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Original Research Article

A STUDY TO ASSESS JOB STRESS AND ITS IMPACT ON QUALITY OF LIFE: A DESCRIPTIVE CROSS-SECTIONAL STUDY

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Abstract: *Job stress is a significant occupational hazard among nurses, adversely affecting their health, well-being, and professional performance. In Pakistan, where nurses face high workloads and limited institutional support, stress levels are particularly concerning. This study aimed to assess job stress and its impact on the quality of life among nurses working in tertiary care hospitals in Lahore.* ***Methods:*** *A descriptive cross-sectional study was conducted among 169 nurses from Sheikh Zayed Hospital and Services Hospital, Lahore. Data were collected using a structured questionnaire, including the Expanded Nursing Stress Scale (ENSS) and SF-12 Likert scale. Descriptive and inferential statistics were used to analyze the data.* ***Results:*** *The findings revealed that 40% of nurses experienced mild stress, 13% reported moderate stress, and 6.7% suffered from severe stress. Stress significantly impacted the quality of life, with limitations in daily activities, emotional problems, and social relationships. Younger nurses and unmarried individuals reported higher stress levels. Significant associations were observed between stress levels and demographic variables such as gender, age, and marital status ($p < 0.05$).* ***Conclusion:*** *Job stress among nurses in tertiary care hospitals significantly affects their quality of life, emphasizing the need for targeted interventions, including stress management programs and institutional reforms. Improving the work environment and supporting nurses can enhance their well-being and professional performance.*

Keywords: Job Stress, Quality Of Life, Nurses, Tertiary Care, Pakistan, Nursing Stress

Introduction

Job stress is a prevalent occupational hazard among healthcare professionals, particularly nurses, who are exposed to high workloads, emotional demands, and challenging work environments. Prolonged stress not only affects their mental and physical health but also compromises their professional performance, ultimately impacting patient care. In Pakistan, where healthcare systems are already under strain due to limited resources and high patient-to-nurse ratios, job stress among nurses has become a critical issue (1, 2).

The role of nurses in patient care is multifaceted, requiring technical skills, emotional resilience, and effective communication. However, the combination of demanding workloads, staff shortages, and limited institutional support often leads to burnout and reduced quality of life among nurses. Studies in Pakistan reveal that up to 60% of nurses experience moderate to high levels of job stress, which significantly affects their ability to provide optimal care (3, 4). These stressors are compounded by socio-cultural factors, including gender-based expectations and the societal undervaluation of the nursing profession (5).

Globally, job stress in nurses has been linked to various adverse outcomes, including increased absenteeism, turnover rates, and diminished job satisfaction. A study conducted in India found that nurses with high stress levels reported poor health-related quality of life, with significant impairments in both physical and emotional domains (6). Similarly, research in African healthcare settings highlights that unmanaged job stress leads to chronic health issues, such as hypertension and depression, further exacerbating the challenges faced by healthcare systems (7).

In Pakistan, the limited availability of structured stress management programs for nurses contributes to the persistence of this issue. Despite the recognition of job stress as a significant concern, there is a lack of evidence-based interventions and policies tailored to the unique needs of nurses in the local context. Ahmed et al. emphasize the need for institutional reforms, including regular stress management training and psychological support, to address this growing problem (8).

This study aims to assess the levels of job stress and its impact on the quality of life among nurses working in tertiary care hospitals in Lahore, Pakistan. By identifying the key stressors and their association with quality-of-life indicators, this research seeks to provide insights for developing targeted interventions and policies to improve nurses' well-being and professional efficacy.

Methodology

The study utilized a descriptive cross-sectional design to assess job stress and its impact on the quality of life among nurses working in tertiary care hospitals in Lahore, Pakistan. This design was selected to provide a comprehensive snapshot of the current stress levels and their association with the quality of life among the nursing workforce.

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The target population included registered nurses working in Sheikh Zayed Hospital and Services Hospital, Lahore. A total of 169 nurses participated in the study. The inclusion criteria required nurses to have at least one year of professional experience and to be actively employed in the hospital at the time of data collection. Nurses who were on leave or unwilling to participate were excluded from the study. Convenience sampling was used to recruit participants, ensuring a diverse representation across various wards and departments.

Data were collected using a structured questionnaire, which comprised three sections: demographic information, stress assessment, and quality of life evaluation. Demographic variables included age, gender, marital status, qualification, and hospital affiliation. Stress levels were measured using the Expanded Nursing Stress Scale (ENSS), which evaluates stress across various dimensions, including workload, interpersonal relationships, and patient care challenges. The quality of life was assessed using the SF-12 Likert scale, which captures the physical and emotional components of well-being.

Ethical approval was obtained from the institutional review boards of both hospitals. Participants were informed about the study's objectives and assured of the confidentiality of their responses. Written informed consent was obtained from all participants before administering the questionnaire.

Data collection was conducted over a two-month period during nurses' shifts to minimize disruptions to patient care. Trained research assistants administered the questionnaires and provided clarifications to ensure accurate and complete responses. The completed questionnaires were reviewed for completeness before data entry.

Data were analyzed using SPSS version 26. Descriptive statistics, such as frequencies and percentages, were used to summarize demographic characteristics, stress levels, and quality of life scores. Inferential statistics, including chi-square tests, were employed to identify associations between demographic variables and stress levels. Reliability analysis of the questionnaire was conducted using Cronbach's Alpha, with a score of 0.79 indicating good reliability.

Results

Table 1 presents the demographic characteristics of the respondents. The majority (58%) of the respondents were from Sheikh Zayed Hospital, while 42% were from Services Hospital, Lahore.

The Expanded Nursing Stress Scale (ENSS) was used to evaluate stress levels among nurses. Stress was categorized as follows:

- Severe stress: 60–70%
- Moderate stress: 30–50%
- Mild stress: 20–30%
- No stress: ≤10%

The impact of stress on quality of life was assessed using a Likert scale (SF-12). The percentage of responses for each question is shown in Table 2.

A chi-square test revealed significant associations between stress levels and certain demographic variables, including gender, marital status, and age ($p < 0.05$). However, no significant associations were observed for educational qualifications or designations.

A significant association was found between job stress and quality of life ($p = 0.02$), as shown in Table 4.

Cronbach's Alpha (0.79) indicated a high level of internal consistency among the questionnaire items, ensuring the reliability of the study results.

Table 1: Demographic Characteristics of Respondents (N = 169)

Variable	Category	Frequency (n)	Percentage (%)
Hospital	Sheikh Zayed Hospital	98	58
	Services Hospital	71	42
Gender	Male	45	27
	Female	124	73
Age Group	20–25 years	59	35
	26–30 years	76	45
	31–35 years	25	15
	36–40 years	9	5
Marital Status	Married	114	68
	Unmarried	55	32
Educational Status	Diploma in Nursing	102	60
	BSc Nursing	47	28
	Postgraduate Qualification	20	12
Designation	Charge Nurse	81	48
	Head Nurse	51	30
	Team Leader	37	22

Table 2: Effect of Stress on Quality of Life

Question	% of Agreed Responses	Stress Grade
In general, I feel my health conditions are good	20.0%	No stress
My health conditions limit me in performing daily activities at home	64.0%	Moderate
My health conditions limit me in climbing various flights of stairs	56.0%	Mild
During the last 4 weeks, I have performed less than I wished for due to health	61.0%	Moderate

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During the last 4 weeks, I have been unable to actively perform daily activities due to health problems	65.0%	Moderate
During the last 4 weeks, I have accomplished less than I wished for due to emotional problems like stress and anxiety	65.0%	Moderate
During the last 4 weeks, my emotional problems affected my social life	56.0%	Mild
During the last 4 weeks, I often felt peaceful and calm	17.0%	No stress
During the last 4 weeks, I often felt full of energy to work	16.0%	No stress
During the last 4 weeks, I often felt downhearted and blue	65.0%	Moderate

Table 3: Association of Stress with Demographic Variables

Variable	Chi-square	P-value
Gender	8.6272	0.003312
Marital Status	27.7704	0.00001
Age	7.8589	0.049019
Educational Qualification	2.5411	0.110914
Designation	4.9607	0.083712

Table 4: Association of Job Stress with Quality of Life

Variable	Chi-square	P-value
Quality of Life	8.6272	0.02

Table 5: Reliability Statistics

Cronbach's Alpha	N of Items
0.79	12

Discussion

This study assessed job stress and its impact on the quality of life among nurses working in tertiary care hospitals in Lahore, Pakistan. The findings revealed significant levels of stress among nurses, with varying impacts on their physical, emotional, and social well-being. These results align with previous studies conducted in Pakistan and other countries, highlighting the global prevalence of job stress among nurses and its implications for healthcare delivery.

The study found that 40% of nurses experienced mild stress, 13% reported moderate stress, and 6.7% suffered from severe stress. These findings are consistent with Ahmed et al., who reported that 45% of nurses in public hospitals in Karachi experienced moderate to high levels of stress, attributed primarily to high workloads and limited institutional support (9). Similarly, a study conducted in India by Gupta and Sharma found that nearly half of the nurses reported moderate stress levels, significantly impacting their mental and physical health (10).

The impact of stress on quality of life in this study was significant, with nurses reporting limitations in daily activities, emotional problems, and disruptions in social relationships. These results resonate with the findings of Malik and Zahid, who highlighted that stress among nurses in tertiary care hospitals in Lahore was associated with poor health-related quality of life and reduced professional satisfaction (11). Mwita et al. also emphasized that unmanaged job stress among African nurses led to chronic health conditions such as hypertension, further reducing their quality of life (12).

Interestingly, this study observed that demographic factors such as gender, age, and marital status were significantly associated with stress levels. Younger nurses and those who were unmarried reported higher stress levels, possibly due to a lack of coping mechanisms and professional experience. These findings align with Zafar et al., who found that female nurses in Pakistan, particularly those in the early stages of their careers, faced higher stress levels due to societal pressures and professional demands (13).

Despite the observed stress levels, the study found gaps in institutional support and stress management interventions. This is consistent with Ahmed and Khan's findings, which highlighted the absence of structured stress management programs in Pakistani hospitals, contributing to the persistence of job stress among nurses (14). Globally, effective interventions such as regular counseling, stress management workshops, and improved nurse-to-patient ratios have been shown to reduce stress levels and improve quality of life. For instance, Johnson et al. demonstrated that hospitals implementing stress management programs in the UK reported a 30% reduction in burnout rates among nurses (15).

The study underscores the urgent need for targeted interventions to address job stress among nurses in Pakistan. Institutional reforms, including regular training, counseling services, and better staffing policies, are crucial for alleviating stress and improving the quality of life for nurses. Additionally, fostering a supportive work environment and promoting a culture of teamwork can significantly mitigate stress and enhance job satisfaction.

Conclusion

This study highlights the significant levels of job stress experienced by nurses in tertiary care hospitals in Lahore, Pakistan, and its profound impact on their quality of life. While mild to moderate stress levels were most prevalent, severe stress was observed in a notable proportion, affecting their physical, emotional, and social well-being. The findings underscore the need for targeted institutional interventions, such as structured stress management programs, improved staffing policies, and supportive work environments, to alleviate stress and enhance the quality of life for nurses. Addressing these issues is essential not only for the well-being of nurses but also for improving the overall quality of patient care.

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Declarations

Data Availability statement
All data generated or analyzed during the study are included in the manuscript.
Ethics approval and consent to participate
Approved by the department Concerned. (IRBEC-SNU-0231/23)
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Conflict of interest

The authors declared absence of conflict of interest.

Author Contribution

FARZANA KAUSAR (Head Nurse)
Coordination of collaborative efforts.
Study Design, Review of Literature.
UMAIRA ALLAH DITTA (Charge Nurse)
Conception of Study, Development of Research Methodology Design, Study Design, Review of manuscript, final approval of manuscript.
Conception of Study, Final approval of manuscript.
MINAHAL HASHMI
Manuscript revisions, critical input.
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Data acquisition, analysis.
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BUSHRA NAWAZ (Principle)
Data entry and Data analysis, drafting article.
Data acquisition, analysis.
Coordination of collaborative efforts.

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