Mental health of health professionals and their perspectives on mental health services in a conflict-affected setting: a qualitative study in health centres in the Gaza Strip during the COVID-19 pandemic

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ABSTRACT

Objectives To explore how primary care health professionals perceive their own mental health in a conflict-affected setting during and beyond the COVID-19 pandemic and to explore their perspectives on mental health services.

Methods The Gaza Strip faces a chronic humanitarian crisis and is suffering from the consequences of the COVID-19 pandemic; United Nations Relief and Works Agency (UNRWA) health centres were used to recruit participants for this study. Semistructured interviews were conducted with 29 health professionals in UNRWA health centres who were sampled using maximum variation sampling. Transcripts were translated, double checked and analysed via thematic analysis.

Results From the analysis, a thematic map was developed showing how health professionals perceive their mental health impacts. This included difficulties due to the COVID-19 pandemic, as well as the socioeconomic processes stemming from the on-going conflict. Another thematic map was developed showing the perceived strengths and challenges of the health services. The strengths included positive impact of the services to the service users and health professionals. In terms of challenges, health professionals identified socioeconomic processes and aspects of remote service provision during COVID-19.

Conclusions Based on the findings, we suggest that an improved signposting mechanism should be developed to address many of the challenges that emergencies bring about; in particular, this could support the health professionals’ mental health, as well as improve the response to patients’ socioeconomic challenges. We further suggest recommendations for improving mental health services when delivered remotely to increase their resiliency during various emergencies.

BACKGROUND

It has been shown that the COVID-19 pandemic increased mental health problems, particularly among healthcare professionals. However, the mental health of health professionals in low-income, conflict-affected settings during COVID-19 has been understudied, compared with high-income, non-conflict-affected countries. Mental distress is a major public health concern for conflict-affected populations who make up an estimated 370 million worldwide. Systematic reviews have shown high levels of poor mental health in conflict-affected settings, which is associated with demographic factors including gender, socioeconomic status and number of traumatic events. Although reports on mental distress among conflict-affected populations during COVID-19 are scarce, one longitudinal study, which was conducted in conflict-affected Columbia, showed elevated depression, anxiety and parental stress among caregivers who had...
been displaced due to conflict during COVID-19. Other commentaries also suggest that COVID-19 added new mental health challenges to the already existing difficulties and generated multiple traumas; however, detailed illustrations are missing. The studies call for in-depth understanding of mental health, not only a list of symptoms on a measurement scale, given that the variety of chronic stressors are presumably impacting individuals through complex processes in these settings.

It is particularly beneficial to understand health professionals’ mental health from their own perspectives since it has been shown that they experience higher psychological distress and also display higher likelihood of mood, anxiety, sleep and other psychiatric disorders than the general population. During the COVID-19 pandemic and other viral outbreaks, studies from high-income settings have shown elevated levels of stress, anxious and depressive symptomatology among health care workers. A few studies have also confirmed this in low-income countries. This is concerning within itself and has shown to also be related to reduced service productivity and quality. Nevertheless, studies in conflict-affected settings have not explored the health professionals’ perspectives on their mental health stressors and coping strategies, particularly during COVID-19. It is particularly notable that health professionals are not only suffering from difficulties, but also coping with them. Moreover, health workers providing mental health services in conflict-affected primary care settings, due to their proximity to service provision and delivery, are also in a great position to provide perspectives on the advantages and challenges of the mental health services. A systematic review highlights challenges faced by health staff providing mental health support in low-income and middle-income countries in primary care settings such as heavy workload and stigma. At the same time, they also highlight the need for qualitative studies on service provider perspectives as the current evidence base does not discuss contextual strengths and challenges for services.

The Gaza Strip is a representative area where the population, including health professionals, are exposed to both conflict and the pandemic and are trained to provide mental health support in primary care. The United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) offers mental health and psychosocial support services (MHPSS) in its primary healthcare centres for nearly 1.5 million registered refugees in the Gaza Strip. The territory is a narrow piece of land comprising a total of 362 km² and is considered as one of the world’s most densely populated areas. It has been facing a chronic humanitarian crisis impacting livelihoods and access to essential services for its inhabitants since a complete blockade with severe restrictions to the flow of people and supplies was imposed by the Israeli occupation in 2007. In 2020, the unemployment rate in the area reached 49%, reflecting the consequences of the prolonged blockade. The inhabitants of the Gaza Strip, primarily Palestinian refugees, continue to be exposed to regular airstrikes, with human lives lost and livelihood opportunities destroyed. Mental suffering, referring to feeling that one’s spirit, morale and/or future was broken or destroyed, and emotional and psychological exhaustion in the context of protracted political conflict has been used to describe the mental health impact of Gazans. Although studies have shown high levels of mental suffering, and high rates of medically defined mental distress including anxiety, depression and post-traumatic stress reactions in the population through time, health professionals as a subpopulation have not been studied; nor are we aware of any studies exploring the mental health during COVID-19 in this population. To address the afore-mentioned critical gaps, the setting provides us with a useful ground for the dual aims of: exploring how primary care health professionals perceive their own mental health in a conflict-affected setting during and beyond COVID-19 and eliciting their perspectives on the mental health services for informing service improvements.

**METHOD**

**Study design**

The explorative qualitative study was guided by interpretive and constructivist approaches and used semi-structured video interviews to gain an understanding of the subjective mental health of the health workers and to elicit perspectives of the strengths and challenges of the mental health services during and beyond the COVID-19 emergency.

**Study site, population and sampling**

The study was conducted in 3 out of the 22 UNRWA health centres in the Gaza Strip. Each health centre was nominated by the UNRWA Gaza Strip management staff based on its location in different geographical areas of Gaza. This was done to achieve a maximum variation of different views that can arise due to external geographical variations, such as differences in the levels of bombing experienced, collective events in the area and demands of the work. Participants included health staff that had received the mandatory MHPSS training and were available and willing to participate. Staff that had newly joined or for other reasons had not yet completed the MHPSS training were excluded. Maximum variation of specific professions, gender and age range was sought in accordance with maximum variation sampling, and then theoretical sampling was conducted until data saturation was reached.

**Interview preparation and data collection**

The interview topic guide was collaboratively developed by the authors and the health centre management staff of the three health centres through discussions. To ensure the guide’s effectiveness, it was tested in a mock interview with a health professional who did not participate in the
study. The development process involved generating an initial list of interview questions designed to elicit information relevant to the research questions. The list was then refined through feedback from the health centre management staff and the mock interview. The interviews were semistructured, centered around the well-being of the health staff and their experiences providing the mental health services, both before and during COVID-19. The topic guide is available in the online supplemental file 1. Special care was taken not to probe into any potential trauma and to allow the participants to talk as little or as much about the topics as they felt comfortable. Although the preparatory work was done by the first author on the ground in Gaza, due to COVID-19, the study was fully conducted online via a video platform.

The data collection took place during the COVID-19 pandemic, following an emergency mode functioning of the health centres, as soon as it was feasible in October and November 2020 over a period of 4 weeks. Each health centre prepared a list of their health staff who had been trained in MHPSS. The trained Gaza field office staff approached appropriate health staff individually, fulfilling the maximum variation requirement. Potential participants were briefed about the study in conjunction with the information sheet and any questions were answered. Particular effort was made to ensure that no health staff felt obliged to participate. A private and quiet room with a computer was set up in the health centre for the online video interview. The first author and the third author, who is a trained Arabic-English interpreter, sought recorded informed consent prior to starting the interview.

Data analysis
The recordings of the interview were anonymised, transcribed and translated by two trained bilingual translators. The translations were double checked by the translators through independently reviewing each others translations and discussing any differences in opinion. A meeting between the first author and one of the translators took place to clarify any parts that were difficult for them to translate or agree on (e.g., idioms) and explanations were given for such expressions to the first author. Deductive and inductive thematic analysis was then conducted on the English translations by the first author and involved the stages outlined by Braun and Clarke and also included other authors at specified timepoints. This involved initially reading the translated transcripts at least two times. Initial codes were generated inductively by word-by-word, line-by-line coding across all transcripts. Initial codes were collated by similar features to form potential themes. Various thematic groupings were explored using inductively generated codes and deductively the research questions. The codes and thematic groups were refined with the third author and one of the translators by discussing different groupings. The themes were defined and named by the first author, and following that, the thematic maps were confirmed by the third author and discussed with the managements of the health centres and the Gaza Field Office Health Department.

Throughout the analysis, the first author reflected on her identity and discussed with the third author about potential ways their combined identities might have helped or hindered the participants’ disclosure of difficulties.

Patient and public involvement
A local assistant, the third author, was hired to assist with establishing locally appropriate methodology, data collection and for providing contextual insights for the analysis.

RESULTS
Interviews were conducted with a total of 29 participants, and their characteristics can be found in table 1. Through thematic analysis, two broad thematic maps were created in line with the research aims. The first thematic map showed aspects related to the mental health of health professionals in Gaza generally, and during the COVID-19 pandemic in particular. The second thematic map showed the perceived positive and challenging aspects of the MHPSS services in Gaza generally, and during the COVID-19 pandemic specifically.

Mental health and well-being of health professionals
The thematic analysis revealed five themes that health professionals perceived as contributing to their mental health difficulties. Two themes indicated that beyond COVID-19, health professionals are affected by the difficult psychological cases as well as personal and national events. During the COVID-19 emergency, health professionals faced additional burdens, including fears of

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*Two participants are missing data for age.
infection, increased workload and novel everyday struggles due to national measures. Despite this, our analysis identified three themes showing that mental health is supported through religion, work and positive activities and community. However, the majority of these supports, with the exception of religion, was reported to have somewhat diminished during COVID-19. Online supplemental table 1 provides a thematic map and evidence of these findings.

Participants discussed the long-standing difficulties faced by the population in the Gaza Strip due to successive wars, blockade and the resulting financial and societal burdens (supreme theme I). This overarching theme highlights the challenging environment in which health professionals must work, treating patients facing unemployment, financial and food insecurity, which means that patients may be unable to even afford transportation to the health centres. The interviewed health professionals described that working with such difficulties contributed to their own emotional stress and feelings of helplessness (supreme theme a). Cases where patients’ root cause of distress is financial situation and unemployment, which the health professionals felt unable to solve, exacerbated feelings of helplessness.

The feelings of helplessness were also saturated in the health professionals’ stories of facing collectively experienced disasters (supreme theme b). This included describing the Israeli air attacks and its aftermath, as well as a recent gas-explosion caused fire where they did not feel they could help. The participants also reported experiencing significant distress from personal events and circumstances, which varied in their personal content and included, but was not limited to, dealing with the death of a family member, dealing with non-communicable diseases in the family and having caring responsibilities. As with the collective events, it was clear that the element of helplessness was a common thread causing distress. For example, due to the lack of resources in Gaza to address non-communicable diseases and developmental disorders in children, health professionals have limited opportunities to address these burdens.

According to health professionals, the COVID-19 emergency worsened the difficulties by intensifying the feelings of helplessness and adding extra stressors. They likened some of these difficulties to the experiences during increases in bombardments. They reflected that collectively experienced disasters have a negative personal impact, but extra pressure is added by increases in workload during these periods (supreme theme c). Participants mentioned that whether it is an intensified bombardment, or COVID-19, the workload increases. The fear of infection was also discussed as a unique stressor, different from any prior fears including the intense fear during bombardment. The fear of infection centres on potentially becoming infected and passing the infection on to family members, rather than the potential impact of the infection on themselves.

Additionally, during COVID-19, new types of everyday stressors emerged (supreme theme d). In the Gaza Strip, as in other areas around the world, restrictions to movement were implemented which resulted in the need for rapid adaptations to everyday habits and the need for additional efforts to complete everyday tasks. For example, public transportation availability was problematic due to curfew hours and resulted in problems in getting to work. Similarly, supermarket opening hours created issues with getting supplies. Home schooling was suddenly needed because of temporary, but lengthy school closures. This added extra stress, especially if there were many children in the family and limited technology. The health professionals emphasised how due to the unique COVID-19 restrictions, their usual self-care practices, such as going for walks and visiting friends and family, were not available. The latter are considered an essential part of the communal life in the Gaza Strip and typically supports mental health.

Importantly, in these extreme conditions, health professionals discussed how they cope (supreme theme II). They reported universally finding relief in religion, which included religious activities such as praying and reading the Quran, as well as the dogma surrounding God’s will and destiny (supreme theme e). Religion was seen as providing comfort, freedom and certainty during times of external restrictions and circumstances beyond their control, whether it be conflict, COVID-19 or other circumstances. Support from others, including work colleagues and managers, family members and friends, was seen as essential during times of distress (supreme theme f). The health staff discussed that during COVID-19, management was helpful in trying to reduce the everyday struggles such as transportation issues promptly. Psychosocial counsellors that are usually supporting the patients are also employed to support colleagues when in need and this was seen as effective. The extended family and community were also supportive factors. The health staff described how they adapted their coping strategies during increases in infections and restrictions by reaching people via technology and scheduling leisure activities at home (supreme theme g).

**MHPSS perspectives**

The analysis showed that the health staff perceived four main strengths of the MHPSS programme: the multiple success stories, positive personal impact, adapting and reducing resistance and signposting. Three themes were identified in regard to the reported difficulties that were perceived as significant challenges to the programme: societal stigma, economic problems faced by the patients and societal gender roles, as well as feelings of inadequate knowledge and skills. In addition to the cross-cutting challenges, three themes were identified as related to the COVID-19 emergency situation and having a negative impact on the delivery of the programme: privacy concerns regarding remote phone-based mental health work, loss to follow-up and loss of a trustful family health team relationship. The themes and evidence are presented in online supplemental table 2.
The health staff discussed how they have witnessed many success stories in supporting the mental health of patients in health centres (superordinate theme III, subordinate theme h). These success stories included, but were not limited to, assisting with anxiety disorders, suicidal ideation and postnatal depression. Health staff emphasised how the mental health programme has a ripple effect for improving non-communicable diseases care, particularly diabetes outcomes. Related to this, the health staff reported that signposting to other services can be helpful when the root cause of mental distress lies beyond the domains of the health centre. This included referring patients to employment workshops or financial institutions (subordinate theme k). Lastly, the participants narrated that the programme has also made them practice positive coping mechanisms in their private lives (subordinate theme i).

In addition to reporting witnessing success stories for improving mental health and physical health, as well as positive personal impact, the health staff also noted that the programme allows for enough flexibility to respond to the accessibility barriers (subordinate theme j). Although there are many barriers which can stop a person from attending appointments, such as stigma and gender roles, the participants suggested that the programmes flexibility allows them to counter some of these challenges. This includes reassuring the patient about confidentiality and going beyond their duty to make follow-up calls private in environments where family members live in close proximity. For example, by adjusting the time of calling or not stating the purpose of the call when a family member would answer the call. The family health team approach, where one patient always sees the same doctor, was seen as helping to increase trust and adherence to follow-up appointments.

However, several challenges to the programme were voiced by health professionals (superordinate theme IV). The devastating effect of stigma was highlighted (subordinate theme l). For example, a person who seeks mental healthcare is generally viewed negatively, and it is not believed that help is available for mental health conditions. This also means that people who would benefit from help do not want to seek it for fear of societal consequences, such as hindrance to their marriage potential or destruction of family relations. Stigma was reported not only among patients, but was also observed among the health staff themselves. One proxy measure of that was that the health staff who had experienced mental health difficulties and received help from outside UNRWA, had not disclosed it to close family or workplace. In addition, the interviewed psychosocial counsellors discussed that there is resistance among other staff to refer patients to them as the cases were not perceived as severe enough to warrant help.

Besides mental health stigma, economic problems and gender roles were seen as hindering the programme’s success (subordinate theme m). Health staff reported observing that the financial situation and unemployment in the Gaza Strip are the root cause of a lot of distress and common mental health problems. Participants felt that a health programme is unable to adequately address the root cause for the majority of patients. Health staff reported that patients may not have enough money to pay for transportation to come to the health centre. While this was sometimes solved by collecting money internally among the health staff to pay for the transportation of the patient, it was reported as being only a temporary solution. Additionally, participants also reported rigid gender role expectations prevent many females from attending the health centre for their appointments or from talking in a private space over the phone.

The health staff, with the exception of psychosocial counsellors, identified that they would need more training on specific issues, such as domestic violence, and support to manage the time-constrained health centre environment (subordinate theme n). Health staff also felt overwhelmed by their workload and reported not having enough time to adequately provide basic psychosocial care, as it requires more time than other tasks.

The health staff discussed two novel interlinked challenges that emerged for the services during the COVID-19 pandemic (subordinate themes o and p). On 25 August 2020, when COVID-19 cases were detected in the area, the health centres started functioning in accordance to the emergency plan. This meant that MHPSS services were only provided via telemedicine, a system that had been implemented in April 2020. Due to safety concerns, face-to-face services were limited. According to the UNRWA emergency plan, initially no psychosocial care was offered except through telemedicine and hotline phone numbers, which the clients could use to reach doctors and psychosocial counsellors. Screening for new cases was stopped, and the medications were distributed by home delivery to the clients. Once it became possible, from the 13th of September 2020, psychological support was offered face to face for critical and urgent cases, as well as over the phone to existing clients. On 7 October 2020, screening for new cases was resumed but only for a limited number of high-risk individuals.

The health staff discussed difficulties in detecting new cases and establishing rapport over the phone. They explained that due to the nature of phone calls, they were unable to employ the typical mechanisms of observing the person’s body language, which made psychological screening challenging (subordinate theme o). The health staff also reported that patients who previously had a good follow-up record because of the established trusting relationship with their doctor, suddenly had reduced attendance for follow-ups. The health staff attributed this to the fact that during the emergency situation, different doctors were conducting follow-ups. Therefore, the trust-based relationship which existed previously was no longer present, leading to reduced attendance.

The health staff also expressed concerns about the effectiveness of treatment and the privacy when care is provided via telemedicine (subordinate theme p).
Speciﬁcally, they emphasised that treating mental health conditions over the phone may not be as effective as face to face for some patients, and that face-to-face treatment should be resumed as a priority as soon as possible. They reported that due to the sensitivity of the topic of mental health, the patient may sometimes need to hide their conditions from the family. Phone consultations could not always ensure the level of privacy needed, particularly as private spaces are often not available in the home environments. Although a minority of health staff reported that privacy was not a concern as they could call patients at a suitable time, the majority reported the opposite, raising concerns for the patients’ safety and comfort if they happen to receive a call at an inconvenient time.

**DISCUSSION**

The study results shed light on various aspects of the mental health of health workers in UNRWA health centres in the Gaza Strip, as well as the positive and challenging aspects of the UNRWA MHPSS programme from the perspectives of the health staff. The interviews revealed that the health staff perceived that their mental health is generally impacted by the difﬁcult psychological cases that they work with, as well as personal and national events. During the pandemic emergency situation, they perceived that novel aspects negatively affected their mental health, particularly fears of infection, increased workload and struggles related to the COVID-19 restrictions. Their mental health continued to be supported by religion, work, personal leisure and the community. In terms of services, the health staff recognised the positive impact of mental health services on both patients and themselves personally, and saw the ability to adapt the services as an advantage. However, the participant’s stories also highlighted challenges including societal stigma, persistent economic problems and gender roles, and the need to improve their knowledge and skills. The emergency situation compounded these challenges, particularly with interlinked concerns about phone-based mental health work.

The ﬁndings elaborated on aspects that may be unique to conﬂict-affected settings, such as how distress in such a setting continues beyond the conﬁned pandemic period. One prior commentary suggested how in conﬂict-affected settings, COVID-19 adds new mental health challenges including worsening the already existing mental health difﬁculties and adding multiple traumas; however, there is a gap in literature exploring this in conﬂict-affected settings qualitatively. One qualitative research from a low income country, although not in conﬂict setting, has suggested that the high workload of health providers can adversely impact mental health during COVID-19. The health staff highlighted two central aspects which show how burdens accumulate during a pandemic. However, they also highlighted these aspects as not unique to the pandemic but are common in other emergencies including conﬂict escalations. First, the workload increases were perceived as distressing and typically occurring with any emergency. Second, the national restrictions to counter COVID-19, although needed to counter the spread of the virus, added new distress to everyday life including difﬁculties with food supplies and home schooling responsibilities. Everyday stressors are also heightened during conﬂict escalations. The study also demonstrated an increased fear of infection that has been found in medical professionals in other settings during the COVID-19 pandemic.

**Signposting**

Our ﬁndings regarding signposting have implications for other settings. They highlight the importance of universal signposting to supportive community services that can address not only the patients’ needs beyond the healthcare sector but also improve the mental health of health professionals who feel unable to address some of the root causes, such as ﬁnancial difﬁculties, of the patients’ distress. By signposting to community services that can address these issues, healthcare professionals can better support their patients and improve their own mental health. One of the cross-cutting principles of the WHO mental health action plan 2013–2030 is multisectoral approach, collaborating between health, education, employment, social and other sectors to provide comprehensive support. Previous studies from other settings recommend to have clear guidance on signposting in primary care and to include support from various community sources in the efforts of addressing mental health. Our study adds essential nuances to this recommendation in conﬂict-affected settings.

We found that signposting is seen as a valuable approach by the health staff, which should be used comprehensively by all health staff, particularly considering the multitude of social determinants which can negatively impact patients’ mental health, including economic problems, gender norms and societal stigma. Therefore, we recommend, as a ﬁrst step, mapping the available community resources and local services. This is particularly important in a setting frequently experiencing escalations in conﬂict, where partnerships should be made with durable services that are providing, for example, phone or online support. This should be followed by establishing strong links with the community resources and local services and establishing guidelines on signposting for the staff that is involved in screening for the mental health services. This would allow for comprehensive mental health support, addressing not only the patients’ needs but also the feelings among the health professionals that they cannot do enough to address social problems. Ultimately, this could have a dual effect of improving the comprehensiveness of support and addressing at least partially the mental health concerns of health professionals themselves.
Remote mental health work

The findings also suggest the importance of strengthening remote mental health work that would be resilient to escalations in conflict and the pandemic. This includes not only improving the ways in which support is delivered by the health staff, but also strengthening the way mental health support is provided for the health staff.

In our study, health workers reported that they regularly work with cases that are difficult to process emotionally, and this has been a persistent issue even before the COVID-19 pandemic due to the prolonged siege. We recommend to always keep the mental health of health professionals at the forefront through multiple mechanisms to ensure that the support can be maintained through different types of emergencies. Although wellbeing activities are regularly conducted for the staff in UNRWA, more benefits can be gained through professional supervision by a senior psychologist or psychiatrist, monthly reflective spaces and peer supervision. These activities should also be carried out remotely during times when face-to-face support is not possible. Considering the high levels of distress that can be experienced, access to counselling and therapies should also be provided in an online format, as well as outside of the organisation, for example, by partnering with other local organisations and the Ministry of Health. The proposed measures would not only assist in improving the mental health of health workers but also enhance their ability to handle emotionally impactful cases.

Taking into account the central challenges conveyed by the health staff regarding the remote phone-based mental healthcare, there are ways to improve phone consultations that are offered in emergency situations. Although these recommendations were developed in the context of COVID-19 emergency restrictions, they may be applicable to other emergencies when face-to-face support is not possible such as during conflict escalations. To improve the general resilience of the service and prepare for unexpected events, we first recommend to develop a clear framework for phone-based care which includes guidance on improving privacy mechanisms. The framework should give clear guidance on how to improve therapeutic relationship and assess symptoms and risk of harm via the phone, as has been suggested to be important by research covering telehealth mental health services during COVID-19. The framework could also include guidance on innovative ways to address privacy, including for example, providing the clients with a private space which they can access for the phone appointments, as well as set boundaries for phone-based work to avoid staff feeling overwhelmed by workload, as these were some of the challenges highlighted by the health professionals. Similar frameworks would potentially be beneficial for other conflict-affected settings and other types of community organisations wanting to sustain mental health support during crises.

The study had some limitations stemming from the study design and decisions made for analysis. First, the research team was hired by UNRWA during the research design, data collection and analysis phases. As the participants were also working for UNRWA and the study took place in their workplace, it is possible that the participants chose not to fully disclose their difficulties or primarily reported positive information about the MHPSS programme. Further, the first author of the study, who conducted majority of the analysis, is a foreign researcher, relatively unfamiliar with the local language and culture. The data analysis occurred in the English language, potentially missing nuances of informative body language and phrases that would have improved the quality of the analysis. It is therefore important to acknowledge that even though the third author, a local Palestinian, was involved in interviews and parts of the analysis, and translations were checked, the analysis might have been richer if conducted in Arabic.

CONCLUSIONS

The study provided insights into the mental health of health workers and the mental health programme in the conflict-affected Gaza Strip, during the sensitive time of the COVID-19 emergency. We showed the first-person perspectives of health professionals on their mental health, as well as the strengths and challenges of the mental health services, both during and beyond COVID-19 pandemic. The study generated insights which may be useful to also other settings experiencing strain, including which face the duality of the pandemic and conflict. This included recommendations for implementing a framework for signposting that would improve both the mental health of health professionals as well as help to meet the needs of the patients. The study also shed light on how to better use phone support, both for improving the services during disease outbreaks, but also for using it to support health professionals during conflict escalations when other support systems might be unavailable.

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Contributors

TT is the guarantor of the research. TT and YO conceptualised the study. TT, YO, YE-D, KH, AShishtawi and MT codedesigned the study. TT and SA collected the data and analysed the data. TT, YO, YE-D, KH, AShishtawi, MT, SA and ASeita contributed to theoretical conceptualisations, literature review and/or
writing. TT, YO, YE-D, KH, AShishtawal, MT, SA and ASeita read and approved the final manuscript.

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Patient consent for publication Not applicable.

Ethics approval This study involves human participants and was approved by Palestine Health Research Council (ref. PHRC/N/C/671/19) and London School of Hygiene and Tropical Medicine Research Ethics Committee (ref. 18045). Participants gave informed consent to participate in the study before taking part.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement No data are available. The datasets generated and analysed during the current study are not publicly available due to the protection of the participants.

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## Supplementary table 1: Thematic map 1: Themes & Evidence

**Objective:** Exploring the mental health and well-being of health professionals

<table>
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<th>Superordinate theme</th>
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<td></td>
<td>(a) Difficult</td>
<td>“This is one of the difficulties that we used to have and still, especially with sexual abuse cases when it’s with children. These cases are very difficult to deal with in our society and we will be very careful when we deal with them because it poses danger to you and the case itself” - P05</td>
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<td></td>
<td>Psychological cases</td>
<td>“For example, if I want to hear the patient’s problems, maybe it would affect myself and work. I can serve people and listen to them, but within reasonable limits. I will tell you a story. There was a patient who came to me while I was working in vaccinations, and she told me her problem. I emotionally couldn’t stand it. I took her to the doctor. And I went back to my room. And I couldn’t hold a pin for 15 minutes.” – P22</td>
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</table>
|                     | (b) Personal and national events | “For me corona is better than the bombardment, it is true that corona is an invisible virus, but the bombardment is a terrifying thing. I don’t like to remember those bombing moments and those scary moments, one day I was at the camp and the Jewish people were hitting us with a large one, I had to leave the house with my three children and run in the street… It was Ramadan that time and you would be sitting and suddenly the rocket hit, with the bombing and the smoke all around you. I remember there were days when I couldn’t make Ramadan Iftar meal during the periods of heavy bombings. We see the smoke…This was a difficult period as well, but with god’s will we were able to overcome it and get used it. We are used to it now, every day there is a bombardment or every week there are
### I. Factors negatively impacting mental health

| (a) | bombadments, two or three times, it’s alright unless it’s near then we get afraid.” – P04 |
| (b) | “Also, the fire of Nuseirat...I kept imagining the pictures I saw, imagining everyone I see and how will they look like burnt, I started imagining the fire all the time. My mental health was bad especially that I work with kids…so I started imagining the children being burned so I started to feel tightness in my chest and that I couldn’t breathe.” -P22 |

| (c) | COVID-19-related fear of infection and increased workload |
| (d) | COVID-19-related everyday struggles |

| (c) | “…It’s known that her immunity is low, and this is the thing that caused my fear mostly that I would pass her an infection because she can’t handle it in her situation. This caused me severe stress.” P-11 |
| (d) | “My parents had a neighbor that was being forced to leave because they were going to bombard his house and my parents also left to another house... When there are the escalations, education will stop when there is an escalation but for the health, we never stop, on the contrary our work increases when there is an escalation. “ P-28 |

| (d) | “And also, everything is closed, it became difficult to even buy a tomato. The regular supermarkets open for a specific time, but for example things like fresh food became harder to get. I mean life basics became difficult to get. “– P25 |
| (d) | “My area had lockdown from 7pm until 7am, and the bus could not enter that area. I mean, there wasn’t a bus available before 7am to pick me up for work“ -P06 |
| (d) | “You discover that you spent a great portion of your time teaching this and that because all the burden is on us to explain, train and teach. All of this is a burden to the parents in addition to work that is already there… This also...” |
| II. Positive influences on mental health | will constitute another burden for me, you have to tutor the kids… I have one in the first grade and now he missed a whole year and still doesn’t know how to write, this is also more responsibility for me as I have to teach him all over again like a home teacher.” – P15  
(e) Religion  
“With god’s will that they won’t feel the burn like we do, this is what helped me and comforted me a bit. I’m sure god helped them by not feeling the burn, like going into a coma or a shock, they burned after they were in shock or breathing CO2 made them go into a coma, and after the coma they got burned so they wouldn’t feel. This thing comforts me, and I hope they are in heaven as martyrs, this religious belief is important. With god’s will they will be in heaven because the burn victim is considered a martyr. “- P10  
“I keep myself busy with reading the Quran because I feel it brings me comfort in order to face the anxiety I’m having” - P15  
(f) Work  
“When I was isolating at home there was contact between me and my manager and she offered me huge support” – P17  
“I saw them when they went to the hospital, lots and lots of burned victims. When I saw my son was one of the injured as well I was psychologically destroyed, with the aid of the psychological counsellors I got better day by day.”- P03  
“Also, the feeling of belonging to the organization or the refugee population that we serve, to feel that the person we serve is like our father, mother, sister or wife, that lifts our spirits and morals” – P25  
“I just try to forget and occupy myself with other things which can refresh me and change my mood, like reading a book or reading other things like praying and such. These things bring about some sort of comfort.” - |
| (g) Personal leisure and community | P05“...getting support by contacting with relatives and close friends over the phone.
I contact someone who listens to me if I feel anxious or if I want to talk about specific topic to empty my feelings and feel relieved “– P08 |
**Supplementary table 2: Thematic map 2: Themes & Evidence**

**Objective:** Exploring the mental health and psychosocial support services perspectives

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<thead>
<tr>
<th>Superordinate theme</th>
<th>Subordinate theme</th>
<th>Evidence</th>
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| (h) Multiple success stories – importance of the MHPSS services |  | “People truly need this program and need us. I can mention a small example, a couple of days ago I had a young man…. He had panic attacks but he was going to respiratory specialties or gastrointestinal specialties, each one would ask for tests and such but with no findings…I started asking him questions about the things I used to have: “Do you get this?...” He said that he had all of that, I told him your situation is 1, 2,3. I felt he was happy that he found out what was his problem “ – P23  

“Honestly, when we started working with cases and seeing improvements, we started to hold on to the subject. And with the large amount of cases that we see, we discovered that we have a large number of mental health cases. We can exemplify that with the iceberg model, only the tip is showing but under it is the big part” – P11 |
| (i) Positive personal impact |  | “I was short tempered. When my sons wanted something I would scream at them... Now I would tell them… I will tell them to wait a bit, I would take a deep breath, I would say I wanted to rest, relax or something like that. Before I start to talk to them and get angry I would take a break, relax and such, I’m calmer with them” – P03  

“Naturally it was very useful for me because the human being always goes through life situations and setbacks, so this training helped me a lot in my life to...” |
### III. Main Strengths

**overcome the situations I’ve been through. I started to do psychological support to myself, for people around me and other people that are in need. ”— P11**

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<th>(j) Adapting and reducing resistance</th>
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<td>“Some ladies would be late to their follow-up appointments because of their circumstances and because of the financial means. So, there were difficulties to do follow-up with regards to the psychological subject. In order for us not to expose her secrets to her husband, mother in law or anyone, if any of them answers the phone when I ask to speak to the lady, we would approach the subject differently. I would say that the lady is late to appointment, late for a diabetes test for example and that we want her to come and talk to us. We had a specific approach” — P07</td>
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<th>(k) Signposting to other services</th>
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<td>“Yes, she tried to kill herself …we knew the direct cause is that she wanted to finish university, but her father’s poverty did not allow her to. We tried to lead her to some institutes. There are institutes that help university graduates and because she was about to graduate. The mother and father were happy and also the girl. We tried to eliminate the causal factor that lead her into depression and to try to take her own life, which is that she that she wanted to finish university. We helped her with this thing, and she became better.” —P24</td>
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“There is lady who had a very bad financial situation and who was getting abused by her husband…she tried to complain to the cops more than once. They didn’t come for her and he was taking her coupons, selling them and buying Tramadol and other drugs to take. We have relationships with other institutions around and we tried to help this lady…We got in contact with an institute…that gives women free workshops…She opened a small business and
<table>
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<th>(l) Stigma among the society</th>
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<td>“The foundation of this problem is that they were raised on that the mental health patient is a mad person, this is what they think. That the mentally ill patient is a crazy person that doesn’t understand, that has many problems and there is no treatment for this crazy person and thus a hopeless case “- P05</td>
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<td>“They try as much as possible to stay away from us, even if we asked the doctor to transfer us a case if he feels the case might be in need, he would say no she is not crazy and doesn’t have anything…I mean the health care team itself doesn’t believe in the mental health services, so who would you even convince? The doctor or the people? This is one of the difficulties that we face “- P12</td>
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<th>(m) Economic problems in the Gaza strip and Gender roles.</th>
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<td>“The problem that the people face at our camp is not a psychological issue, it’s the economic problem that is the cause of the psychological issues. Most of the ones are unemployed or employed but have loans. Most of the psychological problems are caused by the economic problem. For some cases, no matter how much support we give as long as the financial situation is bad the problem will persist, we can’t provide them with a salary or money or…you can do as much as you can with the psychological service, but you can’t fix the financial situation.” –P04</td>
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<td>“As I told you, the ladies don’t have full control over their own time, the home circumstances as Tel Sultan is not like other countries…I try over the phone, more than once I try and the lady would refuse to come or she doesn’t have currently she is doing okay…Every time she comes here, she thanks us and prays for us and we are very happy. She would say ” without you {} my children would have been lost.” She can use her coupons because she got separated from her husband, she has a source of income now.” –P04</td>
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### IV. Challenges

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<th>(n) Need for more knowledge and skills, and feeling overburdened</th>
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<td>“Because we are nurses. How, for example, will we sit with the patient and talk about their health, psychological condition, whilst we don’t have any background or experience in the health psychology of the patient “– P12</td>
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<tr>
<td>“Time is one of them, when they come in you have to sit with the patient, but when it’s very busy you can’t take your time. You would be talking with the patient then knocking might happen, there are a lot of interruptions during your time with the patient so I try to bring them early morning.. or end of the day “– P17</td>
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<th>(o) COVID-19-related limited services, loss to follow-up and trustful relationship</th>
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<td>“So, we had a conflict between me and my patient. The patient when he comes… then he finds that the doctor is not his regular treating doctor, this caused some patients to feel some dread. It’s even possible the patient won’t get treated, that he just gets up and leaves home as he doesn’t want everyone to know about his thing…this is the most important problem that we faced.” – P23</td>
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<td>“We started to trust what the patient says over the phone, for example, he would say he has stomach ache, although if he told you that face to face you might find that it’s stress and psychosomatic and not a stomach ache. But he is not in front of you and you can’t see if he is nervous or anxious, you don’t see any of that” - P25</td>
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<th>(p) COVID-19-related phone work concerns of efficiency and privacy</th>
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<td>“It is safer but that doesn’t suffice, for some cases I have to see them face to face to be able to talk to them” – P04</td>
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<tr>
<td>“The types of cases we deal with are private and the problems tend to be private, so the case itself wouldn’t be comfortable talking to us while being at home because the husband is there or she would be living with the extended family</td>
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permission from her husband to leave the house, I try to work with her over the phone” – P16
with the in-laws and children around her. I wanted to check on her but at the same time I would be afraid that someone around her would know that she follows-up and she would get in trouble. This was a big challenge for me.” - P05
SUPPLEMENTARY FILE 1: TOPIC GUIDE

A: Background of Interviewee

Age:
Gender:
Profession:
Length of Service:
Completion of MHPSS training:
Name of the facility:

B: Exploring health workers own mental health difficulties and coping during and before COVID-19, through the following:

1) Please tell me about your every-day life and memorable experiences in the past months?

2) If you feel comfortable, can you please tell me what health and life problems you face? (queries: in the last few months during COVID-19 emergency? What about before COVID-19? How did you cope?)

3) Please tell us about any difficulties you experience in your work-life? (queries: Can you please tell me more about the difficulties in the last few months during COVID-19 emergency as well as before COVID-19? How do you cope at work?)

4) Please tell me about what helps you when you face problems? What helps you feel better? (queries: What helped you through difficulties before COVID-19? What about during COVID-19?)

C: Exploring health workers perspectives on the MHPSS services during and before COVID-19, through the following:

5) Can you please tell me what you remember about the period when MHPSS support was first implemented in this health center? (query: What were your and your colleagues’ reactions? What were the difficulties?)

6) Where did people get support (for stress/anxiety and other mental health problems) before the implementation of MHPSS? (query: What helped them before and what helps them now?)

7) What difficulties do you face when implementing MHPSS at the moment? (query: What difficulties are due to COVID-19? Can you tell about difficulties before COVID-19?)

8) Can you tell me one positive and one less positive experience of yours when implementing MHPSS? (query: Can you bring me an example of an experience where a patient felt it helped them? If you feel comfortable telling me, what about one less successful where the patient perhaps didn’t feel it helped?)