

THE EFFECT OF WORKLOAD ON EMERGENCY NURSES' PSYCHOLOGICAL HEALTH IN TERTIARY CARE HOSPITALS OF PESHAWAR

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Abstract

Introduction: Emergency nurses, specifically, are responsible for managing acute medical situations, stabilizing patients, and making quick decisions under pressure(3). The unique challenges they face in emergency departments (EDs) are characterized by long working hours, understaffing, the need for rapid assessment and intervention, and the presence of critically ill patients. Such conditions contribute to a substantial workload that not only tests their clinical skills but also impacts their mental well-being.

Objectives: To assess the psychological impact of workload on emergency nurses, including burnout, anxiety, and depression.

Methodology: The study utilized a cross-sectional design to investigate the psychological impacts of workload on emergency department nurses in tertiary care hospitals of Peshawar. The research was conducted in the emergency departments of Hayatabad Medical Complex (HMC) and Khyber Teaching Hospital (KTH), with the study population comprising all emergency nurses working in these hospitals. A census sampling technique was employed, including all registered nurses directly involved in patient care with at least one year of experience, while excluding those in administrative roles. Data was collected using a modified questionnaire adapted from the Maslach Burnout Inventory. The collected data was analyzed using SPSS version 22, where frequencies and simple statistics were calculated for nominal variables, and descriptive statistics were applied to demographic variables. Various statistical tests were performed to assess the level of burnout among emergency nurses.

Results: The demographic data indicate that the majority of participants (90.9%) were aged 25-30 years, with smaller proportions aged 31-35 years (6.1%) and 36-40 years (3.0%). Most were female (74.2%), while 25.8% were male. Regarding education, 56.1% held a Post RN qualification, 22.7% had a BSN, 19.7% a diploma, and 1.5% an MSN. In terms of experience in the emergency department, 87.9% had 1-2 years of experience, 7.6% had 3-5 years, and 4.5% had 6-8 years. The findings show varying levels of burnout among emergency nurses. In terms of **Emotional Exhaustion**, the majority (74.2%) experienced moderate burnout, while

19.7% had low burnout, and 6.1% reported high burnout. For **Depersonalization**, 75.8% exhibited moderate burnout, 13.6% severe burnout, and 10.6% mild burnout. Regarding **Personal Accomplishment**, 84.8% had low-level burnout, while 15.2% experienced moderate-level burnout.

Discussion: Burnout was widespread, with moderate levels of emotional exhaustion (74.2%) and depersonalization (75.8%) due to high workloads and limited psychological support (26, 30-31). Despite challenges, 84.8% reported positive personal accomplishment, influenced by cultural caregiving values (24, 30). These findings underscore the need for interventions to reduce stress and enhance job satisfaction.

Conclusion: This study highlights significant challenges faced by nurses, particularly in emotional exhaustion and depersonalization. While most nurses maintain a positive sense of personal accomplishment, systemic changes are needed to address burnout comprehensively. By drawing on global, Asian, and Pakistani perspectives, this discussion provides a foundation for future interventions aimed at improving the well-being and effectiveness of the nursing workforce.

INTRODUCTION

1.2 Background of the Study

Nurses form the largest group within the healthcare workforce and are integral to patient care delivery. Emergency nurses, specifically, are responsible for managing acute medical situations, stabilizing patients, and making quick decisions under pressure(3). The unique challenges they face in emergency departments (EDs) are characterized by long working hours, understaffing, the need for rapid assessment and intervention, and the presence of critically ill patients. Such conditions contribute to a substantial workload that not only tests their clinical skills but also impacts their mental well-being. Studies have shown that high workloads and the accompanying stress can have severe implications for nurses' psychological health, resulting in conditions like burnout, anxiety, depression, and post-traumatic stress disorder (PTSD)(4)

In the context of emergency nursing, workload can be intense and unpredictable, influenced by factors such as patient inflow, the complexity of medical cases, and resource limitations(5). The mental toll of these conditions is profound, often exacerbated by the lack of institutional support

and the stigmatization of seeking mental health support among healthcare providers(6).

1.4 Objectives of the Study

To assess the psychological impact of workload on emergency nurses, including burnout, anxiety, and depression.

1.5 Research Questions

How does workload impact the psychological health of emergency nurses in these settings?

1.8 Operational definitions

1.8.2 Effect: A psychological condition emerging as a prolonged response to chronic job stressors, characterized by emotional exhaustion, depersonalization, and reduced personal accomplishment. Assessed using the **Maslach Burnout Inventory (MBI)**(10), which includes three subscales:

- **Emotional Exhaustion (EE):** which has 9 question and 5 Likert scale for each question and total score of 45
- **Depersonalization (DP):** 5 questions and total score of 25
- **Personal Accomplishment (PA):** 6 question and total score of 30

Those who score more than 60 percent in the first 2 categories and less 30 percent in Personal

Accomplishment (PA) category will be considered as high level burn out

Methodology

Study design: Cross sectional design

Study setting: Hayatabad medical complex and Khyber teaching hospital Peshawar.

Study population: emergency nurses of KTH and HMC.

Sample size: All emergency nurses

Sampling technique: census was used as sampling technique.

Data collection tool and procedure: Data was collected through a modified questionnaire adapted from Maslach burnout inventory. The questionnaire was distributed physically and also shared online with the participants through google form.

Inclusion Criteria:

- Registered nurses directly involved in patient care
- Nurses with at least one year experience in emergency department

Exclusion Criteria: Nurses who are involved in administration.

Data Analysis and Results**Demographic data:**

The participants were aged 25–30 years (90.9%), with females making up 74.2% of the sample. A majority were unmarried (68.2%), and 56.1% held a Post RN degree, followed by BSN (22.7%) and Diploma (19.7%), while only 1.5% had an MSN degree. Most participants had 1–3 years of total nursing experience (92.4%) and 1–2 years of emergency department experience (87.9%).

Table 1:

Statement	Never %)	Rarely %)	Sometimes %)	Often %)	Always %)
I feel emotionally drained	13.6%	16.7%	57.6%	9.1%	3.0%
I feel fatigued in the morning	13.6%	22.7%	30.3%	19.7%	13.6%
I feel exhausted	12.1%	16.7%	50.0%	12.1%	9.1%
I feel I'm working too hard	7.6%	19.7%	27.3%	19.7%	25.8%
Work taking toll on physical health	16.7%	15.2%	34.8%	21.2%	12.1%
I feel burned out	22.7%	24.2%	28.8%	21.2%	3.0%
I feel I'm at the end of my rope	27.3%	19.7%	37.9%	12.1%	3.0%
I feel I'm running on empty	31.8%	28.8%	27.3%	9.1%	3.0%
I feel my emotions are drained	24.2%	22.7%	27.3%	18.2%	7.6%

Section 1: Emotional Exhaustion (EE):

The findings indicate that emotional and physical fatigue vary among participants. 57.6% felt emotionally drained sometimes. 50.0% felt exhausted sometimes, whereas 9.1% always felt exhausted. 25.8% felt they were working too hard always, while 7.6% never did. Work affected physical health sometimes for 34.8%, with 12.1% always feeling the toll. Burnout was reported

sometimes by 28.8%, but only 3.0% always felt burned out. 37.9% sometimes felt “at the end of their rope,” while 3.0% always did. 31.8% never felt they were “running on empty,” but 9.1% often did. Emotional depletion was sometimes reported by 27.3%, and 7.6% always felt emotionally drained. The data suggests exhaustion is prevalent but not constant for most participants.

Category	Attribute	Frequency	Percent (%)
Age (years)	25-30 yrs	60	90.9
	31-35 yrs	4	6.1
	36-40 yrs	2	3.0
Gender	Male	17	25.8
	Female	49	74.2
Marital Status	Married	21	31.8
	Unmarried	45	68.2
Educational Level	Diploma	13	19.7
	Post RN	37	56.1
	BSN	15	22.7
	MSN	1	1.5
Total Experience as a Nurse (Years)	1-3 yrs	61	92.4
	4-6 yrs	4	6.1
	10-12 yrs	1	1.5
Experience in Emergency Department	1-2 yrs	58	87.9
	3-5 yrs	5	7.6
	6-8 yrs	3	4.5

Table 2: Emotional Exhaustion (EE):

Section 2: Depersonalization (DP):

The findings show varying levels of emotional detachment among participants. 34.8% felt callous sometimes, 22.7% often, and 6.1% always, indicating a moderate concern. 30.3% sometimes felt emotionally disconnected, while 7.6% always did. 37.9% sometimes felt they were "just going through the motions," whereas 3.0%

always felt this way. A strong majority (66.7%) never felt indifferent toward clients, but 13.6% sometimes and 4.5% often or always did. 48.5% never felt disengaged from their work, but 16.7% sometimes and 9.1% often felt disconnected. The data suggests that while most participants remained engaged, some experienced emotional detachment intermittently.

Table 3: Depersonalization (DP):

Statement	Never(%)	Rarely(%)	Sometimes(%)	Often(%)	Always(%)
I feel I've become more callous toward people	7.6%	28.8%	34.8%	22.7%	6.1%
I feel I've lost touch with my emotions	18.2%	30.3%	30.3%	13.6%	7.6%
I feel I'm just going through the motions	24.2%	16.7%	37.9%	18.2%	3.0%
I feel I don't care what happens to my clients	66.7%	12.1%	13.6%	4.5%	3.0%
I feel I'm not invested in my work	48.5%	21.2%	16.7%	9.1%	4.5%

Section 3: Personal Accomplishment (PA):

The findings highlight positive perceptions of progress, effectiveness, and confidence among

participants. 39.4% always felt they were making progress, while 22.7% often did, though 3.0% never felt this way. 54.5% always felt effective,

and 19.7% often did, with only 3.0% rarely and 6.1% never feeling effective. Similarly, 54.5% always felt they were doing a good job, while 22.7% often did, and only 1.5% never felt successful. 36.4% always felt capable of handling their workload, and 33.3% often did, though

1.5% never felt capable. 31.8% always achieved their goals, and 33.3% often did, with 4.5% never achieving them. Lastly, 54.5% always felt confident in their abilities, while 31.8% often did, indicating strong self-assurance among most participants.

Table 4: Personal Accomplishment (PA):

Statement	Never (%)	Rarely (%)	Sometimes (%)	Often (%)	Always (%)
I feel I'm making progress in my work	3.0%	9.1%	25.8%	22.7%	39.4%
I feel I'm effective in my role	3.0%	6.1%	16.7%	19.7%	54.5%
I feel I'm doing a good job	1.5%	12.1%	9.1%	22.7%	54.5%
I feel I'm able to handle my workload	1.5%	9.1%	19.7%	33.3%	36.4%
I feel I'm achieving my goals	4.5%	10.6%	19.7%	33.3%	31.8%
I feel confident in my abilities	1.5%	9.1%	3.0%	31.8%	54.5%

Burnout:

Emotional Exhaustion:

The findings from the **Emotional Exhaustion (EE)** section of the Maslach Burnout Inventory highlight the varying levels of burnout experienced by nurses. Among the participants, 19.7% reported a low level of emotional exhaustion, indicating minimal burnout in this domain. The majority, 74.2%, experienced a

moderate level of burnout, suggesting a significant prevalence of emotional exhaustion among the nurses. Notably, 6.1% of participants reported a high level of emotional exhaustion, indicating severe burnout. These results underscore the need for targeted interventions to address and mitigate emotional exhaustion in nursing staff, particularly for those with moderate to high levels of burnout.

Table 5: Emotional Exhaustion:

Emotional Exhaustion Level	Frequency	Percent (%)
Low Burnout	13	19.7
Moderate Burnout	49	74.2
High Burnout	4	6.1
Total	66	100.0

Depersonalization:

In the assessment of depersonalization among nurses, the majority of participants (75.8%) exhibited moderate burnout levels. A smaller proportion, 13.6%, experienced severe burnout,

while only 10.6% reported mild burnout. These findings highlight that most nurses face a significant degree of depersonalization in their professional roles.

Table 6: Depersonalization:

Depersonalization Level	Frequency	Percent (%)
Mild Burnout	7	10.6
Moderate Burnout	50	75.8

Severe Burnout	9	13.6
Total	66	100.0

personal accomplishment:

In the assessment of personal accomplishment among nurses, 84.8% of participants reported low levels of burnout, indicating a sense of achievement in their work. Conversely, 15.2%

exhibited moderate levels of burnout. These findings suggest that most nurses perceive themselves as effective and capable in their professional roles despite the challenges they face.

Table 7: personal accomplishment:

Level of Burnout	Frequency	Percent (%)
Moderate level burnout	10	15.2
Low level burnout	56	84.8
Total	66	100.0

Discussion

The data reveal that the majority of participants (90.9%) were between 25 and 30 years old. This age distribution aligns with global nursing workforce trends, where younger nurses often dominate due to the demanding nature of the profession and high attrition rates among older nurses (24). In Pakistan, this trend is particularly pronounced due to the increasing emphasis on healthcare education and early career entry (25).

Female nurses constituted the majority (74.2%), reflecting traditional gender roles in nursing worldwide and in Pakistan, where the profession is predominantly female. The underrepresentation of male nurses (25.8%) highlights ongoing challenges in diversifying the nursing workforce, especially in South Asia(26).

The findings indicate that 68.2% of participants were unmarried, likely reflecting the challenges of balancing family life with the demanding schedules of nursing. Similar trends have been observed in other Asian countries, where young, unmarried individuals form the bulk of the nursing workforce (27). More than half of the participants (56.1%) had Post RN qualifications, suggesting a well-educated workforce. This aligns with Pakistan's growing focus on advanced nursing education to improve healthcare outcomes. However, the low representation of MSN-qualified nurses (1.5%) highlights gaps in higher education opportunities for nurses in

Pakistan compared to developed countries(28,29).

The majority of nurses (92.4%) had 1-3 years of total experience, and 87.9% had 1-2 years of experience in the emergency department. These findings reflect the youthful composition of the workforce and high turnover rates in emergency settings globally, which are also observed in Pakistan due to workplace stress and limited career advancement opportunities (29).

Emotional Exhaustion (EE)

The results indicate that 74.2% of participants experienced moderate burnout, and 6.1% reported high burnout. Emotional exhaustion is a well-documented issue in nursing, with studies from Asia and Pakistan highlighting similar trends due to high workloads, long hours, and emotional demands (26,30). These findings emphasize the urgent need for strategies to mitigate emotional fatigue, such as stress management training and workload redistribution.

Depersonalization (DP)

Moderate depersonalization was observed in 75.8% of participants, with 13.6% experiencing severe burnout. These findings are consistent with global and regional studies linking depersonalization to emotional fatigue and job dissatisfaction (31). In Pakistan, the lack of

adequate psychological support exacerbates this issue, particularly in emergency departments (25).

Personal Accomplishment (PA)

Low burnout levels were reported by 84.8% of participants regarding personal accomplishment, suggesting a generally positive perception of their professional efficacy. This contrasts with findings in some Western countries, where higher burnout levels in this domain are reported due to systemic healthcare pressures (24). The cultural emphasis on altruism and caregiving in South Asia may contribute to this sense of achievement (30).

Limitations of the Study

The study is limited to tertiary care hospitals in Peshawar, which may not reflect the experiences of emergency nurses in other regions or specialties. Its reliance on self-reported data introduces potential bias, and the cross-sectional design restricts causal inferences between workload and psychological health. A small sample size, time constraints, and resource limitations may affect the generalizability and depth of findings. Additionally, psychological health is subjective and influenced by personal and external factors not fully addressed, such as workplace policies and cultural attitudes toward mental health. These limitations suggest a need for further, more comprehensive research

Conclusion

This study highlights significant challenges faced by nurses, particularly in emotional exhaustion and depersonalization. While most nurses maintain a positive sense of personal accomplishment, systemic changes are needed to address burnout comprehensively. By drawing on global, Asian, and Pakistani perspectives, this discussion provides a foundation for future interventions aimed at improving the well-being and effectiveness of the nursing workforce.

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