/s41372-021-01023-8

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COVID-19, children, lockdown, mental health, development	5-Mar-21	<a href="#">Protecting the Mental Health of Children and Young People during the Covid-19 Pandemic</a>	Comprehensive Child and Adolescent Nursing	Editorial	The COVID-19 pandemic has had a substantial impact on parents, caregivers, and children. Newly published reports highlight the adverse sequelae of the pandemic to the mental health of children and young people. Several studies have shown that lack of socialization in children leads to slowed development and increased risk of mental health disorders and pathologies later in life. Furthermore, children who require special needs (such as those on the autism spectrum) may be especially prone to emotional trauma with such a disruption to their routines. Recent reports have shown that children most affected by lack of schooling during the lockdown have regressed across a range of developmental skills, oral fluency, and learning, as well as increased incidence of self-harm. A Prince's Trust research report showed that 41% of 16-25 year-olds believed that their future goals seem impossible to achieve, which erodes their self-esteem and ambition. The Royal College of Pediatrics and Child Health reported that 83% of young people state their mental health has worsened during the COVID-19 pandemic, mostly due to loneliness and worries about education and the future. It is to be expected that with ongoing COVID-19 vaccinations, the concerns for the mental health of children and young people will lessen. However, these effects will outlast the period of the pandemic.	The author discusses the impact of the COVID-19 pandemic on the mental health of children and young people. 83% of young people state that their mental health has worsened during the COVID-19 pandemic, mostly due to loneliness and worries about education and the future. The author urges continued vigilance as these effects will outlast the period of the pandemic.	Glasper EA. Protecting the Mental Health of Children and Young People during the Covid-19 Pandemic [published online, 2021 Mar 5]. Compr Child Adolesc Nurs. 2021;1-5. doi:10.1080/24694193.2021.1879625
Burn; COVID-19; Emergency; Injury; Traumatic; Wound	5-Mar-21	<a href="#">Emergency department visits for pediatric traumatic injuries during general confinement: A single-center study in an urban setting</a>  <a href="#">[Free Access to Abstract Only]</a>	Archives de Pédiatrie	Short Communication	This study aimed to analyze the incidence of pediatric emergency department (ED) visits and hospitalizations for traumatic injuries during the national COVID-19 lockdown from March 17-May 11, 2020, in Paris, France, compared to previous years. Any pediatric visit to the ED with a burn, fracture, traumatic wound, or sprain/bruise contusion was recorded within the 2 weeks before (March 2-16, weeks 10-11) and during the lockdown (March 17-May 11, weeks 12-19) and were compared to visits during the same period of the previous 2 years. The number of recorded visits between weeks 10-19 in 2018, 2019, and 2020 was 2657, 2625, and 1106 children, respectively. The average number of visits per day during the lockdown (13±5) was significantly lower than the average number of visits per day during the same weeks in 2018 and 2019 (38±8 vs. 39±9, p<0.0001). The average number of visits per day was significantly lower during the lockdown compared with 2018 and 2019 for fractures, traumatic wounds, and sprain/bruises (p<0.0001) but not for burns (p=0.23). The average number of hospitalizations per day was significantly lower during the lockdown than during 2018 and 2019 (1.6±1.3 vs. 2.6±1.8, p<0.0001). The authors concluded that the COVID-19 lockdown period appeared to decrease the incidence of injuries, except for burns, in children.	This study aimed to analyze the incidence of pediatric emergency visits and hospitalizations for traumatic injuries during the national COVID-19 lockdown from March 17-May 11, 2020, in Paris, France, compared to previous years. The average number of visits per day was significantly lower during the lockdown compared with 2018 and 2019 for fractures, traumatic wounds, and sprain/bruises (p<0.0001) but not for burns (p=0.23). The authors concluded that the COVID-19 lockdown period appeared to decrease the incidence of injuries, except for burns, in children.	Rougereau G, Guedj R, Irtan S, Qassemayr Q, Vialle R, Langlais T. Emergency department visits for pediatric traumatic injuries during general confinement: A single-center study in an urban setting [published online 2021 Mar 5]. Arch Pediatr. 2021;S0929-693X(21)00029-4. doi:10.1016/j.arcped.2021.02.012

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
COVID-19; pediatric; chronic kidney disease	5-Mar-21	<a href="#">An analysis of chronic kidney disease as a prognostic factor in pediatric cases of COVID-19</a>	Jornal Brasileiro de Nefrologia	Review	This narrative review looked into literature on pediatric patients with chronic kidney disease (CKD) to verify whether they were more prone to developing more severe symptoms when diagnosed with COVID-19 compared to children without CKD and adults with CKD. The studies included in this review did not report severe cases or deaths and indicated that pediatric patients with CKD and previously healthy children recovered quickly from infection. However, some patients with MIS-C required hospitalization in intensive care units, and a few died, although it was not possible to correlate MIS-C and CKD. Conversely, adults with CKD reportedly had an increased risk of severe SARS-CoV-2 infection and higher death rates. The discrepancies seen between age groups may be due to immune system and renin-angiotensin system differences, with a more pronounced expression of ACE2 in children. Immunosuppressant therapy has not been related to positive or negative effects in individuals with COVID-19, although current recommendations establish decreases in the dosage of some medications. The authors concluded that CKD was not associated with more severe involvement in children diagnosed with COVID-19. Additional studies enrolling larger populations are needed.	This narrative review looked into literature on pediatric patients with chronic kidney disease (CKD) to verify whether they were more prone to developing more severe symptoms when diagnosed with COVID-19 compared to children without CKD and adults with CKD. The authors concluded that CKD was not associated with more severe involvement in children diagnosed with COVID-19. Additional studies enrolling larger populations are needed.	Faria BCD, Sacramento LGG, Filipin CSA, et al. An analysis of chronic kidney disease as a prognostic factor in pediatric cases of COVID-19. J Bras Nefrol. 2021:S0101-28002021005025303. English, Portuguese. doi:10.1590/2175-8239-JBN-2020-0208.
MIS-C, COVID-19, Kawasaki disease, ACE2, pediatrics	5-Mar-21	<a href="#">Is multisystem inflammatory syndrome related with coronavirus disease 2019, Kawasaki disease, and angiotensin-converting enzyme 2 in children?</a>	Clinical and Experimental Pediatrics	Editorial	This editorial considers Kawasaki disease (KD) prevalence in young children and how its symptoms are like MIS-C in older children during the COVID-19 pandemic. The author reports that SARS-CoV-2 infects humans through the ACE2 receptor, making the ACE2 receptor a key factor responsible for vascular involvement in SARS-CoV-2 infection. The author suggests this may explain why COVID-19 occurs less frequently in children with lower ACE2 expression. In younger children ACE2 expression might develop earlier in the gastro-intestinal (GI) tract than in the respiratory tract, potentially explaining increased GI irritation in pediatric patients. The author acknowledges that ACE2-expressing organs do not equally participate in COVID-19 pathophysiology, implying that other mechanisms are involved in disease presentation. The author concludes that pediatricians should be aware of all KD-like symptoms or toxic shock syndrome, even in the absence of a confirmed diagnosis of COVID-19, and MIS-C should be considered during the COVID-19 pandemic to ensure proper treatment without the misdiagnosis or overdiagnosis of KD.	This editorial considers Kawasaki disease prevalence in young children and how its symptoms are like MIS-C in older children during the COVID-19 pandemic. The author hypothesizes that ACE2 expression is related to disease presentation.	Eun LY. Is multisystem inflammatory syndrome related with coronavirus disease 2019, Kawasaki disease, and angiotensin-converting enzyme 2 in children? [published online, 2021 Mar 5]. Clin Exp Pediatr. 2021;10.3345/cep.2021.00031 . doi:10.3345/cep.2021.00031
Neurology; children; adolescents; COVID-19; SARS-CoV-2; MIS-C	5-Mar-21	<a href="#">Neurologic Involvement in Children and Adolescents Hospitalized in the United States for COVID-19 or Multisystem</a>	Journal of the American Medical Association (JAMA) Neurology	Original Investigation	This study aimed to understand the range and severity of neurologic involvement associated with COVID-19 in children and adolescents. Active surveillance was performed at 61 hospitals in 31 US states to identify 1695 children and adolescents (median [IQR] age, 9.1 [2.4-15.3] years) with SARS-CoV-2–related illness hospitalized from March 15–December 15, 2020. 22% had documented neurologic involvement. Patients with neurologic involvement were more likely to have underlying neurologic disorders (81/365, 22%) compared with those without (113/1330, 8%), but a similar number were	This study aimed to understand the range and severity of neurologic involvement associated with COVID-19 in children and adolescents. 22% of children and adolescents hospitalized for COVID-19 or MIS-C had neurologic involvement, which was mostly transient.	LaRovere KL, Riggs BJ, Poussaint TY, et al. Neurologic involvement in Children and Adolescents Hospitalized in the United States for COVID-19 or Multisystem Inflammatory Syndrome [published online 2021 Mar 5]. JAMA Neurol. 2021.

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		<a href="#">Inflammatory Syndrome</a>			previously healthy (195/365, 53%; vs 723/1330, 54%) and met criteria for MIS-C (126/365, 35%; vs 490/1330; 37%). Among those with neurologic involvement, 88% had transient symptoms and survived, and 12% developed life-threatening conditions associated with COVID-19, including severe encephalopathy (n=15; 5 with splenic lesions), stroke (n=12), central nervous system infection/demyelination (n=8), Guillain-Barré syndrome/variants (n=4), and acute fulminant cerebral edema (n=4). Compared with those without life-threatening conditions, those with life-threatening neurologic conditions had higher neutrophil-to-lymphocyte ratios (median, 12.2 vs 4.4) and higher reported frequency of D-dimer >3 µg/mL fibrinogen equivalent units (49% vs 22%). The authors found that neurologic involvement was common in children and adolescents with COVID-19–related hospitalization, and was mostly transient.		doi:10.1001/jamaneurol.2021.0504
COVID-19; neonate; breastfeeding; telehealth; e-health; Iran	4-Mar-21	<a href="#">Mobile-Assisted Virtual Bonding Enables Breast Milk Supply in Critically Ill Mothers With COVID-19: A Reflection on the Feasibility of Telelactation</a>	Cureus	Case Report	The authors presented 3 cases where a favorable outcome was observed through a telehealth initiative for breastfeeding mothers with severe COVID-19 pneumonia. The 3 cases involved a 31-year-old who delivered at 32 weeks of gestation, a 26-year-old who delivered at 31 weeks of gestation, and a 36-year-old who delivered at 36 weeks gestation with severe COVID-19 pneumonia who were separated from their neonates in a maternity hospital in Iran in March, April and July 2020 respectively. The process involved sharing pictures and videos of neonates with the mothers, which provided periodic updates on the progress of the infants. In all 3 cases, the mothers were able to maintain their milk supply during the period of physical separation from their children (16 days and 10 days for the latter 2 cases, ~7-8 months for the first case where the mother underwent mitral valve replacement surgery). Virtual mother-infant bonding with mobile-assisted technology helps to connect SARS-CoV-2-infected mothers with newborn infants remotely and enables mobile lactation. Techniques offering telelactation could play a supplementary role during the COVID-19 pandemic and potentially hasten the emotional recovery of mothers separated from their infants during the postnatal period by playing an important role in breast milk initiation and sustenance.	The authors presented 3 cases where a favorable outcome was observed through a telehealth initiative for breastfeeding mothers with severe COVID-19 pneumonia who were separated from their neonates in a maternity hospital in Iran. Telelactation enabled all 3 mothers to maintain their milk supply during the period of physical separation. Techniques offering telelactation could play a supplementary role during the COVID-19 pandemic and potentially hasten the emotional recovery of mothers separated from their infants during the postnatal period by playing an important role in breast milk initiation and sustenance.	Farhadi R, Mehrpisheh S, Philip RK. Mobile-Assisted Virtual Bonding Enables Breast Milk Supply in Critically Ill Mothers With COVID-19: A Reflection on the Feasibility of Telelactation. Cureus. 2021;13(3):e13699. doi:10.7759/cureus.13699.
COVID-19; children; MIS-C; retropharyngeal edema; United States	4-Mar-21	<a href="#">Multisystem inflammatory syndrome in children (MIS-C) and retropharyngeal edema: A case series</a>	International Journal of Pediatric Otorhinolaryngology	Case Report	The authors present 3 pediatric cases with suspected MIS-C, found to have retropharyngeal edema without evidence of a bacterial etiology in the United States [dates not specified]. The patients (Case 1: 12-year-old male; Case 2: 4-year-old male; Case 3: 13-year-old female) presented to the emergency department with fever and neck pain/swelling. All 3 tested positive for SARS-CoV-2 infection by PCR or antibody testing. Retropharyngeal edema was detected in both patients by neck CT or surgical exploration in the setting of presumed MIS-C. The patients' imaging findings were relatively similar, showing retropharyngeal fluid without peripheral enhancement characteristic of a purulent bacterial infection or	The authors discuss 3 pediatric cases with suspected MIS-C and positive SARS-CoV-2 tests, presenting with retropharyngeal edema in the United States. All 3 patients received antibiotic treatment, and 1 underwent surgical intervention. These cases raise the possibility that an association between MIS-C and retropharyngeal edema exists.	Daube A, Rickert S, Madan RP, et al. Multisystem inflammatory syndrome in children (MIS-C) and retropharyngeal edema: A case series. Int J Pediatr Otorhinolaryngol. 2021;144:110667. doi:10.1016/j.ijporl.2021.110667.

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					abscess. All 3 received broad-spectrum antibiotics with anaerobic coverage empirically, and both Case 2 and 3 received antibiotics prior to hospital admission. Only Case 1 underwent surgical intervention. Although the surgery was performed after administering antibiotics, no discrete abscess was found for drainage, and the clinical relevance was unclear for the <i>Streptococcus parasanguinis</i> obtained from soft tissue culture. These cases raise the possibility that an association between MIS-C and retropharyngeal edema exists. Confirmation of this association in additional studies could influence antibiotic and surgical management of retropharyngeal edema found in patients with MIS-C. Inversely, knowledge of such an association might alert clinicians to the possibility of MIS-C when retropharyngeal edema is discovered. Further mechanistic and epidemiologic studies are needed to evaluate this question.	Confirmation of this association in additional studies could influence antibiotic and surgical management of retropharyngeal edema found in patients with MIS-C.	
COVID-19; breast milk expression; breastfeeding; decontamination; milk banks	4-Mar-21	<a href="#">Chlorine Solutions for a Safe Method of Decontamination of Breast Pump Milk Collection Kits Before and After the Coronavirus Disease 2019 Pandemic</a>	Frontiers in Nutrition	Original Research Article	Promotion of breast feeding and breast pumping is essential for the most vulnerable infants even if the current COVID-19 pandemic imposes stringent hygienic measures. This study in France [dates not reported] evaluated the safety and efficacy of using chlorine solution (CS) to decontaminate breast pumps and bottles. Researchers prepared solution trays with not only the recommended dilution (1 tablet for 5L of water) but also 3 other dilutions (2, 3, or 4 tablets for 5L of water) to mimic dilution errors. Bottles used to collect the milk were soaked for 15 min; after draining, bottles were filled with increasing volumes of milk (20, 50, 100, or 200 ml). Results of 1,982 breast pump milk samples showed a major decrease of the microbial contamination using either sterile device or decontamination with CS compared to a simple soap washing. Under the usual dilution conditions (1 tablet for 5 L of water), the residual estimated concentration of hydrochloric acid in milk was below the WHO guideline threshold for safe drinking water, whether the bottles were filled with 200, 100, or even 50 ml. This threshold was reached only in the worst-case scenario consisting in the use of 4 tablets in 5 L of water for decontamination followed by an addition of 50 ml of milk in the previously drained bottle. The authors propose a guideline for the safe use of CS, and suggest breast pump decontamination might be necessary for use in vulnerable infants, special circumstances such as the current COVID-19 pandemic, cases in which women living are living in unsanitary conditions, or for women pumping their milk at work with no access to clean water. This method of decontamination reduces losses of milk for bacteriological reasons in human milk banks and may also help prevent horizontal contamination of breastmilk with SARS-CoV-2.	This study in France evaluated the safety and efficacy of using chlorine solution to decontaminate breast pumps and bottles, finding it to be a safe and effective method for decontamination under usual dilution conditions and in cases of dilution error resulting in 2x or 3x the amount of recommended chlorine in solution. The authors recommend this method of decontamination to reduce losses of milk for bacteriological reasons in human milk banks and to help prevent horizontal contamination of breastmilk with SARS-CoV-2.	Rigourd V, Mouadh B, Poupon J, et al. Chlorine Solutions for a Safe Method of Decontamination of Breast Pump Milk Collection Kits Before and After the Coronavirus Disease 2019 Pandemic. <i>Front Nutr.</i> 2021;8:574311. Published 2021 Mar 4. doi:10.3389/fnut.2021.574311
COVID-19; pediatric; characteristics;	4-Mar-21	<a href="#">Distinct Characteristics of COVID-19</a>	Frontiers in Pediatrics	Review	The authors summarized the pathogenesis, epidemiology, and clinical management of COVID-19 in pediatric patients. A literature review was conducted for papers published in PubMed and medRxiv	The authors summarized the pathogenesis, epidemiology, and clinical management of COVID-19	Han X, Li X, Xiao Y, et al. Distinct Characteristics of COVID-19 Infection in Children.

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children; infection		<a href="#">Infection in Children</a>			(preprints) between December 2019 and December 2020 that reported on pediatrics patients (aged <18 years) with a confirmed COVID-19 diagnosis. Even though most pediatric patients with COVID-19 present mild symptoms and good prognosis, children are as susceptible as adults. Besides, an increasing number of COVID-19 pediatric patients with MIS-C have been reported. There is currently no concrete evidence for the effectiveness and safety of specific drugs against COVID-19. Children with mild or absent symptoms should be isolated at home for 2 weeks. Severe cases should be admitted to the pediatric ICU as soon as possible. Antiviral drugs targeting specific sites on different stages could effectively inhibit the virus replication in the host cells. However, their efficacy and safety remain to be determined. Antibiotics and antifungal drugs can be used only in patients with secondary bacterial infections based on the culture and antibiogram results. Further study is of paramount importance for better prevention, diagnosis, and treatment of COVID-19 in children worldwide.	in pediatric patients. Even though most pediatric patients with COVID-19 present mild symptoms and good prognosis, children are as susceptible as adults and an increasing number of COVID-19 pediatric patients with MIS-C have been reported. Further study is of paramount importance for better prevention, diagnosis and treatment of COVID-19 in children worldwide.	Front Pediatr. 2021;9:619738. doi:10.3389/fped.2021.619738 .
vaccine exclusion; COVID-19; pregnant and lactating women	4-Mar-21	<a href="#">Exclusion of pregnant and lactating women from COVID-19 vaccine trials: a missed opportunity</a>	European Heart Journal	Article	The author reports on excluding pregnant and lactating women in vaccine trials, forcing women to rely on anecdotal and delayed evidence rather than clinical trials due to a 'protection by exclusion' plan even for COVID-19 vaccines. She reminds us that there is no reason to assume that a vaccine is harmful, and exclusion should rely on clinical evidence rather than assumption. The COVID-19 pandemic has been especially dangerous for front-line healthcare workers, many of which are women of childbearing age, making this practice of excluding pregnant and lactating women especially relevant now. Furthermore, there have even been recommendations to avoid pregnancy in the weeks following the COVID-19 vaccination. The conditions of pregnant and lactating women are different and should not be lumped together for exclusion. The exclusion of pregnant and lactating women from trials does not uphold ethical principles of justice, beneficence, and autonomy. The authors report these concerns as a missed opportunity to inform pregnant and lactating women's clinical care.	The author reports on excluding pregnant and lactating women in vaccine trials, forcing women to rely on anecdotal and delayed evidence rather than clinical trials due to a 'protection by exclusion' plan even for COVID-19 vaccines.	Van Spall HGC. Exclusion of pregnant and lactating women from COVID-19 vaccine trials: a missed opportunity [published online, 2021 Mar 4]. Eur Heart J. 2021;ehab103. doi:10.1093/eurheartj/ehab103
COVID-19; Newborn; Novel coronavirus infection; Vertical transmission	4-Mar-21	<a href="#">A Review Study on the Neonatal Outcomes of Pregnant Women with COVID-19</a>	Advances in Experimental Medicine and Biology	Review	This review investigates the rate of vertical transmission in infants born to women with COVID-19 and describes the characteristics of the infected infants. 13 studies, conducted in China, were included in this review with a total of 103 newborns, ranging from 1 to 33 per study. About one-fifth of the newborns were preterm and the rest were full-term. 83.5% of the newborns were born by C-section, and 16.9% had low birth weight. There were 5 (5.4%) positive tests for SARS-CoV-2 out of 93 tests performed. In the infected infants, there were 2 cases of meconium-stained amniotic fluid, 1 case with premature rupture of membranes, and 1 case of fetal distress. Clinical symptoms included vomiting, fever, lethargy, shortness of breath, and cyanosis. In 4 newborns, there was evidence of pneumonia on the chest x-ray. On laboratory testing, the most	This review investigated the rate of vertical transmission in infants born to women with COVID-19 and aimed to describe the characteristics of the infected infants. The findings of this review showed that the prognosis of newborns of infected mothers was mostly favorable, and that clinical symptoms are nonspecific.	Makvandi S, Mahdavian M, Kazemi-Nia G, Vahedian-Azimi A, Karimi L, Sahebkar A. A Review Study on the Neonatal Outcomes of Pregnant Women with COVID-19. Adv Exp Med Biol. 2021;1321:45-51. doi:10.1007/978-3-030-59261-5_4

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					common finding was leukocytosis and elevated creatine kinase levels. 1 premature newborn needed mechanical ventilation. All newborns were discharged from the neonatal ICU. The findings of this review showed that the prognosis of newborns of infected mothers was mostly favorable, and that clinical symptoms are nonspecific. There are still a lack of data and the authors strongly recommend more studies be performed on neonates of infected women to achieve more accurate and definitive results.		
Maternal outcomes, c-section, preterm birth, neonatal outcomes, vertical transmission	4-Mar-21	<a href="#">The 2019 Novel Coronavirus Disease in Pregnancy: A Systematic Review</a>	Advances in Experimental Medicine and Biology	Systematic Review	This systematic review of clinical symptoms, laboratory findings, obstetrical complications, and maternal, fetal, and neonatal complications of COVID-19 infection in pregnant women was conducted through April 5, 2020. The authors searched the Cochrane library, MEDLINE/PubMed, and Web of Sciences and included 12 studies involving 68 women (age range 22 to 41 years). The three most common symptoms at the time of hospitalization were fever (76.5%), cough (39.7%), and fatigue (13.2%). The most common laboratory finding was an increase in C-reactive protein (CRP)(74.3%). The most common obstetrical complication was preterm labor (33.3%). No maternal deaths were reported. The C-section rate was 83.3% and the reported vertical transmission rate was 2.23%. The authors conclude that these findings indicate that the clinical symptoms and laboratory measures of pregnant women affected by COVID-19 did not differ from the general population, however, preterm labor and C-section delivery appeared more likely to occur in pregnant women with COVID-19. In general, the prognosis of mothers who suffered from COVID-19 and their newborns was favorable. However, there is a need for further rigorous studies to confirm these findings as the pandemic progresses.	In this systematic review of 12 studies involving 68 pregnant women with COVID-19, the most common obstetrical complication was preterm labor (33.3%), the C-section rate was 83.3% and the vertical transmission rate was 2.23%. The findings showed that the clinical symptoms of pregnant women affected by COVID-19 did not differ from the general population, however, preterm labor and C-section delivery appeared more likely to occur in pregnant women with COVID-19.	Makvandi S, Mahdavian M, Kazemi-Nia G, et al. The 2019 Novel Coronavirus Disease in Pregnancy: A Systematic Review. Adv Exp Med Biol. 2021;1321:299-307. doi:10.1007/978-3-030-59261-5_27
Antenatal care, prenatal care, rural health, maternal health, pregnancy	4-Mar-21	<a href="#">Exploring COVID-19 Related Factors Influencing Antenatal Care Services Uptake: A Qualitative Study among Women in a Rural Community in Southwest Ethiopia</a>	Journal of Primary Care and Community Health	Original Research	This study explored COVID-19 related factors influencing antenatal care service uptake in rural Ethiopia (Bench-Sheko Zone). A community-based qualitative study was conducted from September 25- November 25,2020 among 44 selected pregnant women residing in rural districts ages 25-43 years (6 focus groups), and healthcare providers (9 in-depth interviews) working in the local health care facilities. The study revealed several COVID-19 related factors influencing the uptake of antenatal care services during the pandemic. These included health facility related barriers (for example crowded waiting areas and shortages of supplies), perceived poor quality of care during the pandemic by pregnant women, government measures against COVID-19 (such as transportation challenges and mandatory screening in public areas), anxiety related to the pandemic, and risk minimization due to the perception that health facilities were a potential source of SARS-CoV-2 infection. The authors conclude that programs and strategies designed to maintain maternal health services especially in rural settings should take these determinants into consideration.	In this qualitative study exploring COVID-19 related factors influencing antenatal care service uptake in rural Ethiopia, the authors found that health facility related barriers, perceived poor quality of care during the pandemic, government measures against COVID-19, anxiety related to the pandemic, and risk minimization were all factors impacting antenatal care uptake for pregnant women in the region.	Hailemariam S, Agegnehu W, Derese M. Exploring COVID-19 Related Factors Influencing Antenatal Care Services Uptake: A Qualitative Study among Women in a Rural Community in Southwest Ethiopia. J Prim Care Community Health. 2021;12:2150132721996892. doi:10.1177/2150132721996892

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COVID-19, pregnancy, clinical symptoms, laboratory findings, radiological findings, systematic review	4-Mar-21	<a href="#">A Systematic Review of 571 Pregnancies Affected by COVID-19 [Free Access to Abstract Only]</a>	Clinical, Biological and Molecular Aspects of COVID-19	Systematic Review	This systematic review explored clinical symptoms, laboratory and radiological findings, and characteristics of pregnant women with COVID-19. Scientific databases were searched through May 21, 2020. A total of 51 studies comprising 571 pregnant women with COVID-19 pneumonia were included, spanning 11 countries. Women ranged in age from 17 to 49 years, and most were in the third trimester of pregnancy (n=379). The most common comorbidities, in descending order, were obesity, gestational diabetes mellitus, chronic hypertension, pulmonary conditions, asthma, diabetes mellitus, and preeclampsia/eclampsia. Common symptoms at the onset of disease included: fever (65.8%), cough (61.6%), dyspnea (6.4%), fatigue (6.1%), and myalgia (3.8%). Common laboratory findings were elevated C-Reactive Protein levels (33.9%), lymphopenia (31.8%), increased D-dimer levels (27.3%), leukocytosis (9.9%), and leukopenia (6.6%). A common radiological finding was patchy shadowing or ground-glass opacities (n=181, 49.7%). A total of 114 C-sections were performed due to COVID-19-related concerns. Of the 412 deliveries, 112 were preterm (27.2%). There were 55 cases of intubation (11.6%) and 13 maternal deaths (2.3%). The vertical transmission rate was 7.9% [authors do not state how this was confirmed]. The authors conclude that the characteristics of pneumonia caused by COVID-19 in pregnant women do not appear to be different from those in the general population with COVID-19. However, they report that pregnant women with underlying diseases were more likely to develop COVID-19 than others, and, in those infected with the virus, the rate of C-section and preterm birth increased.	This systematic review explored clinical symptoms, laboratory and radiological findings, and characteristics of pregnant women with COVID-19. The authors conclude that the characteristics of pneumonia caused by COVID-19 in pregnant women do not appear to be different from those in the general population with COVID-19. However, pregnant women with underlying diseases were more likely to develop COVID-19 than others, and, in those infected with the virus, the rate of C-section and preterm birth increased.	Karimi, L., Vahedian-Azimi, A., Makvandi, S., et al. (2021). A Systematic Review of 571 Pregnancies Affected by COVID-19. Clinical, Biological and Molecular Aspects of COVID-19, 287–298. <a href="https://doi.org/10.1007/978-3-030-59261-5_26">https://doi.org/10.1007/978-3-030-59261-5_26</a>
breastfeeding, COVID-19, SARS-CoV-2, post-partum care, pregnancy, skin-to-skin contact, SSV	4-Mar-21	<a href="#">COVID-19 Guidelines for Pregnant Women and New Mothers: A Systematic Evidence Review</a>	International Journal of Gynaecology and Obstetrics	Systematic Review	This systematic review aimed to summarize recommendations for 3 areas of maternal and neonatal care – breastfeeding, post-partum social distancing, and decontamination. The authors of this review searched the PubMed, Embase and Web of Science databases and found a total of 385 articles up to 8 November 2020. After removal of articles that did not cover the correct populations or subject matter, 74 articles were left and were included in the analysis. The results showed that most articles recommended direct breastfeeding with enhanced precaution measures. Many articles agreed that transmission via breast milk is unlikely, while a smaller proportion felt evidence was lacking to make a meaningful assessment. Recommendations regarding post-partum social distancing varied, with some articles recommending routine separation of the mother and newborn immediately after birth, regardless of either the mother or the child’s symptoms. Others specified that separation should occur only if either the mother or child was symptomatic or had symptomatic contacts, or if the infant was high-risk because they were pre-term or had required care in the neonatal ICU. Articles published more recently often recommended keeping the mother and newborn in the same room	This systematic review aimed to summarize recommendations for 3 areas of maternal and neonatal care – breastfeeding, post-partum social distancing and decontamination. Most articles recommended direct breastfeeding with enhanced precaution measures, and more recent articles recommended keeping the mother and newborn in the same room when possible. Decontamination recommendations emphasized mask wearing, good hand hygiene, and proper cleaning of surfaces.	DiLorenzo MA, O'Connor S, Ezekwesili C, et al. COVID-19 guidelines for pregnant women and new mothers: A systematic evidence review [published online ahead of print, 2021 Mar 4]. Int J Gynaecol Obstet. 2021. doi:10.1002/ijgo.13668

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					when possible. Decontamination recommendations emphasized mask wearing, good hand hygiene, and proper cleaning of surfaces. In conclusion, there was a focus on shared decision making when approaching topics such as breastfeeding and post-partum social distancing. Guidelines for decontamination were fairly uniform in nature.		
MIS-C; children; adolescents; PIMS-TS; Kawasaki; KD; India	3-Mar-21	<a href="#">Inclusion of Multisystem Inflammatory Syndrome in Children and Adolescents Temporally Related to COVID-19 in the Differential Diagnosis of Kawasaki Disease</a>	The Indian Journal of Pediatrics	Correspondence	In this brief correspondence, the authors discussed a recently published position paper from the Indian Academy of Pediatrics (IAP) on Kawasaki Disease (KD). This IAP position paper mentions various differential diagnosis of KD but fails to mention PIMS-TS or MIS-C. It is important that these two diseases be considered in the differential diagnosis of KD, as the clinical presentation is very much overlapping, though the underlying mechanism for hyper-inflammation is different. In KD, inflammation of the coronary arteries is due to IL-1, while the myocardial dysfunction and higher severity of the 2019-nCoV infection is predominantly driven by IL-6 and IL-10 in MIS-C. 3 different phenotypes of hyperinflammation in children has been speculated as classic KD, PIMS-TS, and macrophage activation syndrome. Though IVIG and steroids are the mainstay of therapy in these conditions with aspirin also being important in KD, the prognosis and long-term follow up are different. Hence, the authors of this correspondence would like to suggest that these evolving inflammatory diseases should be included in the position paper as one of the differentials for KD.	This brief correspondence discussed a recently published position paper from the Indian Academy of Pediatrics on Kawasaki Disease (KD). It is important that MIS-C and PIMS-TS should be considered in the differential diagnosis of KD, so the authors of this correspondence would like to suggest that these evolving inflammatory diseases should be included in the position paper as one of the differentials for KD.	Jagzape T, Goel AK. Inclusion of Multisystem Inflammatory Syndrome in Children and Adolescents Temporally Related to COVID -19 in the Differential Diagnosis of Kawasaki Disease. Indian Pediatr. 2021;58(2):191. doi:10.1007/s13312-021-2146-1
COVID-19; children; celiac disease; parental measures; Turkey	3-Mar-21	<a href="#">Evaluation of anti-COVID-19 measures taken by the parents of children with celiac disease: a cross-sectional study</a>	Sao Paulo Medical Journal	Original Research	This cross-sectional study determined the degree of awareness of COVID-19 among parents of children with celiac disease in Turkey and examined the preventive measures taken. A survey conducted online between May and July 2020 identified 73 parents (57.5% mothers) to include in the study. The mean age was 37.57 ± 6.56 years for the mothers, 41.15 ± 5.56 years for the fathers, and 11.36 ± 4.36 years for the children. The children's ages at diagnosis were 1-4 years in 48 cases (65.8%). 90.4% of the parents reported that SARS-CoV-2 was transmitted through "speaking, coughing, sneezing, and infection of the face after contact with virus-infected surfaces". 80.8% indicated that washing hands frequently with soap and water, cleaning the hands with alcohol-based disinfectants, avoiding face contact, and staying away from people with flu-like symptoms were important for preventing transmission of SARS-CoV-2. Moreover, washing hands "for 20 seconds" was reported to be important by 94.5% of parents. 53.4% of parents reported that they thought the risk of their child developing COVID-19 was greater than that of healthy children. 78.1% indicated that they did not have any difficulty in finding gluten-free foods for their children during the lockdown. Most of the parents reported that they were giving food supplements to their children in accordance with their doctors' advice. These parents of children with celiac disease believed that their children's risk of developing COVID-19 did not differ from that	This cross-sectional study determined the degree of awareness of COVID-19 among parents of children with celiac disease in Turkey and examined the preventive measures taken. The results showed that parents of children with celiac disease believed that their children's risk of developing COVID-19 did not differ from that of healthy children. These results revealed that the parents of children with celiac disease should be informed more about the COVID-19 pandemic.	Bükülmez A, Baş MT, Çiftçi E. Evaluation of anti-COVID-19 measures taken by the parents of children with celiac disease: a cross-sectional study. Sao Paulo Med J. 2021:S1516-31802021005006202. doi:10.1590/1516-3180.2020.0644.10122020.

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					of healthy children. These results revealed that the parents of children with celiac disease should be informed more about the COVID-19 pandemic.		
COVID-19; pediatric; pneumothorax; point-of-care lung ultrasound; Italy	3-Mar-21	<a href="#">Point-of-care lung ultrasound in the diagnosis and monitoring of paediatric patients with spontaneous pneumothorax in SARS-CoV-2 infection</a>	Journal of Paediatrics and Child Health	Viewpoint	The authors described 2 cases of pneumothorax (PTX) in Italy, which are among the first reported in COVID-19 patients <18 years old. The first was a 16-year-old boy who was transferred to the emergency department due to breathing difficulties and a positive SARS-CoV-2 PCR test result via throat swab. He complained of sudden chest pain during running. Physical examination revealed moderate respiratory distress and subcutaneous emphysema of the neck and upper chest. The second case was that of a 17-year-old boy with a known 10-day history of asymptomatic SARS-CoV-2 infection, brought to the emergency department after the sudden appearance of chest pain. On presentation, moderate respiratory distress was evident and breath sounds were reduced on the left. Point-of-care lung ultrasound (POC-LUS) was used to diagnose both patients with PTX. The role of POC-LUS in PTX is crucial as a valid diagnostic aid to support clinical evaluation, reducing the exposure to ionizing radiation. Furthermore, this practice avoids moving infected patients out of the isolation zone, because it can be easily performed at the bedside by trained personnel.	The authors described 2 cases of pneumothorax (PTX) in Italy, which are among the first reported in COVID-19 patients <18 years old. Point-of-care lung ultrasound (POC-LUS) was used to diagnose both patients with PTX. The role of POC-LUS in PTX is crucial as a valid diagnostic aid to support clinical evaluation, especially during the COVID-19 pandemic.	Musolino AM, Boccuzzi E, Supino MC, et al. Point-of-care lung ultrasound in the diagnosis and monitoring of paediatric patients with spontaneous pneumothorax in SARS-CoV-2 infection. J Paediatr Child Health. 2021. doi:10.1111/jpc.15410.
COVID-19; pediatric; acute kidney injury; MIS-C; United States	3-Mar-21	<a href="#">Acute kidney injury in pediatric patients hospitalized with acute COVID-19 and multisystem inflammatory syndrome in children associated with COVID-19</a>	Kidney International	Article	The authors described the incidence, associated clinical characteristics, and outcomes of acute kidney injury (AKI) in a pediatric cohort with COVID-19 and MIS-C in the United States between 9 March-13 August 2020. 152 patients were included, n=97 with acute COVID-19 (median age=8.2, IQR 1.5-13.8 years) and n=55 with MIS-C associated with COVID-19 (median age=7.5 years, IQR 1.5-13.8 years). AKI occurred in 8 patients with acute COVID-19 and in 10 with MIS-C. AKI, in unadjusted models, was associated with lower serum albumin levels (OR=0.17; 95% CI 0.07-0.39; p<0.001) and higher white blood cell counts (OR=1.11; 95% CI 1.04-1.2; p=0.003). Patients with MIS-C and AKI had significantly greater rates of systolic dysfunction, compared to those without (80% vs 49%, p=0.038). In unadjusted models, patients with AKI had hospitalizations 8.4 days longer than patients without AKI (95% CI 4.4-6.7; p<0.0001). AKI in acute COVID-19 and MIS-C may be related to inflammation and/or dehydration. Further research in larger pediatric cohorts is needed to better characterize risk factors for AKI in acute COVID-19 and in MIS-C consequent to COVID-19.	The authors described the incidence, associated clinical characteristics, and outcomes of acute kidney injury (AKI) in a pediatric cohort with COVID-19 and MIS-C in the United States. Children with COVID-19-related AKI had increased white blood cell counts, lower serum albumin levels, and greater rates of systolic dysfunction. Pediatric COVID-19-related AKI was associated with outcomes including increased length of hospital stay.	Basalely A, Gurusinge S, Schneider J, et al. Acute kidney injury in pediatric patients hospitalized with acute COVID-19 and multisystem inflammatory syndrome in children associated with COVID-19. Kidney Int. 2021. doi:10.1016/j.kint.2021.02.026
COVID-19; neonatology prenatal consultation; satisfaction survey; telemedicine; virtual prenatal	3-Mar-21	<a href="#">Evaluating Patients' and Neonatologists' Satisfaction With the Use of Telemedicine for Neonatology Prenatal</a>	Frontiers in Pediatrics	Article	This cross-sectional study evaluated patients' and neonatologists' satisfaction with virtual prenatal consultations during the COVID-19 pandemic and compared satisfaction levels of patients receiving virtual vs. in-person consultations. Participants included 50 pregnant women with diagnosis of fetal anomalies who received neonatology prenatal consultations at Oklahoma Children's Hospital (USA), either in-person (n=12; all patients between ages 20-39 years) or through telemedicine (n=35; 91.42% patients between ages 20-39 years),	This cross-sectional study evaluated patients' and neonatologists' satisfaction with virtual prenatal consultations during the COVID-19 pandemic and compared satisfaction levels of patients receiving virtual vs. in-person consultations. The	Lapadula MC, Rolfs S, Szyld EG, Hallford G, Clark T, McCoy M, McKnight S, Makkar A. Evaluating Patients' and Neonatologists' Satisfaction With the Use of Telemedicine for Neonatology Prenatal Consultations During the

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visits; United States		<a href="#">Consultations During the COVID-19 Pandemic</a>			from May to mid-November 2020, and neonatologists providing virtual prenatal consultations in the same period (n=8, demographic information not collected). Patients and physicians who agreed to participate rated acceptability completing an anonymous 5-point Likert scale survey. Overall consultation quality was rated good or excellent by all video-consult and in-person patients. Patient group means computed on six 5-point Likert items about patient-physician communication did not differ significantly (p=0.753263). All 8 physicians agreed or strongly agreed that telemedicine was effective and their combined consultation quality score on the Likert scale computed on 10 survey questions was high. The findings indicate patients and physicians were highly satisfied with virtual visits despite patient inexperience with tele-consultations, the quick implementation of telemedicine, and the sensitive reason for the visit.	findings indicate patients and physicians were highly satisfied with virtual visits despite patient inexperience with tele-consultations, the quick implementation of telemedicine, and the sensitive reason for the visit.	COVID-19 Pandemic. Front Pediatr. 2021;9:642369. doi:10.3389/fped.2021.642369
COVID-19, SARS-CoV-2, ARDS, Cesarean section, Case report	3-Mar-21	<a href="#">COVID-19 with Severe Acute Respiratory Distress in a Pregnant Woman Leading to Preterm Cesarean Section: A Case Report</a>	Case Reports in Women's Health	Case Report	This is a case report of a 25-year old G3P1 pregnant woman who presented to the emergency department at 34+2 weeks gestation with chest pain. Before presentation to the hospital, she had a 5-day history of sore throat and cough followed by fever and myalgia. She tested positive for SARS-CoV-2 3 days before admission via nasopharyngeal PCR testing. The patient was admitted with a fever (39.4 degrees C), a heart rate of 125, a respiratory rate of 32 with SpO2 98% without oxygen supply, and blood pressure of 119/79 mmHg. There was no sign of ischemia on an initial EKG. 5 days after admission, she became increasingly hypoxic and was transferred to the ICU, where she was placed on high-flow oxygen and intermittent CPAP. An emergency cesarean section was subsequently performed at 35+0 weeks gestation. She delivered a female infant weighing 2250 g with APGAR scores of 4 at two minutes of age and 10 at five and ten minutes of age. The neonate's tracheal aspirate, urine culture, blood culture, and stool tests were all negative for SARS-CoV-2. The neonate tested negative for SARS-CoV-2 via nasopharyngeal swab on days four and six after birth. 3 days post-op, the mother's oxygen needs increased, requiring mechanical ventilation. A CT scan of the chest showed bilateral lung involvement with ground-glass opacities. The mother was also treated with continuous inhaled nitric oxide for five days at gradually reducing concentration. She recovered after a total of 25 days of mechanical ventilation, and she and her newborn were discharged from the hospital in good condition. No vertical transmission of SARS-CoV-2 was observed.	This is a case report of a 25-year old G3P1 pregnant woman who presented to the emergency department at 34+2 weeks gestation with chest pain, 3 days after testing positive for SARS-CoV-2. She recovered after 25 days of mechanical ventilation and treatment with inhaled nitric oxide. She delivered a healthy neonate via emergency C-section, and there was no evidence of vertical transmission.	Paramanathan S, Kyng KJ, Laursen AL, Jensen LD, Grejs AM, Jain D. COVID-19 with severe acute respiratory distress in a pregnant woman leading to preterm caesarean section: A case report. Case Reports in Women's Health. 2021;30:e00304. <a href="https://www.sciencedirect.com/science/article/pii/S2214911221000229">https://www.sciencedirect.com/science/article/pii/S2214911221000229</a> . doi: <a href="https://doi.org/10.1016/j.crw.2021.e00304">https://doi.org/10.1016/j.crw.2021.e00304</a> .

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Coronavirus disease 2019; pediatric gastroenterology; leadership; severe acute respiratory syndrome coronavirus 2	3-Mar-21	<a href="#">Changes to Pediatric Gastroenterology Practice during the COVID-19 pandemic and lessons learned: An international survey of division and group heads</a>	Gastroenterology	Article	The authors conducted a survey of pediatric gastroenterology (GI) division and group heads from 20 countries on their response to the COVID-19 pandemic and its impact on pediatric GI practices. Endoscopy was reported to have decreased by >75% for 77.4% of respondents (89/115). Reductions of >75% were also reported for ambulatory (48.6%, 56/115) and inpatient services (47.0%, 54/115). Changes to care delivery of ambulatory services (98.3%) and endoscopy (97.4%) were the most affected, and non-endoscopic procedures requiring intubation were most often postponed (84%). 50% of respondents reported no compromise in diagnosing and managing patients despite the care restrictions; however, 36.1% reported more severe presentations of typical diseases due to delays in diagnosis. Priorities identified for re-opening services were the management of patient flow with space to maintain safety (59.5%) and triaging postponed and new patients (55.2%). Virtual care as a successful solution for care during the pandemic was identified by 89.3% of respondents. The authors state that the COVID-19 pandemic did have a significant impact on pediatric GI practices worldwide.	The authors conducted a survey of pediatric gastroenterology division and group heads from 20 countries on their response to the COVID-19 pandemic and its impact on pediatric GI practices. Endoscopy was reported to have a decrease of >75% by 77.4% of respondents.	Tam SS, Picoraro JA, Gupta SK, et al. Changes to Pediatric Gastroenterology Practice during the COVID-19 Pandemic and Lessons Learned: An International Survey of Division and Group Heads [published online ahead of print, 2021 Mar 3]. <i>Gastroenterology</i> . 2021;S0016-5085(21)00469-8. doi:10.1053/j.gastro.2021.02.064
Antenatal steroids, corticosteroids, preterm birth, pregnancy, infants	3-Mar-21	<a href="#">Current evidence for prenatal and postnatal corticosteroids in preterm infants</a>  <a href="#">[Free Access to Abstract Only]</a>	Archives of Disease in Childhood Fetal and Neonatal Edition	Summary Article	Antenatal therapy in pregnant women at risk of preterm delivery at 24–34 weeks lowers risk for mortality and severe morbidity in preterm infants. However, the use of antenatal corticosteroids in women with COVID-19 raises important questions regarding potential risks and benefits summarized in this article. Early studies in the pandemic suggested that patients who received systemic corticosteroids had worse outcomes, although it was not clear whether this finding was related to the underlying severity of disease or to the therapeutic intervention itself. However, the Recovery trial reported reduced mortality associated with high-dose dexamethasone treatment. Extrapolation from high-dose corticosteroid therapy in COVID-19-infected, non-pregnant adults to short, lower-dose courses of antenatal corticosteroids is complex. In order to assess relative risk (RR), it is important to note that the number needed to treat with antenatal corticosteroids to prevent one death before discharge increases from 6 at 23–24 weeks' gestation to 798 at 34 weeks' gestation. Accordingly, there have been calls from maternal–fetal medicine specialists to consider limiting antenatal corticosteroid administration to women before 32 weeks' gestation. However, despite these concerns, 27 professional organizations have published 37 recommendations mostly recommending unaltered use of antenatal corticosteroids during the pandemic, at least up to 34 weeks gestation.	The authors review risks and benefits of antenatal and postnatal corticosteroids in preterm infants, highlighting considerations during the COVID-19 pandemic. Most professional organizations recommend unaltered use of antenatal corticosteroids during the pandemic, at least up to 34 weeks gestation.	Shinwell ES, Gurevitz P, Portnov I. Current evidence for prenatal and postnatal corticosteroids in preterm infants. <i>Arch Dis Child Fetal Neonatal Ed</i> . 2021;fetalneonatal-2020-319706. doi:10.1136/archdischild-2020-319706
Pregnancy, hypertensive disorders, maternal	3-Mar-21	<a href="#">COVID-19 Infection and Hypertensive Disorders of Pregnancy</a>	American Journal of Obstetrics and Gynecology	Original Research	This retrospective cohort study assessed whether COVID-19 is associated with an increased risk of hypertensive disorders of pregnancy (HDP). Women admitted for delivery at a hospital in St Louis, USA from June 1–November 30, 2020, with a positive SARS-CoV-2 test during pregnancy were compared 1:2 with randomly	This retrospective cohort study assessed the association between SARS-CoV-2 infection during pregnancy and risk of hypertensive disorders of	Rosenbloom JI, Raghuraman N, Carter EB, Kelly JC. COVID-19 Infection and Hypertensive Disorders of Pregnancy [published online ahead of

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health, obstetrics		<a href="#">[Abstract Only Available]</a>			selected controls who had a negative SARS-CoV-2 test and were matched for race and parity. Of 1856 births, there were 83 women (4.5%) reported to have COVID-19 (age range 23-31 years). Patients with COVID-19 had almost a two-fold risk of HDP (Hazard Ratio (HR) 1.93 (95%CI 1.13, 3.31). However, COVID-19 was not associated with severity of HDP, and severity of COVID-19 was not associated with HDP development. Among patients with COVID-19 and HDP at delivery, the median interval from COVID-19 diagnosis to delivery was 3.8 weeks (IQR 0.29, 11.5). In additional analysis, early, but not late, COVID-19 was associated with HDP development (HR for early COVID-19 2.17 (95%CI 1.11, 4.24), HR for late COVID-19 1.68, (95%CI 0.79, 3.57). The authors conclude that early SARS-CoV-2 infections are associated with HDP, suggesting that SARS-CoV-2 may alter pregnancy physiology and increase the risk of HDP development over time.	pregnancy (HDP). Patients with COVID-19 had almost a two-fold risk of HDP, and early gestation, but not late, COVID-19 was associated with HDP development. The authors conclude that SARS-CoV-2 infection may alter pregnancy physiology and increase the risk of HDP development over time.	print, 2021 Mar 3]. Am J Obstet Gynecol. 2021;S0002-9378(21)00150-2. doi:10.1016/j.ajog.2021.03.001
COVID-19, Pediatric Cancer, Low - Middle Income Countries	3-Mar-21	<a href="#">Global effect of the COVID-19 pandemic on paediatric cancer care: a cross-sectional study</a>	The Lancet Child and Adolescent Health	Original Research	This cross-sectional study assessed the effect of the COVID-19 pandemic on global pediatric cancer care. A survey of continuity of care was distributed to pediatric oncology providers worldwide from June 22 to Aug 21, 2020. 311 responses from 213 institutions in 79 countries from all WHO regions were included in analysis. 15 (7%) centers reported complete closure of pediatric hematology-oncology services (median 10 days, range 1–75 days). 5 (2%) centers were no longer evaluating new cases of suspected cancer, while 43% (90 of 208) of the remaining centers described a decrease in newly diagnosed pediatric cancer cases. 73 (34%) centers reported increased treatment abandonment. Changes to cancer care delivery included: reduced surgical care (153 [72%]), blood product shortages (127 [60%]), chemotherapy modifications (121 [57%]), and interruptions to radiotherapy (43 [28%] of 155 institutions that provided radiotherapy before the pandemic). The decreased number of new cancer diagnoses did not vary based on country income status (p=0.14). However, unavailability of chemotherapy agents (p=0.022), treatment abandonment (p<0.0001), and interruptions in radiotherapy (p<0.0001) were more frequent in low-income and middle-income countries (LMICs) than in high-income countries. The authors conclude that the COVID-19 burden is more pronounced in pediatric cancer care in LMICs and advocate for equitable distribution of global resources in public health emergencies.	This cross-sectional study assessed the effect of the COVID-19 pandemic on global pediatric cancer care. The authors conclude that the COVID-19 burden is more pronounced in pediatric cancer care in LMICs and advocate for equitable distribution of global resources in public health emergencies.	Graetz D, Agulnik A, Ranadive R, et al. Global effect of the COVID-19 pandemic on paediatric cancer care: a cross-sectional study. The Lancet Child and Adolescent Health (2021 Mar 3). <a href="https://doi.org/10.1016/S2352-4642(21)00031-6">https://doi.org/10.1016/S2352-4642(21)00031-6</a> .
SARS-CoV-2 RNA, viral load, children, COVID-19	3-Mar-21	<a href="#">Upper respiratory tract SARS-CoV-2 RNA loads in symptomatic and asymptomatic children and adults</a>	medRxiv	Preprint (not peer-reviewed)	This retrospective, single center study examined a large cohort June 2020 – January 2021 in Valencia, Spain to compare SARS-CoV-2 RNA load in the upper respiratory tract between children and adults, either presenting with COVID-19 or asymptomatic. 1,184 consecutive subjects [(256 children; median age 12 years, range 0-18 years) and (928 adults; median age 37 years, range 19-93 years)] testing positive for SARS-CoV-2 RNA in nasopharyngeal exudates were included, of whom 424 (121 children and 303 adults) had	This retrospective, single center study examined a large cohort in Spain to compare SARS-CoV-2 RNA load in the upper respiratory tract between children and adults, either presenting with COVID-19 or asymptomatic. The authors conclude that children	Costa R, Bueno F, Albert E, et al. Upper respiratory tract SARS-CoV-2 RNA loads in symptomatic and asymptomatic children and adults. medRxiv. 2021 Mar 3. doi:10.1101/2021.03.03.21252814.

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					COVID-19 not requiring hospitalization and 760 (135 children and 625 adults) were asymptomatic close contacts of COVID-19 patients. Median SARS-CoV-2 RNA loads were comparable between adults and children with COVID-19 (7.14 log <sub>10</sub> copies/ml vs. 6.98 log <sub>10</sub> copies/ml; P=0.094). Median SARS-CoV-2 RNA load in asymptomatic children and adults was similar (6.20 log <sub>10</sub> copies/ml vs. 6.48 log <sub>10</sub> copies/ml; P=0.97). Children with COVID-19 symptoms displayed SARS-CoV-2 RNA loads comparable to their asymptomatic counterparts (P=0.61). Meanwhile in adults, median SARS-CoV-2 RNA load was significantly higher in symptomatic than in asymptomatic subjects (P<0.001), yet comparable (p=0.61) when the analysis excluded patients sampled within 48 hours after symptoms onset. The authors conclude that children may be drivers of SARS-CoV-2 transmission in the general population at the same level as adults.	may be drivers of SARS-CoV-2 transmission in the general population at the same level as adults.	
COVID-19; uterine transmission; stillborn; pregnancy	3-Mar-21	<a href="#">Intrauterine Transmission of SARS-CoV-2 (COVID-19 Virus)</a>	The Journal of Obstetrics and Gynaecology of India	Letter to the Editor	The authors describe the case of a 30-year old pregnant woman (G2P1L1) who was admitted at a tertiary care center in India at 20 weeks and 6 days gestation. She reported vaginal bleeding and loss of fetal movement after a 1-day history of a fall. 4 days prior, she had a mild fever, cough, and sore throat, for which she took two 500-mg shots of acetaminophen. She had the beta-thalassemia trait and also tested positive for SARS-CoV-2. Upon admission, she had a mild cough, and her uterus was non-tender with normal tone, with mild vaginal bleeding upon investigation with a speculum. Ultrasonography revealed no fetal heart activity, with the fetal death presumed to be 4 days post symptom onset. The patient was given mifepristone and misoprostol to terminate the pregnancy, after which she delivered a stillborn female (340g) who tested positive for SARS-CoV-2 via nasopharyngeal and oropharyngeal swabs. Histopathological testing of the placenta revealed placental hypertrophy of membrane arterioles, and with mixed inflammatory cell infiltrates, atherosclerosis of maternal arterioles, deciduitis with a mixed inflammatory infiltrate (predominantly neutrophils), dilated fetal vessels with mural fibrin, villous edema in many villi, with few syncytial knots with perivillous increased fibrin. The authors concluded that further studies are needed to confirm intrauterine vertical transmission of SARS-CoV-2.	The authors describe the case of a 30-year old pregnant woman at 20 weeks and 6 days gestation with SARS-CoV-2 admitted to a tertiary care center in India after a 4-day history of fever, cough, and sore throat. She had a history of a fall and reported loss of fetal movement, eventually delivering a stillborn female (240g) who tested positive for SARS-CoV-2. The authors concluded that further studies are needed to confirm intrauterine vertical transmission of SARS-CoV-2.	Agarwal M, Basumatary S, Kant B, Kumar S. Intrauterine Transmission of SARS-CoV-2 (COVID-19 Virus) [published online ahead of print, 2021 Mar 3]. J Obstet Gynaecol India. 2021;1-3. doi:10.1007/s13224-021-01431-y
COVID-19; maternal-fetal; placenta; pregnancy	3-Mar-21	<a href="#">Influence of SARS-COV-2 during pregnancy: A placental view</a>	Biology of Reproduction	Review	The authors conducted a literature review on placental changes in infected pregnant women and/or asymptomatic carriers of SARS-CoV-2 during pregnancy, aiming to investigate the possible vertical transmission. A systematic review was carried out on the effects that COVID-19 can cause directly and/or indirectly to pregnancy and the placenta in the following databases: Pubmed, Science Direct, Scielo, Lilacs, and Web of Science. The following descriptors were used for the database search: placenta, pregnant woman, COVID-19, maternal-fetal. The results indicate transplacental transmission in some cases and the presence of SARS-CoV-2 in amniotic fluid,	The authors conducted a literature review on placental changes in SARS-CoV-2-infected pregnant women and/or asymptomatic carriers of SARS-CoV-2 during pregnancy, aiming to investigate the possible vertical transmission. Based on the researched material, there is little evidence of transplacental	Costa MAS, Albuquerque Britto DBL, Silva ME, et al. Influence of SARS-COV-2 during pregnancy: A placental view. Biol Reprod. 2021;ioab037. doi:10.1093/biolre/ioab037.

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					umbilical cord, and peripheral blood. Finally, pathological studies suggest that there are morphological changes related to SARS-CoV-2 infection in the placentas. Based on the researched material, there is little evidence of transplacental vertical transmission and its respective morphological changes related to viral infection in the placenta.	vertical viral transmission and its respective morphological changes related to viral infection in the placenta.	
COVID-19, vaccine, SARS-CoV-2, syncytin 1, pregnancy	3-Mar-21	<a href="#">Are COVID-19 vaccines safe in pregnancy?</a>	Nature Reviews Immunology	Commentary	This commentary debunks unfounded rumors that the COVID-19 vaccine is unsafe for pregnant women. The specific claim cited in unsubstantiated social media posts is that the antibodies that recognize the SARS-CoV-2 spike protein can cross-react with the human placental protein syncytin 1 and damage the placenta. Formal approaches have shown that this is patently false. Early clinical trial data show that the vaccines do not prevent female rodents from becoming pregnant or harm the pups if given during pregnancy. Further, pregnant people were excluded from the trials and participants were asked to avoid becoming pregnant, but, nonetheless, 53 pregnancies occurred across various vaccine trials. The outcomes of these pregnancies show no significant difference between vaccinated vs. unvaccinated groups in either the rate of accidental pregnancies or miscarriages. Currently, 20,000 pregnant people had received a COVID-19 vaccine. Pregnant patients with COVID-19 are more likely to need intensive care, deliver early, and have their infants admitted to the neonatal unit. It is plausible that vaccination will reduce these risks and, should this be the case, pregnant people should perhaps be prioritized for vaccination. In all, the COVID-19 vaccines seem to be safe for pregnant people.	The author argues why pregnant women should get the COVID-19 vaccine. The vaccine has not shown any detrimental effects in this group in either pre-clinical or clinical trials, and the risks associated with SARS-CoV-2 infection in pregnancy can be severe. Therefore, pregnant women should get vaccinated, and perhaps even be given priority.	Male V. Are COVID-19 vaccines safe in pregnancy? [published online ahead of print, 2021 Mar 3]. Nat Rev Immunol. 2021;1-2. doi:10.1038/s41577-021-00525-y
COVID-19, incidence, youth soccer, US	3-Mar-21	<a href="#">COVID-19 in Youth Soccer During Summer 2020</a>	Journal of Athletic Training	Original Research	This retrospective survey study identified the incidence of COVID-19 and the mitigation procedures being implemented among a nationwide sample of youth soccer players [ages not noted] in the United States. Surveys were distributed to the directors of the Elite Clubs National League between August 26 – 30, 2020 and completed by 129 directors. 124 clubs, representing 91,007 players, had restarted practicing soccer since local restrictions were put in place. 282 cases of COVID-19 were reported, including 239 players and 43 staff members from 78 clubs (63%). Of the 119 clubs that had progressed to group activities, 218 cases of COVID-19 were reported among 85,861 players. Overall, youth soccer players had a lower case rate and incidence rate than children in the US (254 v. 477 cases per 100,000; incidence rate ratio [IRR]=0.511, 95% CI = 0.40-0.57; p<0.001) and players/staff had lower case and incidence rates than the general population (268 v. 864 cases per 100,000; IRR=0.202, 95% CI = 0.19-0.21; p<0.001). After adjusting for local COVID-19 incidence, there was no relationship between club COVID-19 incidence and phase of return (non-contact: b=0.35±0.67, p=0.61; contact: b=0.18±0.67, p=0.79). Soccer clubs reported utilizing a median of 8 (IQR: 6-10) risk reduction procedures. The authors concluded that the incidence of COVID-19 among youth soccer	This retrospective survey based study identified the incidence of COVID-19 and the mitigation procedures being implemented among a nation-wide sample of youth soccer players in the United States. The authors concluded that, during the summer of 2020, the incidence of COVID-19 among youth soccer athletes was low compared to the incidence among all children in the United States, and no relationship was identified between COVID-19 incidence and phase of return to soccer.	Watson AM, Haraldsdottir K, Biese K, et al. COVID-19 in Youth Soccer During Summer 2020 [published online ahead of print, 2021 Mar 3]. J Athl Train. 2021;10.4085/610-20. doi:10.4085/610-20

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					athletes was low compared to the incidence among all children in the United States, and no relationship was identified between COVID-19 incidence and phase of return to soccer.		
COVID-19, lockdown, physical activity, youth, ethnicities, United Kingdom	3-Mar-21	<a href="#">Covid-19 lockdown: Ethnic differences in children's self-reported physical activity and the importance of leaving the home environment. A longitudinal and cross-sectional study from the Born in Bradford birth cohort study</a>	medRxiv	Preprint (not peer-reviewed)	This longitudinal and cross-sectional study was part of the Born in Bradford (BiB) COVID-19 Research Study and analyzed children's self-reported physical activity (PA) during the first COVID-19 UK lockdown. From May 21 - July 31, 2020, 949 (17.9%) children from BiB had completed PA data and were included in the analysis. Ages ranged from 9 to 13 years, with median age 10.5 years (SD 1.1), 484 were male. 634 (66.8%) children had matched PA data prior to the COVID-19 pandemic. 3 categories of ethnicity were used: White British (WB), Pakistani Heritage (PH) and 'Other' (O). WB children were more sufficiently active (>60 minutes moderate intensity PA per day) (34.1%) compared to PH (22.8%) or O children (22.8%; p=0.00). Leaving the home at least once a day significantly increased the odds of being sufficiently active, with the odds increasing further for children who reported leaving the home more than once a day (OR=1.6 once a day, 95%CI 1.04-2.36, p=0.03; OR=2.7 ≥once a day, 95%CI 1.66-4.48, p=0.00). WB left the home more frequently and for longer periods. Modifiable variables related to being sufficiently active were frequency, duration, and type of activity, and destination away from the home environment. There was a large reduction in children being sufficiently active during the first COVID-19 lockdown (28.9%) compared to pre-pandemic (69.4%). The authors conclude that the impact and consequences of COVID-19 lockdowns upon children's PA should be considered.	This longitudinal and cross-sectional study was part of the Born in Bradford COVID-19 Research Study and analyzed children's self-reported physical activity during the first COVID-19 UK lockdown. White British children were more sufficiently active (34.1%) than those of Pakistani heritage (22.8%) or other ethnicity (22.8%). There was a large reduction in children being sufficiently active during the first COVID-19 lockdown (28.9%) compared to pre-pandemic (69.4%).	Bingham D, Daly-Smith A, Hall J et al. Covid-19 lockdown: Ethnic differences in children's self-reported physical activity and the importance of leaving the home environment. A longitudinal and cross-sectional study from the Born in Bradford birth cohort study. medRxiv. 2021. doi: <a href="https://doi.org/10.1101/2021.02.26.21252543">https://doi.org/10.1101/2021.02.26.21252543</a>
Pediatric psychology; Hospitalization; Coronavirus 2019; Accompaniment; Families	3-Mar-21	<a href="#">Implementation of guidelines to integrate the caregiver as a coassistant of health-care personnel during the hospital stay of COVID-19 pediatric patients: adaptation in a Mexican public pediatric hospital</a>	Boletin Medico del Hospital Infantil de Mexico	Review Article	The authors discuss the experience of implementing a chosen caregiver model for hospitalized pediatric patients (ages not specified) with COVID-19 in Mexico (dates not specified). In this model, the caregiver serves as a co-assistant for patient care to reduce the physical and psychological risk to staff, increase pediatric patient cooperation, decrease stay duration, reduce the negative psychological impact on the patient and family, and optimize hospital operations. The model includes medical evaluation, training, health monitoring, communication, nutrition interventions with caregivers, and mental health interventions when appropriate for caregivers and patients. A description of the admission route and flowcharts of the care model is provided in the article. Adjustments made to the model by the implementation team included acquiring more space for patients and caregivers, tailoring guidelines based on role (provider or caregiver), designating areas for confirmed or suspected patients with SARS-CoV-2 infection, and decreasing the frequency of SARS-CoV-2 infection testing for caregivers. Some limitations include the caregiver's hesitancy to enter areas designated for patients with SARS-CoV-2 infection and teens choosing to be left alone for fear of infecting their family members. The model serves as a way to adapt guidelines to	This article describes the implementation of a chosen caregiver model for hospitalized pediatric patients with COVID-19 in Mexico, consisting of the caregiver serving as a co-assistant for patient care. Considerations for implementing the model are described along with limitations. The authors indicated several benefits of the model, including a reduction in physical and psychological risk to staff and a family-centered, comprehensive bio-psycho-social care experience for the patient.	Luque-Coqui M, Adame-Vivanco MJ, de la Rosa-Zamboni D, et al. Implementation of guidelines to integrate the caregiver as a coassistant of health-care personnel during the hospital stay of COVID-19 pediatric patients: adaptation in a Mexican public pediatric hospital [published online, 2021 Mar 3]. Bol Med Hosp Infant Mex. 2021;doi:10.24875/BMHIM.20000256

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					pediatric circumstances and prevent family separation due to COVID-19 hospitalization through family-centered care and a comprehensive bio-psycho-social care experience.		
COVID-19; pediatric; asthma control; maintenance therapy; Italy	3-Mar-21	<a href="#">Pediatric asthma control during the COVID-19 pandemic</a>	Immunity, Inflammation and Disease	Original Research	This study investigated the level of asthma control and maintenance therapy used in asthmatic children during the COVID-19 lockdown in Italy. Among asthmatic children attending an outpatient clinic, 92 patients (males, n=67; mean age=12 ± 3 years) prescribed the same therapy in March-April 2019, and March-April 2020 were identified. The authors separately analyzed 13 children (n=9 males; mean age=13.7 ± 2.2 years) with severe asthma treated with Omalizumab during the lockdown. The level of asthma control (measured using GINA-score) and the maintenance therapy used during the lockdown (March-April 2020) were compared with those of March-April 2019. A higher proportion of children modified their maintenance therapy in 2020 compared to 2019 (38% vs. 15.2%, p < 0.001), with a significant increase in both the proportion of children who increased (p = 0.033) and in children who decreased their therapy (p = 0.026). The GINA score was significantly lower (indicating a better control) in March 2020 compared to March 2019 (p = .023) and in April 2020 compared to April 2019 (p = .007). Furthermore, the 13 children treated with Omalizumab showed a significantly better level of control in 2020 compared to 2019 (March p = 0.011; April p = 0.017). The findings indicate that the level of control improved during the lockdown period, likely because of the reduced exposure to typical asthma triggers due to confinement. Some patients reduced maintenance treatment, likely because of the good level of disease control. In contrast, others increased it, either because of symptoms or because of fear and anxiety related to the pandemic.	This study investigated the level of asthma control and maintenance therapy used in asthmatic children during the COVID-19 lockdown in Italy. The findings indicate that the level of control improved during the lockdown period, likely because of the reduced exposure to typical asthma triggers due to confinement. The lockdown also affected children's attitudes toward their maintenance therapy.	Ferraro VA, Zamunaro A, Spaggiari S, et al. Pediatric asthma control during the COVID-19 pandemic. Immun Inflamm Dis. 2021. doi:10.1002/iid3.418.
COVID-19, maternal mental health, NICU, prematurity	3-Mar-21	<a href="#">COVID-19-related health worries compound the psychiatric distress experienced by families of high-risk infants</a>	Journal of Perinatology	Original Research	This cross-sectional survey study examined how COVID-19-related health worries might moderate the effect of the neonatal ICU (NICU) experience on maternal mental health symptoms. It included mothers who gave birth in the US in the previous 6 months (N = 628 women: mothers of healthy infants n = 565, mothers of NICU infants n = 63). Data was collected from May 19 - September 23, 2020. Mean age of the mothers was 33.55 years (SD = 3.45). At the time of survey completion, the mean age of infants not admitted to a NICU was 11.95 weeks (SD = 7.29), and mean age of NICU infants was 11.27 weeks (SD = 8.05). COVID-19-related health worries were assessed using the Coronavirus Health Impact Survey (CRISIS). NICU parents reported significantly higher symptoms of anxiety and post-traumatic stress disorder (p < 0.05). Group differences in the remaining outcomes did not achieve statistical significance (depression: p = 0.13; loneliness: p = 0.09). COVID-19-related health worries were associated with mental health symptoms among NICU mothers whose infants were hospitalized for reasons other than prematurity (most commonly transient respiratory problems and	This cross-sectional survey study from the US examined how COVID-19-related health worries might moderate the effect of the neonatal ICU (NICU) experience on maternal mental health symptoms. COVID-19-related health worries were associated with mental health symptoms among NICU mothers whose infants were hospitalized for reasons other than prematurity (most commonly transient respiratory problems and hypoglycemia). The authors conclude that these data support the recent call for enhanced	Liu CH, Mittal L, Erdei C. COVID-19-related health worries compound the psychiatric distress experienced by families of high-risk infants [published online ahead of print, 2021 Mar 3]. J Perinatol. 2021;1-5. doi:10.1038/s41372-021-01000-1

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					hypoglycemia). The authors suggest that the unexpected nature of these medical conditions and need for an unplanned NICU hospitalization may be perceived as traumatic, increasing the risk for trauma-related symptoms. The authors conclude that these data support the recent call for enhanced psycho-social support of all families of high-risk infants.	psycho-social support of all families of high-risk infants.	
COVID-19; Healthcare workers; Pediatric emergency; Personal protective equipment	3-Mar-21	<a href="#">Impact of novel coronavirus Disease-19 (COVID-19) pandemic in Italian pediatric emergency departments: a national survey</a>	Italian Journal of Pediatrics	Original Research	This was an observational, online survey study conducted by the Italian Society of Pediatric Emergency from April 1-30, 2020, on organizational changes that took place in Italian pediatric departments (PED) during the COVID-19 pandemic. 94 hospitals, from every region of Italy, completed the survey. 98% of the hospitals created a special pre-triage area, 30% of which were dedicated to pediatrics. Hospital directives mainly concerned the use of PPE (95%), the methods of performing nasopharyngeal swab testing (85.71%), the hospitalization of infectious subjects (84.29%) and their transfer to other hospitals (95.7%). The comparison of PED visits and admissions between March 2019 and 2020, showed that there was an overall reduction of 75.58% for emergency visits and 68.42% for admissions. In 15/94 hospitals, pediatric beds were used to care for adult COVID-19 patients. The authors state that the COVID-19 outbreak highlighted a gap between infectious disease healthcare and epidemiologist advice for preventing the spread of the disease, versus the actions taken by the state authorities. Finally, the authors state that the prompt activation and implementation of containment measures to reduce the risk of COVID-19 in Italy, together with the attention and re-organization of hospitals and departments, reduced the risk of viral transmission.	This was an observational, online survey study conducted by the Italian Society of Pediatric Emergency from April 1-30, 2020, on organizational changes that took place in Italian pediatric departments during the COVID-19 pandemic. The authors conclude that the prompt activation and implementation of containment measures to reduce the risk of COVID-19 in Italy, together with the attention and re-organization of hospitals and departments, reduced the risk of viral transmission.	Talarico V, Pinto L, Marseglia GL, et al. Impact of novel coronavirus Disease-19 (COVID-19) pandemic in Italian pediatric emergency departments: a national survey. Ital J Pediatr. 2021;47(1):47. Published 2021 Mar 3. doi:10.1186/s13052-021-00996-8
COVID-19, pediatric cancer care, low and middle-income countries, health care systems	3-Mar-21	<a href="#">Effect of the COVID-19 outbreak on pediatric cancer care in low-income and middle-income countries</a>	The Lancet Child and Adolescent Health	Comment	The author of this comment responds to an article by Graetz et al. that reported on a cross-sectional survey (from June 22 - Aug 21, 2020) distributed to 311 health-care professionals at 213 institutions in 79 countries, published in The Lancet Child & Adolescent Health. The author agrees with the findings that during the COVID-19 outbreak, children with cancer have been at risk of having treatments delayed, interrupted, or substantially modified. Pediatric oncology units altered their basic operationality to minimize the risk of SARS-CoV-2 spread, while ensuring that children and adolescents accessed their oncology treatment. The author highlights that in response to these challenges, countries in Latin America have implemented new policies and distributed resources. She cites that hospitals decreased hospital visits when patients had a high risk of death due to SARS-CoV-2 infection. Additionally, she gives an example from El Salvador, where the national pediatric cancer program team recognized the importance of expanding telemedicine. The author states that health-care systems in the Latin America region need to re-organize health-care infrastructure to ensure sustained curative outcomes for children with cancer, while maintaining public health and safety during the pandemic. She	The author of this comment responds to an article by Graetz et al. that reported on a cross-sectional survey (from June 22 – Aug 21, 2020) distributed to 311 health-care professionals at 213 institutions in 79 countries, published in The Lancet Child & Adolescent Health. The author states that health-care systems in the Latin America region need to re-organize health-care infrastructure to ensure sustained curative outcomes for children with cancer, while maintaining public health and safety during the COVID-19 pandemic.	Fuentes-Alabi, S. Effect of the COVID-19 outbreak on paediatric cancer care in low-income and middle-income countries. The Lancet Child & Adolescent Health, 2021. Published Online March 3, 2021. <a href="https://doi.org/10.1016/S2352-4642(21)00058-4">https://doi.org/10.1016/S2352-4642(21)00058-4</a>

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					reports that the COVID-19 pandemic has created an opportunity to develop legislation for childhood cancer services, and cites the Peruvian legislature's proposed Childhood Cancer Law from April 2020 as an example.		
asthma; hospitalization; COVID-19	3-Mar-21	<a href="#">Prevalence of Asthma in Hospitalized and Non-Hospitalized Children with COVID-19</a>	Journal of Allergy and Clinical Immunology: In Practice	Original Research	In this retrospective cohort study, the authors extracted electronic health records (EHR) for 979 children aged 21 years and younger with a PCR-confirmed SARS-CoV-2 infection at a hospital in the United States to understand the association between current asthma and COVID-19-related hospitalization. EHR data was extracted between March and August 2020, and the presence of a current asthma diagnosis was confirmed and classified by severity based on prescribed medications. During the specified period, 979 patients aged 0-21 years tested positive for SARS-CoV-2 infection within the health system, of which 205 had a concurrent active asthma diagnosis. 121 patients were hospitalized with COVID-19, 11 of whom had a current asthma diagnosis. Asthma was associated with a lower odds of COVID-19 hospitalization compared to children without asthma after adjusting for age, sex, race, ethnicity, health care payer, obesity diagnosis, and existing complex chronic conditions (OR=0.28, p < 0.01). The frequency of patients with an asthma controller medication prescription was higher in the subgroup of patients with COVID-19 hospitalizations compared to those who were not hospitalized (82% vs. 41%, respectively, p=0.01). Larger, multi-center studies that incorporate temporality are needed to confirm the observed negative association between asthma diagnosis and COVID-19-related hospitalization in children.	This retrospective cohort study of 979 children aged 21 years and younger in the United States aimed to understand the association between current asthma and COVID-19-related hospitalization. Asthma was associated with a lower odds of COVID-19 hospitalization compared to children without asthma after adjusting for age, sex, race, ethnicity, health care payer, obesity diagnosis, and existing complex chronic conditions. Further studies are needed to confirm this negative association between asthma and COVID-19-related hospitalization in children.	Chandler Floyd G, Dudley JW, Xiao R, et al. Prevalence of Asthma in Hospitalized and Non-Hospitalized Children with COVID-19. <i>JACI</i> . 2021. <a href="https://doi.org/10.1016/j.jaip.2021.02.038">https://doi.org/10.1016/j.jaip.2021.02.038</a>
delivery; transmission; hospitalization; SARS-CoV-2; COVID-19	3-Mar-21	<a href="#">Management of infants born to mothers with suspected or confirmed SARS-CoV-2 infection in the delivery room: A tentative proposal 2020</a>	Pediatrics International	Guidelines	The authors describe guidelines for mitigating SARS-CoV-2 infection risk in hospital delivery rooms where the mother has tested positive in Japan. They emphasize that practical preventative action must take into account the following infection routes: (i) aerosol transmission from mothers to healthcare providers, (ii) horizontal transmission to healthcare providers from infants infected by their mothers, and (iii) horizontal transmission from mothers to infants. Prenatal visits can first be discussed by telephone or video conference to minimize exposure to healthcare providers. Neonatal staff should be regularly briefed on infection status and delivery timing to optimize resuscitation procedures. The authors also emphasize that healthcare personnel strictly adhere to PPE use and suggest that neonatal resuscitation should be ideally performed in a separate area next to the delivery, or otherwise > 2m away and physically partitioned off in the same room. Furthermore, all aerosol-generating procedures should be minimized as much as possible, and only a minimum number of skilled personnel should participate in neonatal resuscitation. Infants may benefit from being initially separated from mothers to prevent horizontal SARS-CoV-2 transmission. Infants should remain isolated in an incubator in a negative pressure room until a negative PCR SARS-CoV-2 test result	The authors describe guidelines for limiting SARS-CoV-2 risk in hospital delivery rooms where a mother has tested positive. They emphasize the need to limit aerosol-generating procedures, adhere strictly to PPE use, conduct necessary resuscitation procedures at a distance from the SARS-CoV-2-positive mother, and isolate infants in an incubator until a negative PCR result is returned. These precautions promote the health of mothers, infants, and healthcare personnel.	Hosono S, Isayama T, Sugiura T, et al. Management of infants born to mothers with suspected or confirmed SARS-CoV-2 infection in the delivery room: A tentative proposal 2020. <i>Pediatr Int</i> . 2021;10.1111/ped.14571. doi:10.1111/ped.14571

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					is obtained. These guidelines will help ensure mothers, infants, and healthcare personnel remain safe before, during, and after delivery.		
Cardiology, shock, inflammation, neonate, prenatal exposure, intensive care	3-Mar-21	<a href="#">Multisystem inflammatory syndrome in a neonate, temporally associated with prenatal exposure to SARS-CoV-2: a case report</a>	The Lancet Child and Adolescent Health	Case Report	A 24-day-old female neonate was admitted to the pediatric cardiac ICU in India with cardiogenic shock. At presentation she was afebrile, drowsy, tachycardic, hypotensive, and tachypneic. Her mother had a history of mild COVID-19 at 31 weeks gestation, which was managed with supportive measures. On exam, hepatomegaly was present, and the patient had metabolic acidosis and elevated lactate. Chest x-ray showed cardiomegaly, and point-of-care echocardiogram showed severe biventricular dysfunction with a left ventricular ejection fraction of 10% and global hypokinesia. Initial management included mechanical ventilation, inotropic support, and antimicrobial coverage. Laboratory results revealed that cardiac markers, inflammatory markers, and liver enzymes were all substantially elevated. Two blood cultures were sterile. Qualitative antibody assay detected IgG antibodies against SARS-CoV-2 spike protein in both maternal and neonatal serum samples. A respiratory virus panel was negative. This clinical presentation with severe acute myocardial injury, multiorgan dysfunction, elevated inflammatory markers, temporal association with prenatal exposure to COVID-19, and laboratory evidence of IgG antibodies to SARS-CoV-2 led the consideration of a hyperinflammatory response to prenatal exposure to COVID-19. The patient was treated with IV immunoglobulin, methylprednisolone daily injections, and continuous heparin infusion with stabilization within 24 hours. The patient was extubated and finally discharged home on day 29.	In this case report of a 24-day old neonate in India with cardiogenic shock, the clinical presentation with severe acute myocardial injury, multiorgan dysfunction, elevated inflammatory markers, temporal association with prenatal exposure to COVID-19, and laboratory evidence of IgG antibodies to SARS-CoV-2 led the consideration of a hyperinflammatory response to prenatal exposure to COVID-19. The patient stabilized after treatment and was discharged home.	Kappanayil M, Balan S, Alawani S, et al. Multisystem inflammatory syndrome in a neonate, temporally associated with prenatal exposure to SARS-CoV-2: a case report. Lancet Child Adolesc Health. 2021; doi:10.1016/S2352-4642(21)00055-9
Immunocompromised, children, mutation, strain, persistent infection, antibody, immunology	2-Mar-21	<a href="#">Persistent SARS-CoV-2 infection and increasing viral variants in children and young adults with impaired humoral immunity</a>	medRxiv	Preprint (not peer-reviewed)	There is concern that persistent SARS-CoV-2 infection could serve as a reservoir for mutation accumulation. In this article, the authors describe 3 patients (female <5 years of age, male 20-25 years, and male <5 years) with acute lymphoblastic leukemia who were persistently positive for SARS-CoV-2 by RT-PCR. Longitudinally-collected specimens obtained at Children’s Hospital Los Angeles, USA between May 7-November 21, 2020 were assessed for viral viability. Whole-genome sequencing and serological studies were performed to measure viral evolution. In Patient 1, culturable virus was only detected in the day 0 sample, and she had a strong IgA, IgG, and IgM response to all tested antigens at days 46 and 117, consistent with a more typical clinical course. Patient 2 had culturable virus up to day 144 and positive viral RNA up to day 172, was weakly IgG positive and was negative for IgA and IgM to all tested SARS-CoV-2 antigens. Patient 3 had detectable viral RNA up to day 162, and showed weakly positive IgG and unusually high levels of IgM for the RBD, S1, and Spike proteins, but negative N antibodies. Patients 2 and 3 demonstrated an increase in intra-host viral diversity over time in variants of both high (major) and low (minor) allele frequencies across the viral genome. The authors	In this study, the authors describe 3 patients (2 pediatric and one young adult) with acute lymphoblastic leukemia who were persistently positive for SARS-CoV-2. Serological and sequencing studies showed that for two of the patients with weak immune response, intra-host viral diversity increased over time in variants of both high (major) and low (minor) allele frequencies across the viral genome. The authors conclude that immunocompromised patients are susceptible to prolonged viral infections with mutation accumulation.	Truong TT, Ryutov A, Pandey U, et al. Persistent SARS-CoV-2 infection and increasing viral variants in children and young adults with impaired humoral immunity. medRxiv. 2021; doi.org/10.1101/2021.02.27.21252099

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					conclude that immunocompromised patients are susceptible to prolonged viral infections with mutation accumulation.		
COVID-19; human rights in childbirth; humanistic childbirth; midwifery; public health	2-Mar-21	<a href="#">Protecting Women's and Newborns' Rights in a Public Maternity Unit During the COVID-19 Outbreak: The Case of Dra. Eloísa Díaz - La Florida Hospital in Santiago, Chile</a>	Frontiers in Sociology	Original Research Article	This article presents a case study of the Maternity in Dra. Eloísa Díaz' hospital in Santiago, Chile, describing their response to the COVID-19 pandemic from March to July 2020 and the obstetric outcomes achieved. Recognized for their humanistic model of care called the "Safe Model of Personalized Childbirth," this hospital adapted protocols to maintain its quality of care standards despite the COVID-19 health crisis. One initial obstacle was the issuance of guidelines across Chile that contrasted with standards of care that had become rights in the Maternity: companion of choice during labor, skin-to-skin contact after birth, and early breastfeeding. The authors carried out interviews with healthcare providers and reviewed outcomes of the 55 women (mean age 29.4 years; range not reported) who were SARS-CoV-2 positive via RT-PCR. 41 (75%) of the women were asymptomatic, 9 (16%) delivered at <37 weeks' gestation, and 2 (3.6%) required ICU admission. Protocols were put in place to re-establish the companion during labor and childbirth, skin-to-skin contact, and breastfeeding, which were suspended for almost 3 weeks before Chilean guidance was updated 2 April 2020, and an Instagram account was created to communicate with the external community. After some initial weeks of adjustment, the standards of care for all women, including those with COVID-19, were re-established almost to pre-pandemic levels. For example, in 2020 (up to July) 71% of mothers had immediate skin-to-skin contact of >30 min after birth, including breastfeeding, compared to 70% in 2019. This case shows that quality of care can be maintained and the rights of women and newborns can be respected during a health crisis like the COVID-19 pandemic.	This article presents a case study of a hospital in Santiago, Chile, describing their response to the COVID-19 pandemic and the obstetric outcomes achieved. After some initial weeks of adjustment, the standards of care for all women, including those with COVID-19, were re-established almost to pre-pandemic levels. This case shows that quality of care can be maintained and the rights of women and newborns can be respected during a health crisis like the COVID-19 pandemic.	Leiva G, Sadler M, López C, et al. Protecting Women's and Newborns' Rights in a Public Maternity Unit During the COVID-19 Outbreak: The Case of Dra. Eloísa Díaz - La Florida Hospital in Santiago, Chile. <i>Front Sociol.</i> 2021;6:614021. Published 2021 Mar 2. doi:10.3389/fsoc.2021.614021
COVID-19; children; school; childcare; leisure; lockdown	2-Mar-21	<a href="#">Loss of childcare and classroom teaching during the Covid-19-related lockdown in spring 2020: A longitudinal study on consequences on leisure behavior and schoolwork at home</a>	PLoS One	Original Research	The authors examined changes in leisure behaviors of children associated with the closure of schools and social restrictions during the COVID-19 pandemic in Germany. The leisure behaviors of children (n = 285) ages 1-10 years were examined, along with attitudes towards completing schoolwork (n = 102) at 2 time points; March/April 2020 (1-2 weeks after school closure) and April/May 2020 (5-6 weeks after school closure). Changes in behavior between the two time points were examined, along with associations of these changes with socio-economic status, the number of children at home, and how often children received materials from school. The authors found that the frequency of playing outside increased between the time points examined (OR = 1.65, 95% CI 1.18–2.33, p = .004), though the frequency of participating in crafts (OR = 0.62, 95% CI 0.45–0.85, p = 0.003), board games (OR = 0.62, 95% CI 0.46–0.84, p = 0.002), and indoor sports (OR = 0.61, 95% CI 0.46–0.83, p = 0.001) decreased, along with motivation to complete schoolwork (OR = 0.59, 95% CI 0.34–0.97, p = 0.039). These changes did not vary with socio-economic status, though lower socio-economic status	This article examined changes in the leisure behaviors of children between the start of school closures and 5-6 weeks after the closures in Germany during the COVID-19 pandemic. The frequency of playing outside increased, but the frequency of participating in crafts, board games, indoor sports, and motivation to complete schoolwork decreased. The authors concluded that these findings suggest that homeschooling cannot fully replace in-person learning.	Poulain T, Meigen C, Sobek C, et al. Loss of childcare and classroom teaching during the Covid-19-related lockdown in spring 2020: A longitudinal study on consequences on leisure behavior and schoolwork at home. <i>PLoS One.</i> 2021;16(3):e0247949. Published 2021 Mar 2. doi:10.1371/journal.pone.0247949

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					was associated with increased media use and reduced time spent completing schoolwork. Children in households with more than one child played outside more often (OR= 1.60, 95% CI = 1.17–2.22, p < 0.001). The authors indicate that the loss of childcare and school activities was associated with decreased participation in indoor activities and schoolwork, suggesting that homeschooling cannot fully replace in-person learning.		
COVID 19; antiviral activity; clinical application of human milk factors; functions human milk factors; human milk research	2-Mar-21	<a href="#">Anti-Infective, Anti-Inflammatory, and Immunomodulatory Properties of Breast Milk Factors for the Protection of Infants in the Pandemic From COVID-19</a>	Frontiers in Public Health	Hypothesis and theory article	The authors state their paper is a summary of the current evidence on the mechanisms that explain human milk's multiple functions of anti-infective responses and the possible application of breast milk against the COVID-19 pandemic. This "hypothesis and theory article" has 3 sections: breast milk and mediators; breast milk and viral infection; and breast milk factors: a new topic of COVID research. In the first part of the paper, the known mechanisms of protection and defense of breast milk are delineated. The authors highlight potential therapeutic activity of human milk under evaluation in infections, inflammatory bowel diseases, hypertension, cognitive decline, and cancer. In the second section, human milk effects in viral infections are described. The authors propose that most of the bio-active factors of human milk may interact synergistically with each other or with the immune response. In the third section, the authors state that few data are available about human milk's potential role against COVID-19, but they review studies that document its antiviral effect against many viruses. The authors hypothesize that human milk mediators might have a function in all pathologic events related to COVID-19.	The authors state their paper is a summary of the current evidence on the mechanisms that explain human milk's multiple functions of anti-infective responses and the possible application of breast milk against the COVID-19 pandemic. The authors hypothesize that human milk mediators might have a function in all pathologic events related to COVID-19.	Quitadamo PA, Comegna L, Cristalli P. Anti-Infective, Anti-Inflammatory, and Immunomodulatory Properties of Breast Milk Factors for the Protection of Infants in the Pandemic From COVID-19. <i>Front Public Health</i> . 2021;8:589736. Published 2021 Mar 2. doi:10.3389/fpubh.2020.589736
COVID-19; influenza; rhinovirus; SARS-CoV-2; viral interference	2-Mar-21	<a href="#">Increased risk of rhinovirus infection in children during the coronavirus disease-19 pandemic</a>	Influenza and Other Respiratory Viruses	Original Research	To investigate the impact of the COVID-19 pandemic on influenza and other respiratory viral infections via viral interference, the authors analyzed clinical specimens collected from 2244 Japanese pediatric patients with respiratory diseases between January 2018 and September 2020. Of the examined patient samples, 53% were male, and 50% were younger than 10 years. The results showed that the frequency of influenza and other respiratory viruses was reduced among all patients during the COVID-19 pandemic except for rhinovirus in children younger than 10 years. Influenza detection, in particular, fell from 80% prevalence during the 2018 and 2019 winters to near 0% prevalence in samples collected in 2020. Rhinovirus detection, however, rose from 20% detection in the 2018 and 2019 seasons to 40% detection during the 2020 season in children younger than 10 years. The authors cite rhinovirus's non-enveloped and subsequent longer survival time on surfaces as potential reasons for this rising prevalence during the pandemic. They suggest that rhinovirus infections be continuously monitored to understand young children's increased risk during the COVID-19 pandemic and viral interference with SARS-CoV-2.	The authors compared the prevalence of influenza and other respiratory viral infections in clinical samples collected from 2244 Japanese pediatric patients between 2018 and 2020. The frequency of influenza and several other respiratory infections was appreciably reduced during the COVID-19 pandemic, except for rhinovirus, whose prevalence increased among children <10 years old during the pandemic. The authors suggest continuous monitoring of rhinovirus infections in young children during the COVID-19 pandemic	Takashita E, Kawakami C, Momoki T, et al. Increased risk of rhinovirus infection in children during the coronavirus disease-19 pandemic [published online, 2021 Mar 14]. <i>Influenza Other Respir Viruses</i> . 2021;10.1111/irv.12854. doi:10.1111/irv.12854

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COVID-19; SARS-CoV-2; school closures; social distancing	2-Mar-21	<a href="#">The effects of school closures on SARS-CoV-2 among parents and teachers</a>	Proceedings of the National Academy of Sciences of the United States	Article	The authors studied the effect of school closures in Sweden between the closed upper-secondary schools and the open lower-secondary schools for the incidence of SARS-CoV-2 among teachers and parents June-July 2020. Teachers exposed to open schools had 2 times the odds of a positive SARS-CoV-2 PCR (OR 2.01; 95%CI 1.52-2.67, p<0.01) and COVID-19 diagnosis (OR 2.01; 95%CI 1.45-2.79, p<0.01) than those from closed schools. Parents' odds were only slightly increased from open schools with an odds ratio of 1.17 (95% CI 1.03-1.32) for a positive SARS-CoV-2 test, and only 0.94 (95%CI 0.77-1.14) for a COVID-19 diagnosis. The authors state that closing schools is costly and detrimental to students and that this study showed only a minor impact on the spread of SARS-CoV-2 by keeping lower-secondary schools open. However, teachers are the most affected, and measures should be considered to keep them protected.	The authors studied the effect of school closures in Sweden between the closed upper-secondary schools and the open lower-secondary schools for the incidence of SARS-CoV-2 among teachers and parents. Teachers exposed to open schools had 2 times the odds of a positive SARS-CoV-2 PCR.	Vlachos J, Hertegård E, B Svaleryd H. The effects of school closures on SARS-CoV-2 among parents and teachers. <i>Proc Natl Acad Sci U S A</i> . 2021;118(9):e2020834118. doi:10.1073/pnas.2020834118
COVID-19, depression, anxiety, adolescents	2-Mar-21	<a href="#">Depression, anxiety and associated factors among Chinese adolescents during the COVID-19 outbreak: a comparison of two cross-sectional studies</a>	Translational Psychiatry	Original Research	This study aimed to examine changes and factors in depression and anxiety among Chinese adolescents during the COVID-19 epidemic. 2 surveys were conducted among Chinese adolescents, in all 34 provinces, between February 20 – 27 (during the outbreak) and April 11 - 19, 2020 (after the outbreak). A total of 9554 (47.9% male) and 3886 (46.2% male) adolescents, aged 11 – 20 years, participated in the first and second surveys, respectively. During the initial survey, the prevalence of depression was 36.6% (95% CI: 35.6–37.6%) while the prevalence of anxiety was 19% (95% CI: 18.2–19.8%). Rates of depression and anxiety increased to 57.0% (95% CI: 55.4–58.6%) and 36.7% (95% CI: 35.2–38.2%), respectively, in the second survey. Female gender, senior secondary school enrollment, and concerns about entering a higher grade were positively associated with both depression and anxiety. Conversely, a sleep duration of ≥6 h/day, an exercise duration ≥30 min/day, and living in provinces with 1000–9999 confirmed COVID-19 cases (as opposed to higher or lower incidence) were negatively associated with depression and anxiety [all specific statistics provided in article]. The authors conclude that the prevalence of depression and anxiety in Chinese adolescents significantly increased after the initial outbreak.	This survey study aimed to examine changes and factors in depression and anxiety among Chinese adolescents during and after the COVID-19 outbreak. Female gender, senior secondary school enrollment, and concerns about entering a higher grade were positively associated with both depression and anxiety. The authors conclude the prevalence of depression and anxiety in Chinese adolescents significantly increased after the initial outbreak.	Chen X, Qi H, Liu R, et al. Depression, anxiety and associated factors among Chinese adolescents during the COVID-19 outbreak: a comparison of two cross-sectional studies. <i>Transl Psychiatry</i> . 2021;11(1):148. Published 2021 Mar 2. doi:10.1038/s41398-021-01271-4
Dengue, COVID-19, children, MIS-C	2-Mar-21	<a href="#">Co-Infection of Dengue Fever with COVID-19 in a Child with MIS-C</a>	The Indian Journal of Pediatrics	Case Report	This letter to the editor presents the case of an 8-year-old male child with MIS-C—according to WHO criteria—and dengue virus co-infection in India. He had a fever for 8 days, abdominal pain, and vomiting. Examination revealed bilateral conjunctival congestion, minimal ascites, facial puffiness, erythematous macular rashes on palms and soles, and hepatomegaly. Complete blood count showed maximum and minimum counts as follows: leukocytes (12,900/cmm and 7700/cmm), platelets (411,000/cmm and 96,000/cmm) and hematocrit (29.9% and 25.3%). RT-PCR for SARS-CoV-2 was positive, and serology showed elevated immunoglobulin IgG titer for SARS-CoV-2. Inflammatory markers—C-reactive protein, ferritin, lactate dehydrogenase, D-dimer—were elevated.	This letter to the editor presents the case of an 8-year-old male child with MIS-C and dengue virus co-infection in India. Considering the overlapping clinical features of COVID-19 and Dengue fever, children should be tested for both SARS-CoV-2 and Dengue, especially in India.	Ratageri VH, Pawar GR, G Nikhil, et al. Co-Infection of Dengue Fever with COVID-19 in a Child with MIS-C [published online, 2021 Mar 2]. <i>Indian J Pediatr</i> . 2021;1. doi:10.1007/s12098-021-03701-z

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					Abdominal ultrasound showed minimal ascites with hepatomegaly, and echocardiography showed globally hypokinetic left ventricular (LV) dysfunction with an ejection fraction of 30%. IgM for Dengue was positive through antibody-capture enzyme-linked immunosorbent assay (MAC-ELISA). The patient improved with intravenous immunoglobulin therapy (2 g/kg), and her ejection fraction improved to 60% during follow-up. Considering the overlapping clinical features of COVID-19 and Dengue fever, children should be tested for both SARS-CoV-2 and Dengue, especially in India.		
COVID-19 vaccination, Pregnancy, Vaccine safety	2-Mar-21	<a href="#">Guidance for design and analysis of observational studies of fetal and newborn outcomes following COVID-19 vaccination during pregnancy</a>	Vaccine	Short Communication	Several unique methodological challenges face observational studies of vaccination during pregnancy, some of which may be more pronounced for COVID-19 studies. This article discusses the most critical study design, data collection, and analytical issues likely to arise and offers brief guidance to optimize the quality of such studies to ensure their maximum value for informing public health decision-making. Temporal issues in observational studies include varied timing of vaccination during pregnancy leading to varying levels of exposure. Rather than treating vaccine exposure during pregnancy as a binary variable, the authors recommend incorporating length of vaccine exposure through a Cox proportional hazards regression with a time-varying exposure variable. Failure to do so may bias estimates in favor of vaccination by up to 10-26%. Aligning gestational and calendar time between vaccine-exposed and vaccine-unexposed pregnancies can be complicated by background pandemic factors, such as vaccine availability, distribution, and changing safety recommendations. This can be corrected for by matching pregnancies by estimated date of conception, excluding pregnancies that do not overlap with time periods when the vaccine is available, and/or including timing of conception in propensity score models that estimate the probability of vaccination. In some influenza vaccination studies, uptake was higher among pregnant individuals with pre-existing medical comorbidities; other studies have documented higher vaccine uptake by pregnant individuals with higher socio-economic status and fewer comorbidities or other risk factors. Potential confounding factors can be corrected for with propensity score matching.	This article discusses the most critical study design, data collection, and analytical issues likely to arise when assessing COVID-19 vaccine safety during pregnancy. The authors offer brief guidance to optimize the quality of these studies.	Fell DB, Dimitris MC, Hutcheon JA, et al. Guidance for design and analysis of observational studies of fetal and newborn outcomes following COVID-19 vaccination during pregnancy [published online, 2021 Mar 2]. Vaccine. 2021;doi:10.1016/j.vaccine.2021.02.070
COVID-19; maternal health; infant health; research priorities; research; policy; systems strengthening	2-Mar-21	<a href="#">Shifting research priorities in maternal and child health in the COVID-19 pandemic era in India: a renewed focus on systems strengthening</a>	medRxiv	Preprint (not peer-reviewed)	The authors conducted a rapid assessment to identify key priorities for public health research in maternal and child health in India within the context and aftermath of the COVID-19 pandemic. A survey was administered to relevant stakeholders, including maternal and child health researchers, healthcare providers, academic faculty, and policymakers (n = 84), in India from September to November 2020. Survey respondents were asked to rank research priorities by answering 26 questions in 6 domains: vaccine-preventable diseases, outbreak preparedness, primary healthcare integration, maternal health, neonatal health, and	This article reports on results from a survey of key stakeholders in India administered during the COVID-19 pandemic to identify research priorities for maternal and child health. Systems strengthening, workforce strengthening, augmented surveillance, increased use of antenatal care, neonatal	Mehta K, Zodpey S, Banerjee P, et al. Shifting research priorities in maternal and child health in the COVID-19 pandemic era in India: a renewed focus on systems strengthening. medRxiv. 2021: doi:10.1101/2021.02.28.21252648.

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					infectious diseases. The priorities with the highest rankings were strengthening the public sector workforce to address vaccine-preventable diseases, augmenting surveillance networks for outbreak preparedness, encouraging antenatal visits to improve maternal health, implementing neonatal resuscitation to prevent birth asphyxia, and screening mothers and children for tuberculosis. The common theme across the domains was systems strengthening, and the authors suggest focusing research on strengthening existing systems and services during the COVID-19 pandemic rather than starting novel research.	resuscitation, and screening for tuberculosis were identified as areas in need of prioritization.	
COVID-19; community child health; maternal medicine; primary care	2-Mar-21	<a href="#">Digital health literacy intervention to support maternal, child and family health in primary healthcare settings of Pakistan during the age of coronavirus: study protocol for a randomised controlled trial</a>	British Medical Journal (BMJ) Open	Protocol	This article describes the study protocol for implementing and evaluating a digital health literacy program for disadvantaged women in Pakistan to improve the health literacy of women during their reproductive years. In particular, this program will aim to improve hygiene, sanitation, COVID-19 awareness and prevention. The study will occur between January - April, 2021 and will follow 3 consecutive steps. First, baseline data will be collected regarding health challenges faced by women in disadvantaged communities; next, a pretest survey will be administered to the control and intervention groups to assess their health literacy, a health literacy booklet will be provided to both groups, and the intervention group will receive the digital intervention; lastly, the control and intervention groups will take a post-test. The intended study population will consist of a sample of 1,000 women of reproductive age (15-45 years) with 500 in the control group and 500 in the intervention group. 100 community healthcare workers will be recruited for this study and will be responsible for training participants. The digital health literacy intervention will last 3 months and consist of the following components: video tutorials, one-on-one training for improving awareness, group training, and one-on-one training for self-management. The authors suggest that this study will make an important contribution by improving knowledge with respect to hygiene, sanitation and COVID-19 prevention, thereby empowering female clients in their communities.	This article describes the study protocol for implementing and evaluating a digital health literacy program in Pakistan to improve the health literacy of women during their reproductive years. The program will focus on improving knowledge with respect to hygiene, sanitation and COVID-19 prevention.	Jafree SR, Bukhari N, Muzamill A et al. Digital health literacy intervention to support maternal, child and family health in primary healthcare settings of Pakistan during the age of coronavirus: study protocol for a randomised controlled trial. <i>BMJ Open</i> . 2021;11(3):e045163. Published 2021 Mar 2. doi:10.1136/bmjopen-2020-045163
COVID-19; visitation; pediatrics; research; clinical care; policies; family separation	2-Mar-21	<a href="#">Unintended consequences of restrictive visitation policies during the COVID-19 pandemic: implications for hospitalized children</a>	Pediatric Research	Commentary	The authors describe the unintended effects of restrictive visitation policies in research and clinical settings in the United States during the COVID-19 pandemic and identify strategies to mitigate the adverse impacts of these policies on families and children. The authors suggest that researchers consider that patients who feel distressed due to restrictive visitation policies may be less willing to participate in research. Adequate consent may not be granted for studies involving children if all parents are not present. These restrictive measures may result in under-enrollment, reduced sample sizes, and underrepresentation of some populations in research. Impacts on family-centered care in neonatal intensive care units include physiological and psychological impacts on infants, less	This article details the adverse effects of restrictive visitation policies in research and clinical settings on children in the United States during the COVID-19 pandemic. Adverse effects include decreased participation in research, less provision of family-centered care, exacerbation of health inequities, and less health care utilization. The authors provide suggestions for	Raphael JL, Kessel W, Patel M. Unintended consequences of restrictive visitation policies during the COVID-19 pandemic: implications for hospitalized children [published online, 2021 Mar 2]. <i>Pediatr Res</i> . 2021;10.1038/s41390-021-01439-0. doi:10.1038/s41390-021-01439-0

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					skin-to-skin contact, decreased breastfeeding rates, increased parental stress and anxiety, and decreased parental participation in decision-making. Health inequities may also be exacerbated through restrictive visitation policies due to social isolation, decreased family support, parental guilt, discrimination and bias, and less ability for vulnerable populations to advocate for themselves. These policies can also reduce healthcare utilization due to avoidance or deferring medical procedures and patient and family dissatisfaction. Suggestions for mitigating these policies' effects include modifying policies and procedures when possible, applying ethical rigor and transparency to policy implementation, increasing communication, engaging patients, and providing support mechanisms.	researchers and clinicians to help mitigate these adverse effects.	
otolaryngology; SARS-CoV-2 infection; infant; cochlear implant	2-Mar-21	<a href="#">Undetectable viral load within the mastoid during cochlear implantation in a patient with COVID-19</a>	Otolaryngology Case Reports	Case Report	The authors present the case of a 12-month old female undergoing cochlear implantation in Tennessee, USA, whose surgery was delayed by 6 weeks after testing positive for SARS-CoV-2. She remained asymptomatic during the period. However, a repeat nasopharyngeal swab was again positive at 6 weeks. After a thorough discussion between the operative team and the patient's family, the decision was made to proceed with surgery with appropriate precautions for aerosol-generating procedures in a SARS-CoV-2-positive patient. Intraoperatively, swabs of her nasopharyngeal cavity and bilateral mastoid cavities were obtained. The nasopharyngeal swab was mildly positive for the presence of SARS-CoV-2 on RT-qPCR but negative in bilateral mastoids. Hence, the authors demonstrated that there was no SARS-CoV-2 detected in the mastoid cavities pre-operatively and intraoperatively. Thus in some instances, it may be safe to perform cochlear implantation and other routine otologic surgery for patients who persistently test positive for SARS-CoV-2 after an adequate waiting period. Further research is needed to determine the time course of viral load within the mastoid in patients who are persistently positive for SARS-CoV-2.	The authors present the case of a 12-month old female who underwent a cochlear transplant despite a persistently positive SARS-CoV-2 test. Her mastoid cavities tested negative for SARS-CoV-2 despite the presence of viral RNA in her nasopharyngeal cavity. The authors suggest that in some instances, it may be safe to perform cochlear implantation and other routine otologic surgery for patients who persistently test positive for SARS-CoV-2 after an adequate waiting period.	Kimura KS, Smetak MR, Freeman MH, Wootten CT. Undetectable viral load within the mastoid during cochlear implantation in a patient with COVID-19. Otolaryngol Case Reports. 2021:100273. doi:https://doi.org/10.1016/j.xocr.2021.100273
SARS-CoV-2, COVID-19, Coronavirus, breast milk, breastfeeding	2-Mar-21	<a href="#">SARS-CoV-2 Antibodies Detected in Human Breast Milk Post-Vaccination</a>	medRxiv	Preprint (not peer-reviewed)	The authors of this prospective cohort study aimed to determine whether SARS-CoV-2-specific immunoglobulins are found in breast milk post-vaccination, and to characterize the time course and types of immunoglobulins present. 6 lactating women who planned to receive both doses of the Pfizer-BioNTech or Moderna vaccine between December 2020 and January 2021 were included in this study. Breast milk samples were collected between December 2020 and February 2021. Samples were collected at the following timepoints: pre-vaccination; 1, 4, 7, 11 and 14 days post-1st vaccine dose; 1 day before 2nd dose; and 1, 4, 7, 11, 14 days post-2nd vaccine dose. In total, 50 human milk samples were included in the analysis. The results showed that the 6 lactating women who received 2 doses of the SARS-CoV-2 vaccine had significantly elevated levels of SARS-CoV-2-specific IgG and IgA antibodies in breast milk beginning at Day 7 after the initial vaccine dose, with an	This prospective cohort study aimed to determine whether SARS-CoV-2-specific immunoglobulins are found in breast milk post-vaccination, and to characterize the time course and types of immunoglobulins present. Results found that lactating women who received 2 doses of the SARS-CoV-2 vaccine had significantly elevated levels of SARS-CoV-2-specific IgG and IgA antibodies in breast milk, with an IgG-dominant response.	Baird JK, Jensen SM, Urba WJ, et al. SARS-CoV-2 antibodies detected in human breast milk post-vaccination. 2021. doi: 10.1101/2021.02.23.21252328

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					IgG-dominant response. This is in contrast to previous work showing an IgA-dominant antibody response in the breast milk of previously infected/exposed women. In conclusion, this study showed that maternal vaccination results in SARS-CoV-2-specific immunoglobulins in breast milk that may be protective for infants.		
COVID-19; pediatric; liver transplantation ; Japan	1-Mar-21	<a href="#">Do Not Delay: Safe Operation for Pediatric Living-donor Liver Transplantation Programs in the COVID-19 Era</a>	Transplantation	Letter to the Editor	The authors discussed safe operation for pediatric living-donor liver transplantation (LDLT) programs in Japan during the COVID-19 pandemic. The National Center for Child Health and Development had never suspended the LT program during the pandemic, to maintain the availability of life-saving LT. Although there was a temporary decrease of LT cases during early summer 2020 following the initial COVID-19 surge in Japan, 20 LDLT and 4 deceased-donor LT procedures were successfully performed from May-October 2020. Notably, the cases demonstrated favorable clinical outcomes, and no donors or recipients developed COVID-19 before or after LT. In addition, recent reports from other centers revealed overall morbidity and mortality of COVID-19 among pediatric LT recipients as being similar to immuno-competent children and lower than in adults. Furthermore, significantly higher pediatric end-stage liver disease (PELD) scores (in which higher scores generally indicate more severe illness) at the time of LDLT (median 14 vs. 8.5 respectively, p=0.0061) were observed in cholestatic children during the pandemic (n=12), compared to 2019 (n=22). This suggests that patients with advanced cholestasis need to be carefully monitored during the pandemic. The emotional hesitancy to pursue LT during the pandemic and delay of transplant evaluation referrals likely contributed to these higher PELD scores. The authors suggest transplantation be performed when appropriate and necessary without delay.	The authors discussed safe operation for pediatric living-donor liver transplantation programs in Japan during the COVID-19 pandemic. The authors suggest transplantation be performed when appropriate and necessary without delay.	Yamada M, Funaki T, Shoji K, et al. Do Not Delay: Safe Operation for Pediatric Living-donor Liver Transplantation Programs in the COVID-19 Era. Transplantation. 2021;105(3):e39-e40. doi:10.1097/TP.0000000000003594.
COVID-19, SARS-CoV-2, Children, Sleepiness, Pediatric Daytime Sleepiness Scale (PDSS), Later school start times, School closure, Midpoint of sleep, Midsleep, Social jetlag	1-Mar-21	<a href="#">A Longitudinal Study of Subjective Daytime Sleepiness Changes in Elementary School Children Following a Temporary School Closure Due to COVID-19</a>	Children (Basel)	Article	The aim of this study was to identify changes in the subjective sleepiness of students during the COVID-19 pandemic and to elucidate factors associated with changes in sleepiness. In Japan, all schools were closed from February to May 2020, due to the pandemic. Surveys about students' sleep habits and the Japanese version of the Pediatric Daytime Sleepiness Scale (PDSS) were conducted longitudinally at one Tokyo elementary school in June 2019, January 2020, and June 2020. The number of students (grades 1-6, aged 6-11 years) who answered the questionnaire was 619 in June 2019, 609 in January 2020, and 646 in June 2020. The PDSS is an 8-item self-report that asks children about their experiences with sleepiness. Total scores can range from 0 to 32, with higher scores indicating more daytime sleepiness. The results showed a mean change in PDSS score of 0.94 +/- 5.51 from June 2019 to January 2020, and -1.65 +/- 5.71 (p<0.001) from January 2020 to June 2020. There was also decreased social jetlag associated with decreased PDSS scores (OR=0.77, 95% CI: 0.62-0.96, p=0.02) during the school closure. In conclusion, a less restrictive school schedule secondary	The aim of this study was to identify changes in the subjective sleepiness of students during the COVID-19 pandemic and to elucidate factors associated with changes in sleepiness. In conclusion, a less restrictive school schedule secondary to COVID-19-related school closure decreased sleepiness in children and was associated with decreased social jetlag.	Komada Y, Ishibashi Y, Hagiwara S, et al. A Longitudinal Study of Subjective Daytime Sleepiness Changes in Elementary School Children Following a Temporary School Closure Due to COVID-19. Children (Basel). 2021;8(3):183. Published 2021 Mar 1. doi:10.3390/children8030183

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
Addiction; COVID-19; Plasmapheresis ; Pregnancy; Thrombotic thrombocytopenic purpura	1-Mar-21	<a href="#">A COVID-19 pregnant patient with thrombotic thrombocytopenic purpura: a case report</a>	Journal of Medical Case Reports	Case Study	This case study highlights the clinical course of a pregnant patient with SARS-CoV-2 infection who was admitted to a hospital in Tehran, Iran on March 20, 2020, at 29 weeks' gestation. The patient was a 21-year-old Caucasian woman with a history of methamphetamine addiction, although she had ceased taking methamphetamine one month before admission. She vaginally delivered a stillborn infant weighing 1300 g. The patient had thrombotic thrombocytopenic purpura (TTP) at the time of delivery. PCR testing confirmed that she was positive for SARS-CoV-2 infection, which caused fever and dyspnea. Chest CT showed ground glass lung opacities, diffuse multiple bilateral consolidations and diffuse bilateral fine interlobar septal thickening, related to the viral lung infection. Her blood tests indicated leukocytosis (21,600 count/mm <sup>3</sup> ), low hemoglobin (4.9 g/dl), low platelets (25,000/mm <sup>3</sup> ), high serum creatinine (4.7 mg/dl), and high lactate dehydrogenase (1050 U/l). The patient did not have any signs of dyspnea on the 20th day of ICU hospitalization, and the leukocyte level returned to normal. The patient was transferred to the gynecological ward, then finally discharged after 8 days. This case study illustrates that pregnancy and SARS-CoV-2 infection could trigger TTP.	This case study highlights the clinical course of a COVID-19 pregnant patient with COVID-19, who was admitted to a hospital in Tehran, Iran on March 20, 2020, at 29 weeks-gestation. This case study illustrates that pregnancy and SARS-CoV-2 infection could trigger thrombotic thrombocytopenic purpura.	Aminimoghaddam S, Afrooz N, Nasiri S, et al. A COVID-19 pregnant patient with thrombotic thrombocytopenic purpura: a case report. J Med Case Rep. 2021;15(1):104. Published 2021 Mar 1. doi:10.1186/s13256-020-02577-5
COVID-19; children; neurologic features; Chile; MIS-C	1-Mar-21	<a href="#">Neurologic Features Associated With SARS-CoV-2 Infection in Children: A Case Series Report</a>	Journal of Child Neurology	Article	The authors described neurologic manifestations associated with COVID-19 at one pediatric hospital in Chile between 1 April-14 July 2020. 14.4% of the 90 patients with positive SARS-CoV-2 testing in the above time frame presented with new-onset neurologic symptoms (n=13; median age=6.5 years, range 15 months-17 years; 61.5% female). 4 other patients showed epilepsy exacerbation. Neurologic manifestations ranged from mild (headache, muscle weakness, anosmia, ageusia), to severe (status epilepticus, Guillain-Barré syndrome, encephalopathy, demyelinating events). Of the patients who presented with MIS-C (17/90), 8 had new-onset neurologic manifestations, with 3 types of MIS-C phenotypes: 12.5% Kawasaki-like syndrome, 25% distributive shock, and 62.5% with both. All of these patients presented with fever, 75% with exanthema, 75% with gastro-intestinal symptoms, and 62.5% with conjunctivitis. Echocardiographic tests were performed in all MIS-C patients, and 75% showed significant signs of coronary compromise or myocardial failure. In general, neurologic symptoms resolved as the systemic disease presentation subsided. The 13 patients with new-onset neurologic symptoms were hospitalized for a mean of 13 days (range 4-23 days). 69.2% (9/13) required an average of 9 days (range 2-11 days) in the ICU, and 53.8% (7/13) needed ventilatory support for an average of 3.2 days (range 0.5-5 days). This study highlighted a wide range of new-onset neurologic manifestations in COVID-19 pediatric patients.	The authors described neurologic manifestations associated with COVID-19 and MIS-C at one pediatric hospital in Chile between 1 April-14 July 2020. This study highlighted a wide range of new-onset neurologic manifestations in COVID-19 pediatric patients. In general, neurologic symptoms resolved as the systemic disease presentation subsided.	Sandoval F, Julio K, Méndez G, et al. Neurologic Features Associated With SARS-CoV-2 Infection in Children: A Case Series Report. J Child Neurol. 2021. doi:10.1177/0883073821989164.

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COVID-19; pediatric; acute appendicitis; Spain	1-Mar-21	<a href="#">Acute Appendicitis in Children During the COVID-19 Pandemic: Neither Delayed Diagnosis Nor Worse Outcomes</a>	Pediatric Emergency Care	Article	This retrospective study described the incidence of complicated appendicitis in patients at a single pediatric emergency department (ED) during the COVID-19 pandemic lockdown from 21 March-6 May 2020 in Spain. A control group was made up of a similar number of patients, diagnosed from January-September 2019. Of 6845 total patients seen in the ED in the 2020 time frame, 77 were diagnosed with acute appendicitis (1.1%; 61% male; mean age=10.7 ± 3.09 yrs). The mean time between symptom onset and presentation to the ED was 39 ± 51 hrs. All patients reported abdominal pain, 31% complained of fever, 77% had vomiting, and >10% had diarrhea. 2 patients tested positive for SARS-CoV-2 on PCR, but neither had respiratory symptoms or a complicated clinical course. 30 children (38.9%) were diagnosed with complicated appendicitis. The mean length of hospital stay was 4 days, and <10% returned to the ED after discharge. 74 patients from the previous year formed the control group. The incidence of complicated appendicitis was 28.3% in 2019, showing no significant difference compared to 2020. The 2 groups were homogeneous, with no differences in time elapsed between symptom onset and first ED visit (40.3 ± 43.4 hrs vs. 39 ± 51 hrs), laboratory test results, median length of stay (2 days for both periods), and ICU admissions (13.5% vs. 12.9%). The findings suggest that self-quarantine during the pandemic did not increase the incidence of complicated appendicitis in children.	This retrospective study described the incidence of complicated appendicitis in patients at a single pediatric institution during the COVID-19 pandemic lockdown from 21 March-6 May 2020 in Spain. The findings suggest that self-quarantine during the pandemic did not increase the incidence of complicated appendicitis in children.	Gaitero Tristán J, Souto Romero H, Escalada Pellitero S, et al. Acute Appendicitis in Children During the COVID-19 Pandemic: Neither Delayed Diagnosis Nor Worse Outcomes. <i>Pediatr Emerg Care.</i> 2021;37(3):185-190. doi:10.1097/PEC.0000000000002364.
COVID-19; preterm birth; pediatric; Saudi Arabia	1-Mar-21	<a href="#">Prevalence of Preterm Birth Rate During COVID-19 Lockdown in a Tertiary Care Hospital, Riyadh</a>	Cureus	Article	This cross-sectional study evaluated the impact of the COVID-19 lockdown on the rate of premature births at a tertiary care neonatal ICU in Riyadh, Saudi Arabia. Birth rates among preterm infants between 1 March-30 June, 2017-2019 were compared to the similar calendar months of 2020. 266/1,763 live births were found to be preterm in 2020, compared to 315/1,586 live births, 353/1,911 live births and 386/1,966 live births in 2017, 2018 and 2019, respectively. The preterm birth rate per 1,000 live births during lockdown showed a 23% drop in 2020 compared to 2019, with Prevented Fraction of 36% (p=0.05) in extremely pre-term (<28 weeks gestational age) births and 26% (p=0.0004) in moderate/late premature (32 weeks to 36 weeks + 6 days gestational age) births. A reduction in preterm birth rate per 1,000 live births was observed for both Saudi nationals and expatriates (8.39 and 15.11 in 2020 vs. 10.02 and 18.62 in 2017-19 respectively), but this reduction was not statistically significant for either group. The findings indicate a significant reduction in the birth rate of extremely preterm and moderate/late preterm infants during lockdown when compared to the preceding 3 years.	This cross-sectional study evaluated the impact of the COVID-19 lockdown on the rate of premature births at a tertiary care neonatal ICU in Riyadh, Saudi Arabia. The findings indicate a significant reduction in the birth rate of extremely preterm and moderate/late preterm infants during lockdown when compared to the preceding 3 years.	Huseynova R, Bin Mahmoud L, Abdelrahim A, et al. Prevalence of Preterm Birth Rate During COVID-19 Lockdown in a Tertiary Care Hospital, Riyadh. <i>Cureus.</i> 2021;13(3):e13634. doi:10.7759/cureus.13634.

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
COVID-19; Lactating women; Pregnant women; Quality of life; Sexual function	1-Mar-21	<a href="#">Sexual function, mental health, and quality of life under strain of COVID-19 pandemic in Iranian pregnant and lactating women: a comparative cross-sectional study</a>	Health and Quality of Life Outcomes	Original Research	The authors examined the impact of the COVID-19 pandemic on the psychological health, sexual function, and quality of life for pregnant and lactating women in Iran from May to June 2020. The study was cross-sectional and the participants (n = 604, mean age 20.81 years, age range 18-45) were asked to complete a questionnaire. Mean scores on the Hospital Anxiety and Depression Scale (14 questions, with a score >11 considered clinical disease) were higher for pregnant (12.11, SD = 6.72) and lactating (11.98, SD = 8.44) women compared to non-lactating/non-pregnant women (9.38, SD = 6.2, P < 0.001). Mean scores for quality of life (on the Short Form Health Survey (SF-12), with possible score 0-100, higher score indicating higher quality of life) for pregnant women (68.21, SD = 9.47) and lactating women (74.18, SD = 12.65) were lower than for non-pregnant, non-lactating women (79.03, SD = 10.48, P < 0.001). Mean scores for sexual function (on the Female Sexual Function Index, with a score <23 considered sexual dysfunction) were also lower in pregnant (22.71, SD = 8.16) and lactating (22.72, SD = 8.16) women when compared to non-pregnant/non-lactating women (26.19, SD = 3.93, P < 0.001). The authors suggest deployment of psychological interventions for the pregnant and breastfeeding population during the COVID-19 pandemic.	This article assessed the impact of the COVID-19 pandemic on depression, anxiety, quality of life, and sexual function for pregnant and lactating women in Iran during the COVID-19 pandemic. Pregnant and lactating women had higher scores for depression and anxiety and lower scores for sexual function and quality of life compared to non-pregnant/non-lactating women.	Mirzaei N, Jahanian Sadatmahalleh S, Bahri Khomami M, et al. Sexual function, mental health, and quality of life under strain of COVID-19 pandemic in Iranian pregnant and lactating women: a comparative cross-sectional study. Health Qual Life Outcomes. 2021;19(1):66. Published 2021 Mar 1. doi:10.1186/s12955-021-01720-0
COVID-19; antibiotics; SARS_CoV-2; emergency department	1-Mar-21	<a href="#">Antibiotic prescribing patterns for coronavirus disease 2019 (COVID-19) in two emergency departments with rapid procalcitonin</a>	Infection Control and Hospital Epidemiology	Research Brief	The authors conducted a retrospective cohort study of antibiotic prescribing patterns for a cohort of emergency department (ED) patients with symptomatic COVID-19 to improve characterization of ED-based antibiotic prescribing and assess the effectiveness of procalcitonin (PCT) testing as a stewardship intervention during the COVID-19 pandemic. 73 patients were included in the analysis, all of whom were symptomatic and tested positive for SARS-CoV-2 at 2 midwestern EDs in the same healthcare system from March 15-May 18, 2020. 27/73 patients (37.0%; 13 females; 1 person aged 0-19 years) were prescribed antibiotics during their ED encounter, 25 (92.6%) of whom received their antibiotics before the positive test result. 24/27 patients (88.88%) had antibiotics administered at the ED, while 3 (11.1%) received antibiotics at discharge. Pneumonia (52.1%) was the most common indication for which antibiotics were prescribed, followed by sepsis or bacteremia (27.1%) and urinary tract infection (12.5%). 10/45 patients who underwent a procalcitonin test during their ED stay reported an elevated level of PCT (>0.25 µg/L). Of the 32 patients with a PCT test available before the antibiotic order, 25% received their antibiotics compared to 46.3% of those who either had no PCT test or had their results available after the antibiotic order (-21.3%; 95% CI, -42.74% to -0.06%; p = 0.061). The authors suggest that the low overall prescribing rates (37%) despite long turnaround times for COVID-19 test results could be due to the utilization of rapid PCT to guide empiric antibiotic decisions. Therefore, after excluding patients with sepsis or identified nonpulmonary infections, it is possible to	In this retrospective cohort study, the authors found a -21.3% absolute difference (p=0.061) in antibiotic prescribing for patients who received PCT testing compared to those who either had no PCT test or had their results available after the antibiotic order. The authors suggest that the low overall prescribing rates (37%) despite long turnaround times for COVID-19 test results could be due to the utilization of rapid PCT to guide empiric antibiotic decisions. Therefore, after excluding patients with sepsis or identified nonpulmonary infections, it is possible to reduce empiric ED prescribing rates so they more closely align with observed bacterial coinfection rates.	Pulia MS, Wolf I, Schwei RJ, et al. Antibiotic prescribing patterns for coronavirus disease 2019 (COVID-19) in two emergency departments with rapid procalcitonin. Infect Control Hosp Epidemiol. 2021 Mar;42(3):359-361. doi: 10.1017/ice.2020.1329. Epub 2020 Nov 19. PMID: 33208206; PMCID: PMC7737132.

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
MIS-C; hospitalization; protocol; pediatrics	1-Mar-21	<a href="#">Multisystem Inflammatory Syndrome in Children Associated With Coronavirus Disease 2019 in a Children's Hospital in New York City: Patient Characteristics and an Institutional Protocol for Evaluation, Management, and Follow-Up</a>	Pediatric Critical Care Medicine	Article	reduce empiric ED prescribing rates so they more closely align with observed bacterial coinfection rates.  The authors aimed to develop a clinical inpatient protocol for the evaluation, management, and follow-up of patients with MIS-C. The protocol was developed by a multidisciplinary team based on literature related to COVID-19, MIS-C, and related inflammatory syndromes, supplemented with the authors' personal clinical experiences. Data were obtained on patients with MIS-C at a New York (USA) hospital from the pre-protocol and post-protocol periods. The protocol was developed in order to identify cases of MIS-C with high sensitivity, stratify risk to guide treatment, recognize co-infectious or co-inflammatory processes, mitigate coronary artery abnormalities, and manage hyper-inflammatory shock. Key elements of evaluation include case identification using broad clinical characteristics and comprehensive laboratory and imaging investigations. Treatment centers around glucocorticoids and IV immunoglobulin, with biologic immunomodulators as adjuncts. Multidisciplinary follow-up after discharge is indicated to manage continued outpatient therapy and evaluate for disease sequelae. Within 2 months, the authors admitted 54 MIS-C patients (n=26 pre-protocol, n=28 post-protocol), all of whom survived without invasive ventilatory or mechanical circulatory support. Median pre-protocol length of hospital stay was 6 days, while post-protocol length was 3 days (p < 0.01). After protocol implementation, median time from admission to initiation of treatment with IV immunoglobulin also decreased significantly from 33 to 20 hours (p = 0.02) This protocol can help improve diagnosis and treatment and shorten the time to discharge for vulnerable pediatric COVID-19 patients with MIS-C.	The authors describe the development and implementation of a clinical inpatient protocol to evaluate, manage, and follow-up with patients with MIS-C in a US hospital, based on clinical experience and relevant literature. The protocol identifies MIS-C with high sensitivity, stratifies risk to guide treatment, and recognizes co-infectious or co-inflammatory processes. For those with MIS-C, the protocol can improve patients' clinical course and shorten time to discharge.	Jonat B, Gorelik M, Boneparth A, et al. Multisystem Inflammatory Syndrome in Children Associated With Coronavirus Disease 2019 in a Children's Hospital in New York City: Patient Characteristics and an Institutional Protocol for Evaluation, Management, and Follow-Up. <i>Pediatr Crit Care Med.</i> 2021;22(3):e178-e191. doi:10.1097/PCC.0000000000002598
COVID-19; Cytomegalovirus; Herpes simplex virus; Human immunodeficiency virus; Maternal-to-child transmission; Pregnancy; Viral hepatitis; Viral infections	1-Mar-21	<a href="#">Management of Viral Complications of Pregnancy: Pharmacotherapy to Reduce Vertical Transmission</a>  <a href="#">[Free Access to Abstract Only]</a>	Obstetrics and Gynecology Clinics of North America	Review Article	The authors review evidence on the treatment and vertical transmission of SARS-CoV-2 infection during pregnancy, along with herpes simplex virus, cytomegalovirus, hepatitis B and C viruses, and HIV. Pregnant women with COVID-19 are more likely to be hospitalized than nonpregnant women; however it is unclear if this is due to differences in COVID-19 severity, or due to bias toward admitting pregnant women for observation. After controlling for age, race/ethnicity, and comorbidities, pregnant women with COVID-19 have a 1.5x increased risk of ICU admission and a 1.7x increased risk of mechanical ventilation compared with nonpregnant women with COVID-19. Increased rates of preterm birth, cesarean delivery, neonatal ICU admission, and intra-uterine fetal demise have been reported. SARS-CoV-2 has been detected in umbilical cord blood, placental samples, and vaginal secretions, suggesting the possibility of in-utero and intrapartum transmission. However, mother-to-child transmission of SARS-CoV-2 is rare with rates ranging from 2-5%, and most transmission likely occurs postnatally through exposure to respiratory droplets. Most infected	The authors review the treatment of SARS-CoV-2 infection during pregnancy, along with herpes simplex virus, cytomegalovirus, hepatitis B and C viruses, and HIV. Mother-to-child transmission of SARS-CoV-2 is rare with rates ranging from 2-5%, and most transmission likely occurs postnatally through exposure to respiratory droplets. Although the best therapy for COVID-19 among pregnant women is still unknown, the authors present evidence that dexamethasone and remdesivir may be well-tolerated in this population.	Rogan SC, Beigi RH. Management of Viral Complications of Pregnancy: Pharmacotherapy to Reduce Vertical Transmission. <i>Obstet Gynecol Clin North Am.</i> 2021;48(1):53-74. doi:10.1016/j.ogc.2020.12.001

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					neonates are asymptomatic. The best therapy for COVID-19 among pregnant women is still unknown. Dexamethasone reduces mortality in nonpregnant patients requiring respiratory support and likewise should be used in pregnancy when indicated. Preliminary data on compassionate use of remdesivir in 86 pregnant and postpartum women indicate that the medication is well tolerated with high recovery rates. The authors conclude that although pregnant women were not included in COVID-19 vaccine trials, vaccination against COVID-19 will likely improve maternal outcomes and protect neonates through transplacental antibody transfer.		
COVID-19; Crohn's disease; inflammatory bowel disease; ulcerative colitis; pregnancy; United Kingdom	1-Mar-21	<a href="#">Impact of the coronavirus infectious disease (COVID-19) pandemic on the provision of inflammatory bowel disease (IBD) antenatal care and outcomes of pregnancies in women with IBD</a>	British Medical Journal (BMJ) Open Gastroenterology	Article	This study examined the impact of the COVID-19 pandemic on inflammatory bowel disease (IBD) antenatal care and pregnancy outcomes in the United Kingdom. Retrospective data were recorded in consecutive patients attending for IBD antenatal care from March-August 2020 including outpatient appointments, infusion unit visits and advice line encounters. 244 pregnant women (mean age=31.3 years; 93.4% Caucasian) with IBD were included, of which 75 (30.7%) were on biologics. Biologic treatment was stopped in 22 (29.3%) cases, at a median gestational age of 28 weeks. Steroids were given in 22 cases (9%). The care provided during 460 patient encounters was not affected by the pandemic in 94.1% of cases. 68.2% of encounters were performed via telephone (compared with 3% pre-pandemic practice, p<0.0001). 110 women delivered 111 live newborns (mean 38.2 weeks gestation), with 12 (11%) giving birth before week 37. Birth occurred by vaginal delivery in 72 (56.4%) and by C-section in 48 (43.6%) cases. 33 C-sections were elective (12 for IBD indications) and 15 were emergency C-sections. Breast feeding was recorded for 34 of 88 (38.6%) documented cases and patients exposed to biologics were not less likely to breastfeed (p=1). Among the 244 pregnant women with IBD, 1 suspected SARS-CoV-2 infection was recorded. The findings indicate that IBD antenatal care adjustments during the pandemic have not negatively affected patient care. Despite high levels of immunosuppression, only a single SARS-CoV-2 infection occurred.	This study examined the impact of the COVID-19 pandemic on inflammatory bowel disease (IBD) antenatal care and pregnancy outcomes in the United Kingdom. The findings indicate that IBD antenatal care adjustments during the pandemic have not negatively affected patient care. Despite high levels of immunosuppression, only a single SARS-CoV-2 infection occurred.	Selinger CP, Fraser A, Collins P, et al. Impact of the coronavirus infectious disease (COVID-19) pandemic on the provision of inflammatory bowel disease (IBD) antenatal care and outcomes of pregnancies in women with IBD. BMJ Open Gastroenterol. 2021;8(1):e000603. doi:10.1136/bmjgast-2021-000603.
SARS-CoV-2; prevalence; pediatric	1-Mar-21	<a href="#">Prevalence of Asymptomatic Severe Acute Respiratory Syndrome Coronavirus 2 Infection Among Youth</a>	The Pediatric Infectious Disease Journal	Letter to the Editor	In this letter, the authors aimed to evaluate the prevalence of asymptomatic SARS-CoV-2 infection among children and young adults to assess the importance of routine screening. Between August and October 2020, a community-based sample (n=54,501) of test results as well as demographic and potential exposure characteristics from individuals <18 years in Los Angeles, CA (USA) was analyzed [specific age data not reported]. The prevalence of SARS-CoV-2 infection among asymptomatic children was found to be 9.5%. Among all children who tested positive, 54.6% were asymptomatic. Among asymptomatic individuals tested (n=35,186) 13.8% of those who reported not wearing masks tested positive compared to 8.7% [p-values not reported]. They also observed a higher prevalence of asymptomatic infections among some racial	In a sample of 54,501 individuals <18 years, the prevalence of SARS-CoV-2 infection among asymptomatic children was found to be 9.5%, and among all children who tested positive, 54.6% were asymptomatic. The authors also observed a higher prevalence of asymptomatic infections among racial and ethnic minorities and youth who reported not wearing a mask in public. These results show	Allan-Blitz LT, Hertlein F, Klausner JD. Prevalence of Asymptomatic Severe Acute Respiratory Syndrome Coronavirus 2 Infection Among Youth. Pediatr Infect Dis J. 2021;40(3):e132-e133. doi:10.1097/INF.0000000000003023

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					and ethnic minority groups; among asymptomatic individuals tested the percent positivity rates were 13.2% for American Indian or Alaska Native, 2.4% for Asian, 4.4% for Black or African American, 3.3% for multiracial, 1.8% for Native Hawaiian or other Pacific Island, 16.4% for “other,” and 6.2% for White children. The authors argue these results support the use of regular testing as a means for infection surveillance among school-age children as there is evidence of the heterogeneity in exposures that contribute to asymptomatic infection among youth. In addition to testing, surveying for potential exposures in the past 7 days should also be routine. Both routine interventions mitigate transmission risk and avoid the need for school closures.	evidence in support of regular testing and exposure surveys to mitigate transmission risk and avoid the need for school closures.	
COVID-19; pediatric; United Kingdom	1-Mar-21	<a href="#">Critical paediatric COVID-19: varied presentations but good outcomes</a>	Archives of Disease in Childhood	Article	The authors described a single-center pediatric ICU (PICU) experience of children who tested positive for SARS-CoV-2 in the first 10 weeks of the pandemic in the UK, excluding those who met PIMS-TS criteria. From 26 March-31 May 2020, 96 children were suspected to have COVID-19 of which 24 (25%) tested positive by RT-PCR at admission. 13 of these patients presented with PIMS-TS. Of the remaining 11 (81% male; median age=5 years, IQR 0.4-11.1 years), 4 children had respiratory disease fulfilling the 2015 PALICC (the pediatric acute lung injury consensus conference) criteria for pediatric acute respiratory distress syndrome. Hypoxemic respiratory failure management included prone ventilation (n=4) and inhaled pulmonary vasodilators (n=3). 2 infants were escalated to high frequency oscillation due to refractory hypoxia on conventional ventilation. Median duration of ventilation was 13 days (IQR 10-15.5 days). The remaining 7 children required admission to PICU for reasons other than respiratory failure (3 presented in status epilepticus, 3 had new diagnoses in congenital heart disease, leukemia and diabetes mellitus, 1 was undergoing chemotherapy for a malignancy). 5 children (45%) received compassionate use of remdesivir following ethics review. A larger number of children were found to be SARS-CoV-2 positive coincidentally. While a causal relationship between some presentations and SARS-CoV-2 infection cannot be ruled out, these cases will have implications for hospital infection control precautions in children with critical illness throughout the pandemic.	The authors described a single-center pediatric ICU experience of children who tested positive for SARS-CoV-2 in the first 10 weeks of the pandemic in the UK, excluding those who met PIMS-TS criteria. A larger number of children were found to be SARS-CoV-2 positive coincidentally. While a causal relationship between some presentations and SARS-CoV-2 infection cannot be ruled out, these cases will have implications for hospital infection control precautions in children with critical illness throughout the pandemic.	Lanyon N, du Pré P, Thiruchelvam T, et al. Critical paediatric COVID-19: varied presentations but good outcomes. Arch Dis Child. 2021;106(3):e10. doi:10.1136/archdischild-2020-319602.
Multisystem inflammatory syndrome; children; critical care	1-Mar-21	<a href="#">First Tunisian Cluster Admissions of Critically Ill Patients with Multisystem Inflammatory Syndrome in Children (MIS-C)</a>	Mediterranean Journal of Hematology and Infectious Disease	Original article	The authors conducted a retrospective study between November 1-30, 2020, of all children < 15 years admitted to a pediatric ICU (PICU) in Tunisia, meeting the WHO case definition for MIS-C. 8 children were admitted with MIS-C with a median age of 8 years (age range: 4-10 years), 7 were male-children, all had been previously healthy, and none were obese. All 8 patients reported fever and gastrointestinal symptoms. The median delay between fever and PICU admission was 6.5 days (range of 4-15 days). All cases showed increased c-reactive protein levels and procalcitonin levels without a	The authors conducted a retrospective study between November 1-30, 2020, of all children less than 15 years admitted to a PICU in Tunisia, meeting the WHO case definition for MIS-C. 8 children with a median age of 8 years were admitted with MIS-C; all had	Borgi A, Khadhraoui H, Louati A, et al. First Tunisian Cluster Admissions of Critically Ill Patients with Multisystem Inflammatory Syndrome in Children (MIS-C). <i>Mediterr J Hematol Infect Dis</i> . 2021;13(1):e2021023.

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					microbial cause. 4 of the patients had acute kidney injury. All the patients had positive SARS-CoV-2 serology tests, but only one had a positive nasopharyngeal RT-PCR SARS-CoV-2 test. All patients required respiratory support, with 3 needing mechanical ventilation with severe cardiac dysfunction and hypotension. Inotropic agents were given to 7 of the patients, complete recovery of left ventricular function occurred at a median time frame of 4 days (range 1-7 days) from admission. All patients were treated with immunoglobulin, methylprednisolone, and low-dose aspirin. No death occurred in this group of patients, and all were discharged home with a median length of stay of 5.5 days (range 2-10 days). The authors state that due to the small number of MIS-C cases worldwide, pediatricians should coordinate for a multicenter study.	been previously healthy, and none were obese.	Published 2021 Mar 1. doi:10.4084/MJHID.2021.023
Turkey, burns, pediatric, COVID-19	1-Mar-21	<a href="#">Increased admissions and hospitalizations to pediatric burn center during COVID 19 pandemic</a>	Burns	Letter to the Editor	This letter reports increased admissions to one pediatric burn center in Turkey during the COVID-19 pandemic. Usually, the number of yearly admissions and hospitalizations at this center average 600 and 350, respectively, with a peak during winter. However, between March 11 and June 11, 2020, there was a significant increase in both admissions (52%) and hospitalizations (60%). The author expected this rise to occur concurrent with "stay-at-home" orders, because children would be spending more time at home in proximity to possible burn hazards. The author stated that all types of pediatric trauma except burns decreased during the first 3 months of the pandemic, and the increased admissions and hospitalizations for pediatric burns is ongoing. He advised that burn care staff must be ready for this situation by taking preventive measures against COVID-19.	This letter reports increased admissions to one pediatric burn center in Turkey during the COVID-19 pandemic. Between March 11 and June 11, 2020, there was a significant increase in both admissions (52%) and hospitalizations (60%) compared to previous years. The author expected this rise to occur concurrent with "stay-at-home" orders, and urges burn care staff to remain vigilant against COVID-19.	Demircan M. Increased admissions and hospitalizations to pediatric burn center during COVID 19 pandemic. Burns. 2021;47(2):487-488. doi:10.1016/j.burns.2020.07.013
SARS-CoV-2, COVID-19, children, PIMS-TS, Pediatric multisystem inflammatory syndrome, KD, Kawasaki Disease, CRP, C-Reactive Protein, TSS, Toxic Shock Syndrome, MIS-C, surveillance	1-Mar-21	<a href="#">Paediatric multisystem inflammatory syndrome temporally associated with SARS-CoV-2 (PIMS-TS): Prospective, national surveillance, United Kingdom and Ireland, 2020</a>	The Lancet Regional Health	Original Research	This study is a prospective national surveillance analysis of 268 PIMS-TS, PIMS-TS/KD, and PIMS-TS/TSS cases in the United Kingdom (UK) and the Republic of Ireland between March 1 and June 15, 2020. The authors conducted a geographical, temporal, and latent class analysis to characterize the epidemiology and clinical characteristics of PIMS-TS. The median age of cases was 8.2 (IQR 4.0-12.1) years, with PIMS-TS/KD cases being younger (5.2 years) and PIMS-TS/TSS cases older (8.8 years) than PIMS-TS only cases (7.8 years). 46.3% of total cases were reported from Greater London. The authors found temporal and geographical associations between community SARS-CoV-2 prevalence and PIMS-TS cases with a median lag of 16 days between COVID-19 and PIMS-TS cases in England [p-value was not given]. 44.0% of the cohort were admitted to a Pediatric ICU, and children classified as PIMS-TS, and another syndrome, especially TSS, were more likely to require intensive care support and longer hospital stay than those with PIMS-TS only. Latent Class Analysis validated the findings of the different phenotypes in the cohort and identified three separate classes (Class 1: PIMS-TS only, Class 2: PIMS-TS/KD, Class 3: PIMS-TS/TSS). Class 3 was older and the most severe with the highest	This study is a prospective national surveillance analysis of 268 PIMS-TS, PIMS-TS/KD, and PIMS-TS/TSS cases in the United Kingdom (UK) and the Republic of Ireland between March 1 and June 15, 2020. The findings revealed a strong geographical and temporal association between SARS-CoV-2 infection rates and PIMS-TS cases. The strong association between SARS-CoV-2 and PIMS-TS emphasizes the importance of maintaining low community infection rates to reduce the PIMS-TS risk.	Flood J, Shingleton J, Bennett E, et al. Paediatric multisystem inflammatory syndrome temporally associated with SARS-CoV-2 (PIMS-TS): Prospective, national surveillance, United Kingdom and Ireland, 2020, The Lancet Regional Health - Europe, Volume 3, 2021, 100075, ISSN 2666-7762, <a href="https://doi.org/10.1016/j.lanepe.2021.100075">https://doi.org/10.1016/j.lanepe.2021.100075</a> .

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					proportions with multi-organ involvement. Such characterizations will be useful for the clinical management of children presenting with a wide variety of syndromes. The strong association between SARS-CoV-2 and PIMS-TS emphasizes the importance of maintaining low community infection rates to reduce the PIMS-TS risk.		
COVID-19; parent-infant dyad; hospital visitation; neonates; breastfeeding; isolation practices; United States	1-Mar-21	<a href="#">The Ripple Effect of a Pandemic on the Parent-Infant Dyad</a>	Neonatal Network	Commentary	In this commentary, the author explored the implications of isolation practices on parent-infant dyads during the COVID-19 pandemic. For mothers with suspected or confirmed COVID-19, the American Academy of Pediatrics guideline updated in May 2020 provided expanded guidance for rooming-in, delayed cord-clamping, breastfeeding, testing, NICU, and hospital discharge. Recognizing that the data are limited guiding care practices for mothers and newborns, temporary separation is recommended. Studies thus far have not detected the virus in breast milk. It is recommended that mothers pump and a noninfected caregiver feed the infant. However, a mother may decide to breastfeed despite the relative risk of transmission. A number of hospitals across the United States have banned all visitors, including parents, from the NICU in an attempt to protect these most vulnerable patients from exposure. Parent responses to being banned from seeing their infants reveal their feelings of pain and isolation. Patient and family-centered care (FCC) principles recognize that the family plays a vital role in the health and well-being of the infant. With limited visitations, there is a need to find secure, alternative means of communication with families, such as through video conferencing. During this dynamic period of understanding COVID-19, there is a need to stay abreast of the evidence and adjust policies and care guidelines accordingly.	In this commentary, the author explored the implications of isolation practices on parent-infant dyad during the COVID-19 pandemic. With limited visitations, there is a need to find secure, alternative means of communication with families such as through video conferencing. During this dynamic period of understanding COVID-19, there is a need to stay abreast of the evidence and adjust policies and care guidelines accordingly.	Reyna BA. The Ripple Effect of a Pandemic on the Parent-Infant Dyad. Neonatal Netw. 2021;40(2):117-120. doi:10.1891/0730-0832/11-T-690.
COVID-19; household transmission; clusters	1-Mar-21	<a href="#">Geospatial Analysis of Age-specific SARS-CoV-2 Transmission Patterns in Households, Korea</a>	Journal of Korean Medical Science	Brief Communication	The authors constructed an age-to-age infection matrix to characterize the household infection pattern of SARS-CoV-2 and determine the age distribution factors between infectors and infectees. The authors obtained data on laboratory-confirmed COVID-19 cases (including addresses) between November 20-December 15, 2020 in Korea, and geocoded the locations of residence, 2-7 cases in the same geolocation were assumed household clusters; 4,048 such clusters were identified. Researchers found that household transmission occurred in 21% of cases, with the index case infecting an average of 1.57 contacts. They found 455 events of infections passed from parent/guardian (aged 30-49) to child (aged 0-14), while child-to-parent infections occurred in 123 events. 48.9% (n=359) of individuals ≥65 years old were infected from those in their age group, while only 4.9% of these individuals were infected by children. Adults aged 45-49 years formed the highest proportion of infectors (n=391; 11.1%), followed by adults aged 55-59 years (n=397; 9.7%) and 40-44 years (n=357; 8.7%). 381/4088 infectees were 50-54 years old (9.3%), followed by 60-64 years (n=357, 8.7%), and 55-59 years (n=324, 7.9%). The authors concluded that transmission of SARS-CoV-2 was more common from	To characterize the household transmission pattern of SARS-CoV-2, the authors analyzed reports of laboratory-confirmed COVID-19 cases in Korea. Adults aged 45-49 years formed the highest proportion of infectors (n=391; 11.1%), with adults aged 50-54 years forming the highest proportion of secondary case infectees (n=381; 9.3%). The authors concluded that the transmission of SARS-CoV-2 was more common from adults to children than the reverse.	Yi S, Kim YM, Choe YJ, et al. Geospatial Analysis of Age-specific SARS-CoV-2 Transmission Patterns in Households, Korea. J Korean Med Sci. 2021;36(8):e63. Published 2021 Mar 1. doi:10.3346/jkms.2021.36.e63

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					adults to children than the reverse, urging additional awareness in the adult population and encouraging re-evaluation of the implications of school closure on SARS-CoV-2 transmission in households.		
COVID-19; telehealth; information technology; qualitative research; technology; pediatric;	1-Mar-21	<a href="#">Multidisciplinary community paediatric video appointments during COVID-19 pandemic: descriptive study</a>	Archives of Disease in Childhood	Letter to the Editor	The authors describe the conversion of services for children with special needs, including neurodevelopmental and complex disabilities, to telehealth format beginning in March 2020 for a child development center in the United Kingdom. Qualitative feedback was obtained from families (n = 74) and staff (n = 29) of the center. Families had overall positive feedback for the virtual visits and noted less travel time, missing less work or school, flexibility in attendance despite differing geographical location, and a more relaxed feeling in their home as positive themes. 57% of the families stated they did not have any dislikes about the video consultations. Staff had overall negative impressions of the telehealth format and noted technological difficulties, limited opportunities for examination of patients, challenges with building rapport, and the tiring effect of lengthened appointments as drawbacks of the approach. The authors estimate that the differing opinions of the two groups may be due to different experiences, with the staff having to adapt to different working environments while families were grateful to still have access to appointments. They note that future successful video consultations may complement rather than replace in-person consultations, particularly for children with presentation subtleties that can be missed on video. The authors noted that financial implications, reduced carbon footprint, examination of inequities for families with technology access, and privacy considerations should be considered with regard to video consultations for these services.	This letter to the editor describes the experiences of staff and families amidst the conversion of services for children with special needs to a telehealth format during the COVID-19 pandemic in the United Kingdom. Overall families noted many positive themes with regard to the conversion while staff indicated negative themes, suggesting a different experience for the providers and families and the need to consider ongoing implications. The authors noted that financial implications, reduced carbon footprint, examination of inequities for families with technology access, and privacy considerations should be considered with regard to video consultations for these services.	Mount CE, Elson N, Ahmad S. Multidisciplinary community paediatric video appointments during COVID-19 pandemic: descriptive study. Arch Dis Child. 2021;106(3):e19. doi:10.1136/archdischild-2020-320011
COVID-19; stem cell therapy; human amniotic cells	1-Mar-21	<a href="#">Stem cells and COVID-19: are the human amniotic cells a new hope for therapies against the SARS-CoV-2 virus?</a>	Stem Cell Research and Therapy	Review	The authors reviewed existing data about the use of stem cells for COVID-19 treatment, including ongoing clinical trials. Currently, there are 41 clinical trials using mesenchymal stem cells (MSCs) as cell therapy to combat SARS-CoV-2 pneumonia. Moreover, 21 of them use MSCs derived from the human placenta. The authors also discussed the non-cellular therapies that are being applied, such as respiratory support (mechanical ventilation, non-invasive ventilation or invasive ventilation), non-specific antiviral drugs (remdesivir, lopinavir-ritonavir), plasma from recovered patients, and anti-inflammatory treatments such as NSAIDs, glucocorticoids (dexamethasone), aminoquinolines (chloroquine and hydroxychloroquine), immunosuppressants, and inflammatory cytokine antagonists. Finally, the use of human amniotic membrane cells in patients who suffer from immune/inflammatory lung diseases are discussed and their possible use as a successful treatment against COVID-19 is hypothesized. Due to their differentiation capacity and its undoubted immunoregulatory properties, amnion cells therapy would be a promising treatment	The authors reviewed existing data about the use of stem cells for COVID-19 treatment, including ongoing clinical trials, and also discussed non-cellular therapies. Due to their differentiation capacity and its undoubted immunoregulatory properties, amnion cells therapy would be a promising treatment for COVID-19.	Riedel RN, Pérez-Pérez A, Sánchez-Margalet V, et al. Stem cells and COVID-19: are the human amniotic cells a new hope for therapies against the SARS-CoV-2 virus? Stem Cell Res Ther. 2021;12(1):155. doi:10.1186/s13287-021-02216-w.

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
					for COVID-19. They will probably act dually, not only by the prevention of cytokine storm but also by repairing and replacing damaged tissue. These features position human amniotic membrane stem cells as candidates to develop new successful protocols and curative treatments for COVID-19.		
Children, pediatrics, testing, positivity rate, schools, reopening	1-Mar-21	<a href="#">Severe Acute Respiratory Syndrome Coronavirus 2 Testing in Children in a Large Regional US Health System During the Coronavirus Disease 2019 Pandemic</a>	Pediatric Infectious Diseases Journal	Original Research	This cross-sectional study evaluated patterns of pediatric SARS-CoV-2 testing within the Yale New Haven Health System, USA throughout the COVID-19 pandemic (March-September 2020). 23,137 (9.8%) of tests were performed in patients ≤18 years of age, including 734 (3.2%) positive tests from 688 unique patients [age range not provided]. After the first positive case in March, the positivity rate in children increased by 3.7% per week, a significantly slower pace than adults (4.3% slower, 95% CI: 2.2%–6.4%; p< 0.01). The rate of positivity in the pediatric population peaked at 18% the week of March 30 and plateaued the week of June 22 at <1%, with a second peak in late July (3.1%). After the second peak, no significant correlation was found between the number of tests performed and the count of positive tests per week (rs = 0.51; p=0.06). The positivity rate remained low and did not change after schools re-opened (trend: 0.02% per week; 95% CI: –0.06% to 0.09%; p=0.65). Older children consistently made up the larger portion of positive pediatric cases (p<0.001). The authors concluded that improved access to testing for children over time led to more complete case detection, and the percent positivity in children did not change after schools re-opened.	In this evaluation of the patterns of pediatric SARS-CoV-2 testing at a US hospital system, the authors found that the positivity rate in children increased more slowly than adults. After a second peak in July 2020, there was no correlation between number of tests performed and number of positive tests per week. Older children consistently made up a larger portion of positive tests. Importantly, the positivity rate did not change significantly after schools re-opened. The authors concluded that improved access to testing for children over time led to more complete case detection, and the percent positivity in children did not change with re-opening of schools.	Peaper DR, Murdzek C, Oliveira CR, et al. Severe Acute Respiratory Syndrome Coronavirus 2 Testing in Children in a Large Regional US Health System During the Coronavirus Disease 2019 Pandemic. <i>Pediatr Infect Dis J</i> . 2021;40(3):175-181. doi:10.1097/INF.0000000000003024
HCoVs; SARS-CoV-2; cross-reactivity; human milk; passive immunity; breastfeeding	1-Mar-21	<a href="#">Previous viral symptoms and individual mothers influenced the leveled duration of human milk antibodies cross-reactive to S1 and S2 subunits from SARS-CoV-2, HCoV-229E, and HCoV-OC43</a>	Journal of Perinatology	Article	This US study investigated the influence of previous viral symptoms on the level and duration of human milk antibodies reactive to SARS-CoV-2 and other common human coronaviruses (HCoVs). Human milk samples were collected once per month for 4 consecutive months (March-June 2020) from 9 mothers aged 21-35 years with (n=5) and without (n=4) previous self-reported viral symptoms during 2020. Antibodies reactive to S1 and S2 subunits from SARS-CoV-2, HCoV-OC43, and HCoV-229E were measured via ELISA. The level of SARS-CoV-2 S2-reactive SIgA/IgA was higher in mothers with symptoms (p = 0.014). S2-reactive SIgM/IgM tended to be higher in mothers with symptoms (p = 0.066). SARS-CoV-2 S2- and HCoV-229E-reactive IgG were not related to previous symptoms. The duration of antibody levels in human milk in mothers with previous viral symptoms varied between 3 and 4 months after the reported viral symptoms. The authors conclude that previous viral symptoms may change the antibody cross-reactive levels to SARS-CoV-2 and HCoVs in human milk. These results underline the importance of breastfeeding to provide passive immunity to infants via human milk antibodies. The next step of this	This study analyzed milk samples from 9 US mothers with (n=5) and without (n=4) previous viral symptoms. Results indicate that patients with viral symptoms had higher levels of SARS-CoV-2 S2-reactive SIgA/IgA and tended to have higher SARS-CoV-2 S2-reactive SIgM/IgM antibodies. Symptoms did not relate to SARS-CoV-2- and HCoV-229E-reactive IgG in human milk.	Demers-Mathieu V, DaPra C, Mathijssen GB, et al. Previous viral symptoms and individual mothers influenced the leveled duration of human milk antibodies cross-reactive to S1 and S2 subunits from SARS-CoV-2, HCoV-229E, and HCoV-OC43 [published online ahead of print, 2021 Mar 1]. <i>J Perinatol</i> . 2021;1-9. doi:10.1038/s41372-021-01001-0

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					investigation will be to determine the neutralizing capacity of human milk antibodies against SARS-CoV-2.		
Preterm birth, health disparities, infants, delivery, obstetrics	1-Mar-21	<a href="#">Racial/Ethnic Disparities in Very Preterm Birth and Preterm Birth Before and During the COVID-19 Pandemic</a>	Journal of the American Medical Association (JAMA) Network Open	Original Research	This cross-sectional study assessed racial/ethnic disparities in very preterm birth (VPTB) and preterm birth (PTB) during the first wave of the COVID-19 pandemic in New York City, USA. 8026 Black, Latina, and White women were included: Women who delivered from March 28-July 31, 2020, were considered the pandemic cohort (n=3834), and women who delivered from March 28-July 31, 2019, were considered the pre-pandemic cohort (n= 4192). A difference-in-differences (DID) analysis was conducted. In the pre-pandemic cohort, VPTB risk was 4.4% (20/451) and PTB risk 14.4% (65/451) among Black infants compared with 0.8% (17/2188) VPTB risk and 7.1% (156/2188) PTB risk among White infants. In the pandemic cohort, VPTB risk was 4.3% (21 of 491) and PTB risk was 13.2% (65 of 491) among Black infants compared with 0.5% (10 of 1994) VPTB risk and 7.0% (240 of 1994) PTB risk among White infants. The DID estimators indicated that no increase in Black vs White disparities were found (VPTB, 0.1 additional cases per 100 [95% CI, -2.5 to 2.8]; PTB, 1.1 fewer case per 100 [95% CI, -5.8 to 3.6]). There was also no change detected in Latina vs White disparities. The authors conclude that in this study, no evidence was found for increased racial/ethnic disparities in PTB during the pandemic.	In this cross-sectional study, the authors conducted a difference-in-differences analysis to assess for changes in racial/ethnic disparities in preterm birth and very preterm birth during the COVID-19 pandemic in New York City, USA. No evidence was found for increased racial/ethnic disparities in preterm birth during the pandemic when comparing Black, White, and Latina women who delivered before versus during the pandemic.	Janevic T, Glazer KB, Vieira L, et al. Racial/Ethnic Disparities in Very Preterm Birth and Preterm Birth Before and During the COVID-19 Pandemic. JAMA Netw Open. 2021;4(3):e211816. Published 2021 Mar 1. doi:10.1001/jamanetworkopen.2021.1816
SARS-CoV-2, COVID-19, Pregnancy, Maternal leave policies, asymptomatic COVID-19	1-Mar-21	<a href="#">Asymptomatic SARS-CoV-2 Infections in Pregnant Patients in an Italian City during the Complete Lockdown</a>	Journal of Medical Virology	Original Research	The authors of this study aimed to determine the prevalence of SARS-CoV-2 infections in asymptomatic pregnant women at term gestation from 4 different hospitals in Genoa, Italy, over a 1-month study period during the COVID-19 lockdown from April 1 to April 30, 2020. The study included 333 pregnant women (mean age 35.02±6.02 years) who underwent universal screening for SARS-CoV-2 infection via PCR testing. 261 (78.4%) pregnant women were at term, 61 (18.3%) were tested at admission for late premature delivery (34-36 weeks gestation), and the remaining 11 (3.3%) were between 30 and 34 weeks gestation. The results showed that of the 333 pregnant women tested, only 9 were symptomatic. Only 1 symptomatic patient (0.3%) and 6 asymptomatic ones (1.8%) tested positive. None developed clinical symptoms out of the 6 positive asymptomatic patients, and no infection was reported in their newborns. Of note, 5 of the 6 positive asymptomatic patients were from the city's most disadvantaged neighborhood, and 4 out of 6 were migrants. In conclusion, even if Italy was severely affected by COVID-19 during the study period, the reported prevalence of SARS-CoV-2 infections in asymptomatic pregnant patients at term was lower than those reported in the literature.	The authors of this study aimed to determine the prevalence of SARS-CoV-2 infections in asymptomatic pregnant women at term gestation from 4 different hospitals in Genoa, Italy, over a one-month study period during lockdown from April 1 to April 30, 2020. The authors concluded that even if Italy was severely affected by COVID-19 during the study period, the reported prevalence of SARS-CoV-2 infections in asymptomatic pregnant patients at term gestation was lower than those reported in the literature.	Massarotti C, Adriano M, Cagnacci A, et al. Asymptomatic SARS-CoV-2 infections in pregnant patients in an Italian city during the complete lockdown. J Med Virol. 2021;93(3):1758-1760. doi:10.1002/jmv.26458
COVID-19; children; hospital transport;	1-Mar-21	<a href="#">Safe Ground Transport of Pediatric COVID-19 Patients-A Single-Center</a>	Pediatric Emergency Care	Original Research	The authors examined the hospital records for children (n = 883, ages 2 months-21 years, mean age 11 years) seen in a pediatric hospital in the US, who received ground transport from April-October 2020. 16% of the patients (n = 143) were confirmed SARS-CoV-2 PCR-positive. 40% of all children had complex medical	This article describes the experience of a pediatric emergency transport unit in the United States that transported children with COVID-19 during	McPherson ML, Krennerich EC, Arrington AS, et al. Safe Ground Transport of Pediatric COVID-19 Patients-A Single-Center First-Surge

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emergency transport		<a href="#">First-Surge Experience</a>			conditions, and 25% of the patients required aerosol-generating procedures during transport. The most common medical diagnoses for patients transported was respiratory compromise (n = 51), followed by diabetic ketoacidosis (n = 9) and sickle cell crises (n = 6), and the most common surgical diagnosis was appendicitis (n = 14). Overall, there were no adverse events reported during the transports, and no staff were found to have contracted a SARS-CoV-2 infection from these transports. Total transport volume decreased during the time period when compared to prior to the COVID-19 pandemic, in tandem with a decline in total inpatient volume (graph of transport volume available in the article). Operational challenges that were encountered during the COVID-19 pandemic for the pediatric transport unit included fear/anxiety of occupational exposure, enhanced scrutiny of appropriate triage, fewer parents in attendance with pediatric patients, additional cleaning procedures, and the need for constant and rapid education. The authors concluded that children with COVID-19 can be safely transported with some adjusted logistics and procedures, appropriate change management, and education and messaging on use of PPE.	the pandemic. No adverse events were reported during the transports, and no staff contracted a SARS-CoV-2 infection from the transports.	Experience. <i>Pediatr Emerg Care.</i> 2021;37(3):175-178. doi:10.1097/PEC.0000000000002330
COVID-19, anxiety, cognitive empathy, education, families, social stressors	1-Mar-21	<a href="#">Social, Family, and Educational Impacts on Anxiety and Cognitive Empathy Derived From the COVID-19: Study on Families With Children</a>	Frontiers in Psychology	Original Research	This study aims to describe the socio-family, psychological, and educational impacts of the COVID-19 pandemic on Spanish families. Questionnaires were completed by 145 families representing a total of 522 people (89.1% nuclear families with children living in the same household) in Aragon, Spain during the first week of April 2020. The average age of adult participant is 42.52 years (SD=6.87), and average children's age is 8.83 years (SD=6.32). The instruments used include: Beck-II Depression Inventory (BDI-II); Baron-Cohen and Wheelwright's Empathy Quotient (EQ) with its cognitive empathy subscale, and an ad-hoc questionnaire, reviewed by a panel of experts, to learn about socio-personal, family and housing conditions, use of technology, involvement in school tasks and household, and working condition. The multiple regression analysis results show that the anxiety derived from the current situation is explained in 23.1% (p < 0.001) by the variables: gender (t = -2.31, p = 0.022), level of Internet consumption (t = 2.139, p = 0.034), increase of family conflicts (t = 2.980, p = 0.003) and help with school tasks (t = 2.980, p = 0.040). Cognitive empathy is explained in 24.6% (p < 0.001) by the variables: gender (t = -4.690, p < 0.001) and mother's hours of teleworking (t = 2.101, p = 0.037). A limitation of the study is its generalizability to the wider public given 89.1% of study population are nuclear families. The authors assert that the results highlight the inequalities that still exist within the family sphere and propose education to increase empathy and regulate anxiety during exceptional situations.	This study aims to describe the socio-family, psychological, and educational impacts of the COVID-19 pandemic of Spanish families. The main findings of this research are that: anxiety derived from the pandemic situation is explained by gender, the level of Internet consumption, the increase in family conflicts and help with homework. Cognitive empathy is explained by gender and mother's teleworking hours.	Quilez-Robres A, Lozano-Blasco R, Íñiguez-Berrozpe T, Cortés-Pascual A. Social, Family, and Educational Impacts on Anxiety and Cognitive Empathy Derived From the COVID-19: Study on Families With Children. <i>Front Psychol.</i> 2021;12:562800. Published 2021 Mar 1. doi:10.3389/fpsyg.2021.562800
COVID-19, children, brain death, apnea	1-Mar-21	<a href="#">Brain Death Evaluation in Children With</a>	Pediatric Critical Care Medicine	Technical Note	The aim of this article was to discuss the challenges of conducting a death by neurologic criteria/brain death evaluation in children during the COVID-19 era and provide guidance to mitigate viral	The authors of this article state that neurologic examination and apnea tests in children during the	Kirschen MP, McGowan N, Topjian A. Brain Death Evaluation in Children With

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		<a href="#">Suspected or Confirmed Coronavirus Disease 2019</a>			transmission risk and maintain patient safety during testing. The target patient population for this note is children with suspected or confirmed COVID-19 who suffer catastrophic brain injury due to neurologic complications. The authors provide guidance to mitigate transmission risk and maintain patient safety during evaluation, such as appropriate PPE. Additionally, risk of aerosol generation and viral transmission during the apnea test can be mitigated by using continuous positive airway pressure delivered via the ventilator as a means of apneic oxygenation. The authors also stress that disconnections to and from a ventilator during transport can also increase risk of transmission.	COVID-19 pandemic can be conducted in relatively the traditional manner with a few modifications to mitigate the risk of disease transmission, such as PPE and ventilator precautions.	Suspected or Confirmed Coronavirus Disease 2019. <i>Pediatr Crit Care Med.</i> 2021 Mar 1;22(3):318-322. doi: 10.1097/PCC.0000000000002650.
Ultrasound, maternal-fetal medicine, doppler, uterine artery, pregnancy	1-Mar-21	<a href="#">Doppler assessment of the fetus in pregnant women recovered from COVID-19</a>	The Journal of Obstetrics and Gynaecology Research	Original Research	This prospective case-control study conducted in Ankara City Hospital, Turkey between July 1-August 30, 2020 evaluated the maternal-fetal Doppler ultrasound patterns in pregnant women recovered from COVID-19. The fetal Doppler parameters for 30 pregnant women (median age 30 years, range not provided) who were diagnosed with SARS-CoV-2 by RT-PCR were compared with 40 healthy pregnant women. Doppler ultrasonographic assessment of the uterine arteries and middle cerebral artery (MCA) were used in addition to umbilical artery Doppler between 23-40 weeks of gestation. Cerebroplacental ratio (CPR) was calculated according to gestational age. Doppler ultrasound assessment was performed approximately 3 weeks after confirmation of infection. The pulsatility and resistance indices of umbilical and uterine arteries showed a significant increase in pregnant women in the study group compared to the control group ( $p < 0.05$ ). Multivariable logistic regression analysis revealed that pulsatility and resistance indices of the mean uterine arteries were independently associated with disease (OR > 1000, 95%CI 9.77 to >1000, $p = 0.009$ ; OR 0.000 95%CI 0.000-0.944, $p = 0.049$ ), respectively. However, no significant changes were observed in MCA pulsatility index and CPR between two groups ( $p > 0.05$ ). The authors conclude that uterine artery Doppler indices in the third trimester may have clinical value in pregnant women recovered from COVID-19.	This case-control study compared maternal-fetal doppler ultrasound patterns in pregnant women recovered from COVID-19 to healthy pregnant controls in Turkey. The pulsatility and resistance indices of umbilical and uterine arteries showed a significant increase in pregnant women in the study group compared to the control group. The authors conclude that uterine artery Doppler indices in the third trimester may have clinical value in pregnant women recovered from COVID-19.	Anuk AT, Tanacan A, Yetiskin FDY, et al. Doppler assessment of the fetus in pregnant women recovered from COVID-19. <i>J Obstet Gynaecol Res.</i> 2021; doi:10.1111/jog.14726
SARS-CoV-2; viral loads; saliva; children; sensitivity	1-Mar-21	<a href="#">Performance of RT-PCR on saliva specimens compared to nasopharyngeal swabs for the detection of SARS-CoV-2 in children: A prospective comparative clinical trial</a>	medRxiv	Preprint (not peer-reviewed)	The authors conducted a clinical trial of children and adolescents (age range: 1.2-17.9 years; mean age: 12.7 years) with symptoms suggestive of COVID-19 between November-December 2020 in Switzerland for detection and viral loads of saliva versus nasopharyngeal (NP) swabs tested by RT-PCR. 397 children had both NP and saliva samples taken during the study period, with a mean time between the onset of symptoms and a sample of 2.4 days (SD 1.8, range 0-10 days). 89.9% of the children $\geq 12$ years presented with at least one major symptom of SARS-CoV-2, and 81.5% of those <12 years presented with a fever. 91 (22.9%; 18.8-27.1%) participants tested positive for SARS-CoV-2 RT-PCR tests by saliva sample, 101 (25.4%; 21.2-29.7%) by NP swab, and 106 (26.7%; 22.4-31.1%) by any of the 2 samples. 15 children only tested positive by	The authors conducted a clinical trial of children and adolescents with symptoms suggestive of COVID-19 in Switzerland for detection and viral loads of saliva versus nasopharyngeal (NP) swabs tested by RT-PCR. There was a significant difference for saliva samples detection by age category (0-6, $\geq 6-12$ , $\geq 12$ years) but not for the NP swabs.	Fougere Y, Schwob JM, Miauton A, et al. Performance of RT-PCR on saliva specimens compared to nasopharyngeal swabs for the detection of SARS-CoV-2 in children: A prospective comparative clinical trial. <i>MedRxiv.</i> 2021. <a href="https://doi.org/10.1101/2021.02.27.21252571">https://doi.org/10.1101/2021.02.27.21252571</a>

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					NP swab, and 5 only by saliva. There was a significant difference for saliva samples detection by age category (0-6, ≥6-12, ≥12 years)(p=0.007) but not for the NP swabs (p=0.07). When using a NP viral load (VL) of 106 cp/ml, the sensitivity of saliva and NP samples were 85.9% (95%CI 79.2-92.5%) and 95.3% (95%CI 91.3-99.3%) respectively (p=0.034). Age stratification for sensitivity was 89.9% by saliva and 97.1% by NP for children ≥12 years, 6-12-year-olds sensitivity was 84.4% (saliva) and 90.6% by NP, and for children <6 years, the saliva sensitivity was 25% (due to inability to drool), and NP was 100%. Additional information on VL data is available in graphs provided by the authors. The authors conclude that saliva is a reliable and non-invasive alternative SARS-CoV-2 testing method for children.		
SARS-CoV-2; screening; saliva; daycare; children; transmission	1-Mar-21	<a href="#">Screening for SARS-CoV-2 infections in daycare facilities for children in a large city in Germany</a>	medRxiv	Preprint (not peer-reviewed)	This cohort study evaluated a voluntary SARS-CoV-2 screening strategy for re-opening daycare centers in Düsseldorf, Germany. The study was conducted from June 10 - July 7, 2020, and included 5,210 children (age range: 1-7 years) and staff from 115 facilities, during which participants submitted saliva samples for SARS-CoV-2 screening twice weekly. During the study period, the Public Health Authority of Düsseldorf reported 501 infections from the overall population, of which 32 were among preschool-aged children. 10 cases (8 children, 2 childcare workers) were assigned to facilities participating in the study, of which only 1 infection (a child) was part of the study cohort. The frequency of reported SARS-CoV-2 infections in daycare during the study period was not significantly different from the prevalence of reported infections in the general population of Düsseldorf (0.81 infections per 1000 inhabitants, 95% CI 0.74-0.89, p=0.313). Furthermore, the incidence of SARS-CoV-2 was significantly lower among children in the study cohort (0.25/1,000 children) than in children who did not participate in the study (2.64/1,000 children; p=0.0087). The authors suggest that although there may have been selection bias in their study, SARS-CoV-2 screening programs in daycare facilities may help detect asymptomatic infections early and thereby support containment.	This cohort study evaluated a voluntary SARS-CoV-2 screening strategy for re-opening daycare centers in Düsseldorf, Germany, in which children and staff submitted saliva samples twice weekly. The authors found no evidence for a higher rate of transmission in daycare facilities for children compared to the general population. SARS-CoV-2 screening programs in daycare facilities may help detect asymptomatic infections early and thereby support containment.	Lubke N, Schupp AK, Bredahl R et al. Screening for SARS-CoV-2 infections in daycare facilities for children in a large city in Germany. medRxiv [pre-print]. 2021 Mar 1. doi: <a href="https://doi.org/10.1101/2021.02.26.21252510">https://doi.org/10.1101/2021.02.26.21252510</a>
Adverse childhood experiences; COVID-19; Child abuse; Child maltreatment; Child neglect; Domestic violence; Mental health; Parental stress	1-Mar-21	<a href="#">Families in the COVID-19 pandemic: parental stress, parent mental health and the occurrence of adverse childhood experiences- results of a representative</a>	European Child and Adolescent Psychiatry	Original Article	An increase in adverse childhood experiences (ACEs) during the COVID-19 pandemic has been widely predicted, but evidence is scarce. This study aimed to generate data on pandemic-related parental stress and mental health and the occurrence of ACEs, identify risk factors for increased ACEs, and provide qualitative data on parents' experiences. A survey was conducted in Germany in August 2020 with 1,024 parents with a mean age of 41.7 years (range 18–73 years). Mean child age was 9.41 years (range 0.5–17.0 years). >50% of parents reported being stressed by social distancing and the closure of schools and childcare facilities. Parental stress increased significantly during the pandemic (p<0.001). Parents also reported higher levels of anxiety and depression compared to German normative data, with very high levels (above the 95th	This survey of German parents aimed to generate data on pandemic-related parental stress and mental health and the occurrence of adverse childhood experiences (ACEs). Increases in children witnessing domestic violence and verbal emotional abuse were associated with higher parental stress, job loss, and younger parent and child age.	Calvano C, Engelke L, Di Bella J, et al. Families in the COVID-19 pandemic: parental stress, parent mental health and the occurrence of adverse childhood experiences-results of a representative survey in Germany [published online, 2021 Mar 1]. Eur Child Adolesc Psychiatry. 2021;1-13. doi:10.1007/s00787-021-01739-0

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		<a href="#">survey in Germany</a>			percentile) of depressive symptoms (12.3%) and anxiety (9.7%). Up to one-third of the sample reported ACEs in the child's lifetime. In this group, 29.1% reported an increase in children witnessing domestic violence during the pandemic, and 42.2% reported an increase verbal emotional abuse. These families were characterized by higher parental stress (p<0.001), job losses (p<0.05), and younger parent (p<0.05) and child age (p<0.001). These results indicate parental stress is an important target point for interventions addressing the impact of the pandemic on ACEs.		
Pediatrics, children, MIS-C, practice guidelines, transmission, prevention	1-Mar-21	<a href="#">Acute covid-19 and multisystem inflammatory syndrome in children</a>	British Medical Journal (BMJ)	Practice Guideline	To develop this clinical practice update regarding COVID-19 and MIS-C in children (0-18 years of age) in the United States, the authors searched the Medline database and a personal archive of references for articles focusing on pediatric age groups. The primary literature review occurred in October 2020; however, the authors included key up-to-date publications through February 2021. The practice update covers the presentation of COVID-19, asymptomatic and mild disease, and severe COVID-19, along with characteristics of MIS-C, transmission of SARS-CoV-2, considerations for testing, health disparities, and therapeutic and prevention efforts. Key points include: 1) Exclude COVID-19 in children with fever and respiratory tract symptoms or loss of taste or smell, especially if there is possible exposure to others with the virus. 2) Consider MIS-C in children presenting with fever and abdominal symptoms—particularly if they develop conjunctivitis or rash—and refer to a pediatric emergency department for evaluation. 3) MIS-C can have overlapping symptomatology with disease processes that require prompt treatment, such as sepsis, toxic shock syndrome, myocarditis, and meningitis. 4) Simple prevention measures, including mask wearing, hand hygiene, and social distancing remain crucial to prevent the spread of SARS-CoV-2 in children and adults.	This clinical practice update focuses on the recognition and treatment of COVID-19 and MIS-C in children 0-18 years of age in the United States. The authors highlight that COVID-19 should be excluded in children with fever and respiratory symptoms, MIS-C should be considered in children presenting with fever and abdominal symptoms and referred to the emergency department, MIS-C can have overlapping symptomatology with disease processes that require prompt treatment, and that simple prevention measures, including mask wearing, hand hygiene, and social distancing remain crucial to prevent the spread of SARS-CoV-2 in children and adults.	Rubens JH, Akindele NP, Tschudy MM, Sick-Samuels AC. Acute covid-19 and multisystem inflammatory syndrome in children. BMJ. 2021;372:n385. Published 2021 Mar 1. doi:10.1136/bmj.n385
Newborn, COVID-19, vertical transmission, contact, droplet,	1-Mar-21	<a href="#">A COVID 19 positive preterm mother and infant: a case report [Free Access to Preview Only]</a>	Journal of Obstetrics and Gynaecology	Case Report	This is a case report of an obese 36-year-old female at 31 6/7 weeks gestation who presented to the local maternity unit with shortness of breath, fever, cough, and underlying gestational diabetes in the United Kingdom [date not specified]. Laboratory examination showed increased C-reactive protein of 134.4 mg/L and positive SARS-CoV-2 from nasal/throat swab. Chest X-ray showed patchy bilateral opacification, and a CT pulmonary angiogram revealed extensive bilateral pneumonia, ruling out pulmonary embolism. Antenatal corticosteroids were administered for fetal lung maturation and magnesium sulfate for neuroprotection. The patient also required an insulin sliding scale to control her blood glucose. Cesarean section under spinal anesthesia was performed, resulting in uncomplicated delivery of a female infant, weighed 2105 grams. The neonate was immediately transferred to the neonatal ICU without contact with the mother. Chest X-Ray of the neonate revealed signs of respiratory distress syndrome, and swab at birth	This is a case report of an obese 36-year-old female at 31 6/7 weeks gestation who presented to the local maternity unit with COVID-19 and underlying gestational diabetes in the United Kingdom. She gave birth to a healthy female infant that later tested positive for SARS-CoV-2 on day 3. As there was no in utero testing or placental swabs, the possibility of vertical transmission is one the authors felt was difficult to explore in this case.	George H, Mutema E. A COVID 19 positive preterm mother and infant: a case report [published online, 2021 Mar 1]. J Obstet Gynaecol. 2021;1-4. doi:10.1080/01443615.2020.1863343

Key Terms	Date Published	Title	Journal / Source	Type of Publication	Summary & Key Points	Specific Observations	Full Citation
					was negative for SARS-CoV-2. However, repeated swab testing of the neonate on day 3 showed a positive result for SARS-CoV-2. The neonate did well without any invasive treatment. The authors suggest that the most likely method of transmission was immediately at birth with the initial breaths in the operating theater or by vertical transmission. As there was no in utero testing or placental swabs, the possibility of vertical transmission is one the authors felt was difficult to explore in this case.		
COVID-19; SARS-CoV-2; TMPRSS2; ACE2; placental transmission	1-Mar-21	<a href="#">Entry, egress and vertical transmission of SARS-CoV-2</a>	Journal of Molecular Cell Biology	Review	In this review, the authors summarized the molecular mechanism for entry of SARS-CoV-2 into host cells, the basis for lung and other organ failures in severe acute cases, and the evidence for congenital transmission. Infected neonates and children have relatively mild clinical manifestations of COVID-19 and a lower fatality rate than elderly adults. Recent studies have unambiguously demonstrated the vertical transmission of SARS-CoV-2 from infected pregnant women to fetuses, which creates yet another challenge for disease prevention. The mechanisms that underlie the significantly lower incidence of severe illness and death in children remain poorly understood. Previous studies examined the mRNA levels of ACE2 and TMPRSS2. Characterization of the spatiotemporal distribution of ACE2, TMPRSS2, and FURIN proteins in human tissues at the fetal and post-natal stages will provide insights into the potency of infant infection by SARS-CoV-2. Accurate diagnostic tools need to be developed for children with non-specific symptoms. The severity of the pandemic demands combined global efforts for the future well-being of humankind.	In this review, the authors summarized the molecular mechanism for entry of SARS-CoV-2 into host cells, the basis for the failure of the lungs and other organs in severe acute cases, and the evidence for congenital transmission. The mechanisms that underlie the significantly lower incidence of severe illness and death in children remain poorly understood. Accurate diagnostic tools need to be developed for children with non-specific symptoms.	Zhang H, Zhang H. Entry, egress and vertical transmission of SARS-CoV-2. J Mol Cell Biol. 2021:mjab013. doi:10.1093/jmcb/mjab013.
COVID-19; children; masking; respiratory function; infants	1-Mar-21	<a href="#">Assessment of Respiratory Function in Infants and Young Children Wearing Face Masks During the COVID-19 Pandemic</a>	Journal of the American Medical Association (JAMA) Network Open	Original Research	The aim of this cohort study is to examine whether the use of surgical facial masks among children in Italy is associated with episodes of oxygen desaturation or respiratory distress. Between May - June 2020, 47 healthy children were enrolled (aged 4 months to 12 years). Participants were divided into two groups; Group A consisted of 22 children (46.8%), with 11 (50.0%) boys and median (IQR) age 12.5 (10.0-17.5) months; Group B consisted of 25 children (53.2%), with 13 boys (52.0%) and median (IQR) age 100.0 (72.0-120.0) months. Each group participated in 2 30-minute sessions; the first without a mask and the second with the mask in place. During the second session, the children engaged in usual play. For group B, children walked briskly for 12 minutes. During the first 60 minutes of evaluation, there was no significant change in group A in median partial pressure of end-tidal carbon dioxide (Petco <sub>2</sub> ); 33.0 [32.0-34.0] mm Hg; P = 0.59) or oxygen saturation (Sao <sub>2</sub> ); 98.0% [97.0%-99.0%]; P = 0.61), or for group B in median (IQR) Petco <sub>2</sub> (36.0 [34.0-38.0] mm Hg; P = 0.97), Sao <sub>2</sub> (98.0% [97.0%-98.0%]; P = 0.52). After the group B walking test, compared with before the walking test, there was a significant increase in median (IQR) pulse rate (96.0 [84.0-104.5] pulsations/min vs 105.0 [100.0-115.0] pulsations/min; P < 0.02) and respiratory rate (22.0 [20.0-25.0] breaths/min vs 26.0	The aim of this cohort study is to examine whether the use of surgical facial masks among children in Italy is associated with episodes of oxygen desaturation or respiratory distress. The authors report that the use of face masks was not associated with significant changes in oxygen saturation or partial pressure of end-tidal carbon dioxide, including among children aged 24 months and younger.	Lubrano R, Bloise S, Testa A, et al. Assessment of Respiratory Function in Infants and Young Children Wearing Face Masks During the COVID-19 Pandemic. JAMA Netw Open. 2021;4(3):e210414. Published 2021 Mar 1. doi:10.1001/jamanetworkopen.2021.0414

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					[24.0-29.0] breaths/min; P < 0.05).The authors report that the use of face masks was not associated with significant changes in Sao2 or Petco2, including among children aged 24 months and younger.		
eviction; housing stability; neonatal health; maternal health; United States	1-Mar-21	<a href="#">Association of Eviction With Adverse Birth Outcomes Among Women in Georgia, 2000 to 2016</a>	Journal of the American Medical Association (JAMA) Pediatrics	Original Research	More than 2 million US families face eviction from their homes annually, a number likely to increase due to the COVID-19 pandemic; however, the association of eviction with neonatal health remains to be examined. This case-control study compared birth outcomes of infants whose mothers were evicted during gestation with those whose mothers were evicted at other times. Participants included infants born to mothers who were evicted in Georgia, USA from January 1, 2000 to December 31, 2016. A total of 88,862 births to 45,122 mothers (mean age, 26.26 years) who experienced 99,517 evictions were identified during the study period, including 10,135 births to women who had an eviction action during pregnancy and 78,727 births to mothers who had experienced an eviction action when not pregnant. Compared with mothers who experienced eviction actions at other times, eviction during pregnancy was associated with lower infant birth weight (difference, -26.88 [95% CI, -39.53 to 14.24] g) and gestational age (difference, -0.09 [95% CI, -0.16 to -0.03] weeks), increased rates of low birth-weight (0.88 [95% CI, 0.23-1.54] percentage points) and prematurity (1.14 [95% CI, 0.21-2.06] percentage points), and a nonsignificant increase in mortality. The association of eviction with birth weight was strongest in the 2nd and 3rd trimesters of pregnancy, with birth weight reductions of 34.74 (95% CI, -57.51 to -11.97) and 35.80 (95% CI, -52.91 to -18.69) g, respectively. These findings suggest that eviction actions during pregnancy are associated with adverse birth outcomes. Therefore, ensuring housing, social, and medical assistance to pregnant women at risk for eviction may improve infant health, particularly during the COVID-19 pandemic.	This case-control study in the US compared birth outcomes of infants whose mothers were evicted from their homes during gestation with those whose mothers were evicted at other times. Findings suggest that eviction during pregnancy is associated with adverse birth outcomes, particularly during the 2nd and 3rd trimester. Housing, social, and medical assistance to pregnant women at risk for eviction may improve infant health, particularly during the COVID-19 pandemic.	Himmelstein G, Desmond M. Association of Eviction With Adverse Birth Outcomes Among Women in Georgia, 2000 to 2016 [published online, 2021 Mar 1]. JAMA Pediatr. 2021;10.1001/jamapediatrics.2020.6550. doi:10.1001/jamapediatrics.2020.6550
breastmilk substitutes; International Code; breastfeeding; aggressive marketing; baby formula; COVID-19; emergencies; maternal child health; infant and young child feeding; malnutrition	1-Mar-21	<a href="#">Old Tricks, New Opportunities: How Companies Violate the International Code of Marketing of Breast-Milk Substitutes and Undermine Maternal and Child Health during the COVID-19 Pandemic</a>	International Journal of Environmental Research and Public Health	Article	Inappropriate marketing of breastmilk substitutes (BMS), feeding bottles, and teats has the potential to threaten breastfeeding practices and exacerbate child mortality, morbidity, and malnutrition in the context of the COVID-19 pandemic. These tactics are in direct violation of the International Code of Marketing of Breast-Milk Substitutes ("the Code"). This study reviewed promotional materials and activities from 9 BMS companies in 14 countries since the start of the COVID-19 pandemic (defined as 30 January 2020) up to October 2020. Reported violations of Executive Order 51 in the Philippines (based on the Code) were also examined from January 2019 - July 2020. Results indicate that companies are capitalizing on fear related to COVID-19 worldwide by using health claims and misinformation about breastfeeding. 8 themes emerged: 1) Unfounded health claims on immunity that prompt fear; 2) Association with public health authorities to gain legitimacy; 3) Appeals to public sentiment of solidarity and hope; 4) Influxes of BMS product and supply donations related to COVID-19; 5)	This study reviewed promotional materials and activities from 9 breastmilk substitute companies in 14 countries since the start of the COVID-19 pandemic, finding that these companies capitalized on fear related to COVID-19 by using health claims and misinformation about breastfeeding.	Ching C, Zambrano P, Nguyen TT, et al. Old tricks, new opportunities: How companies violate the international code of marketing of breast-milk substitutes and undermine maternal and child health during the COVID-19 pandemic. International Journal of Environmental Research and Public Health. 2021;18(5). doi: 10.3390/ijerph18052381.

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					Prominent use of digital platforms; 6) Promoting uncertainty through breastfeeding endorsements; 7) Discounts on BMS products linked to COVID-19; and 8) Outreach to health professionals through educational events related to COVID-19 and infant and young child feeding. The authors also found a sharp increase of reported marketing violations in the Philippines during the pandemic: 291 during the first months of the outbreak compared with 70 in all of 2019. The authors recommend monitoring marketing tactics to inform World Health Assembly actions and targeted Code enforcement. Efforts should also be made to address misinformation about breastfeeding in the context of COVID-19 and prevent spillover of BMS donations to breastfeeding mothers. Longer-term action includes holding social media platforms accountable, raising public awareness on the Code, and mobilizing community monitoring efforts.		
COVID-19; Pregnancy; Vaccination; Vaccine acceptance; Vaccine confidence	1-Mar-21	<a href="#">COVID-19 vaccine acceptance among pregnant women and mothers of young children: results of a survey in 16 countries</a>	European Journal of Epidemiology	Article	Estimates of COVID-19 vaccine acceptance among pregnant women and mothers of young children are yet unknown. This article describes the results of an online survey administered October 28 - November 18, 2020 to pregnant women and mothers of children <18 years old to assess their acceptance of COVID-19 vaccination. 17,871 total survey responses from 16 countries were obtained. The mean age of all respondents was 34.4 years (SD = 7.3; range not reported). Given a 90% COVID-19 vaccine efficacy, 52% of pregnant women (n = 2747/5282) and 73.4% of non-pregnant mothers (n = 9214/12,562) indicated intention to receive the vaccine. 69.2% of women (n = 11,800/17,054), both pregnant and non-pregnant, indicated an intention to vaccinate their children against COVID-19. COVID-19 vaccine acceptance was generally highest in India, the Philippines, and all sampled countries in Latin America, with >60% of pregnant women and >78% of non-pregnant mothers reporting they would vaccinate themselves and >75% of all women reporting they would vaccinate their children against COVID-19. Vaccine acceptance was lowest in Russia, the US, and Australia, with <45% of pregnant women and <56% of nonpregnant mothers indicating they would vaccinate themselves and <52% of all women reporting they would vaccinate their children against COVID-19. The strongest predictors of vaccine acceptance (both for themselves or for their children) included having confidence in COVID-19 vaccine safety or effectiveness, worrying about COVID-19, belief in the importance of vaccines to their own country, compliance to mask guidelines, trust of public health agencies/health science, as well as attitudes towards routine childhood vaccines. These findings persisted in all within-country analyses. The authors conclude that COVID-19 vaccination campaigns for pregnant women, mothers, and children should be specific for each country, addressing not only concerns about vaccine safety and effectiveness but also the pandemic as a whole and what's at stake for their communities.	This study surveyed pregnant women and mothers in 16 countries to assess COVID-19 vaccination acceptance. The strongest predictors of vaccine acceptance were confidence in COVID-19 vaccine safety or effectiveness, worrying about COVID-19, belief in the importance of vaccines to their own country, compliance to mask guidelines, trust of public health agencies/health science, as well as attitudes towards routine childhood vaccines.	Skjefte M, Ngirbabul M, Akeju O, et al. COVID-19 vaccine acceptance among pregnant women and mothers of young children: results of a survey in 16 countries [published online ahead of print, 2021 Mar 1]. Eur J Epidemiol. 2021;1-15. doi:10.1007/s10654-021-00728-6

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COVID-19, SARS-CoV-2, school, in-person school, part-time school, remote school, mitigation	1-Mar-21	<a href="#">Household COVID-19 risk and in-person schooling</a>	MedRxiv	Preprint (not peer-reviewed)	This article seeks to determine whether living with a child attending in-person school increases the risk of COVID-19-related outcomes. Responses from the nation-wide COVID-19 Symptom Survey were analyzed over 2 time periods during the 2020-2021 USA school year (Nov. 24-Dec. 23, 2020 and Jan. 11-Feb. 10, 2021). Of all respondents who lived with $\geq 1$ child, 49% (284,789/576,051) reported that they were engaged in either full- or part-time in-person schooling. Compared to living with students in remote schooling, these households were associated with a substantial increase in the odds of reporting a positive SARS-CoV-2 test result within the previous 14 days (adjusted odds ratio (aOR) 1.30, 95% CI 1.24-1.35). There was an association with the number of mitigation measures implemented by the school and the risk of COVID-19 outcomes. Each measure implemented was associated with a 7% decrease in the odds of a recent positive SARS-CoV-2 test (aOR 0.93, 95% CI 0.92-0.94). Notably, part-time in-person schooling was not associated with a decrease in the risk of COVID-19-related outcomes compared to full-time in-person schooling. In all, living with children attending in-person school is linked to a higher risk of COVID-19 outcomes, which school-based interventions can help mitigate.	This article analyzes whether living with a child attending in-person school in the USA puts the household at greater risk of contracting COVID-19. The authors find that there is an increased risk to household members of contracting COVID-19, but that mitigation steps taken by the school can diminish the likelihood of infection.	Lessler J, Grabowski MK, Grantz KH, et al. Household COVID-19 risk and in-person schooling. MedRxiv. March 2021. doi:10.1101/2021.02.27.21252597
COVID-19, RSV, influenza, pediatric, respiratory virus	1-Mar-21	<a href="#">Changes in pediatric infections during the COVID-19 pandemic: 'a quarantrend for coronials'?</a>	European Journal of Pediatrics	Editorial	This article discusses possible reasons for the dramatic decline in influenza and other respiratory virus infections in children during the COVID-19 pandemic. The authors suggest that diminished social contacts have likely prevented spread, along with face masks and increased hygiene (i.e., hand washing). Further, travel restrictions, quarantine, and school closures have dramatically reduced local reservoirs for viral spread. Although one explanation could be that fewer people are seeking medical care, the data seems to show that people stayed at home with self-limiting diseases, but sought medical care with more severe conditions. However, the reduction of these infections may have significant consequences, such as reduced datasets for vaccine development, as well as potentially ineffective monoclonal antibody immunization programs. In all, there is much left to discover about the lasting consequences of this pandemic as it relates to pediatric respiratory viral infections.	This article outlines observations and possible explanations regarding the reduced incidence of pediatric respiratory virus infection during the COVID-19 pandemic. Although this phenomenon has unburdened hospital systems, the lack of infection may diminish influenza datasets for vaccine development. In all, the authors point to the many avenues that future research can explore related to the changing infection rates throughout the pandemic.	Toelen J, Ritz N, de Winter JP. Changes in pediatric infections during the COVID-19 pandemic: 'a quarantrend for coronials'? [published online ahead of print, 2021 Mar 1]. Eur J Pediatr. 2021;1-3. doi:10.1007/s00431-021-03986-4
pregnancy; COVID-19; risk factors; SARS-CoV-2; illness severity	1-Mar-21	<a href="#">Risk factors for illness severity among pregnant women with confirmed SARS-CoV-2 infection – Surveillance for Emerging Threats to Mothers and Babies Network, 20 state, local,</a>	medRxiv	Preprint (not peer-reviewed)	This study aims to determine risk factors associated with COVID-19 illness severity among pregnant women with SARS-CoV-2 infection. Data from 5,963 pregnant women with confirmed SARS-CoV-2 infection by RT-PCR testing were reported between March 29, 2020–January 8, 2021 through the Surveillance for Emerging Threats to Mothers and Babies Network (SET-NET) in the US. Most women were aged 20-39 years (90.8%), 44.9% were Hispanic or Latina ethnicity, and 55.7% had Medicaid. Most women had SARS-CoV-2 infection identified in the 3rd (60.6%) or 2nd (29.1%) trimester. Pregnant women aged 30-34 years (RR=1.35, 95% CI: 1.03, 1.77) and 35-39 years of age (RR=1.44, 95% CI: 1.08, 1.90) were at an increased risk of moderate-to-severe or critical illness compared to	This study aims to determine risk factors associated with COVID-19 illness severity among pregnant women with SARS-CoV-2 infection. Results show pregnant women 30 years or older, women with underlying obesity, cardiovascular disease, chronic lung disease, pregestational/gestational diabetes, and women with Black/Non-Hispanic	Galang R, Newton SM, Woodworth KR, et al. Risk factors for illness severity among pregnant women with confirmed SARS-CoV-2 infection – Surveillance for Emerging Threats to Mothers and Babies Network, 20 state, local, and territorial health departments, March 29, 2020 - January 8, 2021. doi:

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		<a href="#">and territorial health departments, March 29, 2020 - January 8, 2021</a>			pregnant women who were <20 years of age. Those in a healthcare occupation (RR=1.34, 95% CI: 1.18, 1.53) were at an increased risk of moderate-to-severe or critical illness than those who were not. Pregnant women with pre-pregnancy obesity (RR=1.32, 95% CI: 1.17, 1.48), cardiovascular disease (RR=1.54, 95% CI: 1.14, 2.08), chronic lung disease (RR=1.39, 95% CI: 1.16, 1.66), and pregestational (RR=1.54, 95% CI: 1.20, 1.98) and gestational (RR=1.23, 95% CI: 1.04, 1.45) diabetes were at increased risk of moderate-to-severe or critical illness. Black/Non-Hispanic race/ethnicity was associated with a 22% increased risk (aRR=1.22, 95% CI: 1.04, 1.43) of moderate-to-severe or critical illness compared to the referent group (White, Non-Hispanic race/ethnicity). These data can help counsel pregnant women about their risk for moderate-to-severe or critical COVID-19 and guide their choice of prevention strategies, target public health messaging, and inform decisions around resource allocation.	race/ethnicity were at increased risk of moderate-to-severe or critical COVID-19.	<a href="https://doi.org/10.1101/2021.02.27.21252169">https://doi.org/10.1101/2021.02.27.21252169</a>
MIS-C, children, laboratory findings, pediatrics	1-Mar-21	<a href="#">Distinguishing Features of Patients Evaluated for Multisystem Inflammatory Syndrome in Children</a>  <a href="#">[Free Access to Abstract Only]</a>	Pediatric Emergency Care	Original research	In this retrospective cohort study, the authors investigated differences in presentation and laboratory studies between suspected versus confirmed MIS-C patients in Boston, USA between April 21-July 1, 2020. A total of 106 patients (median age 4 years, range 0-21 years) were included, of whom 17 (16%) met the CDC or WHO case criteria for MIS-C. MIS-C patients were more likely to be previously healthy (OR [95% CI], 3.18 [0.96-10.5]), be hospitalized (OR, 9.89 [1.25-78]), and require ICU level of care (OR, 5.14 [1.57-16.88]). Among the presenting signs and symptoms, MIS-C patients were more likely to report COVID-19 exposure (OR, 13.17 [3.87-44.9]), present with at least one constitutional symptom (100% vs 66.3%; P < 0.01), and present with at least 1 gastro-intestinal complaint (OR, 3.81 [1.02-14.19]). Patients with MIS-C had a significantly higher odds of having abnormal laboratory values including high-sensitivity troponin T (OR, 13 [4.0-42.2]), N-terminal B-type natriuretic peptide (OR, 8.4 [2.3-30.1]), D-dimer (OR, 13 [1.6-103]), and ferritin (OR, 7.8 [2.2-27.2]) along with C-reactive protein (134.45 mg/L vs 12.6 mg/L; P < 0.05) and procalcitonin (1.71 ng/mL vs 0.14 ng/mL; P < 0.001). The authors conclude that these factors may help distinguish between MIS-C patients and non-MIS-C patients.	In this investigation of the difference between suspected versus confirmed MIS-C patients, the authors found that MIS-C patients were more likely to report COVID-19 exposure, present with constitutional or gastro-intestinal complaints, and have abnormal laboratory values in high sensitivity troponin T, N-terminal B-type natriuretic peptide, D-dimer, ferritin, C-reactive protein, and procalcitonin. These factors may help distinguish between MIS-C patients and non-MIS-C patients.	Kelly MS, Fernandes ND, Carr AV, Lahoud-Rahme M, Cummings BM, Chiu JS. Distinguishing Features of Patients Evaluated for Multisystem Inflammatory Syndrome in Children. <i>Pediatr Emerg Care.</i> 2021;37(3):179-184. doi:10.1097/PEC.0000000000002344
COVID-19; lockdown; pregnancies; risk factors; sociodemographic characteristics	1-Mar-21	<a href="#">Sociodemographic characteristics of pregnant women tested positive for COVID-19 admitted to a referral center in Northern Italy</a>	Journal of Obstetrics and Gynaecology Research	Original Research	The authors examined the association between sociodemographic characteristics and SARS-CoV-2 infection for pregnant women admitted to a high-risk maternity unit in Italy between March 1 - April 30, 2020, during the COVID-19 pandemic. Sociodemographic characteristics examined included age, education, occupation, partner's occupation, ethnicity, tobacco use, household size, and area of residence. Of the 896 women tested, 50 had a positive test for SARS-Cov-2 infection. Those with age ≥ 35 years had lower odds of having a SARS-COV-2 infection (OR = 0.29; 95% CI 0.16-0.55), whereas foreign women (OR = 3.32; 95% CI 1.89-5.81), unemployed	This article examined the association between sociodemographic characteristics and SARS-CoV-2 infection among women admitted to a high-risk maternity unit in Italy during the COVID-19 pandemic. Foreign women, unemployed women, women with an unemployed partner, and women younger	D'Ambrosi F, Lurlaro E, Tassis B, et al. Sociodemographic characteristics of pregnant women tested positive for COVID-19 admitted to a referral center in Northern Italy during lockdown period [published online, 2021 Mar 1]. <i>J Obstet Gynaecol Res.</i> 2021;doi:10.1111/jog.14729

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		<a href="#">during lockdown period</a>			women (OR = 3.09; 95% CI 1.77-5.40), and women with an unemployed partner (OR = 3.16; 95% CI 1.48-6.79) had higher odds of infection. No significant association was observed between tobacco use or education and SARS-CoV-2 infection. Ethnicity was positively associated with higher odds of having a SARS-CoV-2 infection, and foreign women were more likely to have a lower education level ( $p < 0.01$ ), live in larger families ( $p < 0.01$ ), and be unemployed ( $p < 0.01$ ). The authors hypothesize that the findings of the different odds of SARS-CoV-2 infection between foreign and non-foreign women may be explained by social factors, age during pregnancy, community integration, occupational exposure, and household size. These factors may increase the risk of viral transmission, reducing the effectiveness of the lockdown and social distancing.	than 35 years old had higher odds of testing positive for SARS-CoV-2 infection.	
COVID-19 pandemic prenatal mental health; access to care; depression; anxiety; post-traumatic stress disorder	1-Mar-21	<a href="#">Impact of the COVID-19 pandemic on mental health, access to care, and health disparities in the perinatal period</a>	Journal of Psychiatric Research	Original Research	The authors examined the associations between demographics and psychiatric symptoms (via validated mental health screening instruments) and the impact of the COVID-19 pandemic on mental health and access to mental health care for perinatal and up to 3 months postpartum individuals ( $n = 163$ ) with a history of depression in the United States between March 23 and September 14, 2020. The results showed that 50.9% screened positive for depression, 41.1% screened positive for anxiety, and 19.0% screened positive for Post-traumatic stress disorder (PTSD). 80.8% of the participants had increased symptoms of depression, and 88.8% had increased symptoms of anxiety due to the pandemic. Furthermore, a positive screen for depression, anxiety and/or PTSD, higher education, and higher income was associated with increased symptoms of depression and anxiety due to the pandemic. Participants of color (Black, Asian, Multiracial, Hispanic/Latinx) were more likely to indicate that the pandemic changed their mental health care access when compared to non-Hispanic White participants (OR 3.25, 95% CI 1.23, 8.59). These findings suggest that the COVID-19 pandemic has increased perinatal depression and anxiety symptoms and affected perceived access to care. Understanding these differences is important to address perinatal mental health and provide equitable care.	This study examined the associations between demographics and psychiatric symptoms and the impact of the COVID-19 pandemic on mental health and access to mental health care for perinatal and up to 3 months postpartum individuals with a history of depression in the United States. The findings suggest that the COVID-19 pandemic has increased perinatal depression and anxiety symptoms. The pandemic also affected perceived access to mental health care, especially in individuals of color.	Masters GA, Asipenko E, Bergman AL, et al. Impact of the COVID-19 pandemic on mental health, access to care, and health disparities in the perinatal period. J Psychiatr Res. 2021;137:126-130. doi:https://doi.org/10.1016/j.jpsychires.2021.02.056.
COVID-19; pediatrics; obesity; BMI	1-Mar-21	<a href="#">COVID-19 and Changes in Child Obesity</a>	Pediatrics	Research Brief	The authors evaluated shifting rates of obesity for pediatric patients, and explored disparities based on age, race/ethnicity, insurance, and income, to better understand the emerging disparities during the COVID-19 pandemic in Philadelphia, USA. They measured the body mass index (BMI) from 500,417 patient visits (mean age = 9.2 years, range 2-17 years) from January 2019-December 2020. To compare pre-pandemic vs pandemic obesity, they compared the average obesity rates from June-December 2019 to June-December 2020. Patients were classified as obese when their BMI was equal to or higher than the 95th percentile. Overall obesity prevalence increased from 13.7% (June-December 2019) to	The authors evaluated shifting rates of obesity for pediatric patients, and explored disparities based on age, race/ethnicity, insurance, and income, to better understand the emerging disparities during the COVID-19 pandemic in Philadelphia, USA. This study reveals that underlying disparities in obesity, in terms of race/ethnicity, insurance, and	Jenssen BP, Kelly MK, Powell M, et al. COVID-19 and Changes in Child Obesity [published online ahead of print, 2021 Mar 2]. Pediatrics. 2021;e2021050123. doi:10.1542/peds.2021-050123

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					15.4% (June-December 2020). Obesity increased across all age ranges, ranging from an increase of 1.0% in patients aged 13-17 years, to 2.6% in patients aged 5-9 years. Nearly 25% of Hispanic/Latino, non-Hispanic Black, publicly insured, or lowest income quartile patients seen during the pandemic were obese, compared to 11.3% of non-Hispanic white patients, 12% of non-publicly insured patients, and 9.1% of highest income quartile patients. Pre-existing disparities appeared to have worsened. Racial/ethnic differences in obesity increased from a 10-11% (June-December 2019) to 13-14% (June-December 2020) difference during the pandemic. This study reveals that underlying disparities in obesity, in terms of race/ethnicity, insurance, and neighborhood socio-economic status, worsened during the COVID-19 pandemic.	neighborhood socio-economic status, worsened during the COVID-19 pandemic.	
COVID-19; latinx; children; structural inequities; risk factors; protective factors; mental health	1-Mar-21	<a href="#">Structural Inequities and the Impact of COVID-19 on Latinx Children: Implications for Child and Adolescent Mental Health Practice</a>	Journal of the American Academy of Child and Adolescent Psychiatry	Commentary	The authors describe the impact of structural inequities in the United States and the COVID-19 pandemic on the physical and mental health of Latinx children. The structural inequities include the disproportionate burden of COVID-19 for Latinx people, lack of employer-sponsored insurance, barriers to applying for public benefits, lack of services for undocumented people, poverty, and inadequate linguistic and culturally-competent services. The authors highlight that as of March 2021, 52.4% of confirmed SARS-CoV-2 infection among children in the United States was in Latinx children, and pregnant Latinx and Black women are five times more likely to be exposed to SARS-CoV-2 than White and Asian women. Risk factors for poor mental health outcomes among Latinx children include the disproportionate death rate among Latinx people, escalating rates of depression and anxiety, cumulative emotional losses, financial issues, parental stress, xenophobia, discrimination, the digital divide, and overburdened child-serving systems. Some protective factors for mental health among Latinx children include religiosity, spirituality, familial bonds, and support from family members. Three vignettes are provided in the article to illustrate these factors. The authors recommend that child and adolescent psychiatrists respond to the increased need among Latinx children by proactively addressing mental health needs, practicing cross-cultural competence, and linking families to services that address social determinants of health. They also recommend working collaboratively with schools and pediatricians and advocating for expanded access to technology and culturally-appropriate public benefits.	This article highlights the impact of structural inequities in the United States and the COVID-19 pandemic on the physical and mental health of Latinx children. Risk and protective factors for physical and mental health are noted and also highlighted through three vignettes. The authors provide recommendations for child and adolescent psychiatrists to respond to increased needs among Latinx children during the COVID-19 pandemic.	Rothe EM, Fortuna LS, Tobon AL, et al. Structural Inequities and the Impact of COVID-19 on Latinx Children: Implications for Child and Adolescent Mental Health Practice. Journal of the American Academy of Child & Adolescent Psychiatry. 2021. doi:https://doi.org/10.1016/j.jaac.2021.02.013.

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COVID-19; policy; infection testing; herd immunity; household transmission; school closures	1-Mar-21	<a href="#">Open Schools, Covid-19, and Child and Teacher Morbidity in Sweden</a>	The New England Journal of Medicine (NEJM)	Letter to Editor	Two letters to the editor were published in the New England Journal of Medicine in response to a peer-reviewed research letter from Ludvigsson et al. (published Feb 18, 2021), which concluded that severe COVID-19 cases in children were rare in Sweden, despite schools there being kept open. In the first letter, Dr. Y. Takefuji argues that Taiwan had fewer deaths than Sweden after implementing a robust “digital fence,” using mandatory coronavirus apps to isolate asymptomatic and presymptomatic carriers of SARS-CoV-2 and prevent contact with uninfected persons. Dr. Y. Takefuji suggests that health policy should be immediately updated based on the consequences of policy scores or outcomes. In the second letter, Dr. L Besancon and colleagues argue that the focus on morbidity in the correspondence from Ludvigsson et al. is of limited relevance as a means to analyze the effects of school closure on COVID-19 transmission. They suggest that the focus of an analysis should logically be on outbreaks or household transmission and should allow assessment of the direct or indirect effects of schools on the outcome. In response to the above letters, Dr. JF Ludvigsson and colleagues agree with Dr. Takefuji that infection testing plays a key role and that health policies need to be continuously updated. However, Dr. JF Ludvigsson and colleagues state that although analysis of household transmission and school outbreaks are relevant, they were beyond the scope of their report. Therefore, Dr. JF Ludvigsson and colleagues stand by their conclusion that severe COVID-19 in children is rare in Sweden despite schools being open.	Two letters to the editor argue against Ludvigsson et al.'s conclusions (published Feb 18, 2021) that severe COVID-19 cases in children were rare in Sweden, despite schools being kept open. The letters assert that countries with stricter COVID-19 policies than Sweden have been successful at limiting the disease spread. The letters also suggest that the focus of an analysis should logically be on outbreaks or household transmission and should allow assessment of the direct or indirect effects of schools on the outcome.	Takefuji Y, Besancon L, Ludvigsson JF. Open Schools, Covid-19, and Child and Teacher Morbidity in Sweden. The New England Journal of Medicine [editorial]. 1 Mar 2021. doi: 10.1056/NEJMc2101280
school re-opening; transmission; lockdown; European Union	1-Mar-21	<a href="#">Opening schools and trends in SARS-CoV-2 transmission in European countries</a>	medRxiv	Preprint (not peer-reviewed)	The authors analyzed the role of school re-opening in COVID-19 case count trends in the 27 member countries of the European Union, with case counts sourced from the Our World in Data (OWID) database. Raw counts of new COVID-19 cases were collected from OWID for each country over a 65-day period: from 20 days before schools opened until 45 days after schools re-opened in each country. Dates of school closures and re-opening were obtained from the Education, Audiovisual, and Culture Executive Agency. A regression analysis was conducted for each country, where the outcome of raw COVID-19 case counts was modeled against days before or after school re-opening to identify a point where the number of COVID-19 cases drastically changed. The results showed that the change points ranged from 10 to 42 days after schools re-opened, with the majority (20/27) occurring 21 days after school re-opening. Changes in regression slopes (increase in cases per day since school re-opening) were most drastic for Lithuania, Poland, Latvia, Slovenia, Croatia, and Cyprus. This ecological analysis demonstrates a potential association between school re-opening and higher COVID-19 case numbers, but further research which incorporates individual level data and controls for the re-opening and increased availability of other activities and venues in each country is still required.	In this ecological analysis, the authors examined the relationship between school re-opening and COVID-19 case counts in the 27 member countries of the European Union. They constructed individual models to identify change points in the number of reported COVID-19 cases in a 65-day period encompassing time before and after school re-opening in each country. Most countries' change points occurred 21 days after school re-opening, demonstrating a potential association between school re-opening and higher rates of SARS-CoV-2 community transmission.	Buja A, Paganini M, Cristofori V, et al. Opening schools and trends in SARS-CoV-2 transmission in European Countries. medRxiv. 2021. <a href="https://doi.org/10.1101/2021.02.26.21252504">https://doi.org/10.1101/2021.02.26.21252504</a>

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COVID-19, stressors, perinatal, postpartum, pregnant women, coping	1-Mar-21	<a href="#">Stressors, coping, and resources needed during the COVID-19 pandemic in a sample of perinatal women</a>	BioMed Central (BMC) Pregnancy and Childbirth	Original Research	This article aimed to assess the stressors, coping behaviors, and resources needed for pregnant and postpartum women in relation to the COVID-19 pandemic. Quantitative responses from 162 participants (125 pregnant and 37 postpartum, average age 31 years) were collected regarding stressors and coping, and interview answers were collected regarding the necessary resources needed during the COVID-19 pandemic. The results indicated that the lockdown orders prevented pregnant women from finding adequate healthy foods. Participants reported missing prenatal appointments and significant financial issues. Pregnant women were less likely to engage in stress-coping behaviors than postpartum women. Participants also expressed concerns about their children contracting SARS-CoV-2 in the hospital. To better support perinatal women's mental health during the COVID-19 pandemic, healthcare providers should engage in conversations regarding access to resources needed to care for newborns, refer patients to counseling services and virtual support groups (via telemedicine), and consistently screen pregnant women for stressors.	This article investigated a variety of stressors and coping behaviors of pregnant and postpartum women during the COVID-19 pandemic. Study participants had difficulties finding healthy food, attending appointments, and had anxiety about their children contracting SARS-CoV-2.	Barbosa-Leiker C, Smith CL, Crespi EJ, et al. Stressors, coping, and resources needed during the COVID-19 pandemic in a sample of perinatal women. BMC Pregnancy Childbirth. 2021 Mar 1;21(1):171. doi: 10.1186/s12884-021-03665-0.