

Relationship of Burnout with Mental Stress, Job Satisfaction among Nurses

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Abstract: Nurses frequently experience high levels of stress due to demanding workloads, emotional strain, and complex healthcare environments, which may contribute to burnout and reduced job satisfaction. Understanding the interplay between mental stress, burnout, and job satisfaction is essential to improving nursing wellbeing and patient care quality. **Objective:** To evaluate the relationship between mental stress and nurses' burnout levels and job satisfaction. **Methodology:** Nurses working in the Nursing Department of the tertiary care hospital were cross-sectionally analyzed from April 2023 to April 2024. A total of 90 nurses working in the hospital for 1 year or more were included in the study. Personal data of nurses including gender and marital status were noted. Mental stress was evaluated by translated version of 28-item questionnaire designed by Bradbury and Graves. Burnout was assessed by 22-item questionnaire designed by Maslach and Jackson. Job satisfaction was determined by 39-item questionnaire designed by Visoki and Chrome on 5 dimensions; job component, promotion, supervisor, payment, colleague. **Results:** A significant F ratio of 44.818 was recorded between burnout and mental stress. The R² value showed that a 0.09% change in burnout level can be predicted by emotional intelligence. There was also a significant F ratio of 772.797 between job satisfaction and relationship management, a component of emotional intelligence. A 0.61% change in job satisfaction could be predicted by relationship management. Burnout was significantly associated to all components of emotional intelligence; relationship management (0.363), social awareness (0.213), self-management (0.148) and self-awareness (0.147). **Conclusion:** Emotional intelligence has a significant impact on level of burnout in nurses with a high EI leading to reduced burnout.

Keywords: Burnout, Mental stress, Nurses

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Introduction

Burnout syndrome, characterized by emotional exhaustion, unsatisfactory work performance, and depersonalization, is a common condition in healthcare staff, especially nurses. It can lead to an increase in absenteeism rates, work conflicts, resignations, physical and mental disorders, and decreased quality of care. According to a recent study, 48.6% of Pakistani nurses experience burnout, which is significantly higher than in developed countries (1).

There are several predictors of burnout, with mental stress being a major one (2). The ability to manage and recognize emotions can help minimize the effects of job pressure through engaging in productive, positive activities. A previous study in more than 200 nurses reported a significant negative association between mental stress and burnout in new nurses with less than 18 months of experience (3).

Job satisfaction is also an important determinant of burnout, as it is the most common reason for nurses to quit. Unsatisfaction and unhappiness in the workplace can lead to poor quality of life, job stress, burnout, and poor patient outcomes. Literature has backed the claim that job satisfaction is also significantly related to mental stress (4). Emotionally intelligent nurses are more satisfied with their jobs and more committed, reducing the risk of burnout.

This study was conducted to evaluate the impact of mental stress on nurses' burnout levels and job satisfaction.

Methodology

Nurses working in the Nursing Department of a tertiary care hospital were cross-sectionally analyzed from April 2023 to April 2024. A total of 90 nurses working in the hospital for 1 year or more were included in

the study. Interns and new joiners were excluded from the analysis. All participants provided informed consent to participate in the study. The hospital's ethics board approved the study.

Personal data of nurses, including gender and marital status, were noted. Mental stress was evaluated using the translated version of the Bradbury and Graves questionnaire. There were 28 questions regarding social awareness, self-management, relationship management, and self-awareness. Responses could be provided on a Likert scale from 1 to 6. An overall score of ≥ 60 indicated low intelligence, and a score of > 80 indicated a high level of intelligence.

Burnout was assessed using a 22-item questionnaire designed by Maslach and Jackson. Three dimensions of burnout — depersonalization (5 questions), emotional fatigue (9 questions), and personal performance (8 questions) — were evaluated. Responses could be provided on a Likert scale from 0 to 7, with zero indicating never and 6 indicating very high.

Job satisfaction was determined using a 39-item questionnaire designed by Visoki and Chrome across five dimensions: job component, promotion, supervisor, payment, and colleague. Response could be provided on a Likert scale from 1 to 5. The lowest possible score was 39, and the highest possible score was 195.

Results

A total of 90 nurses were included in the analysis; 80 (80%) were women and 20 (20%) were men. 50% of the participants were married. Table I shows that mental stress was not significantly associated with



job satisfaction ($p=0.048$), but it was significantly associated with burnout ($p=0.005$).

Table II presents the regression analysis for predicting burnout and job satisfaction. A significant F ratio of 44.818 was recorded between burnout and mental stress. A 0.51% change in job satisfaction could be predicted by relationship management.

Table III shows a significant association between relationship management and job satisfaction ($r = 0.112$). Burnout was significantly associated with all components of emotional intelligence: relationship management (0.363), social awareness (0.213), self-management (0.148), and self-awareness (0.147).

Table 1: Association between study variables

	Emotional intelligence	Job satisfaction	Burnout
Emotional intelligence	1	0.048	0.005**
Job satisfaction	0.048	1	-
Burnout	0.005**	-	1

Table 2: Predictive Ability of Mental Stress for Burnout and Job Satisfaction

Dependent variables	Burnout	Job satisfaction
Mental stress		
R	0.200	
R ²	0.091	
F	44.818	
P	0.0	
B	0.348	
Beta	0.200	
T	5.666	
Relationship management		
R		0.693
R ²		0.519
F		672.797
P		0.0
B		0.244
Beta		0.693
T		25.632

Table 3: Association Between Mental Stress and Dimension of Burnout and Job Satisfaction

Dimensions	Job satisfaction	Burnout
Relationship management	0.112**	0.363**
Social awareness	0.008	0.213**
Self-management	0.059	0.148**
Self-awareness	-0.061	0.147**

Discussion

This study was conducted to assess the prediction of burnout and job satisfaction by level of mental stress. The results revealed a significant negative association between burnout and emotional intelligence. This indicates that nurses who experience mental stress are more likely to manage their jobs and experience less burnout. These findings comply with previous studies (5, 6, 7).

Cao et al reported a 70% burnout rate in Chinese nurses with a mean score of 35.5 (8). Mental stress had a strong relationship with burnout parameters: exhaustion, depersonalization, and personal performance ($p<0.01$), along with workplace violence, which was the mediating variable ($p<0.01$).

Yu et al also reported that mental stress in nurses was related to negative psychology ($B=0.11$), burnout ($B=0.57$), and self-efficacy ($B=-0.55$) (9). Mental stress served as a mediator between burnout and negative psychology, which had a significant positive association. A study conducted in Saudi Arabia showed that mental stress significantly improved the nurse-patient communication ($p<0.001$) (10). It also significantly reduced personal, patient-related, and job-related burnout ($p<0.001$).

Mental stress did not affect nurses' job satisfaction, and only one EI dimension was associated with it. In contrast to our study, Vazquez et al showed that mental stress had a significant positive relationship with conflict management, which was positively related to job satisfaction

($p<0.001$) (11). Conflict management mediated a significant association between job satisfaction and mental stress ($p<0.001$).

The study has some limitations. The cross-sectional study design limited the assessment of the causal relationship between variables. An extensive prospective study must be conducted to get more precise results.

Conclusion

Mental stress has a significant impact on burnout levels among nurses with high EI, thereby reducing burnout.

Declarations

Data Availability statement

All data generated or analysed during the study are included in the manuscript.

Ethics approval and consent to participate

Approved by the department concerned. (IRBEC-24)

Consent for publication

Approved

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Conflict of interest

The authors declared no conflicts of interest.

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Author Contribution

MS (Staff Nurse)

Manuscript drafting, Study Design, Review of Literature, Data entry, Data analysis, and drafting an article.

MN (Charge Nurse)

Conception of Study, Development of Research Methodology Design,

SK (Nursing Officer)

Study Design, manuscript review, and critical input.

All authors reviewed the results and approved the final version of the manuscript. They are also accountable for the integrity of the study.



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