MEDEYE

Research Article

ASSESSMENT OF ANXIETY LEVELS IN NURSING STAFF DURING COVID-19 PANDEMIC

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Abstract: The present study aims to investigate the psychological stress levels among nursing staff by measuring anxiety scores using the GAD-7 scale. This cross-sectional study was conducted at the Bahria International Hospital Lahore. 121 nursing staff were included in the study and divided into two groups. Group A was not directly involved in managing covid-19 patients, whereas group B was directly in contact with COVID-19 patient management. Our findings indicate a significant increase in anxiety levels among the exposed group. These results suggest that healthcare administrative authorities should consider these findings better to support the psychological well-being of nursing healthcare professionals.

Introduction

The COVID-19 pandemic has profoundly impacted diverse domains of human life, with the healthcare sector bearing the brunt of its deleterious effects (Wang et al., 2021a). Nurses representing the frontline workforce have been in the vanguard of the fight against the pandemic, treating patients infected with the virus (Mailani et al., 2022). Nevertheless, besides the physical exigencies associated with caring for COVID-19 patients, nurses have experienced serious mental health challenges, with anxiety emerging as a salient concern (Stephens et al., 2020).

Empirical research indicates that the COVID-19 pandemic has significantly increased anxiety levels among nurses. For example, a recent study by Zhang et al. (2021) found that nurses who had direct contact with COVID-19 patients experienced higher anxiety levels than those who did not. Similarly, Chew et al. (2020) reported that nurses working in COVID-19-designated hospitals experienced higher levels of anxiety than those working in non-COVID-19-designated hospitals (Chen et al., 2021; Wang et al., 2021b).

Given nurses' critical role in managing COVID-19 patients, it is crucial to comprehend the factors contributing to anxiety in this population and develop effective measures to mitigate the risk of psychological distress. This study aims to examine the levels of anxiety experienced by nurses during the COVID-19 pandemic.

Material and methods

This case and control analysis was conducted at Bahria Town International Hospital Lahore from April to June 2020. A total of 121 nurses were included and divided into two groups. Group A consisted of nurses frequently come into contact with COVID-19 patients, and Group B consisted of nurses who did frequently contact COVID-19 patients. Participants with pre-existing mental illnesses and anti-psychotic medication users were excluded from the study.

Participants from a number of hospitals in Lahore were given questionnaires to complete to collect replies. Anxiety levels were assessed using the Generalized Anxiety Disorder-7 (GAD-7) score system, which ranges from 0 to 21. An anxiety score of 5 to 9 denotes a mild condition, 10 to 14 is a moderate case, and 15 or higher is a severe illness.

P-values less than 0.05 were regarded as statistically significant, with a confidence interval of 95% when performing the Chi-square test to assess the data gathered. Pared in a laboratory (Owusu and Newman *et al*, 2020).

Results

A total of 121 staff were included in the study. The total number of males was 69 and female were 52,

Table-1: Anxiety Levels among nursing staff

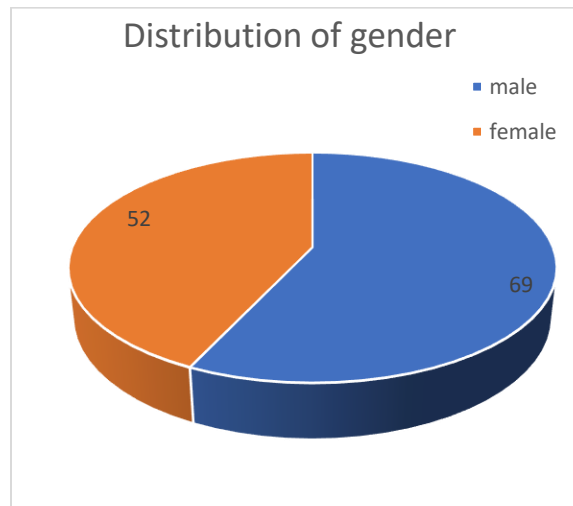| Variables	Constructs	Groups		P value
		Group A (n=48)	**Group B (n=73)**	
Gender	Male	28 (58.3%)	41 (56.1%)	0.54
	Female	20 (41.7%)	32 (43.8%)	
Anxiety	No anxiety	26 (54.2%)	33 (45.2%)	0.03
	Mild anxiety	12(25.0 %)	21 (28.8%)	
	Moderate anxiety	7(14.6%)	11(15.1%)	
	Severe anxiety	3 (6.3 %)	8(11.0)	

Figure 1

with a mean age of 39 ± 9.26 years. Group A contained 48 participants, whereas Group B had 71 participants. In group A, 58.3% were male, and 56.1% were males in group B.

The frequency and percentage of nursing staff members in each group, broken down by gender and anxiety score, are presented in the table-1 below. 121 registered nurses were working at the facility in total. Because the p-value for gender was 0.54, it may be concluded that there was no discernible difference in the distribution of genders between the two groups. The p-value for the anxiety score was 0.03, indicating a significant difference in the level of anxiety experienced by the two groups. Table 1 shows that the percentage of nursing staff who reported having mild, moderate, or severe anxiety was higher in Group B, which was directly involved in the management of covid-19 patients, in comparison to Group A. On the other hand, the percentage of nursing staff who reported having no anxiety was lower in Group B compared to Group A.

Discussion

Anxiety, a typical human response to stressful situations, can be adaptive, motivating people to take appropriate action. However, when anxiety becomes overwhelming and chronic, it can engender detrimental mental and physical health effects (Doherty and Clayton, 2011). During the COVID-19 pandemic, nurses have confronted a plethora of stressors, resulting in elevated anxiety levels. For instance, they have had to adapt promptly to new protocols for treating COVID-19 patients, including social distancing and using personal protective equipment (PPE) (Kontoangelos et al., 2020). Furthermore, they have endured extended work hours, leading to physical exhaustion and burnout. Many nurses have also experienced concerns about contracting or transmitting the disease to their loved ones (Goh et al., 2021).

According to the study's findings, the nursing personnel in Group B who managed COVID-19 patients experienced considerably more anxiety than the nursing staff in Group B who were not directly involved (Group A). This result aligns with earlier research that showed elevated anxiety levels among healthcare professionals during infectious disease outbreaks (Lai et al., 2020; Pappa et al., 2020).

The greater danger of infection and the rigors of caring for severely ill patients during the COVID-19 pandemic are likely to be blamed for the higher degree of anxiety seen in Group B. These results highlight the need for focused interventions to improve healthcare professionals' mental health and well-being, especially those directly involved in patient care during the pandemic.

It is also important to note that Group B had fewer anxiety-free nurses than Group A. This shows that even among healthcare professionals who do not report high anxiety levels, the pressures of caring for COVID-19 patients may adversely affect their mental health. Earlier studies have also noted increased burnout and emotional weariness among healthcare professionals during the pandemic (Kang et al., 2020; Shanafelt et al., 2020). Our study has some limitations as well. This study was conducted in a Single hospital with a small sample size. A large multicentric study needs further analysis of this important topic.

Conclusion

In conclusion, the current study offers additional proof of how the COVID-19 pendemic has impacted the mental health of healthcare professionals, especially those who directly provide patient care. The results show that during infectious disease outbreaks, there is a need for focused interventions to enhance the mental health and well-being of healthcare personnel.

Conflict of Interest

The authors declared an absence of conflict of interest.

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