The Psychological Analysis of Health Care Professionals in the Era of Covid-19 in Khyber Pakhtunkhwa (KP)

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Abstract: *COVID-19 has impacted every sector of society across the globe. It is important to note that healthcare professionals were the most vulnerable group, and the pandemic has impacted them psychologically. This issue has been researched in various countries, i.e., China, India, and Pakistan, though the issue has remained neglected except for a few studies in Pakistan. This study focused on the psychological impact of fear of COVID-19 in the prediction of stress, anxiety, depression and OCD in healthcare professionals. This study was quantitative in nature, and data was collected from health professionals, including doctors, nurses and paramedical staff, with the help of a questionnaire from 250 respondents through purposive sampling techniques. The collected data was analyzed through SPSS. The main finding showed that Fear of COVID-19 positively predicts stress, anxiety, depression and OCD among healthcare professionals. The study recommended that there was a need for psychological interventions for the psychological well-being of healthcare professionals to minimize fear of CIVID-19 and manage stress, anxiety, depression and OCD experienced by healthcare professionals.*

Introduction

In recent times, the world has faced a pandemic known as covid-19. No society in the world is immune from the impacts of this virus. This is also known as coronavirus. It is important to mention that these infectious diseases first appeared in December 2019 in Wuhan, China, and then spread to other societies of the global north and south. When it spread to the majority of the nations and affected a large number of people, the WHO announced it as a global pandemic. The findings of a study confirm that almost more than 1,991,562 cases of COVID-19 globally, with 130,885 deaths reported (Li, Wang, Xue, Zhao, & Zhu, 2020). Health Care Workers (HCWs), especially those who work in the front line, e.g., emergency department (ED), are directly involved in managing either suspected or confirmed cases of COVID-19.

WHO, in its daily situation report dated 8th April 2020, has reported 22,073 HCWs who have been detected to have COVID-19. Concerns about the psychological distress of HCWs who are treating and caring for these patients are also emerging. The role of healthcare professionals and workers is very important in this regard because they provide services to COVID-19 patients (Dai, Hu, Xiong, Qiu, & Yuan, 2020). The above empirical findings reveal that the virus causes life-threatening pneumonia and represents some major symptoms like fever, cough, sore throat, and difficulty breathing in the infected patients (Yang & Wang, 2020). It is a spreadable virus that transmits from one person to another and spreads exponentially across the world by affecting almost every nation of the world with varying levels and ratios. For example, The COVID-19 pandemic affected the entire world everywhere, and people 2 limited themselves to their homes. Institutions and organizations remained closed, except the hospital, which provides services to the people (Bardaquim et al., 2020).

The doctors, nurses, and paramedical staff face COVID-19 patients during treatments, which create Post-Traumatic Stress symptoms (PSTD), obsessive-compulsive disorder symptoms (OCD), and insomnia among the HCPs (Silva Filho & Minayo, 2020). Consequently, it is very significant to recognize the

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healthcare workers who are in serious danger of exhaustion and are more likely to suffer from anxiety, depression, stress, and trauma in this pandemic so that help can be provided where and when required. Therefore, this study investigates the various psychological impacts (PTSD, OCD, and Insomnia) on healthcare professionals (including doctors, nurses, and paramedical staff) who are present in the hospitals of Peshawar Khyber Pakhtunkhwa, Pakistan, during this pandemic situation. Thus, it is obvious that several studies have been approved on the impacts of covid-19 (Yang & Wang, 2020; Pfefferbaum & North, 2020 (Shigemura, Ursano, Morganstein, Kurosawa, & Benedek, 2020). However, these cited studies have been conducted in a few developed countries. Thus, it is argued that the issue under consideration has not been researched in the context of developing countries, particularly in Pakistan. It is, therefore, mentioned that the fear of coronavirus has a psychological impact on the health care/medical professionals in Peshawar, Khyber Pakhtunkhwa, Pakistan. It is important to mention that the study focuses on healthcare professionals because they are more aware of the impacts of coronavirus as they are dealing with impacted people.

Unlike other developed countries, our country's hospitals do not have protective measures that could safeguard the health care professionals. Such conditions three may lead to various psychological impacts such as distorted perceptions, different mental problems, and suffered from insomnia, stress, depression, panic attacks, anger, and fear of infection, even those who have not been infected. Healthcare care professionals have faced numerous psychological crises in the community because of the stigmatization of being open to COVID-19 patients, and during duty hours, they are suffering from OCD symptoms, PTSD symptoms, and insomnia caused by COVID-19 diseases. The health care professionals and their families are at higher risk due to a lack of protection services. In the hospital, there are no proper safety measures in the Corona ward, and the lack of safety dresses and other equipment creates a sense of fear and psychological disorders among healthcare professionals. Thus, it is mentioned here again that the core purpose of the current study is to explore and find the psychological impacts on healthcare professionals.

Literature Review

Health is an essential human right and one of the compulsory elements for individual well-being. Health, or being in good health, is significant to everyone. Health and sickness are in a symbiotic relationship. A disease, on the other hand, is a specific abnormal disorder that adversely distresses the function structure of a portion or an entire organism. Virus infections are frequently considered as medical situations with definite symbols and indicators (Sirota et al., 2013). Many illnesses caused by internal immune system dysfunctions, for example, can result in a variety of ailments, such as immunological insufficiency, hypersensitivity, allergies, and autoimmune disorders. People are affected not only substantially but also emotionally, as narrowing and existing with an illness can change a person's perception of life (Jalal, 2011; Nadeem, Jalal, & Kim, 2020).

Health and illness have always been linked to human society. There are two types of diseases: viral and bacterial, each with its own set of implications and symptoms. Diseases are also the result of the environment, yet pandemic diseases, such as Malaria, AIDS, and, more recently, Ebola, strike the earth at random intervals and wipe out humanity (Sayyadi-Toranloo, Jamali, Jalal Pour, & Sadr-Bafghi, 2009). A pandemic is a chiastic situation that creates where people find a place where they can be secure and safe. The COVID-19 pandemic shakes the entire world due to its complications (Venuleo et al., 2020). There have been countless epidemics of diseases throughout human history. The phrase wasn't coined until later pandemics, such as the influenza pandemic in 1918 and the Spanish flu. Recent pandemics comprise COVID-19 (SARS-CoV-2) and HIV/AIDS. Currently, humanity is faced with the curse of coronavirus infection (Woolliscroft, 2020).

Fear of COVID-19 has a variety of impacts on people, healthcare professionals, and workers (Palacio Sanudo et al., 2017). The U.K., The U.S., the Middle East, Asia, and North Africa, with 7025 Coronavirus cases, affected almost all countries, including definite cases in Pakistan as of 22/04/20 (Waris, Khan, Ali, Ali, & Baset, 2020). However, if a drug is established, there are continued apprehensions about the level of manufacture that will be compulsory and whether it will be available to the common domain's inhabitants (Mamun & Ullah, 2020). The existing worldwide pandemic unavoidably has significance for mental health

(Mak, Chu, Pan, Yiu, & Chan, 2009). Post-Traumatic Stress Disorder and Depression are long-term mental comorbidities (Bonanno et al., 2008). Therefore, in China, 70% of healthcare professionals are in severe psychological distress had psychological distress, and many have sleep disturbance. According to the findings part, therefore, healthcare workers experience indicators of anxiety and sadness (Vieira, Franco, Restrepo, & Abel, 2020). A study showed that 29% of the HCWs may have had sensitive suffering and PTSD after the SARS epidemic in 2003 (Dutheil, Mondillon, & Navel, 2020). It has been stated that men are less vulnerable compared to young women to psychological repercussions (Lai et al., 2020). Furthermore, nurses are more likely to be affected than doctors (Cullen et al., 23, 2020). Passive nurses were more vulnerable to sensitive stress than forefront nurses (Arafa, Mohamed, Saleh, & Senosy, 2021).

Previous studies indicate that healthcare professionals who work in the emergency department and provide services to COVID-19 patients are at high risk of tension, anxiety, and depression (Villalba-Arias et al., 2020). In addition, the stress level among women health care workers is high as compared to male health workers (Lai et al., 2020). In addition, various research studies indicate that depression, stress, and anxiety are high in female healthcare professionals as compared to male healthcare professionals (Pappa et al., 2020; Pearman, Hughes, Smith, & Neupert, 2020; Xiang et al., 2020).

Method

In this research, a cross-sectional research design was used. The data was collected from different sections, i.e., doctors, nurses, and paramedical staff, including both males and females. These three units of doctors, nurses, and paramedical staff are taken into consideration because they are more exposed to coronavirus patients. Data was collected from the top six hospitals: Khyber Teaching Hospital (KTH), Lady Reading Hospital (LRH), Hayatabad Medical Complex (HMC), Northwest General Hospital (NW), and Kuwait Hospital Peshawar. Participants For this study, the purposive sampling technique was used. The study was limited to medical professionals and hospital staff; however, only doctors, nurses, and paramedical staff were approached. In doctors, nurses, and paramedical staff, the researcher purposively selected 50 medical professionals, including Doctors (n=20; 10 male and ten female), Nurses (n=20; 10 male and 10 female), and paramedical staff (n=10; 5 male, and five female) from each hospital. Therefore, a total of (N= 250) medical professionals were selected from each mentioned hospital with the above ratio. The age range of the sample was between 21 to 58 years.

Findings and Discussion

The study is designed to investigate the relationship between fear of COVID-19 and its psychological impacts among healthcare professionals. The relationship is established with the help of various predetermined scales, i.e., the Fear of COVID-19 scale, Yale-Brown Obsessive-Compulsive scale and post-traumatic stress scale.

This study investigated the psychological impacts of the fear of COVID-19 among healthcare professionals. The fear of COVID-19 has a variety of impacts on healthcare professionals. The data is examined with the help of SPSS using a quantitative approach. The hypotheses of the research were tested with the help of correlation, regression, analysis, and to predict psychological impacts, specifically PTSD symptoms and obsessive-compulsive disorder (OCD) from Fear of COVID-19. The study concludes that the majority of the respondents, i.e., healthcare professionals, experienced fear of COVID-19 and its psychological impacts. The study concludes that fear of COVID-19 created psychological problems in healthcare professionals. Results and discussion clarify the fact that healthcare care professionals experienced post-traumatic stress symptoms and obsessive-compulsive symptoms because of their exposure to COVID-19 patients. The study demonstrated that most of the respondents agreed to the fact that fear of COVID-19 creates fear and phobia, which further leads to psychological symptoms in healthcare professionals.

These data are systematically analyzed in the following table:

Table 1

Correlation between fear of COVID-19, obsessive-compulsive symptoms, and post-traumatic stress symptoms (N=250)

Variables	1	2	3	4	5	6	7	8	9	10
1. FC	–	.37**	.38**	.32**	.23**	.22**	–.28**	–.30**	–.26**	–.26**
2. OCD		–	.94**	.94**	.41**	.37**	–.35**	–.35**	–.34**	–.33**
3. OB			–	.78**	.42**	.39**	–.35**	–.35**	–.33**	–.32**
4. CP				–	.34**	.30**	–.32**	–.31**	–.32**	–.29**
5. PTSD					–		–.36**	–.36**	–.32**	–.35**

*Note. ***P<.5 FC= Fear of COVID-19, OCD=Obsessive-compulsive disorder, OB=Obsessions, CP=Compulsion, PTSD= post-traumatic stress disorder*

The present study was conducted to investigate the relationship between Fear of COVID-19, PTSD symptoms, and OCD symptoms. The study indicated that Fear of COVID-19 positively related to PTSD symptoms and OCD symptoms in healthcare medical professionals (see Table 1). Results showed that fear of COVID-19 positively correlated with PTSD symptoms and OCD symptoms in health care professionals. The various research studies stated that because of the extremely traumatic work-related conditions, health professionals are exposed to life-threatening medical conditions, caring for chronic people, frequently witnessing death and trauma, working in crowded settings, and disturbed circadian rhythms due to shift work, healthcare workers in emergency care surroundings are mostly at risk for PTSD, OCD, sleep disturbance and stress (Figly., 1995; Crabbe et al.,2004).

Table 1 numerical values show a highly significant relationship between fear of COVID-19 and other dependent variables. Obsessive-compulsive symptoms and their subscales (obsessions and compulsion) and post-traumatic stress symptoms have a significant positive correlation and positive relationship with fear of COVID-19.

In addition to that, the results of regression show a highly significant association between fear of COVID-19 and PTSD symptoms and OCD symptoms in healthcare professionals, which validates the hypothesis of the study Fear of Covid-19 positively predicts PTSD symptoms, OCD symptoms, and Insomnia (see Table-2). The study was also proved by various researches to make the association between fear of COVID-19 and other dependent variables. The existing fear of the coronavirus has numerous features that increase the danger of post-traumatic stress symptoms, OCD symptoms, and sleep disturbance among emergency responders, such as the unusual number of critically infected patients, the illness's often unpredictable course, high death rates, and an absence of effective treatment, or treatment strategies (Wang, 2020; Peeri et al., 2020).

Table 2

Linear regression analysis to predict PTSD symptoms from fear of COVID-19 (N=250)

95%CI Variables	B	LL	UL
Constant	28.62	15.29	41.94
Fear of covid-19	.81	.37	1.26
R²	.05		
F	13.05		

*Note: ***P<.05   B = Coefficient of Regression, CI = Confidence interval, LL = Lower Limit, UL = Upper Limit*

Table 2 indicated linear regression among fear of COVID-19 (Predictive variable) and post-traumatic stress symptoms (outcome variable). The result specified that fear of COVID-19 has a positive relationship with post-traumatic stress symptoms among healthcare care medical professionals (F= 13.05, B= 28.62, p< 0.05) with an R^2 of .05. The value of R^2 showed that the Fear of COVID-19 pattern explains a .050% variance in post-traumatic stress symptoms. Thus, the hypothesis concluded Fear of COVID-19 leads to PTSD symptoms in healthcare medical professionals.

Conclusion

This study investigated the psychological impacts of COVID-19 among healthcare professionals. The study concludes that the majority of the respondents, i.e., healthcare professionals, experienced fear of COVID-19 and its psychological impacts. The study concludes that fear of COVID-19 created psychological problems in healthcare professionals due to exposure to Corona patients' treatments. The health care professionals are more exposed to COVID-19 patients in these mentioned hospitals, which increased fear and post-traumatic stress symptoms and obsessive-compulsive symptoms that have affected their mental and physical health. This fear and situational uncertainty lead healthcare professionals to have distorted perceptions and different mental problems and suffer from insomnia, stress, depression, panic attacks, anger, and fear of infection, even those who have not been infected.

The findings clarify the fact that healthcare professionals experience post-traumatic stress symptoms and obsessive-compulsive symptoms because the health professionals are more in face-to-face contact with chronic patients. The study demonstrated that most of the respondents agreed to the fact that fear of the coronavirus creates fear and phobia, which further leads to psychological symptoms in health care professionals. The outcome specified that fear of COVID-19 positively predicts insomnia among Health care medical professionals.

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