

Assessment of Burnout Levels among Nurses Working at a Tertiary Cancer Care Hospital in Pakistan

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ABSTRACT

Background: Nursing is the most demanding profession among other healthcare professionals and a very challenging job. Nurses face difficult situations due to workload and a stressful working environment. Nurses experiencing burnout have effects on building relationships with patients and coworkers and exhibit dissatisfaction with their jobs, which in turn leads to poor performance, poor quality of work, and intentions to leave the job.

Objective: The objective of this study is to assess the level of burnout among nurses working at a specialist tertiary care cancer hospital in Pakistan.

Method: An analytic cross-sectional survey was done. The nurses working in inpatient and outpatient departments of a tertiary care center hospital in Pakistan participated in the study. The Burnout Assessment Tool (BAT) 2.0 version was used to collect the data, and the SPSS 20.0 version was used for data analysis.

Results: Majority of the participants were female (55,5%), a significant population was married and hold 4-year generic nursing degree. A moderate level of burnout was observed in 78.6% of participants, while 21.4% of nurses experienced a higher level of burnout. Moreover, a higher level of burnout was experienced by the nurses working in inpatient departments as compared to those working in outpatient departments.

Conclusion: Burnout is a psychological condition that all healthcare professionals, especially nurses, experience during their work life, and it impacts their personal and professional lives. A mild to moderate level of burnout does not have a bad impact on the patient's outcome, and healthcare professionals' lives, but a higher level of burnout can impact both healthcare professionals' and patients' outcomes. Healthcare organizations and leadership should identify the nurses who experience a higher level of burnout and take preventive and corrective strategies to overcome this significant issue, which will ultimately result in better patient outcomes.

Keywords: Nurses; Oncology; Burnout Assessment; Cancer Care

Abbreviations: BAT: Burnout Assessment Tool; IRB: Intuitional Review Board

Introduction

Burnout in nursing is a pervasive issue that has received significant attention in the literature due to its impact on both nurses' well-being and patient care outcomes. According to [1], burnout is defined as a psychological syndrome characterized by emotional ex-

haustion, depersonalization, and a diminished sense of personal accomplishment. Nurses are particularly vulnerable to burnout due to the high demands of their profession, which often involve long working hours, emotional strain, exposure to trauma for themselves, and the pressure of providing continuous care.

The prevalence of burnout among nurses is a global concern, in studies across different countries, including the United States, United Kingdom, and other developing nations, showing a concerning trend of burnout in healthcare settings [2,3]. In Pakistan, nursing burnout has been under-researched, particularly in oncology settings where the psychological demands are compounded by the nature of cancer care and patients' condition.

Cancer care involves frequent encounters with terminal illnesses, prolonged patient suffering, and the challenge of providing emotional support while managing complex treatment regimens. These factors are found associated with higher levels of burnout [4]. The objective of this study is to assess the burnout levels among nurses in a tertiary care cancer hospital in Pakistan. Moreover, the study aims to explore the contribution of demographic and professional factors to nurse burnout, with a focus on the inpatient departments, which are particularly resource-intensive. The findings of this study can inform strategies aimed at reducing burnout and enhancing nurses' well-being in a healthcare environment of high stress and ultimately improving patient care quality.

Materials and Methods

An analytical cross-sectional design was applied. A universal sampling technique was used to recruit 229 nurses from a tertiary care cancer hospital in Pakistan. Data were collected by using the Burnout Assessment Tool (BAT) version 2.0, which has demonstrated strong internal consistency, with Cronbach's alpha ranging from .82 to .95 [5]. This tool is widely regarded for its validity in measuring burnout levels in healthcare professionals [6]. Ethical approval was obtained from the Institutional Review Board (IRB) of the hospital and written informed consent was taken from all participants. Participation was voluntary and the anonymity of the participants was maintained throughout the study. Data analysis was conducted using SPSS. Descriptive statistics were used to determine frequencies, percentages, and distributions of burnout levels across various demographic and professional categories. Burnout was categorized based on BAT scores into low, moderate, and high levels.

Results

As shown in Table 1, out of 229 nurses, 127 (55.5%) were female and 102 (44.5%) were male. The age 30–34 years accounted for the highest proportion (40.2%), followed by 35-39 years in 24% of the participants. Regarding marital status, 111 (48.5%) were single and 118 (51.5%) were married. In terms of qualification, 47.2% held a Generic BSN degree, 29.7% held a post-RN BSN degree, and the rest of the 23.1% had a diploma in general nursing with or without specialization. Most of the participants, (39.3%) had 1–5 years of professional experience. Burnout was most prevalent among nurses working in inpatient departments. A total of 97 (66.9%) inpatient nurses reported a moderate level of burnout whereas 48 (33.1%) reported a high level of burnout. In contrast, only 1 outpatient nurse reported a

high level of burnout whereas 83 outpatient nurses 98.8% reported a moderate level of burnout, as shown in Table 2. As given in Table 3, Staff Nurse II had the highest number of moderate burnout cases, 74 nurses (approximately 32.3%) were experiencing moderate burnout. A notable portion of this group, 16 nurses (7.0%), also reported high burnout, reflecting the demanding nature of their role. Staff Nurse I and Staff Nurse III had lower levels of burnout comparatively, with 24 nurses (10.5%) and 29 nurses (12.7%) reporting moderate levels of burnout, respectively. Whereas, 9 nurses (3.9%) from Staff Nurse-I and 7 nurses (3.1%) from Staff Nurse-III reported experiencing high burnout.

Table 1: Demographic Characteristics of Participants (n=229).

Variable	Category	Frequency	Percentage (%)
Gender	Female	127	55.5
	Male	102	44.5
Age Group	<30	45	19.7
	30–34	92	40.2
	35–39	57	24.9
	≥40	35	15.3
Marital Status	Single	111	48.5
	Married	118	51.5
Experience (years)	<1	49	21.4
	1–5	90	39.3
	6–10	59	25.8
	>10	31	13.5
Qualification	Generic BSN	108	47.2
	Post-RN BSN	68	29.7
	Diploma	53	23.1

Table 2: Burnout Levels by Department.

Department	Moderate Burnout		High Burnout	
	Frequency	%	Frequency	%
Inpatient	97	66.9%	48	33.1%
Outpatient	83	98.8%	1	1.2%

Table 3: Burnout Levels by Designations.

Department	Moderate Burnout		High Burnout	
	Frequency	%	Frequency	%
Staff Nurse I	24	10.5%	9	3.9%
Staff Nurse II	4	32.3%	16	7.0%
Staff Nurse III	29	12.7%	7	3.1%
Official Shift Leader	20	8.7%	7	3.1%
Team Leader	33	14.4%	8	3.5%
Clinical Nurse Instructor	0	0.0%	1	0.4%
Nurse Lecturer/Practitioner	0	0.0%	1	0.4%

Official Shift Leaders and Team Leaders, who typically have more responsibilities reported moderate burnout in 20 (8.7%) and 33 (14.4%) nurses, respectively.

Both groups had 7 (3.1%) and 8 (3.5%) nurses reporting high levels of burnout. Clinical Nurse Instructors and Nurse Lecturers/Practitioners reported minimal high burnout, with 1 nurse (0.4%) from each designation reporting high burnout, but no moderate burnout was reported as shown in Table 3. Table 4 presents the frequency and percentage distribution of moderate and high burnout levels across different levels of professional experience. A total of 37 (21.4%) nurses with less than one year of experience were reported to have moderate and 12 (6.8%) had high burnout. Among nurses with 1–5 years of experience, 75 (43.4%) nurses reported moderate burnout, and 15 (8.6%) nurses experienced high burnout with the highest prevalence of burnout across all experience categories. Among the 6–10 years of experience category, 49 nurses (28.3%) showed moderate burnout while 10 nurses (5.7%) reported high burnout. For nurses with 11–15 years of experience, 11 nurses (6.3%) reported moderate burnout, and 7 nurses (4.0%) reported high burnout. Finally, nurses with 16–20 years of experience, moderate burnout was observed in 8 nurses (4.6%), and high burnout in 5 nurses (2.9%). The above data suggests that nurses with 1–5 years of experience are most susceptible to both moderate and high levels of burnout, likely due to early-career stressors and adjustment to the demanding nature of nursing. The prevalence of burnout diminishes somewhat with increasing experience, although a significant number of mid-career nurses still report moderate levels of burnout.

Table 4: Burnout by Years of Experience.

Department	Moderate Burnout		High Burnout	
	Frequency	%	Frequency	%
<1	37	21.4%	12	6.8%
1–5	75	43.4%	15	8.6%
6–10	49	28.3%	10	5.7%
11–15	11	6.3%	7	4.0%
16–20	8	4.6%	5	2.9%

Discussion

This study aimed to assess burnout levels among nurses at a tertiary care cancer hospital in Pakistan. The results indicate a concerning prevalence of burnout, particularly among nurses working in inpatient departments, those with fewer years of experience, and those in mid-career positions. These findings are consistent with previous studies showing that nursing burnout is a global issue, with high levels of emotional exhaustion, depersonalization, and reduced personal accomplishment observed in healthcare workers, especially in high-intensity fields such as oncology [2,3]. The high burnout levels among inpatient nurses could be attributed to several factors intrinsic

to the nature of oncology care. Oncology nursing involves direct care for patients suffering from terminal illnesses, often requiring complex treatment regimens and requiring long-term emotional and psychological support.

According to [6], the prolonged emotional labor and stress of caring for cancer patients, who frequently experience pain, suffering, and eventual death, are major contributors to nurses' emotional exhaustion. This constant exposure to patients' suffering without adequate recovery time or emotional support requirements can lead to a deterioration in nurses' psychological well-being, resulting in burnout. In addition, the high workload and patient-to-nurse ratio, particularly in inpatient departments, exacerbate this problem by placing excessive physical and emotional demands on nurses, leading to increased feelings of stress and diminished job satisfaction [4]. Moreover, the findings related to burnout by designation highlight the importance of role-specific stressors. Staff Nurse II, who has responsibilities in clinical care tasks, reported the highest levels of moderate burnout. This is consistent with literature that suggests that nurses with increased responsibilities and those who serve in leadership or management roles are at greater risk for burnout due to role ambiguity, time pressures, and conflict between different responsibilities [1]. The challenge of balancing patient care with administrative duties can be overwhelming, particularly when nurses are not provided with adequate support, training, or resources to manage these multiple demands.

The observation that both early-career nurses and those with 6–10 years of experience reported higher burnout levels suggests that burnout is not only an issue for experienced nurses but also for those in the early stages of their careers. Early-career nurses such as SN-I to III are particularly vulnerable to burnout due to the emotional and physical demands of the profession, coupled with the transition into the workplace and the need to adjust to high-stress environments [3]. On the other hand, mid-career nurses, who have typically been in the profession for 6–10 years, may experience burnout due to a buildup of chronic stress without sufficient coping mechanisms or professional support. Research by [6] supports this notion, indicating that burnout tends to accumulate over time if proper interventions are not in place to address the ongoing challenges faced by healthcare professionals. Furthermore, it is important to note the impact of institutional and environmental factors in the development of burnout. Nurses in this study reported that heavy workloads, lack of staffing, and inadequate resources were significant contributors to burnout. This finding aligns with [1] framework, which emphasizes that job demands, such as insufficient staffing, long working hours, and inadequate work-life balance, are key factors that might contribute to burnout. The organizational culture also plays a crucial role in burnout levels. A supportive organizational environment that encourages communication, provides adequate resources, and promotes work-life balance can help mitigate the adverse effects of burnout [2].

In addition to these factors, the emotional impact of cancer care itself cannot be understated. Oncology nurses frequently deal with patients who experience both physical and emotional suffering, often working with patients during the final stages of life. This emotional toll is compounded by the feeling of helplessness that may arise when nurses are unable to improve a patient's prognosis. This emotional burden is particularly relevant in high-stress care settings like oncology and inpatient, where patients may not recover, resulting in repeated loss and grief for the nursing staff [4]. In these situations, nurses often need to manage their emotional responses while still providing compassionate care, which can further exacerbate burnout if not managed appropriately. To address these issues, healthcare institutions need to prioritize the mental health and well-being of their nursing staff. This can be achieved through the implementation of structured support systems, such as counseling services, stress management workshops, and resilience training programs. Additionally, creating a supportive work environment with appropriate staffing levels and a clear delineation of roles and responsibilities could significantly reduce the risk of burnout. Providing opportunities for professional development, specialized education, peer support, and regular feedback can also enhance job satisfaction and prevent burnout [6].

Practice Implications

This study has important implications for nursing practice and healthcare management. Interventions aimed at reducing burnout should be targeted and multifaceted. Firstly, hospitals should prioritize the implementation of regular burnout screening using tools like the Burnout Assessment Tool (BAT) to monitor the well-being of nurses. This will enable early identification of at-risk individuals and allow for timely intervention. Additionally, targeted support should be provided to nurses in high-stress departments like oncology, including stress reduction techniques and psychological support tailored to the unique challenges of cancer care. Another crucial recommendation is improving staffing levels in inpatient departments. Adequate staffing is a key determinant of nurse burnout, as high patient-to-nurse ratios have been consistently linked to increased emotional exhaustion and burnout [3]. By ensuring that nurses are not overburdened with patient care responsibilities, hospitals can reduce the physical and emotional strain placed on nursing staff. Furthermore, the hospital management should consider implementing job rotation strategies to prevent burnout caused by prolonged exposure to high-stress areas and ensure that nurses have opportunities for professional growth in less emotionally demanding roles.

Limitations and Future Research

While this study provides valuable insights into burnout among oncology nurses in Pakistan, it is important to acknowledge its limitations. The cross-sectional design limits the ability to draw conclusions about causality. Future studies could explore the longitudinal effects of burnout and the impact of specific interventions over time. Additionally, the study was conducted in a single hospital, which may limit the generalizability of the findings to other settings. Future research should aim to include a broader sample from different regions and healthcare settings across Pakistan to gain a more comprehensive understanding of nursing burnout in the country.

Conclusion

Burnout remains a significant challenge in healthcare settings, particularly among nurses working in high-stress environments such as oncology. The findings of this study underscore the need for comprehensive interventions to address the root causes of burnout, such as high workloads, lack of support, and role ambiguity. By focusing on improving organizational support, adequate and specialized staffing, and mental health resources, hospitals can mitigate the negative impact of burnout on nurses and, by extension, patient care. As the healthcare workforce in Pakistan continues to face increasing demands, it is crucial to prioritize nurse well-being to ensure sustainable and high-quality care for patients.

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Conflict of Interest

None.

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