

## Survey Report

# Johns Hopkins Center for Humanitarian Health: COVID-19, Maternal and Child Health, and Nutrition Repository Survey

Melissa J. Chao,<sup>1</sup> Jeslyn Tenglawan,<sup>2</sup> Mija-Tesse Ververs<sup>3</sup>

<sup>1</sup> Department of Microbiology and Molecular Immunology, Bloomberg School of Public Health, Johns Hopkins University

<sup>2</sup> Bloomberg School of Public Health, Johns Hopkins University

<sup>3</sup> Johns Hopkins Center for Humanitarian Health, Bloomberg School of Public Health, Johns Hopkins University

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### Introduction

The outbreak of Coronavirus Disease 2019 (COVID-19) has been characterized as a pandemic since March 11, 2020 and has quickly become an international public health crisis (WHO, 2020a). In response to this novel disease, the scientific community has produced numerous articles related to COVID-19. Consequently, the COVID-19-based research has caused a so-called infodemic, an overabundance of information, which makes navigating the literature difficult (WHO, 2020b). To facilitate the exchange of new research findings, a scientific repository on **COVID-19, Maternal and Child Health, and Nutrition (MCHN)** was established at the Johns Hopkins Center for Humanitarian Health. The repository summarizes current primarily peer-reviewed journal articles on various COVID-19-related MCHN topics published since February 1, 2020 and provides hyperlinks to all included articles.

Since September 2020, a subset of the main COVID-19, Maternal and Child Health, and Nutrition (MCHN) repository has been created: The **COVID-19, Breastfeeding, Infant Feeding and Breast Milk (BIFBM)** repository (JHCHH, 2020a). Initially, both repositories were sent to a group of selected professionals only. However, the MCHN repository was officially launched online on May 14, 2020, on the Johns Hopkins Center for Humanitarian Health website and was initially published twice a week, on Tuesdays and Thursdays. The BIFBM repository website was created on October 14, 2020.

The repository updates are a snapshot of published articles every week. As of April 1, 2021, there have been over 5,600 primarily peer-reviewed journal articles in the repository, and every week, new summaries are distributed to approx. 5,600 subscribers. As a result, the MCHN repository website has garnered 35,000 – 40,000 pageviews (including over 6,000 page views for the BIFBM repository as of April 1, 2021).

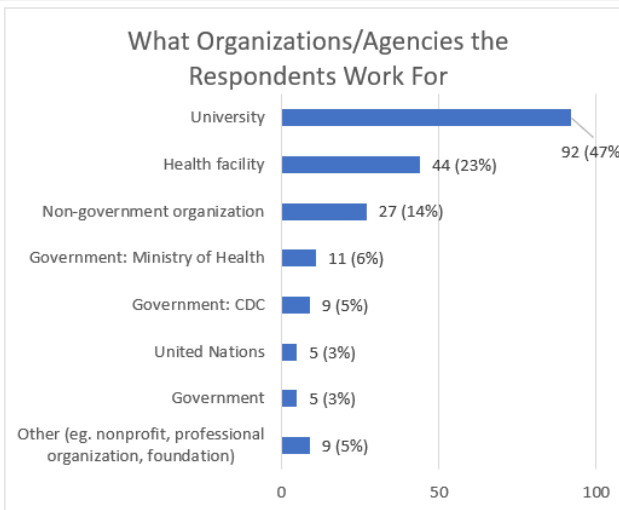
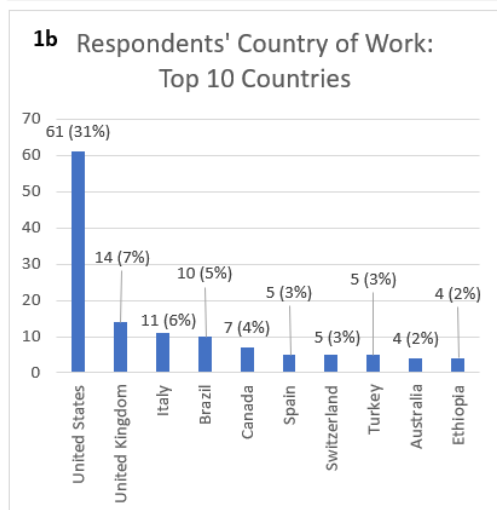
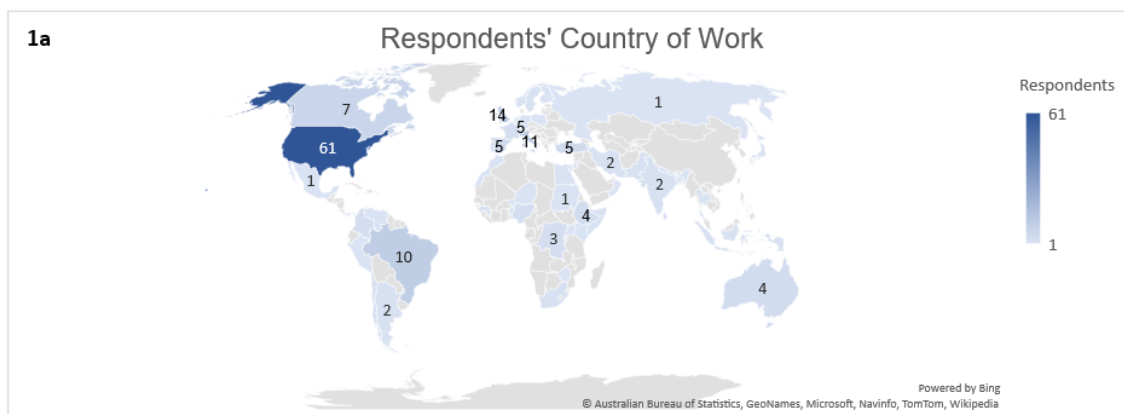
To understand how users interact with the repository, we distributed a survey among people on the listserv and our website. The survey's objective was predominantly to identify the usefulness of the repository and suggestions for improvements.

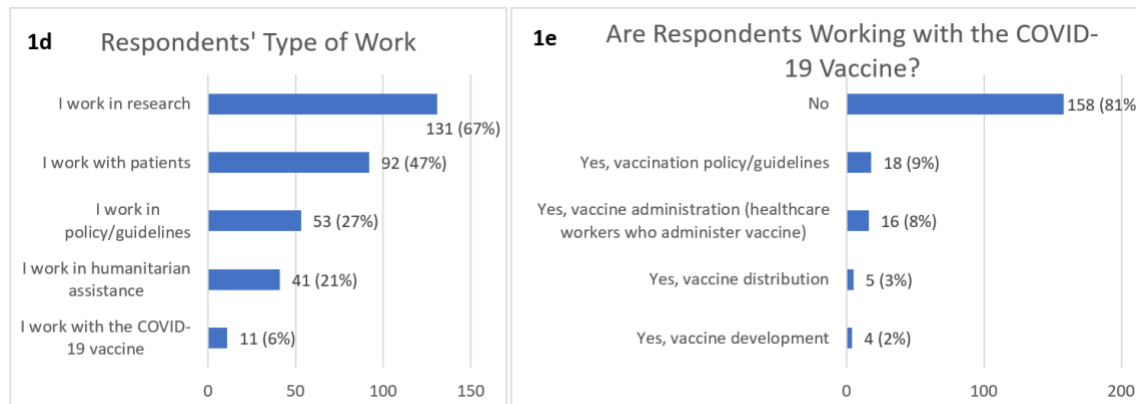
**Methods**

An online survey was disseminated through weekly email updates to the listserv subscribers of the "COVID-19, Maternal and Child Health, and Nutrition" email list and "COVID-19, Breastfeeding, Infant Feeding, and Breast Milk" email list. Additionally, the survey was posted on the repository website. A convenience sample of 195 responses from February 12 to March 10, 2021, was generated.

**Results**

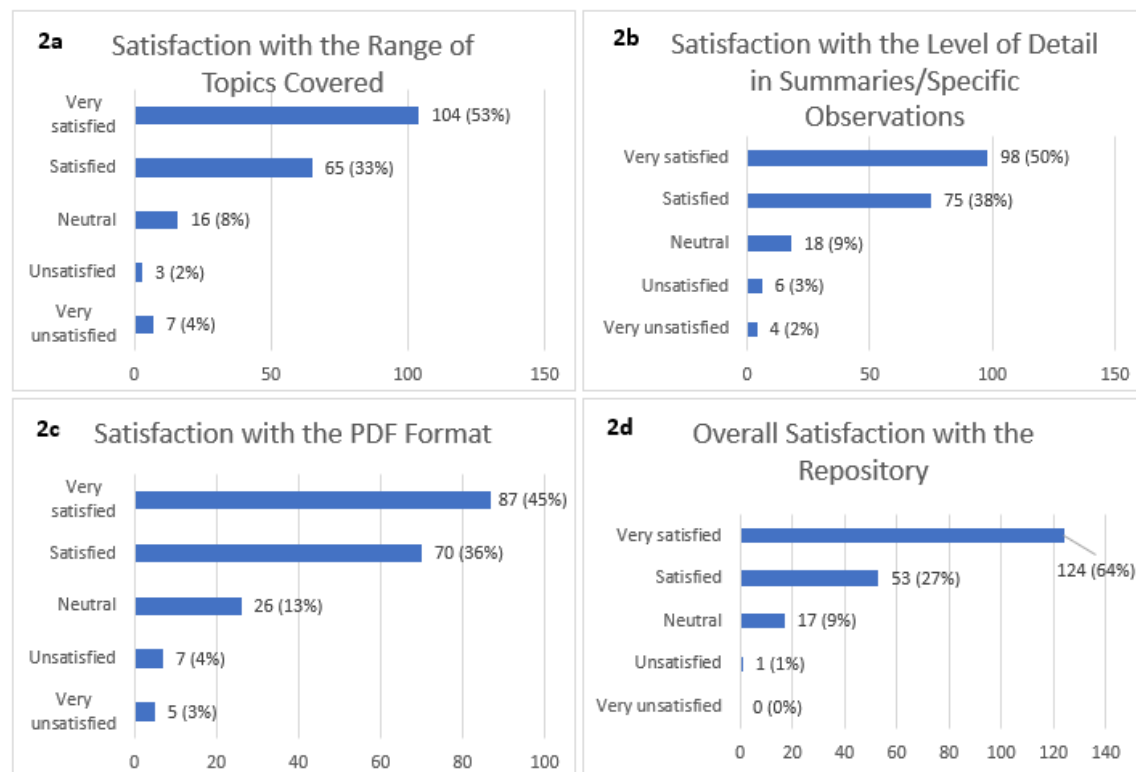
Respondents work in 56 countries, as displayed in Panel 1. Figure 1a and Figure 1b indicate that the highest representation is from the United States, with 61 respondents representing 31% of respondents. Figure 1c demonstrates that almost half of the respondents (47%) worked for a university and nearly a quarter (23%) work in health facilities. The majority (67%) worked in research, and 47% work with patients (Figure 1d). Finally, the majority (81%) of respondents did not work with the COVID-19 vaccine (Figure 1e).





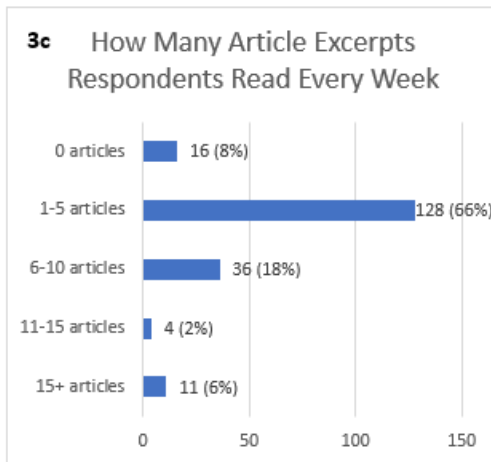
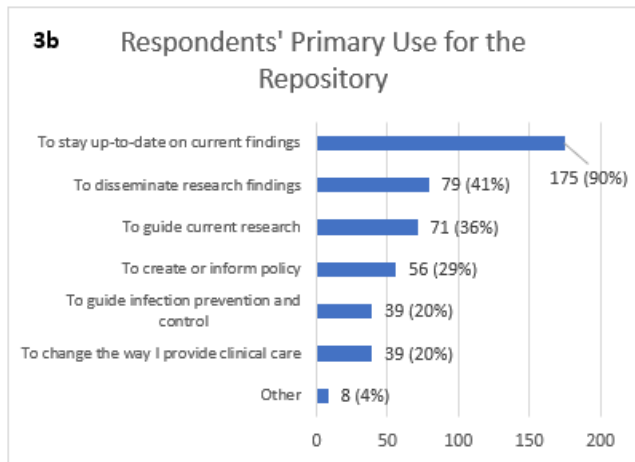
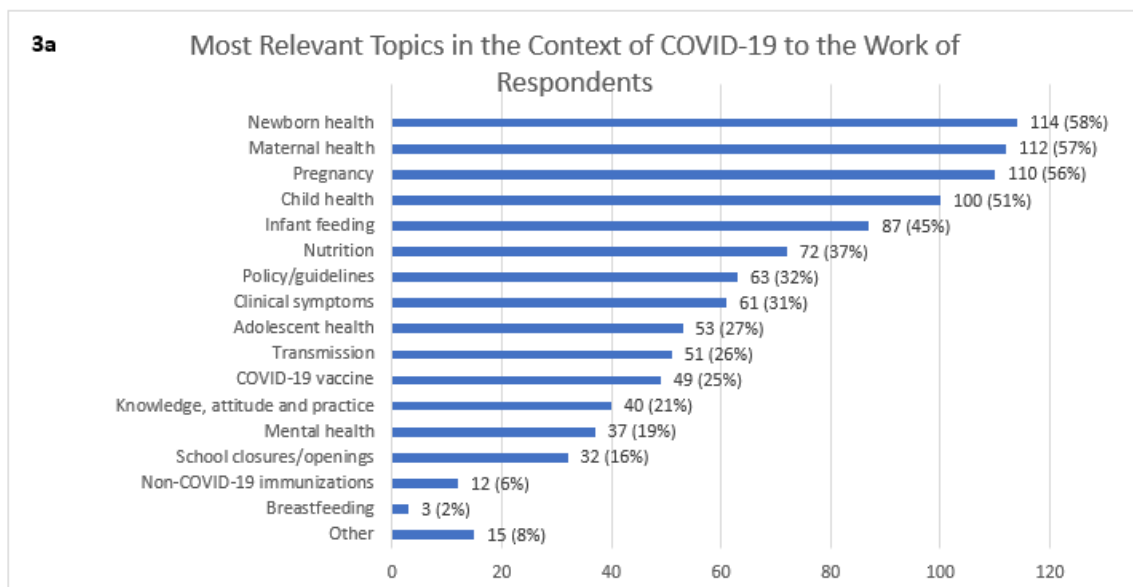
**Panel 1:** Panel 1 describes the respondents’ characteristics; (a) and (b) indicate the respondents’ country of work, where (b) highlights the top ten countries of work; (c) indicates the organization types that respondents work for; (d) displays what category of work respondents perform; (e) indicates whether respondents work with the COVID-19 vaccine and if so, in what capacity.

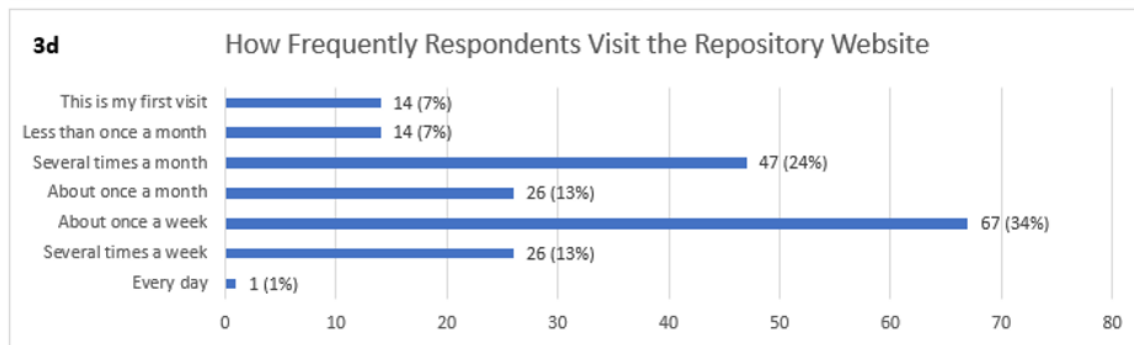
Concerning satisfaction with the repository, 86% of the respondents were “satisfied” or “very satisfied” with the range of topics covered, while this was 88% for the level of detail in summaries or specific observations. 81% were very satisfied with the PDF format. Overall, most respondents (91%) were satisfied (27%) or very satisfied with the repository (64%).



**Panel 2:** Panel 2 describes respondents’ satisfaction with different features of the repository; (a) displays the respondents’ satisfaction with the range of topics covered, while (b) describes their satisfaction with the level of detail in summaries or specific operations; (c) describes the respondents' satisfaction with the PDF format. Finally, (d) displays the overall satisfaction with the repository.

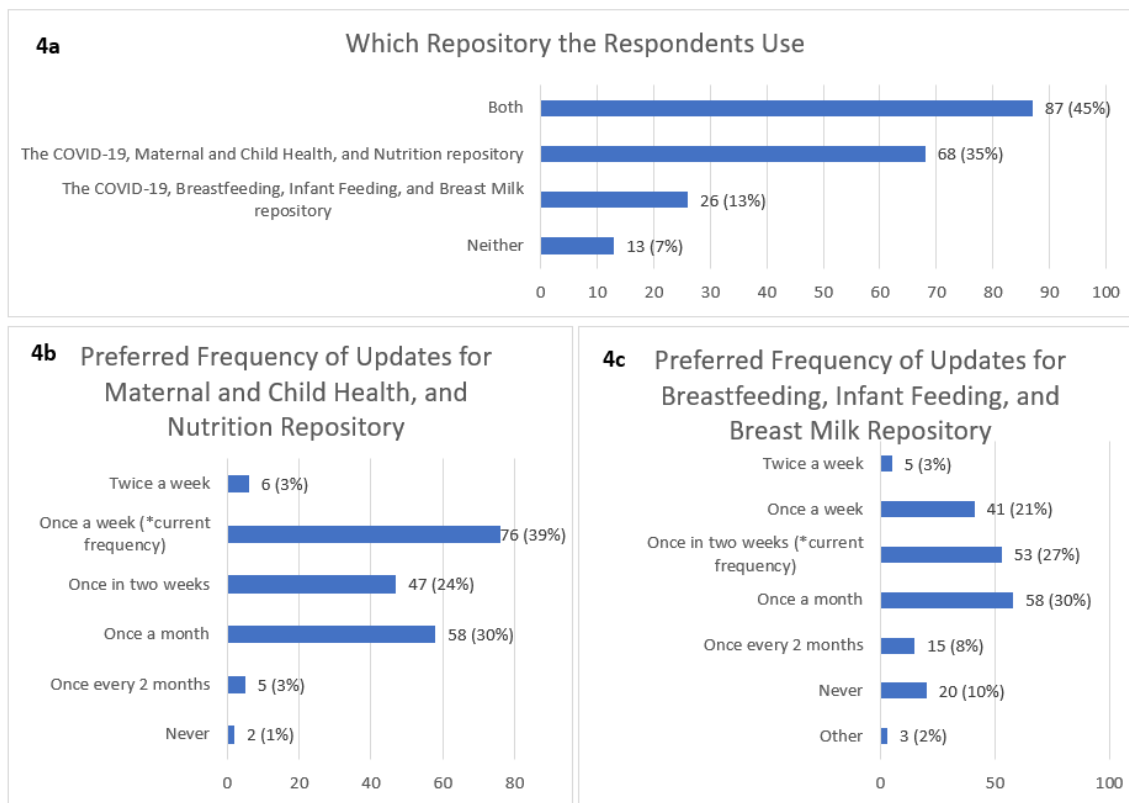
We examined the repository usage of the respondents. Figure 3a outlines the most relevant topics covered in the context of COVID-19 to respondents' work, where over half of respondents reported that newborn health, maternal health, pregnancy, and child health were the most relevant topics to their work. A high majority (90%) of respondents reported that their primary use for the repository was “to stay up-to-date on current findings,” and to a lesser extent “to disseminate research findings” (41%) and “to guide research” (36%). The frequency at which respondents visit the repository websites varied greatly; one-third answered “about once a week” (34%). Finally, most respondents reported reading 1-5 article excerpts per week (66%).





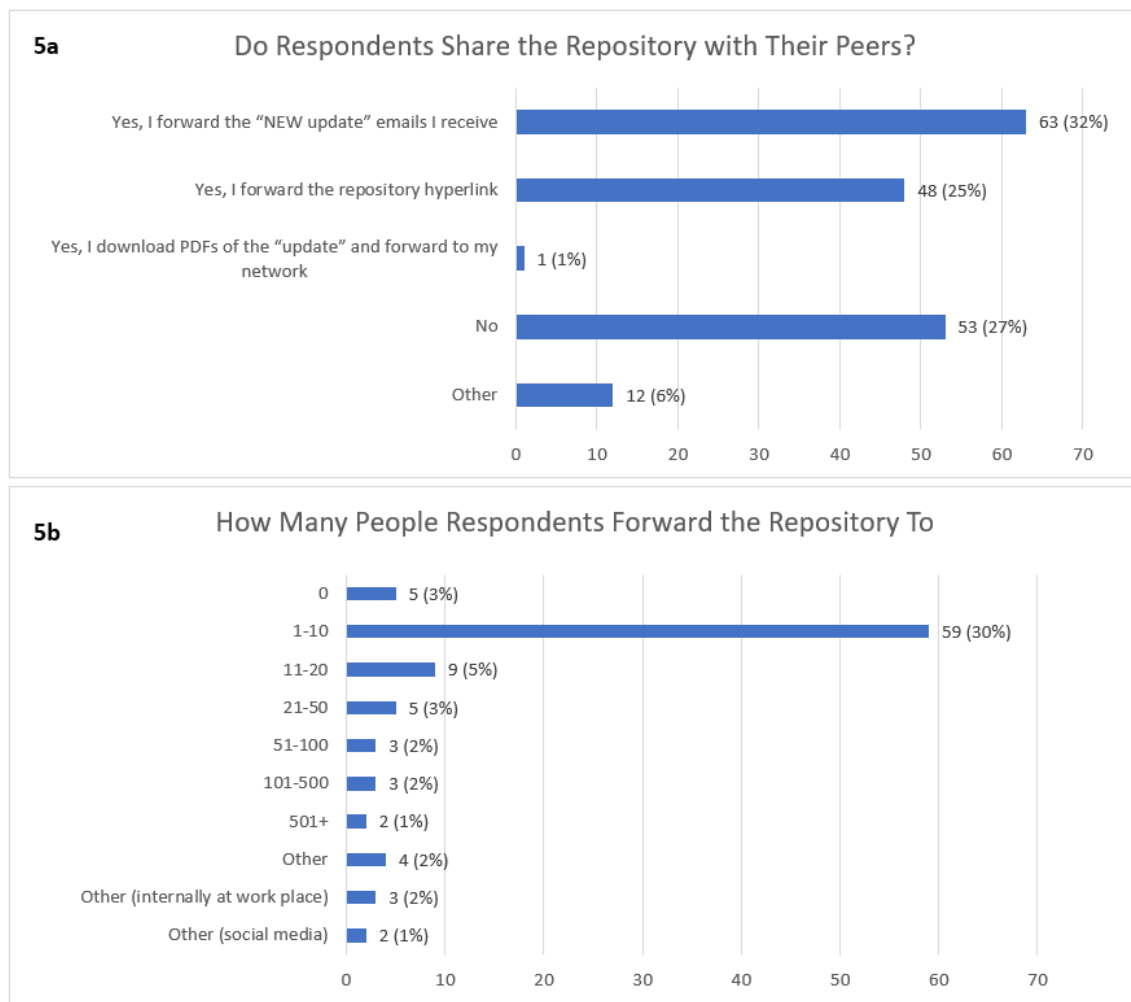
**Panel 3:** Panel 3 describes the respondents’ usages of the repository; (a) describes the most relevant topics in the context of COVID-19 to the respondents; (b) reports the respondents’ primary uses for the repository, while (c) reports how many article excerpts respondents read every week. Finally, (d) reports how frequently respondents visit the repository website.

When asked about the two repositories, MCHN and BFIFBM, many respondents claim to use both repositories (45%) as reported in Panel 4; there is higher usage of the MCHN repository alone (35%) compared to the BFIFBM repository alone (13%). Similarly, when asked about the preferred frequency of updates, respondents’ preferences varied but “once a week,” “once in two weeks,” and “once a month” were the most popular responses for both repositories.



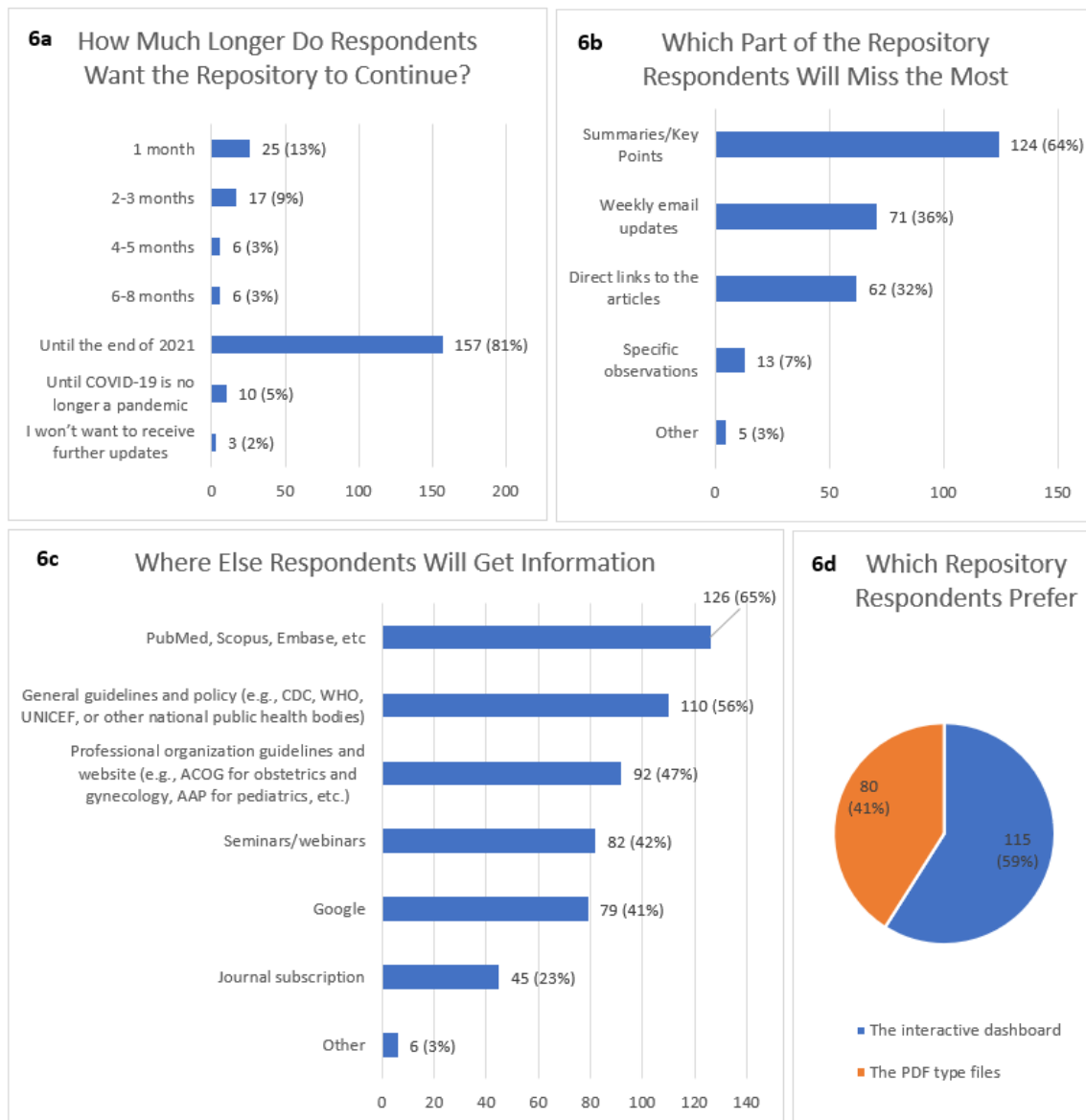
**Panel 4:** Panel 4 shows the respondents’ use and frequency of use both repositories; (a) shows which repositories respondents used; (b) shows respondents’ preferred frequency for maternal and child health and nutrition repository updates; (c) shows the respondents’ preferred frequency for breastfeeding, infant feeding, and breast milk repository updates.

We collected data on if and how respondents share the repository with their peers. Answers varied considerably; almost one-third forwarded the “new update” emails (32%). A quarter forwarded the repository hyperlink, and 27% did not forward the repository. Additionally, Figure 5b displays how many respondents forwarded the repository; the most popular answer was that respondents send it to 1-10 people (30%).



**Panel 5:** Panel 5 describes the sharing habits of respondents; (a) reports if and how respondents share the repository with their peers; (b) reports the number of peers the respondents forward the repository to.

Figure 6a reports how much longer respondents want the repository to continue, where a large majority (81%) preferred the repository to continue until the end of 2021. When the repository ends, 65% of the respondents will get their information from “PubMed, Scopus Embase, etc.” and 56% from general guidelines and policy documents from CDC, the UN, or other national health bodies. When the repository ends, most respondents will miss the summaries/key points the most (64%). Of the two formats, respondents preferred the interactive dashboard (59%) over the PDF type files (41%).



**Panel 6:** Panel 6 reports respondents' preferences for the future of the repository; (a) reports how much longer respondents would like the repository to be continued; (b) reports which part of the repository respondents will miss the most, while (c) reports where the respondent will get information once the repository ends. Finally, (d) reports which repository format the respondents prefer.

Concerning free-text responses, 67 free-text comments were made about the repository, and Table 1 presents 20 quotes (verbatim).

**Table 1:** Table 1 presents a list of 20 free-text comments made by respondents.

<b>Quotes (Verbatim)</b>
It has been very rewarding to see the amount of new information that you have offered. It has changed my understanding of this disease in pregnancy.
It is a very useful resource and a good initiative
Keep up the good work!
Many thanks you for your efforts
Thank you for all the incredible work to date!
Thank you for this amazing resource!
Thank you for this excellent support!
Thank you so much for initiative
Thanks for bringing all the research together
Thanks for doing this in a critical time
Thanks- great work
Thanks indeed for your effort and tenacity.
Thank you for your hard work promoting maternal and child health!
Thanks for great work!
The help that you have provided is much appreciated
The work of the repository is very much appreciated.
This is an excellent resource that has been extremely useful in keeping updated
Well done and thank you for your hard work
Your work has helped greatly to improve our understanding of this disease.
Your work is great!

### **Limitations**

These results have limitations; respondents do not represent all repository users; many users forward the updates to their colleagues as illustrated in Panel 5 (therefore being less aware of the survey), and participation was on a voluntary basis.

### **Conclusion**

Overall, the respondents vary in their country of work, their organization, and type of work. Most respondents are satisfied or very satisfied with the repository. Overall, the use of the repository varies, and many would like to see the repository continued.

### **Author Contributions**

Melissa J. Chao designed the survey, analyzed the survey results, and drafted the article. Jeslyn Teng kawan designed the survey and critically revised the work. Mija-Tesse Ververs conceived of the idea and co-designed the survey and critically revised the work.



**References**

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<http://hopkinshumanitarianhealth.org/empower/advocacy/covid-19/covid-19-children-and-nutrition/covid-19-breastfeeding-infant-feeding-and-breast-milk>