Challenges Encountered by Healthcare Professionals as Frontline Fighters during the COVID-19 Pandemic in Bangladesh: A Qualitative Study

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Abstract

Throughout the pandemic, healthcare professionals (HCPs) all around the world encountered numerous challenges. This study was done in the middle of the pandemic, from June to November 2021, and looked into the multiple issues that HCPs faced in Dhaka, Bangladesh. Thirty doctors and nurses covering a wide range of workplaces and experiences were interviewed, and a qualitative investigation was done to see the influences of diverse organizational, familial, social, and religious factors on them while they fulfill their professional duties. Thematic content analysis was performed to find out the results. The findings emphasize physical and mental health problems of HCPs, the organizations' role as vital in addressing HCPs' well-being, necessity of training for HCPs, PPE related problems, and workloads of HCPs. It also explores the roles of families, the influence of society, and the impact of religious beliefs on their commitment during the pandemic.

Keywords: Bangladesh; Covid-19 Pandemic; Challenges; Healthcare Professionals; Qualitative Study

Introduction

The fear of the COVID-19 pandemic has subsided a lot, and now it is less fatal than it was in 2020 (Sarun Charumilind Matt Wilson, 2022). According to the World Health Organization (WHO), as of March 21, 2023, there had been over 761 million confirmed cases of COVID-19 and more than 6.8 million deaths globally (*WHO Coronavirus (COVID-19) Dashboard*, n.d.). If we look at the Southeast Asian region, as of March 28, 2023, India had confirmed over 44 million cases and more than 530 thousand deaths from COVID-19. During the same period, Bangladesh confirmed more than 2 million COVID-19 cases and nearly 30 thousand deaths (World Health Organization, n.d.). After the Second World War, it has been the most stirring event in the world (BBC News, 2020). The war on COVID-19 was faced by healthcare warriors with little knowledge of what to do and how to start. To date, around the world, numerous healthcare professionals (HCPs) have been affected by COVID-19, and the worst side of facing this pandemic for HCPs was death, which reached between 80,000 and 180,000 in the period between January 2020 and May 2021 (World Health Organization, 2021). The number had increased with time. Since the onset of the pandemic, healthcare professionals have demonstrated greater levels of support, unity, and appreciation than they previously exhibited. (*WHO/Europe | Home*, n.d.). For all these reasons, they were the most vulnerable during this critical period (Cabarkapa et al., 2020). So, the physical and mental health consequences of the COVID-19 pandemic among HCPs were tremendous. Hospitals, where the HCPs worked, had a major responsibility for supporting them physically, mentally (Alrawashdeh et al., 2021) and financially during this crucial period (Razu et al., 2021). The high risk of infection, extreme pressure to perform at work, shortages of necessary equipment, ~~and~~ lack of ability to spend time with family and friends, nationwide lockdown, living with family members compared

to living alone and questionable social media news exposure (Patwary et al., 2022) were all complicating the physical and mental health of HCPs (UNFPA, 2020).

Different studies around the world showed that HCPs suffered a lot during the pandemic (Razu et al., 2021). They were at a higher risk of infection due to their direct contact with suspected and confirmed coronavirus patients in healthcare institutions. This syndrome is even more severe in low- and lower-middle-income countries (LMICs) (Patwary et al., 2022). Many contracted the infection, though they did not necessarily contract it from hospitals (Canada, 2021). In Canada, 7.0% of HCPs got the infection (Canada, 2021). A study in Mexico reported a high prevalence of COVID-19 infection in HCPs in Mexico City (Antonio-Villa et al., 2021). The most common problems related to personal protective equipment (PPE) were cutaneous manifestations and skin damage (97.0%), with the nasal bridge (83.0%) being the most commonly affected site (Shaukat et al., 2020). As it was an unprecedented event for HCPs, the mental pressure was high when confronting the patients (Vizheh et al., 2020). Participants perceived their current psychological health to be worse during the COVID-19 emergency outbreak as compared to before the outbreak, and this was especially true among women (Bettinsoli et al., 2020) as several studies also revealed that depression among women is high (Sultana, Muhammad, Chowdhury, et al., 2023); (Sultana, Muhammad, & Chowdhury, 2023). HCPs experienced high levels of depression, anxiety, insomnia, and distress. Female HCPs, including nurses, were disproportionately affected (Shaukat et al., 2020). A study conducted in Bangladesh showed that approximately 70% of respondents had clinically significant anxiety, whereas more than 43.82% had moderate or severe perceived stress (Patwary et al., 2022). A study in Italy shows that, overall, approximately 33.5% of HCPs meet the threshold for psychiatric morbidity (Bettinsoli et al., 2020). Front-line HCPs such as

nurses, female workers, younger medical staff, and workers in areas with higher infection rates reported more severe degrees of all psychological symptoms than other HCPs (Vizheh et al., 2020).

There have been many studies reflecting on the physical and mental health problems of the HCPs managing this pandemic situation. However, these physical and mental health problems had roots deep down in the family, society, (*WHO/Europe | Home*, n.d.) and religious supports and obstacles (Sisti et al., 2023). The family was vital in supporting them physically and mentally (Sapkota et al., 2021). HCPs were also afraid of their families, as they could spread the disease to them. Though the HCPs were trying to do their best, we witnessed primarily the negative role of society against the HCPs. They were harassed by society because they considered the HCPs to be the source of contagion (Souadka et al., 2020). Religion is another thing that comes up with mental tranquility, giving HCPs the strength to stand while working with these patients (Razu et al., 2021). From history, we know that, during the period of the Ebola crisis, a majority of the healthcare workers left on the ground were missionaries. Faith was the chief motivator for those both funding and serving in some of the most difficult parts of the world (David King, 2017). Besides helping others being more common among religious people, it has also been found that members of religious congregations volunteer more frequently and dedicate more hours to voluntary service (Domaradzki & Walkowiak, 2021). So, in this study, we also tried to observe how much religion helped HCPs stick to their work during this COVID-19 pandemic.

We have observed several studies being carried out in Bangladesh among HCPs. A study conducted by Razu et al. (2020), in Bangladesh, upheld a lot of aspects and challenges of HCPs (Razu et al., 2021). Another study explored by Pooja et al. in 2022 showed HCPs had limited

knowledge regarding COVID-19 management, but they were motivated to provide care due to organizational support, moral responsibility, and a sense of accomplishment (Das Pooja et al., 2022).

Nonetheless, we ventured into this study to find out things from a different perspective and probe deep into some facts. Just because, as far as review goes, we found no single study conducted that holistically demonstrated the physical and mental health problems faced by HCPs as well as the familial, social, religious, and organizational influences while performing their professional responsibilities during the COVID-19 crisis.

Methods

Study design and sampling

This qualitative study used 30 in-depth interviews with healthcare professionals of different levels to collect data on the topic. Maximum variation sampling and a purposive sampling technique were used to collect the data. Participants selected for the study are doctors and nurses who worked directly with patients in hospitals during the COVID-19 pandemic. A significant portion of them also held managerial and administrative positions concurrently.

This study was conducted between June and November 2021, and the participants were selected from the COVID-19 dedicated units or hospitals in Dhaka and Narayanganj, Bangladesh. The researchers conducted interviews with key personnel working at Sheikh Russel National Gastroliver Institute and Hospital, National Institute of Diseases of the Chest and Hospital, Kurmitola General Medical Hospital, Mugda Medical College and Hospital, DNCC Dedicated

COVID-19 Hospital, Narayanganj 300 Bed Hospital, Dhaka Medical College Hospital, Comfort Nursing Home, and Japan Bangladesh Friendship Hospital. A semi-structured in-Depth Interview (IDI) guideline was used to keep the focus on the objective of the research. After conducting the first few interviews, some parts of the IDI guideline were identified as redundant, and after critical review, these parts were removed. The interview guideline acted as a directory for the researchers to probe deeply into each topic to get more vivid and precise pictures.

Data Collection

Interviews were conducted at the workplaces of the participants by a group of academically trained interviewees in the methods of qualitative data collection. Another training session was organized by the investigators for this study, which also trained the data analyst team. All the interviews were recorded with the permission of the participants. These recorded interviews were transcribed word by word and later translated into English by a skilled translator for analysis. The interviews were recorded in thick descriptions, and any personally identifiable information was kept hidden and coded before analysis. After conducting interviews with the first 24 participants, the researchers started finding nearly repetitive answers. After collecting 30 interviews, we found no new information, so no new interviews were conducted.

Data Analysis

A thematic content analysis was performed to establish the results of the study. From the research question, some themes were predetermined. By examining the contents of the interviews, the conveyed messages of the participants were set against those predetermined themes. From each separate interview, relevant contents were highlighted for selective coding (Moser, 2019) and later

categorized. Similar categories were identified, and a significant pattern in the information was discovered. The interpretation of each interview was debriefed to check for any major discrepancies. After analysing all the coded data, eight major key themes of this research were identified.

Ethical consideration

The researchers individually approached the participants and provided a clear explanation of the study's objectives. Participants willingly gave their consent, with the option to withdraw from the interview at any time. Prior to the interview, permission to record the conversation was also obtained, and written consent was documented. The study protocol underwent a thorough review and received approval from the Research Ethics Committee (REC) at the Faculty of Allied Health Science (FAHS), Daffodil International University (DIU), with the ethical approval reference number REC/FAHS/DIU/2021/1017.

Results

Data regarding the socio-demographic, and professional characteristics of the participants are represented in table 1.

Table 1. The socio-demographic, and professional characteristics of the participants

Age	27 to 58 years. Their mean age was 43.10 years (SD ± 9.095).	
Sex	Eighteen males and twelve females	
Marital Status	Married, unmarried, and widowed	
Occupation or Designation during the study	• Associate Professor (4) • Assistant Professor (4) • Nursing Superintendent (5) • Consultant (1)	• Armed Forces Nursing Service Officer, Rank-Captain (1) • Doctor In-Charge, ICU (1)

time (Total Participants)	• Senior Consultant (1) • Medical Officer (4) • ICU Nurse In-Charge (2) • Resident Physician (2) • Nursing Supervisor (1) • Registered Nurse (1)	• Assistant Registrar (1) • Emergency Medical Officer (1) • Emergency Nurse in charge (1)
Study Area	Narayanganj and Dhaka City, Bangladesh	
Institutions (Total Interview Taken)	• Sheikh Russel National Gastroliver Institute and Hospital (15) • National Institute of Diseases of the Chest and Hospital (2) • Kurmitola General Medical Hospital (2) • Mugda Medical College and Hospital (1) • DNCC Dedicated Covid-19 Hospital (1) • Narayanganj 300 Bed Hospital (3) • Dhaka Medical College Hospital (4) • Comfort Nursing Home (1) and • Japan Bangladesh Friendship Hospital (1)	
Type of Institutions	Seven Government and two Non-government	
Work Experience	1 month to 11 years on the specific designations	
Area of Work During the Study	Covid-19 ward, ICU, OPD, emergency room, Covid-19 RTPCR lab, and pathology.	
Education in the Field	• MBBS • MRCP P-1 • FCPS • MD • Ph. D. in Nursing • DA • MPH	• Diploma in Nursing Science and Midwifery • M Phil • MRCS • MCPS • BSc in Nursing
	(Most of the participants had two or more degrees)	

Pre-determined themes of our study

Before conducting interviews with the participants, some themes were predetermined. These were-

1. Supports from the organization
2. Training needed for HCPs to deal with Covid 19
3. The lifestyle of HCPs during Covid 19
4. Problems related to PPE
5. Whether full PPE or mask is needed to work with Covid 19 patients

6. The necessity of isolation and quarantine
7. Workloads of HCPs
8. Physical health problems of HCPs
9. Mental health problems of HCPs
10. Role of the family
11. Role of society
12. Role of religion
13. Forecast about Covid 19
14. General advice for HCPs to combat diseases like Covid 19

Eight major key themes of the study

During data analysis, themes that seemed superfluous were removed and similar categories were unified. Furthermore, limited data could be gathered on certain topics, which were subsequently eliminated. So, after multiple revisions, we reduced the fourteen pre-determined themes to eight. These were-

1. Physical and mental health problems
2. Organizational role in supporting HCPs
3. The necessity of training for HCPs to deal with COVID-19
4. Problems related to PPE and type of protection for COVID-19 patients
5. Workloads of HCPs
6. Support and negligence from the family
7. Support and negligence from society
8. Role of Religion on HCPs

Thematic content analysis of the interviews

1. Physical and mental health problems

Most of the participants stated that they faced a lot of physical and mental health problems during this period of COVID-19. According to their opinion, the physical and mental health problems of COVID-19 were interrelated. They were anxious to get affected at any time and if they were affected, they would become more anxious to spread it to their family members. One of the participants (IDI- 6) said that he became infected with COVID-19 while working and spent at the hospital cabin until his RTPCR for COVID-19 was negative. He was afraid to spread it to the family members. Some participants had comorbidities and working with comorbidities made them more vulnerable to physical problems, they said. Participants, who got COVID-19 infection, were suffering from post-COVID-19 symptoms (IDI- 6, 11) such as tiredness, and difficulty in concentration. Mental health problems included panic, stress, fear of death, fear of getting the infection and spreading the infection to family members. A medical officer, working directly with patients, said,

"*The stress was too much, especially the anxiety was much higher. But, yes, mental problems were much more challenging than physical problems*". IDI- 01.

One nursing supervisor who was managing COVID-19 nurses in her hospital from the very first time, stated:

"Working with PPE for long periods, our girls (nurses) are getting sick while on duty. Tension is high at work because they have small children. Both physical and mental problems are there". IDI- 12.

A senior consultant, who was working as the head of RTPCR of COVID-19 and pathology, in response to the question of what were her problems while working with COVID-19 said:

"*The main concern is that we might get affected anytime by COVID-19. Not becoming infected is our biggest challenge*". IDI- 08.

2. Organizational role in supporting HCPs

All the participants believed that support from the working organization should encompass all necessary measures to ensure the protection and security of HCPs. Consolidated statements from most of the participants ascertained that organizations should support HCPs regarding updated information about COVID-19, infection prevention and control (IPC) training, physical and mental health supports, risk allowances, transport facilities, food, accommodation, and refreshing activities. They said support from the organization increases the productivity of the employees. We can quote here what a COVID-19 ICU medical officer said:

"*The hospital authority needs to pay attention to this because if the environment is good, the risk rate can be reduced, then we can all be satisfied by working and the patients will also get good service*". IDI-05.

A consultant from the COVID-19 ward said,

"*It seems to me that the environment, as well as the logistics issues such as our IPC protocol, should be supported by our organization in the first place"*. IDI- 22.

Some of the participants said that all the organizations were not well equipped and they had limitations. So, prioritizing the needs and providing these in adequate amounts ensures the best service from the HCPs. The COVID-19 emergency nurse in charge was concerned,

"All institutions are not fully occupied and there are limitations from their sides. However, facilities like PPE, masks, gloves, sanitizing as well as mental support should be provided". IDI-09

A medical officer working in the emergency thought,

"To me, it seemed that those who are on the front line and managing such patients have not been well prepared. Preparing them mentally and motivating them is the most important thing because they have to face the whole risk.". IDI- 30

3. Necessity of training for HCPs to deal with COVID-19

We asked about the importance of training for HCPs to deal with COVID-19. In response to this issue, all of our participants said that, as COVID-19 was a new situation for all, our HCPs needed training on infection prevention and control (IPC); donning doffing of PPE and safety

measurements; COVID-19 disease and its consequences as well as treatment steps; how to apply special services to COVID-19 patients, such as oxygen and other life-saving drugs; ICU care of COVID-19 patients; etc. They think, the organization should arrange these pieces of training for its employees and training should be arranged according to the level of the employees. They also said that in Bangladesh, training was organized for the HCPs, but did not cover all of them. One participant, who was working as a resident physician at COVID-19 outpatient department (OPD), asserted

"Training is a must. As it is a new situation, to ensure the safety of their selves, patients and other people training should be provided. Training on virus-related safety kits, PPE, how to cope with the infection, and the treatment procedure of the infection should be done". IDI-03

A COVID-19 ward consultant and assistant professor from Kurmitola General Hospital emphasized,

"*When it comes to patient management, how to manage a patient by a physician and nurses and other assistants, what will be their approach, how to examine the patient, how to provide their treatments, what will be the procedures, we can train these things online*". IDI- 22

4. Problems related to PPE and type of protection for COVID-19 patients

PPE was of main concern when COVID-19 patients started to come to the hospitals. But in the tropical climate of Bangladesh, it was difficult to work with PPE. And the cost was also a matter of concern. All the participants agreed on the matter that PPE was necessary to work with COVID-

19 patients but various physical and mental health problems were generated due to the wearing of PPE. It created physical difficulties as well as increased mental stress. A resident physician working in the COVID-19 outpatient department stated that with PPE, he tried to perform his visits with the patients quickly.

"After wearing the PPE for a long time in a non-air-conditioned area, we have faced problems like excessive sweating, and dehydration. With PPE, we tried to perform our jobs rapidly". IDI-03

Not only did PPE pose physical barriers, but it also hindered the check-up and treatment processes. This issue was highlighted by a significant number of participants when further the topic was investigated. One medical officer who was working at COVID-19 ICU had given his opinion in the following words,

"Besides, it was very difficult to hear with a stethoscope. It would sometimes cause headaches and high blood pressure at night. Keeping PPE for a long time is very troublesome because we cannot drink water too. We feel suffocated and at some point, we feel like we would die after a while". IDI-05

As we could see, maintenance of PPE was difficult, so we wanted to know whether full PPE (head cover, goggles, mask, whole body cover, gloves, and shoe cover) was mandatory or whether only well-fitting masks were enough to work with COVID-19 patients.

Most of the participants were uncertain of the benefits of the use of full-body PPE. A COVID-19 ward consultant shared his view regarding the fact,

"Actually, the concept of full PPE came from the appearance of the Ebola virus. We could not understand it during the first period of COVID-19, but with time we understand that if the face, nose, mouth, and eyes can be kept covered then we can get enough protection. We have seen that our Nurses are working only with masks and they are not being infected. Though I don't know what the Research concludes, my personal opinion is full PPE is not mandatory for COVID-19". IDI-04.

A medical officer working at ICU said,

"I don't think full PPE is mandatory. I haven't been wearing full PPE personally for eight months. I am working wearing a mask and trying to protect myself using a face shield for intubation or other procedures". IDI-05

5. Workloads of HCPs

According to the participants' viewpoints, hospitals were undergoing a transformation in response to the new circumstances, considering it was a novel situation. HCPs exerted their bests to equip the hospitals. Given the unfamiliarity of the situation, everyone was in fear and had an extra burden imposed on them in setting up patients' wards, maintenance of PPE, and other IPC measures. There was a constant awareness of the risk of infection, leading to mental stress. The shortage of manpower due to quarantine and restrictions on patients' attendance further compounded the

challenges. The participants emphasized that only those working in the healthcare field could truly comprehend the gravity of this situation. COVID-19 ward consultant said,

"There is no way to deny that from last March (2020), the toil and hardships exerted by the HCPs are unbelievable. It is beyond expression through language. HCPs from each stage, doctors, nurses, and others are exerting a lot of labour". IDI-04.

Participants said that the situation was different from normal life and was a burden for them. Due to COVID-19 restrictions, they could not move easily, there was a lot of maintenance. Where there were patients other than COVID-19 patients, it was more difficult to manage all the patients with limited personnel. An assistant registrar from the COVID-19 outpatient department said,

"*Certainly, there is work overload. General patients and Covid patients are not the same. During the pre-Covid period, I was not used to wearing even masks. Now I need to wear masks for 7-8 hours. After that I need to wear PPE, which I did not use before, I need to change my PPE. In this field, certainly, HCPs are carrying an extra workload*". IDI- 25

A COVID-19 nursing superintendent conveyed,

"*As per the existing patients in Bangladesh, we have inadequate nurses. Some nurses are going into quarantine, so the lacking becomes more apparent. Again, wearing PPE every day in hot temperatures and not knowing the procedure of donning and doffing all these are creating an extra burden physically and mentally*". IDI- 19

6. Support and negligence from the family

As per the statements of the participants, throughout the pandemic, most of the HCPs received family support. The families took care of them when they were away from home and when they were at home after their service. The participants also expressed that, in some cases, the members of a family did not give consent to work at COVID-19 units. The HCPs too were worried about their family members as they had to go back to the family after work and they might spread the disease to the family members. All the participants conformed, without support from the families, HCPs could not face this risk alone. According to a COVID-19 emergency nurse,

"*Except for some fragmented cases, maximum of the HCPs has got family support*". IDI- 26.

Many of the participants spoke, they were obliged to work irrespective of the fear of their family members. COVID-19 ward consultant who was also responsible for many of the administrative decisions asserted,

"My family was afraid. But I had no alternative, it is my profession and I don't know anything other than this. By surpassing the fear and anxiety of my family, I have to come here". IDI-04.

A COVID-19 ward nurse also said,

"*The family was scared and did not want us to work at COVID-19, later they mustered the courage to stay by our side, they took care of us coming from COVID-19, saying do like this, do like that".* IDI- 24.

7. Support and negligence from society

According to the participants, the role of society was much more debatable. All the participants agreed that, at the very beginning of the epidemic, society was more in a negative role. HCPs were harassed, they were driven out of their home, and nobody would want to rent a house if they knew s/he was a doctor or nurse or HCPs. Society thought that if they allowed a health worker in their area, they might get the infection. With time, society understood the importance of the job of HCPs and embraced them. A medical officer of the COVID-19 ward declared,

"Many doctors were socially harassed in the early days of the situation. Even, many have been told to leave their homes or to be kept in solitary confinement in society - I have seen many such incidents happening in the vicinity. If the frontline fighters are not socially degraded, and isolated, but rather encouraged in various ways, then they could better serve the patients". IDI -01.

An assistant registrar from the COVID-19 outpatient department (OPD) was very agitated about the role of society. He expressed,

"There are questions raised by society. At first, society did not help us. When a doctor or a nurse went to get rent for a house, society denied it and ignored them. When our ward boy walked down the roads, our society showed indignation. Our hospital linens were taken for washing from a pond, but society impeded them. All the people of the world should know about this. Society has spread its helping hand after coming to a certain stage". IDI- 25

As per the statements of the participants, HCPs were working hard and expected acceptance from society. They were working so hard that even society should give them some reward or recognition, most of the participants said. From the revelation of all the participants, HCPs wished for the assistance of society, not hostility. COVID-19 ward consultant said,

"If society does not give us even a little thank, or does not become sympathetic, or does not give us mental support, then we will become apathetic to work". IDI- 07.

8. Role of religion

Most of the participants stated the role of religion depended on the personal beliefs of the HCPs. Religion could give mental peace and could help HCPs in pursuing their services. A resident from the COVID-19 emergency articulated,

"Religion motivates to work well for people, however, it is more dependent on the personal belief". IDI- 27.

Associate professor and consultant of the COVID-19 ward thinks,

"From the religious point of view, it is said in every religion that there is a system of reward for those who do good to the poor and heal the poor. So, in that case, everyone is religiously motivated". IDI- 23

As per the statements of the participants, during this pandemic of COVID-19, the observance of religious activities is seen to be increased among the HCPs. ICU medical officer observed,

"The belief has been strengthened and I can see attending prayers with my various colleagues has increased a lot. And taking part in the ceremony, saying the prayers, and asking Allah for forgiveness all these things are increased". IDI-05

Discussion

The main purpose of this study was to find out the organizational, familial, social, and religious factors confronted by HCPs as front-line fighters during the COVID-19 pandemic. Our findings show that HCPs faced a lot of physical and mental health problems during this period of COVID-19. A similar systematic qualitative review done by a group of researchers says that the pandemic has affected frontline workers' physical and psychological health, causing them to experience emotional distress such as fear, anxiety, depression, and stress. In addition, the pandemic increased posttraumatic stress disorder, leading to burnout and discontinuity of healthcare workloads to ensure the patient's safety and the high quality of care provided to the patients (Koontalay et al., 2021). Another study says that, in the initial three months of the pandemic, healthcare workers who were working directly with patients were found to have three times higher chances of being admitted with COVID-19 compared to healthcare workers who did not have direct patient interaction (Karlsson & Fraenkel, 2020).

The organization had roles in supporting HCPs physically and mentally. A similar study, conducted in Bangladesh, conforms with our study. They said HCPs should be provided mental

support to cope with a new situation, PPE according to need, and should be given incentives as compensation for their workloads. They should be supported with adequate safety kits, protocols, and support for both physical and mental health (Razu et al., 2021).

To face a new situation training is mandatory, the findings of our study indicated. A similar qualitative study conducted in the UK also identified problems in terms of insufficient training provided to redeployed staff and the failure to take into account their skills when assigning them to new areas (Vindrola-Padros et al., 2020). Based on our study, the findings emphasize the specific training needs that should be addressed. It is also stated that the organization is responsible to arrange and provide these pieces of training and training should be arranged according to the level of the employees. In comparison to the mentioned study, our study inferred the necessity of training in detail.

Thematic analysis of our study also suggests that considering the difficulties and unavailability of full PPE (Coverall, masks, face shields, gloves, shoe covers, etc.), full PPE is not mandatory to work with COVID-19 patients. An article published by WHO says that coveralls (sometimes called Ebola PPE) are not required when managing COVID-19 patients (Royal College of Nursing, 2023). Another article says the type of PPE needed will depend on a risk assessment which should include the environment you work in and the procedures you carry out. Other than PPE, hand washing, social distancing measures, training, workplace cleaning practices, ventilation, vaccination, and risk assessments for staff health play important roles in infection prevention and control and managing the safety of staff and patients (Royal College of Nursing, 2023). After

comparing with other studies, from our study, it might be surmised that though full PPE can provide some benefits, well-fitting face masks work better for working with Covid 19 patients.

The workload was high during the COVID-19 period. A study conducted in Iran says that health workers who came into contact with COVID-19 patients experienced a higher workload in comparison to those who did not have any interactions with COVID-19 patients in their workplace (Shoja et al., 2020). Our study manifests extensively the reasons for workload such as unfamiliarity with the situation, maintenance of PPE, other IPC measures, and COVID-19 restrictions.

Our study also shows that the HCPs experienced negligence/torture/blaming/bullying/threats from the people of their society. A qualitative study conducted in Bangladesh can correspond with it. The social stigma was another challenge for the HCPs during the COVID-19 pandemic (Razu et al., 2021). Another study conducted in Japan also conforms. It also has led to HCPs being perceived as polluted and their children being told they were not welcome in schools (Jecker & Takahashi, 2021). So, these findings agree with our study and it may be concluded that social torture and stigmatization of HCPs were universal during this pandemic of COVID-19.

The participants of this study stated that religion gives mental strength to continue work. This finding supported the study by Razu et al. (2021), which said that faith in God and mutual support were the keys to adapting to adversities (Razu et al., 2021). A similar qualitative study in Portugal concludes by saying participants with higher levels in the hope/optimism dimension of the Spirituality Scale showed less COVID-19 related anxiety (Prazeres et al., 2021). These findings supported that religion helps HCPs psychologically and gives them mental strength.

Conclusion

During the first period of COVID-19, HCPs were very much anxious for the safety of themselves and their families. This study tries to find out the focal points of their anxiousness and the factors responsible for those. As the study was conducted during the mid-period of the pandemic, HCPs gained much knowledge by experience along with the knowledge of concurrent virology. The study brought out that HCPs were in physical and mental health problems and they needed support from the organization for which they were working. These supports include physical and mental health maintenance and training for new disease management. This study also projected light on the roles of family, society, and religion during this alarming period. Apart from some exceptions, most of the HCPs received family support. A lot of HCPs suffered from social torture and bullying. Religion, though a personal belief, helped the maximum of the HCPs to get mental strength. This study sets the stage for further research to investigate potential connections between these variables and the quality of healthcare services provided by HCPs.

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Declaration of conflicting interests

The Authors declare that there is no conflict of interest.

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