

Original Article

Relationship between Communication Skills and Task Load: A Comparative Study of Nurses in Surgical and Medical Wards

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Abstract

Objective: To assess communication skills and task load among nurses and compare these variables between medical and surgical wards.

Study Design: A descriptive cross-sectional study was conducted.

Place and duration of study: An descriptive cross-sectional study was conducted over six month period in major hospitals of Abbottabad (2024). Convenience sampling technique was used and a total of 197 registered nurses were collected. Ethical approval was obtained and consent was taken before data collection. Standardized questionnaires were used including Communication Skills Questionnaire (CSQ), and Task Load Index (TLX). Inferential analyses included chi-square tests, and Spearman's rho correlation.

Material and Methods: Convenience sampling technique was used and a total of 197 registered nurses were collected. Ethical approval was obtained and consent was taken before data collection. Standardized questionnaires were used including Communication Skills Questionnaire (CSQ), and Task Load Index (TLX). Inferential analyses included chi-square tests, and Spearman's rho correlation.

Results: The mean age of nurses was 31.88 ± 7.92 years; most participants were female (58.88%), and married (61.42%). Most were diploma holders (44.16%), and a significant proportion had 1–5 years of experience (55.33%). Marital status was significantly associated with ward placement, where single nurses were more likely in medical wards and married nurses in surgical wards. Age and experience status showed significant (P value < 0.05) moderate positive correlation ($\rho = 0.25$) with task load, whereas education levels showed weak negative correlation ($\rho = -0.14$) with task load. Regression analysis confirmed that communication skills highly significantly (P value < 0.01 , $OR = 3.77$, 95% $CI = 2.27-6.28$) predicted increasing task load.

Conclusion: Communication skills are significantly associated with nurses' task load. Strengthening communication competencies alongside optimized workload distribution may support effective task management and improve nurses' well-being.

Keywords: Nurses; Communication; WorkLoad; Cross-Sectional Studies

1. Introduction

Nurses collaborate with doctors and other medical staff, maintain accurate documentation, follow infection control protocols, and respond to medical emergencies to ensure patient safety and recovery⁽¹⁾. Nurses in wards provide comprehensive care for patients with acute and chronic illnesses, including monitoring vital signs, administering medications, and managing symptoms⁽²⁾. A heavy workload can lead to increased stress, fatigue, and decreased productivity. When employees are overwhelmed with tasks, the quality of their work may suffer, leading to mistakes and

inefficiency⁽³⁾. Implementing self-care strategies and workplace interventions, such as mindfulness and better scheduling, can help reduce stress and improve job satisfaction⁽⁴⁾.

Good communication skills help people express their thoughts clearly and understand others effectively⁽⁵⁾. Effective communication in nursing is essential for building trust, ensuring patient safety, and delivering high-quality care⁽⁶⁾.

Clear and concise communication prevents mis-

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understandings, reduces errors, and enhances teamwork, ultimately improving efficiency and reducing work-related stress⁽⁷⁾.

2. Materials & Methods

This study employed a descriptive cross-sectional design. The study was conducted in major hospitals of Abbottabad, including Women and Children Hospital, Ayub Teaching Hospital, District Headquarters (DHQ) Hospital, and Jinnah International Hospital. Using open-source statistics for public health (www.openepi.com), a total of 197 nurses were estimated with margin error of 5%, confidence level of 95%, assuming a population size of 4000 and 50 % response distribution. Data were collected from registered nurses that were actively involved in direct patient care during their shifts. Nurses with less than one year of clinical experience and those who had recently experienced personal or professional trauma were excluded, as these factors could influence perceived workload and communication outcomes. Ethical approval (Ref: 1303) was obtained from the Institutional Ethical Research and study Committee of Women Institute of learning and rehabilitation sciences, Abbottabad. Written informed consent was obtained from all participants prior to data collection. Data were collected using a structured questionnaire comprising three sections: section I included demographic characteristics; Section II consisted of the Communication Skills Questionnaire (CSQ); and Section III included the Task Load Index (TLX). Data were entered and cleaned using Microsoft Excel and analyzed using the Statistical Package for Social Sciences (SPSS), inferential statistics included chi-square, Spearman's rho correlation and binary logistic regression model. Significant level was considered at $p < 0.05$.

3. Results

Table 1 shows that for gender distribution, female and male nurses comprised 58.88% and 41.12% nurses, respectively. Highest number was recorded for married nurses (61.42%) compared to single nurses (38.58%).

Diploma holders (44.16%) nurses were the highest, followed by post-RN graduates (29.44%) and BSN holders (26.40%). The medium socioeconomic status constitutes the highest number of nurses (69.04%), followed by high at 29.95%, and low at 1.02%.

Nurses in medical and surgical ward were observed 54.31% and 45.69%, respectively. Results showed that females in medical ward (35.03 %) were observed with the highest participants, followed by female nurses in surgical ward (23.86 %). Regarding education, diploma holders had the highest number of participants in medical ward. The majority had 1-5 years of experience (55.33%), followed by 6-10 years (20.30%), 10-20 years (18.27%), and above 21 years (6.09%).

Table 1. Demographic variables distribution of nurses in wards

Demographic characteristics		Medical Ward	Surgical Ward	Total
Gender ⁺	Female	69(35.03)	47(23.86)	116 (58.88)
	Male	38(19.29)	43(21.83)	81 (41.12)
Marital status ⁺	Married	58(29.44)	63(31.98)	121 (61.42)
	Single	49(24.87)	27(13.71)	76 (38.58)
Education ^{ns}	Diploma	23(11.68)	29(14.72)	87 (44.16)
	BSN	51(25.89)	36(18.27)	58 (29.44)
	Post RN	33(16.75)	25(12.69)	52 (26.40)
Experience ^{ns}	1-5	62(31.47)	47(23.86)	109 (55.33)
	6-10	24(12.18)	16(8.12)	40 (20.30)
	11 to 20	15(7.61)	21(10.66)	36 (18.27)
	20 above	6(3.05)	6(3.05)	12 (6.09)
Socioeconomic status ^{ns}	Low	2(1.02)	0.00	2 (1.02)
	Medium	74(37.56)	62(31.47)	136 (69.04)
	High	31(15.74)	28 (14.21)	59 (29.95)
Total		107 (54.31)	90 (45.69)	

(*= $p < 0.05$, ns= $p > 0.05$)

As shown in table 2, results showed that highest number of participants possess moderate communication skills (62.44%), followed by high (23.35%) and low (14.21%) communication skills. Similarly, highest number of participants were observed for moderate task load (46.19 %), followed by high (42.64 %) and low (11.17 %) task load levels. Medical wards (34.01%) were slightly higher than surgical ward (28.43%) nurses. A low task load was reported by 6.60% of

medical ward nurses and 4.57% of surgical ward nurses. The majority of nurses in both wards fell into the moderate task load category, with 26.40% in the medical ward and 19.80% in the surgical ward.

Table 2. Distribution of communication skills and task load among medical and surgical wards

Dependent Variables		Medical ward	Surgical ward	Total
Communication Skills ^{ns}	Low	14 (7.11)	14(7.11)	28 (14.21)
	Moderate	67 (34.01)	56(28.43)	123 (62.44)
	High	26 (13.20)	20(10.15)	46 (23.35)
Task load ^{ns}	Low	13(6.60)	9(4.57)	22 (11.17)
	Moderate	52(26.40)	39(19.80)	91 (46.19)
	High	42(21.32)	42 (21.32)	84 (42.64)

(ns=p>0.05)

Table 3 presents the association between demographic variables and main variables. Results showed that gender and marital showed significant ($P<0.05$) weak positive correlation ($\rho = 0.124$ and 0.162 , respectively) with wards, indicating that male and married nurses were more likely in surgical wards, whereas female and single nurses were more likely in medical wards. No significant ($P>0.05$) relationship was found between demographic variables and communication skills. As for task load index, age and experience status showed significant ($P<0.05$) moderate positive correlation ($\rho=0.257$ and 0.254 , respectively), whereas education levels showed significant ($P<0.05$) weak negative correlation ($\rho=-0.147$) with task load. It indicates that with increase in age and experience status, nurses' task loads increases, but with increase education status the task load decreases.

Table 3. Spearman's correlation of demographic characteristics with nurses wards, communication skills and task load index.

Demographic characteristics	Wards	Communication Skills	Task load index
Age	0.132 ^{ns}	-0.024 ^{ns}	.257**
Gender	0.124*	0.065 ^{ns}	-0.079 ^{ns}
Marital status	.162*	-0.089 ^{ns}	0.024 ^{ns}
Education levels	0.108 ^{ns}	0.082 ^{ns}	-.147*
Socioeconomic status	0.037 ^{ns}	-0.097 ^{ns}	0.11 ^{ns}
Experience status	0.082 ^{ns}	-0.057 ^{ns}	.254**

(**=p<0.01, *=p<0.05, ns=p>0.05)

The odds ratio (table 4) showed that improved communication skills highly significantly (P value<0.01, OR=3.77, 95% CI=2.271-6.282) increase task load, confirming a strong effect of communication skills in managing task load.

Table 4. Odds ratio of communication skills with task load

Variables		Odds ratios	95% Confidence level	
Independent V	Dependent V		Lower	Upper
Communication skills	Task load	3.77**	2.271	6.282

4. Discussion

Literature suggests that while both wards present unique challenges, surgical ward nurses may experience higher workload and stress due to fast-paced environments and complex perioperative care responsibilities^(8,9). This difference may be attributed to the nature of medical ward duties, where patient interactions and chronic disease management require extensive communication^(10,11). A study showed that surgical nurses face slightly higher task demands than medical nurses, likely due to perioperative care responsibilities⁽¹²⁾. Recent study findings indicate that younger nurses often experience higher levels of workplace stress due to inexperience and adaptation challenges. However, they also exhibit a greater ability to adapt to evolving healthcare environments and technology integration⁽¹³⁾. In terms of gender, the study highlights a female predominance (58.88%) compared to males (41.12%). According to the World Health Organization, women constitute the majority of the global nursing workforce, reflecting long-standing gender imbalances within the profession⁽¹⁴⁾. Studies have shown that female nurses report greater work-family conflict and emotional exhaustion compared to their male counterparts, which may influence occupational well-being and job performance^(15,16). The predominance of female nurses is clinically and

socially relevant, as evidence suggests that women in nursing roles often experience higher levels of emotional and psychological stress due to dual caregiving responsibilities at work and within the household. Additionally, local evidence from Pakistan highlights increased psycho-emotional challenges among female nurses, further supporting the impact of gender-related role burdens in healthcare settings ⁽¹⁷⁾. This present study finding on education level distribution suggests that while a significant proportion of nurses pursue higher education; diploma programs still form the primary entry pathway into nursing. Studies indicate that higher education levels correlate with improved communication skills and patient outcomes, as BSN and post-RN graduates receive more training in critical thinking and patient-centered care ⁽¹⁸⁾. Studies emphasize BSN education for improved communication, critical thinking, and quality of care ⁽¹⁹⁾. Higher education levels contribute to improved clinical decision-making and leadership skills, especially in high-stakes surgical environments. In our study, most participants belong to the middle socioeconomic class (69.04%), with a smaller percentage in the high (29.95%) and low (1.02%) categories. Among the nurses, most had low experience (1 to 5 years). Nursing is a salaried profession that offers financial stability without placing practitioners at socioeconomic extremes. The higher proportion of nurses with 1–5 years of experience aligns with workforce trends indicating that hospital settings frequently employ early-career nurses, influenced by recent graduation rates, workforce turnover, and migration of more experienced staff. Previous studies have also documented a concentration of nurses in the early stages of their professional careers, particularly in clinical service roles ⁽²⁰⁾. Regarding task load, moderate task load (46.19%) was most common, followed by high task load (42.64%). Studies confirm that excessive task load negatively impacts nurses' mental health, ultimately increasing burnout risks ⁽²¹⁾. Effective communication and task management are especially vital for nurses in medical and surgical wards because of the complexity and intensity of care in these settings ⁽²²⁾. Nurses in medical wards care for patients with

chronic and multiple comorbidities, requiring frequent communication for education, symptom monitoring, and long-term care coordination. In contrast, surgical ward nurses face intensive task demands involving perioperative preparation, postoperative monitoring, wound care, and rapid patient turnover ^(8,23). Previous research indicates that both medical and surgical nurses face significant workload pressures. Surgical wards often involve higher task intensity, whereas medical wards require sustained communication and emotional engagement with patients. Inadequate communication and excessive workloads are associated with higher stress, missed nursing care, and reduced patient safety ⁽²⁴⁾. This highlights the need for strong communication skills and effective workload management in clinical settings.

Conclusion:

Single nurses were more likely to work in medical wards, while married nurses were more likely to be in surgical wards. Improved communication skills enable nurses to manage higher task loads more effectively. Skill development programs are recommended to enhance nurses' communication skills. Strategies such as optimized shift scheduling, clear role assignments, and workload distribution should be adopted to support nurses in managing task load efficiently. Future studies should explore other potential factors, such as stress, leadership support, work environment, and emotional resilience, to understand and develop projects in improving nurses wellbeing.

Disclosure /Conflict of interest:

Authors declare no conflict of interest.

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