

Nº 9, January-June 2020



# THE LANCET



Featuring articles on COVID-19 and humanitarian assistance

[https://flic.kr/p/2j3yFp3



# WELCOME

to the Humanitarian Health Digest a biannual bibliography of published peer-reviewed journal articles on humanitarian health. The Digest is compiled by the Johns Hopkins Center for Humanitarian Health and The Lancet. It includes one or two new commentaries on peer-reviewed articles cited in the Digest.

The objective of the Digest is to provide links to peer-reviewed articles on humanitarian health from a wide variety of journals in one place for ease of reference. Peer-reviewed articles will be searched systematically using the PubMed and Global Health (OVID) databases. Articles will mostly include primary research and systematic reviews. Humanitarian health will be divided into three broad categories:

- Conflict and Forced Displacement
- Natural Disasters
- Technological Disasters

The articles will be further divided into low- and middle-income countries and high-income countries. Under each of these two sub- categories, articles will be subdivided into the following public health-related categories:

- I. COMMUNICABLE DISEASE
- II. NON-COMMUNICABLE DISEASE
- III. REPRODUCTIVE, MATERNAL, NEWBORN, CHILD AND ADOLESCENT HEALTH
- IV. NUTRITION AND FOOD SECURITY
- V. WATER, SANITATION AND HYGIENE (WASH)
- VI. MENTAL HEALTH, PSYCHOSOCIAL ISSUES, AND SUBSTANCE ABUSE
- VII. HEALTH SYSTEMS
- VIII. MULTI-CATEGORY

All featured articles from the Lancet family of journals will be free to read with registration on TheLancet.com. It is the Center for Humanitarian Health's goal that other journals will follow suit to allow all peer-reviewed articles to be free to read so that humanitarian workers worldwide can learn from and apply lessons learned and conclusions immediately in the field to benefit persons affected by conflict, natural disasters and technological disasters.

We hope that you will learn and benefit from the articles presented in the Humanitarian Health Digest.

**Paul Spiegel MD MPH** Director of the Center for Humanitarian Health

**Richard Horton FRCP FMedSci** Editor-in-Chief of *The Lancet* 

# COMMENT I.

# The need for integrated COVID-19 response in humanitarian settings

by Natalya Kostandova BS MPH, PhD student, Center for Humanitarian Health, Johns Hopkins Bloomberg School of Public Health

As the confirmed COVID-19 cases worldwide have exceeded 17 million<sup>1</sup>, and with the pandemic nowhere near its end. it is critical that we consider its indirect effects on morbidity and mortality among populations in humanitarian settings. The funding requirements for implementation of the Global Humanitarian Response Plan (GHRP) for COVID-19 are estimated at \$6.71 billion.<sup>2</sup> As daily activities and trade continue to be upended, threatening a long-term contraction of the global economy, there is a concern about diverting already strained resources towards the COVID-19 response, thus reducing funding flows to address other pressing humanitarian needs.

As illustrated by Tran and colleagues<sup>3</sup> in a comment included in this issue of the Digest, evidence suggests that discontinuing essential health services unrelated to the pandemic may have devastating effects on the morbidity and mortality of populations in humanitarian settings, with excess deaths from these discontinuations surpassing the direct deaths from the outbreak itself. This comment specifically underscores the importance of maintaining sexual and reproductive health (SRH) services during this time, arguing that the suspension of these services in countries affected by fragility and crisis would

have debilitating consequences. Tran and colleagues echo the guidance issued by the Inter-Agency Working Group for Reproductive Health in Crises on SRH and COVID-19, outlining a fourpronged approach for ensuring that lifesaving SRH services remain available, appropriate public health information is available to practitioners and communities, and COVID-19 transmission risks at health facilities are mitigated through appropriate infection, prevention, and control..

A comment by Olu and colleagues<sup>4</sup> emphasizes lessons learned in preparing for cross-border introduction of Ebola virus disease (EVD) into the Republic of South Sudan. The authors attribute the effectiveness of preparedness efforts to a cohesive strategy that established outbreak response capacity while simultaneously strengthening existing health systems. This led to an increase in EVD preparedness from 17% in November 2018 to 61% in March 2019, as measured during Joint Monitoring Missions carried out by the Ministry of Health, World Health Organization (WHO), and in-country partners using the EVD readiness checklist developed by WHO and collaborators. A report by Mobula and colleagues<sup>5</sup> presents recommendations for COVID-19 response based on the



▲ Dr Lia Tadesse, Minister of Health, with the first shipment of COVID-19 humanitarian supplies for use by health workers in Ethiopia.

lessons learned from the EVD outbreak in the Democratic Republic of the Congo. They similarly underscore the importance of continued service provision to mitigate the secondary effects of the outbreak. The authors address the challenges of food insecurity, armed conflict, and limited access to safe water in containing EVD outbreak, thus advocating for a multisectoral approach to addressing the current pandemic.

Tijjani and Ma's commentary<sup>6</sup> anticipates that COVID-19 will worsen the humanitarian situation in complex settings such as northeast Nigeria, a region already susceptible to emergence and re-emergence of endemic diseases such as cholera, Lassa fever, meningitis, and measles. The authors draw attention to the call from the United Nations to maintain a consistent flow of funding to address the unmet humanitarian needs that are not directly tied to COVID-19 response. This is especially important given the likelihood that public health measures established to reduce the spread of COVID-19, such as movement restrictions and lockdowns, may increase the operational challenges and decrease the ability to address the existing humanitarian needs of communities.

The failure to maintain and ensure continued access to routine services



In May 2020 communities around Uganda's western Rwenzori mountains found themselves facing a concurrent humanitarian emergency of COVID-19 and large-scale destruction caused by flash floods when the banks of the Nyamwamba and Mubuk rivers burst. The Kilembe mines hospital was destroyed. The Uganda Red Cross quickly moved in to support affected families, assisting with emergency evacuations, providing first aid and distributing food and non-food items to at least 1,750 people.
COVID-1

will likely disproportionately affect the populations in positions of lesser power who already experience the undue burden of disease. An article by Lokot and Avakyan<sup>7</sup> notes the importance of employing a lens of intersectionality in COVID-19 response in humanitarian settings. The authors highlight the reduction in SRH services in Sierra Leone during the Ebola outbreak, and the resulting increase in neonatal and maternal deaths in 2014 and 2015. Lokot and Avakyan argue that power hierarchies that persist in conflict-affected populations are likely to deepen during the pandemic. A reduction in resources and services available, as well as social isolation and distancing, may further the discrimination and inequality of power experienced by some community groups. Individuals already facing barriers to accessing services may again be disproportionately affected by the reduction of services due to the diversion of resources to the COVID-19 response.

Our response to COVID-19 should not be considered as a parallel or a competing endeavor independent of provisioning routine health services and interventions that address unmet humanitarian needs. While there is a clear need to counter the direct threat to life health posed by COVID-19, the indirect consequences of the pandemic cannot be overlooked. The provision of COVID-19-specific measures must be approached through a lens of a holistic response that takes into account the basic unmet needs, socioeconomic structures, and power hierarchies of communities in humanitarian settings. If not, the alternative has the potential to have a devastating impact on populations already facing excess morbidity and mortality in such contexts.

# REFERENCES

<sup>1</sup> Johns Hopkins University. COVID-19 dashboard. https:// coronavirus.jhu.edu/map.html (accessed July 28, 2020).

<sup>2</sup> OCHA. Global Humanitarian Response Plan COVID-19, May update. In: United Nations Coordinated Appeal, April–December 2020. Geneva: Office for the Coordination of Humanitarian Affairs, 2020.

<sup>3</sup> Tran NT, Tappis H, Spilotros N, Krause S, Knaster S, for the Inter-Agency Working Group on Reproductive Health in Crises. Not a luxury: a call to maintain sexual and reproductive health in humanitarian and fragile settings during the COVID-19 pandemic. *Lancet Glob Health* 2020; **8**: e760–61. doi:10.1016/S2214-109X(20)30190-X.

<sup>4</sup> Olu OO, Lako R, Wamala JF, Ramadan PO, Ryan C, Udenweze I, Berta K, Guyo AG, Sokemawu A, Tukuru M, Gray HJ, Chimbaru A. What did we learn from preparing for cross-border transmission of Ebola virus disease into a complex humanitarian setting—the Republic of South Sudan? *Infect Dis Poverty* 2020; **9**: 40. doi:10.1186/s40249-020-00657-8. <sup>5</sup> Mobula LM, Samaha H, Yao M, Gueye AS, Diallo B, Umutoni C, Anoko J, Lokonga JP, Minikulu L, Mossoko M, Bruni E, Carter S, Jombart T, Fall IS, Ahuka-Mundeke S. Recommendations for the COVID-19 response at the national level based on lessons learned from the Ebola virus disease outbreak in the Democratic Republic of the Congo. *Am J Trop Med Hyg* 2020; published online May 19. doi:10.4269/ajtmh.20-0256.

<sup>6</sup> Tijjani SJ, Ma L. Is Nigeria prepared and ready to respond to the COVID-19 pandemic in its conflict-affected northeastern states? *Int J Equity Health* 2020; **19:** 77. doi:10.1186/s12939-020-01192-6.

<sup>7</sup> Lokot M, Avakyan Y. Intersectionality as a lens to the COVID-19 pandemic: implications for sexual and reproductive health in development and humanitarian contexts. Sex Reprod Health Matters 2020; 28: 1764748. doi:10.1080/26410397.2020. 1764748.

# COMMENT II.

# Not a luxury: a call to maintain sexual and reproductive health in humanitarian and fragile settings during the COVID-19 pandemic

by Nguyen Toan Tran, Hannah Tappis, Nathaly Spilotros, Sandra Krause, Sarah Knaster, for the Inter-Agency Working Group on Reproductive Health in Crises¶

About 1.8 billion people live in fragile contexts worldwide,1 including 168 million individuals in need of humanitarian assistance. Approximately a quarter of those in fragile contexts are women and girls of reproductive age.<sup>2</sup> Experience from past epidemics in these settings has showed that discontinuing health-care services deemed unrelated to the epidemic response resulted in more deaths than did the epidemic itself.<sup>3</sup> Issues related to sexual and reproductive health are among the leading causes of mortality and morbidity among women of childbearing age, with countries affected by fragility and crisis accounting for 61% of maternal deaths worldwide.4

Poor health outcomes will surge from the absence or disruption of lifesaving services, including emergency obstetric and newborn care, contraception to prevent unwanted pregnancies, and the management of abortion complications. Gender-based violence and sexual exploitation and abuse might increase during outbreaks because of confinement, increased exposure to perpetrators at home, economic precarity, and reduced access to protection services. The care for children and others confined at home further reduces women's ability to properly care for themselves.5

In the context of the pandemic preparedness and response, members of the Inter-Agency Working Group for Reproductive Health in Crises have issued various field guidance documents on sexual and reproductive health and coronavirus disease 2019 (COVID-19). Building on the overarching need for humanitarian actors to coordinate and plan to ensure that sexual and reproductive health is integrated into the pandemic preparedness and response,<sup>6</sup> there are four prongs on how to mitigate the impact of COVID-19 on mortality and morbidity due to sexual and reproductive health conditions in crisis and in fragile settings.

First, with the understanding that the risks of adverse outcomes from medical complications outweigh the potential risks of COVID-19 transmission at health facilities, the availability of all crucial services and supplies as defined by the Minimum Initial Services Package for sexual and reproductive health should continue.<sup>6</sup>These services include intrapartum care for all births and emergency obstetric and newborn care (caesarean sections should only be performed when medically indicated as a COVID-19 positive status is not an indication for a caesarean section<sup>7</sup>), post-abortion care, safe abortion care to the full extent of the law, contraception, clinical care for rape survivors, and prevention and treatment for HIV and other sexually transmitted infections. Early and exclusive breastfeeding and skin-to-skin contact for neonates should be promoted, and mother and neonate should not be separated unless one or both are critically ill in cases of suspected or confirmed COVID-19 infections.<sup>7</sup>

Second, comprehensive sexual and reproductive health services should continue as long as the system is not overstretched with COVID-19 case management. For relevant consultations and follow-up, remote approaches should be considered where feasible (eg, telephone, digital applications, text messaging). In addition to the Minimum Initial Service Package, these comprehensive services-ie, all antenatal care, postnatal care, newborn care, breastfeeding support, and cervical cancer screening, as well as care for individuals experiencing intimate partner violence-should remain available to all individuals who need them, including adolescents.

I Lancet Glob Health 2020; 8: e760-61. doi:10.1016/S2214-109X(20)30190-X. https://www.ncbi.nlm.nih.gov/pubmed/32330429/

Third, clear, consistent, and updated public health information crafted with representatives of the targeted audiences should reach the community and health-care workers. This information should reaffirm that medical complications outweigh the potential risk of transmission at health facilities and that community members should continue to seek and receive care during childbirth and for all other essential sexual and reproductive health needs or emergencies resulting from other diseases, trauma, or violence. The community should understand that any changes in routine services are for patients' benefit to ensure support to the COVID-19 response, avert undue exposure to the risk of contracting the virus in a health facility during the outbreak, or both. However, the coordination and planning to re-establish such comprehensive services should occur

as soon as the situation stabilises.

Fourth, COVID-19 infection prevention and control precautions, including hand hygiene, physical distancing, and respiratory etiquette should apply to patients (and accompanying family members if their presence is necessary). Additionally, staff should be protected with adequate personal protective equipment. Facilities also need to establish a patient flow that incorporates triage before entrance into the facility, and an isolation area and separate consultation room for suspected or confirmed cases.

To minimise preventable deaths, crucial health-care services, including sexual and reproductive health services, should remain accessible during public health emergencies, even when resources from already fragile health systems are often redirected for outbreak response. The COVID-19 pandemic will magnify the risks inherent to resource reshuffling at the expense of other services; however, sexual and reproductive health cannot be viewed as a luxury.<sup>8</sup> On March 31, 2020, the United Nations Secretary-General highlighted in relation to COVID-19 that "we are only as strong as the weakest health system in our interconnected world".9 To echo this statement, we have offered guidance on sexual and reproductive health and COVID-19, and we call on health authorities to prioritise these lifesaving services in humanitarian and fragile settings. Such interventions should be considered as indispensable components of health services that do not strain, but strengthen health systems during COVID-19 preparedness and response efforts. The collective health of women, girls, and the wider community depends on these services.

# REFERENCES

<sup>1</sup> Organisation for Economic Co-operation and Development. States of fragility 2018. Paris: OECD Publishing, 2018.

<sup>2</sup> United Nations Office for the Coordination of Humanitarian Affairs. Global Humanitarian Overview 2020. Dec 4, 2019. https://www.unocha.org/sites/unocha/files/GHO-2020\_v9.1.pdf (accessed April 2, 2020).

<sup>3</sup> McQuilkin PA, Udhayashankar K, Niescierenko M, Maranda L. Health-care access during the Ebola virus epidemic in Liberia. *Am J Trop Med Hyg* 2017; **97**: 931–36.

<sup>4</sup> UNFPA, WHO, UNICEF, World Bank Group, the United Nations Population Division. Trends in maternal mortality 2000 to 2017: estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division. Geneva: World Health Organization, 2019.

<sup>5</sup> Logie CH, Khoshnood K, Okumu M, et al. Self care interventions could advance sexual and reproductive health in humanitarian settings. *BMJ* 2019; **365:** 1083.

<sup>6</sup> Inter-Agency Standing Committee. Interim guidance: scaling-up COVID-19 outbreak readiness and response operations in humanitarian situations, including camps and camp-like settings. March 17, 2020. https:// interagencystandingcommittee.org/system/files/2020-03/ IASC%20 Interim%20Guidance%20on%20COVID-19%20 for%20Outbreak%20 Readiness%20and%20Response%20 Operations%20-%20Camps%20 and%20Camp-like%20 Settings.pdf (accessed April 2, 2020).

<sup>7</sup> WHO. Clinical management of severe acute respiratory infection (SARI) when COVID-19 disease is suspected: interim guidance. March 13, 2020. https://www.who.int/publicationsdetail/clinical-management-of-severeacute- respiratoryinfection-when-novel-coronavirus-(ncov)-infection-issuspected (accessed April 2, 2020).

<sup>8</sup> Vann B. Sexual violence in populations affected by armed conflict. 2005. World Health Organization Health in Emergencies. https://www.who.int/ hac/network/newsletter/Final\_HiE\_ n20\_%20Jan\_2005\_finalpdf.pdf (accessed April 2, 2020).

<sup>9</sup> Guterres A. Opening remarks at virtual press encounter to launch the Report on the Socio-Economic Impacts of COVID-19. March 31, 2020. United Nations Secretary-General. https:// www.un.org/sg/en/content/sg/speeches/2020-03-31/remarkslaunch-of-report-the-socio-economicimpacts-of-covid-19 (accessed April 2, 2020).

# Conflict and Forced Displacement

# I. COMMUNICABLE DISEASE

#### LOW- AND MIDDLE-INCOME COUNTRIES

Beadling C, Brett-Major D, Hamer M, Vest K, Muyimbo T, Burkle F. Ebola outbreak in Democratic Republic of Congo: lessons learned, or ignored? *Disaster Med Public Health Prep* 2020; published online Jun 24. doi:10.1017/dmp.2020.171. https://www.ncbi.nlm.nih.gov/pubmed/32576308

Ngwa MC, Alemu W, Okudo I, et al. The reactive vaccination campaign against cholera emergency in camps for internally displaced persons, Borno, Nigeria, 2017: a two-stage cluster survey. *BMJ Glob Health* 2020; **5**. doi:10.1136/bmjgh-2020-002431. https://www.ncbi.nlm.nih.gov/pubmed/32601092/

Lees S, Palmer J, Procureur F, Blanchet K. Contested legitimacy for anthropologists involved in medical humanitarian action: experiences from the 2014–2016 West Africa Ebola epidemic. *Anthropol Med* 2020; **27:** 125-43. doi:10.1080/13648470.2020.1742576. https://www.ncbi.nlm.nih.gov/pubmed/32363909/

Enriquez K, Udhayashankar K, Niescierenko M. Understanding the predictors that contribute to Liberian health care workers feeling protected from Ebola while at work. *Disaster Med Public Health Prep* 2020; published online May 29. doi:10.1017/dmp.2020.52

#### https://www.ncbi.nlm.nih.gov/pubmed/32468986/

Ekzayez A, Al-Khalil M, Jasiem M, et al. COVID-19 response in northwest Syria: innovation and community engagement in a complex conflict. *J Public Health (Oxf)* 2020; published online May 21. doi:10.1093/pubmed/fdaa068.

#### https://www.ncbi.nlm.nih.gov/pubmed/32436578/

Mobula LM, Samaha H, Yao M, et al. Recommendations for the COVID-19 response at the national level based on lessons learned from the Ebola virus disease outbreak in the Democratic Republic of the Congo. *Am J Trop Med Hyg* 2020; published online May 19. doi:10.4269/ajtmh.20-0256.

# https://www.ncbi.nlm.nih.gov/pubmed/32431285/

Abbara A, Rayes D, Fahham O, et al. Coronavirus 2019 and health systems affected by protracted conflict: the case of Syria. *Int J Infect Dis* 2020; **96:** 192–95. doi:10.1016/j.ijid.2020.05.003.

#### https://www.ncbi.nlm.nih.gov/pubmed/32389845/

Olu OO, Lako R, Wamala JF, et al. What did we learn from preparing for cross-border transmission of Ebola virus disease into a complex humanitarian setting—the Republic of South Sudan? *Infect Dis Poverty* 2020; **9:** 40. doi:10.1186/s40249-020-00657-8. https://www.ncbi.nlm.nih.gov/pubmed/32312320/

Meteke S, Stefopulos M, Als D, et al. Delivering infectious disease interventions to women and children in conflict settings: a systematic review. *BMJ Glob Health* 2020; **5** (suppl 1). doi:10.1136/bmjgh-2019-001967

#### https://www.ncbi.nlm.nih.gov/pubmed/32341087/

Feldstein LR, Bennett SD, Estivariz CF, et al. Vaccination coverage survey and seroprevalence among forcibly displaced Rohingya children, Cox's Bazar, Bangladesh, 2018: a cross-sectional study. *PLoS Med* 2020; **17**: e1003071. doi:10.1371/journal.pmed.1003071.

#### https://www.ncbi.nlm.nih.gov/pubmed/32231368/

Alhawarat M, Khader Y, Shadfan B, Kaplan N, Iblan I. Trend of cutaneous leishmaniasis in Jordan from 2010 to 2016: retrospective study. *JMIR Public Health Surveill* 2020; **6:** e14439. doi:10.2196/14439.

https://www.ncbi.nlm.nih.gov/pubmed/32207696/

Chowdhury F, Bhuiyan TR, Akter A, et al. Immunogenicity of a killed bivalent whole cell oral cholera vaccine in forcibly displaced Myanmar nationals in Cox's Bazar, Bangladesh. *PLoS Negl Trop Dis* 2020; **14**: e0007989. doi:10.1371/journal.pntd.0007989. https://www.ncbi.nlm.nih.gov/pubmed/32176695/

Wong YJ, Lee SWH. Prevalence of latent tuberculosis among refugee children in Malaysia. *ERJ Open Res* 2020; **6**. doi:10.1183/23120541.00254-2019.

# https://www.ncbi.nlm.nih.gov/pubmed/32166089/

Blackburn CC, Lenze PE , Jr, Casey RP. Conflict and cholera: Yemen's man-made public health crisis and the global implications of weaponizing health. *Health Secur* 2020; **18**: 125–31. doi:10.1089/hs.2019.0113.

#### https://www.ncbi.nlm.nih.gov/pubmed/32324073/

Ergönül Ö, Tülek N, Kayı I, Irmak H, Erdem O, Dara M. Profiling infectious diseases in Turkey after the influx of 3.5 million Syrian refugees. *Clin Microbiol Infect* 2020; **26**: 307–12. doi:10.1016/j.cmi.2019.06.022.

#### https://www.ncbi.nlm.nih.gov/pubmed/31284037/

Lubogo M, Mohamed AM, Ali AH, et al. Oral cholera vaccination coverage in an acute emergency setting in Somalia, 2017. *Vaccine* 2020; **38** (suppl 1): A141–47. doi:10.1016/j.vaccine.2020.01.015.

#### https://www.ncbi.nlm.nih.gov/pubmed/31980193/

Saikal SL, Ge L, Mir A, et al. Skin disease profile of Syrian refugees in Jordan: a field-mission assessment. *J Eur Acad Dermatol Venereol* 2020; **34:** 419–25. doi:10.1111/jdv.15909.

#### https://www.ncbi.nlm.nih.gov/pubmed/31498503/

Czerniewska A, White S. Hygiene programming during outbreaks: a qualitative case study of the humanitarian response during the Ebola outbreak in Liberia. *BMC Public Health* 2020; **20:** 154. doi:10.1186/s12889-020-8240-9.

https://www.ncbi.nlm.nih.gov/pubmed/32005207/

#### **HIGH-INCOME COUNTRIES**

Janda A, Eder K, Fressle R, et al. Comprehensive infectious disease screening in a cohort of unaccompanied refugee minors in Germany from 2016 to 2017: a cross-sectional study. *PLoS Med* 2020; **17:** e1003076. doi:10.1371/journal.pmed.1003076.

#### https://www.ncbi.nlm.nih.gov/pubmed/27450185/

Spernovasilis N, Tsioutis C, Markaki L, Zafeiri M, Soundoulounaki S, Gikas A. Fever of unknown origin caused by infectious diseases in the era of migrant and refugee crisis. *Travel Med Infect Dis* 2020; **33**: 101425. doi:10.1016/j.tmaid.2019.05.011 https://www.ncbi.nlm.nih.gov/pubmed/31100443/

# Dinleyici EC, Borrow R. Meningococcal infections among refugees and immigrants:

silent threats of past, present and future. *Hum Vaccin Immunother* 2020; published online Apr 29. doi:10.1080/21645515.2020.1744979.

#### https://www.ncbi.nlm.nih.gov/pubmed/32347773/

Williams B, Boullier M, Cricks Z, et al. Screening for infection in unaccompanied asylum-seeking children and young people. *Arch Dis Child* 2020; **105**: 530–32. doi:10.1136/archdischild-2019-318077

https://www.ncbi.nlm.nih.gov/pubmed/32094246/

# **II. NON-COMMUNICABLE DISEASE**

#### LOW- AND MIDDLE-INCOME COUNTRIES

Ansbro É, Garry S, Karir V, et al. Delivering a primary-level non-communicable disease programme for Syrian refugees and the host population in Jordan: a descriptive costing study. *Health Policy Plan* 2020; published online Jul 4. doi:10.1093/heapol/czaa050. https://www.ncbi.nlm.nih.gov/pubmed/32621490./

Carruth L, Ateye MJ, Nassir A, Hosh FM, Mendenhall E. Diabetes in a humanitarian crisis: Atypical clinical presentations and challenges to clinical- and community-based management among Somalis in Ethiopia. *Glob Public Health* 2020; **15**: 828–39. doi:10.1080/17441692.2020.1718735.

# https://www.ncbi.nlm.nih.gov/pubmed/31994445/

Spiegel PB, Cheaib JG, Aziz SA, et al. Cancer in Syrian refugees in Jordan and Lebanon between 2015 and 2017. *Lancet Oncol* 2020; **21:** e280–91. doi:10.1016/S1470-2045(20)30160-1.

#### https://www.ncbi.nlm.nih.gov/pubmed/32359503

Shah S, Munyuzangabo M, Gaffey MF, et al. Delivering non-communicable disease interventions to women and children in conflict settings: a systematic review. *BMJ Glob Health* 2020; **5** (suppl 1). doi:10.1136/bmjgh-2019-002047.

#### https://www.ncbi.nlm.nih.gov/pubmed/32341086/

McNatt ZZ. Addressing noncommunicable diseases among urban refugees in the Middle East and North Africa: a scoping review. *Confl Health* 2020; **14:** 9. doi:10.1186/s13031-020-0255-4.

https://www.ncbi.nlm.nih.gov/pubmed/32099579/

HIGH-INCOME COUNTRIES

N/A.

# III. REPRODUCTIVE, MATERNAL, NEWBORN, CHILD, AND ADOLESCENT HEALTH

#### LOW- AND MIDDLE-INCOME COUNTRIES

Akik C, Semaan A, Shaker-Berbari L, et al. Responding to health needs of women, children and adolescents within Syria during conflict: intervention coverage, challenges and adaptations. *Confl Health* 2020; **14:** 37. doi:10.1186/s13031-020-00263-3. https://www.ncbi.nlm.nih.gov/pubmed/32523615/

Tappis H, Elaraby S, Elnakib S, et al. Reproductive, maternal, newborn and child health service delivery during conflict in Yemen: a case study. *Confl Health* 2020; **14**: 30. doi:10.1186/s13031-020-00269-x.

#### https://www.ncbi.nlm.nih.gov/pubmed/32514295/

Çöl M, Bilgili Aykut N, Usturalı Mut AN, et al. Sexual and reproductive health of Syrian refugee women in Turkey: a scoping review within the framework of the MISP objectives. *Reprod Health* 2020; **17**: 99. doi:10.1186/s12978-020-00948-1. https://www.ncbi.nlm.nih.gov/pubmed/32571350/

Mirzazada S, Padhani ZA, Jabeen S, et al. Impact of conflict on maternal and child health service delivery: a country case study of Afghanistan. *Confl Health* 2020; **14:** 38. doi:10.1186/s13031-020-00285-x.

https://www.ncbi.nlm.nih.gov/pubmed/32536966/

Altare C, Malembaka EB, Tosha M, et al. Health services for women, children and adolescents in conflict affected settings: experience from North and South Kivu, Democratic Republic of Congo. *Confl Health* 2020; **14:** 31. doi:10.1186/s13031-020-00265-1

https://www.ncbi.nlm.nih.gov/pubmed/32514296/

Ataullahjan A, Gaffey MF, Tounkara M, et al. C'est vraiment compliqué: a case study on the delivery of maternal and child health and nutrition interventions in the conflictaffected regions of Mali. *Confl Health* 2020; **14:** 36. doi:10.1186/s13031-020-0253-6. https://www.ncbi.nlm.nih.gov/pubmed/32514301/

Sami S, Mayai A, Sheehy G, et al. Maternal and child health service delivery in conflictaffected settings: a case study example from Upper Nile and Unity states, South Sudan. *Confl Health* 2020; **14:** 34. doi:10.1186/s13031-020-00272-2. https://www.ncbi.nlm.nih.gov/pubmed/32514299/

Das JK, Padhani ZA, Jabeen S, et al. Impact of conflict on maternal and child health service delivery – how and how not: a country case study of conflict affected areas of Pakistan. *Confl Health* 2020; **14:** 32. doi:10.1186/s13031-020-00271-3. https://www.ncbi.nlm.nih.gov/pubmed/32514297/

Ramos Jaraba SM, Quiceno Toro N, Ochoa Sierra M, et al. Health in conflict and post-conflict settings: reproductive, maternal and child health in Colombia. *Confl Health* 2020; **14:** 33. doi:10.1186/s13031-020-00273-1.

#### https://www.ncbi.nlm.nih.gov/pubmed/32514298/

Sarker M, Saha A, Matin M, et al. Effective maternal, newborn and child health programming among Rohingya refugees in Cox's Bazar, Bangladesh: implementation challenges and potential solutions [Correction]. *PLoS One* 2020; **15**: e0234227. doi:10.1371/journal.pone.0234227.

#### https://www.ncbi.nlm.nih.gov/pubmed/32470096/

Freedman J, Crankshaw TL, Mutambara VM. Sexual and reproductive health of asylum seeking and refugee women in South Africa: understanding the determinants of vulnerability. *Sex Reprod Health Matters* 2020; **28:** 1758440. doi:10.1080/26410397.2020.1758440.

#### https://www.ncbi.nlm.nih.gov/pubmed/32425112/

Packer CA, Rastagar SH, Chen M, et al. Factors associated with reported modern contraceptive use among married men in Afghanistan. *Reprod Health* 2020; **17:** 64. doi:10.1186/s12978-020-0908-1.

#### https://www.ncbi.nlm.nih.gov/pubmed/32398075/

Desrosiers A, Betancourt T, Kergoat Y, Servilli C, Say L, Kobeissi L. A systematic review of sexual and reproductive health interventions for young people in humanitarian and lower-and-middle-income country settings. *BMC Public Health* 2020; **20:** 666. doi:10.1186/s12889-020-08818-y.

# https://www.ncbi.nlm.nih.gov/pubmed/32398129/

Nara R, Banura A, Foster AM. A multi-methods qualitative study of the delivery care experiences of Congolese refugees in Uganda. *Matern Child Health J* 2020; **24**: 1073–82. doi:10.1007/s10995-020-02951-1.

#### https://www.ncbi.nlm.nih.gov/pubmed/32377926/

Lokot M, Avakyan Y. Intersectionality as a lens to the COVID-19 pandemic: implications for sexual and reproductive health in development and humanitarian contexts. *Sex Reprod Health Matters* 2020; **28**. doi:10.1080/26410397.2020.1764748. https://www.ncbi.nlm.nih.gov/pubmed/32366190/

Odo AN, Musa K, Oladugba AV. Sexual and reproductive health needs and problems of internally displaced adolescents (IDAs) in Borno State, Nigeria: a mixed method approach. *Afr J Reprod Health* 2020; **24**: 87–96. doi:10.29063/ajrh2020/v24i1.9. https://www.ncbi.nlm.nih.gov/pubmed/32358940/

Tran NT, Tappis H, Spilotros N, Krause S, Knaster S (Inter-Agency Working Group on Reproductive Health in Crises). Not a luxury: a call to maintain sexual and reproductive health in humanitarian and fragile settings during the COVID-19 pandemic. *Lancet Glob Health* 2020; **8**: e760-61. doi:10.1016/S2214-109X(20)30190-X.

#### https://www.ncbi.nlm.nih.gov/pubmed/32330429/

Dahab R, Bécares L, Brown M. Armed conflict as a determinant of children malnourishment: a cross-sectional study in The Sudan. *BMC Public Health* 2020; **20:** 532. doi:10.1186/s12889-020-08665-x.

#### https://www.ncbi.nlm.nih.gov/pubmed/32306937/

Schaaf M, Boydell V, Sheff MC, Kay C, Torabi F, Khosla R. Accountability strategies for sexual and reproductive health and reproductive rights in humanitarian settings: a scoping review. *Confl Health* 2020; **14:** 18. doi:10.1186/s13031-020-00264-2. https://www.ncbi.nlm.nih.gov/pubmed/32280369/

Agbemenu K, Auerbach S, Ely G, Aduloji-Ajijola N, Wang HH. Family planning trends among community-dwelling African refugee women. *Public Health Nurs* 2020; published online Apr 5. doi10.1111/phn.12725.

#### https://www.ncbi.nlm.nih.gov/pubmed/32249486/

Casey SE, Gallagher MC, Kakesa J, et al. Contraceptive use among adolescent and young women in North and South Kivu, Democratic Republic of the Congo: a cross-sectional population-based survey. *PLoS Med* 2020; **17:** e1003086. doi:10.1371/journal.pmed.1003086.

#### https://www.ncbi.nlm.nih.gov/pubmed/32231356/

Sarker M, Saha A, Matin M, et al. Effective maternal, newborn and child health programming among Rohingya refugees in Cox's Bazar, Bangladesh: implementation challenges and potential solutions. *PLoS One* 2020; **15**: e0230732. doi:10.1371/journal.pone.0230732.

#### https://www.ncbi.nlm.nih.gov/pubmed/32214359/

Nasir S, Goto R, Kitamura A, et al. Dissemination and implementation of the e-MCH Handbook, UNRWA's newly released maternal and child health mobile application: a cross-sectional study. *BMJ Open* 2020; **10**: e034885. doi:10.1136/bmjopen-2019-034885.

#### https://www.ncbi.nlm.nih.gov/pubmed/32156767/

Gausman J, Othman A, Daas I, Hamad I, Dabobe M, Langer A. How Jordanian and Syrian youth conceptualise their sexual and reproductive health needs: a visual exploration using concept mapping. *Cult Health Sex* 2020; published online Feb 27. doi:10.1080/13691058.2019.1698769.

#### https://www.ncbi.nlm.nih.gov/pubmed/32105196/

Ekezie W, Adaji EE, Murray RL. Essential healthcare services provided to conflict-affected internally displaced populations in low and middle-income countries: a systematic review. *Health Promot Perspect* 2020; **10**: 24–37. doi:10.15171/hpp.2020.06.

#### https://www.ncbi.nlm.nih.gov/pubmed/32104654/

Samba M, Attia-Konan AR, Sangaré AD, Youan GJ, Kouadio LP, Bakayoko-Ly R. Factors associated with the use of maternal health services by mothers in a post-conflict area of western Côte d'Ivoire in 2016. *BMC Health Serv Res* 2020; **20:** 136. doi:10.1186/s12913-020-4976-2.

https://www.ncbi.nlm.nih.gov/pubmed/32087713/

Amodu OC, Richter MS, Salami BO. A scoping review of the health of conflict-induced internally displaced women in Africa. *Int J Environ Res Public Health* 2020; **17:** E1280. doi:10.3390/ijerph17041280.

# https://www.ncbi.nlm.nih.gov/pubmed/32079235/

Howell E, Waidmann T, Birdsall N, Holla N, Jiang K. The impact of civil conflict on infant and child malnutrition, Nigeria, 2013. *Matern Child Nutr* 2020; **16:** e12968. doi:10.1111/mcn.12968.

#### https://www.ncbi.nlm.nih.gov/pubmed/32048455/

Endler M, Al Haidari T, Chowdhury S, et al (FIGO Committee for Human Rights, Refugees and Violence Against Women). Sexual and reproductive health and rights of refugee and migrant women: gynecologists' and obstetricians' responsibilities. *Int J Gynaecol Obstet* 2020; **149:** 113–19. doi:10.1002/ijg0.13111.

#### https://www.ncbi.nlm.nih.gov/pubmed/32012258/

Sürmeli A, Tolunay T, Yasin Y, et al. Child health, parasites and lower socioeconomic status: Outcomes of a long-term screening, intervention and training study by health volunteers in rural Nepal. *Acta Trop* 2020; **202:** 105263. doi:10.1016/j.actatropica.2019.105263.

#### https://www.ncbi.nlm.nih.gov/pubmed/31711749/

Bhatta MP, Johnson DC, Lama M, Maharjan B, Lhaki P, Shrestha S. Cervical cancer and human papillomavirus vaccine awareness among married Bhutanese refugee and Nepali women in eastern Nepal. *J Community Health* 2020; **45:** 516–25. doi:10.1007/s10900-019-00770-2.

#### https://www.ncbi.nlm.nih.gov/pubmed/31696420/

Nara R, Banura A, Foster AM. Assessing the availability and accessibility of emergency contraceptive pills in Uganda: A multi-methods study with Congolese refugees. *Contraception* 2020; **101:** 112–16. doi:10.1016/j.contraception.2019.09.008. https://www.ncbi.nlm.nih.gov/pubmed/31655072/

El-Mowafi IM, Foster AM. Emergency contraception in Jordan: assessing retail pharmacists awareness, opinions, and perceptions of need. *Contraception* 2020; **101**: 261–65. doi:10.1016/j.contraception.2019.10.002.

#### https://www.ncbi.nlm.nih.gov/pubmed/31655070/

El-Kak F, Kabakian-Khasholian T, Ammar W, Nassar A. A review of maternal mortality trends in Lebanon, 2010-2018. *Int J Gynaecol Obstet* 2020; **148:** 14–20. doi:10.1002/ijgo.12994.

#### https://www.ncbi.nlm.nih.gov/pubmed/31596955/

Mazimpaka C, Uwitonze E, Cherian T, et al. Perioperative management and outcomes after Cesarean section: a cross-sectional study from rural Rwanda. *J Surg Res* 2020; **245:** 390–95. doi:10.1016/j.jss.2019.07.070.

#### https://www.ncbi.nlm.nih.gov/pubmed/31425881/

Edmond K, Yousufi K, Naziri M, et al. Mobile outreach health services for mothers and children in conflict-affected and remote areas: a population-based study from Afghanistan. *Arch Dis Child* 2020; **105:** 18–25. doi:10.1136/archdischild-2019-316802. https://www.ncbi.nlm.nih.gov/pubmed/31270097/

Abbasi-Kangevari M, Amin K, Kolahi AA. Antenatal care utilisation among Syrian refugees in Tehran: A respondent driven sampling method. *Women Birth* 202; **33**: e117-21. doi:10.1016/j.wombi.2019.02.001.

#### https://www.ncbi.nlm.nih.gov/pubmed/30777740/

Joseph J, Liamputtong P, Brodribb W. From liminality to vitality: infant feeding beliefs among refugee mothers from Vietnam and Myanmar. *Qual Health Res* 2020; **30**: 1171–82. doi:10.1177/1049732318825147.

https://www.ncbi.nlm.nih.gov/pubmed/30674230/

Turkay Ü, Aydın Ü, Salıcı M, et al. Comparison of pregnant Turkish women and Syrian refugees: does living as a refugee have an unfavorable effect on pregnancy outcomes? *Int J Gynaecol Obstet* 2020; **149:** 160–65. doi:10.1002/ijgo.13117. https://www.ncbi.nlm.nih.gov/pubmed/32043575/

#### **HIGH-INCOME COUNTRIES**

Zwi K, Sealy L, Samir N, et al. Asylum seeking children and adolescents in Australian immigration detention on Nauru: a longitudinal cohort study. *BMJ Paediatr Open* 2020; **4:** e000615. doi:10.1136/bmjpo-2019-000615.

https://www.ncbi.nlm.nih.gov/pubmed/32201744/

### **IV. NUTRITION AND FOOD SECURITY**

#### LOW- AND MIDDLE-INCOME COUNTRIES

Ahmed Z, Ataullahjan A, Gaffey MF, et al. Understanding the factors affecting the humanitarian health and nutrition response for women and children in Somalia since 2000: a case study. *Confl Health* 2020; **14:** 35. doi:10.1186/s13031-019-0241-x. https://www.ncbi.nlm.nih.gov/pubmed/32514300

Ataullahjan A, Gaffey MF, Sami S, et al. Investigating the delivery of health and nutrition interventions for women and children in conflict settings: a collection of case studies from the BRANCH Consortium. *Confl Health* 2020; **14:** 29. doi:10.1186/s13031-020-00276-y.

#### https://www.ncbi.nlm.nih.gov/pubmed/32514294

Collado Z. Meals under tents: experiences of food insecurity among the displaced people of southern Philippines. *Med Confl Surviv* 2020; **36:** 162–73. doi:10.1080/13623699.2020.1766200.

#### https://www.ncbi.nlm.nih.gov/pubmed/32434380

Dahab R, Bécares L, Brown M. Armed conflict as a determinant of children malnourishment: a cross-sectional study in The Sudan. *BMC Public Health* 2020; **20:** 532. doi:10.1186/s12889-020-08665-x.

#### https://www.ncbi.nlm.nih.gov/pubmed/32306937

Dhoubhadel BG, Raya GB, Shrestha D, et al. Changes in nutritional status of children who lived in temporary shelters in Bhaktapur municipality after the 2015 Nepal earthquake. *Trop Med Health* 2020; **48:** 53. doi:10.1186/s41182-020-00225-8. https://www.ncbi.nlm.nih.gov/pubmed/32607058

Di Marcantonio F, Custodio E, Abukar Y. Child dietary diversity and associated factors among children in Somalian IDP camps. *Food Nutr Bull* 2020; **41:** 61–76. doi:10.1177/0379572119861000.

#### https://www.ncbi.nlm.nih.gov/pubmed/32174168

Doocy S, Busingye M, Lyles E, et al. Cash and voucher assistance and children's nutrition status in Somalia. *Matern Child Nutr* 2020; **16**: e12966. doi:10.1111/mcn.12966. https://www.ncbi.nlm.nih.gov/pubmed/32141183

Ghattas H, Choufani J, Jamaluddine Z, Masterson AR, Sahyoun NR. Linking women-led community kitchens to school food programmes: lessons learned from the Healthy Kitchens, Healthy Children intervention in Palestinian refugees in Lebanon. *Public Health Nutr* 2020; **23**: 914–23. doi:10.1017/S1368980019003161. https://www.ncbi.nlm.nih.gov/pubmed/31753059

Guesdon B, Couture A, Pantchova D, Bilukha O. Potential consequences of expanded MUAC-only programs on targeting of acutely malnourished children and ready-to-use-therapeutic-food allocation: lessons from cross-sectional surveys. *BMC Nutr* 2020; **6**: 5. doi:10.1186/s40795-019-0328-1.

#### https://www.ncbi.nlm.nih.gov/pubmed/32153978

Howell E, Waidmann T, Birdsall N, Holla N, Jiang K. The impact of civil conflict on infant and child malnutrition, Nigeria, 2013. *Matern Child Nutr* 2020; **16:** e12968. doi:10.1111/mcn.12968.

#### https://www.ncbi.nlm.nih.gov/pubmed/32048455

lacoella F, Tirivayi N. Child nutrition during conflict and displacement: evidence from areas affected by the Boko Haram insurgency in Nigeria. *Public Health* 2020; **183**: 132–37. doi:10.1016/j.puhe.2020.03.012.

#### https://www.ncbi.nlm.nih.gov/pubmed/32497781

Joseph J, Liamputtong P, Brodribb W. From liminality to vitality: infant feeding beliefs among refugee mothers from Vietnam and Myanmar. *Qual Health Res* 2020; **30**: 1171–82. doi:10.1177/1049732318825147.

#### https://www.ncbi.nlm.nih.gov/pubmed/30674230

Kurdi S, Figueroa JL, Ibrahim H. Nutritional training in a humanitarian context: evidence from a cluster randomized trial. *Matern Child Nutr* 2020; **16**: e12973. doi:10.1111/mcn.12973.

#### https://www.ncbi.nlm.nih.gov/pubmed/32147962

Lazzerini M, Wanzira H, Lochoro P, et al. Quality of healthcare for children with severe acute malnutrition in a refugee setting: cross-sectional study in West Nile Region, Uganda. *BMJ Open* 2020; **10**: e034738. doi:10.1136/bmjopen-2019-034738.

#### https://www.ncbi.nlm.nih.gov/pubmed/32532769

Martin-Canavate R, Custodio E, Yusuf A, Molla D, Fasbender D, Kayitakire F. Malnutrition and morbidity trends in Somalia between 2007 and 2016: results from 291 cross-sectional surveys. *BMJ Open* 2020; **10:** e033148. doi:10.1136/bmjopen-2019-033148.

#### https://www.ncbi.nlm.nih.gov/pubmed/32071180

McElrone M, Colby S, Fouts HN, et al. Feasibility and acceptability of implementing a culturally adapted cooking curriculum for Burundian and Congolese refugee families. *Ecol Food Nutr* 2020; published online May 12. doi:10.1080/03670244.2020.1759575. https://www.ncbi.nlm.nih.gov/pubmed/32397821

McElrone M, Colby S, Franzen-Castle L, Olfert MD, Kattelmann KK, Fouts HN, Spence M, Kavanagh K, White AA. A community-based cultural adaptation process: developing a relevant cooking curriculum to address food security for Burundian and Congolese refugee families. *Health Promot Pract* 2020; published online May 25. doi:10.1177/1524839920922496.

# https://www.ncbi.nlm.nih.gov/pubmed/32449387

Tijjani SJ, Ma L. Is Nigeria prepared and ready to respond to the COVID-19 pandemic in its conflict-affected northeastern states?. *Int J Equity Health* 2020; **19**: 77. doi:10.1186/s12939-020-01192-6.

#### https://www.ncbi.nlm.nih.gov/pubmed/32460766

Zeng W, Malla P, Xu X, et al. Associations among soil-transmitted helminths, G6PD deficiency and asymptomatic malaria parasitemia, and anemia in schoolchildren from a conflict zone of northeast Myanmar. *Am J Trop Med Hyg* 2020; **102**: 851–56. doi:10.4269/ajtmh.19-0828.

https://www.ncbi.nlm.nih.gov/pubmed/32043453

#### **HIGH-INCOME COUNTRIES**

Kim JY, Lee SK, Kim SG. Comparisons of food security, dietary behaviors and nutrient intakes between adult North Korean Refugees in South Korea and South Koreans. Nutr Res Pract 2020; 14: 134-42. doi:10.4162/nrp.2020.14.2.134. https://www.ncbi.nlm.nih.gov/pubmed/32256988

# V. WATER, SANITATION, AND HYGIENE (WASH)

# LOW- AND MIDDLE-INCOME COUNTRIES

Sikder M, String G, Kamal Y, Farrington M, Rahman AS, Lantagne D. Effectiveness of water chlorination programs along the emergency-transition-post-emergency continuum: Evaluations of bucket, in-line, and piped water chlorination programs in Cox's Bazar. Water Res 2020; 178: 115854. doi:10.1016/j.watres.2020.115854. https://www.ncbi.nlm.nih.gov/pubmed/32361348/

Zangana A, Shabila N, Heath T, White S. The determinants of handwashing behaviour among internally displaced women in two camps in the Kurdistan Region of Iraq. PLoS One 2020; 15: e0231694. doi:10.1371/journal.pone.0231694. https://www.ncbi.nlm.nih.gov/pubmed/32384095/

Subbaraman N. 'Distancing is impossible': refugee camps race to avert coronavirus catastrophe. Nature 2020; 581: 18. doi:10.1038/d41586-020-01219-6. https://www.ncbi.nlm.nih.gov/pubmed/32332908/

Uprety S, Dangol B, Nakarmi P, et al. Assessment of microbial risks by characterization of Escherichia coli presence to analyze the public health risks from poor water quality in Nepal. Int J Hyg Environ Health 2020; 226: 113484. doi:10.1016/i.ijheh.2020.113484. https://www.ncbi.nlm.nih.gov/pubmed/32097888/

HIGH-INCOME COUNTRIES

N/A.

# VI. MENTAL HEALTH, PSYCHOSOCIAL ISSUES, AND SUBSTANCE ABUSE

#### LOW- AND MIDDLE-INCOME COUNTRIES

Miller KE, Koppenol-Gonzalez GV, Arnous M, et al. Supporting Syrian families displaced by armed conflict: a pilot randomized controlled trial of the Caregiver Support Intervention. Child Abuse Negl 2020; 106: 104512. doi:10.1016/j.chiabu.2020.104512. https://www.ncbi.nlm.nih.gov/pubmed/32408022

Oner O, Kahilogullari AK, Acarlar B, Malaj A, Alatas E. Psychosocial and cultural needs of children with intellectual disability and their families among the Syrian refugee population in Turkey. J Intellect Disabil Res 2020; published online Jul 6. doi:10.1111/jir.12760.

#### https://www.ncbi.nlm.nih.gov/pubmed/32627246

Yildirim H, Isik K, Firat TY, Aylaz R. Determining the correlation between social support and hopelessness of Syrian refugees living in Turkey. J Psychosoc Nurs Ment Health Serv 2020; 58: 27-33. doi:10.3928/02793695-20200506-04. https://www.ncbi.nlm.nih.gov/pubmed/32396207

Goral A, Greene T, Gelkopf M. Does sense of threat in civilians during an armed conflict predict subsequent depression symptoms? J Clin Psychol 2020; 76: 1293-303. doi:10.1002/jclp.22935.

https://www.ncbi.nlm.nih.gov/pubmed/32003909

Al Laham D, Ali E, Mousally K, Nahas N, Alameddine A, Venables E. Perceptions and health-seeking behaviour for mental illness among Syrian refugees and Lebanese community members in Wadi Khaled, north Lebanon: a gualitative study. Community Ment Health J 2020; 56: 875-84. doi:10.1007/s10597-020-00551-5.

# https://www.ncbi.nlm.nih.gov/pubmed/31965411

Im H, Swan LET, Heaton L. Polyvictimization and mental health consequences of female genital mutilation/circumcision (FGM/C) among Somali refugees in Kenya. Women Health 2020; 60: 636-51. doi:10.1080/03630242.2019.1689543. https://www.ncbi.nlm.nih.gov/pubmed/31711407

Alduraidi H, Dardas LA, Price MM. Social determinants of resilience among Syrian refugees in Jordan. J Psychosoc Nurs Ment Health Serv 2020; published online Jun 30. doi:10.3928/00989134-20200624-04.

#### https://www.ncbi.nlm.nih.gov/pubmed/32609861

Gruner D, Magwood O, Bair L, Duff L, Adel S, Pottie K. Understanding supporting and hindering factors in community-based psychotherapy for refugees: a realist-informed systematic review. Int J Environ Res Public Health 2020; 17. doi:10.3390/ijerph17134618.

#### https://www.ncbi.nlm.nih.gov/pubmed/32604990

Seidi PA, Jaff D, Connolly SM, Hoffart A. Applying cognitive behavioral therapy and thought field therapy in Kurdistan region of Iraq: A retrospective case series study of mental-health interventions in a setting of political instability and armed conflicts. Explore (NY) 2020; published online Jun 25. doi:10.1016/j.explore.2020.06.003. https://www.ncbi.nlm.nih.gov/pubmed/32622816

Richa S, Herdane M, Dwaf A, et al. Trauma exposure and PTSD prevalence among Yazidi, Christian and Muslim asylum seekers and refugees displaced to Iraqi Kurdistan. PLoS One 2020; 15: e0233681. doi:10.1371/journal.pone.0233681.

#### https://www.ncbi.nlm.nih.gov/pubmed/32579560

Panter-Brick C, Eggerman M, Ager A, Hadfield K, Dajani R. Measuring the psychosocial, biological, and cognitive signatures of profound stress in humanitarian settings: impacts, challenges, and strategies in the field. Confl Health 2020; 14: 40. doi:10.1186/s13031-020-00286-w.

#### https://www.ncbi.nlm.nih.gov/pubmed/32582366

Gargiulo A, Tessitore F, Le Grottaglie F, Margherita G. Self-harming behaviours of asylum seekers and refugees in Europe: a systematic review. Int J Psychol 2020; published online Jun 18. doi:10.1002/ijop.12697.

#### https://www.ncbi.nlm.nih.gov/pubmed/32557612

Slewa-Younan S, McKenzie M, Thomson R, Smith M, Mohammad Y, Mond J. Improving the mental wellbeing of Arabic speaking refugees: an evaluation of a mental health promotion program. BMC Psychiatry 2020; 20: 314. doi:10.1186/s12888-020-02732-8. https://www.ncbi.nlm.nih.gov/pubmed/32552878

Koirala R, Søegaard EGI, Ojha SP, Hauff E, Thapa SB. Trauma related psychiatric disorders and their correlates in a clinical sample: a cross-sectional study in trauma affected patients visiting a psychiatric clinic in Nepal. PLoS One 2020; 15: e0234203. doi:10.1371/journal.pone.0234203.

#### https://www.ncbi.nlm.nih.gov/pubmed/32541999

Lacour O, Morina N, Spaaij J, et al. Prolonged grief disorder among refugees in psychological treatment-association with self-efficacy and emotion regulation. Front Psychiatry 2020; 11: 526. doi:10.3389/fpsyt.2020.00526. https://www.ncbi.nlm.nih.gov/pubmed/32581893

Liem A, Natari RB, Jimmy, Hall BJ. Digital health applications in mental health care for Immigrants and Refugees: A Rapid Review. *Telemed J E Health* 2020 Jun 4. doi:10.1089/tmj.2020.0012.

# https://www.ncbi.nlm.nih.gov/pubmed/32498658

Lancaster SL, Gaede C. A test of a resilience based intervention for mental health problems in Iraqi internally displaced person camps. *Anxiety Stress Coping* 2020; published online Jun 4. doi:10.1080/10615806.2020.1773446.

#### https://www.ncbi.nlm.nih.gov/pubmed/32496821

Endale T, St Jean N, Birman D. COVID-19 and refugee and immigrant youth: a community-based mental health perspective. Psychol Trauma 2020; Jun 1. doi:10.1037/tra0000875.

#### https://www.ncbi.nlm.nih.gov/pubmed/32478552

Giraldo LS, Aguirre-Acevedo DC, Trujillo S, Ugarriza JE, Trujillo N. Validation of the Extreme Experiences Scale (EX2) for armed conflict contexts. *Psychiatr Q* 2020; **91:** 495–520. doi:10.1007/s11126-020-09710-z.

#### https://www.ncbi.nlm.nih.gov/pubmed/32008210

Meyer SR, Yu G, Rieders E, Stark L. Child labor, sex and mental health outcomes amongst adolescent refugees. *J Adolesc* 2020; **81:** 52–60. doi:10.1016/j.adolescence.2020.04.002.

#### https://www.ncbi.nlm.nih.gov/pubmed/32361065

Júnior JG, de Sales JP, Moreira MM, Pinheiro WR, Lima CKT, Neto MLR. A crisis within the crisis: The mental health situation of refugees in the world during the 2019 coronavirus (2019-nCoV) outbreak. *Psychiatry Res* 2020; **288:** 113000. doi:10.1016/j.psychres.2020.113000.

#### https://www.ncbi.nlm.nih.gov/pubmed/32353696

Goodkind JR, Bybee D, Hess JM, et al. Randomized controlled trial of a multilevel intervention to address social determinants of refugee mental health. *Am J Community Psychol* 2020; **65:** 272–89. doi:10.1002/ajcp.12418.

# https://www.ncbi.nlm.nih.gov/pubmed/32067251

Blackmore R, Gray KM, Boyle JA, et al. Systematic review and meta-analysis: the Prevalence of Mental Illness in Child and Adolescent Refugees and Asylum Seekers. *J Am Acad Child Adolesc Psychiatry* 2020; **59:** 705–14. doi:10.1016/j.jaac.2019.11.011. https://www.ncbi.nlm.nih.gov/pubmed/31778780

Arenliu A, Bertelsen N, Saad R, Abdulaziz H, Weine SM. War and displacement stressors and coping mechanisms of Syrian urban refugee families living in Istanbul. *J Fam Psychol* 2020; **34:** 392–401. doi:10.1037/fam0000603.

#### https://www.ncbi.nlm.nih.gov/pubmed/31697101

Snyder JD, Boan D, Aten JD, et al. Resource loss and stress outcomes in a setting of chronic conflict: the conservation of resources theory in the Eastern Congo. *J Trauma Stress* 2020; **33**: 227–37. doi:10.1002/jts.22448.

#### https://www.ncbi.nlm.nih.gov/pubmed/31553500

Djelantik AAAMJ, de Heus A, Kuiper D, Kleber RJ, Boelen PA, Smid GE. Post-migration stressors and their association with symptom reduction and non-completion during treatment for traumatic grief in refugees. *Front Psychiatry* 2020; **11**: 407. doi:10.3389/fpsyt.2020.00407.

#### https://www.ncbi.nlm.nih.gov/pubmed/32547428

Beni Yonis O, Khader Y, Jarboua A, et al. Post-traumatic stress disorder among Syrian adolescent refugees in Jordan. *J Public Health (Oxf)* 2020; **42:** 319–24. doi:10.1093/pubmed/fdz026.

https://www.ncbi.nlm.nih.gov/pubmed/30927431

Marroquín Rivera A, Rincón Rodríguez CJ, Padilla-Muñoz A, Gómez-Restrepo C. Mental health in adolescents displaced by the armed conflict: findings from the Colombian national mental health survey. *Child Adolesc Psychiatry Ment Health* 2020; **14:** 23. doi:10.1186/s13034-020-00327-5.

#### https://www.ncbi.nlm.nih.gov/pubmed/32467726

Starck A, Gutermann J, Schouler-Ocak M, Jesuthasan J, Bongard S, Stangier U. The relationship of acculturation, traumatic events and depression in female refugees. *Front Psychol* 2020; **11**: 906. doi:10.3389/fpsyg.2020.00906.

# https://www.ncbi.nlm.nih.gov/pubmed/32528358

Hammad J, Tribe R. Social suffering and the psychological impact of structural violence and economic oppression in an ongoing conflict setting: The Gaza Strip. *J Community Psychol* 2020; published online May 12. doi:10.1002/jcop.22367.

### https://www.ncbi.nlm.nih.gov/pubmed/32399970

Haar K, El-Khani A, Molgaard V, Maalouf W. Strong families: a new family skills training programme for challenged and humanitarian settings: a single-arm intervention tested in Afghanistan. *BMC Public Health* 2020; **20:** 634. doi:10.1186/s12889-020-08701-w. https://www.ncbi.nlm.nih.gov/pubmed/32381064

Kerbage H, Marranconi F, Chamoun Y, Brunet A, Richa S, Zaman S. Mental health services for Syrian refugees in Lebanon: perceptions and experiences of professionals and refugees. *Qual Health Res* 2020; **30**: 849–64. doi:10.1177/1049732319895241. https://www.ncbi.nlm.nih.gov/pubmed/31904307

Doumit R, Kazandjian C, Militello LK. COPE for adolescent Syrian refugees in Lebanon: a brief cognitive-behavioral skill-building intervention to improve quality of life and promote positive mental health. *Clin Nurs Res* 2020; **29:** 226–34. doi:10.1177/1054773818808114.

#### https://www.ncbi.nlm.nih.gov/pubmed/30477312

Tay AK, Rees S, Kareth M, Mohsin M, Tam N, Silove D. Associations between family-level adversity and society-level trauma with emotional and behavioural problems amongst children of West Papuan refugees. *Eur Child Adolesc Psychiatry* 2020; published online Jun 4. doi:10.1007/s00787-020-01569-6.

#### https://www.ncbi.nlm.nih.gov/pubmed/32500279

Tol WA, Leku MR, Lakin DP, et al. Guided self-help to reduce psychological distress in South Sudanese female refugees in Uganda: a cluster randomised trial. *Lancet Glob Health* 2020; **8**: e254-63. doi:10.1016/S2214-109X(19)30504-2 https://pubmed.ncbi.nlm.nih.gov/31981556/

Sijbrandij M, Horn R, Esliker R, et al. The effect of psychological first aid training on knowledge and understanding about psychosocial support principles: a cluster-randomized controlled trial. *Int J Environ Res Public Health* 2020; **17**: 484. doi:10.3390/ijerph17020484

#### https://pubmed.ncbi.nlm.nih.gov/31940865/

Panter-Brick C, Eggerman M, Ager A, Hadfield K, Dajani R. Measuring the psychosocial, biological, and cognitive signatures of profound stress in humanitarian settings: impacts, challenges, and strategies in the field. *Confl Health* 2020; **14**: 40. doi:10.1186/s13031-020-00286-w

#### https://pubmed.ncbi.nlm.nih.gov/32582366/

Yayan EH, Düken ME, Özdemir AA, Çelebioğlu A. Mental health problems of Syrian refugee children: post-traumatic stress, depression and anxiety. *J Pediatr Nurs* 2020; **51:** e27–32. doi:10.1016/j.pedn.2019.06.012

https://pubmed.ncbi.nlm.nih.gov/31255362/

#### **HIGH-INCOME COUNTRIES**

Park JK, Park J, Elbert T, Kim SJ. Effects of narrative exposure therapy on posttraumatic stress disorder, depression, and insomnia in traumatized North Korean refugee youth. *J Trauma Stress* 2020; **33**: 353–59. doi:10.1002/jts.22492. https://www.ncbi.nlm.nih.gov/pubmed/32216143

Rathke H, Poulsen S, Carlsson J, Palic S. PTSD with secondary psychotic features among trauma-affected refugees: the role of torture and depression. *Psychiatry Res* 2020; **287**: 112898. doi:10.1016/j.psychres.2020.112898.

https://www.ncbi.nlm.nih.gov/pubmed/32179211

Lee M, Lee ES, Jun JY, Park S. The effect of early trauma on North Korean refugee youths' mental health: moderating effect of emotional regulation strategies. *Psychiatry Res* 2020; **287:** 112707. doi:10.1016/j.psychres.2019.112707.

https://www.ncbi.nlm.nih.gov/pubmed/32193008

Hedrick K, Armstrong G, Coffey G, Borschmann R. Self-harm among asylum seekers in Australian onshore immigration detention: how incidence rates vary by held detention type. *BMC Public Health* 2020; **20**: 592. doi:10.1186/s12889-020-08717-2. https://www.ncbi.nlm.nih.gov/pubmed/32354370

Hanewald B, Knipper M, Fleck W, et al. Different patterns of mental health problems in unaccompanied refugee minors (URM): a sequential mixed method study. *Front Psychiatry* 2020; **11**: 324. doi:10.3389/fpsyt.2020.00324. https://www.ncbi.nlm.nih.gov/pubmed/32411027

**VII. HEALTH SYSTEMS** 

#### LOW- AND MIDDLE-INCOME COUNTRIES

Biddle L, Wahedi K, Bozorgmehr K. Health system resilience: a literature review of empirical research. *Health Policy Plan* 2020; published online Jun 12. doi:10.1093/heapol/czaa032.

# https://www.ncbi.nlm.nih.gov/pubmed/32529253

Tresànchez-Lacorte B, Figueras A. Medicines in western Sahara refugee camps in Tindouf: prescriptions and self-medication mixing in the drawer. *Glob Public Health* 2020; published online Jun 6. doi:10.1080/17441692.2020.1775864.

# https://www.ncbi.nlm.nih.gov/pubmed/32507050/

Miller NP, Richards AK, Marx MA, Checchi F, Kozuki N. Assessing community health worker service delivery in humanitarian settings. *J Glob Health* 2020; **10**: 010307. doi:10.7189/jogh.10.010307.

https://pubmed.ncbi.nlm.nih.gov/32257135/

#### **HIGH-INCOME COUNTRIES**

N/A.

# VIII. MULTI-CATEGORY

### LOW- AND MIDDLE-INCOME COUNTRIES

Zaman S, Sammonds P, Ahmed B, Rahman T. Disaster risk reduction in conflict contexts: Lessons learned from the lived experiences of Rohingya refugees in Cox's Bazar, Bangladesh. *Int J Disaster Risk Reduct* 2020; **50:** 101694. doi:10.1016/j.ijdrr.2020.101694.

https://www.ncbi.nlm.nih.gov/pubmed/32518743/

Fawad M, Rawashdeh F, Parmar PK, Ratnayake R. Simple ideas to mitigate the impacts of the COVID-19 epidemic on refugees with chronic diseases. *Confl Health* 2020; **14:** 23. doi:10.1186/s13031-020-00277-x.

#### https://www.ncbi.nlm.nih.gov/pubmed/32391077/

Angeletti S, Ceccarelli G, Bazzardi R, et al. Migrants rescued on the Mediterranean Sea route: nutritional, psychological status and infectious disease control. *J Infect Dev Ctries* 2020; **14**: 454–62. doi:10.3855/jidc.11918.

#### https://www.ncbi.nlm.nih.gov/pubmed/32525831/

Cañardo G, Gálvez J, Jiménez J, Serre N, Molina I, Bocanegra C. Health status of rescued people by the NGO Open Arms in response to the refugee crisis in the Mediterranean Sea. *Confl Health* 2020; **14:** 21. doi:10.1186/s13031-020-00275-z. https://www.ncbi.nlm.nih.gov/pubmed/32377233/

Strømme EM, Haj-Younes J, Hasha W, et al. Health status and use of medication and their association with migration related exposures among Syrian refugees in Lebanon and Norway: a cross-sectional study. *BMC Public Health* 2020; **20:** 341. doi:10.1186/s12889-020-8376-7.

#### https://www.ncbi.nlm.nih.gov/pubmed/32183773/

Ghosh S, Dronavalli M, Raman S. Tuberculosis infection in under-2-year-old refugees: should we be screening? A systematic review and meta-regression analysis. *J Paediatr Child Health* 2020; **56:** 622–29. doi:10.1111/jpc.14701.

# https://www.ncbi.nlm.nih.gov/pubmed/31883282

Hugelius K, Semrau M, Holmefur M. HESPER web-development and reliability evaluation of a web-based version of the humanitarian emergency settings perceived needs scale. *BMC Public Health* 2020; **20:** 323. doi:10.1186/s12889-020-8387-4. https://pubmed.ncbi.nlm.nih.gov/32164647/

# HIGH-INCOME COUNTRIES

N/A.

# **Natural Disasters**

# I. COMMUNICABLE DISEASE

#### LOW- AND MIDDLE-INCOME COUNTRIES

Parekh FK, Yeh KB, Olinger G, Ribeiro FA. Infectious disease risks and vulnerabilities in the aftermath of an environmental disaster in Minas Gerais, Brazil. *Vector Borne Zoonotic Dis* 2020; **20:** 387–89. doi:10.1089/vbz.2019.2501. https://www.ncbi.nlm.nih.gov/pubmed/31944914/

#### **HIGH-INCOME COUNTRIES**

N/A.

# **II. NON-COMMUNICABLE DISEASE**

### LOW- AND MIDDLE-INCOME COUNTRIES

N/A.

#### **HIGH-INCOME COUNTRIES**

O'Dwyer N, Cliffe H, Watson KE, McCourt E, Singleton JA. Continuation of opioid replacement program delivery in the aftermath of cyclones in Queensland, Australia: a qualitative exploration of the perspectives of pharmacists and opioid replacement therapy staff. *Res Social Adm Pharm* 2020; **16**: 1081–86. doi:10.1016/j.sapharm.2019.11.007.

https://www.ncbi.nlm.nih.gov/pubmed/31753692/

Covey J, Horwell CJ, Ogawa R, et al. Community perceptions of protective practices to prevent ash exposures around Sakurajima volcano, Japan. *Int J Disaster Risk Reduct* 2020; published online Feb 10. doi:10.1016/j.ijdrr.2020.101525. https://www.sciencedirect.com/science/article/pii/S2212420919308751

# III. REPRODUCTIVE, MATERNAL, NEWBORN, CHILD, AND ADOLESCENT HEALTH

### LOW- AND MIDDLE-INCOME COUNTRIES

Horiguchi H, Nakazawa M. Long-lasting effects of the 2013 Yolanda typhoon on overall health of mothers and children. *Disaster Med Public Health Prep* 2020; published online Apr 27. doi:10.1017/dmp.2020.40.

# https://www.ncbi.nlm.nih.gov/pubmed/32336314/

Epstein A, Benmarhnia T, Weiser SD. Drought and illness among young children in Uganda, 2009–2012. *Am J Trop Med Hyg* 2020; **102:** 644–48. doi:10.4269/ajtmh.19-0412.

### https://www.ncbi.nlm.nih.gov/pubmed/31933457/

Sajow HS, Water T, Hidayat M, Holroyd E. Maternal and reproductive health (MRH) services during the 2013 eruption of Mount Sinabung: a qualitative case study from Indonesia. *Glob Public Health* 2020; **15:** 247–61. doi:10.1080/17441692.2019.1657925. https://www.ncbi.nlm.nih.gov/pubmed/31543003/

#### **HIGH-INCOME COUNTRIES**

N/A.

# **IV. NUTRITION AND FOOD SECURITY**

#### LOW- AND MIDDLE-INCOME COUNTRIES

Herrera-Fontana ME, Chisaguano AM, Villagomez V, Pet al. Food insecurity and malnutrition in vulnerable households with children under 5 years on the Ecuadorian coast: a post-earthquake analysis. *Rural Remote Health* 2020; **20:** 5237. doi:10.22605/RRH5237.

# https://www.ncbi.nlm.nih.gov/pubmed/31937106

Janmohammadi P, Daneshzad E, Alipour T, Heshmati J, Eshaghi H, Mirzaei K. Is there any association between dietary patterns, food security status and psychiatric disorders among Iranian earthquake victims? *BMJ Mil Health* 2020; published online Feb 20. doi:10.1136/jramc-2019-001301.

https://www.ncbi.nlm.nih.gov/pubmed/32086271

#### **HIGH-INCOME COUNTRIES**

N/A.

# V. WATER, SANITATION, AND HYGIENE (WASH)

#### LOW- AND MIDDLE-INCOME COUNTRIES

Lequechane JD, Mahumane A, Chale F, et al. Mozambique's response to cyclone Idai: how collaboration and surveillance with water, sanitation and hygiene (WASH) interventions were used to control a cholera epidemic. *Infect Dis Poverty* 2020; **9:** 68. doi:10.1186/s40249-020-00692-5.

https://www.ncbi.nlm.nih.gov/pubmed/32546268/

Wahyuni RD, Mutiarasari D, Miranti, Demak IPK, Pasinringi SA, Mallongi A. Analysis of risk factors in the post-disaster of diarrhea in Donggala district, Indonesia. Enferm Clin 2020; 30 (suppl 4): 75-78. doi:10.1016/j.enfcli.2019.10.044. https://www.ncbi.nlm.nih.gov/pubmed/32545142/

#### **HIGH-INCOME COUNTRIES**

N/A.

# VI. MENTAL HEALTH, PSYCHOSOCIAL ISSUES, AND SUBSTANCE ABUSE

#### LOW- AND MIDDLE-INCOME COUNTRIES

Subedi S, Davison C, Bartels S. Analysis of the relationship between earthquake-related losses and the frequency of child-directed emotional, physical, and severe physical abuse in Haiti. Child Abuse Negl 2020; 106: 104509. doi:10.1016/j.chiabu.2020.104509. https://www.ncbi.nlm.nih.gov/pubmed/32413776

Cénat JM, McIntee SE, Blais-Rochette C. Symptoms of posttraumatic stress disorder, depression, anxiety and other mental health problems following the 2010 earthquake in Haiti: a systematic review and meta-analysis. J Affect Disord 2020; 273: 55-85. doi:10.1016/j.jad.2020.04.046.

#### https://www.ncbi.nlm.nih.gov/pubmed/32421623

Mason NF, Francis DB. Information-seeking and use of primary Care mental health services among Gulf Coast survivors of natural disasters. Disaster Med Public Health Prep 2020; published online Jul 6. doi:10.1017/dmp.2020.99. https://www.ncbi.nlm.nih.gov/pubmed/32624084

Gerstner RMF, Lara-Lara F, Vasconez E, Viscor G, Jarrin JD, Ortiz-Prado E. Earthquake-related stressors associated with suicidality, depression, anxiety and post-traumatic stress in adolescents from Muisne after the earthquake 2016 in Ecuador. BMC Psychiatry 2020; 20: 347. doi:10.1186/s12888-020-02759-x. https://www.ncbi.nlm.nih.gov/pubmed/32616034

Fernandez CA, Choi KW, Marshall BDL, et al. Assessing the relationship between psychosocial stressors and psychiatric resilience among Chilean disaster survivors. Br J Psychiatry 2020; published online Jun 11. doi:10.1192/bjp.2020.88.

# https://www.ncbi.nlm.nih.gov/pubmed/32522300

Karmegam D, Mappillairaju B. Spatio-temporal distribution of negative emotions on Twitter during floods in Chennai, India, in 2015: a post hoc analysis. Int J Health Geogr 2020; 19: 19. doi:10.1186/s12942-020-00214-4.

#### https://www.ncbi.nlm.nih.gov/pubmed/32466764

Sangraula M. Turner EL. Luitel NP. et al. Feasibility of Group Problem Management Plus (PM+) to improve mental health and functioning of adults in earthquake-affected communities in Nepal. Epidemiol Psychiatr Sci 2020; 29: e130. doi:10.1017/S2045796020000414.

https://www.ncbi.nlm.nih.gov/pubmed/32452336

#### **HIGH-INCOME COUNTRIES**

Felix E, Rubens S, Hambrick E. The relationship between physical and mental health outcomes in children exposed to disasters. Curr Psychiatry Rep 2020; 22: 33. doi:10.1007/s11920-020-01157-0.

https://www.ncbi.nlm.nih.gov/pubmed/32405888

# **VII. HEALTH SYSTEMS**

VIII. MULTI-CATEGORY

# Technological Disasters I. COMMUNICABLE DISEASE

# II. NON-COMMUNICABLE DISEASE

# III. REPRODUCTIVE, MATERNAL, NEWBORN, CHILD, AND ADOLESCENT HEALTH

# **IV. NUTRITION AND FOOD SECURITY**

# V. WATER, SANITATION, AND HYGIENE (WASH)

I.-V., N/A.

# VI. MENTAL HEALTH, PSYCHOSOCIAL ISSUES, AND SUBSTANCE ABUSE

LOW- AND MIDDLE-INCOME COUNTRIES N/A.

#### HIGH-INCOME COUNTRIES

Kashiwazaki Y, Takebayashi Y, Murakami M. Relationships between radiation risk perception and health anxiety, and contribution of mindfulness to alleviating psychological distress after the Fukushima accident: cross-sectional study using a path model. *PLoS One* 2020; **15**: e0235517. doi:10.1371/journal.pone.0235517. https://www.ncbi.nlm.nih.gov/pubmed/32628692

Momoi M, Murakami M, Horikoshi N, Maeda M. Dealing with community mental health post the Fukushima disaster: lessons learnt for the COVID-19 pandemic. *QJM* 2020; published online Jul 2. doi:10.1093/qjmed/hcaa213.

# https://www.ncbi.nlm.nih.gov/pubmed/32614440

Takebayashi Y, Maeda M, Orui M, et al. Resilience factors contributing to mental health among people affected by the Fukushima disaster: development of Fukushima Resilience Scale. *Front Public Health* 2020; **8:** 159. doi:10.3389/fpubh.2020.00159. https://www.ncbi.nlm.nih.gov/pubmed/32435630

# **VII. HEALTH SYSTEMS**

# VIII. MULTI-CATEGORY

VII.-VIII., N/A.

▼ Children demonstrate hand washing at Kakuma refugee camp, Kenya. Photographs courtesy of the Lutheran World Federation/P Omagwa. As the main implementer of education at the camp, LWF has reinforced hygiene education to prevent the spread of COVID-19.

[https://flic.kr/p/2j3AcKC

# CONTACT

Johns Hopkins Bloomberg School of Public Health Department of International Health Center for Humanitarian Health 615 N. Wolfe Street Baltimore, Maryland, USA 21205 +1 443 287 8746 www.HopkinsHumanitarianHealth.org

The Lancet 125 London Wall London EC2Y 5AS, UK +44 20 7424 4950 www.TheLancet.com