



Impact of Covid-19 on employee's mental health and performance in the public sector health institutes of Pakistan

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Abstract- The aim of this study is to evaluate the impact of Covid-19 pandemic, especially its second wave on the healthcare professional's mental wellbeing of and performances in the public sector healthcare institutions of Pakistan. A cross-sectional approach with quantitative methodology and deductive reasoning has been adopted to collect the responses from the participants. For purpose of collecting responses, a final sample of 120 employees has been selected from the major public sector institutions of Mardan and Peshawar regions of KPK. Responses from the participants were collected through Dass-21, which is a depression, anxiety and stress scale to ascertain the prevailing level of these three factors among the healthcare professionals and how they affect the psychological and mental wellbeing of healthcare professionals. Moreover, for measuring its corresponding implications on the employee's performance a self-administered questionnaire has been adapted. The findings of the study suggest that depression, stress and anxiety were highly prevalent among the healthcare workers during the time of second wave of the Covid-19 pandemic; however, among the three stress shows relatively less impact on employee's mental health and underlying performances. The findings of the given study are found highly consistent with the evaluations carried out in the past. Furthermore, the study highlights certain limitations and also provided some recommendations to the future researchers to form more informed judgements and findings in the future.

Keywords: Anxiety, depression, Covid-19, Healthcare professionals, Stress and Mental wellbeing.

I. INTRODUCTION

Covid-19 also called coronavirus was first diagnosed in the late 2019 in Wuhan city of China, which has later encircled the entire world. It was declared as a pandemic by the World Health Organization (WHO) and to control the situation due to its widespread transmission, lockdown, isolation, and social distancing was suggested. Unfortunately, it is not possible for the healthcare providers to practice the suggested standard procedures and they were left exposed to cope with the situation to ensure safety of general public. In countries like Pakistan where the healthcare infrastructure is not up to the mark like developed countries, the pandemic put increased pressure on the healthcare providers to treat the infected patients as well as to control the degree of further transmission. It has greatly affected the work patterns of the health care professionals in terms of their on-job roles and responsibilities, their social life and their coordination with friends and family. Compared to developed countries, covid-19 pandemic has affected developing countries, such as Pakistan, in a more intense manner because of the lack of sufficient resources and lack of understanding among people about the seriousness of the situation. Started as a flu, this pandemic has reached to 198 countries and as of 13th January, 92,119, 662 cases are reported across the world including 1,972, 689 deaths ("COVID-19 situation update worldwide, as of week 1 2021", 2021). Although, Pandemics has always proven critical for the society because of its negative impact on every aspect of life, however, it has been observed that its impact on healthcare professional is far more severe. It is because healthcare professionals have to provide healthcare services to severely ill patients as well as they have to make sure that the diseases do not impact them and their family and friends. Additionally, the healthcare professionals have to make sure that people infected from the pandemic virus do not affect other patients who are already taking treatments for various health problems.

The ongoing situation of covid-19 has exerted pressure on healthcare professionals in Pakistan in multiple ways which resulted in significant mental distress and decreased performance and productivity. First, the rapid spread of the pandemic has completely changed the work environment such as the redeployment of new roles for some staff members, increased working hours, the increased dependence on digital platform to provide healthcare to remote patients, the demand for increased degree of safety measures (special suits, wearing mask and gloves etc.), the decreased level of coordination between employees at workplace, and a high demand for healthcare services with limited resources. Secondly, the high risk of getting infected from

the patients has increased the fear and anxiety among healthcare professionals and demanded for the need for isolation from family and friends for safety purposes (Cabarkapa et al., 2020). On one hand, it influenced their personal and social life but on the other hand it made them reluctant to perform their duties at their full potential. Furthermore, the unavailability of required safety measures, lack of healthcare resources and the lack of cooperation from general public has multiplied the pressure on healthcare professionals because the non-serious attitude of general public towards the precautionary measures has infected many doctors. Some of them have lost their lives while some others ended up in transferring the infection to their spouses, parents and friend. Such incidents further increased the anxiety and stress among healthcare professionals and affected their mental health and performance.

The unavailability of a proper treatment or vaccine has also created various challenges and added up to the numbers of stressors for healthcare professionals in Pakistan. Evidence from previous outbreaks has proved that the challenges associated with pandemics have remarkable short- and long-term implications on mental wellbeing of the healthcare professionals. However, unlike previous pandemics, Covid-19 has completed its one year and returned with a stronger second wave. The given study aims to evaluate the possible implications of Covid-19 on the mental health and wellbeing of healthcare professionals to understand their plans and policies towards the second wave of the pandemic. During the first wave of Covid-19, many healthcare professionals became infected, some of them lost their lives while some got a recovery after getting quarantined for some time. This caused shortage of healthcare professionals to provide treatments to the infected patients and increased their concerns about the wellbeing of their family and friends for which they further altered their social engagements. Previous studies on pandemic outbreaks mostly tried to evaluate risks to healthcare workers during the pandemic, however, the given study attempts to answer how does the Covid-19 second wave affects the mental health and performance of healthcare workers in public sector healthcare institutes of Pakistan?

Moreover, in order to address the mentioned question and accomplish the aims of this study, the following objectives have been outlined.

- To evaluate the relationship between emotional exhaustion and medical errors.
- To evaluate the ability of healthcare professionals to cope with stressors.
- To evaluate the relationship of the pressure posed by pandemics on the mental health and productivity of healthcare professionals.

II. LITERATURE REVIEW

1. Impact of Epidemics on psychological wellbeing of healthcare professionals

Pandemic or epidemics always pose great challenges for the health care sectors because of its large-scale impact and an ability to widespread easily in a short time. A pandemic is a worldwide spread of an unknown or new disease that spread in several countries in a short time and affect a large number of individuals. History is evident that the world has witnessed many epidemics since ancient times. Some very recent epidemics which hit the world in the 21st century include Severe Acute Respiratory Syndrome (SARS) in 2003 which affected China, Canada and parts of Asia. Ebola is another epidemic, which affected West Africa in 2014 and caused 12,310 deaths in West Africa and additional 15 deaths in countries outside Africa. Studies based on the assessment of epidemics always suggest that such situations have a great impact on the psychological and emotional wellbeing of the frontline healthcare providers because they are the people who have to cope with challenges of epidemics. The reason that made them psychologically weak is because such situations are very sudden and the healthcare professionals are not physically, emotionally, and professionally ready for them (Cabarkapa et al., 2020).

Kang et al., (2020) performed an evaluation on the nursing and medical staff of Wuhan city to understand the psychological implications of Covid-19 on their mental and physical wellbeing. The study concluded that over 34 percent of the healthcare professionals of the region experienced a mild level of mental health disturbance while 6.2 percent experienced a severe mental health disturbance. The mental disturbance was more severe in those healthcare personals who had to work closely with covid-19 infected people. Similarly, Liu et al., (2020) suggests that about 14 percent of the healthcare professionals in Hubei province had high levels of anxiety which was more severe in those staff members who reported physical association with the persons who have been diagnosed positive with Covid-19.

Preti et al., (2020) attempted to collect evidence regarding the possible implications of different pandemics on the emotional and mental wellbeing of the healthcare professionals and concluded a positive correlation between psychological impact on healthcare of the professionals and epidemics. It is observed that compared to male healthcare professionals, extreme degrees of anxiety, stress, and high level of fears were reported among female healthcare staff in various cities of China during the first wave of covid-19.

2. Frontline HCPs are more likely to have Mental Issues

The study conducted by Lee et al., (2018) on MERS outbreak concluded that healthcare professionals who worked closely with patients had a higher degree of psychological impact compared to others. The various types of health issues found in frontline healthcare professionals include insomnia, anxiety, depression and somatization. Eight studies conducted by (Mauder et al., 2004; Tam et al., 2004; Wong et al., 2005; Chan et al., 2005; Lung et al., 2009; Liu et al., 2020b; Lai et al., 2020; Korkmaz et al., 2020) aimed to evaluate the mental implications on healthcare professionals concluded that frontline healthcare professionals including medical officers, nurses, and trainee officers are more likely to form mental issues. Chan et al., 2005 Suggested that compared to private hospitals where the infrastructure is up to the mark, the healthcare professionals in public sector are more likely to develop mental issues due to poor infrastructure, lack of resources, unavailability of personal protective suits/equipment, huge load of cases, and improper management of the workload.

Sandesh et al., (2020) conducted a study in May 2020 in various hospitals of Pakistan. A total of 112 participants were invited to share their experience regarding the covid-19 isolation wards. It is discovered that 81% of the participants has suffered some kind of depression and mental illness. The various causes identified that frontline workers were more exposed to various stressors such as work overload, lack of resources, unavailability of personal protecting suits and the fear of corona infection from patients due to which every healthcare professional made a self-quarantine to ensure the safety of their family and friends. Things became worse when many doctors and nurses diagnosed with covid-19 symptoms and admitted to hospitals as well as some of them have lost their lives. Such a situation is more vulnerable to cause burn out among frontline healthcare professionals because many nurses and doctors experienced three types of stresses at the same time such as the stress of health, the stress of job and the fear of social isolation. The study of E Fatima, (2020) suggested that the biggest reason behind the stress and anxiety in healthcare workers in Pakistan was the fear of infecting their family members. Other significant reasons included lack of awareness and lack of security among people of Pakistan regarding the seriousness of covid-19.

3. The importance of workplace Environment

Muller et al., (2020) discovered that the mental health of workers is strongly correlated with the environment of an organization. It is observed that organizations where the management was not capable to provide psychological support to its workers has a high level of anxiety, stress, depression, and sleep problems among its workers/ healthcare professionals. On the other hand, organizations where the management provided full support to its workers during covid-19 has experienced a low level of anxiety, stress, depression, sleep problems and other psychological issues among its workers. The studies of (Li et al., 2020 and Ornell et al., 2020) have discovered that mental health issues for Healthcare professionals during pandemics and epidemics are usually long-lasting and it could take one to three years in recovery. Therefore, it is extremely important for the management to have some support system to help the workers and Healthcare professionals in managing that stress and anxiety.

The study of Khalid & Ali, (2020) suggested that covid-19 raised a number of issues in the healthcare sector, which resulted in an extreme degree of pressure on the healthcare providers and generated an unprecedented level of stress and trauma among healthcare professionals. First, Pakistan lacked corona testing kits, which were to be imported by China and Japan. This delayed the testing system in Pakistan. Moreover, Pakistan lacked 'Standard Operating Procedures' which also made the situation critical for the healthcare sector to manage the patients and to control the outspread of the epidemic. People made violations of the standard operating procedures such as lockdown, wearing mask, social distance, and other precautionary measures has increased the numbers of cases and the supply of patients in hospitals while the resources were limited. Furthermore, the management of the institutes and the government did not provide any assistance to the workers regarding the management of the situation.

The work conditions in many public sector institutions in Pakistan are already questionable while the widespread of covid-19 made the work conditions more unfortunate. The management of an organization as well as the Government of a country is responsible to take care of the psychological and physical health of its workers, however, in the public sector of Pakistan, it is observed that not the management neither the government has paid attention to the Healthcare professional's psychological health and well-being, which resulted in the development of anxiety, burnout and stress during covid-19 pandemic (Rana et al., 2020).

Rana et al., (2020) further state that the advent of pandemic covid-19 in Pakistan has exposed the health care professionals to physical and psychological stress. The unavailability of personal protecting suits, sanitizers, testing equipment, space for isolation, and the high risk of infection lead to an uncontrollable stress and anxiety among healthcare professionals. Furthermore, the severity of the pandemic and the predictions about the extension of covid-19 for next few years has caused more tension and pressure among Health Care professionals.

4. Fear as a Prominent Stressor

Different schools have conducted about thirteen studies, including studies conducted by (Chua et al., 2004; Khee et al., 2004; Maunder et al., 2004; Tam et al., 2004; Bai et al., 2004; Chan et al., 2005; Koh et al., 2005; Wong et al., 2005; Shih et al., 2007; Wu et al., 2009; Khalid et al., 2016; Ji et al., 2017, and Du et al., 2020) discovered that fear has always been among the prominent stressors during the pandemic and epidemic. Healthcare professionals fear for the unknown disease, the fear for becoming infected, and of their own mortality as well as they fear for the infection and mortality of their family and friends (Khattak et al., 2020). Healthcare professionals are exposed to the disease by working closely with patients that cause fear amongst Healthcare professionals and result in symptoms of depression. The situation becomes worse when any of the colleagues get hospitalized due to infection.

Liu et al., (2020) discovered in their study that many Chinese studies conducted on covid-19 and associated psychological impact on healthcare professionals has identified anxiety as the most important symptom. The level of anxiety is found higher among those Health Care professionals who were suspected to have infection as compared to their counterparts, i.e., not suspected for covid-19. This study further discovered that many healthcare professionals preferred to avoid contact with their families assuming that covid-19 will end in a few weeks or months, however, the extension of the pandemic made them anxious and emotionally ill because they felt it hard to in isolation from their families and friends for a long time. The fear of getting infected from the covid-19 increased the anxiety among healthcare professionals because it was associated with the higher fear of social isolation.

Zhang et al., (2020) suggests that the stipulation of being adhered to heavy protective gear also made performing routine work related tasks difficult for the healthcare professionals. Not only in China, but in countries like Spain, healthcare professionals reported that the heavy protective gear has also put strain over workers in two ways. First, it was hard to carry it and secondly, it is perceived that these suits and gears are insufficient to provide full protection from covid-19 virus. The study discovered that workers who perceived these protective gears unsafe or insufficient had higher levels of depression compared to those who perceived it safe and adequate. Such assumptions increased the fear among healthcare professionals and resulted in more mental issues.

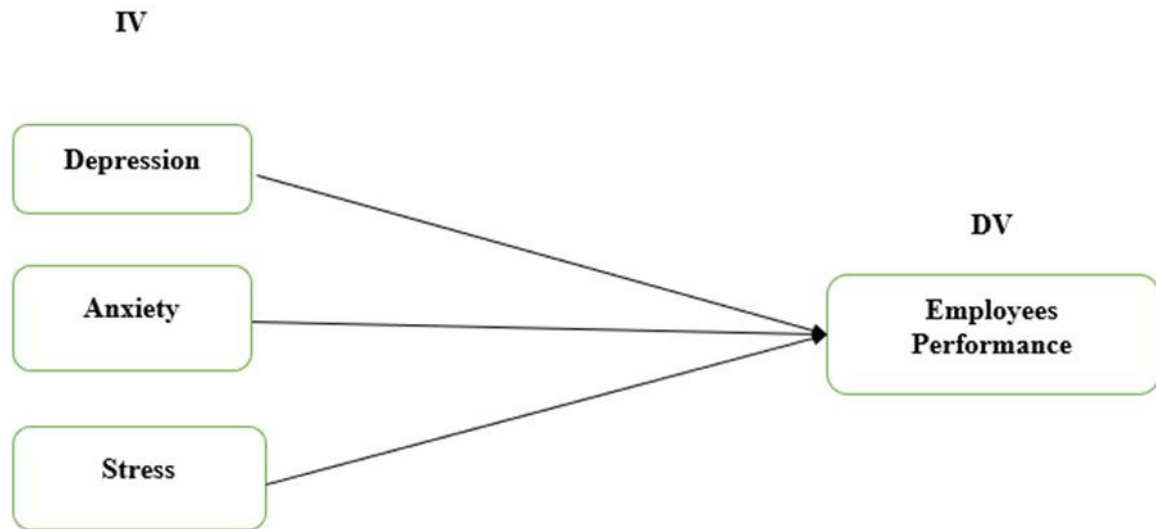
5. Measures to address the covid-19 caused Mental illness and performance shortcomings among Healthcare Professionals

Eleven studies conducted by different authors, including (Chan & Huak, 2004; Wong et al., 2005; Shih et al., 2007; Lung et al., 2009; Khalid et al., 2016; Babore et al., 2020; Kang et al., 2020; Korkmaz et al., 2020; Wang et al., 2020; Romero et al., 2020, and Shechter et al., 2020) concluded that healthcare professionals who had a better understanding to self-coping strategies such as active coping, resilience, stress management, and acceptance were less likely to form mental and performance-related discrepancies. Chan & Huak, (2004) discovered that workers who got some kind of assistance and support from management and co-workers had a significantly lower level of stress and anxiety. Khalid et al., (2016) suggested that positive workplace attitudes during epidemics helped healthcare professionals to stay positive and strong through such times. A recent study by Kang et al., (2020) investigated 994 healthcare professionals and discovered that 36.3 percent of healthcare professionals accessed psychological materials, 50 percent of the participants tried to access psychological resources through the internet and media, whereas, about 18 percent of them preferred to seek psychological assistance from professional psychiatrists.

Lai et al., (2020) suggests that the government and the institutes themselves should pay more attention to organizational support during pandemics. The support could be in the form of short training, collaboration, and teamwork so that the employees do not feel isolated and lonely. Chan & Huak, (2004) suggests that clear communication has also been observed as an effective solution to relieve stress and anxiety during an epidemic. Xing et al., (2020) suggests that the management of healthcare institutes must consider the necessity of providing psychological support and assistance especially to the frontline staff. It is important for the effective delivery of patient care that the mental wellbeing of the professionals offering services in the healthcare industry must be safe and sound so that they could perform their regular tasks effectively as well as to deliver quality patient care. There is a need for the development of some psychiatric development programs to help minimize the stress and anxiety during outbreaks.

Hence on the basis of a critical review of the past literature and the given theoretic evaluation, the following hypotheses have been developed, which are also graphically depicted with the help of the given theoretical framework:

III. THEORETICAL FRAMEWORK



H1: Depression caused by Covid-19 has a significant negative impact on healthcare employee's performance.

H2: Anxiety caused by Covid-19 has a significant negative impact on healthcare employee's performance.

H3: Stress caused by Covid-19 has a significant negative impact on healthcare employee's performance.

IV. METHODOLOGY

Before conducting any study, it is important to decide the research philosophy or paradigm at first hand because it sets the overall guidelines and approach that the research follows during the process of data collection and its analysis. Since the given study attempts to evaluate impact of Covid-19, especially its second wave on the mental health and performance of healthcare employees in Pakistan; therefore, a positivist paradigm with deductive approach was selected as the most appropriate research philosophy for conducting the given study. The positivist paradigm ensures high level of objectivity to the researcher, which in turns reduces chances of researcher's bias in conducting the study (Park et al., 2020). Furthermore, the deductive approach is used that requires the researcher to use quantitative methodology for collection and analysis of data. The research is based upon primary data collection from the participants and attempts to explore the cause-and-effect relationship between the different variables of the study or more concisely assess the possible implications that the Covid-19 pandemic brought on the mental and psychological wellbeing of healthcare workers with respect to their job performance (Woiceshyn & Daellenbach, 2018). Therefore, quantitative methodology has enabled the researcher in carrying out investigation regarding the prevailing stressor that originated due to the Covid-19 pandemic and how did they affect the mental health and performance of healthcare professionals.

Furthermore, this study attempts to evaluate the cause-and-effect relationship between the chosen variables at a specific instance of time; therefore, a cross-sectional investigation is conducted, which means that the responses were collected at some particular instance of time. A cross-sectional study increases the credibility of the research because the phenomenon under consideration is evaluated at a particular instance of time, where its corresponding attributes were tested against some specific circumstances and events. However, the only shortcoming of this type of research resides in its replicability, i.e., cross-sectional studies are hard to replicate in the future because the findings are reflecting on a particular instance of time or events involved (Pandis, 2014). The study is conducted at various hospitals and healthcare institutes in the Peshawar and Mardan regions of Pakistan. The sample size for this study was initially selected as 150, however, only 120 healthcare professionals (HCPs) completed the survey. A questionnaire was created carefully, where for assessing the possible implications that the Covid-19 brought on the mental wellbeing of the healthcare professionals, the study used Dass-21 which is a depression, anxiety, and stress scale. For

the given study an English version of the mentioned scale is used, so that participants can easily understand and make informed replies thereon (Beaufort et al., 2017). Dass-21 is based on three self-reporting scales that are designed to measure three states of emotions such as depression, stress and anxiety. Each of the Dass-21 scales is comprised of seven elements which are then divided into subscales with similar elements. Moreover, the questionnaire developed by Felice et al., (2020) was adapted for measuring the performance of healthcare employees.

Dass-21 is a reliable tool to measure the dimensions of stress, depression, and anxiety. The questionnaire was sent to the participants through email and personal visits to these hospitals on a PR basis. It contained various options that HCPs were required to choose as per their understanding of depression, stress, and anxiety. The participants can make a choice among more than one reason/option if they feel that one reason/option cannot fully define their understanding to these psychiatric symptoms. The data was then analyzed through SPSS Version 21.0 (IBM Corp, Armonk, NJ). For the scores derived from Dass-21 scales, Standard Deviation and Mean were calculated. To make the results more understandable for the readers, the severity of Dass-21 and the reasons that pushed the healthcare professionals to depression, anxiety, and stress were calculated and expressed in the form of percentages and frequencies.

V. RESULTS AND FINDINGS

Table 1: Descriptive Statistics

Variable	No. observations	Mean	Str. Dev	Min	Max
Performance	120	21.824	19.069	0	5
Stress	120	20.203	21.041	0	5
Anxiety	120	19.106	20.002	0	5
Depression	120	18.098	17.907	0	5
Valid N (Listwise)	120				

The summary of descriptive statistics for the data collected from the participants shows that the mean score of performance is 21.824 with a standard deviation of 19.069, which is followed by the mean score of stress, which is 20.203 with a standard deviation of 21.041. Moreover, the mean of anxiety is 19.106 with a standard deviation of 20.002, while the mean of depression is 18.098 with a standard deviation of 17.907. Since the questionnaire was based upon a five-point Likert-scale chart; therefore, the minimum and maximum values are zero and five, respectively. The mean and standard deviation of all variables are quite close to one another, which shows that the distribution of the collected data is focused upon the central point or resides around the mean responses. Furthermore, the table shows that 120 responses were stood valid and therefore, the resultant sample size was reduced to 120 participants.

Table 2: Frequency distribution of anxiety, stress, and depression among the healthcare workers

DASS 21	Depression		Anxiety		Stress	
	F	CF	F	CF	F	CF
Normal	10.3%	10.3%	0	0	2.8%	2.8%
Mild	11.5%	21.8%	3.9%	3.9%	7.2%	10%
Moderate	23%	44.8%	24.02%	27.92%	29%	39%
Severe	43%	87.8%	47.58%	75.5%	48.6%	87.6%
Extremely Severe	12.2%	100%	24.5%	100%	12.4%	100%

Table - 2 shows that about 78.2% participants reported that they have been suffered from moderate to extremely severe depressive condition during the second wave of the Covid-19 pandemic, while a few participants reported mild and normal condition. Similarly, with respect to anxiety, it has been evaluated that none of the participants had a normal condition regarding anxiety. It is also evaluated that 96.1% of the respondents suffered from moderate to extremely severe levels of anxiety during the second wave of the Covid-19 pandemic. Moreover, with respect to stress about 90% of the respondents suffered from mild to highly severe level of stress during the second wave of Covid-19 pandemic and only 10% respondents reported normal or mild condition. Frequency distribution of the results obtained from the participants shows that majority of the healthcare professionals in the selected regions of the country was severely affected by the Covid-19 second wave, it is because of the fact that majority of them have experienced negative association or experiences during the first wave of Covid-19. It is also observed that the second wave of the pandemic was comparatively stronger and more deadly, which posed an immense level of stress on the healthcare professionals.

Table 3: Regression Analysis

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	2.084	.501		4.986	.000
Stress	-.193	.068	-.263	-3.106	.002
Anxiety	-.296	.073	-.401	-4.721	.000
Depression	-.291	.068	-.239	-2.808	.003

Adjusted R Square = 0.693

Table – 3 contains results of regression analysis, which shows that all the three variables that cause mental distress and negatively affects the mental wellbeing of healthcare worker have a significant negative relationship with the performance of healthcare professional during the second wave of Covid-19 pandemic. Hence, all the three hypotheses H1, H2, and H3 are accepted. The negative value of both standardized and unstandardized coefficients shows a negative relationship, while the significance value shows that the relationship is significant at a 95% confidence level. Furthermore, the adjusted R square value of 0.693 shows that the independent variables can cause a variation up to 69.3% in the dependent variable of the study that is healthcare professional’s performance.

Table 4: Correlation Analysis

	Stress	Anxiety	Depression	Performance
Stress	1			
Anxiety	.281**	1		
Depression	.025**	-.031**	1	
Performance	-.040**	-.001**	-.002*	1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Results obtained from the correlation analysis shows that all the three causative agents of mental distress among the healthcare professionals of the selected regions have a significant negative correlation with the underlying organizational performance of healthcare professionals. However, the stress level of employees shows a relatively weak correlation among the other variables, it is because of the fact that the healthcare professionals are appropriately trained to deal with any sort of emergency situation, especially pandemics. Furthermore, the other two variables that include anxiety and depression negatively affected the performance of healthcare professionals. Hence, H1 and H2 are accepted, while the results of correlation analysis partially support the hypothesis H3. The results also show that majority of the healthcare professionals went into psychological distress and anxiety due to the fear of getting their family members infected if they got infected from the patients they are dealing with.

VI. DISCUSSION

The given study found that healthcare employees in the selected districts of KPK have experienced a significant mental distress due to the fear posed by the second wave of the Covid-19 pandemic. There are several reasons attributed to the prevailing fear that the healthcare professionals experienced, which includes fear of getting infected, fear of carrying the infection to their family members, lack of control over the disease, being isolated, lack of appropriate medication, perceived fear of strong health consequences associated with the second wave of the pandemic and insecurity or lack of confidence on the PPE kits provided by the government for safety purposes. It is also evaluated that these factors caused significant anxiety, depression, and stress among the healthcare professionals, which in turn negatively affected their mental condition and brought negative implications on their performances. It is observed that the factors like depression and anxiety was highly prevalent among healthcare professionals, which were negatively affecting their performance, while the stress level prevalent in the selected professionals have comparatively fewer negative implications on their performance.

Moreover, findings of the given study are highly aligned with the findings of the studies conducted in the past; for instance, the studies conducted by Maunder et al., 2004; Tam et al., 2004; Wong et al., 2005; Chan et al., 2005; Lung et al., 2009; Liu et al., 2020b; Lai et al., 2020, and Korkmaz et al., 2020 were of the point of

view that the pandemics usually bring significant stress and depression among the healthcare professionals for various reasons, which in turns negatively affect their overall performance and competitiveness towards the patient's care. However, Khalid et al., (2016) suggest that positive attitude of the healthcare workers and the management of their organizations bring considerable relaxation in the level of stress experienced by such employees, and therefore, they can mold the stressful situation into a positive direction, which can positively contribute towards its performance. In another study conducted by Xing et al., (2020), it is found that healthcare institution needs to implement such policies and procedures that can psychologically assist the healthcare professionals during the time of crises or excessive workload that might be faced by them during the pandemic situations so that they can manage their stress and anxiety in an effective manner and reduce the negative consequences associated with it. In addition, the findings of the study with respect to anxiety and depression have been supported by the studies conducted by Chua et al., 2004; Khee et al., 2004; Maunder et al., 2004; Tam et al., 2004; Bai et al., 2004; Chan et al., 2005; Koh et al., 2005; Wong et al., 2005; Shih et al., 2007; Wu et al., 2009; Khalid et al., 2016; Ji et al., 2017, and Du et al., 2020, who finds in their relevant studies that the excessive fear faced by employees in the healthcare sector during the pandemic situation causes significant anxiety and depression among the healthcare workers, which negatively affects their mental wellbeing and performance in the long run. This shows that the findings of the given study are consistent with the studies conducted in past and therefore increases validity of the current evaluation.

VII. CONCLUSION

The given study was aimed to evaluate the impact of Covid-19 on mental health and performance of healthcare employees in the public sector healthcare institutions of Pakistan. The findings of the study suggest that during the second wave of the Covid-19 pandemic, employees experience a significant level of stress and fear, which in turn causes anxiety, depression, and stress. The study found that several factors including fear of getting infected, lack of proper safety equipment, i.e., PPE kits, fear of carrying the infection to friends and family members, lack of medication, and consistent isolation caused them to fall into a stressful situation, which in most of the situations led to depression and anxiety. Moreover, it is also evaluated that factors like anxiety and depression have a significant negative implication on the mental health and performance of healthcare employees, while stress also showed negative implications, but the extent of its impact is found comparatively lower. It is also found that stress can be managed and converted into eustress with the implementation of certain effective policies and the provision of psychological assistance to healthcare professionals. However, once the stress remains persistent in the long run, it would cause a significant negative implication on the psychological wellbeing of employees and also negatively affects their performances.

VIII. RESEARCH LIMITATIONS AND RECOMMENDATIONS

Though the given study has been completed with significant care and following standard methodology and procedures, but it still carries certain inherent limitations. For instance, the given study has used a cross-sectional approach, which limits the replication of its findings on future instances or a different scenario because cross-sectional studies give evaluation at a particular instance of time or related to a particular event. Furthermore, the given study has been conducted on only two regions of KPK, i.e., Mardan and Peshawar regions, which are comparatively developed and urban areas; therefore, the findings of the study might be impaired due to the given fact and might have given different findings if the sample contained rural areas of the province as well. Therefore, it is recommended that future researchers should consider the longitudinal evaluation and conduct an investigation on the entire period of the pandemic to ascertain the impact of Covid-19 on healthcare employees more accurately. It is also recommended that future researchers should expand the scope of their study to the entire Pakistan by considering both the rural and urban areas of the country from its different provinces so that more informed judgments and findings can be obtained. Moreover, the findings of this study have brought practical insight to the policymakers and hospital management to improve both the physical and psychological assistance of the healthcare professionals to make them capable of dealing with such pandemic situations in an effective manner.

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