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MENTAL HEALTH OF NURSES IN THE POST-COVID 19 ERA: A CROSS-SECTIONAL STUDY IN PESHAWAR

Original Research

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ABSTRACT

Background: Healthcare organizations continue to feel the effects of the COVID-19 pandemic, including prolonged workforce shortages, rising labor costs, and increased staff burnout. Nurses routinely experience job-related stress and symptoms of burnout.

Objectives: This study aimed to assess the mental health of nurses in the post-C0VID-19 era in Peshawar region, Pakistan.

Methodology: Descriptive Cross-sectional study design was used. Data were collected using DASS-21 (Depression, Anxiety, & stress scale) from N=317 nurses working in tertiary care hospital of Peshawar using convenience random sampling technique to assess the mental health of nurses. Data were analyzed through SPSS Version 22.

Result: The study revealed that a significant number of nurses in public sector tertiary care hospitals in Peshawar experience depression, with an average score of 3.6782 %. The majority, n=256 (80.8%) participants reported normal levels of depression, 7.3 % (n=23) showed mild depression, whereas moderate depression was observed in 4.7% (n=15) and severe depression were only in 2.5% (n=8). Stress levels were reported with 44.2% (n=140) experiencing mild stress. Those experiencing moderate stress were 22.4% (n=71) among all the participants, and 7.3% (n=23) were affected by severe stress, and 1.9% (n=6) experienced extremely severe stress. Anxiety levels were also high among the nurses, with n=77 (24.3%) experiencing moderate anxiety, n=141 (44.5%) suffering from severe anxiety, and 99 (31.2%) reporting extremely severe anxiety. Depression showed a weak negative correlation with anxiety. Stress had a strong positive correlation with anxiety.

Conclusion: The study shows that a significant number of nurses are experiencing various levels of depression, stress, and anxiety in the post covid-19 era. The findings highlight the urgent need for targeted mental health interventions to address the high levels of psychological distress among nurses.

Key Words: HMC, KTH, LRH, COVID-19, DAS scale, Mental Health, Depression, Anxiety, Stress.

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INTRODUCTION

The world has been grappled by covid-19 pandemic; a novel pneumonia caused by the SARS-CoV-2 virus since December 2019. The virus first emerged in China in Wuhan City and was declared a pandemic in March 2020 that led to widespread shutdowns, economic impact, and increased unemployment and mental health issues which is still continue to shape societies (1). The World Health Organization (WHO) reported 109,068,745 confirmed cases of SARS-CoV-19 by February 2021, with 2,409,011 deaths (2). The COVID-19 pandemic hit Pakistan hard, with cases initially reported in Islamabad and Karachi in February 2020. Nearly 49% of cases are registered in Punjab, with a 53.2% increase in reported cases from April 5 to April 10, 2020. Sindh and Khyber Pakhtunkhwa recorded the highest number of cases. The World Health Organization (WHO) has reported a 25% increase in the global prevalence of anxiety and depression during the first year of the COVID-19 pandemic. By the end of 2021, the situation had somewhat improved, but many people remain unable to access the care and support they need for both pre-existing and newly developed mental health conditions (3, 4).

Post covid-19 Mental health issues, including grief reactions, substance use disorders, anxiety, sleep disorders, depression, suicides, and post-traumatic stress disorders, are prevalent among healthcare workers (5). The COVID-19 pandemic has led to a global health crisis, with healthcare professionals (HCPs) on the front lines treating patients and dealing with increased mental health stress. Despite being highly rated for honesty and ethical standards, nurses have been thrust into a stressful environment. Even today, they continue to deal with the virus and its consequences. Such sustained stress over time has led to the development of mental health problems that may still be present in this population. Maqbali et al., (2024) study revealed high prevalence of stress (37%), anxiety (31.8%), depression (29.4%), and sleep disturbance (36.9%) among healthcare workers where nurses had a higher prevalence of anxiety and depression (6). The American Nurses Foundation and McKinsey's study on the COVID-19 pandemic's impact on nurses' mental health revealed that nearly two-thirds of nurses reported not receiving mental health support, and there is a perceived stigma associated with mental health issues (7). These disorders can have lasting consequences, including increased stress, psychological distress, poor sleep quality, burnout and decreased job performance (8).Nurses routinely experience job-related stress and symptoms of burnout where the COVID-19 pandemic exacerbated the challenges of this high-intensity role (7). Ongoing efforts needed to support nurses' mental health, including structural changes in healthcare organizations, flexible work options, and reducing administrative burden (1, 8).

Nurses are the majority of the world's health work force and the frontline responders during pandemics. The mental/emotional toll can be profound if it is not identified and treated. This study assesses post COVID-19 pandemic mental health of nurses such as depression, stress and anxiety in Peshawar Pakistan to integrate nursing preparedness into education and professional development, and to develop policies for promoting a healthy workforce during pandemic response to improve their ability to provide safe, robust care in the future. Tackling the sustained challenges for mental health and well-being will be critical for addressing near-term workforce shortages and ensuring the health and well-being of the nursing profession in the long term.

METHODS

The study was conducted in tertiary care hospitals in Peshawar region Pakistan using descriptive Cross-Sectional study design. The calculated sample size was n=317 calculated by using 95% confidence level, 5% marginal error and N=1716 as the total population of nurses. Simple Probability Sampling Technique were used for selecting study participants. Nurses who have worked during the COVID-19 pandemic were included whereas those currently undergoing treatment for pre-existing severe mental health conditions were excluded. After consent, data were collected using a structured questionnaire DASS-21(Depression, Anxiety, and Stress 21 scale) adopted from (9). Each subscale includes seven questions, which are graded on a 4-point Likert scale from 0 to 3 (0 "Never," 1 "Rarely," 2 "Occasionally," 3 "Often"). Data were analyzed by using SPSS version 22. In descriptive statistics, the Mean (∓), median (IQR) and standard deviation were calculated for numerical variables like age and job experiences of nurses. The frequency and percentages were calculated for categorical variables like gender, qualification, marital status, Organization (Hospital). The means, standard deviations, and frequency distributions for the Depression, Stress, and Anxiety were calculated to assess its level. Pearson's correlation test applied to find the relation between Age, experience, qualification and Depression, anxiety, stress score. An informed consent was presented and explained to each participant for his/her agreement, as a participant. Anonymity was be guaranteed to all the participants.

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RESULT

Among total nurses included in the study, there were n=46 (14.5%) males whereas females accounted for a higher frequency of n= 271 (85.5%). Among the study participants, the age group of 21-25 years comprised n=43 (13.6%) of the sample. The majority of the nurses n=177 (55.8%), fell within the 25-30 years age range. The 31-35 years age group included n=84 (26.5%) whereas n=13 (4.1%) were 35 years and above. The predominance of the 25-30 years age group, accounting for more than half of the sample. Out of 317 nurses, 144 nurses (45.4%) hold a General Nursing (Diploma), 105 nurses (33.1%) have a Bachelor of Science in Nursing (BSN) degree, and n=68 (21.5%) possess a post-RN qualification. The distribution of job experience among the participants was as those n=226 nurses (71.3%) had 3-8 years of experience, n=76 (24.0%) had 9-14 years of experience, n=6 (1.9%) had 15-19 years of experience, and n=9 (2.8%) had years of experience more than 20 years. Furthermore, among the total study participants (N=317), N=157 individuals were unmarried, which represents 49.5% of the total, while N=160 (50.5%) were married.

Table 1: Demographic Variables

Variable	Category	Frequency	Percent
Gender	Male	46	14.5 %
	Female	271	85.5 %
	Total	317	100.0
Marital Status	Unmarried	157	49.5 %
	Married	160	50.5 %
	Total	317	100.0
Age Distribution	21-25 years	43	13.6 %
	25-30 years	177	55.8 %
	31-35 years	84	26.5 %
	35> years	13	4.1 %
	Total	317	100.0
Level of Education	General Nursing (Diploma)	144	45.4 %
	BSN	105	33.1 %
	Post-RN	68	21.5 %
	Total	317	100.0
Job Experience	3-8 years	226	71.3 %
	9-14 years	76	24.0 %
	15-19 years	6	1.9 %
	20 and above	9	2.8 %
	Total	317	100.0

Table presents statistical data on the levels of depression among n=317 nurses. The mean depression score is 3.6782, indicating that the average level of depression among the nurses falls below the midpoint of the scale used. The median score is 3. 0000.The standard deviation is 3.71414, showing a considerable variation in depression scores among the nurses.

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Table 2: Descriptive Statistics of Depression: Mean, Median, Mode and standard Deviation

Depression	
Mean	3.6782
Median	3.0000
Mode	1.00
Std. Deviation	3.71414
Minimum	.00
Maximum	21.00

The majority of nurses (84.5%) reported that they could never seem to experience any positive feeling at all, with only 4.4% rarely and occasionally experiencing positive feelings, and 6.6% often feeling this way. This high percentage indicates a pervasive sense of negativity among the nurses. When it came to initiating tasks, 76.0% of the nurses found it difficult, indicating a lack of motivation. Only 12.6% rarely, 6.6% occasionally, and 4.7% often struggled with this issue. Regarding their outlook on life, 60.6% of the nurses felt they had nothing to look forward to, 16.1% rarely felt this way, 17.7% occasionally, and 5.7% often had this sentiment. The high percentage of nurses feeling this way highlights the emotional toll of the pandemic. A significant number of nurses (83.9%) felt downhearted and blue, with 4.4% rarely, 6.3% occasionally, and 5.4% often feeling this way. This reflects the emotional burden carried by nurses during this period. Interestingly, only 4.7% of nurses reported that they were never unable to become enthusiastic about anything, while 74.1% rarely, 14.2% occasionally, and 6.9% often felt this way. This suggests a general lack of enthusiasm, likely due to prolonged stress and exhaustion. In terms of self-worth, 72.9% of nurses felt they were not worth much as a person, with 10.1% rarely, 13.6% occasionally, and 3.5% often feeling this way. Lastly, 85.8% of nurses never felt that life was meaningless, 8.2% rarely, 4.1% occasionally, and 1.9% often felt this way.

Table 3: Depression Items Score

	Never		**Rarely**		**Occasionally**		**Often**	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
I could not seem to experience any positive feeling at all	268	84.5%	14	4.4%	14	4.4%	21	6.6%
I found it difficult to work up the initiative to do things.	241	76.0%	40	12.6%	21	6.6%	15	4.7%
I felt that I had nothing to look forward to.	192	60.6%	51	16.1%	56	17.7%	18	5.7%
I felt downhearted and blue.	266	83.9%	14	4.4%	20	6.3%	17	5.4%
I was unable to become enthusiastic about anything.	15	4.7%	235	74.1%	45	14.2%	22	6.9%
I felt I was not worth much as a person.	231	72.9%	32	10.1%	43	13.6%	11	3.5%
I felt that life was meaningless.	272	85.8%	26	8.2%	13	4.1%	6	1.9%

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A smaller proportion about n=23(7.3%) nurses experienced mild depression, moderate depression was observed in n=15 (4.7%), severe depression in n=8 (2.5%), and extremely severe depression in n=15 nurses (4.7%).

Table 4: Level of depression

	Frequency	Percent	Valid Percent	Cumulative Percent
Normal	256	80.8	80.8	80.8
Mild	23	7.3	7.3	88.0
Moderate	15	4.7	4.7	92.7
Severe	8	2.5	2.5	95.3
Extremely Severe	15	4.7	4.7	100.0
Total	317	100.0	100.0	

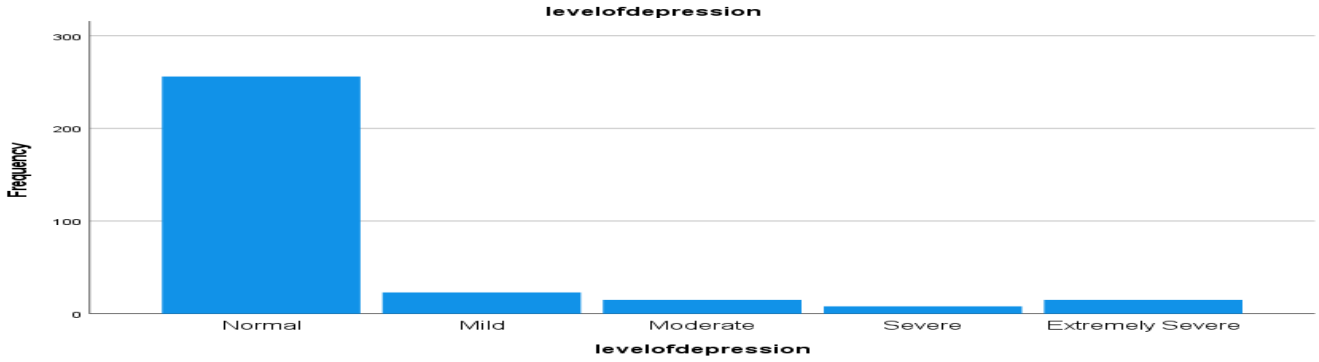

Figure 1 Level of Depression

The mean anxiety score was found to be 9.21, with a median score of 9.00. The standard deviation of 2.18 indicates moderate variability in anxiety levels among the nurses.

Table 5: Descriptive Statistics of Anxiety: Mean, Median, Mode and standard Deviation

Statistics	
Anxiety	
Mean	9.2082
Median	9.0000
Mode	9.00
Std. Deviation	2.18471
Minimum	6.00
maximum	17.00

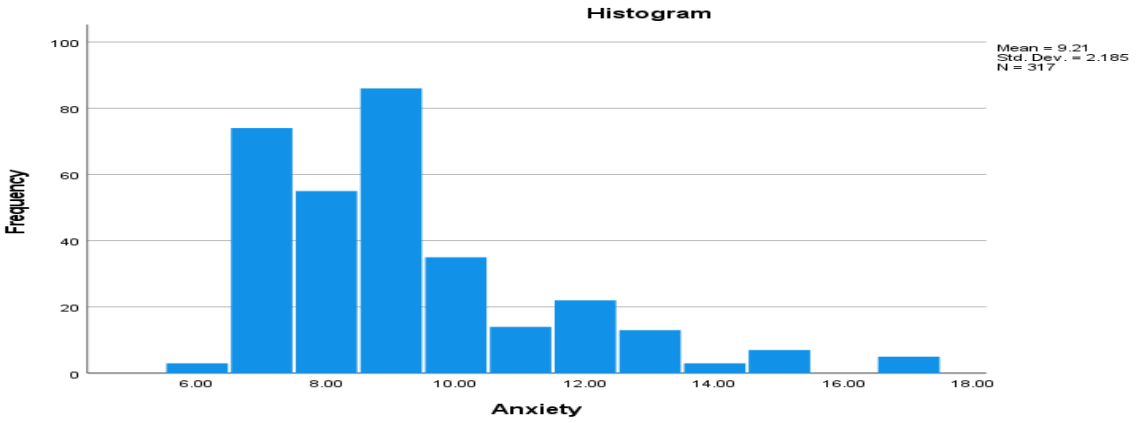

Figure 2 Descriptive Statistics of Anxiety: Mean, Median, Mode and standard Deviation

While analyzing nurses Reponses for each item of the anxiety a significant majority of nurses reported frequent difficulties in relaxing and winding down, with 76.0% and 84.5% respectively experiencing these issues often. Additionally, 85.8% frequently found themselves getting agitated, and 79.8% felt they were using a lot of nervous energy. A considerable proportion also reported being touchy (59.0%) and intolerant of interruptions (83.6%). Overreacting to situations was less prevalent but still notable, with 70.0% occasionally to often displaying this tendency.

Table 6: Anxiety Items Score

	Never		**Rarely**		**Occasionally**		**Often**	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
I found it hard to wind down.	20	6.3%	11	3.5%	241	76.0%	45	14.2%
I tended to overreact to situation	0	0.0%	44	13.9%	51	16.1%	222	70.0%
I felt that I was using a lot of nervous energy.	1	0.3%	16	5.0%	253	79.8%	47	14.8%
I found myself getting agitated	21	6.6%	13	4.1%	11	3.5%	272	85.8%
I found it difficult to relax.	0	0.0%	16	5.0%	33	10.4%	268	84.5%
I was intolerant of anything that kept me from getting on with what I was doing.	1	0.3%	28	8.8%	23	7.3%	265	83.6%
I felt that I was rather touchy.	1	0.3%	100	31.5%	29	9.1%	187	59.0%

A significant portion of the sample exhibited moderate to severe anxiety levels. Out of the N=317 nurses surveyed, n= 77 (24.3%) reported experiencing moderate anxiety, while n=141 (44.5%) suffered from severe anxiety. Furthermore, n=99 nurses (31.2%) reported extremely severe anxiety.

Table 7: Level of anxiety

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Moderate	77	24.3	24.3	24.3
	Severe	141	44.5	44.5	68.8
	Extremely Severe	99	31.2	31.2	100.0
	Total	317	100.0	100.0	

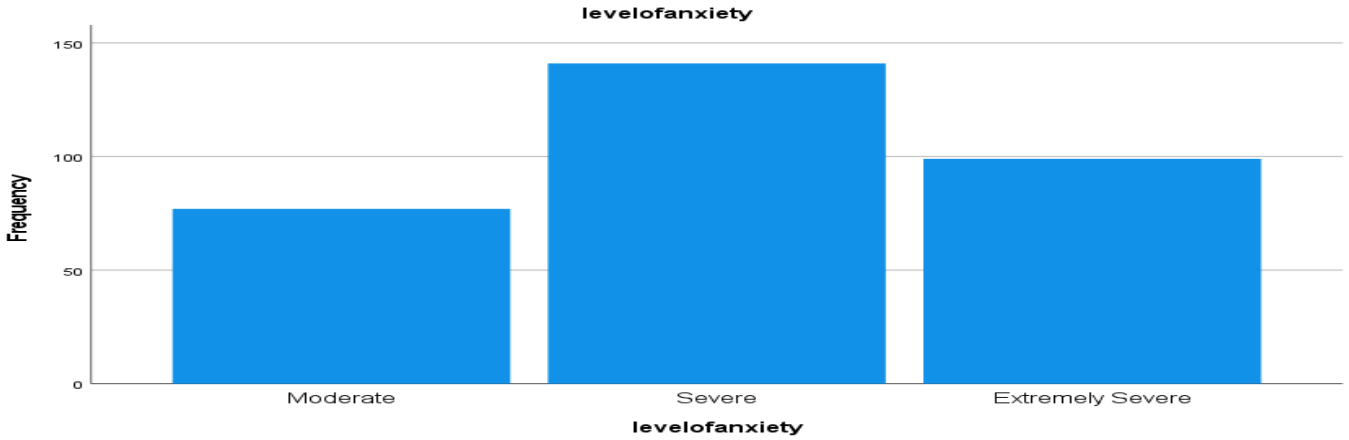

Figure 3 Level of Anxiety

The data revealed a mean stress score of 9.24, with a median of 9.00 and a mode of 9.00. The stress scores exhibited a standard deviation of 2.25, indicating variability in stress levels among the participants.

Table 8: ***Descriptive Statistics of Stress: Mean, Median, Mode and standard Deviation***

Stress	
Mean	9.2429
Median	9.0000
Mode	9.00
Std. Deviation	2.25179
Minimum	6.00
Maximum	19.00

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Table 9: Stress Items Score

	Never		Rarely		Occasionally		Often	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
I was aware of dryness of my mouth	0	0.0%	275	86.8%	19	6.0%	23	7.3%
I experienced breathing difficulty	0	0.0%	190	59.9%	80	25.2%	47	14.8%
I experienced trembling.	8	2.5%	295	93.1%	12	3.8%	2	0.6%
I was worried about situations in which I might panic and make a fool of myself.	0	0.0%	207	65.3%	67	21.1%	43	13.6%
I felt I was close to panic.	0	0.0%	197	62.1%	31	9.8%	89	28.1%
I was aware of the action of my heart in the absence of physical exertion.	4	1.3%	271	85.5%	19	6.0%	23	7.3%
I felt scared without any good reason	0	0.0%	291	91.8%	11	3.5%	15	4.7%

None of the nurses reported experiencing dryness of mouth never; instead, 86.8% (n=275) reported this symptom rarely, 6.0% (n=19) occasionally, and 7.3% (n=23) often. Breathing difficulty was similarly pervasive. The majority (59.9%, n=190) experienced it rarely, 25.2% (n=80) occasionally, and 14.8% (n=47) often. Trembling was reported never by only 2.5% (n=8) of nurses, with a significant majority (93.1%, n=295) experiencing it rarely, 3.8% (n=12) occasionally, and 0.6% (n=2) often. Concerns about panic situations were universally reported, with 65.3% (n=207) experiencing this worry rarely, 21.1% (n=67) occasionally, and 13.6% (n=43) often. Feelings of being close to panic were similarly prevalent, with 62.1% (n=197) reporting this rarely, 28.1% (n=89) often, and 9.8% (n=31) occasionally. Awareness of heart action in the absence of physical exertion was reported never by only 1.3% (n=4) of nurses, with the majority (85.5%, n=271) experiencing this rarely, 6.0% (n=19) occasionally, and 7.3% (n=23) often. Finally, unwarranted fear was reported never by none, with most nurses (91.8%, n=291) experiencing it rarely, 3.5% (n=11) occasionally, and 4.7% (n=15) often.

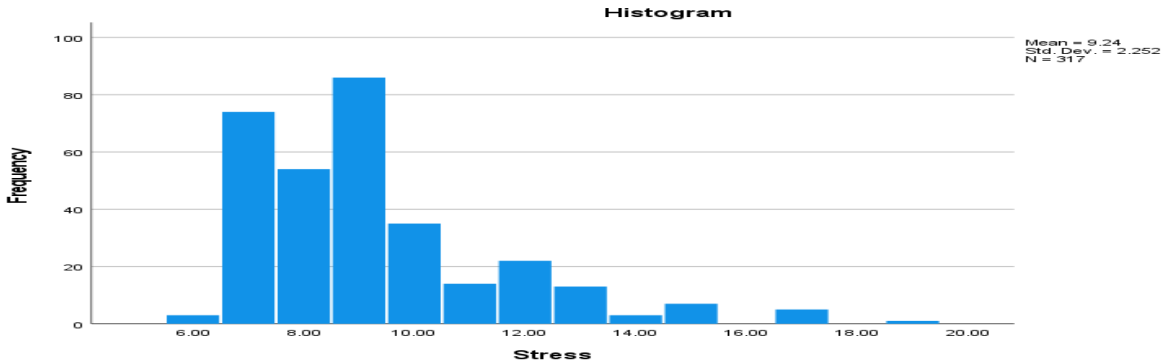

Figure 4 Stress Score

Among the respondents, n=77 (24.3%) reported experiencing normal stress levels. A substantial n=140 (44.2%) of nurses identified with mild stress. Moderate stress was reported by n=71(22.4%) of the participants, while n=23 (7.3%) experienced severe stress. The remaining n=6 (1.9%) reported extremely severe stress. Table represents level of stress.

Table 10: Level of stress

	Frequency	Percent	Valid Percent	Cumulative Percent
Normal	77	24.3	24.3	24.3
Mild	140	44.2	44.2	68.5
Moderate	71	22.4	22.4	90.9
Severe	23	7.3	7.3	98.1
Extremely Severe	6	1.9	1.9	100.0
Total	317	100.0	100.0	

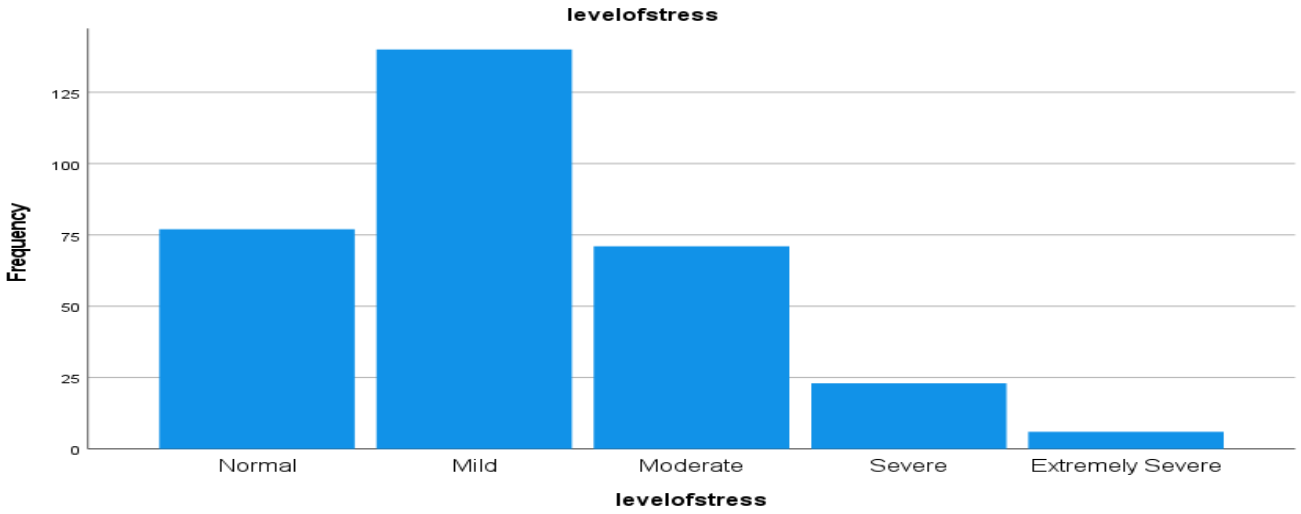

Figure 5 Level of Stress

Depression exhibited a weak but significant negative correlation with anxiety ($r = -0.119$, $p = 0.034$. This unexpected inverse relationship could be due to overlapping symptoms or coping mechanisms influencing both conditions differently. Depression showed weak, non-significant associations with stress ($r = -0.069$, $p = 0.223$), age ($r = -0.004$, $p = 0.943$), and qualification ($r = -0.057$, $p = 0.311$), indicating that these factors do not significantly influence depression levels in this study. Job experience also had a weak, non-significant positive correlation with depression ($r = 0.074$, $p = 0.186$), suggesting that the length of professional experience does not notably influence depression levels among the nurses. Stress demonstrated a strong, significant positive correlation with anxiety ($r = 0.962$, $p < 0.001$), highlighting that increased stress is closely linked with higher anxiety levels. In contrast, stress had weak, non-significant correlations with age ($r = 0.064$, $p = 0.258$), job experience ($r = 0.034$, $p = 0.546$), and education level ($r = 0.004$, $p = 0.938$), indicating that these factors have minimal influence on stress levels among the nurses. Anxiety exhibited weak, non-significant positive relationships with age ($r = 0.092$, $p = 0.101$), job experience ($r = 0.044$, $p = 0.438$), and qualification ($r = -0.021$, $p = 0.714$).

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Table 11: Correlation among Depression, Anxiety, Stress, Age, Qualification and Job Experiences

		Depression	Stress	Anxiety	Age	Qualification	Job Experience
Depression	Pearson Correlation	1	-.069	-.119*	-.004	-.057	.074
	Sig. (2-tailed)		.223	.034	.943	.311	.186
	N	317	317	317	317	317	317
Stress	Pearson Correlation	-.069	1	.962**	.064	.004	.034
	Sig. (2-tailed)	.223		.000	.258	.938	.546
	N	317	317	317	317	317	317
Anxiety	Pearson Correlation	-.119*	.962**	1	.092	-.021	.044
	Sig. (2-tailed)	.034	.000		.101	.714	.438
	N	317	317	317	317	317	317
Age	Pearson Correlation	-.004	.064	.092	1	.118*	.500**
	Sig. (2-tailed)	.943	.258	.101		.036	.000
	N	317	317	317	317	317	317
Qualification	Pearson Correlation	-.057	.004	-.021	.118*	1	.070
	Sig. (2-tailed)	.311	.938	.714	.036		.211
	N	317	317	317	317	317	317
Job Experience	Pearson Correlation	.074	.034	.044	.500**	.070	1
	Sig. (2-tailed)	.186	.546	.438	.000	.211	
	N	317	317	317	317	317	317

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

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

DISCUSSION

This study aims was to explore the impact of covid-19 on mental health of nurses in Peshawar Pakistan in the post covid-19 era. Our study result reveals that a significant number of nurses in public sector tertiary care hospitals in Peshawar experience depression, with an average score of 3.6782. The majority (80.8%) reported normal levels of depression, while a smaller proportion experienced mild depression (7.3%), moderate depression (4.7%), severe depression (2.5%), and extremely severe depression (4.7%). The COVID-19 pandemic likely contributed to these outcomes due to increased workload, exposure to stressful situations, and challenges in maintaining work-life balance. Stress levels were also found to vary among the participants, with 24.3% experiencing normal stress, 44.2% experiencing mild stress, 22.4% experiencing moderate stress, 7.3% experiencing severe stress, and 1.9% experiencing extremely severe

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stress. The study highlights the need for targeted interventions to address high levels of stress within the workforce. Anxiety levels were also high among the nurses, with 77 (24.3%) experiencing moderate anxiety, 141 (44.5%) suffering from severe anxiety, and 99 (31.2%) reporting extremely severe anxiety. These findings highlight a concerning trend where the majority of nurses are grappling with high levels of anxiety, which could be attributed to the ongoing challenges posed by the COVID-19 pandemic, inadequate staffing, insufficient protective equipment, and the psychological strain of working in a high-pressure environment (10). The results indicate significant psychological distress among nurses, largely attributable to the challenges posed by the COVID-19 pandemic and situational factors (11). The high levels of depression, anxiety, and stress among nurses can be linked to the increased workload, emotional strain, and isolation. The weak correlations between depression and other factors such as age, qualification, and job experience suggest that these psychological impacts are more closely tied to the situational stressors rather than individual demographic or professional characteristics (12).

Previous researches also had showed similar result among nurses. Nurses' sleep quality and symptoms of depression, anxiety, and stress showed positive variation during the COVID-19 outbreak (1). The COVID-19 pandemic has significantly impacted the psychological health of nurses, leading to mental complications like distress and fear, and potentially triggering post-traumatic stress symptoms, poor service delivery, and even suicide ideation (13). A study assessed 285 healthcare workers, revealing that coping strategies contributed significantly to predicting depressive symptoms, with 35% of the variance in depression explained by coping strategies such as acceptance, positive reframing, behavioral disengagement, and negation. Active coping and acceptance predicted emotional exhaustion, depersonalization, and personal accomplishment, while behavioral disengagement negatively affected it. These findings underscore the importance of coping strategies in managing stress, anxiety, depression, and burnout among healthcare workers (14, 15). 90% of countries surveyed to include mental health and psychosocial support in their COVID-19 response plans, but major gaps and concerns remain. The pandemic has caused unprecedented stress, including social isolation, loneliness, fear of infection, suffering and death, grief after bereavement, and financial worries. Young people and women have been the most affected, with women being more severely impacted than men. People with pre-existing physical health conditions, such as asthma, cancer, and heart disease, are more likely to develop symptoms of mental disorders. The pandemic has also led to severe disruptions to mental health services, leaving huge gaps in care for those who need it most. Services for mental, neurological, and substance use conditions were the most disrupted among all essential health services reported by WHO Member States. Many countries also reported major disruptions in life-saving services for mental health, including for suicide prevention. By the end of 2021, the situation had somewhat improved, but many people remain unable to get the care and support they need for both pre-existing and newly developed mental health conditions. The urgent need for reliable and effective digital tools is highlighted, but developing and deploying digital interventions remains a major challenge in resource-limited countries and settings (3, 4, 16, 17).

To improve nurses' mental health, targeted interventions such as enhanced support systems, adequate staffing, provision of protective equipment, regular mental health screenings, and access to professional mental health services are crucial. Promoting coping strategies and resilience training can also mitigate psychological distress (18). Limited sample size of our study may not represent the entire population of nurses in Peshawar, affecting the generalizability of the findings. Reliance on self-reported data could introduce bias, as participants may under-report or over-report their mental health status. Moreover, the study’s cross-sectional nature limits the ability to draw causal inferences between COVID-19 and mental health outcomes. This study Highlights the psychological impact of pandemics on healthcare professionals, expanding the understanding of stress factors in high-pressure environments, and contributes to existing theories on occupational stress and coping mechanisms specific to healthcare settings. This study emphasizes the need for robust mental health support systems for nurses, including counseling and peer support programs as well as advocates for the integration of mental health training and resilience-building exercises in nursing education and ongoing professional development. Furthermore, this encourages healthcare institutions to adopt flexible work schedules and adequate rest periods to mitigate burnout and stress. In order to study the mental health of nurses in post-covid 19 era the future researches should conduct longitudinal studies to track changes in mental health over time and establish causal relationships. Studies should include a larger and more diverse sample of nurses from different regions and healthcare settings to enhance the generalizability of the findings. Researchers may compare the mental health and its impacts on nurses with other healthcare professionals and frontline workers to identify unique stressors and coping mechanisms.

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CONCLUSION

The COVID-19 pandemic has significantly impacted the mental health of nurses, who have been thrust into a stressful environment due to increased workload, exposure to stressful situations, and challenges in maintaining work-life balance. This study reveals that a significant number of nurses in public sector tertiary care hospitals in Peshawar, Pakistan experience various levels of depression, stress, and anxiety. The findings highlight the urgent need for targeted mental health interventions, adequate staffing, and support systems to address the high levels of psychological distress among nurses.

AUTHOR CONTRIBUTIONS

Author	Contribution
Shukriya Saleem	Substantial Contribution to study design, analysis, acquisition of Data Manuscript Writing Has given Final Approval of the version to be published
Ashfaq Ahmad	Substantial Contribution to study design, acquisition and interpretation of Data Critical Review and Manuscript Writing Has given Final Approval of the version to be published
Syed Bahar	Substantial Contribution to acquisition and interpretation of Data Has given Final Approval of the version to be published
Muhammad Suliman Ahmad	Contributed to Data Collection and Analysis Has given Final Approval of the version to be published
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