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Patients' Perception of the Quality of Nursing Care Received: Insights from Their Hospitalization Experience

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Abstract: ***Background: Patients' perceptions of nursing care quality are crucial for evaluating healthcare services. Positive relationships with nursing staff and effective administration contribute to better perceptions. Understanding these insights can guide improvements in nursing practices and enhance overall patient satisfaction during hospitalization. Objective: To assess the patients views on the nursing services received. This includes understanding their needs, expectations, and satisfaction levels. Materials and Methods: A cross sectional study was conducted in 2023, among 129 patients selected by simple random technique, admitted in a tertiary care centre, Chennai. The data was collected using structured questionnaires with 23 items answered by the patients related to nursing care received during their hospitalization through self-reporting method. The collected data were analysed using descriptive and inferential statistics in SPSS 20. Results: The results showed highest patient satisfaction in nurses' comfort provision (3.64 ± 0.60) and care coordination (3.63 ± 0.64). Prompt response and also scored post-discharge care (3.62). The lowest scores were for information on tests/procedures (3.47) and patient/family explanations (3.48). Overall, satisfaction averaged 3.53 ± 0.58, indicating positive perceptions of nursing care. Conclusion: Nursing leaders and health-care administrators need set standards and develop strategies for sustaining the quality care.***
Keywords: nursing, nursing care, patient satisfaction, patients' satisfaction, quality of nursing care

I. INTRODUCTION

Patient satisfaction refers to the feelings and perceptions of individuals based on their experiences during hospitalization, and it can differ significantly from one person to another. It serves as a crucial indicator of hospital performance, assessed through feedback mechanisms that evaluate the level of patient satisfaction regarding the quality of nursing care after discharge. Numerous studies have examined the relationship between patient satisfaction and the quality of nursing care, indicating that factors such as education, socioeconomic status, and patient expectations play significant roles in shaping the overall patient experience and their perception of satisfaction.

Patient satisfaction is the important tool to assess the effectiveness of standardized nursing care and elevate the standards of the Hospital in regards of its quality (1). It was observed that patient satisfaction towards nursing care in public hospital was lower compared to the rivate hospital, though no statistical difference ($p = 0.225$) observed (2). The level of satisfaction expressed by patients is significantly affected by various determinants, including the nature and gravity of their medical condition, the hygienic conditions of the ward, the frequency of visits conducted by nursing staff, the availability of assistance when required, the sufficiency of spatial accommodations within the ward, and the perceived competency of the nursing personnel. Patient satisfaction refers to the feelings and perceptions of individuals based on their experiences during hospitalization, and it can differ significantly from one person to another. It serves as a crucial indicator of hospital performance, assessed through feedback mechanisms that evaluate the level of patient satisfaction regarding the quality of nursing care after discharge. Numerous studies have examined the relationship between patient satisfaction and the quality of nursing care, indicating that factors such as education, socioeconomic status, and patient expectations play significant roles in shaping the overall patient experience and their perception of satisfaction and access to pharmacy services were positively associated with patient satisfaction. Continuous evaluation of nursing care is important to assess patients satisfaction through key factors as waiting time, safety of services, comfortable and friendly environment, and attentiveness demonstrates the high level of satisfaction(2). Perspectives regarding satisfaction from paediatric patients hospitalized within the age range of 7 to 17 years, along with their caregivers, indicated that the nursing personnel provided commendable care for the child and exhibited professionalism in their conduct (3)

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The communication skills and explaining information to patients are the predictors of patients' satisfaction with the quality of nursing care(4) so nurses had to focus on these areas. Nursing care components like nurses' ability, attitudes and patient-centred care contributes to safety and wellbeing of the patient (5). Also certain factors like age, type of hospital, number of children, qualification, residence, monthly income of the family and type of Health Insurance are found to be the associated factors in determining the patient satisfaction (6). The patient satisfaction varies with the socio economic and demographic factors of the patient(7). Periodical and continuous examination of the nursing care services can improve the patients' experience during their hospitalization (8). Contrarily a study revealed that there is no significant relation between patient satisfaction and quality of nursing care (9). The patients' expectations are less during Pandemic time, the patient satisfaction level is found to be high with differring nurses' role (10) and the information that was provided. Also noted significant differences in the patients satisfaction in relation to age, educational level, locality and patients preference to select the hospitals. (11). Research on patient satisfaction with nursing care , has experienced a steep growth over the last decade; was mainly published by scholars from a limited number of countries; has limited cross-country collaboration and limited author collaboration, has addressed research topics concerning the quality of care, instrument validation, emergency department and hospital care and has shown the highest readability for topics related to nurses' burnout and patient satisfaction. Holistic nursing care approach and patients' satisfaction has become a major health service performance indicator globally, with the efforts to improve patient satisfaction with nursing care, the practice is still insufficient to meet the required standard in the developing world to identify the gaps in adult patient satisfaction with inpatient nursing care practice (12).

Evaluating patient satisfaction with the care provided has become increasingly significant, and nursing satisfaction is no exception. A robust assessment instrument that accurately quantifies the elements influencing patient satisfaction must be formulated to enhance the quality of nursing services. Consequently, the results derived from nursing management research ought to be employed as a benchmark for evaluating the contributions of nursing to the patient care continuum, which may facilitate the progression of the profession towards a more scientific framework (13). The role of nurses is quintessential within the healthcare framework, given that they engage extensively with patients and deliver approximately 80% of primary care services within hospital settings (14). Consequently, the assessment of patient satisfaction concerning the care received is imperative for evaluating the overall quality of hospital services and discerning whether the needs and expectations of patients are adequately fulfilled (15). This study endeavors to examine the satisfaction levels of patients regarding the quality of nursing care that is administered. By evaluating these perceptions, the study aims to identify areas for improvement in nursing care, ultimately enhancing patient outcomes and experiences in healthcare settings. The findings will provide insights into the effectiveness of nursing practices and inform strategies for delivering higher quality care

II. METHODS AND MATERIALS

This cross sectional study was done in a tertiary care Hospital, sample consisted 129 patients, selected by simple random technique of lottery method, those who were discharged from medical and surgical wards in the hospital between January 2023 to June 2023. Data was collected from the patients on the day of discharge using Patient Satisfaction with Nursing Care Quality Questionnaire developed by Laschinger et al., (2005)(16). The questionnaire comprises two sections: demographic information and inquiries regarding patient satisfaction with nursing care that includes 23 items and provides five response options: excellent, very good, good, fair, and poor with the scores ranging from 0 -5. The instrument was translated and back translated into Tamil language and validated by the language, nursing and medical experts. Written permission was obtained from the author Prof. Heather K. Spence Laschinger. Reliability was established by Cronbach's alpha test which was 0.98. The sample size was determined based on the study results using the equation (17); $N = (Z\alpha * \sigma/e)^2$. N represents the minimum sample size, Z is the constant (1.96), and σ standard deviation of 1.33, and with the margin error of 20%. The calculated sample size was 96 to achieve a confidence level of 95 %. Considering the attrition and better generalization a sample size of 100 was taken for this study. Approval for the conduct of the study was obtained from the institutional ethics committee and concerned authorities of the health care facility. Data collection was done through online Google forms with the assistance of Nursing supervisors and Guest relation staff. The data was gathered systematically with patients undertaking the questionnaires before their discharge from the medical facility. Individuals who consented to engage in the research were provided with a comprehensive elucidation of the study's objectives and subsequently endorsed an informed consent document. Participation in the study was entirely voluntary. Furthermore, considerations regarding confidentiality and anonymity were thoroughly articulated within the document. The collected data were grouped and analyzed by SPSS software 20.

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III. RESULTS

The percentage distribution of patient characteristics reveal that the mean age of the patients was 51.35 (14.11) years and 45% of the participants were aged between 36 – 56 years. Most of the patients were female (52%), married (64%), hospitalized for more than 3 times (59%), perceived good health prior to admission (56%)and admitted to the ward directly (57%). (table.1).

Table.1. Frequency and Percentage Distribution of the Patients' Demographic Characteristics

N=100

Demographic Variables	f &%
Age in years	14
18 -30	46
31 - 55	40
>56	
Gender	
Male	48
Female	52
Marital Status	
Single	10
Married/Cohabiting	64
Separated/Divorced	12
Widowed	14
Hospitalization in the past 2 years	
Only once	9
Twice	32
3 Times	29
4 Times	8
Over 4 Times	22
Health Before Admission	
Excellent	22
Good	56
Fair	22
Mode of Admission	
Emergency Department	20
Admitted through Out patient	57
registration/to the unit directly	20
Admitted after day procedure or test	3

An analysis of the questionnaire results (table 2) revealed that the highest satisfaction levels were associated with the nurses' ability to provide comfort and reassurance to patients (3.64±0.60) and coordination of care with the other hospital staff (3.63±0.64). Additionally, the promptness of nurses in responding to call bells and assisting patients garnered a mean score of 3.62 (SD 0.63), while the coordination of care post-discharge and the overall quality of care and services provided by the nurses also received a mean score of 3.62 (SD 0.55). Conversely, the lowest satisfaction levels were noted in the information provided regarding tests and procedures, as well as the explanations given to patients and their families or friends, with mean scores of 3.47 (SD 0.66) and 3.48 (SD 0.63), respectively. Overall, patient questionnaire scores ranged from 3.47 to 3.64, yielding an average score of (3.53 ± 0.58), indicating that the nursing care received was generally perceived positively.

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Table 2. Distribution of Patient Satisfaction towards Nursing Care Questionnaire (N = 100).

Item no	Items	Mean	SD	Mean %
1	Information you were given	3.47	0.66	69.46
2	Providing instructions	3.57	0.61	71.32
3	Ease of getting information	3.52	0.61	70.39
4	Information given by nurses	3.56	0.61	71.16
5	Informing family or friends	3.49	0.64	69.77
6	Involving family or friends in your care	3.57	0.63	71.47
7	Concern and caring by nurses	3.56	0.65	71.16
8	Attention of nurses to your condition	3.58	0.61	71.63
9	Recognition of your opinions	3.58	0.61	71.63
10	Consideration of needs	3.59	0.57	71.78
11	The daily routine of the nurses	3.56	0.59	71.16
12	Helpfulness	3.64	0.60	72.87
13	Nursing staff response to your calls	3.63	0.64	72.56
14	Skill and competence of nurses	3.55	0.59	71.01
15	Coordination of care	3.59	0.61	71.78
16	Restful atmosphere provided by nurses	3.58	0.62	71.63
17	Providing privacy	3.59	0.57	71.78
18	Discharge instructions	3.55	0.60	71.01
19	Coordination of care after discharge	3.62	0.55	72.40
20	Overall quality of care and services	3.55	0.57	71.01
21	Overall quality of nursing care	3.62	0.55	72.40
22	In general, would you say your health is:	3.53	0.63	70.70
23	Recommend this hospital to my family and friends	3.60	0.58	72.09
	Global Score	83.55	7.61	92.7

The mean patient satisfaction score among those who were hospitalized for 3 times (3.74 ± 0.23) and reported rate of their health status as excellent (3.79 ± 0.15) were significantly higher as in table 3.

Table3. Comparison of Patient Satisfaction with their Background Characteristics (N = 100).

Demographic Variables	N	M±SD	f/t	P
Age in years				
18 -30	14	3.60 ± 0.34	0.512	0.601
31 – 55	46	3.67 ± 0.35		
>56	40	3.60 ± 0.30		
Gender				
Male	48	3.58 ± 0.35	1.49	0.14
Female	52	3.68 ± 0.30		
Marital Status				
Single	10	3.58 ± 0.31	1.55	0.20
Married/Cohabiting	64	3.63 ± 0.32		

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eparated/Divorced	12	3.79 ± 0.24		
Widowed	14	3.52 ± 0.39		
Hospitalization in the past 2 years				
Only once	9	3.65 ± 0.45	2.49	0.04
Twice	32	3.49 ± 0.35		
3 Times	29	3.74 ± 0.23		
4 Times	8	3.71 ± 0.06		
Over 4 Times	22	3.64 ± 0.35		
Health Before Admission				
Excellent	22	3.79 ± 0.15	4.23	*0.01*
Good	56	3.56 ± 0.34		
Fair	22	3.64 ± 0.36		
Admission through				
Emergency Department	20	3.65 ± 0.32	0.655	0.58
Admitted through Out patient	57	3.64 ± 0.32		
registration/to the unit directly	20	3.60 ± 0.39		
Admitted after day procedure	3	3.39 ± 0.01		

IV. DISCUSSION

Patient satisfaction and their expectations regarding care are recognized as significant indicators of the quality of nursing services. A plethora of researchers highlight the importance of healthcare organizations, including nursing associations, committees, leadership frameworks, and financial entities, in the communication of findings relevant to patient satisfaction (18), in reference to this, the present study assessed patient satisfaction concerning diverse aspects of nursing care. This cross sectional study was primarily aimed to investigate the quality of nursing care from the patients' perspective

(19)Similar results were reported in a study that Patients expressed higher satisfaction regarding the "Concern and Caring by Nurses" while showing lower satisfaction with the "Information You Were Given." About 71.01% of patients rated the nursing care received during their hospitalization as excellent. Additionally, patients who rated their health as excellent and those who had been hospitalized either thrice or four times reported greater satisfaction with the nursing care provided. The findings of this study indicate that nurses should enhance their engagement in the information-giving process. This necessitates that nursing faculties to be strengthened through simulation based learning in the therapeutic communication process (20) and the success of the nurses compliance with quality strategies depends on continuous educational activities (21,22)

This cross-sectional study sought to evaluate patient satisfaction with nursing care, revealing that the lowest levels of satisfaction were associated with the information provided about tests and procedures, as well as the explanations offered to patients and their families or friends. Conversely, a higher level of satisfaction was observed regarding nurses' ability to deliver comfort and care. This result underscores the nurses' comprehension of the significance of delivering comprehensive information to patients prior to medical procedures, as well as their acknowledgment of patients' entitlement to be appraised of the specifics regarding medications or treatments. This observation is consistent with a separate study that evaluated patient satisfaction in relation to the privacy protocols enacted by nursing staff and their responsiveness to patient needs during and following hospitalization. It is crucial for effective communication among hospital personnel to be maintained in order to enhance patient and family satisfaction with the care provided. Insufficient communication may jeopardize the patient-nurse relationship by cultivating an atmosphere of distrust. (23)

In our study, the item pertaining to the completeness and clarity of nurse explanations of tests, treatments, and expectations received the highest level of satisfaction. This finding demonstrates the nurses' awareness of patients' rights to information regarding medication or treatment, as well as their comprehension of the significance of giving patients comprehensive information prior to procedures through integrated teaching (24). However, some nurses might think that they don't have to educate patients before starting treatment(25). Fortunately, there is evidence linking patient education to favorable clinical outcomes, including better adherence to treatment plans, decreased anxiety, and improved symptom management.

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Hence it is essential to implement simulation based training programs focused on improving nurses' communication skills. (20) A study by Anita in Turkey revealed similar findings, with the greatest degree of satisfaction being recorded for communication items (19,26)

Our research indicates that patient satisfaction regarding the quality of nursing care was assessed positively, with an average score of 3.50 ± 0.55) These findings are consistent with the study by Gomez et al. (27), which surveyed 164 burn patients in a Spanish burn unit, where participants reported a notable mean score of 3.7 out of 4, reflecting a very high level of overall satisfaction. This aligns with the results from study by a study (2).which reported an overall satisfaction rate of 54.2% (95% CI: 52.9–59.3) concerning the quality of nursing care

V. LIMITATIONS

This research is constrained by several limitations, particularly its dependence on a cross-sectional design, which restricts the capacity to determine causal relationships between patient satisfaction and various covariates. While the random selection method adequately represents the population, there remains a possibility of omitting relevant data that could inform the restructuring of nursing practices aimed at improving nurse performance, as certain samples may be overlooked. Furthermore, there is a potential for the current emotional state of patients to affect their feedback.

VI. CONCLUSIONS

The findings of this study suggest that patients' experiences with nursing care play a crucial role in determining their overall satisfaction levels. It is imperative to conduct regular evaluations of patient experiences to facilitate the ongoing enhancement of nursing care quality. Overall, patient satisfaction with nursing care was reported to be high across various dimensions, including the nurses' skills and competencies, care coordination, and the respect afforded to patient opinions. However, satisfaction regarding the information provided to patients and their families by nurses was notably lower. Consequently, it is advisable to establish and implement training programs focused on improving nurses' communication skills. Hospital administrators are encouraged to create a framework aimed at enhancing nurse performance and to closely monitor its execution to identify the most effective strategies for improvement. Furthermore, it is essential to conduct regular surveys to assess patients' needs, expectations, and aspirations, thereby allowing for the adaptation of nursing care practices within the hospital setting.

VII. CONFLICT OF INTEREST

The authors affirm that they have no known competing financial interests or personal relationships that could be perceived as influencing the research presented in this paper.

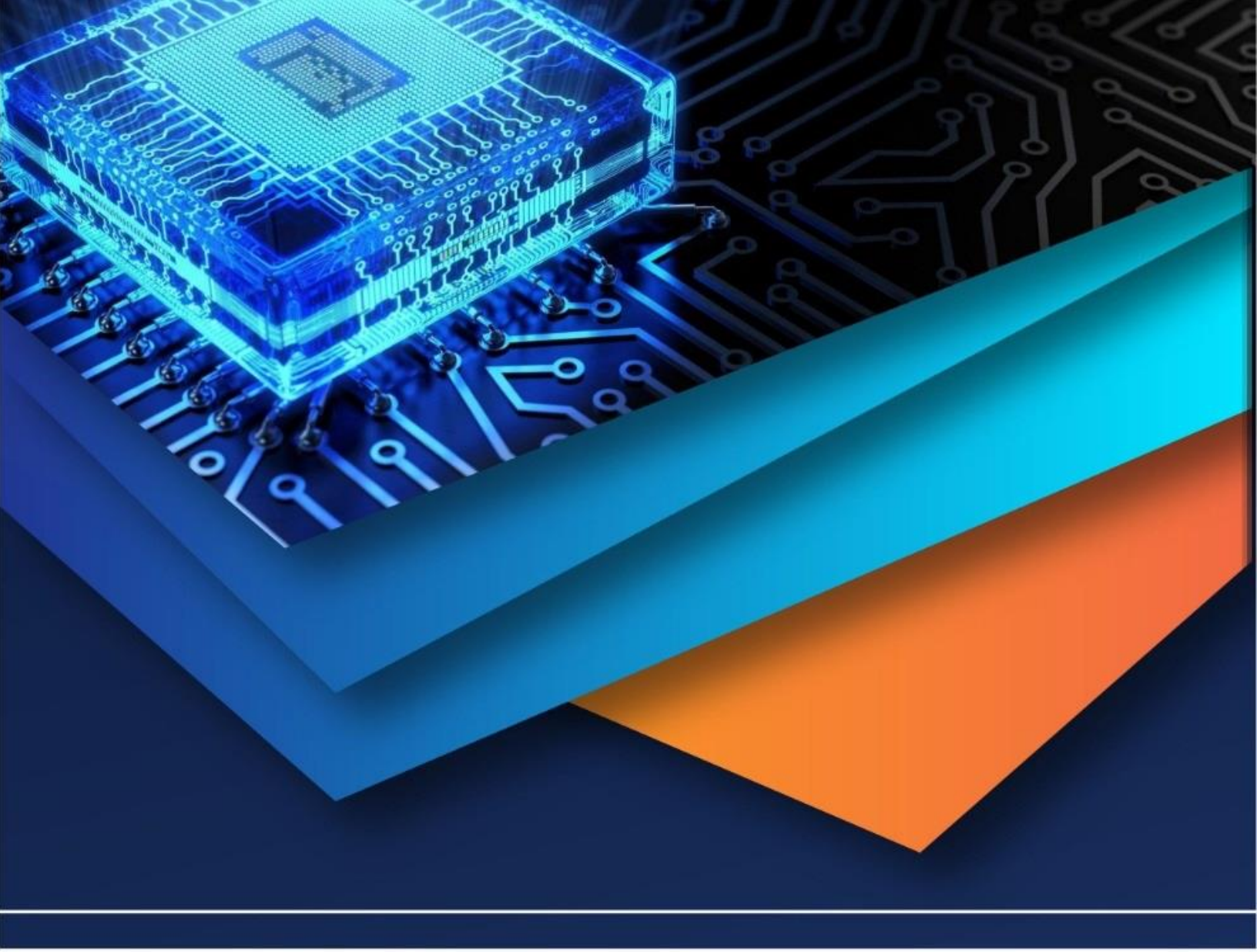
REFERENCES

[1] Alhussin EM, Mohamed SA, Hassan AA, Al-Qudimat AR, Doaib AM, al Jonidy RM, et al. Patients' satisfaction with the quality of nursing care: A cross-sectional study. Int J Africa Nurs Sci. 2024;20:100690. doi:10.1016/j.ijans.2024.100690.
[2] Dinsa K, Gelana Deressa B, Beyene Salgedo W. Comparison of patients' satisfaction levels toward nursing care in public and private hospitals, Jimma, Ethiopia. Nurs Res Rev. 2022;12:177-89. doi:10.2147/NRR.S380630.
[3] Mason JJ, Coleman L, Dawod M, Wathen K, Houston S, Waldron M, et al. Child and caregiver voices about inpatient care: What do they report as positive and as needing improvement? J Pediatr Nurs. 2024;75:213-20.
[4] Al-Hammouri F, Hamdan KM, Haymour AM, Ibrahim MO, Malkawi A, Al-Hiary SS, et al. Quality of nursing care: Predictors of patient satisfaction in a national sample. Nurs Open. 2024;11(8):e2252.
[5] Liu Y, Zhang F, Guan C, Song B, Zhang H, Fu M, et al. Patient satisfaction with humanistic nursing in Chinese secondary and tertiary public hospitals: A cross-sectional survey. Front Public Health. 2023.
[6] Alharbi HF, Alzahrani NS, Almarwani AM, Asiri SA, Alhowaymel FM. Patients' satisfaction with nursing care quality and associated factors: A cross-sectional study. Nurs Open. 2022 Dec 30;10(5):3253-62. doi:10.1002/nop2.1577.
[7] James M. A study to assess patient's satisfaction with quality of nursing care in neuromedical department Medical College Hospital Kottayam. IOSR J Nurs Health Sci. 2022;11(2):41-59.
[8] Alhowaymel F, Abaoud A, Alhuwaimel A, Alenezi A, Alsayed N. COVID-19 patients' satisfaction levels with nursing care: A cross-sectional study. SAGE Open Nurs. 2022;8:23779608221078163. doi:10.1177/23779608221078163.
[9] Sweileh WM. Patient satisfaction with nursing care: A bibliometric and visualization analysis (1950-2021). Int J Nurs Pract. 2022;28(5):e13076. doi:10.1111/ijn.13076.
[10] Wudu MA. Predictors of adult patient satisfaction with inpatient nursing care in public hospitals of eastern Amhara region, northeastern Ethiopia, 2020. Patient Prefer Adherence. 2021;177-85.
[11] Chen X, Zhang Y, Qin W, Yu Z, Yu JX, Lin Y, et al. How does overall hospital satisfaction relate to patient experience with nursing care? A cross-sectional study in China. Nurs Open. 2022;6(2):535-45.

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[12] Gezer D, Arslan S. Patient satisfaction on nursing care: The case of in day surgery. Cukurova Med J. 2021;46(2):663-9. doi:10.17826/cumj.895225.
[13] Freitas JS, Silva AEB, Minamisava R, Bezerra ALQ, Sousa MR. Quality of nursing care and satisfaction of patients attended at a teaching hospital. Rev Latino-Am Enfermagem. 2014;22(3):454-60. doi:10.1590/0104-1169.3241.2437.
[14] Mulugeta H, Wagnew F, Dessie G, Biresaw H, Habtewold TD. Patient satisfaction with nursing care in Ethiopia: A systematic review and meta-analysis. BMC Nurs. 2019;18(1):1-2.
[15] Akhtari-Zavare M, Abdullah MY, Hassan SS, Said SB, Kamali M. Patient satisfaction: Evaluating nursing care for patients hospitalized with cancer in Tehran teaching hospitals, Iran. Glob J Health Sci. 2010;2(1):117-26.
[16] Laschinger HS, Hall LM, Pedersen C, Almost J. A psychometric analysis of the patient satisfaction with nursing care quality questionnaire: An actionable approach to measuring patient satisfaction. J Nurs Care Qual. 2005;20(3):220-30.
[17] Alharbi HF, Alzahrani NS, Almarwani AM, Asiri SA, Alhowaymel FM. Patients' satisfaction with nursing care quality and associated factors: A cross-sectional study. Nurs Open. 2023;10(5):3253-62.
[18] Lotfi M, Zamanzadeh V, Valizadeh L, Khajehgoodari M. Assessment of nurse-patient communication and patient satisfaction from nursing care. Nurs Open. 2019;6(3):1189-96. doi:10.1002/nop2.316.
[19] Karaca A, Durna Z. Patient satisfaction with the quality of nursing care. Nurs Open. 2019;6(2):535-45. doi:10.1002/nop2.237.
[20] Saraswathy K, Susila C, Venkatesan Latha, VIjiyalakshmi K, Sasikala D , Merlin A. Faculty Perception on Simulation Based Learning. International Journal of Nursing Education. 2022 Oct 1;14(4). doi:10.37506/ijone.v14i4.18689.
[21] Dakshinamoorthy S. Compliance of Infection Control VAP Bundle in Critical Care Unit Nurses in Tertiary Care Hospital at Chennai. International Journal of Nursing Education. 2018 Jan 1;10(1). doi: 10.5958/0974-9357.2018.00024.7
[22] Sudhakar M, Dhakshinamoorthy S. Knowledge and practice on prevention of phlebitis among nurses working in ccu at selected hospitals Chennai. TNNMC Journal of Medical & Surgical Nursing. 2021;9(1):12-4.
[23] Woo BF, Lee JX, Tam WW. The impact of the advanced practice nursing role on quality of care, clinical outcomes, patient satisfaction, and cost in the emergency and critical care settings: A systematic review. Hum Resour Health. 2017;15:1-22. doi:10.1186/s12960-017-0237-9.
[24] Ramya K, Mary HR, Venkatesan L. Effectiveness of integrated teaching by patient versus conventional teaching method regarding management of patients with cancer breast upon behavioral outcomes of nursing students. TNNMC Journal of Medical & Surgical Nursing. 2021;9(2):30-3.
[25] Yusefi AR, Sarvestani SR, Kavosi Z, et al. Patients' perceptions of the quality of nursing services. BMC Nurs. 2022;21:131. doi:10.1186/s12912-022-00906-1.
[26] Desborough J, Bagheri N, Banfield M, et al. The impact of general practice nursing care on patient satisfaction and enablement in Australia: A mixed methods study. Int J Nurs Stud. 2016;64:108-19. doi:10.1016/j.ijnurstu.2016.10.004.
[27] Gómez Martín C, García Morato RA, de Los Reyes Cortés N, Fernández-Cañamaque JL, Holguín P. Patient satisfaction in a Spanish burn unit. Burns. 2019;45(2):341-7. doi:10.1016/j.burns.2018.03.015.

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