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Stress anxiety and depression level amongst nurses working at tertiary care hospital

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Abstract--Background: Nurses are expected to offer patients with high-quality care in all healthcare settings and are seen as an essential member of the health care workforce. Objective: To assess the stress anxiety and depression level amongst nurses working at tertiary care hospital. Methodology: The current cross sectional study was carried out at Balochistan Institute of Psychiatry and Behavioral Sciences and Bolan Medical Complex Hospital Quetta from November 2010 to May 2020. A pre-designed questionnaire was distributed amongst all the nurses who fulfill the inclusion criteria. Data collection was done by self-completed scale of Depression, Anxiety and Stress Scale 21 (DASS-21). The SPSS version 24.0 was used to input and analyze the data. Results: In the current study, totally 150 nurses were enrolled. The male nurses were 45 (30%) while female nurses were 105 (70%). The mean age with standard deviation in the current study was 36 (± 4.12) years. In the current study, 30 (20%) nurses were normal, 18 (12%) were with mild depression, 52 (34.66%) were moderate, 45 (30%) were severe and 5 (3.33%) nurses were observed with very severe depression. Distribution based on anxiety shows that 30 (20%) nurses were normal, 15 (10%) were with mild anxiety, 45 (30%) were moderate, 15 (10%) were severe and 40 (26.66%) nurses were observed with very severe anxiety. Distribution based on stress shows that 75 (50%) nurses were normal, 18 (12%) were with mild anxiety, 40 (26.66%) were moderate, 15 (10%) were severe and 2 (3%) nurses were observed with very severe stress. Conclusion: Our study concludes that stress, anxiety and depression were prevalent amongst nurses of tertiary care hospital in Quetta. The nursing staff's performance may suffer as a result of these mental health conditions being neglected, which might impact the patient care quality.

Keywords—Stress, anxiety, depression, nurses.

Introduction

Nurses are expected to offer patients with high-quality care in all healthcare settings and are seen as an essential member of the health care workforce. In their line of work, especially in hospitals, they encounter and cope with a variety of difficult circumstances (1, 2). Anxiety and depression are physical and psychological symptoms of stress, which may also result in maladaptive behaviors like eating disorders, alcoholism, and drug misuse. Stress is also a mental or emotional condition that generates tension in the body and mind (3-5).

According to the literature, there are several situations when being a woman increases your risk of stress, anxiety, and depression (6). Additionally, a number of reasons, such as a lack of resources, high standards and demands, a heavy workload, long shifts and professional disputes are regarded to be a cause for certain psychological issues among nurses (7, 8). According to recent epidemiological data, depression affects nurses twice as often (18%) as the general population (9%), indicating that stress, anxiety, and depression are prevalent in the field of nursing (9, 10). These psychological issues certainly have a negative impact on their social interactions and physical wellbeing. Furthermore, the nurses' personal mental health issues have a significant impact on the quality of the treatment they provide. When one is depressed, they often find it difficult to accomplish their obligations to the best of their abilities. Patients and their families largely depend on medical professionals, especially nurses; as a result, it is crucial for nurses to take better care of their health in order to offer their patients with high-quality care.

Numerous studies have shown that nurses working in hospitals are more likely than the general population to experience stress, anxiety, and depression (11-14). The frequency of stress amongst nurses was between 40% and 90%, which normally runs from moderate-high levels; 35% to 41% of nurses in the United States and 11% to 80% of nurses in Iran (15-17). Furthermore, it was shown that nurses in China, Iran, and Brazil had high rates of anxiety, ranging from 32-43%, 40- 46%, and 44-66%, correspondingly (18-20).

Given the high incidence of psychological problems amongst nurses globally, the paucity of research on the psychological wellness of nurses in Pakistan, the acute shortage of nurses, and the unfavorable working conditions in Pakistan, the present study was designed to investigate the degree of stress, anxiety, and depression among nurses working at Quetta Balochistan's tertiary care hospital.

Materials and Methods

The current cross sectional study was carried out at Balochistan Institute of Psychiatry and Behavioral Sciences and Bolan Medical Complex Hospital Quetta. The study duration was one years from November 2019 to May 2020. The study approval was taken from IRB of the institute. The calculated sample size based on WHO sample size calculator was 150 nurses. The inclusion criteria of our study

were all the nurses of both the gender and all ages willing to participate in our study. The exclusion criteria were all the nurses with severe medical conditions like HIV, diabetes mellitus, hypertension. Pregnant nurses were also excluded from our study. Informed consent was taken in written from all the participants. A pre-designed questionnaire was distributed amongst all the nurses who fulfill the inclusion criteria. A pre-designed proforma was then used to collect all the required information's. Data collection was done by self-completed scale of Depression, Anxiety and Stress Scale 21 (DASS-21). The SPSS version 24.0 was used to input and analyze the data. Frequencies and percentages were used to represent qualitative variables. In terms of Mean SD, quantitative variables were represented.

Results

In the current study, totally 150 nurses were enrolled. The male nurses were 45 (30%) while female nurses were 105 (70%). The mean age with standard deviation in the current study was 36 (± 4.12) years. On the basis of age wise distribution, 90 (60%) nurses were ≤ 30 years, 45 (30%) were 31-40 years while 15 (10%) nurses were 41-50 years old. The mean score of anxiety, depression and stress was 19.11 (± 2.12), 119.36 (± 3.11) and 13.1 (± 0.9) respectively. Distribution based on depression shows that 30 (20%) nurses were normal, 18 (12%) were with mild depression, 52 (34.66%) were moderate, 45 (30%) were severe and 5 (3.33%) nurses were observed with very severe depression. Distribution based on anxiety shows that 30 (20%) nurses were normal, 15 (10%) were with mild anxiety, 45 (30%) were moderate, 15 (10%) were severe and 40 (26.66%) nurses were observed with very severe anxiety. Distribution based on stress shows that 75 (50%) nurses were normal, 18 (12%) were with mild anxiety, 40 (26.66%) were moderate, 15 (10%) were severe and 2 (3%) nurses were observed with very severe stress.

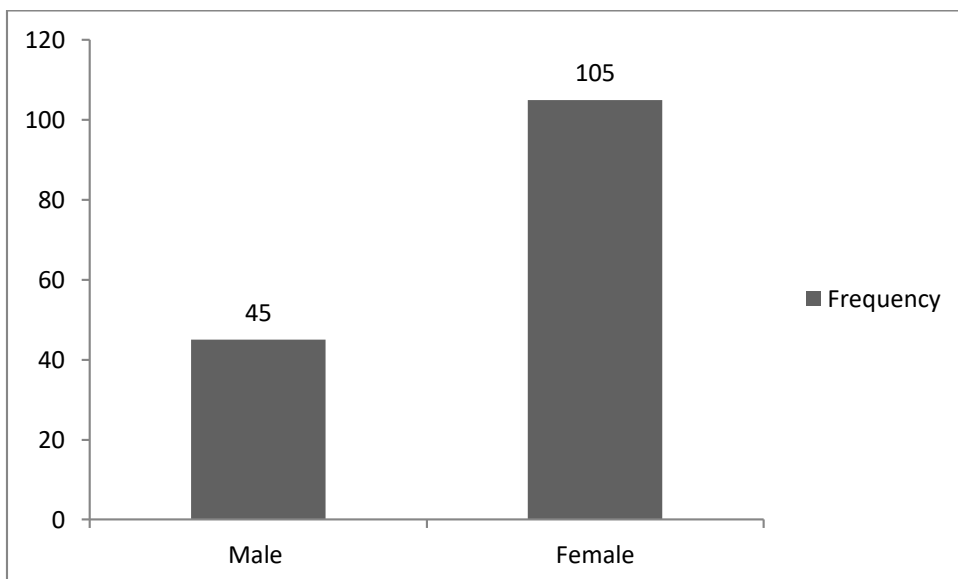


Figure 1: Distribution of patients on gender basis

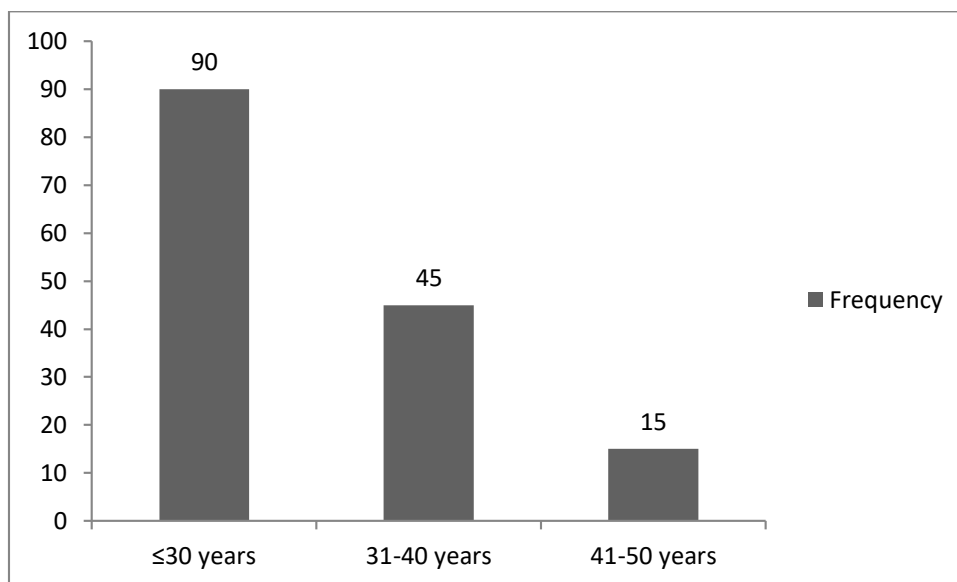


Figure 2: Distribution based on age

Table 1: Distribution of nurses based on depression, anxiety and stress

Parameter	Sub-category	Frequency (%)
Depression	Normal	30 (20%)
	Mild	18 (12%)
	Moderate	52 (34.66%)
	Severe	45 (30%)
	Very severe	5 (3.33%)
Anxiety	Normal	30 (20%)
	Mild	15 (10%)
	Moderate	45 (30%)
	Severe	15 (10%)
	Very severe	40 (26.66%)
Stress	Normal	75 (50%)
	Mild	18 (12%)
	Moderate	40 (26.66%)
	Severe	15 (10%)
	Very severe	2 (3%)

Discussion

Mental health conditions including stress, anxiety, and depression are quite common among nurses who work at the bedside across the world. Lack of resources, an unfavorable job environment, a heavy workload, and working shifts are some of the causes of this. These issues may have a direct impact on the patients' access to high-quality care.

In the current study, totally 150 nurses were enrolled. The male nurses were 45 (30%) while female nurses were 105 (70%). The mean age with standard deviation

in the current study was 36 (± 4.12) years. On the basis of age wise distribution, 90 (60%) nurses were ≤ 30 years, 45 (30%) were 31-40 years while 15 (10%) nurses were 41-50 years old. The mean score of anxiety, depression and stress was 19.11 (± 2.12), 119.36 (± 3.11) and 13.1 (± 0.9) respectively. Distribution based on depression shows that 30 (20%) nurses were normal, 18 (12%) were with mild depression, 52 (34.66%) were moderate, 45 (30%) were severe and 5 (3.33%) nurses were observed with very severe depression. Distribution based on anxiety shows that 30 (20%) nurses were normal, 15 (10%) were with mild anxiety, 45 (30%) were moderate, 15 (10%) were severe and 40 (26.66%) nurses were observed with very severe anxiety. Distribution based on stress shows that 75 (50%) nurses were normal, 18 (12%) were with mild anxiety, 40 (26.66%) were moderate, 15 (10%) were severe and 2 (3%) nurses were observed with very severe stress. The quality of nursing care is eventually impacted by these psychiatric diseases, which also have an adverse effect on the nurse's professional performance and personal life quality (1-6). A previous study from Pakistan reported 81% prevalence of stress which is quite high than our study. This might be due to difference in use of tools for data collection (18). Other studies from south Asia reported comparable prevalence of stress to our study who use DASS 21 tool for data collection (1, 8, 23). In our study the level of anxiety was high than a previous studies who reported 30-60% nurses with anxiety (11, 23). Previous studies reported 29.2-53% prevalence of stress amongst nurses which is not in accordance with our findings (21-23). In light of the aforementioned conclusion, the levels of stress, anxiety, and depression were much greater than those described in earlier studies. Neglecting certain mental health conditions may result in poor intellectual and social functioning, which in turn may lead to inadequate quality care. Anxiety and depression were shown to be positively and significantly correlated, demonstrating a direct link between the two. According to this research, which asserts that all three psychological issues are closely linked to one another, greater stress was shown to be associated with depression, and more anxiety to be associated with depression.

Conclusion

Our study concludes that stress, anxiety and depression were prevalent amongst nurses of tertiary care hospital in Quetta. The nursing staff's performance may suffer as a result of these mental health conditions being neglected, which might impact the patient care quality.

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