

A Study on Anxiety, Facility, and Protective Measures of Health Professionals of Bangladesh

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Abstract

As part of the worldwide pandemic of SARS-CoV-2 infection, Bangladesh was infected. The first three cases were confirmed by the Institute of Epidemiology Disease Control and Research (IEDCR) in the first week of March 2020. The Bangladeshi government immediately required its citizens to comply with the national lockdown to curb the spread of a virus where everyone keeps themselves safe and protected at home except for medical professionals, who risk treating patients in a hospital. This article explores the situation medical professionals go through during the pandemic. This study used a quantitative method with a cross-sectional survey based on frequently asked questions (FAQ). Primary data were obtained from 200 respondents (doctors, nurses, medical professionals). According to the study, the lack of access and availability of PPE such as Particulate Respirator Masks, face shields, protective clothing, protective gloves, and hand sanitizer/disinfectant as facilities in hospitals causes Generalized Anxiety Disorder, Panic Disorder, Social Phobia, and Post-Stress Disorder Trauma from before. However, a positive correlation was found between lack of supply of protective equipment and increased anxiety, panic disorder, social phobia, etc., among healthcare professionals.

Keywords: COVID-19, Protective Measures, Facilities, Medical Professionals.

Abstrak

Sebagai bagian dari pandemi infeksi SARS-CoV-2 di seluruh dunia, Bangladesh terinfeksi. Tiga kasus pertama dikonfirmasi oleh Institute of Epidemiology Disease Control and Research (IEDCR) pada minggu pertama Maret 2020. Pemerintah Bangladesh segera mewajibkan warganya untuk mematuhi penguncian nasional untuk mengekang penyebaran virus di mana setiap orang menjaga diri aman dan terlindungi di rumah kecuali bagi para profesional medis, yang berisiko merawat pasien di rumah sakit. Artikel ini mengeksplorasi situasi yang dialami para profesional medis selama pandemi. Penelitian ini menggunakan metode kuantitatif dengan survei cross sectional berdasarkan pertanyaan yang sering diajukan (FAQ). Data primer diperoleh dari 200 responden (dokter, perawat, tenaga medis). Menurut penelitian, kurangnya akses dan ketersediaan APD seperti Particulate Respirator Mask, face shield, pakaian pelindung, sarung tangan pelindung, dan hand sanitizer/desinfektan sebagai fasilitas di rumah sakit menyebabkan Generalized Anxiety Disorder, Panic Disorder, Social Phobia, dan Post-Stres Disorder Trauma dari sebelumnya. Namun, korelasi positif ditemukan antara kurangnya pasokan peralatan pelindung dan peningkatan kecemasan, gangguan panik, fobia sosial, dll., di antara para profesional kesehatan.

Kata Kunci: COVID-19, Tindakan Protektif, Fasilitas, Tenaga Medis.

INTRODUCTION

The outbreak of a more contagious disease than Severe Acute Respiratory Syndrome (SARS) was first experienced by Wuhan city of China in early December 2019. It was later officially named 'SARS-CoV-2' by the International Committee on Taxonomy of Viruses (ICTV), and the virus of the latest one has been

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Received: May 1, 2021; In Revised : July 2, 2021; Accepted : July 13, 2021

termed 'COVID-19' (Carlos et al., 2020; Du Toit, 2020; Lu et al., 2020; Zu et al., 2020). Global public health security was brought under threat and challenge, and this disease has already been labeled 'pandemic' as it rapidly and rigorously spread in other countries (Li et al., 2020; Nishiura et al., 2020). However, as a part of the worldwide pandemic of SARS-CoV-2 infection, Bangladesh got infected, and the first three cases were confirmed by the Institute of Epidemiology Disease Control and Research (IEDCR) on the first week of March 2020 (Mahmud et al., 2020). Though the number of infected incidents was comparatively low at the initial stages than other countries, it started to get higher within a month. By the first weeks of May, July, and September, the number of totals confirmed cases in the world was 4748356, 11921616, and 28030286, and the total number of deaths was 315822, 546318, 908054. On the other hand, in Bangladesh the total number of confirmed cases in the first weeks of May, July, and September were 23870, 172134, and 331078, also the total number of deaths was 349, 2190, 1674452 (Bangladesh Peace Observatory, 2020).

Many countries have already realized that Covid-19 put older people and those with underlying physical illnesses and serious mental illnesses in a fatal condition. On the whole, they are the worst sufferer as they have the most possibility of death after being infected by this virus (World Health Organization, 2020b). Again, patients institutionalized in a closed unit in a hospital, whether Covid-19 special or non-Covid-19, are also very vulnerable groups of the population in getting infected with the virus. It has been reported that National Health Center in China revealed in an announcement in the mid of February this year that more than 300 patients with serious mental illness were infected with COVID-19. The identified possible was the lack of caution regarding the COVID-19 outbreak in January and insufficient supplies of protective gear (National Health Commission of the People's Republic of China, 2020).

Moreover, a local psychiatric ward was the hub of the first outbreak of coronavirus in Korea. Very alarmingly, 102 patients out of 103 in the psychiatric ward got infected with the deadly virus, and all tested positive. More sorrowfully to state that among the infected patients in the ward, most of them were age 50 to 60, and all of them died within a week. Where the general mortality rate of the elderly population among the Korean population was only 1%, the covid-19 infection made it higher up to 7%, and this has put a challenge not only medical care and ethics but also psychiatric caregivers (National Health Commission of the People's Republic of China, 2020).

However, while discussing the prominent victim of covid-19, two categories of people come first: community-dwelling people who are elderly and living with a physical or psychological disorder such as schizophrenia; secondly, healthcare professionals directly or indirectly dealing with patients (Kim et al., 2019). The former group of people, patients with severe mental illness, tends to neglect infection prevention due to cognitive decline. This leads to reduced regular activity and an increase of fear of getting infected, and all these works deteriorate their physical health and immunity. The latter group comprises doctors, nurses, medical officers, medical staff, virologists, specialists, medicine specialists, intern doctors, volunteers in the medical profession, and other people directly or indirectly involved with patients or hospitals (Kim et al., 2019). They are at risk of both physical and psychological problems. Mental healthcare professionals were found to run out of energy and attention by concentrating on the treatment and prevention of COVID-19 and thus rendering themselves as well as their patients more vulnerable (Brooks et al., 2020). They are also sometimes the worst sufferer of post-traumatic stress disorder and require mental health supporting strategies because the psychiatric inpatient unit has been considered as a perfect breeding ground for the virus (Brooks et al., 2020; Kim & Su, 2020; Lee et al., 2018; Wang et al., 2020). In a nutshell, the reflection of several studies clearly said that healthcare professionals might evidence depression, fear, guilt, and anger (Kim & Su, 2020).

As mentioned earlier, SARS-CoV-2 or COVID-19 is more transmissible, especially in the incubation or prodromal period 2-4, than SARS, and this places people, particularly healthcare workers, at greater risk (Mahmud et al., 2020). As addressed in a discussion paper a couple of years ago, medical professionals usually had gone through a super elevated level of depression, suicide, and burnout that resulted in a more disastrous situation (Dyrbye et al., 2017). This was the psychological state of medical professionals before COVID-19, which add as an additional catastrophe for the health care workers during COVID-19 as they are found anxious about having not enough protective equipment such as PPE, face masks and shields, hand gloves to protect themselves from being infected with the virus. The shortage of oxygen and ventilator supply, testing kits, ICU beds, equipment sometimes made them bound to withhold care from the dying patients and such deteriorated situation have agonized them (Dyrbye et al., 2017; Mahmud et al., 2020). Many physicians serving at dedicated COVID-19 hospitals of Bangladesh were found experiencing sleep difficulties and insomnia. Resembling the situation during the SARS and H1N1 epidemics, healthcare professionals dealing with COVID19 are either under the same psychological pressure and experiencing high rates of psychiatric morbidity or, more to some extent (Mahmud et al., 2020). Many of them either got isolated from their family members or started sleeping in hospitals and hostels to keep their family members safe. It has been sound that they sometimes feel guilty for not staying beside their families during the crisis rather than keeping aloof from them (Zhang et al., 2020). This situation seems not uncommon in epidemics. All those pushed some of them to suffer from psychological trauma, while some are getting infected and died while providing the treatment by fighting against the pandemic. This scenario is more or less common in every country, but the situation is even worse in Bangladesh. An article published recently in a popular daily revealed that a total of 7995 doctors, medical and health officers were infected with coronavirus while serving the people of this country (Bangla Tribune, 2020).

As a whole, the health workers and professionals are at greater risk and overburdened with workloads and a moral dilemma. Before making any effective approach to ease their condition and working environment, it is critical to know about their specific sources and level of anxiety, fear, and feeling of edge (Shanafelt et al., 2020). This study takes anxiety through four of its types, are Generalized Anxiety Disorder, Panic Disorder, Social Phobia, and Post Traumatic Stress Disorder. It employed the GAD-7 scale to screen initial care and mental health setting and the range and severity of symptoms. Regarding disorders/cutoffs, this scale is 70-90% sensitive and 80-90% specific and. A higher score in GAD-7 shows the correlation between disability and functional impairment.

Additionally, protective measures refer to the availability or accessibility of personal protective equipment, according to WHO's a global standard. We followed the technical specifications for PPE specific for COVID-19 (*Personal Protective Equipment for COVID-19*, n.d.). This concludes Particulate Respirators Masks, face shields, Protective gowns, Protective gloves, Hand Sanitizer/disinfectants. Furthermore, health professionals are the front line professionals from the following occupations - Doctor, Intern, Nurse, Health workers, Medical Technician and Voluntary workers.

Pay attention to aspects of anxiety and provide an overview of the mental condition of medical personnel in dealing with the pandemic, and the existing solutions are still lacking and have not had a significant-good impact. For this reason, this study aims to evaluate the level of psychological impacts such as worries, anxiety, fear of health workers and find possible solutions. In addition, it is very important to understand and recognize the psychological status of medical personnel.

RESEARCH METHOD

This research had used the quantitative research method (Apuke, 2017).

Setting and Population

A cross-sectional survey was conducted in the timeline of June 09 to June 30, 2020, after the declaration of lockdown and the COVID-19 outbreak peak period in Bangladesh. The researchers collected data from health professionals (doctors, nurses, interns, medical technologists, hospital staff, public health workers) who were actively involved with COVID-19 affected patients for this study. All the health workers, male and female, or any other gender perspective with 20 years or more and were willing to participate in this study regardless of the COVID-19 outbreak were included in this study. Respondents who did not meet the prior mentioned inclusion criteria were excluded from this study.

Sample Size

The survey was conducted in a convenient selection of health workers in Bangladesh. There was no restriction on the number of respondents. Therefore, the researchers collected data from 200 respondents. However, to minimize the error, the sample size taken for this study was 220 participants for each selected country.

Outcome Measures

This study observed the level of anxiety and risk exposure and protective measures toward the prevention of COVID-19 through geographic location, age, gender, work station, income, etc., as explanatory units among the health workers of Bangladesh.

Study Tools

Because literature was scarce on new coronaviruses, a standardized (structured and semi-structured) questionnaire was created and used for this research. The idea of the variables of the questionnaire was based on Frequently asked questions (FAQ) found on the Centers for Disease Control (CDC), WHO, Institute of Epidemiology Disease Control and Research (IEDCR), and National Institute of Mental Health official website (Institute of Epidemiology, 2020; National Institute of Mental Health, 2019; World Health Organization, 2019, 2020a). Most of the questions were multiple-choice, whereas some were open-ended to gain insights into the participants' risks, causes of anxiety, and measures for protection toward novel coronavirus. A pilot survey was conducted with 20 individuals to ensure the questions elicits to respond and database management. Due to critical conditions and social distancing, it wasn't feasible to implement a community-based national survey; thus, it was decided to collect data online through a google form. The self-reported survey questionnaire was divided into two parts. The first part was designed to attain background information, including socio-demographic information (age, gender, income, work station, and professional types). The second part consisted of GAD-7 questions to measure their level of anxiety. The final part accounted for their protective measures to fight and save themselves and their family. The questionnaire was developed in English but subsequently translated into Bangla for easy understanding, and it was pre-tested to ensure the original meaning.

Data collection and analysis

Data for this study were collected using a convenience sampling method (also known as the availability method) and analyzed through the statistical software SPSS version 20.0. All the categorical variables were represented as percentages and frequencies.

Data were collected on preventive facilities provided and used by the respondents. There were five specific questions with two possible responses. Based on the answers, a scale was formed to measure the high or low level of supplies. The scale ranged between 0-5. A respondent getting all the facilities would obtain five and another one getting no facilities will obtain 0. Thus the scale was divided into two levels. Obtaining a score between 0-2 indicated a low level of supply of facilities and scoring 3-5 indicated a high supply of facilities.

The assessment of anxiety was calculated through Generalized Anxiety Disorder (GAD-7) scale-7 items. It is a self-reported scale and demonstrated its validity and reliability (Löwe et al., 2008; Spitzer et al., 2006). The scale produced a GAD scores summary that ranged from 0 (at the lowest point) to 14 (at the peak point). This study identified respondents with a moderate or high levels of anxiety if they scored seven or more. Respondents scoring between 0-6 were recognized as having a low levels of stress.

Chi-square (χ^2 The) test was employed to understand the association between the variables of anxiety and risks and the bivariate analysis used for explanatory variables. The odds ratio has been tested for a most items of awareness and preparedness. $P \leq 0.05$ was considered as the significant statistical difference.

Ethical Approval

The protocol and procedures of informed consent for this study were granted by "Dhaka University Research Society Review and Ethics Committee, University of Dhaka" before the commencement of the survey. Since the data was collected electronically, an informed consent form was developed on the first page of the questionnaire, where the participants confirmed their willingness by replying Yes/NO. After receiving 'Yes', the participants were directed to the questionnaire form.

RESULT AND DISCUSSION

Result

From June 09 to June 30, 227 health workers were invited to participate in a self-administrative questionnaire in which 202 responses were received where Direct Practitioners (Doctors, Interns, and Nurses) and Indirect Practitioner (Health workers, Medical Technicians, and Voluntary workers) were included (**Table 1**). The questionnaire included two modules, the access to personal protective equipment provided and the level of anxiety.

Demographic Characteristics

Demographics' versatility and characteristics are seen in Table 1. Most of the participants were male (63.4%), work in urban health centers, Laboratories, and Hospitals or clinics. The highest (85.6%) age group is 20-40 years old. The majority of the participants (54.5%) have the lowest range of income – (less than 20,000 BDT). In the participants, most of them (74.3 %) are direct practitioners, including the highest (36.1%) occupations found are doctors (**Table 1**). Most of the workers were from Non-Govt.

organizations (59.4%). The majority (69.3%) had no physiological complications, 8.4% have Respiratory disease, and 13.9% have Diabetes, High/Low Blood Pressure, Cardiac/Heart disease (**Table 1**).

Table 1. Demographics' versatility and characteristics

Characteristics		N (%)
Gender	Male	128(63.4)
	Female	74(36.6)
Location	Rural	33(16.3)
	Urban	169(83.7)
Age	20-40	173(85.6)
	41-60	29(14.4)
Income	Less than 20,000 BDT	110(54.5)
	20,000-40,000 BDT	63(31.2)
	40,000 BDT or more	29(14.4)
Type of job	Direct Practitioner	150(74.3)
	• Doctor	73(36.1)
	• Intern	49(24.3)
	• Nurse	28(13.9)
	Indirect Practitioner	52(25.7)
	• Health workers	10(5.0)
	• Medical Technician	17(8.4)
	• Voluntary workers	25(12.4)
	Workplace	Govt. Organization
Non-Govt. organizations		120(59.4)
• Diagnostic Laboratory		12(5.9)
• Non Govt Hospital/clinic		94(46.5)
• Voluntary Health activity center		14(5.9)
Physiological Complications	Diseased	62(30.7)
	• Allergy (Dust, Cold, Food, etc.)	17(8.4)
	• Asthma or Respiratory Problem	17(8.4)
	• Non-communicable Disease (Diabetes, High Blood Pressure, Cardiac disease, etc.)	28(13.9)
	Non-Diseased	140(69.3)

Source: processed by researchers 2021

Facilities

Considerable access to protective equipment (Particulate respirators, Masks, face shields, Protective gowns, Protective gloves, Hand Sanitizer/disinfectants) was obtained by 67.8% of the total participants—more people from Urban (75.7%) and Non-govt. Health professions (84.2%) got a higher supply while the less rural (27.3%) and Govt. health professionals (43.9%) receive a good supply of protective equipment.

Age, Income level, Job type, and physiological condition had a significant association with provided facilities (**Table 2**). Gender and type of job showed no significant association with facilities. Nearly all the people (100%) from 41-60 years of age got high supply whereas 62.8% of 20-40 years of age got a high supply.

More people from the **least income group were observed to have more facilities** (82.7%). Around half of the middle (46.0%) and the highest (58.6%) income groups had access to a high level of supplies. Around half the diseased people (**46.8%**) had access to a good supply, while more non-diseased people (**77.1%**) had a good PPE supply.

Table 2. Association between the demographic characteristics and overall facility supply

Characteristics		Low supply	High supply	Chi-square	OR (95%CI)
Gender	Male	39(30.5)	89(69.5)	X ² =0.468 P=0.494	0.81(0.44,1.49)
	Female	26(35.1)	48(64.9)		
Location	Rural	24(72.7)	9(27.3)	X ² =29.72 P=0.00*	8.33(3.58,19.34)
	Urban	41(24.3)	128(75.7)		
Age	20-40	65(37.6)	108(62.8)	X ² =16.07 P=0.00*	-
	41-60	0(0.0)	29(100)		
Income	Less than 20K	19(17.3)	91(82.7)	X ² =26.03 P=0.00*	-
	20K-40K	34(54.0)	29(46.0)		
	40k or more	12(41.4)	17(58.6)		
Type of job	Direct Practitioner	51(34.0)	99(66.0)	X ² =0.886; p= 0.347	1.398 (0.70, 2.82)
	Indirect Practitioner	14(26.9)	38(73.1)		
Workplace	Govt. organizations	46(56.1)	36(43.9)	X ² =36.187 P=0.00*	6.792 (3.52,13.09)
	Non-Govt. organizations	19(15.8)	101(84.2)		
Physical Complications	Diseased	33(53.2)	29(46.8)	X ² =18.15 P=0.00*	3.841 (2.03,7.25)
	Non-Diseased	32(22.9)	108(77.1)		

*SIGNIFICANCE LEVEL P<0.05

Source: processed by researchers 2021

Anxiety

In 202 participants, a total of 58.4% (n=118) professionals were shown to have moderate to severe levels of anxiety. Gender, Age, Type of job, Income level, and Physical condition have a significant association with anxiety scores (**Table 3**).

66.4% of males and 44.6% of females were suffering from high levels of stress. The difference in stress levels between males and females was found to be significant (p<0.05), with an odds ratio of 0.407 (95% CI 0.226–0.732). About 57.6%-58.6% of participants, regardless of their location, had high levels. Location-wise difference in stress was not significant with an odds ratio of 1.042 (95% CI 0.49, 2.218).

Also, 86.2% of people with age above 40 had a high level of stress, and it was only 53.8% among people aged below 40 and this difference in stress is significant (p<0.05). The odds of being stressed with increasing age was 5.376 (95% CI 1.795, 16.103). The highest and the lowest level income groups were exposed to severe anxiety more than the middle-income group (respectively 69.0% and 63.6% versus 44.4%), indicating a significant association. Workplaces had no significant association over anxiety, but the physiological conditions had a significant association – more diseased people were vulnerable to severe anxiety, where less non-diseased people were facing severe anxiety (64.3% versus 45.2%)

Almost all the Indirect Practitioners were experiencing severe anxiety (92.3%), where nearly half of the total direct practitioners were undergoing severe anxiety levels (46.7%), which is highly significant (p<0.05). The odds value for these groups is 13.714 (95% CI 4.708, 39.952).

Table 3. Association between the demographic characteristics and overall anxiety level

Characteristics		Low level of stress	High level of stress	Chi-square	OR (95%CI)
Gender	Male	43(33.6)	85(66.4)	X ² =9.184 P=.002*	0.407(0.226, 0.732)
	Female	41(55.4)	33(44.6)		
Location	Rural	14(42.4)	19(57.6)	X ² =0.011 P=0.915	1.042 (0.49, 2.218)
	Urban	70(41.4)	99(58.6)		
Age	20-40	80(46.2)	93(53.8)	X ² =10.766 P=0.001*	5.376 (1.795,16.103)
	41-60	4(13.8)	25(86.2)		
Income	Less than 20K	40(36.4)	70(63.6)	X ² =7.625 P=0.022*	-
	20K-40K	35(55.6)	28(44.4)		
	40k or more	9(31.0)	20(69.0)		
Type of job	Direct Practitioner	80(53.3)	70(46.7)	X ² =33.113 p= 0.00*	13.714 (4.708,39.952)
	Indirect Practitioner	4(7.7)	48(92.3)		
Workplace	Govt. organizations	39(47.6)	43(52.4)	X ² =2.030 P=0.154	1.512 (0.855, 2.672)
	Non-Govt. organizations	45(37.5)	75(62.5)		
Physical Complications	Diseased	34(54.9)	28(45.2)	X ² =6.47 P=0.011*	2.186 (1.190, 4.015)
	Non-Diseased	50(35.7)	90(64.3)		

*SIGNIFICANCE LEVEL P<0.05

Source: processed by researchers 2021

Discussion

In Bangladesh, the health sector faced so many challenges and difficulties like the other developing countries. Doctors, Nurses, Health Workers, Medical Technicians, and Volunteers are at risk of contracting SARS-CoV-2 due to a lack of supplies and a shortage of protective equipment in the United States (Jain, 2020). They also face psychological stress and anxiety due to the rapid increase in patients with Covid-19-like symptoms. This study was conducted to identify the overall PPE facilities for different health professionals and measure their generalized anxiety levels.

The results showed more than half of the health professionals were experiencing moderate to severe levels of anxiety. Still, surprisingly more indirect practitioners are exposed to a high level of anxiety than the direct practitioners (Table -3). However, most indirect practicing groups were provided with higher facilities than the directly practicing groups (Table 2). Direct practitioners are more accustomed to varieties of health risks which uplift their ability of stress management. Indirect practitioners are comparatively less accustomed to such situations, which might be the underlying reason for their high anxiety level. This anxiety level during the covid-19 pandemic is much higher than the previous normal era (Mamun & Griffiths, 2020). Even Sojni Begum, a middle-aged hospital staff, was found dead by suicide hanging in the hospital ward's bathroom grill due to the severe fear from the suspect of being affected by Covid-19 (Mamun & Griffiths, 2020). In 2019, 11% of the medical residents were showed anxiety disorders (Sadiq et al., 2019). Also, the rate was lower in medical students (Eva et al., 2015). Anxiety level was high among aged people. This might be since the mortality rate due to COVID is high among old age

people. Low-income groups were found to receive more facilities. In the low-income groups, large numbers of indirect health practitioners tend to receive these necessary facilities by their respective organizations with minimal or no cost. This might be the underlying reason for the high availability of preventive facilities among them.

This study also collected data about the types of protection facilities that the health professionals were provided (*WHO / Personal Protective Equipment for COVID-19*, n.d.). The result shows that the less rural and Govt. health professionals get a good supply of protective equipment, while a large proportion of urban and non-govt. Health practitioners receive a sufficient supply of PPE. People of the rural community are less conscious about the protection facilities needed to minimize the risk of COVID transmission. Transportation facilities are also disrupted due to lockdown, which can also contribute to this lack of facilities in the rural community. Low access to PPE among rural hospitals and clinics has been found in several similar studies (Darkwa et al., 2015). The poor reach of PPE to the rural areas is leaving the health practitioners in a high-risk environment. (Darkwa et al., 2015). In non-government organizations, health professionals are getting more protection facilities due to the available funds in those organizations. Comparatively, in government hospitals, limited funds are available to provide necessary protection facilities to their many employees. The government is taking several necessary steps for risk management throughout the country.

This study tried to cover aspects of the current situation, the availability of preventive measures, and the anxiety the health practitioners are going through. These are the major strengths of the study. There are several limitations to this study. The population size was small due to the less interest of health professionals to participate in the survey. Also, the GAD-7 scale was used for simplicity of data collection (Ahmed et al., 2020; Cao et al., 2020) instead of applying a more complex and detailed scale for measuring anxiety levels more accurately (Ahmed et al., 2020; Nikčević & Spada, 2020; Taylor et al., 2020). However, the use of social media for communication might have influenced the findings. Also, there was a delay in collecting data and analyzing those that might have lessened the validity and generalization of results. However, these findings address the vulnerable mental conditions of health professionals and suggest a way out from that challenge by increasing PPE facilities and providing counseling for stress relief.

CONCLUSION

A higher prevalence of psychological symptoms - sleeping difficulties, anxiety, fear, insomnia, guilt, anger, depression, was found among healthcare professionals serving during COVID-19. Front-line medical professionals who dealt directly with COVID-19 patients, such as respiratory, emergency, ICU, and infectious disease departments, were more likely to suffer from anxiety, fear, and depression than non-clinical staff likely to be infected by the virus by COVID patients. Moreover, the level of satisfaction of healthcare professionals regarding the safety equipment facilities provided by the hospital was quite marginal. They require health protection and adequate working conditions, e.g., provision of necessary and ample medical protective equipment, the arrangement of proper physical and psychological rest, along recovery programs aimed at boosting their physical and psychological well-being. In conclusion, it is needless to say about the willingness and commitment shown by the doctors, medical staff, healthcare professionals, and volunteers working in the medical and health sectors for the patients in this crisis. They risked their lives and their families, deprived themselves of family care and protection, and vice versa, sacrificed a lot for the people in need of treatment and care. A genuine expression of gratitude to the healthcare professionals should be made and ensure a safe, sound, and secured ambiance to work

Furthermore, reinforcing honor and compassion towards the healthcare professional may help them overcome empathetic distress and fear to everyday fight under challenging clinical circumstances.

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