

ASSESSMENT OF CHALLENGES FACED BY NURSING
PROFESSIONALS WORKING IN TERTIARY CARE HOSPITALS IN
KARACHI, PAKISTAN

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Abstract

Background: Nurses constitute a major component of the health workforce, and unfavorable working conditions may affect staff well-being, retention, and patient care. This study assessed occupational and organizational challenges among nursing professionals working in selected tertiary-care hospitals in Karachi, Pakistan.

Methods: A descriptive cross-sectional study was conducted in one public and one private tertiary-care hospital in Karachi from January 1 to June 30, 2026. A purposive sample of 237 registered nurses with at least six months of continuous work experience participated. Data were collected using a structured self-administered questionnaire covering workload and staffing, workplace safety and environment, professional recognition and compensation, and physical and mental health. The questionnaire was reviewed by five experts for content validity. Data were analyzed using SPSS version 26.0 with descriptive statistics and tests of association.

Results: Of 237 nurses, 51.9% were male, 46.8% were aged 31–40 years, and 64.1% held a Post RN BSN qualification. Most participants (80.2%) worked rotational shifts. Workload challenges were prominent: 76.4% reported an inaccurate patient-to-nurse ratio, 81.0% reported frequently performing non-nursing tasks, 89.0% reported missing breaks or meals because of workload, and 71.7% reported insufficient time to provide quality care. Verbal abuse was reported by 79.7% and physical violence by 62.0%. Only 32.9% reported that a strict violence-reporting protocol was available and acted upon. Regarding compensation, 58.2% were dissatisfied with salary and 85.2% reported no health insurance or other benefits. Emotional exhaustion occurring often or always was reported by 42.6%, while sleep disorders occurring often or always were reported by 48.5%. Missing breaks/meals because of workload was significantly associated with age ($p < 0.001$), gender ($p < 0.001$), qualification ($p < 0.001$), and years of experience ($p = 0.011$), but not marital status ($p = 0.077$ using Pearson chi-square; exact testing also remained non-significant).

Conclusion: Nurses in the participating tertiary-care hospitals experienced substantial workload, staffing, workplace violence, compensation, and well-being challenges. Organizational responses should focus on adequate staffing, workload distribution, violence prevention and reporting, professional support, fair compensation and benefits, and protection of nurses' health and work-life balance.

1. Introduction

Nursing is the largest occupational group within the health sector. The World Health Organization reported approximately 27.9 million nursing personnel globally, representing about 59% of the health professions, while emphasizing continuing workforce gaps and the need for investment in nursing education, jobs, and leadership.¹ Working conditions are therefore important for workforce sustainability and the delivery of safe, effective patient care.

Nurses may encounter multiple occupational stressors, including high workload, inadequate staffing, shift work, workplace violence, insufficient remuneration, and difficult work environments.²⁻⁶ Evidence from Pakistan and other settings has documented workplace violence against nurses and the potential consequences of stressful working conditions for staff well-being and organizational outcomes.⁷⁻¹² Systematic reviews have also linked nurse staffing and work-environment characteristics with nurse and patient outcomes.¹³⁻¹⁸

Karachi is a major healthcare center in Pakistan, with nurses working across public and private tertiary-care hospitals and high-acuity clinical areas. Local evidence describing the range of occupational challenges experienced by nurses can help hospital leaders identify areas requiring organizational attention. The present study therefore assessed workload and staffing, workplace safety and environment, professional recognition and compensation, and physical and mental health challenges among nursing professionals in selected tertiary-care hospitals in Karachi.

2. Objective

To assess the occupational and organizational challenges faced by nursing professionals working in selected tertiary-care hospitals in Karachi, Pakistan.

Specific objectives were to assess workload and staffing challenges; evaluate workplace safety

and the physical work environment; determine concerns related to professional recognition and compensation; and assess physical and mental health challenges.

3. Methods

3.1 Study design and setting

A descriptive cross-sectional study was conducted in one public and one private tertiary-care hospital in Karachi, Pakistan, from January 1 to June 30, 2026.

3.2 Participants and sampling

The study population comprised registered nurses working in the participating hospitals. A total of 237 nurses were included using purposive sampling. Eligibility criteria were a valid professional nursing credential and at least six months of continuous work experience in the participating hospital. Nurses on long-term or maternity leave and those unwilling to participate were excluded.

3.3 Data collection instrument

Data were collected using a structured self-administered questionnaire comprising four domains: workload and staffing (5 items), workplace safety and environment (5 items), professional recognition and compensation (5 items), and physical and mental health (5 items). The first three domains primarily used yes/no responses, whereas the physical and mental health domain used five response categories ranging from never to always. Five experts reviewed the instrument for content validity. The original study documentation reported a reliability coefficient of 0.87; the final submission should identify the validation/pilot sample and specify whether this coefficient was Cronbach's alpha, split-half reliability, or another statistic.

3.4 Data analysis

Data were coded and analyzed using IBM SPSS Statistics version 26.0. Frequencies and percentages were calculated for categorical variables. Associations between demographic variables and the specific workload item 'Does your workload cause you to miss breaks or skip meals?' were assessed using Pearson's chi-square test. Because some contingency-table cells had expected counts below five, exact testing should be considered for the final journal submission; the Pearson chi-square results were retained here

for consistency with the original analysis. Statistical significance was set at $p < 0.05$.

3.5 Ethical considerations

Ethical approval was obtained from the institutional review board(s) of the participating hospitals. Participants were informed about the study purpose and procedures, written informed consent was obtained before participation, and confidentiality and privacy were maintained throughout data collection and analysis.

4. Results

A total of 237 nurses were analyzed. The demographic characteristics are presented in Table 1.

Characteristic	Category	n (%)
Age	18–30 years	78 (32.9)
	31–40 years	111 (46.8)
	>40 years	48 (20.3)
Gender	Male	123 (51.9)
	Female	114 (48.1)
Marital status	Single	86 (36.3)
	Married	147 (62.0)
	Other	4 (1.7)
Qualification	Diploma in Nursing	67 (28.3)
	BSN	18 (7.6)
	Post-RN BSN	152 (64.1)
Experience	<1 year	16 (6.8)
	1–5 years	151 (63.7)
	6–10 years	29 (12.2)
	>10 years	41 (17.3)
Hospital type	Public	139 (58.6)
	Private	98 (41.4)
Working unit	ICU	21 (8.9)
	Emergency	61 (25.7)
	Medical ward	52 (21.9)
	Surgical ward	35 (14.8)
	Pediatric ward	25 (10.5)
	Oncology ward	22 (9.3)
Shift pattern	Other	21 (8.9)
	Morning	18 (7.6)
	Evening	23 (9.7)
	Night	6 (2.5)
	Rotational	190 (80.2)

Note: Percentages are based on N=237. The religion variable appearing in the earlier manuscript was not present in the supplied SPSS dataset and is therefore not included in the corrected table.

4.1 Workload and staffing

Item	Yes n (%)	No n (%)
Patient-to-nurse ratio in the unit is accurate	56 (23.6)	181 (76.4)
Workplace violence increased during the last 12 months	160 (67.5)	77 (32.5)
Frequently perform non-nursing tasks	192 (81.0)	45 (19.0)
Workload causes missed breaks or skipped meals	211 (89.0)	26 (11.0)
Enough time to provide quality care to each patient	67 (28.3)	170 (71.7)

The most frequently reported workload concerns were missed breaks or meals (89.0%), performing non-nursing tasks (81.0%), and inaccurate patient-to-nurse ratios (76.4%).

4.2 Workplace safety and environment

Item	Yes n (%)	No n (%)
Experienced verbal abuse from patients/families in the last 6 months	189 (79.7)	48 (20.3)
Experienced physical violence or threats at the workplace	147 (62.0)	90 (38.0)
Feel safe during night shifts	118 (49.8)	119 (50.2)
Strict violence-reporting protocol is available and acted upon	78 (32.9)	159 (67.1)
Adequate management support regarding workplace harassment	97 (40.9)	140 (59.1)

Workplace violence was common, with 79.7% reporting verbal abuse and 62.0% reporting physical violence or threats. Only 32.9% reported that a strict reporting protocol was available and acted upon.

4.3 Professional recognition and compensation

Item	Yes n (%)	No n (%)
Satisfied with current salary	99 (41.8)	138 (58.2)
Employer provides health insurance or other benefits	35 (14.8)	202 (85.2)
Superiors respect professional knowledge	118 (49.8)	119 (50.2)
Opportunities for professional growth or training	93 (39.2)	144 (60.8)
Plan to leave current job because of working conditions	97 (40.9)	140 (59.1)

Most nurses reported no health insurance or other benefits (85.2%), and 58.2% were not satisfied with their current salary. Less than half

reported opportunities for professional growth or training (39.2%).

4.4 Physical and mental health

Item	Never n (%)	Rarely n (%)	Sometimes n (%)	Often n (%)	Always n (%)
Physically exhausted after a shift	21 (8.9)	35 (14.8)	92 (38.8)	40 (16.9)	49 (20.7)
Emotionally exhausted/burned out	13 (5.5)	47 (19.8)	76 (32.1)	56 (23.6)	45 (19.0)
Adequately protected against infectious diseases	78 (32.9)	29 (12.2)	91 (38.4)	6 (2.5)	33 (13.9)
Able to maintain a healthy work-life balance	43 (18.1)	45 (19.0)	86 (36.3)	21 (8.9)	42 (17.7)
Sleep disorders due to night shifts	21 (8.9)	4 (1.7)	97 (40.9)	12 (5.1)	103 (43.5)

Emotional exhaustion occurring often or always was reported by 42.6% of nurses, while physical exhaustion occurring often or always was reported by 37.6%. Sleep disorders occurring

often or always were reported by 48.5%. Only 16.5% reported feeling often or always adequately protected against infectious diseases.

4.5 Association between demographic characteristics and missed breaks/meals due to workload

Demographic variable	Yes n (%)	No n (%)	Pearson χ^2 (df)	p-value
Age			14.85 (2)	<0.001
18–30 years	61 (78.2)	17 (21.8)		
31–40 years	103 (92.8)	8 (7.2)		
>40 years	47 (97.9)	1 (2.1)		
Gender			20.96 (1)	<0.001
Male	98 (79.7)	25 (20.3)		
Female	113 (99.1)	1 (0.9)		
Marital status			5.12 (2)	0.077
Single	72 (83.7)	14 (16.3)		
Married	136 (92.5)	11 (7.5)		
Other	3 (75.0)	1 (25.0)		
Qualification			21.47 (2)	<0.001
Diploma in Nursing	56 (83.6)	11 (16.4)		
BSN	11 (61.1)	7 (38.9)		
Post-RN BSN	144 (94.7)	8 (5.3)		
Experience			11.13 (3)	0.011
<1 year	11 (68.8)	5 (31.2)		
1–5 years	136 (90.1)	15 (9.9)		
6–10 years	24 (82.8)	5 (17.2)		
>10 years	40 (97.6)	1 (2.4)		

The workload-related outcome was significantly associated with age, gender, qualification, and

years of experience. Marital status was not significantly associated with the outcome.

Because some expected cell counts were below five for marital status and qualification/experience tables, exact tests are preferable for a final statistical report. In exact testing, the marital-status association remained non-significant ($p \approx 0.051$), while qualification remained significant ($p < 0.001$) and experience remained significant ($p \approx 0.011$).

5. Discussion

This study found that nurses working in the participating tertiary-care hospitals experienced challenges across workload, staffing, workplace safety, compensation, professional support, and physical and mental health. The results provide a multidimensional description of the working environment and are broadly consistent with literature identifying workload, staffing limitations, workplace violence, and poor work environments as important concerns for nurses.⁷⁻¹⁸

Workload was particularly prominent. Almost nine in ten nurses reported missing breaks or meals because of workload, and more than three quarters reported an inaccurate patient-to-nurse ratio. In addition, 81.0% reported frequently performing non-nursing tasks and 71.7% reported insufficient time to provide quality care. These findings are relevant to the wider evidence linking staffing and work-environment conditions with nurse and patient outcomes.¹³⁻¹⁸ They also support the importance of workload distribution and appropriate staffing as organizational priorities.

Workplace violence was another major concern. Verbal abuse was reported by 79.7% and physical violence or threats by 62.0%. Only one third of participants reported that a strict violence-reporting protocol was available and acted upon, and 40.9% reported adequate management support regarding workplace harassment. These findings are consistent with Pakistani and international literature documenting workplace violence against nurses and calling for stronger institutional prevention and response mechanisms.^{7-12,20}

Compensation and professional support were also important concerns. More than half of participants were dissatisfied with salary, and 85.2% reported that their employer did not provide health insurance or other benefits. In

addition, 60.8% reported no opportunity for professional growth or training. Such organizational conditions may affect job satisfaction and retention; however, the present cross-sectional design does not permit causal conclusions.

Physical and mental health findings further indicate occupational burden. More than two fifths of nurses reported emotional exhaustion occurring often or always, and nearly half reported sleep disorders occurring often or always. These findings are consistent with the broader literature describing the relationship between demanding work conditions, burnout, sleep disruption, and occupational well-being among nurses.^{10-12,19}

The association analysis showed that missing breaks or meals because of workload varied significantly by age, gender, qualification, and experience. These findings should be interpreted as associations rather than causal effects. The outcome was a single questionnaire item rather than a validated composite measure of overall occupational challenge; therefore, the association results should not be interpreted as demonstrating that demographic characteristics cause occupational stress or workload burden.

6. Strengths and Limitations

Strengths of the study include inclusion of both public and private tertiary-care settings, assessment of multiple dimensions of nurses' working conditions, and analysis of a complete dataset of 237 participants. The study also provides Karachi-specific evidence from clinical nursing settings.

Several limitations should be considered. Purposive sampling and inclusion of only two selected hospitals limit generalizability. The cross-sectional design prevents causal inference. Data were self-reported and may be affected by recall or social-desirability bias. The questionnaire included heterogeneous items rather than a single validated scale for overall occupational challenges, so results should be interpreted at the item/domain level. Finally, the analysis of associations was based on the specific item concerning missed breaks/meals rather than a formally defined composite challenge score.

7. Conclusion

Nurses working in the participating tertiary-care hospitals in Karachi reported substantial challenges related to workload and staffing, workplace violence and safety, compensation and professional support, and physical and mental well-being. Missed breaks or meals due to workload were particularly common and were associated with age, gender, qualification, and years of experience. These findings indicate the need for organizational attention to staffing, workload distribution, workplace violence prevention and reporting, professional development, compensation and benefits, and nurses' health and work-life balance.

8. Recommendations

- Review nurse staffing and patient-to-nurse ratios and redistribute workload according to patient acuity and service demands.
- Reduce the assignment of routine non-nursing tasks to nursing staff where appropriate.
- Strengthen workplace-violence prevention, reporting, investigation, and follow-up mechanisms.
- Provide accessible management support for harassment and workplace-safety concerns.
- Review salary structures, health insurance, benefits, and opportunities for professional development.
- Promote protected rest and meal periods, healthy shift scheduling, and organizational support for work-life balance.
- Conduct multicenter studies using probability sampling and validated instruments to examine occupational stress, burnout, violence, and retention in nurses.

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Conflict of Interest

The authors declare no conflict of interest.

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