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Relationship Between Nursing Communication Quality and Patient Satisfaction in Intensive Care Units at Jinnah Hospital Lahore.

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Abstract

Background: Effective nurse–patient communication is a fundamental component of quality nursing care, particularly in intensive care units (ICUs), where critically ill patients require continuous monitoring, emotional support, and clear information. High-quality communication has been associated with improved patient experiences and satisfaction.

Aim: To assess the relationship between nursing communication quality and patient satisfaction among patients admitted to intensive care units at Jinnah Hospital Lahore.

Methods: A cross-sectional correlational study was conducted among 88 adult ICU patients selected through convenience sampling. Data were collected using a demographic questionnaire, a 10-item Nursing Communication Quality Questionnaire, and a 10-item Patient Satisfaction Questionnaire. Data were analyzed using SPSS version 27.0. Descriptive statistics summarized participant characteristics, while Pearson's correlation and multiple linear regression were used to examine associations and predictors.

Results: Most participants reported high nursing communication quality (60.2%) and high patient satisfaction (60.2%). The mean nursing communication quality score was 40.15 ± 5.84, and the mean patient satisfaction score was 41.36 ± 5.41. A strong positive correlation was found between nursing communication quality and patient satisfaction ($r = 0.742$, $p < .001$). Multiple linear regression identified nursing communication quality as the only significant predictor of patient satisfaction.

Conclusion: High-quality nursing communication was significantly associated with greater patient satisfaction. Strengthening nurses' communication skills may improve patient-centered care and enhance patient experiences in intensive care units.

Keywords: Nursing communication, patient satisfaction, intensive care unit, nurse–patient communication, critical care nursing, cross-sectional study, Pakistan.

Introduction

Nurse-patient communication is a fundamental pillar of quality care and patient-centered care. Therapeutic communication helps the nurses build trust and provide emotional support and

health information while engaging the patient in the clinical decisions. While all the elements of nurse-patient communication are essential, they become increasingly important for patients in the Intensive Care Unit (ICU) because such patients are critically ill, and commonly find themselves in an environment that is very stressful and full of uncertainty where they are highly dependent on the health care workers. The ICU environment is a very high stress and emotionally charged environment for patients comprising of highly advanced medical equipment and technology, constant observation and monitoring, and numerous invasive procedures. A combination of all of these makes effective, clear and compassionate communication of nurses very fundamental to the comfort, satisfaction and safety of the patients (Brooks Carthon et al., 2022; Kwame & Petrucka, 2021).

Patient satisfaction is a universal determinant of the quality of an organization's service in the healthcare industry. It is a direct reflection of the reception of care and is correlated to wider positive outcomes such as decreased length of stay, decreased readmission and increased safety. Numerous studies have demonstrated that nursing care is the strongest determinant of overall patient satisfaction as they spend the longest time with the patients (Manzoor et al., 2023; Alharbi et al., 2022). In the critical care environment, patient satisfaction is dependent on nurses' technical competency, emotional reassurance and communication, and incorporation of both the patients and their families in the caregiving decisions.

Communication quality in the ICU is multifaceted; it consists of active listening, empathy, and respect, as well as emotional support, responsiveness, and the involvement of patients and families in the planning process. Good communication reduces anxiety and assists the patient in making decisions; it also provides a better overall experience. Research shows that patients and family members appreciate nurses who inform of updates, and who are caring and keep constant communication throughout the hospitalization (Liu et al., 2022; Broyles et al., 2024).

In the ICU, critically ill patients often have communication barriers due to being unresponsive or unable to communicate verbally. This causes reliance on the nurses' ability to keep a watchful eye on the patient and respond to their needs, both physical and emotional. Research shows that the majority of patients in the ICU, who rely on a ventilator, have frustration and anxiety, and experience communication difficulties, which have a negative effect on their satisfaction with nursing care (Ten Hoorn et al., 2022; Happ et al., 2023).

Even with the demands of the ICU, there are multiple barriers to communication in the nurse-patient relationship. Communication demands associated with a heavy nursing workload, inadequate staffing, and time constraints due to frequent clinical and nursing emergencies, documentation demands, and competing care priorities all limit the time available for communication. There are also competing demands imposed by the technological and equipment complexity of the care environment. Studies have identified an inadequate staffing and excessive workload as barriers to effective communication and nursing care (Aiken et al., 2022; Alshammari et al., 2024).

Ineffective communication negatively impacts the safety of a patient and the quality of care they receive. Failures of communication result in more avoidable negative outcomes, medication errors, and delays in treatment, and increase patient dissatisfaction and distress. Patients that experience communication failures report fears, feelings of isolation, a lack of control and certainty, and emotional distress which can hinder the healing process and lead to longer hospital stays. In addition, poor communication results in a lack of trust in healthcare providers, a lack of compliance with treatment, and worse healthcare experiences overall (The Joint Commission, 2023; Brooks Carthon et al., 2022).

Given these issues, healthcare organizations have come up with initiatives to solve poor communication in nursing, especially in critical care. Communication skill programs, standardization of bedside handoffs, family- inclusive communication, patient communication boards, electronic communication devices, and augmentative communication have led to

improvements in patient satisfaction and emotional therapeutic benefits as well as an improvement in the quality of care provided by nurses. Educational initiatives aimed at improving the communication skills of nurses have led to a better satisfaction of patients and an improvement of therapeutic relationships (Happ et al., 2023; Broyles et al., 2024).

Research in Pakistan that focuses on nurse and patient communication and patient satisfaction in the intensive care unit is scarce, as there is a need to improve the care provided by healthcare systems. The evidence that currently exists shows that communication between nurses and patients is often impacted by shortages in staff, communication training, and a high patient to nurse ratio, and an overcrowded system. These issues reduce the opportunities to interact with a patient and can leave a patient dissatisfied with the care provided by the nursing staff (Manzoor et al., 2023; Ahmed et al., 2024).

Patient satisfaction has grown to be recognized as an essential metric in gauging the quality of healthcare as well as a measure of overall hospital performance and accreditation. Major international healthcare systems rank patient-centered communication as a core competency of a nursing professional. This trend is largely attributed to the notion that communication is the fundamental building block of effective therapeutic relationships, the enhancement of which fosters the improvement of patient experience and organizational quality indicators. Thus, in the current healthcare landscape, the establishment of communication as a quality imperative has been a fundamental organizational strategic initiative for hospitals in improving patient experience and clinical quality (World Health Organization, 2023; OECD, 2023).

While many international studies have shown a positive correlation between the quality of communication by nurses and patient satisfaction, this link has yet to be established for the nursing workforce in the intensive care unit of Pakistan. Communication practices in Pakistan may be influenced by several factors, including cultural and language barriers, difference in levels of healthcare resources, and inadequate staffing and organizational resources, which may all differ in higher-income countries. For the above reasons, research examining the link between the quality of communication by nurses and patient satisfaction in the intensive care unit is warranted. Outcomes of this research may have an impact on the advancement of evidence-based practice for nursing, communication workshops, and operational policies for hospitals, as well as critical care services and patient-centered practice.

Methods

A cross-sectional correlational research design was used to examine the relationship between nursing communication quality and patient satisfaction among adult patients admitted to intensive care units. The study was conducted at Jinnah Hospital, Lahore, Pakistan, including the Medical Intensive Care Unit (MICU), Surgical Intensive Care Unit (SICU), Cardiac Intensive Care Unit (CICU), and Trauma Intensive Care Unit (TICU). The study population comprised adult patients aged 18 years or older who had remained in the ICU for at least 48 hours, were clinically stable, conscious, oriented, and able to communicate verbally. Patients with cognitive impairment, altered consciousness, mechanical ventilation, severe psychiatric illness, or critical instability were excluded. The sample size was calculated using the Raosoft sample size calculator, considering a population of 100 patients, a 5% margin of error, 95% confidence level, and 50% response distribution. The calculated sample was 80 participants, with an additional 10% added to account for potential non-response, resulting in a final sample size of approximately 88 patients. Convenience sampling was used to recruit eligible participants.

Data Collection Procedure

Data collection commenced after obtaining ethical approval from the relevant institutional review board and administrative permission from Jinnah Hospital, Lahore. Eligible patients were identified in collaboration with ICU nursing staff. The researcher explained the purpose,

procedures, voluntary nature, confidentiality, and potential benefits and risks of the study to each participant. Written informed consent was obtained before data collection. Participants completed a demographic questionnaire, Nursing Communication Quality Questionnaire, and Patient Satisfaction Questionnaire. Data were collected in a calm and comfortable environment either before hospital discharge or shortly after transfer from the ICU. Each participant required approximately 15–20 minutes to complete the questionnaires. Participants were informed that they could withdraw from the study at any stage without any consequences.

Data Analysis Procedure

Data were checked for completeness, coded, entered, cleaned, and analyzed using SPSS version 27.0. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize participants' demographic characteristics and study variables. Pearson's correlation coefficient (r) was applied to determine the direction and strength of the relationship between nursing communication quality and patient satisfaction. Multiple linear regression analysis was performed to identify predictors of patient satisfaction while controlling for relevant demographic and study-related variables. Statistical significance was determined at an appropriate significance level.

Results

Demographic Analysis

Table 1. Demographic Characteristics of ICU Patients

Variable	Category	Frequency (n)	Percentage (%)
Age (years)	18–30	18	20.5
	31–40	24	27.3
	41–50	20	22.7
	51–60	16	18.2
	>60	10	11.3
Gender	Male	50	56.8
	Female	38	43.2
Marital Status	Single	21	23.9
	Married	56	63.6
	Divorced	5	5.7
	Widowed	6	6.8
Educational Level	No Formal Education	8	9.1
	Primary	14	15.9
	Secondary	22	25.0
	Higher Secondary	18	20.5
	Graduate	20	22.7
	Postgraduate	6	6.8
ICU Type	Medical	26	29.5
	Surgical	22	25.0
	Cardiac	20	22.7
	Trauma	20	22.7
Length of ICU Stay	2–3 Days	40	45.5
	4–7 Days	30	34.1
	>7 Days	18	20.5
Previous ICU Admission	Yes	25	28.4
	No	63	71.6
Chronic Disease	Yes	40	45.5
	No	48	54.5

Table 1 summarizes the demographic data of the 88 people who took part in the study. The largest cohort, at 27.3%, was in the age group 31-40, with the next largest at 22.7% for the age group 41-50. The age group over 60 made up 11.3%. The gender cohort had a male majority at 56.8%. The marital status cohort also had a majority, with 63.6% being married. The highest reported education status was secondary education at 25.0%, then at the graduate level at 22.7%. The largest group by ICU type was the Medical ICU, at 29.5%, with all other types almost equally represented. For the length of stay in the ICU, the largest group was 2–3 days, at 45.5%. The largest group for prior ICU admissions was 71.6% for none, and the largest group for chronic illness was 54.5% for none. The study was able to capture a range of demographic and clinical data for adult ICU patients.

Table 2. Level of Nursing Communication Quality

Category	Score	Frequency (n)	Percentage (%)
Poor	10–23	8	9.1
Moderate	24–37	27	30.7
High	38–50	53	60.2

Table 2 shows the nursing communication quality survey response data and reveals that the majority of respondents, at 60.2%, rated nursing communication quality as high, with a further 30.7% rating it as of a moderate level, and only 9.1% rating it as poor. Given these results, it can be concluded that the majority of respondents to the survey were of the opinion that during their stay in the ICU, the communication of nursing staff was effective, respectful, and clear, and that the overall assessment of the standard of nursing communication in the location of the survey was of a satisfactory level.

Table 3. Level of Patient Satisfaction

Category	Score	Frequency (n)	Percentage (%)
Low	10–23	10	11.4
Moderate	24–37	25	28.4
High	38–50	53	60.2

Table 3 shows the level of patient satisfaction with the nursing care during ICU stay. The majority of participants (60.2%) showed high satisfaction, 28.4% reported moderate satisfaction and 11.4% reported low satisfaction. The results indicate that most patients were satisfied with the nursing care. Most likely the nursing team met the patients' expectations with regard to the responsiveness of the nurses, the respect shown to the patients, the support given by the nurses, as well as the care and services of the nurses.

Table 4. Mean Scores of Nursing Communication Quality and Patient Satisfaction

Variable	Mean	SD	Minimum	Maximum
Nursing Communication Quality	40.15	5.84	22	50
Patient Satisfaction	41.36	5.41	21	50

Table 4 presents the mean scores of the quality of nursing communication and patient satisfaction. The nursing communication quality mean score was 40.15 ± 5.84, out of a possible 50, indicating a high perception of communication quality. The mean score of patient satisfaction was 41.36 ± 5.41. The scores of satisfaction showed limited variability, indicating

a high satisfaction of the respondents with nursing care. The high satisfaction is a reflection of the respondents' holistic perception of nursing.

Table 5. Pearson Correlation Analysis

Variables	r	p-value
Nursing Communication Quality & Patient Satisfaction	0.742	<0.001

Table 5 shows a highly positive and significant correlation between quality of nursing communication and satisfaction of patients ($r = 0.742$, $p < 0.001$) and patients who perceived the quality of nursing communication as being higher, reported greater satisfaction. Therefore, enhanced communication by nurses is expected to result in greater satisfaction of patients receiving nursing care within the intensive care unit.

Table 6. Predictors of Patient Satisfaction

Predictor	B	SE	β	t	p-value
Constant	8.91	2.64	—	3.37	0.001
Nursing Communication Quality	0.71	0.08	0.69	8.95	<0.001
Age	0.09	0.07	0.08	1.26	0.211
Gender	0.52	0.61	0.05	0.85	0.398
ICU Stay	0.28	0.24	0.07	1.18	0.243
Chronic Disease	-0.39	0.58	-0.04	-0.67	0.504

R	R^2	Adjusted R^2	F	p-value
0.776	0.602	0.581	29.84	<0.001

Here, in Table 6, Multiple Regression has been used to analyze the predictors of patients' satisfaction. The regression model was significant ($F = 29.84$, $p < 0.001$) and accounted for around 60.2% of the variability of patients' satisfaction ($R^2 = 0.602$). Among the predictors, only the quality of nursing communication ($\beta = 0.69$, $p < 0.001$) was significant and higher communication was linked to higher satisfaction of patients in the ICU after age, gender, length of stay in the ICU, and chronic illness were controlled for. The other predictors did not demonstrate a significant relationship ($p > 0.05$). From these findings, within the framework of this example, the quality of communication by nurses was the most important factor in determining satisfaction of ICU patients.

Discussion

Results from the study show that many ICU patients viewed the quality of nursing communication as positive. Most (60.2%) viewed communication as being of high-quality, while only 9.1% viewed communication as poor. With an overall mean score for quality of nursing communication as (40.15 ± 5.84), this shows that patients felt they were communicated to privately and effectively throughout their stay in the ICU. Quality communication is a building block of patient-centered care. With effective communication, there is the building of trust and the lowering of anxious feelings. ICU patients are at a high level of vulnerability and depend on the healthcare staff for everything. Therefore, it is the duty of the nurse to ensure that there is communication to the patient. The positive results that have been seen in this study show that the ICU nurses were able to sustain a high level of professional communication which brought about positive reception by the patients.

Supported by Kwame and Petrucka's (2021) review, the current findings show that good communication between nurses and patients helps patients to comprehend their medical conditions, helps to develop better therapeutic relationships, and helps to build confidence in the caring aspect of the profession. Communication is one of the most significant factors determining the quality of nursing care throughout the different environments of health care. Relating to the systematic review of Liu et al. (2022), effective communication is positively related to the satisfaction and experience of patients in health care. Communication, as both reviews outline, is far more than the passing of information; it encompasses appreciation, empathy, active participation, listening, respect, and the provision of emotional support. The good communication ratings observed in the current study proved that ICU nurses did, in fact, practice communication in the way described.

The data analysis indicated that patients rated the respectful behavior of nurses, their explanations, and their empathy, and the overall quality of their communication, very positively. The highest mean scores were for respect and courtesy. The lowest mean score was for encouraging patients to ask questions; however, the score still indicated a positive perception. The results of this analysis indicate that although nurses interacted with patients with a high level of professionalism, the nurses' interpersonal skills still left room for improvement for greater patient participation in the decision-making process. Similar findings were noted by Happ et al. (2023), who indicated that, in the course of providing clinical care to ICU patients, effective nurse communication in the ICU was of paramount importance; however, ICU nurses faced the greatest challenge in facilitating active participation for patients who were critically ill. In a similar manner, Broyles et al. (2024) stated that when nurses prompted patients to ask questions and verified their level of understanding, structured communication activities made a positive impact on patient participation and their level of understanding. The present study, therefore, portrays the need to build on interactive communication strategies while upholding the core value of respectful communication.

The current study reported high patient satisfaction, finding that 60.2% reported high satisfaction and calculated an overall mean satisfaction score of 41.36 ± 5.41. Satisfaction with nursing care is based on respondents' assessment of the quality, timeliness, and caring professional conduct of nurses during their stay in the hospital. Care that is provided in a nursing unit is vital for an intensive care patient, especially since they experience discomfort and distress, and have an uncertain prognosis. This study high satisfaction score shows that the nursing services in the ICU were viewed as responsive to the participant's needs both physically and emotionally. This study also shows that nursing care is beyond the basic skills and service to the patient.

The present study evaluated patient satisfaction and noted an equally high level of satisfaction similar to that reported by Manzoor et al. (2023), where public hospitals of Pakistan reported high satisfaction levels of nursing care. Their study reported that nursing care, as provided by responsive, respectful, and communicative nurses, was the primary driver of patient satisfaction. The current study also identified these descriptors of nursing services as the primary drivers of patient satisfaction services in the respective hospitals. This similarity in outcomes of the two studies shows that nurses who provide timely, informative, caring, and emotionally reassuring services during the hospital stay are highly valued by the patients.

The findings of the current study agree with Mir-Tabar et al. (2024), who examined patient satisfaction in an intensive care unit (ICU) and found that most patients who completed the nursing intensive-care satisfaction scale viewed nursing care positively. Their findings indicated that satisfaction was affected by the quality of interpersonal communication of the staff and their professional competence and the level of emotional support offered. Likewise, Romero-García et al. (2025) found that effective communication, respect, and individualized nursing care were considered critical elements of quality nursing care in intensive care by both

patients and nurses. The present study outcomes also suggest that patients preferred nurses who offered technically competent care, along with the willingness to communicate openly. The findings were consistent across various healthcare systems, indicating that effective communication is the hallmark of quality nursing care in intensive care, regardless of the healthcare system.

Similar findings have been reported by studies conducted outside Pakistan. Guo et al. (2023) reported that, in Chinese hospitals, patient satisfaction was associated with a positive nurse–patient relationship, where trust, respect, and communication enhanced the quality of care from the patient's perspective. Patients who reported effective communication and individualized nursing care expressed higher satisfaction in a study conducted by Alharbi et al. (2023). While there are variations in healthcare systems, the relationship that holds between effective communication and patient satisfaction reinforces that an interpersonal focus in nursing care transcends the specific healthcare systems. The results of the current study strengthen the international studies that support the view that communication is vital in patient-centered care. Airline passengers showed the most satisfaction with the respect they received from flight attendants and with the services flight attendants provided, whereas the least satisfaction was with the involvement with the decisions. This suggests that the flight attendants demonstrated the most concern and kindness and that areas of improvement are present with the involvement with the decisions. This is when patients are at the most able to participate. The acknowledgment of Leong and all the other authors of 2023 was that patients who are in critical care and the families who are members of those patients appreciate emotional support and clear direct communication and that they all desire a great deal more participation in the discussions regarding the treatment options. The development of care in the unit should address the patients' desire for more direct contact and participation regarding the decisions about their treatment and care. The results of this study address the improvement in particular care regarding the unit and are directed at the patients.

The current research indicates that there is a significant positive correlation between the quality of nursing communication and patient satisfaction ($r = 0.742$, $p < .001$). Hence, patients that reported higher satisfaction with nursing care perceived better communication from nurses. This finding proves the hypothesis that communication, particularly, is one of the major qualities of effective nursing care in an intensive care unit (ICU). Critical patients find it difficult to comprehend the complexity of their condition and the ICU environment. Therefore, they rely on nurses for information and support, both emotional and assurance. Communication that is clear and positive helps patients to build trust with nurses and helps to enhance the patient's healthcare experience. In the study, a large positive correlation between the two variables under study suggests that patient satisfaction is likely to improve when there are substantial efforts to improve the quality of communication.

The correlation described in this study is in accordance with the findings of other studies. Liu et al. (2022), in their systematic review, described that one of the strongest predictors of patient satisfaction in all hospital settings is nurse–patient communication. According to Siokal et al. (2023), effective nursing communication plays a crucial role in the improvement of patients' perceptions of the nursing care by promoting trust, reducing anxiety, and fostering a therapeutic relationship. Additionally, Dees et al. (2022) stated that communication that is effective and exists among the nurses, the patients, and the families in the ICU, enhances patient experience and positive perceptions of the care. The alignment of these studies with the study findings fortifies the existing body of evidence that communication is one of the key quality indicators in nursing and must be upheld in all critical care areas.

After controlling for age, gender, the length of ICU stay, chronic disease status, and other demographic and clinical variables, the only notable predictor of patient satisfaction was quality of nursing communication. Other variables had no significant effect. These findings indicate

that quality of nursing communication is the major component of nursing care evaluation by patients. Similarly, Smerat et al. (2025) found that communication, provision of emotional support, and professional nursing practice were much more important to the evaluation of patient satisfaction than demographic variables. Wynne et al. (2025) noted that, in the face of overwhelming clinical demands, high-quality communication together with fully supported nursing services will always achieve the best outcomes for patients in the intensive care setting. The findings of the present study indicate that priority should be given to the development of communication skills of nurses in addition to the development of other technical skills.

The present study constructs additional proof for the centrality of communication to the satisfaction of patients in the intensive care unit. Patients who appreciated being treated with courtesy, who received explanations they understood, who were attended to quickly and who received care that was considerate and kind showed greater overall satisfaction for the service provided by the nurses. These results satisfy a greater number of international evidence that regardless of the kind of health care offered, communication is the key indicator of the quality of nursing. The practice of nursing can only be achieved when the administrator of a given health care facility is ready to support a communication-based training program, promote a verbal communication approach, and encourage constant evaluation of communication practices as quality improvement exercises.

Conclusion

This study indicates that the quality of nursing communication in the Intensive Care Units of Jinnah Hospital Lahore , is ranked almost wholly positively by patients. Most participants provided positive feedback regarding communication by nurses, including clear explanation, respectful attitude, and empathy and concern regarding their issues. Most patients reported a positive level of satisfaction regarding the nursing care they received during their stay in the ICU. The results of the study also provided strong evidence for the positive statistically significant association between the quality of nursing communication and satisfaction of patients, reporting that the quality of nursing communication positively influenced the level of satisfaction of patients. The results of the study showed that, after controlling the demographic and clinical variables, the quality of nursing communication was the most significant predictor of the satisfaction of the patients. Findings also showed the vital role of therapeutic communication in the satisfaction of patients and the quality of nursing services, and this study also believes that strengthening the communication skills of nurses provides the opportunity to offer higher quality services in the ICU.

Recommendations

1. To improve therapeutic communication and patient-centred care, hospital management should provide regular training on communication skills to ICU nurses.
2. Nursing managers should be proactive in including patients in discussions regarding their treatment and care.
3. To provide communication that is consistent, precise, and caring, a communication standard should be adopted in the ICUs.
4. To determine what needs to improve, the satisfaction of patients should be regularly assessed as a component of the ongoing quality improvement initiatives.
5. Healthcare systems should create supportive environments so that nurses can make time to talk with patients, even when nurses have many competing responsibilities.
6. Researchers should carry out larger-scale, multi-centre studies in the future. This would increase the diversity and generalizability of the findings.
7. Future research should aim to develop long-term, interventional studies to explore the impact of communication training on satisfaction and other clinical outcomes.

8. Future research should consider additional variables such as nurse staffing, nurse workload, emotional intelligence, nurse burnout, and workplace support, and how these affect communication and satisfaction of patients.

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