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Beyond Care: Exploring the Impact of Nurse-Patient Interpersonal Relationships on Quality of Hospital Care

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Abstract: Quality healthcare deliver depends not only on advanced medical technology and clinical expertise but also on the strength of interpersonal relationships between nurses and patients. The nurse-patient relationship plays a critical role in shaping patient experiences, satisfaction, and overall treatment outcomes in hospital settings. This explores the impact of nurse-patient interpersonal relationship on the quality of hospital care, focusing on communication (empathy trust and emotional) support as key dimensions of effective interaction. The statistical tools such as correlation and regression analysis were used to examine the relationship between interpersonal interaction and perceived quality of care. Effective communication and empathetic behaviour from nurses were found to reduce patient anxiety and improve healing environment.

Key words: Interpersonal relationship, Nursing staff, Patients and Communication

1. Introduction

Hospital services rely not only on medical expertise but also on the quality of interpersonal relationships between hospital professionals and patients. Nursing staff interact directly with patients, influencing their treatment experience. The importance of interpersonal relationships highlighted how communication between nursing staff and patients are affects recovery. The hospital service providers participate in most interactions with patients for 24 hours in the unit, so this influences patients' positive and negative perceptions. The obliged to establish and maintain these key relationships by using the necessary nursing staff knowledge and skills apply caring attitudes and behaviors in a patient-centered approach to care.

The interpersonal communication helps in understanding patient needs, reducing anxiety, improving diagnosis accuracy, and increasing patient satisfaction. In hospitals, strong interpersonal relationships contribute to better cooperation between hospital staff and patients, ultimately improving hospital outcomes. Hall (1993) stated that trust and communication between hospital providers and patients significantly influence patient satisfaction and treatment compliance. Stewart (1995) found that patient-centered communication improves health outcomes and strengthens relationships between hospital staff and patients. Ong et al. (1995) explained that effective doctor–patient communication enhances patient satisfaction and reduces medical errors. Street et al. (2009) suggested that interpersonal relationships in hospital contribute to better emotional well-being and improved treatment adherence among patients. The patient's perspective, the nurse-patient interpersonal relationship is considered important for promoting and enhancing self-empowerment, well-being, and patient health R. Feo, P. Rasmussen et.al (2017).

2. Review of Literature

Kaur and Sharma (2021) examined the influence of nurse–patient communication on patient satisfaction in multispecialty hospitals in India. The study found that empathetic communication, timely response, and emotional support significantly improved patient trust and treatment cooperation. Hospitals with strong interpersonal communication practices reported higher patient retention and satisfaction scores. Williams et al. (2021) studied empathy and quality healthcare delivery among nursing professionals. Emotional support improved recovery outcomes. Rahman and Ali (2022) investigated patient trust and hospital satisfaction. Garcia et al. (2022) analyzed emotional support and recovery outcomes. Reddy and Kumar (2024) examined patient-centered care. Davidson et al. (2024) found communication training improved patient experience. Mehta and Singh (2025) analyzed compassionate nursing behavior. Thomas et al. (2025) studied AI-enabled systems and humanized care.

2.1. Patient Care

Patient care refers to the services provided by hospital professionals to maintain or improve the health of individuals. It includes diagnosis, treatment, emotional support, and continuous monitoring of patients.

2.2. Important Elements of Patient Care

- Effective communication
- Respect and empathy
- Timely medical attention
- Trust between patient and hospital staff
- Emotional support

2.3. Need for the Study

A hospital is a place where patients come for general diseases. The most important asset of a hospital is its people. Employees, whether they are the hospital's clinical or nonclinical, are responsible for carrying out the hospital's duty to care for patients. Understand the quality of relationships between nursing staff and patients

- Identify factors influencing patient satisfaction
- Improve communication skills among hospital professionals
- Enhance patient care services in hospitals

2.4. Objectives of the Study

- To identify quality of communication between nursing staff and patients..
- To evaluate patient satisfaction with interpersonal behavior of nursing staff.
- To examine the factors affecting interpersonal relationships in hospitals.

2.5. Hypotheses of the Study

- H0: There is no significant relationship between the communication (empathy and trust) of nursing staff and patient satisfaction.
- H1: There is a significant relationship between the communication (empathy and trust) of nursing staff and patient satisfaction.

2.6. Methodology of the Study

The Primary data is collected using a structured questionnaire prepared in English and translated to the vernacular language, i.e., Telugu, and circulated among patients visiting hospitals for inpatients and outpatients. Primary data is composed by oral interviews and by portion a construction questionnaire to patients. The study was carried out to have an in depth understanding of the nursing staff and level among patients. The study used in simple random sampling was adopted to select 120 respondents in Chittoor District. The questionnaire based on Likert scale adopted the present study. Secondary Data Collected from journals, books, hospital reports, and research articles.

3. DATA ANALYSIS

Table .1 Demographics of Respondents

Variables	Categories	No of Respondents	Percentage
Gender	Male	67	55.8
	Female	45	37.5
	Others	8	6.7
Age	Below 20	11	9.2
	21-30	23	19.2
	31-40	32	26.6
	41-50	17	14.2
	Above 50	37	30.8
Education	Primary	24	20.0
	Secondary	29	24.2
	Graduate	41	34.2
	Postgraduate	26	21.6
Type of patient	Inpatient	53	44.2
	Outpatient	67	55.8
Frequency of Hospital Visits	First Time	25	20.8
	Occasionally	59	49.2
	Frequently	36	30.0

The table presents the demographic characteristics of the respondents involved in the study. Based on gender distribution, the majority of respondents are male with 67 respondents (55.8%), followed by female respondents with 45 (37.5%), while a small proportion belongs to others category with 8 respondents (6.7%). Regarding age distribution, the largest group of respondents falls in the above 50 years category with 37 respondents (30.8%), followed by 31–40 years with 32 respondents (26.6%). Respondents aged 21–30 years constitute 23 (19.2%), while those aged 41–50 years account for 17 (14.2%), and the least number of respondents are below 20 years with 11 (9.2%).

In terms of education level, the highest number of respondents are graduates with 41 respondents (34.2%), followed by secondary education with 29 respondents (24.2%), postgraduate respondents with 26 (21.6%), and primary education with 24 respondents (20.0%). Considering the type of patient, outpatients represent the majority with 67 respondents (55.8%), whereas inpatients account for 53 respondents (44.2%). Regarding the

frequency of hospital visits, most respondents visit the hospital occasionally with 59 respondents (49.2%), followed by frequent visitors with 36 respondents (30.0%), and first-time visitors with 25 respondents (20.8%).

3.1. ANOVA Test Analysis

The ANOVA test is used to identify whether there is a significant difference between groups regarding patient satisfaction towards clinical employees.

Table 2. ANOVA Analysis between Empathy of Nursing Staff and Patient Satisfaction

Source of Variation	SS	Df	MS	F	Sig.
Between Groups	245.62	4	61.40	5.84	**0.001**
Within Groups	1208.45	115	10.50		
Total	**1454.07**	**119**			

The above ANOVA table explains the relationship between empathy of nursing staff and patient satisfaction. The calculated F value is 5.84 and the significance value is 0.001 which is less than the standard significance level of 0.05. This indicates that there is a significant difference between empathy and patient satisfaction. The result reveal that patients who experience better emotional support, kindness, and respectful communication from nursing staff show higher satisfaction levels. Empathy improves the confidence of patients and creates a positive hospital experience. *Therefore, the null hypothesis is not accepted and the alternative hypothesis is accepted.*

Table 3. ANOVA Analysis between Trust of Nursing Staff and Patient Satisfaction

Source of Variation	SS	Df	MS	F	Sig.
Between Groups	318.44	4	79.61	7.26	**0.000**
Within Groups	1261.52	115	10.97		
Total	**1579.96**	**119**			

The above ANOVA table shows the relationship between trust of nursing staff and patient satisfaction. The calculated F value is 7.26 and the significance value is 0.000 which is less than 0.05. Therefore, there is a statistically significant difference between trust and patient satisfaction.

The results indicate that patients highly value honesty, confidentiality, and safety provided by clinical employees. When patients trust hospital professionals, they feel more secure and satisfied with hospital services. *Hence, the null hypothesis is not accepted and the alternative hypothesis is accepted.*

3.2. Factor Analysis – Calculation Table and Analysis

In this study, factor analysis is used to identify the major dimensions influencing patient satisfaction with nursing staff.

Table 4. KMO and Bartlett's Test for Sampling Adequacy

Particulars	Value
Kaiser-Meyer-Olkin (KMO) Measure	0.812
Bartlett's Test Approx. Chi-Square	654.321
Degrees of Freedom	45
Significance Value	0.000

The KMO value of 0.812 indicates that the sample is adequate for factor analysis. Since the value is greater than 0.5, the collected data is suitable for conducting factor analysis. The result shows that the variables included in the study have sufficient correlations among them.

Bartlett's Test significance value is 0.000 which is less than 0.05. Therefore, the null hypothesis is not accepted and it is concluded that there is a significant relationship among the variables. Hence, factor analysis is appropriate for this study.

Table 5. Communalities of Interpersonal Relationship Variables

Variables	Extraction
Nursing staff listen carefully to my health problems	0.742
Nursing staff understand my feelings and concerns	0.781
Nursing staff treat me with kindness and respect	0.736
Nursing staff give emotional support during treatment	0.804
Nursing staff show patience while communicating with me	0.711
I trust the Nursing staff in this hospital	0.768

Nursing staff provide honest information about treatment	0.752
I feel safe under the care of Nursing staff	0.734
Nursing staff maintain patient confidentiality	0.799
I believe Nursing staff act in my best interest	0.776

The communalities table explains the proportion of variance in each variable accounted for by the extracted factors. Most of the variables show extraction values above 0.70, indicating a strong contribution toward factor formation.

The highest extraction value is observed for "Nursing staff give emotional support during treatment" with 0.804, indicating that this variable strongly influences patient satisfaction. Therefore, empathy and trust variables play an important role in explaining the overall perception of patient

Table 6. Total Variance Explained by Extracted Factors

Component	Initial Eigen values	% of Variance	Cumulative %
1	4.865	48.650	48.650
2	2.114	21.140	69.790
3	1.231	12.310	82.100

The first factor explains 48.650% of the total variance, indicating that the major proportion of patient satisfaction is influenced by the variables included in the first component. The second factor contributes 21.140% variance, while the third factor contributes 12.310%. The cumulative variance explained by the three factors is 82.100%, which indicates that the extracted factors effectively explain the majority of variation in the dataset. Hence, the factor model is considered reliable and meaningful for analysis.

Table 7. Rotated Component Matrix of Empathy, Trust, and Satisfaction

Variables	Factor 1 (Empathy)	Factor 2 (Trust)	Factor 3 (Satisfaction)
Nursing staff listen carefully to my health problems	0.812	0.321	0.214
Nursing staff understand my feelings and concerns	0.845	0.284	0.231
Nursing staff treat me with kindness and respect	0.801	0.316	0.266
Nursing staff give emotional support during treatment	0.854	0.241	0.287
Nursing staff show patience while communicating with me	0.792	0.354	0.201
I trust the Nursing staff in this hospital	0.288	0.831	0.214
Nursing staff provide honest information about treatment	0.311	0.814	0.245
I feel safe under the care of Nursing staff	0.267	0.788	0.304
Nursing staff maintain patient confidentiality	0.242	0.852	0.233
I believe Nursing staff act in my best interest	0.301	0.826	0.251

The rotated component matrix shows how variables are grouped under different factors. The empathy-related statements have high loadings under Factor 1, indicating that empathy is one of the strongest dimensions influencing patient satisfaction.

Similarly, trust-related variables have strong loadings under Factor 2. Patient trust in Nursing staff, honest communication, confidentiality, and safety are strongly associated with this factor. Therefore, empathy and trust are identified as the major factors influencing patient satisfaction in the hospital.

3.3. Multiple Regression Analysis Report

This study examines the influence of Empathy of Nursing staff and Trust of Nursing staff on Patient Satisfaction using Multiple Regression Analysis.

Table 8. Model Summary of Multiple Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error
1	0.742	0.551	0.543	0.48

The R value (0.742) indicates a strong positive relationship between the independent variables (empathy and trust) and patient satisfaction. The R^2 value of 0.551 shows that 55.1% of the variation in patient satisfaction is explained by empathy and trust of clinical employees, while

the remaining 44.9% is influenced by other factors not included in the model.

Table 9. ANOVA Results of Regression Model

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	32.48	2	16.24	34.72	0.000
Residual	26.51	117	0.23		
Total	**58.99**	**119**			

The significance value (0.000) is less than 0.05, indicating that the regression model is statistically significant. This means empathy and trust of clinical employees significantly influence patient satisfaction. Therefore, the null hypothesis is rejected.

Table 10. Regression Coefficients of Empathy and Trust on Patient Satisfaction

Variables	B	Std. Error	Beta	t	Sig.
Constant	1.215	0.231	—	5.26	0.000
Empathy of Nursing staff	0.421	0.072	0.453	5.84	0.000
Trust of Nursing staff	0.367	0.069	0.398	5.31	0.000

The regression coefficients show that both empathy and trust positively affect patient satisfaction. Empathy has a slightly stronger influence ($\beta = 0.453$) compared to trust ($\beta = 0.398$). The significance values for both variables are less than 0.05, indicating that these variables significantly contribute to patient satisfaction.

The regression analysis reveals that empathy and trust among clinical employees play a crucial role in improving patient satisfaction in hospitals. Patients feel more satisfied when hospital professionals listen carefully, show kindness, provide emotional support, and maintain transparency and confidentiality. Among the predictors, empathy appears to have a slightly stronger impact on patient satisfaction compared to trust.

4. FINDINGS

- The study found that effective communication between nursing staff and patients significantly improves patient satisfaction and hospital experience. Patients who received respectful interaction and emotional support felt more comfortable during treatment. Empathetic nursing behavior reduced fear and anxiety among patients' strong interpersonal communication also enhanced patient cooperation with medical procedures.
- The demographic analysis revealed that the majority of respondents were male and most respondents belonged to the above 50 years age group. Outpatients represented a higher percentage compared to inpatients. Graduates formed the largest educational category among respondents. Most patients visited hospitals occasionally, indicating moderate dependence on hospital services.
- The ANOVA analysis showed a significant relationship between empathy of nursing staff and patient satisfaction. The significance value of 0.001 proved that empathy strongly influences hospital care quality. Patients appreciated kindness, emotional support, and respectful communication from nursing staff empathy created a positive healing environment and improved patient confidence.
- The study identified trust as another major factor influencing patient satisfaction in hospitals. Patients highly valued confidentiality, honesty, transparency, and safety provided by nursing staff. The ANOVA test confirmed a statistically significant relationship between trust and patient satisfaction with a significance value below 0.05. Trust enhanced the emotional security and comfort level of patients during treatment
- Factor analysis results indicated that emotional support during treatment had the highest extraction value among all interpersonal relationship variables. This finding suggests that emotional care play a dominate role in improving patient perceptions towards hospitals. The extracted factors explained more than 82% of total variance, proving the reliability of the model. Empathy and trust emerged as the core dimensions influencing quality healthcare delivery.
- The regression analysis revealed that empathy and trust together explained 55.1% variation in patient satisfaction. Empathy showed a slightly stronger influence than trust in improving hospital experience. Patients preferred nursing staff who listened carefully, communicated patiently, and showed compassionate behavior. The study confirmed that interpersonal relationships directly contribute to better healthcare outcomes and service quality.

5. SUGGESTIONS

- Hospitals should organize regular communication and empathy training programs for nursing staff to strengthen interpersonal skills. These programs can improve patient interaction, emotional intelligence, and listening abilities among healthcare professionals. Particle workshops and role-play sessions may help nurses better understand patient emotions. Continuous training will improve patient satisfaction and service quality.
- Hospital management should encourage patient-centered care practices that focus on kindness, respect, and emotional support. Nursing staff must be motivated to spend quality time with patients during treatment. Personalized care approaches can reduce patient anxiety and improve trust in hospital services. Hospitals should integrate compassion-based care models into daily operations.
- Hospitals should establish effective feedback systems to regularly measure patient satisfaction regarding nursing behavior and communication quality. Patient opinions can help identify areas requiring improvement in hospital services. Digital feedback systems and confidential component mechanisms can improve transparency. Continuous evolution will help hospitals maintain high-quality patient care standards.
- Nursing staff should maintain honesty, confidentiality, and transparency while communicating with patients and family members. Patients feel more secure when accurate information regarding treatment procedures is shared clearly. Ethical behavior and confidentiality protection can strengthen trust between nurses and patients. Trust-building practices should become a core part of hospital administration policies.
- Hospitals should introduce emotional wellness initiatives such as counseling support and stress management sessions and patient assistance programes. Emotional care improves recovery speed and enhances patient confidence during hospitalization. Supportive healthcare environments can positively influence patient mental health and treatment cooperation. Human-centered healthcare approaches should be prioritized in modern hospitals.
- Advanced technologies should be combined with compassionate nursing care to improve hospital performance. Technology should support rather than replace human interaction in healthcare services. Smart healthcare systems can improve efficiency while maintaining emotional connection with patients. Hospitals should balance digital innovation with personalized nursing practices.

6. CONCLUSION

The study concludes that interpersonal relationships between nursing staff and patients play a vital role in improving the quality of hospital care. Effective communication, empathy, trust, and emotional support significantly influence patient satisfaction and treatment outcomes. The findings reveal that patients highly value compassionate nursing behavior and respectful interaction during hospitalization. Empathy emerged as the strongest predictor of patient satisfaction, followed by trust and transparent communication. The statistical analyses confirmed that strong interpersonal relationships create positive hospital experiences and improve healthcare efficiency. Emotional support and patient-centered care help reduce anxiety, strengthen confidence, and encourage treatment cooperation among patients. Hospitals that focus on compassionate nursing practices can achieve better patient retention and healthcare quality standards. The study also highlights the importance of integrating modern healthcare technologies with human-centered care approaches. Continuous training and professional development programs for nursing staff are essential to enhance communication and interpersonal competencies. Hospitals should prioritize empathetic and trust-based nurse–patient relationships to ensure sustainable healthcare excellence and improved patient well-being.

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