

Stress And Coping Strategies Among Nurses Working In General Tertiary Care Hospital And Psychiatric Hospital Lahore, Pakistan

Rida Hafeez¹, Kahkshan Saleem², Uzma shaheen³,
Samra Boota⁴, Farah Zulifqar⁵, Hina Shantul⁶

¹Charge Nurse , Mayo Hospital Lahore, Email: ridahafeez860@gmail.com

²Clinical Coordinator, Shalamar College of Nursing Lahore,
Email: Kahkashanharoon@yahoo.com

³Charge Nurse, sir Ganga Ram Hospital Lahore,
email: uzmatalib090069@gmail.com

⁴Charge Nurse, sir Ganga Ram Hospital Lahore,
email; rajpootsamra786@gmail.com

⁵Clinical Resource Nurse , Shalamar Hospital Lahore ,
email; Farahsari2339@gmail.com

⁶Clinical Lecturer, Shalamar Nursing College Lahore,
email; Hina shantul415@gmail.com

Corresponding author

Kahkshan Saleem,

Clinical Coordinator

Shalamar College of Nursing Lahore

Email: Kahkashanharoon@yahoo.com

ABSTRACT

Stress has been linked to high attrition rates, rapid turnover, and increased job unhappiness among nurses. Workplace stress has been shown to have an impact on nurses' health as well as their ability to handle work demands. This will significantly inhibit the delivery of high-quality care as well as healthcare efficiency. The purpose of the study was to assess the stress level and the coping strategies that might be used by nurses. A descriptive cross-sectional study was conducted among 170 nurses working in general tertiary care hospital and psychiatric hospital Lahore. A modified form of questionnaire was used as a study. Results showed that out of 170 nurses; 8 (4.71%) with mild level of stress, 64 were moderate stress (37.65%) and 98 (57.65 %) reported

with severe. The mean scores of the nurses were also calculated. The mean score was highest in the tertiary care hospital among nurses with 27.51 ± 6.966 with $p=0.000$. Nurses worked in general tertiary care hospital had a stress level 59.41% higher than nurses working in psychiatric hospital with (40.59%). Study Concluded that majority of nurses suffer from severe stress. The frequently reported coping strategy was expressed anger to the person who caused the problem. However the least frequently reported coping strategy was talked to someone to find out more about the situation.

Keywords: Stress, Nurses, Tertiary care hospital, coping strategies, psychiatric hospital.

Introduction

Stress is an unavoidable part of the human experience. Stress is a physical or mental tension caused by factors that tend to disrupt an existing equilibrium. It is a motivator for achieving anything in life. It is a well-known fact that all humans are subjected to various types of stressors throughout their lives [1]. Stress has been labeled as both a precursor to an outcome and a method of dealing with situations. Stress, according to Lazarus, is "a particular relationship between the person and the environment that the person appraises as taxing or exceeding his or her resources and endangering his or her well-being"[2].

According to the World Health Organization, stress is a global health issue, accounting for 90% of all Hospital Visits [3]. Stress management or stress reduction is dependent on an individual's ability to identify and adapt using coping strategies [4]. According to a US survey, 93% of nurses experienced high levels of stress. According to a Chinese survey, 68.3% of nurses reported having significant work stress. According to a research conducted in Iran, the majority of nurses (63.47%) experienced stress. 34.7% of nurses in Saudi Arabia experience work-related stress [5].

Because stress affects many people in difficult situations, previous research focused on the relationship between stress and coping mechanisms; however, individual responses varied

depending on coping mechanisms [6]. According to studies, the two most common coping mechanisms used by healthcare professionals were accepting the dire circumstances and maintaining a positive attitude while working. In a similar vein, another study discovered that a positive attitude at work had the greatest impact on reducing employee stress. It was discovered that a lack of proper training and support for healthcare personnel dealing with pressures has a negative impact on the workplace [7].

Job stress is thought to be responsible for up to 40% of employee turnover and for about 50% of all absences from the workplace. [8]. According to Parthasarathy study 49% of nurses reported frequent stress occurrences, 30% reported occasional stress occurrences, and 21% reported extreme stress occurrences [9]. The coping strategies that an individual uses play a significant role in how they perceive stress and how well they can manage it. People who experience significant amounts of stress and who are unable to handle the situation well frequently suffer from both physical and mental health problems. Nurses who lack coping mechanisms may find it difficult to deal with obstacles in their line of work. The purpose of this study is to assess stress and coping strategies among nurses working in general tertiary care hospital and psychiatric hospital Lahore

Methodology: A Descriptive Cross-Sectional study was conducted in the settings of a general tertiary care hospital and a psychiatric hospital in Lahore. The study completed within a four months after receiving approval from the institution's research ethical committee. The sample size, consisting of 170 staff nurses, was determined based on a population of 812 staff nurses working at these hospitals, with reference to a previous study on stress levels among nurses. Convenience sampling was used to select participants who met inclusion criteria, including staff nurses of both genders aged 24-45 years, willing to take part in the study. Exclusion criteria comprised nurses working on the administrative side, those with less than one year of clinical experience, and those with psychiatric or chronic medical conditions.

Data were collected using a modified questionnaire, including sections on demographics, nurses' stress levels, and coping

strategies. Stress levels were assessed using a 20-question inventory with a scoring system of 0 for "never," 1 for "occasionally," and 2 for "always." Coping strategies were evaluated through a questionnaire containing 22 questions, each indicating specific strategies, with scoring ranging from 0 to 2. Data collection began after obtaining approval and involved recruitment based on inclusion and exclusion criteria. Informed consent was obtained from participants, ensuring the confidentiality of their responses. Data were collected in a digital format within a 30-minute time frame.

Data analysis was performed using statistical tools such as SPSS version 21 and MS Excel. Descriptive statistics, including frequency, distribution tables, and percentages, were used to analyze the data. Graphs and charts were also utilized for data visualization. Inferential statistics, including the Kolmogorov-Smirnov test to assess data normality, were conducted. As the sample size exceeded 50 and the test indicated normal distribution ($p > 0.05$), chi-square tests were applied to analyze categorical variables, with statistical significance set at $p < 0.05$.

Results: Data from 170 nurses in general tertiary care and psychiatric hospitals in Lahore revealed that 36.5% were in the 31-40 age range, and the majority were female (62.9%). Education-wise, 41.8% had Post RN qualifications, 24.1% held specialties along with nursing diplomas or BSN degrees, 20% had BSN degrees, and 14.1% had nursing diplomas. The majority had 4-6 years of experience, with only 6.5% having more than 10 years. Table 1 summarizes that most participants were in the late young age group, had post RN qualifications, 4-6 years of experience, and were predominantly female.

Table 1: Demographic Variable of Nurses working in general tertiary care hospital and psychiatric hospital Lahore

Demographic		n	%
Age	20-30	52	30.6
	31-40	62	36.5
	41-50	56	32.9
Gender	Male	63	37.1
	Female	107	62.9
Qualification	Diploma	24	14.1
	Diploma PBS	41	24.1
	RN BSN	71	41.8
	BSN	34	20.0
Experience	1-3 year	54	31.8
	4-6 year	57	33.5
	7-9 year	48	28.2
	> 10 year	11	6.5

Descriptive Statistics analyzed by frequency 'n' and percentage '%'

Figure 1: Stress level among nurses working in general tertiary care hospital and psychiatric hospital Lahore

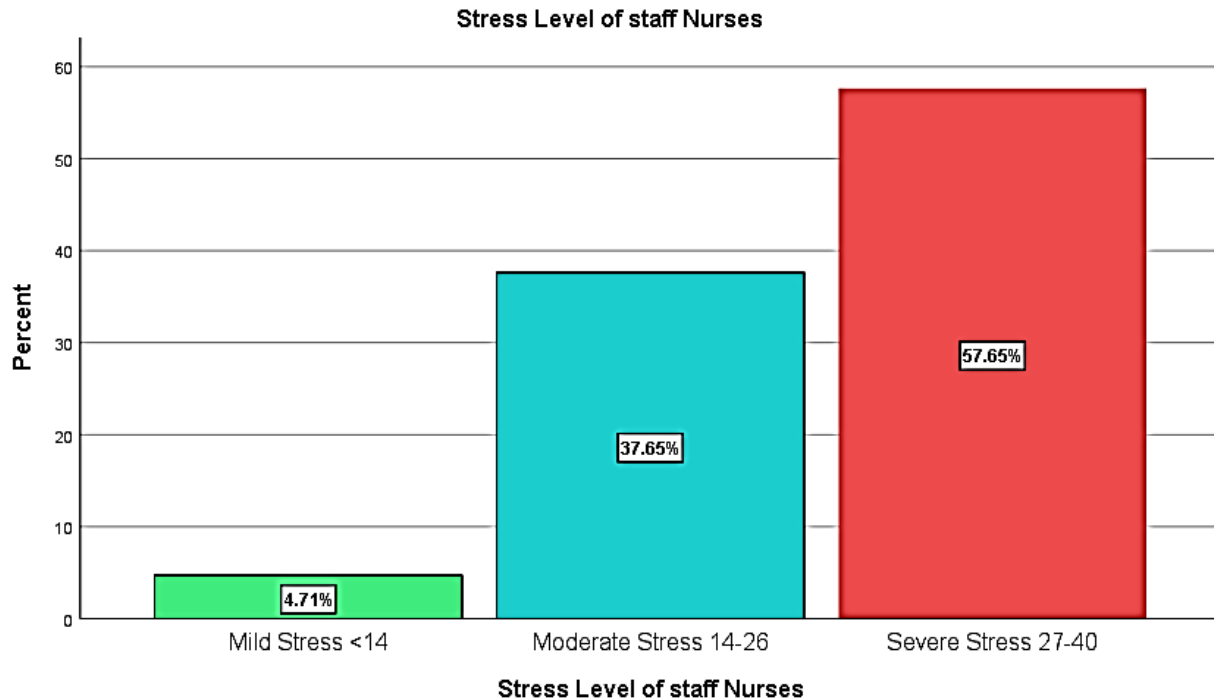


figure 1 shows that nurses in general tertiary care and psychiatric hospitals in Lahore experienced a high level of stress, with 57.65% reporting severe stress, 37.65% experiencing moderate stress, and only 4.71% having mild stress based on our study's operational definition. These findings indicate a predominantly severe stress level among nurses, posing a significant risk for emotional and psychological issues. Overworked medical staff, particularly nurses, are more susceptible to stress, especially in government hospitals

Table 2: Coping strategies with stress among Nurse

	N	Response in always	
		n	%
Expressed anger to the persons who caused the problem	170	94	55.3
I let my feelings out somehow	170	60	35.3
I followed fate; sometimes I just have bad luck.	170	47	27.6
Went on as if nothing had happened	170	45	26.5
Made light of the situation; refused to take it too seriously	170	40	23.5

I didn't want to go to work today	170	59	34.7
I tried to suppress my emotions.	170	44	25.9
Drew on previous experiences; I was in a similar situation previously.	170	52	30.6
Took a big risk or did something extremely dangerous	170	42	24.7
I changed something about myself	170	54	31.8
I prayed	170	18	10.6
I Try to forget the whole thing	170	46	27.1
Talked to someone to find out more about the situation	170	14	8.2
I asked a relative or a friend I respected for advice	170	22	12.9
I apologized or did something to make up	170	28	16.5
I promised myself that the next time would be different.	170	22	12.9
Hoped a miracle would happen	170	20	11.8
Slept more than usual	170	22	12.9
Refused to believe it had happened	170	68	40
Just concentrated on what I had to do next-the next step	170	68	40
I was inspired to do something creative	170	54	31.8
In a positive way, you changed or grew as a person.	170	65	38.2

The higher percentage indicating stronger endorsement of coping strategies

Among the 170 participants in our study on nurses' stress coping strategies, the most commonly employed strategies included expressing anger towards the source of stress (55.3%), focusing on the next steps without dwelling on the problem (40%), personal growth or positive change (38.2%), and venting emotions (35.5%). In contrast, talking to someone to gain more insight into the situation was the least utilized strategy (8.2%). These findings suggest that expressing anger is the predominant strategy for dealing with stress, particularly among nurses in tertiary care settings, who tend to avoid discussing issues or seeking outside help, as shown in Table 2.

Table 4: Prevalence of stress in Nurses working in general tertiary care hospital and psychiatric hospital Lahore

Stress Prevalence	n	%	X $\pm$ S.D	df	P value
Mild Stress <14	8	4.71			
Moderate Stress 14-26	64	37.65	27.51 $\pm$ 0.588	2	0.000
Severe Stress 27-40	98	57.65			

Inferential statistics analyzed by chi-square test with $p < 0.05$

Out of 170 nurses, 8 (4.71%) had mild level of stress, 64 had moderate stress (37.65%) and 98 (57.65 %) reported severe. The mean scores of the nurses were also calculated. The mean score was highest in the tertiary care hospital among nurses with 27.51 ± 6.966 with $p=0.000$. This show that there was high significance difference between the three level of stress among nurses working in general tertiary care hospital and psychiatric hospital Lahore. The pervalence of stress among nurses working in general tertiary care hospital and psychiatric hospital Lahore as shown in the table 4.

Figure 2 compare the stress level of nurses working in general tertiary care hospital and psychiatric hospital Lahore

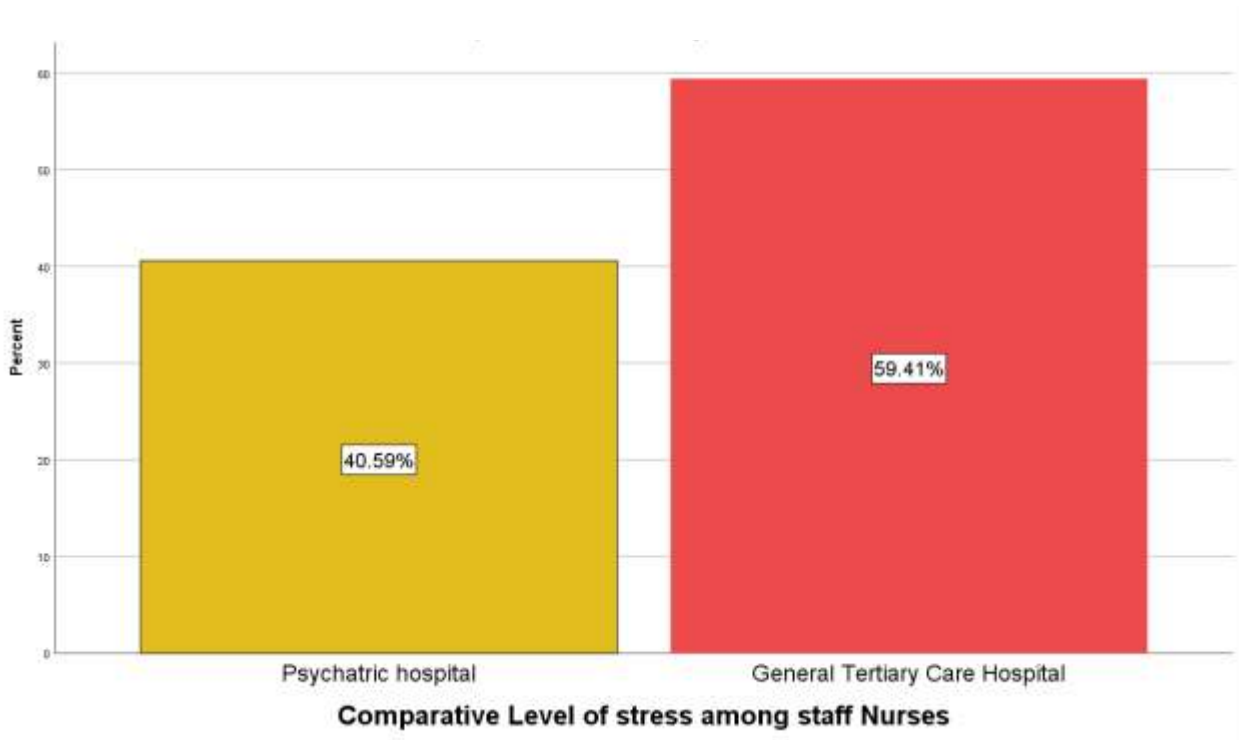


Figure (2) demonstrates that nurses worked in general tertiary care hospital had a stresslevel 59.41% and the stress level among the psychiatric hospital Lahore having a level of stress with a percentage of (40.59%).Further more this figure illustarted that there were a difference between the stress level

of nurses who working in the psychiatric hospital and the general tertiary care hospital Lahore. Thus a high proportion of nurses who working in general tertiary care hospital had significant risk for development of emotional and psychological problem according to our study.

Discussion

Nurses often experience high stress when caring for patients with complex health issues. In this study, 30.6% of nurses were aged 31-40, with the majority being female (62.9%). In terms of education and qualification, 41.8% held postRN qualifications, while only 14.1% had nursing diplomas. Most of these nurses had 4-6 years of experience. These findings are similar with the study of Mohammed (2021) demonstrates that nurses working in general (55.7 percent) were between the ages of 30 and 40. However this study showed that the majority of Nurses (42.9%) having a diploma's degree and 35.7 percent reported having (2-9) years of nursing experience [10]. Furthermore the study of Arif Qadir et al revealed that 48 (36%) of participants were between the ages of 20 and 25, while 61 (45.9%) were between the ages of 26 and 30. Professional nursing diplomas accounted for 78 out of 133 (59%), generic BSNs for 12 out of 133 (9.0%), and post RNs for 43 out of 133 (32.3%) [11].

Our study demonstrates that nurses worked in general tertiary care hospital and psychiatric hospital Lahore having a severe level of stress with a percentage of (57.65%). Further more this figure illustrated that 37.65% nurses with a moderate level of stress and only 4.71% with a mild level of stress. However the study of Sreelekha showed that 2 (1%), 79 (39.5%), and 119 (59.5%) of the 200 samples, respectively, experienced mild stress, moderate stress, and severe stress [12].

Additionally an another study conducted in local context the Work Stress Scale revealed that 35.8% of respondents experienced "Moderate" levels of occupational stress (WSS). The rate of "Severe" occupational stress was found to be 28.3%. [13]. According to the Vernekar and his colleague survey, 59.3% of nurses experienced moderate stress. Stress levels were severe in 36.8% of cases and extremely severe in 2.4%. [1], whereas Bhatia, Kishore [14] study found that 87.4% of nurses reported experiencing occupational stress.

The top stress-reduction techniques, according to our study, were expressing anger at the sources of the problem (55.3%), journaling, exercising, and eating healthy. Refused to accept what had happened and instead concentrated solely on what I needed to do next—the next step (40%) The least frequently used strategies were "changed or improved as a person" (38.2%), "let my feelings out in some way" (35.5%), and "talked to someone to find out more about the incident" (8.2%).

In a study from 2019 by Ansah Ofei and their team, they found that nursing managers used different ways to deal with stress. The most popular ways were managing time better (91.8%), communicating effectively (91%), sharing tasks with others (89.5%), and talking about their feelings instead of keeping them inside (88.8%). On the other hand, only a small number of people, about 18.4%, turned to binge eating as a way to cope with stress [15] This study discovered that nurses use various ways to handle stress, like getting angry at the people causing the problem, ignoring the issue and focusing on the next steps, growing as a person in a positive manner, expressing their feelings, or not wanting to go to work. Talking to someone to understand the situation better was used the least. In general, the most common strategy was expressing anger when feeling stressed. These findings are unlike what Kibria (2018) found, where most nurses prayed (74%) and shared their stress with others (88%) [16]. Also, a study by Homood Alharbi and Abdualrahman Alshehry in 2019 found that many people turned to their religious beliefs when dealing with stress, while very few resorted to using substances (like drugs or alcohol) to cope with stress (with scores of 6.70 ± 1.72 for religious belief and 2.22 ± 0.81 for substance abuse). This aligns with the findings from a study by Ofei and colleagues in 2018, which also showed that substance abuse was not a common coping strategy."

[17] [18]. However In Godwin et al.'s 2016 study, they found that many nurses used different strategies to manage work-related stress. Break time was utilized by 60% of the nurses, meditation by 51.6%, exercise by 64.1%, and relaxation by 74.3%. The majority (84.9%) expressed their emotions instead of keeping them inside, while a small number turned to drug use (6.8%) and overeating (4.5%) as coping methods."Godwin, Alex [19].

In our study, nurses in general tertiary care hospitals reported a stress level of 59.41%, while those in psychiatric hospitals in Lahore had a stress level of 40.59%. This suggests that a significant number of nurses working in psychiatric settings are at risk of developing emotional and psychological issues, as per our findings. This aligns with a study by Tajvar et al. (2018), which found that nurses in psychiatric wards had lower occupational stress levels compared to surgical and internal wards [20]. Similarly, Azam Faraji et al. (2019) reported a 'moderate-to-high' level of occupational stress among nurses, with 'Role Overload' being the most stressful aspect. It's worth noting that high workload is a common source of stress, and psychiatric nurses typically face lower workloads due to the improved condition of their patients [21]. The current study found that psychiatric nurses generally experience less job stress than nurses in general tertiary care hospitals, and this aligns with previous research indicating that occupational factors have a more significant impact on job stress than demographic factors, including workload, workplace characteristics, support from authorities, and support from colleagues. [22].

Conclusion: The majority of nurses, according to the study's findings, experience extreme stress. Nurses worked in general tertiary care hospital had higher level stress than nurses working in psychiatric hospital Lahore. The most often mentioned strategies to cope used by nurses to manage stress are: expressing anger to the person who started the situation, refusing to accept that it had happened and I just focused on what I needed to do next-the next step. The least frequently reported coping strategies was spoke with someone to learn more about the situation.

References

1. Vernekar, S., H. Shah, and H. Shah, A study of work-related stress among nurses in a tertiary care hospital in Goa. *International Journal Of Community Medicine And Public Health*, 2018. 5: p. 657-661.
2. Abdullah, M.K., Z.M. Mirza, and S.Y. Othman, Assessment of Job Stress among Nurses Working in Akre Teaching Hospitals. *Mosul Journal of Nursing*, 2018. 6(1): p. 23-33.

3. Kaburi, B.B., et al., Psychological working conditions and predictors of occupational stress among nurses, Salaga Government Hospital, Ghana, 2016. *The Pan African Medical Journal*, 2019. **33**.
4. Alharbi, H. and A. Alshehry, Perceived stress and coping strategies among ICU nurses in government tertiary hospitals in Saudi Arabia: a cross-sectional study. *Ann Saudi Med*, 2019. **39**(1): p. 48-55.
5. Faraji, A., et al., Occupational stress and its related demographic factors among Iranian CCU nurses: a cross-sectional study. *BMC Res Notes*, 2019. **12**(1): p. 634.
6. Yin, H., S. Huang, and L. Lv, A multilevel analysis of job characteristics, emotion regulation, and teacher well-being: a job demands-resources model. *Frontiers in Psychology*, 2018. **9**: p. 2395.
7. Martínez, J.P., et al., Profiles of burnout, coping strategies and depressive symptomatology. *Frontiers in psychology*, 2020. **11**: p. 591.
8. Masood, M., Occupational stress and its effects on job performance. *Journal of Research and Reviews in Social Sciences Pakistan*, 2018. **1**(2): p. 169-193.
9. Parthasarathy, K., K. Vivekanandan, and P. Aswini, INFLUENCE OF PERSONAL VARIABLES ON OCCUPATIONAL STRESS AMONG THE EMPLOYEES IN PRINT MEDIA. 2019.
10. Mohammed, Q.Q., Stress of Nurses working in General Wards at Teaching Hospitals in Baghdad City. *Mosul Journal of Nursing*, 2021. **9**(2): p. 280-288.
11. Arif, M.-M., et al., Occupational Stress among Medical and Paramedical Staff in Tertiary Care Hospitals Based on Observational Study. *Pakistan Journal of Public Health*, 2020. **10**(4): p. 231-241.
12. Sreelekha, B. and R. H, Stress among Nurses in a Tertiary Care Hospital. *The International Journal of Indian Psychology*, 2019. **3**: p. 155-164.
13. Ansari, Z., et al., Occupational Stress among Emergency Department (ED) Staff and the Need for Investment in Health Care; a View from Pakistan. 2019.
14. Bhatia, N., et al., Occupational Stress Amongst Nurses from Two Tertiary Care Hospitals in Delhi. *Australasian Medical Journal*, 2010. **3**: p. 731-738.
15. ansah ofei, a.m., et al., Stress and coping strategies among nurse managers. *Journal of Nursing Education and Practice*, 2019. **10**: p. 39.
16. Kibria, M.G., Prevalence of stress and coping mechanism among staff nurses of intensive care unit in a selected hospital. *Int J Neurosurg*, 2018. **2**(1): p. 8-12.

17. Alharbi, H. and A. Alshehry, Perceived stress and coping strategies among ICU nurses in government tertiary hospitals in Saudi Arabia: a cross-sectional study. *Annals of Saudi medicine*, 2019. **39**(1): p. 48-55.
18. Ofei, A.M.A., et al., Stress and coping strategies among nurse managers at three district hospitals in the eastern region of Ghana. *NUMID HORIZON: An International Journal of Nursing and Midwifery*, 2018. **2**(1): p. 1-13.
19. Godwin, A., L. Alex, and F.H. Selorm, Occupational stress and its management among nurses at St. Dominic Hospital, Akwatia, Ghana. *Health Science Journal*, 2016. **10**(6): p. 0-0.
20. Tajvar, A., et al., Occupational stress and mental health among nurses in a medical intensive care unit of a general hospital in Bandar Abbas in 2013. *Electronic physician*, 2018. **7**(3): p. 1108.
21. Faraji, A., et al., Occupational stress and its related demographic factors among Iranian CCU nurses: a cross-sectional study. *BMC Research Notes*, 2019. **12**(1): p. 634.
22. Xie, H., et al., Investigation of the Psychological disorders in the healthcare nurses during a coronavirus disease 2019 outbreak in China. *Medicine*, 2020. **99**(34).