# Burnout, Job Satisfaction, Nurse Well-being, and its Influence on Patient Safety and Care Quality at Tertiary care hospital Khyber-Pakhtunkhwa

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## ABSTRACT

In the healthcare sector, the well-being of nurses is crucial not only for their satisfaction but also for the quality of care they provide. Burnout, a state of chronic stress and fatigue, can significantly impact nurses' job satisfaction and overall well-being. This, in turn, can affect patient safety and care quality, as stressed and dissatisfied nurses may have reduced effectiveness in delivering care. **Objective:** This study aims to evaluate burnout among nurses, job satisfaction, nurse well-being, and its influences on patient safety and quality of care.**Methodology:** An analytical cross-sectional study was conducted at a tertiary care hospital in Khyber-Pakhtunkhwa questionnaires were distributed manually among 120 nursing staff, and 75/120 willing to participate in data collection. Random sampling techniques were used. **Results:** A recent survey among nursing professionals has highlighted troubling levels of emotional exhaustion and depersonalization. (97.3%) admitted to feeling emotionally drained by their work. (95.5%) felt used up by the end of the day. (91%) felt fatigued when starting a new workday, and almost nine out of ten (89.3%) struggled with the strain of working with people. A notable proportion (54.6%) reported effectively managing their clients' issues, suggesting a sense of personal accomplishment. **Conclusions:** The study indicates a need for interventions to address the challenges faced by nursing staff in tertiary care hospitals. Strategies such as bolstering support, optimizing staffing, and addressing issues like bullying are crucial to improving patient care and staff well-being.

**Key words:** *Nursing; Stress; Burnout; Emotional exhaustion; Depersonalization; Personal accomplishment, patient safety, job satisfaction; Workload; Healthcare management.*

## I. INTRODUCTION

Burnout is a complicated phenomenon that encompasses emotional exhaustion, depersonalization, and reduced personal accomplishment, and it has been linked to decreased job satisfaction, compromised patient care, and eroded nursing profession (1). The term "burnout" was coined in a 1953 study, involving a mentally exhausted psychiatric nurse. It combines "burn" (firing) and "out" (outside), signifying a person who is physically and emotionally depleted. Described as an overwhelming fire, fading energy, a self-extinguishing flame, or a dead battery, it signifies a state of deep stress and exhaustion(2). In the early 1970s, burnout syndrome (BOS) was recognized in human service professionals, mainly in healthcare workers. Burnout is categorized as a failure to cope with emotional strain at work, or an extreme depletion of resources and energy leading to feelings of fatigue and disappointment. Unlike depression, burnout affects mainly work-related aspects of life. Burnout, assessed by the Maslach burnout components—depersonalization (negative attitudes toward patients), emotional exhaustion, and loss of a sense of personal success at work—negatively impact overall well-being(3). Maslach theorized that burnout is a state that occurs as an outcome of an extended disparity between an individual and at least one of the following six dimensions of work: excessive workload and demands, Control, reward, Community, Fairness, and Values (4). Maslach theorized these six work features as issues triggering burnout and found worsening in workers' health and job performance as a result arising from burnout personnel (5). Nursing burnout is a toxic and significant syndrome that causes distress not only to individuals but also to the organization and patients for whom those nurse's work. As many as half of nursing staff face burnout, with the possibility of personal issues, job dysfunction, and potential risks to patients (6).

The National Academy of Medicine (NAM) reports nurse burnout through statistics, inspection, deed, and teamwork, highlighting employee well-being, supportive guidelines, and education (7). Burnout, with its components of exhaustion, depersonalization, and reduced accomplishment, can lead to nurses leaving their roles and compromising patient care Stressors like heavy workloads, job-related risks, and inadequate resources contribute to burnout, impacting nurses' quality of life and ability to fulfil their duties (1). Effective stress management strategies are crucial across various professions, as burnout affects well-being and mental health (8).Long hours and irregular shifts can lead to fatigue among nurses, affecting patient safety and the accuracy of their nursing services (Seul Ryu & Shim, 2021). In the U.S., medical errors cause over 250,000 deaths yearly, while patients who die in hospitals experience a higher rate of serious adverse events (9).Yet, it is widely accepted that nurses affected by burnout are in increased danger of poor consequences of clinical performance during their clinical duty (10). Burnout has significant individual and societal costs, including work-related injuries, problematic alcohol use, career dissatisfaction, and reduced productivity. Addressing burnout requires comprehensive interventions to promote well-being, decrease stressors, and enhance flexibility, benefiting both healthcare professionals and patient care.

Bakker and Demerouti's JD-R model has proven invaluable in comprehending the connection between burnout and health problems, influencing many studies (11). New research has demonstrated its analytical strength for burnout and job satisfaction, with job-related difficulties anticipating burnout and the want to leave a job, while resources forecast wellness and commitment. Job-related resources can alleviate the effects of stressors, reinforcing motivation, especially during times of high demand Personal resources, such as control beliefs, can be developed through participation, assisting individuals achieve their goals in spite of challenges (12). Many resilience-building initiatives for healthcare professionals balance group and individual strategies and are customized to various settings, including tailored applications, mentorship, healthcare team meetings, and targeted resilience training (13). The nursing profession, confronting a worldwide staff shortage and high turnover, grapples with heavy workloads, impacting both physical and mental health, as well as patient safety (14). Leadership behavior distinctly influences nurses' work-related stress and wellness, with poor

leadership and lack of autonomy resulting in burnout, and recognition boosting well-being. Positive leadership styles, like transformational leadership, and empowering staff promote nurses' well-being in the workplace (15). Effective burnout management requires interventions targeting root causes, prioritizing organizational redesign to optimize job characteristics and exploring personalized approaches like job creating and energy management strategies, However, there's a gap between recommended interventions and implementation, with current approaches focusing on symptom management rather than addressing the root causes (16). Organizational reshaping is critical as burnout is often tied to high job demands and low job resources. Personalized interventions and alternative strategies like job crafting show promise, but systematic research on implementation and efficacy is needed to advance burnout management practices (17).

**METHODOLOGY:**

The researcher used analytical cross-sectional approach because this study defined the nurse well-being, level of job satisfaction, and burnout among nurses and its effect on patient safety and quality care. The study includes nursing staff from tertiary care hospital K.P Pakistan. The data were collected using a self-administered questionnaire among trained health professionals and nursing staff. The total population was 120. Cluster sampling techniques were used, followed by random sampling within each selected cluster. Data were collected through an adopted questionnaire taken from a study previously conducted in the *Philippines* in 2015(18). The questions consisted of two segments: demographic data such as age, gender, education, working institution, and the 2$^{nd}$ segment as the 'Maslach Burnout Inventory' (M.B.I). The Maslach burnout catalog has three aspects, serving as causal variables. (a) emotional exhaustion, (b) depersonalization, and (c) personal accomplishment. MBI consists of 22 items and 3 dimensions, which are evaluated with a Likert type scale:1 =Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 =Always how often the nurses experience their defined feelings or how often they perform the described behaviors. The emotional exhaustion dimension has 9 items, The subscale evaluates the sensation of feeling emotionally drained and exhausted due to one's job. Depersonalization has 5 items and gauges a detached and impersonal reaction toward those who receive service, care, treatment, or instruction. Personal subscale gauges a disconnected and impersonal reaction toward those who receive service, care, treatment, or instruction. personal accomplishment has 8 items. A study of healthcare workers using the MBI obtained reliability coefficients as follows: Cronbach's alpha of 0.86 and split-alpha of 0.57.

The research includes registered nursing staff and those who voluntarily participate in the study. Registered nurses from various wards and critical units were requested to fill out the adopted questionnaires to explore burnout among nurses, nurses' well-being and job satisfaction, patient safety, and quality care. The researcher included only those nurses who have permanent job status, experience of more than one year, currently working in tertiary care hospital. Exclusion criteria are based on nurses who have psychological issues, maternity leave, and those Nurses who are not willing to participate in the study.

Data was analyzed using SPSS version 22 for data representation. (SPSS version 11.0). Descriptive and inferential statistics were used to analyze the data.Descriptive statistics, such as frequency, percentage, mean, and standard deviation, were used to describe the demographic characteristics, Job Satisfaction Scale (JSS), and Maslach Burnout Inventory (MBI) items. Pearson's r coefficient correlation and Fisher's T-test were used to determine the correlation of variables and the significance of the correlation, respectively.

**RESULTS:**

A total of 75 nurses completed the questionnaire, including 56.7% males and 43.3% females, working in tertiary care hospitals at K.P. The marital status of participants varied, with 73.1% being single and 22.7% being single yet supporting their families. Financial issues were reported by 10.7% of the nurses, while 49.3% were married, with some working in critical units and experiencing mild anxiety due to the stressful environment. Moreover, 42.8% of the nurses had over three years of experience and were working in critical units. Regarding patient assignments, 4.5% of nurses indicated that the nurse-to-patient ratio in critical units was 1:3. When there was a shortage of nurses and an influx of critical patients, 26.7% of nurses mentioned that they had to handle up to six patients at a time, which sometimes resulted in prolonged hospitalization and compromised quality care. Additionally, 52.2% of the nurses worked in non-critical units, and 58.7% of staff members in different wards reported working alone or with just two nurses per shift, leading to bullying and uncivil behavior, which is unethical towards patients. Education-wise, 33.3% of nurses held bachelor's degrees, while 56.0% had RN-BSN degrees. Most nurses worked under MTIs KP Hospitals where their pay was commensurate with their services. Nurses in critical units faced challenges due to inadequate resources and an imbalance between staff and patient ratios. (**As shown in Table 1)**

**Table 1. Demographic characteristics.**

| **Table 1.** | | | |
|---|---|---|---|
| **Characteristics** | | **n(75)** | **Percentage** |
| **Gender -** | Female | 38 | 56.7% |
| | Male | 43.3 | 4.16% |
| **Marital status** | Single | 49 | 73.1% |
| | Married | 17 | 22.7% |
| | Widow/er | 1 | 1.3 |
| **Education** | BSN<br>Post RN BSN | 25<br>56.0 | 33.3%<br>56.0% |
| **Working areas** | Critical units<br>Other wards | 32<br>35 | 42.8%<br>52.2 |
| **Working experience** | <5 years<br>5-10 year<br>10-15 year<br>>15 years<br>year | 34<br>21<br>11<br>1 | 50.7%<br>31.3%<br>16.4%<br>1.5% |
| **Nurse-to-patientratio** | 1:2<br>1:6<br>More | 3<br>20<br>44 | 4.5%<br>26.7%<br>58.7% |
| **pay/month** | 50000<br>60000<br>75000<br>85000 | 10<br>16<br>33<br>8 | 14.9%<br>23.9%<br>49.3%<br>11.9% |
| **History of psychological issues** | Mild anxiety<br>Sleep problems<br>problem | 10<br>33.3 | 10.7%<br>49.3% |

A recent study among nursing professionals in the field has revealed disturbing levels of emotional exhaustion and depersonalization. Almost all respondents (97.3%) admitted to feeling emotionally exhausted by their work, while the majority of the participants (95.5%) had disclosed feeling depleted by the end of the day. Moreover, additional findings discovered a significant number of participants (91%) felt tired when approaching a new workday, and nearly nine out of ten participants (89.3%) felt that working with people can be taxing. Despite these difficulties, a significant subcategory (54.6%) of participants also communicated effectively and managed their clients' issues, suggesting a wisdom of personal implementation in their professional roles. These results emphasize the pressing need to discuss workplace stress and burnout, while also acknowledging the meaningful impact rofessionals can have in their clients' lives. **(as shown in Table 2)**

**Table 2. Job Satisfaction and Nurse Respond:**

| **Table 2** | | | | | |
|---|---|---|---|---|---|
| **GAUGE** | | | | | |
| **Emotional exhaustion** | **never** | **Rarely** | **sometime** | **Often** | **always** |
| **I feel emotionally drained by my work:** | 10.7% | 30.7% | 66.7% | 89.3% | 97.3% |
| **I feel used up at the end of the day:** | 31.3% | 59.2% | 86.6% | 95.5% | 4.5% |
| **I feel fatigued when I have to get up in the morning to face another day on the job:** | 26.9% | 52.2% | 76.1% | 91.0% | 9.0% |
| **Working with people all day is a strain for me.** | 37.3% | 25.7% | 20.6% | 14.9% | 1.5% |
| **I feel burned out from my work:** | 34.3% | 19.4% | 25.4% | 11.9% | 9.0% |
| **I feel frustrated by my job:** | 26.9% | 40.2% | 16.4% | 9.0% | 7.5% |
| **I feel I'm working too hard in my job:** | 20.9% | 17.9% | 35.8% | 35.8% | 14.9% |
| **I feel like I'm at the end of my rope:** | 25.4% | 23.9% | 26.9% | 20.9% | 25.4% |
| **Working with people directly puts too much stress on me:** | 14.9% | 32.8% | 35.8% | 10.4% | 6.0% |
| **Depersonalization** | | | | | |
| **I feel I treat some patients as impersonal objects.** | 37.3% | 28.4% | 20.9% | 6.0% | 7.5% |
| **I have become more callous towards people since I took this job:** | 26.9% | 31.3% | 23.9% | 16.4% | 1.55 |
| **I feel some patients blame me for some of their problems.** | 26.9% | 26.9% | 28.4% | 13.45 | 4.5% |
| **In my work, people bother me with personal problems that I do not want to be bothered with.** | 19.4% | 32.8% | 26.9% | 11.9% | 9.0% |
| **I try to keep away from the personal problems of my patients.** | 16.4% | 29.9% | 17.9% | 19.4% | 16.4% |
| **Personal Accomplishment:** | | | | | |
| **I can easily understand how my patients feel about things:** | 9.0% | 29.9% | 32.8% | 14.9% | 13.4% |
| **I deal very effectively with the problems of my patients.** | 17.9% | 22.4% | 35.8% | 17.9% | 6.0% |
| **I feel that II am a positive influence on other people's lives through my work.** | 17.9% | 37.3% | 19.4% | 19.4% | 6.0% |

## DISCUSSION:

The study illuminates the many difficulties encountered by nurses in tertiary care hospitals. A notable frequency of high emotional exhaustion and burnout occurs among nursing staff, exacerbated by factors such as increased demand for hospital care, extended working hours, recurring changes in working conditions, and conflicts between nursing care and administrative or financial priorities (17). Many respondents express feeling emotionally drained and worn out by the end of the day, revealing frustration and a sense of being overwhelmed (16). Other studies underline that inequality in workload and misuse of power by nursing directors, head nurses, and supervisors can contribute to work-related stress and emotional exhaustion (19).

To support newly qualified nurses facing high emotional demands, understaffing, and communication challenges, it is crucial to enhance personal well-being. When nurses perceive that their work aligns with their values, it strengthens psychological protection and satisfaction, leading to increased retention by encouraging motivation, autonomy, professional identity, and organizational attachment (20).

Additionally, issues with staffing levels and patient-nurse ratios emerge, with many participants overwhelmed by an excessive number of patients, particularly in critical units (21).Thus, an imbalance between the nurse and patient ratio has negative outcomes, and nurses become unable to provide quality care, later burden on staff can prolong the hospitalization of patients because nurses cannot hold many patients on shift and the remaining work can create problems for other shifts. The continuity of patient the flow of patients and limited staff can cause exhaustion, and nurses may resign from their jobs, which is characterized by extreme fatigue, reduced ability to regulate cognitive and emotional processes, and mental distancing (16). A survey conducted among 10 European countries showed that nurses' intention to leave the nursing profession ranged from 5% to 17%. Making a policy for nurses' relaxation and providing high-quality care increases nurses' well-being, job satisfaction, and patient safety (22). It is a key outcome that is crucial, with nurses' perceived safety ratings of care delivery on their units or their safety reporting behavior being significant factors (23). A positive safety culture, including open communication, management support, professional suitability, mutual learning, and teamwork, is associated with a lower risk of burnout, leading to increased productivity, satisfaction, and reduced susceptibility to burnout (6). The International Workforce Forum of the International Council of Nurses (ICN) has stressed the necessity of safe staffing levels, and good working conditions for nurses, patient care, and the overall well-being of nurses, as they play a significant role not only in direct care but also in educating future generations of nurses (24).

Finally, the study illuminates' issues of bullying and unprofessional conduct among nursing staff, potentially impacting team morale and job satisfaction (25). Governments, society, and healthcare institutions must collaborate to reduce nurses' stress and prioritize their well-being. Low job satisfaction, even after controlling for other factors, is associated with psychological distress, encompassing various elements such as working conditions, relationships with colleagues and superiors, scheduling and staffing, salaries, advancement opportunities, job security, work hours, and recognition from management (26).

## CONCLUSION:

In summary, the study outcomes show a demanding need for targeted interventions to address the challenges facing nursing staff in tertiary care hospitals. Potential strategies could involve providing additional support and resources to nursing staff, implementing measures to enhance staffing levels and patient ratios, and addressing issues related to bullying and unprofessional behavior(27). By

tackling these issues, hospitals can work towards improving the quality of care provided to patients and ensuring the well-being and job satisfaction of their nursing staff.

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