

A STUDY TO ASSESS PATIENT'S SATISFACTION WITH QUALITY OF NURSING CARE

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ABSTRACT

Objectives: Patient satisfaction is a concrete criterion for the assessment of health care and for that reason quality of nursing care. It provides data for healthcare managers by providing significant resources for processes such as those involved in measuring patients' expectations and satisfaction with nursing care quality, improving nursing service quality through documentation of areas of failure and planning and implementing necessary training. The study was carried on with the aim to assess patient's satisfaction with quality of nursing care in a tertiary care hospital and to identify the relationship between the satisfaction of patients with selected variables.

Methods: This descriptive cross-sectional study was done at a tertiary care hospital of Indian armed forces after taking approval from the ethical committee of the institute. 50 patients from various wards were selected for the study by randomization method. Critical patients, patients in isolation wards/intensive care unit, and patients with mental illness were excluded from the study. All participants were apprised of the study carried out on them and their informed consent was taken. The data were collected from the participants through a validated structured questionnaire to assess the patient's satisfaction with quality of nursing care. The data were collected and analyzed statistically.

Results: Out of all patients, most of the patients (52%) were aged between 36 and 50 years, and many of them, i.e., 82% were married. Analysis of patient's satisfaction with nursing care quality questionnaire (PSNCQQ) revealed that for item "Ease of getting information: Willingness of nurses to answer your questions" the highest excellent satisfaction response was given by 24% patients. Item under the highest very good satisfaction response was "Information given by nurses: How well nurses communicated with patients, families, and doctors." The items for which satisfaction levels were lowest were the "The daily routine of the nurses: How well they adjusted their schedules to your needs" and coordination of care after discharge: Nurses' efforts to provide for your needs after you left the hospital. Overall, patients were satisfied with the quality of nursing care for most of the variables. Analysis of PSNCQQ for perception-related items showed that 24% and 72% of participants' responses for the "Quality of the care and service provided during your stay at the hospital" were excellent and very good respectively. Analysis of PSNCQQ for perception-related items showed that patients aged between 18 and 35 years were more satisfied with quality of care. In the overall perception about the quality of care, males were more satisfied than females. In overall perception of quality of nursing care married were more satisfied. Educated patients are more satisfied with the quality of nursing care.

Conclusion: The results also showed that nurses should provide care in a framework of respect, kindness, and courtesy toward patients by emphasizing the importance of communication. Besides these, the patients were highly satisfied with the overall quality of hospital care, and nursing care and reported that they would recommend this hospital to their families and friends.

Keywords: Nursing care, Patient satisfaction, Patient's satisfaction with nursing care quality questionnaire, Quality of hospital care, Nurses and health-care workers.

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INTRODUCTION

Nursing is an essential component of health-care services delivered by a hospital to its patients. Patient satisfaction is a highly desirable result of clinical care provided in the hospital. A patient's expression of satisfaction or dissatisfaction is a judgment on the quality of hospital care in all the elements. Whatever its strengths and boundaries, patient satisfaction is an index that should be necessary for the evaluation of the quality of care in hospitals.

Nursing is a profession within the health-care sector focused on the care of individuals, families, and communities so they may attain, maintain or recover optimal health and quality of life. Nurses may be differentiated from other health-care providers by their approach to patient care, training, and scope of practice.

Hospitals are increasingly diverse, cultural melting pots where nurses work on the front lines of race, religion, and gender. Doctor time is limited, but nurses deliver hour-to-hour care and interact with the

attendants of patients. It requires the ability to listen and understand people from all walks of life. Great nurses grasp what they've learned in their formal education – the key concepts, the research, the policy, and societal considerations – and apply it to make surprising, tough, life-or-death decisions every day. And that's why nursing education has such a crucial role to play. With the right skills and knowledge, the next generation of nurses can make a huge difference for patients, communities, and our national health-care environment.

Health-care systems today are technically proficient. Strong emphasis is placed on patient service with organized efforts to understand, measure, and meet the needs of clients served. Evidence of this phenomenon is found in the numerous publications that focus on patient satisfaction as a key outcome measure of health care. Patient satisfaction is thus the insight of patient needs and expectations being met. In 2009, Schmidh [1] conducted a study to assess the patient's perceptions of nursing staffing nursing care adverse events and overall satisfaction with the hospital experience. The results of the study revealed that the perception on number and nurse the number

of adverse events reported by patients was a strong predictor of the perception of nursing care received and the perception of nursing care received was the only significant predictor of overall satisfaction with the hospital experience. The patient health-care scenario revolves around the quality assurance and people are also aware of consumer rights. The situation demands that a nurse should be more concerned with patient's satisfaction. The literature search reveals that in India, only few studies were done regarding patient's satisfaction with the quality of nursing care. With this purpose, a study had conducted among nurses and patients to determine patient's satisfaction toward the quality of nursing care.

The concept of patient satisfaction is becoming increasingly prominent as an outcome of the consumer movement, though patient satisfaction has been studied by researchers in several fields for many years. Because patient satisfaction's relationship to nursing care is the focus, this study concentrated on the working of nursing care providers. Patient satisfaction as a measure of quality has been studied from the beginning of research in medicine and nursing [2]. Patient satisfaction has remained essential and a prime focus point for all health providers. Patient satisfaction has long been considered an integral component of care outcomes and is frequently integrated into evaluations of the overall quality of health services.

Hence, the present study may be considered as one among many studies that will help the health care providers in better understanding the various factors that influence the satisfaction of patients and also assist in framing the strategies for effective management of hospitals. Patient satisfaction with care is a significant indicator of perceived quality of care that exerts an impact on patient health outcomes. Hence, this study was conducted with the aim to assess patient's satisfaction with the quality of nursing care.

Aims and objectives

The study was done with the aim to assess patient's satisfaction with quality of nursing care in a tertiary care hospital and to identify the relationship between the satisfaction of patients with selected variables.

METHODS

Study type

This descriptive cross-sectional study was carried out in a tertiary care hospital of the Indian Armed Forces. The study was conducted after taking approval from the ethical committee of the institute.

Study population

A total of 50 patients from various wards.

Inclusion criteria

- Patients aged 18 years and older, irrespective of gender from various wards were chosen for the study by randomization method through the random number generator computer software to eliminate any bias
- The patients who were admitted for at least 3 days before the data collection and who are able to respond
- The patients were able to express their experience verbally or in writing.

Exclusion criteria

Critical patients, patients in isolation wards/intensive care unit (ICU), and patients with mental illness.

All participants (50 patients) were apprised of the study carried out on them and their informed consent was taken. The data were collected from the participants through prevalidated structured questionnaire to assess the patient's satisfaction with quality of nursing care. The questionnaire was distributed to the participants during day time. The participants were required to fill out the questionnaire and return it on the same day to avoid any response bias. Only questionnaires that

were complete were included in the final analysis and incomplete ones were excluded from the final analysis. The data were collected through questionnaire and analyzed statistically using SPSS software. The primary data were compiled, analyzed and based on the findings, necessary recommendations and conclusions were made.

Data analysis and observations

The participants comprised 50 patients from various wards of a tertiary care hospital of the Indian Armed Forces. The demographic details of the study are given below:

The data given in Table 1 shows that 26% of patients were aged between 18 and 35 years, 52% of patients were in 36–50 years age group, and 22% of patients were >50 years of age. Most of the patients were aged between 36 and 50 years. Out of all patients, 66% were males and 34% were females. Most of them, i.e., 82% were married. Out of all patients, 47% were literate and 3% were illiterate.

Analysis of patient's satisfaction with nursing care quality questionnaire (PSNCQQ) questionnaire revealed that for item "ease of getting information: Willingness of nurses to answer your questions" the highest excellent satisfaction response was given by 24% of patients. Item under the highest very good satisfaction response was "information given by nurses: How well nurses communicated with patients, families, and doctors." Other items under >70% very good satisfaction response given by patients were "concern and caring by nurses: Courtesy and respect you were given; friendliness and kindness" item, Information you were given: How clear and complete the nurses' explanations were about tests, treatments, and what to expect and Involving family or friends in your care: How much they were allowed to help in your care. The items for which satisfaction levels were lowest were the "The daily routine of the nurses: How well they adjusted their schedules to your needs" and coordination of care after discharge: Nurses' efforts to provide for your needs after you left the hospital. Overall, patients were satisfied with the quality of nursing care for most of the variables. It indicated that the level of satisfaction with nursing care was high (Table 2).

Analysis of PSNCQQ for perception-related items showed that 24% and 72% of participants' responses for the "quality of the care and service provided during your stay at the hospital" were excellent and very good, respectively. In addition, 100% of patients stated that they would recommend the hospital to their family and friends.

The satisfaction of patients according to their age for different items shows that patients aged between 18 and 35 years were more satisfied for items 1, 3, 4, 5, 7, 10, 12, 14, 16, 18, and 19. The results of 18–to 35-year-old patients' satisfaction for item 18: "Discharge instructions: How clearly and completely the nurses told you what to do and what to expect when you left the hospital" were statistically significant ($p=0.047$). Patients between 36 and 50 years of age were more satisfied for the items 2, 3, 4, 8, 10, 13, and 17. Patients >50 years of age were

Table 1: Demographic details of the participants

Variables	Number	%
Age (years)		
18–35	13	26
36–50	26	52
>50	11	22
Gender		
Male	33	66
Female	17	34
Marital status		
Married	41	82
Unmarried	9	18
Education		
Illiterate	3	6
Literate	47	94

Table 2: Distribution of patient satisfaction with nursing care quality questionnaire

S. No.	Variables	Response of patients: Number (%)				
		Excellent	Very good	Good	Fair	Poor
1	Information you were given: How clear and complete the nurses' explanations were about tests, treatments, and what to expect.		36 (72)	12 (24)	2 (4)	
2	Instructions: How well nurses explained how to prepare for tests and operations.		27 (54)	18 (36)	5 (10)	
3	Ease of getting information: Willingness of nurses to answer your questions.	12 (24)	28 (56)	10 (20)		
4	Information given by nurses: How well nurses communicate with patients, families, and doctors.	6 (12)	39 (78)	3 (6)	2 (4)	
5	Informing family or friends: How well the nurses kept them informed about your condition and needs.		33 (66)	9 (18)	8 (16)	
6	Involving family or friends in your care: How much they were allowed to help in your care.		36 (72)	12 (24)	2 (4)	
7	Concern and caring by nurses: Courtesy and respect you were given; friendliness and kindness.	4 (8)	37 (74)	9 (18)		
8	Attention of nurses to your condition: How often nurses checked on you and how well they kept track of how you were doing.	9 (18)	34 (68)	7 (14)		
9	Recognition of your opinions: How much nurses ask you what you think is important and give you choices.		24 (48)	23 (46)	3 (6)	
10	Consideration of your needs: Willingness of the nurses to be flexible in meeting your needs.		29 (58)	18 (36)	3 (6)	
11	The daily routine of the nurses: How well they adjusted their schedules to your needs.		11 (22)	15 (30)	19 (38)	5 (10)
12	Helpfulness: Ability of the nurses to make you comfortable and reassure you.		22 (44)	28 (56)		
13	Nursing staff response to your calls: How quick they were to help.		34 (68)	15 (30)	1 (2)	
14	Skill and competence of nurses: How well things were done, like giving medicine and handling IVs.		32 (64)	10 (20)	8 (16)	
15	Coordination of care: The teamwork between nurses and other hospital staff who took care of you.		19 (38)	23 (46)	8 (16)	
16	Restful atmosphere provided by nurses: Amount of peace and quiet.		30 (60)	15 (30)	5 (10)	
17	Privacy: Provisions for your privacy by nurses.	4 (8)	26 (52)	19 (38)	1 (2)	
18	Discharge instructions: How clearly and completely the nurses told you what to do and what to expect when you left the hospital.		33 (66)	15 (30)	2 (4)	
19	Coordination of care after discharge: Nurses' efforts to provide for your needs after you left the hospital.		11 (22)	18 (36)	19 (38)	2 (4)
Overall perceptions						
Overall quality of care and services you received during your hospital stay		9 (18)	34 (68)	3 (6)	4 (8)	
Overall quality of nursing care you received during your hospital stay.		12 (24)	36 (72)	2 (4)		
In general, would you say your health is:		2 (4)	37 (74)	8 (16)	3 (6)	
Based on the nursing care I received, I would recommend this hospital to my family and friends		23 (46)	25 (50)	2 (4)		

more satisfied for items 6, 7, 9, 11, 15, and 17. Analysis of PSNCQQ for perception-related items showed that patients aged between 18 and 35 years were more satisfied with quality of care and also recommended this hospital to others for their services (Table 3a).

Analysis of PSNCQQ for satisfaction of patients according to their gender for different items shows that males were more satisfied for items 1, 3, 4, 5, 7, 8, 9, 12, 16, 17, 18, and 19. For other items such as 2, 3, 4, 6, 10, 11, 13, 14 and 15 females were more satisfied. The results were statistically significant for item 4-Information given by nurses: How well nurses communicated with patients, families, and doctors. And item 7-concern and caring by nurses: Courtesy and respect you were given; friendliness and kindness. This data shows that males were more satisfied with various items than females. In the overall perception about quality of care, males were more satisfied than females (Table 3b).

Analysis of PSNCQQ for satisfaction of patients according to their marital status shows that married were more satisfied for items 2, 4, 8, 9, 11, 13, 15, and 17. However, for items 1, 3, 5, 6, 7, 11, 12, 14, 16, 17, 18, and 19; unmarried were more satisfied. The results were statistically significant ($p < 0.05$) for items 12, 13, 14, 15, and 17. In overall perception about quality of nursing care married were more satisfied (Table 3c).

The data of satisfaction of patients according to their education status show that for items 1, 2, 3, 4, 7, 8, 13, and 15; educated patients were more satisfied but for items 5, 6, 9, 10, 11, 12, 14, 16, 17, 18, and 19 uneducated patients were more satisfied (Table 3d).

DISCUSSION

Health professionals' communication skills play a crucial role in ensuring that patients feel valued and cared for. The allocation of sufficient time for talking and listening to patients and providing information is a prerequisite for patient satisfaction, as it ensures that patients are less stressed and more engaged and well-adapted [3]. A study by Abdel Maqsood *et al.* [4] indicated that patients were more satisfied with having respectful communication whereas they were less satisfied with the professional information provided by the nurses about their disease, health status, investigations, and prognosis of their condition. In a meta-analysis conducted by Ozsoy *et al.* [5] patients expected courtesy, attention, understanding, kindness, and helpfulness from individuals providing care services.

In our study, the highest excellent satisfaction response, represented by PSNCQQ scores, was reported for the item "ease of getting information: Willingness of nurses to answer your questions". The results indicated that nurses are willing to answer their queries and patients are highly

Table 3: Satisfaction of patients with selected variables

a. Satisfaction of patients according to their age

Questions	Age 18-35 years					Age 36-50 years					Age >50 years				
	Poor	Fair	Good	Very good	Excellent	Poor	Fair	Good	Very good	Excellent	Poor	Fair	Good	Very good	Excellent
1	Response of patients: Number (percentage)														
Information you were given: How clear and complete the nurses' explanations were about tests, treatments, and what to expect.	0 (0.0)		2 (15.4)	11 (84.6)		1 (3.8)	7 (26.9)	18 (69.2)		1 (9.1)	3 (27.3)	7 (63.6)			
Instructions: How well nurses explained how to prepare for tests and operations.	2 (15.4)	4 (30.8)	7 (53.8)		2 (7.7)	9 (34.6)	15 (57.7)		9.10	45.50					
Ease of getting information: Willingness of nurses to answer your questions.	1 (7.7)	2 (15.4)	6 (46.2)	5 (38.5)		5 (19.2)	17 (65.4)	4 (15.4)		3 (27.3)	5 (45.5)	3 (27.3)			
INFORMATION GIVEN BY NURSES: How well nurses communicated with patients, families, and doctors.	2 (7.7)	2 (15.4)	8 (61.5)	2 (15.4)		0.00	1 (3.8)	22 (84.6)	3 (11.5)	1 (9.1)	0.00	9 (81.8)	1 (9.1)		
Informing family or friends: How well the nurses kept them informed about your condition and needs.	2 (7.7)	2 (15.4)	10 (76.9)		5 (19.2)	5 (19.2)	16 (61.5)		2 (18.2)	2 (18.2)	7 (63.6)				
Involving family or friends in your care: How much they were allowed to help in your care.	0.00	2 (15.4)	11 (84.0)		1 (3.8)	10 (38.5)	15 (57.7)		1 (9.1)	0.00	10 (90.9)				

(Contd...)

Table 3: (Continued)

Questions	Age 18-35 years					Age 36-50 years					Age >50 years				
	Poor	Fair	Good	Very good	Excellent	Poor	Fair	Good	Very good	Excellent	Poor	Fair	Good	Very good	Excellent
7	Concern and caring by nurses: Courtesy and respect you were given; friendliness and kindness.														
8	Attention of nurses to your condition: How often nurses checked on you and how well they kept track of how you were doing.														
9	Recognition of your opinions: How much nurses ask you what you think is important and give you choices.														
10	Consideration of your needs: Willingness of the nurses to be flexible in meeting your needs.														
11	The Daily routine of the nurses: How well they adjusted their schedules to your needs.														
12	Helpfulness: Ability of the nurses to make you comfortable and reassure you.														

(Contd...)

Table 3: (Continued)

Questions	Age 18-35 years					Age 36-50 years					Age >50 years									
	Response of patients: Number (percentage)																			
	Poor	Fair	Good	Very good	Excellent	Poor	Fair	Good	Very good	Excellent	Poor	Fair	Good	Very good	Excellent	Poor	Fair	Good	Very good	Excellent
13		1 (7.7)	4 (30.8)	8 (61.5)		0.00%	6 (23.1)	20 (76.9)		0.00%	5 (45.5)	6 (54.5)		0.00%	5 (45.5)	6 (54.5)		0.00%	5 (45.5)	6 (54.5)
14		0.00	2 (15.4)	11 (84.6)		5 (19.2)	5 (19.2)	61.50%		3 (27.3)	3 (27.3)	5 (45.5)		3 (27.3)	3 (27.3)	5 (45.5)		3 (27.3)	3 (27.3)	5 (45.5)
15		3 (23.1)	8 (61.5)	2 (15.4)		3 (11.5)	12 (46.2)	11 (42.3)		2 (18.2)	3 (27.3)	6 (54.5)		2 (18.2)	3 (27.3)	6 (54.5)		2 (18.2)	3 (27.3)	6 (54.5)
16		0.00	3 (23.1)	10 (76.9)		3 (11.5)	8 (30.8)	15 (57.7)		2 (18.2)	4 (36.4)	5 (45.5)		2 (18.2)	4 (36.4)	5 (45.5)		2 (18.2)	4 (36.4)	5 (45.5)
17		1 (7.7)	7 (53.8)	5 (38.5)	0.00%	0.00%	11 (42.3)	12 (46.2)	3 (11.5)	0.00%	1 (9.1)	9 (81.8)	1 (9.1)	0.00%	1 (9.1)	9 (81.8)	1 (9.1)	0.00%	1 (9.1)	9 (81.8)
18		0.00	2 (15.4)	11 (84.6)		0.00%	10 (38.5)	16 (61.5)		2 (18.2)	3 (27.3)	6 (54.5)		2 (18.2)	3 (27.3)	6 (54.5)		2 (18.2)	3 (27.3)	6 (54.5)

(Contd...)

Table 3: (Continued)

Questions	Age 18-35 years					Age 36-50 years					Age >50 years										
	Response of patients: Number (percentage)																				
	Poor	Fair	Good	Very good	Excellent	Poor	Fair	Good	Very good	Excellent	Poor	Fair	Good	Very good	Excellent	Poor	Fair	Good	Very good	Excellent	
19 COORDINATION OF CARE AFTER DISCHARGE: Nurses' efforts to provide for your needs after you left the hospital. Overall quality of care and services you received during your hospital stay	1 (7.7)	3 (23.1)	5 (38.5)	4 (30.8)	1 (3.8)	11 (42.3)	9 (34.6)	5 (19.2)	0.00%	5 (45.5)	4 (36.4)	2 (18.2)									
Overall quality of nursing care you received during your hospital stay.	(0.0)	1 (7.7)	8 (61.5)	4 (30.8)	1 (3.8)	3 (11.5)	2 (7.7)	19 (73.1)	2 (7.7)	1 (9.1)	(.0)	7 (63.6)	3 (27.3)								
In general, would you say your health is:																					
Based on the nursing care I received, I would recommend this hospital to my family and friends	(0)	2 (15.4)	11 (84.6)	(0)	2 (7.7)	5 (19.2)	19 (73.1)	0 (0)	1 (9.1)	1 (9.1)	1 (9.1)	7 (63.6)	2 (18.2)								
	(0.0)	5 (38.5)	8 (61.5)		1 (3.8)	1 (3.8)	16 (61.5)	9 (34.6)	1 (9.1)	1 (9.1)	4 (36.4)	6 (54.5)									
b: Satisfaction of patients according to their gender																					
Questions	Male										Female										
	Response of patients: Number (Percentage)																				
1 Information you were given: How clear and complete the nurses' explanations were about tests, treatments, and what to expect.	0 (0)	7 (21.2)	26 (78.8)	2 (11.8)	5 (29.4)	10 (58.8)															

(Contd...)

Table 3: (Continued)

Questions	Male					Female				
	Response of patients: Number (Percentage)									
	Poor	Fair	Good	Very good	Excellent	Poor	Fair	Good	Very good	Excellent
2	Instructions: How well nurses explained how to prepare for tests and operations.	2 (6.1)	16 (48.5)	15 (45.5)	(17.6)	2 (11.8)	12 (70.6)			
3	Ease of getting information: Willingness of nurses to answer your questions.	4 (12.1)	22 (66.7)	7 (21.2)		6 (35.3)	6 (35.3)	5 (29.4)		
4	Information given by nurses: How well nurses communicated with patients, families, and doctors.	1 (3.0)	2 (6.1)	29 (87.9)	1 (3.0)	1 (5.9)	10 (58.8)	5 (29.4)		
5	Informing family or friends: How well the nurses kept them informed about your condition and needs.	6 (18.2)	5 (15.2)	22 (66.7)	2 (11.8)	4 (23.5)	11 (64.7)			
6	Involving FAMILY or friends in your care: How much they were allowed to help in your care.	1 (3.0)	9 (27.3)	23 (69.7)	1 (5.9)	3 (17.6)	13 (76.5)			
7	Concern and caring by nurses: Courtesy and respect you were given; friendliness and kindness.	1 (3.0)	29 (87.9)	3 (9.1)		8 (47.1)	8 (47.1)	1 (5.9)		

(Contd...)

Table 3: (Continued)

b: Satisfaction of patients according to their gender

Questions	Male				Female					
	Poor	Fair	Good	Very good	Excellent	Poor	Fair	Good	Very good	Excellent
8 Attention of nurses to your condition: How often nurses checked on you and how well they kept track of how you were doing.			4 (12.1)	23 (69.7)	6 (18.2)			3 (17.6)	11 (64.7)	3 (17.6)
9 Recognition Of your opinions: How much nurses ask you what you think is important and give you choices.	3 (9.1)		12 (36.4)	18 (54.5)		0 (0)	11 (64.7)	6 (35.3)		
10 Consideration of your needs: Willingness of the nurses to be flexible in meeting your needs.	2 (6.1)		14 (42.4)	17 (51.5)		1 (5.9)	4 (23.5)	12 (70.6)		
11 The daily routine of the nurses: How well they adjusted their schedules to your needs.	4 (12.1)	11 (33.3)	11 (33.3)	7 (21.2)	1 (5.9)	8 (47.1)	4 (23.5)	4 (23.5)		
12 Helpfulness: Ability of the nurses to make you comfortable and reassure you.			17 (51.5)	16 (48.5)			11 (64.7)	6 (35.3)		
13 Nursing staff response to your calls: How quick they were to help.	1 (3.0)		12 (36.4)	20 (60.6)		0 (0)	3 (17.6)	14 (82.4)		
14 Skill and competence of nurses: How well things were done, like giving medicine and handling IVs.	5 (15.2)	7 (21.2)	7 (21.2)	21 (63.6)		3 (17.6)	3 (17.6)	11 (64.7)		

(Contd...)

Table 3: (Continued)

Questions	Male					Female				
	Response of patients: Number (Percentage)									
	Poor	Fair	Good	Very good	Excellent	Poor	Fair	Good	Very good	Excellent
15 Coordination of care: The teamwork between nurses and other hospital staff who took care of you.	6 (18.2)	15 (45.5)	12 (36.4)	2 (11.8)	8 (47.1)	7 (41.2)	0 (0)	10 (58.8)	0 (0)	0 (0)
16 Restful atmosphere provided by nurses: Amount of peace and quiet.	5 (15.2)	8 (24.2)	20 (60.6)	0 (0)	7 (41.2)	10 (58.8)	0 (0)	0 (0)	0 (0)	0 (0)
17 Privacy: Provisions for your privacy by nurses.	1 (3.0)	11 (33.3)	17 (51.5)	4 (12.1)	8 (47.1)	9 (52.9)	0 (0)	0 (0)	0 (0)	0 (0)
18 Discharge instructions: how clearly and completely the nurses told you what to do and what to expect when you left the hospital.	2 (6.1)	9 (27.3)	22 (66.7)	0 (0)	6 (35.3)	11 (64.7)	0 (0)	0 (0)	0 (0)	0 (0)
19 Coordination of care after discharge: Nurses' efforts to provide for your needs after you left the hospital.	0 (0)	13 (39.4)	12 (36.4)	8 (24.2)	2 (11.8)	6 (35.3)	3 (17.6)	6 (35.3)	3 (17.6)	0 (0)
Questions	Male					Female				
	Response of patients: Number (Percentage)									
	Poor	Fair	Good	Very good	Excellent	Poor	Fair	Good	Very good	Excellent
Overall perceptions	2 (6.1)	3 (9.1)	22 (66.7)	6 (18.2)	2 (11.8)	2 (11.8)	0 (0)	12 (70.6)	3 (17.6)	0 (0)
Overall quality of care and services you received during your hospital stay	2 (6.1)	2 (6.1)	22 (66.7)	9 (27.3)	0 (0)	14 (82.4)	3 (17.6)	0 (0)	0 (0)	0 (0)
Overall quality of nursing care you received during your hospital stay.	2 (6.1)	2 (6.1)	22 (66.7)	9 (27.3)	0 (0)	14 (82.4)	3 (17.6)	0 (0)	0 (0)	0 (0)

(Contd...)

Table 3: (Continued)

b: Satisfaction of patients according to their gender

Questions	Male				Female					
	Poor	Fair	Good	Very good	Excellent	Poor	Fair	Good	Very good	Excellent
In general, would you say your health is:	1 (3.0)	3 (9.1)	27 (81.8)	2 (6.1)	2 (11.8)	5 (29.4)	10 (58.8)	0		
Based on the nursing care I received, I would recommend this hospital to my family and friends	2 (6.1)	17 (51.5)	14 (42.4)	0 (0)	8 (47.1)	9 (52.9)				

c: Satisfaction of patients according to their marital status

Questions	Married				Unmarried					
	Poor	Fair	Good	Very good	Excellent	Poor	Fair	Good	Very good	Excellent
1 Information you were given: How clear and complete the nurses' explanations were about tests, treatments, and what to expect.	2 (4.9)	10 (24.4)	29 (70.7)	0 (0)	2 (22.2)	7 (77.8)				
2 Instructions: How well nurses explained how to prepare for tests and operations.	4 (9.8)	14 (34.1)	23 (56.1)	1 (11.1)	4 (44.4)	4 (44.4)				
3 Ease of getting information: Willingness of nurses to answer your questions.	9 (22.0)	24 (58.5)	8 (19.5)	1 (11.1)	4 (44.4)	4 (44.4)				
4 Information given by nurses: How well nurses communicated with patients, families, and doctors.	1 (2.4)	3 (7.3)	32 (78.0)	5 (12.2)	1 (11.1)	0 (0)	7 (77.8)	1 (11.1)		

(Contd...)

Table 3: (Continued)

Questions	Response of patients according to their marital status									
	Married					Unmarried				
	Poor	Fair	Good	Very good	Excellent	Poor	Fair	Good	Very good	Excellent
5	Informing family or friends: How well the nurses kept them informed about your condition and needs.									
	6 (14.6)	9 (22.0)	26 (63.4)	2 (22.2)	0 (.0)	7 (77.8)				
6	Involving family or friends in your care: How much they were allowed to help in your care.									
	2 (4.9)	10 (24.4)	29 (70.7)	0 (.0)	2 (22.2)	7 (77.8)				
7	Concern and caring by nurses: Courtesy and respect you were given; friendliness and kindness.									
	9 (22.0)	29 (70.7)	3 (7.3)	0 (.0)	8 (88.9)	1 (11.1)				
8	Attention of nurses to your condition: How often nurses checked on you and how well they kept track of how you were doing.									
	3 (7.3)	18 (43.9)	20 (48.8)	0 (0.0)	5 (55.6)	4 (44.4)				
9	Recognition of your opinions: How much nurses ask you what you think is important and give you choices.									
	2 (4.9)	16 (39.0)	23 (56.1)	1 (11.1)	2 (22.2)	6 (66.7)				
10	Consideration of your needs: Willingness of the nurses to be flexible in meeting your needs.									

(Contd...)

Table 3: (Continued)

Questions	Married					Unmarried				
	Response of patients: Number (percentage)									
	Poor	Fair	Good	Very good	Excellent	Poor	Fair	Good	Very good	Excellent
11 The daily routine of the nurses: How well they adjusted their schedules to your needs.	5 (12.2)	17 (41.5)	10 (24.4)	9 (22.0)	0 (.0)	2 (22.2)	5 (55.6)	2 (22.2)		
12 Helpfulness: Ability of the nurses to make you comfortable and reassure you.			26 (63.4)	15 (36.6)			2 (22.2)	7 (77.8)		
13 Nursing staff response to your calls: How quick they were to help.	0 (.0)		11 (26.8)	30 (73.2)		1 (11.1)	4 (44.4)	4 (44.4)		
14 Skill and competence of nurses: How well things were done, like giving medicine and handling IVs.		8 (19.5)	10 (24.4)	23 (56.1)		0 (.0)	0 (.0)	9 (100.0)		
15 Coordination of care: The teamwork between nurses and other hospital staff who took care of you.		4 (9.8)	18 (43.9)	19 (46.3)		4 (44.4)	5 (55.6)	0 (.0)		
16 Restful atmosphere provided by nurses: Amount of peace and quiet.		5 (12.2)	14 (34.1)	22 (53.7)		0 (.0)	1 (11.1)	8 (88.9)		
17 Privacy: Provisions for your privacy by nurses.	0 (.0)		15 (36.6)	24 (58.5)	2 (4.9)	1 (11.1)	4 (44.4)	2 (22.2)	2 (22.2)	

(Contd...)

Table 3: (Continued)

Questions	Married						Unmarried								
	Response of patients: Number (percentage)														
	Poor	Fair	Good	Very good	Excellent	Poor	Fair	Good	Very good	Excellent	Poor	Fair	Good	Very good	Excellent
18 Discharge instructions: how clearly and completely the nurses told you what to do and what to expect when you left the hospital.	2 (4.9)	18 (43.9)	15 (36.6)	24 (58.5)	0 (0)	0 (0)	0 (0)	0 (0)	9 (100.0)	0 (0)	0 (0)	0 (0)	0 (0)	9 (100.0)	0 (0)
19 Coordination of care after discharge: Nurses' efforts to provide for your needs after you left the hospital.	2 (4.9)	18 (43.9)	12 (29.3)	9 (22.0)	0 (0)	1 (11.1)	6 (66.7)	2 (22.2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Questions	Married						Unmarried								
Response of patients: Number (percentage)															
Overall perceptions	4 (9.8)	2 (4.9)	28 (68.3)	7 (17.1)	0 (0)	0 (0)	1 (11.1)	6 (66.7)	2 (22.2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Overall quality of care and services you received during your hospital stay	1 (2.4)	30 (73.2)	10 (24.4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Overall quality of nursing care you received during your hospital stay.	3 (7.3)	7 (17.1)	29 (70.7)	2 (4.9)	0 (0)	0 (0)	1 (11.1)	8 (88.9)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
In general, would you say your health is:	2 (4.9)	22 (53.7)	17 (41.5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Based on the nursing care I received, I would recommend this hospital to my family and friends	2 (4.9)	22 (53.7)	17 (41.5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

(Contd...)

Table 3: (Continued)

Questions	Illiterate						Literate								
	Response of patients: Number (percentage)														
	Poor	Fair	Good	Very Good	Excellent	Poor	Fair	Good	Very Good	Excellent	Poor	Fair	Good	Very Good	Excellent
1	Information you were given: How clear and complete the nurses' explanations were about tests, treatments, and what to expect.														
	0 (0)	1 (33.3)	1 (33.3)	2 (66.7)	2 (66.7)	2 (4.3)	11 (23.4)	34 (72.3)							
2	Instructions: How well nurses explained how to prepare for tests and operations.														
	1 (33.3)	1 (33.3)	1 (33.3)	1 (33.3)	1 (33.3)	4 (8.5)	17 (36.2)	26 (55.3)							
3	Ease of getting information: Willingness of nurses to answer your questions.														
	1 (33.3)	0 (0)	0 (0)	2 (66.7)	0 (0)	1 (2.1)	3 (6.4)	37 (78.7)	6 (12.8)						
4	Information given by nurses: How well nurses communicated with patients, families, and doctors.														
	0 (0)	0 (0)	0 (0)	3 (100.0)	3 (100.0)	8 (17.0)	9 (19.1)	30 (63.8)							
5	Informing family or friends: How well the nurses kept them informed about your condition and needs.														
	0 (0)	0 (0)	0 (0)	3 (100.0)	3 (100.0)	2 (4.3)	12 (25.5)	33 (70.2)							
6	Involving family or friends in your care: How much they were allowed to help in your care.														
	0 (0)	0 (0)	0 (0)	3 (100.0)	3 (100.0)	2 (4.3)	12 (25.5)	33 (70.2)							

(Contd...)

Table 3: (Continued)

Questions	Illiterate					Literate				
	Response of patients: Number (percentage)									
	Poor	Fair	Good	Very Good	Excellent	Poor	Fair	Good	Very Good	Excellent
7	Concern and caring by nurses: Courtesy and respect you were given; friendliness and kindness.									
8	Attention of nurses to your condition: How often nurses checked on you and how well they kept track of how you were doing.									
9	Recognition of your opinions: How much nurses ask you what you think is important and give you choices.									
10	Consideration of your needs: Willingness of the nurses to be flexible in meeting your needs.									
11	The daily routine of the nurses: How well they adjusted their schedules to your needs.									
12	Helpfulness: Ability of the nurses to make you comfortable and reassure you.									

(Contd...)

Table 3: (Continued)

Questions	Illiterate					Literate				
	Response of patients: Number (percentage)									
	Poor	Fair	Good	Very Good	Excellent	Poor	Fair	Good	Very Good	Excellent
13 Nursing staff response to your calls: How quick they were to help.	0 (0)	0 (0)	2 (66.7)	1 (33.3)	1 (33.3)	1 (2.1)	13 (27.7)	33 (70.2)		
14 Skill and competence of nurses: How well things were done, like giving medicine and handling IVs.	0 (0)	0 (0)	1 (33.3)	2 (66.7)	8 (17.0)	9 (19.1)	30 (63.8)			
15 Coordination of care: The teamwork between nurses and other hospital staff who took care of you.	0 (0)	0 (0)	2 (66.7)	1 (33.3)	8 (17.0)	21 (44.7)	18 (38.3)			
16 Restful atmosphere provided by nurses: Amount of peace and quiet.	1 (33.3)	0 (0)	0 (0)	2 (66.7)	4 (8.5)	15 (31.9)	28 (59.6)			
17 Privacy: Provisions for your privacy by nurses.	0 (0)	0 (0)	0 (0)	2 (66.7)	1 (33.3)	1 (2.1)	19 (40.4)	24 (51.1)	3 (6.4)	
18 Discharge instructions: how clearly and completely the nurses told you what to do and what to expect when you left the hospital.	0 (0)	0 (0)	1 (33.3)	2 (66.7)	2 (4.3)	14 (29.8)	31 (66.0)			

(Contd...)

Table 3: (Continued)

Questions	Illiterate					Literate				
	Response of patients: Number (percentage)									
	Poor	Fair	Good	Very Good	Excellent	Poor	Fair	Good	Very Good	Excellent
19 Coordination of care after discharge: Nurses' efforts to provide for your needs after you left the hospital.	0 (0)	1 (33.3)	1 (33.3)	1 (33.3)	2 (4.3)	18 (38.3)	17 (36.2)	10 (21.3)		
Questions	Illiterate					Literate				
	Response of patients: Number (Percentage)									
	Poor	Fair	Good	Very good	Excellent	Poor	Fair	Good	Very good	Excellent
Overall perceptions	0 (0)	0 (0)	3 (100.0)	0 (0)	4 (8.5)	3 (6.4)	31 (66.0)	9 (19.1)		
Overall quality of care and services you received during your hospital stay			0 (0)	3 (100.0)	0 (0)		2 (4.3)	33 (70.2)	12 (25.5)	
Overall quality of nursing care you received during your hospital stay.		0 (0)	0 (0)	3 (100.0)	0 (0)	3 (6.4)	34 (72.3)	2 (4.3)		
In general, would you say your health is:			0 (0)	1 (33.3)	2 (66.7)		2 (4.3)	24 (51.1)	21 (44.7)	
Based on the nursing care I received, I would recommend this hospital to my family and friends			0 (0)	1 (33.3)	2 (66.7)		2 (4.3)	24 (51.1)	21 (44.7)	

satisfied with the ease of getting information from nurses. Most of the patients (74%) responded very good satisfaction for items "Information given by nurses: How well nurses communicated with patients, families, and doctors" and "Concern and Caring by Nurses: Courtesy and respect you were given; friendliness and kindness" item. The results indicate that the nurses' communication style is to treat patients respectfully and be friendly towards them. However, the nurses were less interested in items "The daily routine of the nurses: How well they adjusted their schedules to your needs" and Coordination of care after discharge: Nurses' efforts to provide for your needs after you left the hospital". Nurses' efforts to adjust their schedules as per the needs of patients and to coordinate their care after discharge did not meet their expectations.

Nurses and other healthcare professionals play a key role in providing support and information. Nurses care for the patients on a 24 h basis and should be empowered to provide requisite information and instructions to the patients [6]. Patient education has been linked with positive clinical outcomes such as improved adherence to a therapeutic regime, reduced anxiety, and enhanced ability to cope with symptoms [7]. It is known that receipt of adequate information affects patients' confidence and satisfaction and this is the most important factor in encouraging patients to participate in their own health care. Several studies have reported inadequacies in information provision. For example, Dzomeku *et al.* [8] found that the type and amount of information provided by nurses about patients' conditions constituted one of the main causes of dissatisfaction. In a meta-analysis conducted by Ozsoy *et al.* [5] the patients' most important expectation concerning care quality was that they should be informed about medication and treatment. Patients reported that information played an important role in their satisfaction and they emphasized that information provided by nurses should be clear and concise. Therefore, it is crucial for nurses to realize that information provision and education are nursing responsibilities and that they should collaborate with other healthcare staff to provide complete and relevant information to patients.

The satisfaction of patients according to their age for different items shows that patients aged between 18 and 35 years were more satisfied for the items 1, 3, 4, 5, 7, 10, 12, 14, 16, 18, and 19. Patients between 36 and 50 years of age were more satisfied for the items 2, 3, 4, 8, 10, 13, and 17. Patients >50 years of age were more satisfied for items 6, 7, 9, 11, 15, and 17. These data show that patients >50 years old were less satisfied than other age groups. This can be related to the fact that the nurses did not pay more attention to elderly patients. Another possible justification can be that levels of satisfaction could differ according to cultural values or that the patients did not hold positive attitudes towards events, based on age-related increases in tolerance and maturity levels. Sitzia and Wood [7] stated in their review study that older people tend to be more satisfied with health care than younger people. Similarly, according to Shinde and Kapurkar [6] old age respondents were more satisfied, probably because they were more social and accepting than younger or they had more respect and care for providers.

Analysis of PSNCQQ for satisfaction of patients according to their gender for different items shows that males were more satisfied for items 1, 3, 4, 5, 7, 8, 9, 12, 16, 17, 18, and 19. For other items such as 2, 3, 4, 6, 10, 11, 13, 14, and 15 females were more satisfied. The results were statistically significant for item 4- information given by nurses: How well nurses communicated with patients, families, and doctors and item 7-concern and caring by nurses: Courtesy and respect you were given; friendliness and kindness. These data show that males were more satisfied for various items than females. In another study by Alsaqri [9] no relationships were found between gender and patient satisfaction levels. However, while some of these studies Akin and Erdogan [10] Alhusban and Abualrub [11] reported that women's levels of satisfaction with care were higher relative to those observed in men. Shinde and Kapurkar [6] showed higher satisfaction levels in men relative to those observed in women. While the reason for these differences can involve cultural characteristics, they can also occur

because, relative to men, women pay more attention to hygiene and care and are more anxious.

Analysis of PSNCQQ for the satisfaction of patients according to their marital status shows that married were more satisfied for items 2, 4, 8, 9, 11, 13, 15, and 17. However for items 1, 3, 5, 6, 7, 11, 12, 14, 16, 17, 18, and 19; unmarried were more satisfied. The results were statistically significant ($P < 0.05$) for items 12, 13, 14, 15 and 17. In overall perception about quality of nursing care married were more satisfied.

The data on satisfaction of patients according to their education status show that for items 1, 2, 3, 4, 7, 8, 13, and 15; educated patients were more satisfied but for items 5, 6, 9, 10, 11, 12, 14, 16, 17, 18 and 19 uneducated patients were more satisfied. From the given data, it was suggested that the nurses took extra efforts to provide care, meeting their needs and explaining more about the requirements from them. Educated patients are more satisfied with the quality of nursing care. Both recommended the hospital to their family and friends in case of need.

This study suggested that the patients were satisfied with the quality of nursing care for most of the variables. This indicated that the level of satisfaction with nursing care was high.

Limitations

The sample was restricted to patients from various wards excluding critical patients, patients in isolation wards/ICU, and patients with mental illness. In addition, the study was conducted in a single hospital. Therefore, the results cannot be generalized to all hospitals.

CONCLUSION

The results revealed that nurses should inform patients about each application and procedure and provide necessary explanations about illness, diagnosis, and treatment to ensure patient satisfaction and the requirement of high-quality nursing care. The results also showed that nurses should provide care in a framework of respect, kindness, and courtesy toward patients by emphasizing the importance of communication. Besides these, the patients were highly satisfied with the overall quality of hospital care, nursing care and reported that they would recommend this hospital to their families and friends. Nurses could contribute to the quality service provision by evaluating the patient satisfaction with nursing care for the advancement and improvement of nursing care based on patients' expectations. Data obtained from this evaluation should be considered in determining training requirements for nurses and in-service training programs should be organized to develop nurses' knowledge and skills in care planning. The PSNCQQ is considered applicable for nurse administrators in improving nursing care. The questionnaire could allow managers to determine the attitudes of individuals with whom they work and those whom they manage and exert some degree of control over.

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AUTHORS CONTRIBUTION

All authors have contributed to the preparation of the manuscript.

CONFLICT OF INTEREST

The authors declare that there was no conflict of interests.

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