

Job-related stress and perceived workplace stressors among nurses at Khulna Medical College Hospital, Bangladesh: a cross-sectional study

Franklin Talukder^{1*}, Mumtaj Tabassum¹, Kaberi Barai¹, Rowshanara Khatun¹, Shikha Halder Sylvia¹, Dipabali Mondal¹, Arian Akter¹, Juthika Mondal¹, Dipti Rani Shikdar¹, Usha Paul¹, Farhana Rahman Arju¹, Sujata Das¹, Lakshmi Basak^{1,2}

¹Department of Nursing, Khulna Nursing College, Khulna, Bangladesh

²Pharmacy Discipline, Khulna University, Khulna, Bangladesh

ARTICLE INFO

Article history

Received: 4 June 2026

Accepted: 7 August 2026

Published: 30 August 2026

Keywords

Job-related stress;
Occupational stress; Nurses;
Workplace stressors; Nursing
workload; Bangladesh

Corresponding Author

Franklin Talukder

Email:

franklintalukder68@gmail.com

ABSTRACT

Job-related stress is an important occupational health concern among nurses and may adversely affect their well-being, work performance, and quality of patient care. Nurses working in hospital settings are exposed to various occupational demands and workplace stressors. To assess the level of job-related stress and describe perceived workplace stressors among nurses at Khulna Medical College Hospital, Bangladesh. A descriptive cross-sectional study was conducted among 155 registered nurses at Khulna Medical College Hospital from January to December 2025. Participants were selected using a non-probability convenience sampling technique from a total population of 480 nurses. Data were collected using a pre-tested, self-administered semi-structured questionnaire covering socio-demographic characteristics, job-related stress, and perceived workplace stressors. Data were analyzed using descriptive statistics, including frequency, percentage, and mean, with SPSS version 21. Among the 155 respondents, 68 (43.9%) had mild job-related stress, 54 (34.8%) had minimum stress, 30 (19.4%) had moderate stress, and 3 (1.9%) had high stress according to the study's predefined grading criteria. Most respondents (81.9%) were satisfied with their working pattern or shift, while 41.3% reported attending to more than 40 patients per day. Psychological distress related to work was reported by 83.9% of respondents. The most frequently reported situations associated with job-related stress were night shifts (43.9%), handling many patients (34.2%), and emergency situations (20.0%). Disagreements with doctors were identified as a source of stress by 76.1% of respondents, while 52.9% reported a high level of stress related to inadequate support or guidance from supervisors. Most nurses in this study reported minimum to mild levels of job-related stress; however, several workplace conditions, particularly workload, night shifts, emergency situations, psychological distress, interpersonal disagreements, and inadequate supervisory support, were commonly reported as sources of stress. Strengthening workplace support, improving workload management, promoting effective teamwork, and implementing stress-management interventions may help create a healthier working environment for nurses.

1. Introduction

Job-related stress is an important occupational health concern, particularly among healthcare professionals who work in demanding and emotionally challenging environments. It refers to the physical, psychological, and emotional strain that may occur when the demands and pressures of work exceed an individual's perceived capacity to cope. Persistent occupational stress can adversely affect workers' health, well-being, job satisfaction, and work performance and may also have implications for the quality of healthcare delivery (Bakker et al., 2014; Moustaka & Constantinidis, 2010).

Nursing is widely recognized as a profession characterized by high levels of occupational stress. Nurses work at the frontline of healthcare delivery and are required to manage heavy workloads, shift duties, critically ill patients, emergency situations, emotional demands, and interactions with patients,

relatives, physicians, and other healthcare professionals. Factors such as overtime, inadequate staffing, workload, and job dissatisfaction have been reported as important contributors to occupational stress among nurses (Alamri et al., 2018; Arri et al., 2016; Sarafis et al., 2016). Prolonged exposure to such conditions may contribute to emotional exhaustion, reduced coping capacity, absenteeism, and decreased work performance, potentially affecting the provision of quality patient care.

Previous studies have demonstrated that occupational stress is common among nurses working in hospital settings. Stress may arise from several dimensions of the nursing work environment, including inadequate staffing, poor teamwork, insufficient training, limited supervisory support, difficult patient-care situations, and conflicts in the workplace. Although a certain degree of stress may be experienced as a normal response to demanding situations, persistent or

excessive stress can have detrimental consequences for both nurses and healthcare organizations.

The situation is particularly relevant in Bangladesh, where shortages in the health workforce and unfavorable nurse-to-population and nurse-to-healthcare-professional ratios have historically been identified as important challenges. Such workforce constraints may increase workload and occupational pressure among nurses (Ahmed et al., 2011). Previous research has also highlighted the importance of workplace conditions and psychosocial factors in the mental well-being of healthcare and other female workers in Bangladesh (Akhter et al., 2017). Therefore, understanding the extent of job-related stress and the workplace conditions perceived by nurses as stressful is important for developing appropriate organizational interventions.

Several studies conducted in different healthcare settings have reported varying levels of occupational stress among nurses. Studies from hospital settings have identified factors such as workload, shift work, patient-related demands, emotional challenges associated with death and dying, interpersonal relationships, and organizational support as important sources of occupational stress (Al Rasasi et al., 2015; Gulavani & Shinde, 2014; Sarafis et al., 2016). However, the level and nature of perceived workplace stressors may differ according to the characteristics of the healthcare facility, staffing conditions, workload, and organizational environment.

Khulna Medical College Hospital is a tertiary-level government hospital serving patients from Khulna and surrounding areas. Nurses working in such a setting may encounter substantial occupational demands, including high patient loads, shift work, emergency care, and emotionally challenging clinical situations. Despite the importance of nurses' occupational well-being, there is limited local information describing the level of job-related stress and commonly perceived workplace stressors among nurses working at Khulna Medical College Hospital.

Therefore, this study was conducted to assess the level of job-related stress and describe perceived workplace stressors among nurses at Khulna Medical College Hospital, Bangladesh. The findings may provide useful information for nursing administrators and hospital authorities in identifying areas of the work environment that require attention

and in developing appropriate strategies to promote nurses' occupational well-being and improve the working environment.

2. Materials and methods

2.1 Study design

A descriptive cross-sectional study was conducted among registered nurses working at Khulna Medical College Hospital (KMCH), Khulna, Bangladesh. KMCH is a tertiary-level government hospital serving patients from Khulna and surrounding areas. The study was conducted over a period of one year, from January to December 2025.

2.2 Study population

The study population consisted of registered nurses working at Khulna Medical College Hospital. The total study population was reported as 480 nurses.

2.3 Sample size and sampling technique

The calculated sample size using Cochran's formula was 384 participants; however, due to limitations related to time, leave, and respondent availability, data were collected from 155 nurses using a convenience sampling technique.

The authors should provide a clearer justification for the final sample size and discuss its implications for representativeness and generalizability. Information regarding the number of eligible nurses approached, participation rate, and reasons for non-participation should also be reported if available.

2.4 Data collection procedure

Data were collected using a self-administered questionnaire. The questionnaire was administered to eligible nurses during the study period. Information was collected regarding the socio-demographic characteristics of the respondents, job-related stress, and workplace factors perceived or experienced by the respondents as sources of stress.

2.5 Data collection instrument

A pre-tested, modified self-administered semi-structured questionnaire was used for data collection. The questionnaire consisted of 25 items divided into two sections: socio-demographic characteristics and job-related stress with related workplace factors. The questionnaire was reviewed

by academic experts to assess content validity, and necessary modifications were made based on their recommendations before final use.

The manuscript should clearly describe the source or development process of the questionnaire, the item structure, the scoring procedure, and the method used to calculate the overall stress score. If a standardized instrument was adapted, the original source should be cited. If the questionnaire was developed by the researchers, details of its development and validation process should be provided. Formal reliability measures, such as Cronbach's alpha, should be reported if they were assessed.

2.6 Validity of the instrument

The content validity of the questionnaire was assessed by a panel of academic experts. Based on their recommendations, modifications were made to the instrument before its use in the study.

2.7 Pre-testing and reliability

The questionnaire was pre-tested among 20 senior staff nurses at Khulna Specialized Hospital, Khulna, to identify ambiguous or unclear questions. Based on the pre-test findings, necessary modifications were made before final data collection.

Pre-testing improves the clarity and applicability of the questionnaire; however, if internal consistency reliability analysis was conducted, the relevant statistics should be reported. If no formal reliability testing was performed, pre-testing alone should not be described as evidence of instrument reliability.

2.8 Measurement and Grading of Job-Related Stress
Job-related stress was assessed using a four-point Likert-scale-based grading system, and stress levels were categorized as minimum (<50%), mild (51-60%), moderate (61-70%), and high (71-100%).

The manuscript should provide a clear explanation of how individual questionnaire responses were converted into percentage scores and classified into these categories. If these cut-off values were adopted from previous literature, appropriate references should be cited. If the categories were developed by the researchers, the rationale for selecting these thresholds should be described.

2.9 Data processing and statistical analysis

Completed questionnaires were checked for consistency, relevance, and completeness. The data

were subsequently coded, categorized, edited, and prepared for analysis.

Data were analyzed using Statistical Package for the Social Sciences (SPSS), version 21. Descriptive statistics, including frequency, percentage, and mean, were used to summarize the characteristics of the respondents and their reported levels of job-related stress and workplace stressors. Results were presented using tables and graphical representations where appropriate.

Because the current analysis is descriptive, the findings should be reported as distributions and observed patterns rather than as statistically significant associations. Any claim of statistical association should only be made if appropriate inferential statistical tests are subsequently performed.

2.10 Ethical considerations

Ethical clearance was obtained from the Institutional Review Board (IRB) of Khulna Nursing College. Permission to conduct the study was obtained from the relevant administrative authorities, including the director of the selected hospital. Participants' privacy and confidentiality were maintained throughout the study. The manuscript states that participants were informed about the study findings without distortion and that all participants were treated equally. No intervention or invasive procedure was performed during the study.

3. Results

3.1 Socio-demographic characteristics of the respondents

A total of 155 nurses participated in the study. The mean age of the respondents was 37 years. The largest proportion of respondents (37.4%, n=58) were aged 31-35 years, followed by those aged 36-40 years (32.9%, n=51), 40 years and above (17.4%, n=27), and 26-30 years (12.3%, n=19).

The majority of respondents were female (92.9%, n=144), while 7.1% (n=11) were male. Regarding religion, 49.7% (n=77) were Muslim, 46.5% (n=72) were Hindu, and 3.9% (n=6) were Christian.

With respect to family type, 64.5% (n=100) of respondents belonged to nuclear families, 30.3% (n=47) to joint families, 4.5% (n=7) to single-parent families, and 0.6% (n=1) to childless families.

Most respondents were married (87.7%, n=136), while 7.7% (n=12) were single, 2.6% (n=4) were divorced, and 1.9% (n=3) were widowed.

Regarding monthly income, 49.0% (n=33) of respondents reported an income of BDT 36,000–45,000, 21.3% (n=28) reported BDT 46,000–55,000, 18.1% (n=76) reported BDT 26,000–35,000, and 11.6% (n=18) reported an income above BDT 55,000. The income frequencies and percentages reported in the submitted table should be rechecked against the original dataset because the reported values do not sum consistently to the total sample.

Regarding educational qualification, 64.5% of respondents had a Diploma in Nursing Science and Midwifery, 25.2% had a Post-basic BSc in Nursing, 9.0% had an MPH or MSc in Nursing, and 1.3% had a Bachelor of Science in Nursing (Table 1).

Table 1: Socio-demographic characteristics of the respondents (n=155)

Variables	Category	n	%
Age	26-30 years	19	12.30%
	31-35 years	58	37.40%
	36-40 years	51	32.90%
	40 years and above	27	17.40%
Mean age-37			
Sex	Male	11	7.10%
	Female	144	92.90%
Religion	Muslim	77	49.70%
	Hinduism	72	46.50%
	Chirstian	6	3.60%
Family Type	Nuclear family	100	64.50%
	Joint F	47	30.30%
	Single parents family	7	4.50%
	Child less family	1	0.60%
Marital status	Single parents' family		
	Single	12	7.70%
	Married	136	87.70%
	Divorced	4	2.60%
	Widowed	3	1.90%
Monthly income	26000-35000	76	18.10%
	36000-45000	33	49.00%

	46000-55000	28	21.30%
	>55000	18	11.60%
Education al status	Diploma in Nursing science and midwifery		64.50%
	Post basic BSc in Nursing		25.20%
	Bachelor of Nursing		1.30%
	MPH or MSc in Nursing		9.00%

3.2 Work-related characteristics and perceived workplace stressors

The distribution of respondents according to their work area is presented in Figure 1. The largest proportion (36.8%) worked in other units, including EPI, OPD, and emergency services, followed by the surgery unit (25.2%), medicine unit (19.4%), and ICU/CCU (18.7%).

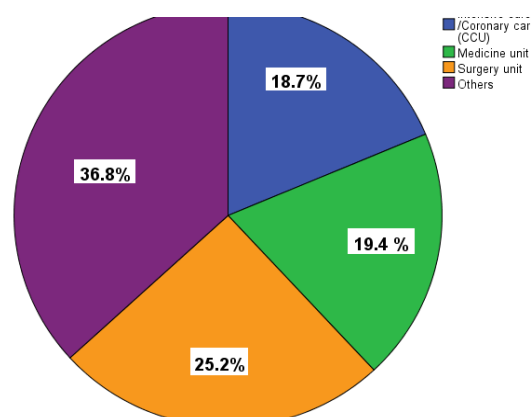


Figure 1: Distribution of respondents according to their work area

Most respondents (81.9%, n=127) reported being satisfied with their current working pattern or shift, while 18.1% (n=28) were not satisfied. Regarding the number of patients attended per day, 41.3% (n=64) reported attending to more than 40 patients, 23.2% (n=36) attended to 5–10 patients, 18.1% (n=28) attended to 21–40 patients, and 17.4% (n=27) attended to 11–20 patients.

Regarding overall job satisfaction, 59.4% (n=92) of respondents reported being satisfied, 25.2% (n=39) were neutral, 14.2% (n=22) were dissatisfied, and 1.3% (n=2) were very dissatisfied.

A large majority of respondents (83.9%, n=130) reported experiencing psychological distress related

to their work, whereas 16.1% (n=25) did not report such distress.

The most frequently reported situations in which respondents experienced job-related stress were during night shifts (43.9%, n=68), when handling many patients (34.2%, n=53), during emergency situations (20.0%, n=31), and during patient admission (1.9%, n=3).

Regarding emotional stress while handling dying patients, 43.9% (n=68) reported a high level of stress, 35.5% (n=55) reported moderate stress, 14.8% (n=23) reported minimum stress, and 5.8% (n=9) reported mild stress.

Disagreements with doctors were reported as a source of stress by 76.1% (n=118) of respondents, while 23.9% (n=37) did not report such disagreements as a source of stress.

Regarding mental preparedness for difficult situations, 59.4% (n=92) reported a high level of preparedness, 25.8% (n=40) reported moderate preparedness, 9.0% (n=14) reported minimum preparedness, and 5.8% (n=9) reported mild preparedness.

The distribution of respondents according to these job-related stressors and workplace factors is presented in Table 2.

Table 2: Job-related stress and perceived workplace stressors among respondents (n=155)

Variables	Category	n	%
Satisfied with their working patterns or shift	Yes	127	81.90 %
	No	28	18.10 %
	5-10 patients	36	23.2
Number of patients attend in a day	11-20 patients	27	17.4
	21-40 patients	28	18.1
	Above 40 patients	64	41.3
The overall job satisfaction	Satisfied	92	59.40 %
	Dissatisfied	22	14.20 %
	Neutral	39	25.20 %
	Very dissatisfied	2	1.30%

Experience psychological distress related to your work	Yes	130	83.90 %
	No	25	16.10 %
	Patient admission date	3	1.90%
	During Night shifts	68	43.90 %
Where you feel most job stress	During emergency situations	31	20.00 %
	When handling many patients	53	34.20 %
	High	68	43.90 %
Emotional stress during handle of dying patient.	Moderate	55	35.50 %
	Mild	9	5.80%
	Minimum	23	14.80 %
Disagreements with doctors a source of stress	Yes	118	76.10 %
	No	37	23.90 %
	High	92	59.40 %
The mental preparedness to handle difficult situations	Moderate	40	25.80 %
	Mild	9	5.80%
	Minimum	14	9%
	High	71	45.80 %
Mental stress when your college did not enough support s	Moderate	57	36.80 %
	Mild	6	3.90%
	Minimum	21	13.50 %
	High	82	52.90 %
Emotional stress	Moderate	54	34.80 %
	Mild	3	1.90%
	Minimum	16	10.30 %
Stress when the treatment plan or instructions are not clear	Never stressful	3	1.90%
	Sometimes stressful	47	30.30 %
	Fairly stressful	61	39.40 %

	Extremely stressful	44	28.40 %
	High	50	32.30 %
Stressful event someone giving special privilege to any employees	Moderate	55	35.50 %
	Mild	12	7.70%
	Minimum	38	24.50 %
	High	25	16.10 %
Emotional support from the patient	Moderate	37	23.90 %
	Mild	28	18.10 %
	Minimum	65	41.90 %
	Yes	97	62.60 %
Feel safe and secure in your working environment	No	58	37.40 %

3.3 Overall level of job-related stress

The overall distribution of job-related stress levels among the respondents is presented in **Table 3**. Among the 155 respondents, 68 (43.9%) were classified as having mild job-related stress, 54 (34.8%) had minimum stress, 30 (19.4%) had moderate stress, and 3 (1.9%) had high stress according to the grading criteria used in the study. Thus, the largest proportion of respondents had mild stress (43.9%), followed by minimum stress (34.8%), moderate stress (19.4%), and high stress (1.9%). Overall, 78.7% of respondents were classified as having minimum or mild stress, whereas 21.3% were classified as having moderate or high stress.

Table 3: Distribution of respondents according to overall job-related stress level (n=155)

S/no	Stress level	Scoring	n	%
1	High stress	71-100%	3	1.9
2	Moderate stress	61-70%	30	19.4
3	Mild stress	51-60%	68	43.9
4	Minimum	<50%	54	34.8
	Total	100%	155	100

3.4 Summary of major findings

The descriptive findings indicate that several workplace conditions were commonly reported as

stressful or challenging by the participating nurses. These included high patient workload, night shifts, emergency situations, psychological distress related to work, disagreements with doctors, inadequate support or guidance, and emotionally demanding patient-care situations (Table 2).

The overall stress-level distribution indicates that mild and minimum levels of job-related stress were most frequently reported among the respondents (Table 3).

Because the current analysis used descriptive statistics only, these findings should be interpreted as reported workplace stressors or perceived stress-related factors rather than statistically confirmed associated factors. No causal relationship or statistical association between these variables and overall job-related stress can be established from the analyses presented in the current manuscript.

4. Discussion

The present study assessed the level of job-related stress and described perceived workplace stressors among 155 nurses working at Khulna Medical College Hospital, Bangladesh. The findings showed that 43.9% of respondents were classified as having mild job-related stress, 34.8% had minimum stress, 19.4% had moderate stress, and 1.9% had high stress. Thus, most respondents were classified within the minimum or mild stress categories. However, several workplace conditions were commonly reported as stressful, including night shifts, handling a large number of patients, emergency situations, psychological distress related to work, disagreements with doctors, and inadequate workplace support.

4.1 Socio-demographic characteristics

The mean age of the respondents was 37 years, with the largest proportion (37.4%) belonging to the 31–35-year age group. Previous research among nurses in Pakistan also reported a relatively young to middle-aged nursing workforce, with a mean age of 32.29 ± 7.025 years (Panhwar et al., 2019). The similarity in age distribution may reflect the concentration of nurses within the active working-age group in hospital settings. However, because the present study was descriptive, no statistical association between age and job-related stress can be established.

The majority of respondents in the present study were female (92.9%), and 64.5% had a Diploma in

Nursing Science and Midwifery. This demographic profile is consistent with the predominantly female composition of the nursing workforce reported in many hospital-based studies. The educational distribution also reflects the different professional training pathways among nurses working in the study setting.

4.2 Overall level of job-related stress

The largest proportion of respondents (43.9%) was classified as having mild job-related stress, followed by minimum stress (34.8%), moderate stress (19.4%), and high stress (1.9%). Therefore, 78.7% of respondents were classified as having minimum or mild stress, while 21.3% were classified as having moderate or high stress.

The observed distribution differs from the findings of Al Rasasi et al. (2015), who reported a substantially higher level of work-related stress among nurses working in healthcare institutions in Dubai. Differences between studies may be related to variations in healthcare systems, staffing levels, workload, measurement instruments, occupational environments, and the characteristics of the study populations. Similarly, Tadese et al. (2016) reported occupational stress among nurses working in public hospitals in Jimma Zone, Southwest Ethiopia. However, direct comparisons should be made cautiously because differences in study settings, measurement instruments, and stress classification criteria may influence the reported levels of occupational stress.

4.3 Workplace factors perceived as sources of stress

Workload appeared to be an important concern among the participating nurses. More than two-fifths of respondents (41.3%) reported attending to more than 40 patients per day. In addition, 34.2% reported that handling many patients was a situation in which they experienced the most job-related stress. High workload may increase the physical and psychological demands placed on nurses and may make it more difficult to maintain adequate time and attention for individual patients.

Night-shift work was another commonly reported stressful situation, with 43.9% of respondents identifying night shifts as a situation in which they experienced the most job-related stress. Shift work can place additional demands on nurses because of changes in working schedules and sleep patterns.

Previous literature has also identified shift work and occupational demands as relevant concerns for nurses (Gulavani & Shinde, 2014; Gholam et al., 2012).

Emotional demands associated with patient care were also evident. In the present study, 43.9% of respondents reported a high level of emotional stress when handling dying patients, while a further 35.5% reported moderate stress. Similar findings have been reported among nurses in other hospital settings, where death and dying have been identified as important sources of occupational stress (Tadese et al., 2016). These findings highlight the emotionally demanding nature of nursing work and the potential importance of appropriate psychological and organizational support.

4.4 Interpersonal and organizational stressors

The findings indicate that interpersonal relationships within the healthcare team may be an important area of concern. More than three-quarters of respondents (76.1%) reported that disagreements with doctors were a source of stress. In addition, 52.9% of respondents reported a high level of stress related to inadequate supervisory support, while 34.8% reported moderate stress in this area.

Effective communication, teamwork, and supportive supervision are important components of a healthy nursing work environment. Poor communication or disagreements between healthcare professionals may increase workplace tension and make it more difficult for nurses to manage demanding clinical situations. Previous research has similarly identified workplace relationships, organizational conditions, and support as relevant dimensions of occupational stress among nurses (Sarafis et al., 2016; Ji-Young Lim et al., 2022).

A considerable proportion of respondents (83.9%) also reported experiencing psychological distress related to their work. This finding suggests that although the overall stress classification was predominantly minimum or mild, many nurses nevertheless experienced psychological difficulties related to their occupational environment. The difference between the overall stress classification and the high proportion reporting psychological distress may partly reflect the multidimensional nature of the questionnaire and should be investigated further using a validated stress measurement instrument.

4.5 Job satisfaction and workplace safety

In this study, 59.4% of respondents reported being satisfied with their jobs, while 25.2% were neutral and 15.5% were dissatisfied or very dissatisfied. In contrast, a study among nurses in public hospitals in the Greater Banjul Area, The Gambia, reported that 30.2% of nurses had high job satisfaction, while 69.8% had low job satisfaction (Omotosho et al., 2025).

Regarding workplace safety, 62.6% of respondents reported feeling safe and secure in their working environment, whereas 37.4% did not. Although the majority reported feeling safe, the proportion who did not feel safe remains important from an occupational-health perspective. Workplace safety should therefore be considered alongside workload, staffing, interpersonal relationships, and psychological support when developing interventions for nurses.

Overall, the findings suggest that job-related stress among the participating nurses was predominantly within the minimum-to-mild categories according to the study's grading system. Nevertheless, several workplace conditions were frequently reported as stressful, particularly high patient workload, night shifts, emergency situations, emotionally demanding patient care, disagreements with doctors, and inadequate supervisory support.

These findings should be interpreted in light of the study design. The study used a descriptive cross-sectional design and convenience sampling, and the analysis was limited to descriptive statistics. Therefore, the reported workplace factors should be considered perceived or reported stress-related factors rather than statistically confirmed predictors or associated factors. The study cannot establish causality or determine whether any particular workplace factor independently increases the likelihood of job-related stress.

Future studies using larger probability-based samples and validated occupational-stress instruments, together with appropriate inferential and multivariable analyses, would be useful to identify factors independently associated with job-related stress among nurses in Bangladesh.

5. Conclusion

The present study found that job-related stress among nurses at Khulna Medical College Hospital was predominantly within the minimum-to-mild

categories, with 43.9% of respondents reporting mild stress and 34.8% reporting minimum stress. However, several workplace conditions were frequently reported as stressful, including night-shift duties, high patient workload, emergency situations, emotionally demanding care of dying patients, psychological distress, disagreements with doctors, and inadequate supervisory support. In particular, 41.3% of nurses reported attending to more than 40 patients per day, 43.9% identified night shifts as a major stressful situation, 83.9% reported work-related psychological distress, 76.1% reported disagreements with doctors as a source of stress, and 52.9% reported high stress related to inadequate supervisory support.

These findings indicate that, although the overall level of job-related stress was mostly minimum to mild according to the study's grading system, important workplace stressors remain present in the hospital environment. Strengthening workload management, supportive supervision, communication and teamwork, psychological support, and workplace safety may contribute to a healthier working environment for nurses. However, because this was a descriptive cross-sectional study based on convenience sampling and descriptive statistics, the reported workplace factors should be interpreted as perceived or reported stress-related factors rather than statistically confirmed predictors or causes of job-related stress.

6. Limitations of the study

The study has some limitations. The cross-sectional design does not allow causal relationships to be established. The sample size was smaller than the calculated sample size due to time, leave, and respondent availability, and convenience sampling may limit the representativeness and generalizability of the findings. Furthermore, only descriptive statistics were used; therefore, statistically significant associations or predictors of job-related stress could not be identified.

7. Recommendations

Hospital authorities should improve workload and staffing management, strengthen supervisory support, teamwork, and communication, and provide regular training on stress management, coping strategies, and time management. A safe and supportive working environment, including appropriate psychological support for nurses, should also be promoted. Future studies should use larger probability-based samples, validated stress

assessment instruments, and appropriate inferential statistical methods to identify factors associated with job-related stress.

References

- Alamri, M. S., & Almazan, J. U. (2018). Barriers of physical assessment skills among nursing students in Arab Peninsula. *International Journal of Health Sciences*, 12(3), 58–66.
- Arri, S. S., Ryan, M., Redwood, S. R., & Marber, M. S. (2016). Mental stress-induced myocardial ischaemia. *Heart*, 102(6), 472–480. <https://doi.org/10.1136/heartjnl-2014-307306>.
- Asefzadeh, S., Kalhor, R., & Tir, M. (2017). Patient safety culture and job stress among nurses in Mazandaran, Iran. *Electronic Physician*, 9(12), 6010–6016. <https://doi.org/10.19082/6010>.
- Ahmed, S. M., Hossain, M. A., RajaChowdhury, A. M., & Bhuiya, A. U. (2011). The health workforce crisis in Bangladesh: Shortage, inappropriate skill-mix and inequitable distribution. *Human Resources for Health*, 9, Article 3. <https://doi.org/10.1186/1478-4491-9-3>.
- Akhter, S., Rutherford, S., Akhter Kumkum, F., Bromwich, D., Anwar, I., Rahman, A., & Chu, C. (2017). Work, gender roles, and health: Neglected mental health issues among female workers in the ready-made garment industry in Bangladesh. *International Journal of Women's Health*, 9, 571–579. <https://doi.org/10.2147/IJWH.S137250>
- Al Rasasi, A., Al Faisal, W., El Sawaf, E., Hussain, H., & Wasfy, A. (2015). Work-related stress among nurses working in Dubai, a burden for healthcare institutions. *American Journal of Psychology and Cognitive Science*, 1(2), 61–65.
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and work engagement: The JD–R approach. *Annual Review of Organizational Psychology and Organizational Behavior*, 1, 389–411. <https://doi.org/10.1146/annurev-orgpsych-031413-091235>
- Kunwar, D., Shrestha, B., Shrestha, S., Risal, A. (2025). Occupational stress among the nurses working in a Medical College Hospital in Nepal. *Industrial Psychiatry Journal*. 34(2):210-214. doi: 10.4103/ipj.ipj_20_25
- Gholam, H. H., Ibrahim, S. N., Hamid, H., Mojahede, S. N., Reza, J. N., & Hajian, N. (2012). Effect of shift work on the frequency of depression in nursing staff of Yazd University of Medical Sciences. *Journal of Community Health Research*, 1(2), 104–109.
- Gulavani, A., & Shinde, M. (2014). Occupational stress and job satisfaction among nurses. *International Journal of Science and Research*, 3(4), 733–740.
- Lim, J.Y., Kim, G.M., Kim, E.J. (2022). Factors Associated with Job Stress among Hospital Nurses: A Meta-Correlation Analysis. *International Journal of Environmental Research and Public Health*. 10;19(10):5792. doi: 10.3390/ijerph19105792
- Kane, P. P. (2009). Stress causing psychosomatic illness among nurses. *Indian Journal of Occupational and Environmental Medicine*, 13(1), 28–32. <https://doi.org/10.4103/0019-5278.50721>
- Kaneita, Y., Ohida, T., Uchiyama, M., Takemura, S., Kawahara, K., Yokoyama, E., Miyake, T., Harano, S., Suzuki, K., & Fujita, T. (2006). The relationship between depression and sleep disturbances: A Japanese nationwide general population survey. *The Journal of Clinical Psychiatry*, 67(2), 196–203. <https://doi.org/10.4088/JCP.v67n0204>.
- Lim, J.-Y., Kim, G.-M., & Kim, E.-J. (2022). Factors associated with job stress among hospital nurses: A meta-correlation analysis. *International Journal of Environmental Research and Public Health*, 19(10), 5792. <https://doi.org/10.3390/ijerph19105792>
- Moustaka, E., Constantinidis, T.C. (2010). Sources and effects of occupational stress in nursing. *Health Science Journals*; 4:210.
- Marshall, J. (1980). Stress amongst nurses. In C. L. Cooper & R. Marshall (Eds.), *White collar and professional stress* (pp. 19–45). Wiley.
- Omotosho, T. F., Omotosho, T. O. A., & Bass, P. (2025). Work-related stress and its associated factors among nurses in public hospitals in the Greater Banjul Area, The Gambia. *International Journal of Africa Nursing Sciences*, 22, 100842. <https://doi.org/10.1016/j.ijans.2025.100842>
- Panhwar, G.A., Badil, B., Shaikh, G.M., Sherali, S., Ghouri, A. (2019). Job related stress and its various sources among nurses working at Liaquat University Hospital, Jamshoro. *Pakistan Journal of Medicine and Dentistry*. 2019;8(2):75-77
- Price, J.L., Mueller, C.W. (1981). Professional turnover: the case of nurses. *Health Syst Manage*. 15:1-160.
- Shinde, M., & Patel, S. (2014). Co-Relation between “Problematic Internet Use” And Mental Health in Professional Education Students. *International Journal of Science and Research*, 3(2), 194–202.
- Sarafis, P., Rousaki, E., Tsounis, A., Malliarou, M., Lahana, L., Bamidis, P., Niakas, D., Papastavrou, E. (2016). The impact of occupational stress on nurses' caring behaviors and their health related quality of life. *BMC Nursing*. 27;15:56. doi: 10.1186/s12912-016-0178-y.