

## Work Stress, Burnout, and Patient Satisfaction Towards Nurses Working in Medicare Hospital, Multan

Robina Ghazanfar\*, Hafsa Noreen, Nuzhat Sher, Adeel Nouman

Department of Nursing, Medicare College of Nursing Multan, Pakistan

\*Corresponding author's email address: [drarooma123@yahoo.com](mailto:drarooma123@yahoo.com)

(Received, 24<sup>th</sup> November 2024, Revised 7<sup>th</sup> January 2025, Published 31<sup>st</sup> January 2025)

**Abstract:** Nurse burnout and work-related stress are critical factors that can influence patient care quality. Understanding their impact on patient satisfaction, particularly in high-pressure settings like emergency departments, is essential for improving healthcare outcomes. **Objective:** To assess the association between burnout and work stress in nurses with patient satisfaction in the emergency department. **Methodology:** A cross-sectional study was conducted in the Emergency Department of Medicare Hospital, Multan, from December 2023 to December 2024. A total of 100 nurses working in the emergency department for at least 1 year were included in the study. Study data was collected through questionnaires. A 22-item Nursing Stress Scale was used to assess work stress through incidences in the workspace. A 16-item Maslach Burnout Inventory-General Services Scale was used to evaluate burnout in nurses. The questionnaire was divided into three sections: emotional exhaustion, cynicism, and personal effectiveness. Patient satisfaction was measured on a 12-item La Mónica-Oberst Patient Satisfaction Scale presented to emergency department patients after 1-2 days of admission. **Results:** No significant associations were observed between demographic and professional parameters, stress, burnout, and patient satisfaction. The mean satisfaction score was  $4.71 \pm 0.93$ , showing an adequate positive perception among patients. The mean nurse stress score was  $0.99 \pm 0.10$ , emotional exhaustion score was  $2.02 \pm 0.28$ , cynicism score was  $1.49 \pm 0.21$ , and personal effectiveness score was  $5.08 \pm 0.30$ , indicating low stress, exhaustion, and cynicism which lead to high performance. Only 5% of the nurses experienced burnout, which was associated with stress experienced at work. However, patient satisfaction was not associated with burnout or stress levels of nurses. **Conclusion:** Stress and burnout parameters of nurses were not significantly associated with patient satisfaction. However, further research is needed in this field.

**Keywords:** Burnout, Emergency, Nursing, Satisfaction

**[How to Cite:** Ghazanfar R, Noreen H, Sher N, Nouman A. Work stress, burnout, and patient satisfaction towards nurses working in Medicare hospital, Multan. *Biol. Clin. Sci. Res. J.*, 2025; 6(1):1-4. doi: <https://doi.org/10.54112/bcsrj.v6i1.1502>]

### Introduction

Patient satisfaction with the service provided can estimate the quality of a healthcare institution. As a central part of the healthcare system, nurses contribute significantly to ensuring quality care and patient satisfaction. Therefore, healthcare organisations must foster healthy work environments and professional conditions that prevent burnout and work stress among nurses, ultimately affecting patient care.

Interpersonal conflicts, lack of resources, long working hours, and lack of social and emotional support to deal with suffering and death at the hospital are the most commonly recognised factors that cause burnout and stress in nursing personnel. (1, 2). This also leads to other counterproductive behaviours, such as cynicism, exhaustion, and poor work performance. (3, 4) Burnout can also negatively impact the organisation, increasing the chances of personnel quitting, absenteeism, and negligence regarding medical tasks.

Limited local research has investigated the association between stress and burnout in nursing personnel and patient care. However, exhaustion and low mental health have been reported to impact patient satisfaction negatively. (5) Since the emergency department of a hospital has been perceived as a stressful working place, little research has been conducted to determine its impact on the staff.

This study assessed the association between burnout and work stress in nurses and patient satisfaction in the emergency department.

### Methodology

A cross-sectional study was conducted in the Emergency Department of Medicare Hospital, Multan, from December 2023 to December 2024. A total of 100 nurses working in the emergency department for at least 1

year were included in the study. Nurses on rotation and newly appointed nurses were excluded. All participants provided informed consent to participate in the survey, which the hospital's ethical committee approved. Study data was collected through questionnaires. Nurses' demographics, such as age, sex, marital status, experience, emergency department experience, and shift type, were recorded. A 22-item Nursing Stress Scale was used to assess work stress through incidences in the workspace. The questions could be answered on a Likert scale from 0 to 3, with zero being never and three being frequent. A high score showed a high incidence of environmental stressors. A 16-item Maslach Burnout Inventory-General Services Scale was used to evaluate burnout in nurses. The questionnaire was divided into three sections: emotional exhaustion, cynicism, and personal effectiveness. The questions could be answered on a Likert scale from 0 to 6, with zero being never and six being always. A high score indicated high cynicism and exhaustion and low personal effectiveness. Patient satisfaction was measured on a 12-item La Mónica-Oberst Patient Satisfaction Scale presented to emergency department patients after 1-2 days of admission. The statements could be answered on a Likert scale from 1 to 7, with one fully agreeing and seven entirely disagreeing. A high score indicated high satisfaction with the care provided. Patients with neuropsychiatric disorders, ICU patients, and patients under high-drug doses were excluded from this analysis. Patient characteristics, including length of hospital stay, diagnosis, sex, age, and qualification, were also recorded.

All data were analysed using SPSS version 20. Descriptive analyses evaluated nurses' and patients' data and burnout variables. The difference in stress, burnout, and patient satisfaction according to demographics and professional features was calculated using the X<sup>2</sup> test, ANOVA, t-test, and Pearson's coefficient.



**Results**

Table I shows the demographic details of nurses and patients included in the study. The mean age of nurses was  $38.6 \pm 9.1$  years, with an average experience of  $14.2 \pm 7.8$  years. The mean age of surveyed patients was  $60.6 \pm 20.3$  years, with a mean duration of  $13.4 \pm 12.76$  hours in the ER. All aggregation indexes were justified, and no significant associations were observed between demographic and professional parameters, stress, burnout, and patient satisfaction, as shown in Table 2. The mean satisfaction score was  $4.71 \pm 0.93$ , showing an adequate positive perception among patients. The mean nurse stress score was  $0.99 \pm 0.10$ , emotional exhaustion score was  $2.02 \pm 0.28$ , cynicism score was  $1.49 \pm 0.21$ , and personal effectiveness score was  $5.08 \pm 0.30$ , indicating low stress, exhaustion, and cynicism which lead to high performance. Only 5% of the nurses experienced burnout, which was associated with stress experienced at work. However, patient satisfaction was not associated with burnout or stress levels of nurses. Duration of patient stay was inversely related to stress score in nurses; the longer the hospital stay, the lower the stress ( $r = -0.40, p < 0.01$ ). Similarly, the longer the hospital stay, the lower the cynicism score among nurses ( $r = -0.36, p < 0.01$ ) Table 3.

**Table 2: Aggregation Indexes of Nurses and Patients**

Variables	AD <sub>M</sub> (J)	ICC 1	ICC 2	F (49,152)
<b>Nurses' variables</b>				
Work stress	0.69 (0.22)	0.33	0.81	5.09**
Emotional exhaustion	0.91 (0.18)	0.28	0.79	4.48**
Cynicism	0.89 (0.21)	0.18	0.57	3.25**
Personal Effectiveness	0.88 (0.18)	0.20	0.69	3.51**
<b>Patient variables</b>				
Patients' satisfaction with nurses	0.90 (0.17)	0.19	0.70	3.40**

\*\*p<0.01

**Table 3: Pearson's Correlation between Study Variables**

	Mean ± SD	Work stress	Emotional exhaustion	Cynicism	Personal Effectiveness	Patient Satisfaction	Duration of hospital stay
<b>Nurses' variables</b>							
Work stress	$0.99 \pm 0.10$						
Emotional exhaustion	$2.02 \pm 0.28$	0.35**					
Cynicism	$1.49 \pm 0.21$	0.39**	0.35*				
Personal Effectiveness	$5.08 \pm 0.30$	0.11	-0.05	-0.29			
<b>Patient variables</b>							
Patients' satisfaction with nurses	$4.71 \pm 0.93$	-0.12	-0.10	-0.13	0.16		
Duration of hospital stay	$12.65 \pm 12.72$	-0.41**	0.26	-0.36**	-0.07	-0.19	

**Discussion**

This study was conducted on stress and burnout among emergency department nurses and its association with patient satisfaction. The results revealed low stress, burnout, and cynicism levels, leading to adequate patient satisfaction and personal performance. These findings are similar to other studies. (6-8).

5% of the nurses experienced burnout, which showed a low-stress perception. The literature concerning nurses' burnout has mixed results; some conclude similar results, while some studies report a lower or higher prevalence than ours. (9-11). A recent meta-analysis reported a cumulative rate of 26% of burnout among emergency department nurses, which is significantly higher than our findings. (12).

**Table 1: Nurses' Professional and Demographic Details**

Parameters	N (%)
<b>Nurses (n=100)</b>	
<b>Gender</b>	
Mean age	$38.6 \pm 9.1$
Male	10 (10%)
Female	90 (90%)
<b>Marital status</b>	
Married	80 (80%)
Single	20 (20%)
<b>Type of shift</b>	
Day	10 (10%)
Night	15 (15%)
Rolling	75 (75%)
Mean experience	$14.2 \pm 7.8$
<b>Patients (n=150)</b>	
<b>Gender</b>	
Male	90 (60%)
Female	60 (40%)
Mean age	$60.6 \pm 20.3$
<b>Qualification</b>	
Primary/secondary education	60 (40%)
Undergraduate/ graduate degree	9 (6%)
No formal education	81 (64%)
<b>Referred department</b>	
Cardiology	30 (20%)
Pulmonology	24 (16%)
Surgery	27 (18%)
Neurology	15 (10%)
Oncology	9 (6%)
Others	60 (40%)

Our study has some limitations. The cross-sectional study design limited the generalizability of the results and the establishment of the relationship between parameters. Secondly, the results may be influenced by bias as the nurses filled out the questionnaire, and the interviewee selected the patients interviewed based on his desire. Further multi-hospital and country-level research is needed to obtain variable results to counter the situation.

### Conclusion

Nurses' stress and burnout parameters were not significantly associated with patient satisfaction; however, further research is needed in this field.

### 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-NNMC-092/23)

#### Consent for publication

Approved

#### Funding

Not applicable

### Conflict of interest

The authors declared the absence of a conflict of interest.

### Author Contribution

#### RG, HN

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

#### NS, AN

*Conception of Study, Development of Research Methodology Design, Study Design, manuscript review, Manuscript revisions, 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.*

### References

- Dall'Ora C, Ball J, Reinius M, Griffiths P. Burnout in nursing: a theoretical review. *Human resources for health*. 2020;18:1-17.
- Borges EMdN, Queirós CML, Abreu MdSnd, Mosteiro-Diaz MP, Baldonado-Mosteiro M, Baptista PCP, et al. Burnout among nurses: a multicentric comparative study. *Revista latino-americana de enfermagem*. 2021;29:e3432.
- Saad Saleh Ali M, Abdelwahab Ibrahim Elsayed A. Correlation between organisational cynicism and counterproductive work behaviours among nurses. *Egyptian Journal of Health Care*. 2022;13(2):1601-14.
- Abd-Erhaman ESA, Helal WES, Elnady FM. Authentic Leadership and Organizational Identification: Its Relation to Organizational Silence and Cynicism among Staff Nurses. *Assiut Scientific Nursing Journal*. 2022;10(33):108-22.
- Mohammad AS, Abd El Rahman SM, Ali RMN, Ali HD. Effect of Organizational Cynicism on Quality of Work Life and Employee Effectiveness among Nursing Staff. *Minia Scientific Nursing Journal*. 2022;11(1):2-10.
- Carthon JMB, Hatfield L, Brom H, Houton M, Kelly-Hellyer E, Schlak A, et al. System-level improvements in work environments lead to lower nurse burnout and higher patient satisfaction. *Journal of nursing care quality*. 2021;36(1):7-13.

- Jun J, Ojemeni MM, Kalamani R, Tong J, Crecelius ML. Relationship between nurse burnout, patient and organisational outcomes: Systematic review. *International journal of nursing studies*. 2021;119:103933.
- Alnaiem MS, Mansour AY, Nemir MJ, Fadlalmola HA, Awad HMA. Effect of Stress Level and Burnout on Quality of Care and Patient Satisfaction among Critical Care Nurses. *International Egyptian Journal of Nursing Sciences and Research*. 2022;2(2):269-77.
- Byrd J, Knowles H, Moore S, Acker V, Bell S, Alanis N, et al. Synergistic effects of emergency physician empathy and burnout on patient satisfaction: a prospective observational study. *Emergency Medicine Journal*. 2021;38(4):290-6.
- Riman KA, Harrison JM, Sloane DM, McHugh MD. Work environment and operational failures associated with nurse outcomes, patient safety, and patient satisfaction. *Nursing research*. 2023;72(1):20-9.
- Huhtala M, Geurts S, Mauno S, Feldt T. Intensified job demands in healthcare and their consequences for employee well-being and patient satisfaction: A multilevel approach. *Journal of advanced nursing*. 2021;77(9):3718-32.
- Stemmer R, Bassi E, Ezra S, Harvey C, Jojo N, Meyer G, et al. A systematic review: Unfinished nursing care and the impact on the nurse outcomes of job satisfaction, burnout, intention-to-leave and turnover. *Journal of advanced nursing*. 2022;78(8):2290-303.
- Heidari S, Parizad N, Goli R, Mam-Qaderi M, Hassanpour A. Job satisfaction and its relationship with burnout among nurses working in COVID-19 wards: A descriptive correlational study. *Annals of Medicine and Surgery*. 2022;82:104591.
- Ryu IS, Shim J. The influence of burnout on patient safety management activities of shift nurses: the mediating effect of compassion satisfaction. *International journal of environmental research and public health*. 2021;18(22):12210.
- Montgomery AP, Patrician PA, Azuero A. Nurse burnout syndrome and work environment impact patient safety grade. *Journal of Nursing Care Quality*. 2022;37(1):87-93.
- Schneider BJ, Ehsanian R, Schmidt A, Huynh L, Kennedy DJ, Maher DP, et al. The effect of patient satisfaction scores on physician job satisfaction and burnout. *Future Science OA*. 2021;7(1):FSO657.



**Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, <http://creativecommons.org/licenses/by/4.0/>. © The Author(s) 2025