




# Patient Satisfaction and Barriers to Nursing Care Quality in Oncology Units

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## Abstract

**Background:** Every patient expects safe and quality patient care. A satisfying journey during hospitalization indicates quality care. Nurses provide a significant component of patient care over a long period, compared to any other healthcare professional. This study aims to find patient satisfaction in oncology units and identify the barriers to nursing care quality.

**Materials and Methods:** A cross-sectional correlation design was used with 100 cancer patients admitted to oncology units of tertiary care hospital selected by convenience sampling. The Nursing Care Quality Questionnaire was used to assess patient satisfaction, and an investigator-prepared and validated checklist was used to identify barriers to nursing care quality.

**Results:** The study revealed that 50% of patients were satisfied with the overall nursing care quality received during the hospital stay, and the overall barrier score to patient satisfaction for quality nursing care was 33.5%. Overall, 37% of patients were extremely satisfied with the quality of care and services they received during their hospital stay. The findings revealed a statistically significant association between patient satisfaction and the patients' employment status, type of treatment, and duration of stay in the hospital. This study also revealed that workload, lack of time, and inability to speak the local language were the major barriers to patient satisfaction.

**Conclusions:** Patients are the hospital's consumers or customers. For the best results, hospitals should train nurses to communicate in the local language, provide adequate staffing, and adequate training.

## Keywords

- ▶ hospitals
- ▶ language
- ▶ Oncology
- ▶ patient satisfaction
- ▶ workload

## Introduction

Human beings are vulnerable to numerous experiences that are pleasurable and sorrowful in life. During hospitalization, patients' physical and psychological well-being can be pro-

moted by their individual experiences. Despite their physical ailment, some people will find their hospital experience to be the best, most bearable, or worst they have ever had. Good interpersonal relationships, ethical practice, and appropriate behavior among the hospital staff will provide a better

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experience for a patient during their hospital stay. Such experiences will result in better patient satisfaction in the hospital. Professionalism at the highest level is expected of all professionals. The way health professionals talk to the patient, how they are being treated, the cleanliness of the hospital, dietary services, the cost of medical and hospital expenses, and many other factors influence patient satisfaction.

The increasing competition in the healthcare industry promotes quality health services. The prerequisite for improved healthcare service is available through advances in healthcare technology, which change patients' expectations and opinions. Individual involvement in the health sector is also increasing, resulting in increased costs and high demand for better quality.<sup>1</sup> Being diagnosed with a life-threatening illness, such as cancer, is one of the most traumatic experiences in a person's life.

During the initial phase of diagnosis and the treatment regimen, patients must receive the highest priority of care from health professionals and family members. Nurses working in oncology units should have additional training in oncology care, including consideration of the patients' psychosocial, emotional, and spiritual well-being. Nursing care quality can be measured based on patients' and family members' views. Nursing care is an essential component of hospital service and is one of the most important indicators of patient satisfaction. Nurses have to understand how patients perceive things, which is a vital element for improving patient care.<sup>2</sup>

A hospital's reputation is determined solely by the ratings given by patients and is based on nursing care. Quality nursing care entails meeting the needs and expectations of patients by adhering to relevant standards/requirements and providing comprehensive care throughout the nursing process. Primary care or acute care adult/nurse practitioners or nurse specialists are advanced-trained nurses who work in this field. However, due to diverse challenges, most Indian hospitals cannot implement primary care. A systematic review confirms that healthcare providers consider patient satisfaction because of services provided differently to every patient. The contented patient may be ready to advocate for and recommend the hospital to others.<sup>3</sup>

A study conducted at DEBRE Berhan Hospital in Ethiopia found that 49% of the patients were satisfied with nursing care. The educational factors and previous admission were the reasons for satisfaction.<sup>4</sup> Another systematic review using Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to identify the factors that influence patient satisfaction concluded that no universally accepted patient satisfaction measurement system was available, and the elements of satisfaction varied globally.<sup>5</sup>

Presently, nurses perform various crucial roles, besides patient care. Patient safety is the keystone of quality in a healthcare setting. The outcomes of poor-quality care are mortality and morbidity. Nurses have a crucial position in monitoring and coordinating care to reduce such adverse consequences. Nursing care quality is increased by appropri-

ate knowledge, empathetic care, adequate communication, a good organizational system, and active contribution.

The quality of nursing care affects both the patient's prognosis and safety. Patient satisfaction and patients' expectations of care are valid indicators of the quality of nursing care. Communication with families may increase the satisfaction of their hospitalized relatives. Nursing services are one of the essential components of hospital services. Nurses must know which factors influence patient satisfaction so that they can focus on those aspects of care. Hence, assessing satisfaction and identifying barriers can help to enhance quality patient care. This study aims to find patient satisfaction in oncology units and the barriers to nursing care quality.

## Methods

A cross-sectional correlation design was used to assess patient satisfaction with nursing care and barriers to quality nursing care in the oncology units of the selected hospital in Mangalore. The independent variable was barriers to nursing care quality, and patient satisfaction was the dependent variable. Permission was obtained from the Institutional Ethics Committee (IEC/2019-2020 -1472 dated 10/04/2019) and the hospital authorities. The research was carried out in a full-fledged, 1000-bed teaching and super-specialty hospital with 12 broad specialties and 15 super-specialties located around 16 km from the center of Mangalore city. Radiation oncology, medical oncology, and surgical oncology are among the therapies accessible to cancer patients, as well as a well-equipped daycare center that can accommodate both outpatients and inpatients and staffed by experienced counselors. The daily bed occupancy of the unit varies between 40 and 70. This facility employs approximately 25 registered nurses licensed by a professional board to practice. There is no special training offered to nurses to work in oncology units. The nurse-to-patient ratio is determined by the patients' abilities. One nurse is responsible for 5 to 10 patients in general wards and one to three patients in special areas. The calculated sample size included 100 patients diagnosed with cancer and admitted to oncological units selected by convenience sampling technique. Patients who had difficulties responding to questions were excluded from the study.

The following tools were used to assess patient satisfaction and barriers to quality nursing care. A proforma was used to collect demographic variables such as age, sex, occupation, marital status, education, type of family, residential area, type of treatment, number of caregivers, duration of admission, type, and stage of cancer. A Patient Satisfaction with Nursing Care Quality Questionnaire (PSNCQQ) was used to assess patient satisfaction. PSNCQQ is a standardized scale developed by Laschinger et al,<sup>6</sup> to measure patient satisfaction with nursing care quality. It is a Likert scale that ranges from one to five, on which one is poor, and five is excellent. The PSNCQQ has a high Cronbach's reliability estimation (0.97). Across hospital categories, reliability estimates are comparable. The PSNCQQ consists of 19

items and three questions designed to assess the quality of care provided throughout the hospital stay, nursing care, and the hospital's plan to advocate for itself to others.<sup>6</sup> The researcher developed a checklist to identify the barriers to nursing care quality. The items selected in the checklist were based on obstacles and hindrances to nursing care quality. The options given to the patient were "yes" or "no". Option "yes" was coded with one mark and "no" with 0 marks. Validation of the developed tool was done by seeking opinions from experts in the field. The reliability of the checklist to find the nursing care quality by Cronbach alpha was 0.76. The tools were translated into Kannada and Malayalam with the help of language experts. A pilot study was conducted with ten subjects and the study was found to be feasible.

$$n = \frac{Z^2 \cdot 1 - \alpha / 2 \cdot P \cdot (1 - P)}{d^2}$$

Using the above estimation of a single proportion formula, the investigators calculated the sample size ( $\alpha$  indicates the significance level,  $d$  is precision-0.1, and the anticipated proportion is  $P=37$ ). The calculated sample size was 98, which was rounded off to 100 patients.

The study included inpatients who could read and write English, Malayalam, or Kannada, but those who had physical hardships in responding to questions were excluded. Informed written consent was obtained from the subjects selected by convenience sampling based on inclusion criteria, and data was collected. The study's goal and objectives were disclosed to the participants, and confidentiality was guaranteed.

The data were analyzed using IBM Statistical Packages for Software Sciences (SPSS) statistics version 25.

## Results

The demographic characteristics revealed that 29% of patients were in the age group of 51 to 60 years, 9% were between 20 and 30 years, slightly more than half (54%) were males, 36% of patients were unemployed, and 12% of patients were working in government jobs. Fifty-four percent belonged to joint families, while 6% belonged to extended families. At least half of the subjects (41%) were undergoing chemotherapy, 45% stayed in the hospital for one week, and only 6% stayed for more than one month. Almost half of the participants (49%) had stage II cancer, while only 9% had stage IV cancer.

As per **Table 1**, in this study, patients were satisfied with nurses' willingness to answer questions (66%), communication with patients and family members (74%), involvement in care (70%), courtesy and respect (72%), attention to patient condition (69%), recognize the opinion (71%), adjust the schedule as needed (67%), ability to comfort patients (65%), response to patient call (65%), skill and competence (69%), coordination of care among healthcare providers (67%), provision of a tranquil environment (75%) and privacy (79%), discharge instructions (75%), and post-discharge coordination of care (78%).

Patients in this study were dissatisfied with the information given by nurses (36%), not receiving updated informa-

tion on a regular basis (37%), not considering the patients' needs (35%), and not receiving enough explanations about the procedure (39%).

This study also revealed that all patients who participated in this study were ready to recommend the present hospital to others. The study findings revealed that among highly satisfied patients, the majority were undergoing chemotherapy (92.7%), whereas the least satisfied were undergoing radiation (68.4%).

**Table 2** presented the findings of overall perceptions, around 50% of patients were satisfied with the overall quality of nursing care they received during their hospital stay, and the overall barrier score to patient satisfaction for quality nursing care was 33.5%. Overall, 37% of patients were extremely satisfied with the quality of care and services received during their hospital stay.

**Fig. 1** depicts the overall barrier score to patient satisfaction related to the nursing care quality was 33.5%. It was found that 65% of patients found the nurse's workload as a barrier, 50% revealed time constraints, 51% felt a lack of language proficiency, 32% felt a lack of hygiene, which refers to hand hygiene practices, and 35% said that conflicts among nurses were prevalent.

In relation to the association between demographic characteristics and patient satisfaction, it was found that occupation, type of treatment, and duration of admission had a significant association ( $p < 0.05$ ) with patient satisfaction. The calculated table value for the occupation of the patient was 9.581 with a  $p$ -value less than 0.05 (0.048), the calculated table value for the type of treatment was 7.521 with a  $p$ -value less than 0.05 (0.057), and the calculated table value for the type of treatment was 12.693 with a  $p$ -value less than 0.05 (0.013). Hence, there was a significant association between patient satisfaction and selected demographic variables.

A weak negative correlation using the Karl Pearson correlation coefficient was found between patient satisfaction and the barriers to nursing care quality ( $r = -0.12$ ,  $p > 0.05$ ), which was not significant. As patient satisfaction increases, barriers to nursing care quality are less perceived.

## Discussion

In this study, 29% of patients were in the age group of 51 to 60 years, only 9% were between 20 and 30 years of age, and 54% were males. Overall, 37% of patients were satisfied with the quality of care and services received during their hospital stay, and 50% were satisfied with the quality of nursing care.

A similar study on patient satisfaction, health condition, age, and several other factors was used in evaluations of care done in Ostergotland, Sweden. The result indicates that the age of the patient had the most important descriptive value for the patient satisfaction index (PSI). Males were more satisfied than females.<sup>7</sup> According to a survey conducted in Kuwait, the overall quality is related to nursing care quality ( $r = 0.36$ ,  $p = 0.01$ ).<sup>8</sup> Similar results were obtained in a cross-sectional study in Turkey, with the total data specifying a high patient satisfaction level. Nursing care satisfaction was

**Table 1** Level of patient satisfaction on the nursing care quality

Sl. no.	Items	(n = 100)									
		Excellent		Very good		Good		Fair		Poor	
		f	%	f	%	f	%	f	%	f	%
1	Information by nurses	34	34	30	30	31	31	5	5	-	-
2	Explanations about procedure	30	30.0	31	31.0	34	34.0	4	4.0	1	1.0
3	Willingness to answer questions	37	37.0	29	29.0	30	30.0	4	4.0	0	0
4	Communication with patient and family members	34	34.0	40	40.0	26	26.0	0	0	0	0
5	Update information regularly.	29	29.0	34	34.0	31	31.0	6	6.0	0	0
6	Involvement in care	33	33.0	37	37.0	26	26.0	2	2.0	2	2.0
7	Courtesy and respect	42	42.0	30	30.0	26	26.0	2	2.0	0	0
8	Attention to patient condition	33	33.0	36	36.0	28	28.0	3	3.0	0	0
9	Recognize the opinion	37	37.0	34	34.0	25	25.0	2	2.0	2	2.0
10	Consider patients' needs	32	32.0	33	33.0	27	27.0	8	8.0	0	0
11	Adjust schedule as per patient needs	37	37.0	30	30.0	30	30.0	2	2.0	1	1.0
12	Ability to comfort patient	37	37.0	34	34.0	24	24.0	5	5.0	0	0
13	Response to patient call	32	32.0	33	33.0	30	30.0	1	1.0	4	4.0
14	Skill and competence	33	33.0	36	36.0	28	28.0	3	3.0	0	0
15	Coordination of care between health care professionals	39	39.0	28	28.0	28	28.0	2	2.0	3	3.0
16	Provide peaceful atmosphere	35	35.0	40	40.0	21	21.0	4	4.0	0	0
17	Provision of privacy	48	48.0	31	31.0	20	20.0	1	1.0	0	0
18	Discharge instructions	45	45.0	30	30.0	17	17.0	7	7.0	1	1.0
19	Coordination of care after discharge	43	43.0	35	35.0	19	19.0	2	2.0	1	1.0

**Table 2** Overall perceptions about patient care

Sl. no.	Items	Excellent		Very good		Good		Fair		Poor	
		f	%	f	%	f	%	f	%	f	%
1	Overall quality of care and services received during hospital stay	37	37.0	39	39.0	23	23.0	0	0	1	1.0
2	Overall quality of nursing care received during hospital stay	50	50.0	33	33.0	15	15.0	2	2.0	0	0
3	Recommend the hospital to other patients	100	100.0	0	0	0	0	0	0	0	0

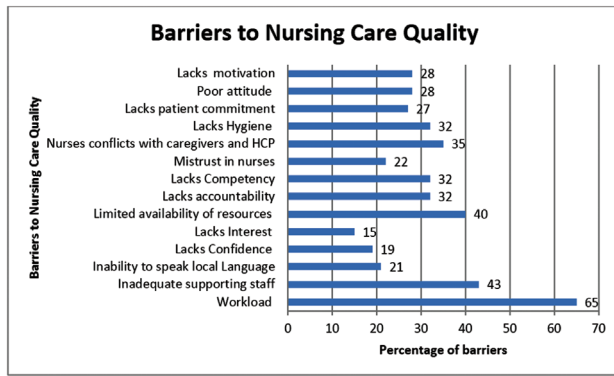
affected by the type of ward, gender, monthly income, and educational status. Older men with low levels of education had higher satisfaction than the more educated.<sup>9</sup>

More than half of the patients in this study were pleased with the communication, explanations, discharge instructions, respect for their wishes, and nurses' commitment. In a concept analysis, the characteristics important to patient satisfaction with nursing care were: empathetic care, health information, accurate decisions, and professional abilities.<sup>10</sup>

According to a cross-sectional study conducted at three public hospitals, 229 (40.7%) participants were satisfied with

the care provided by nurses. Three hundred twenty-two (57.2%) admitted patients agreed that nurses should clearly explain nursing procedures to them before performing them.<sup>11</sup>

A patient care report about nurses' and doctors also verified missed nursing care was treated as both an outcome measure and an explanatory factor in a cross-sectional study. Seventy-five percent of patients had complete trust in the nurses caring for them. Sixty-four percent of those polled said there were always or nearly always enough nurses on duty to care for hospital patients. The most frequently missed



**Fig. 1** Barriers to patient satisfaction on nursing care quality. HCP, healthcare professional.

types of care are comforting and talking with patients, teaching patients, and family members how to manage care after discharge.<sup>12</sup>

In this study, it was observed that 94.1% of patients who had stayed for 2 to 3 weeks in the hospital were highly satisfied. In a cross-sectional descriptive correctional study conducted in Saudi Arabia, among 100 patients, 86% had a high level of satisfaction with nursing care, but disagreement rates were observed in the language (56%), discharge information (56%), and unavailability (20%) for care.<sup>13</sup> A study in Riyadh among 424 patients exhibited a high level of patient satisfaction in all areas. No significant satisfaction was found in male patients compared to females.<sup>14</sup> A high level of satisfaction with nursing care was also revealed in a study conducted in China.<sup>15</sup>

In this study, the overall barrier score to patient satisfaction related to the quality of nursing care was 33.5%. Sixty-five percent of patients found the nurse's workload as a barrier, 50% revealed time constraints, 51% felt language proficiency, and 35% said conflicts among nurses are prevalent.

A quantitative descriptive study conducted in the West Coast Winelands Region among 272 nurses revealed inadequacies in staffing (97%) as the main barrier. Seventy-six percent denied receiving continuing education, and more than 80% mentioned inadequate provision of equipment and consumables for quality patient care.<sup>16</sup> A similar study that was done in two hospitals affiliated with Alborz University of Medical Sciences also found barriers to communication between patients and nurses. As barriers, patients identified the nurse's gender, disinclination to respond, heavy workload, and their own physical and psychological discomforts.<sup>17</sup> This study showed a weak negative correlation between patient satisfaction and the barriers to nursing care quality ( $r = -0.12, p > 0.05$ ), which was not significant, whereas a study done in Kuwait showed a positive correlation ( $r = 0.36, p = 0.01$ ).<sup>8</sup> A contradictory finding was also found that there was no correlation between PSI and gender.<sup>7</sup> A study done in Saudi Arabia shows no significant correlation between patient satisfaction and nurses' caring behaviors. Similarly, there was no significant difference between patients' satisfaction with age, sex, previous hospitalization, and size of the ward.<sup>18</sup>

This study's limitations were that it was conducted in one hospital only and the use of a convenience sampling technique.

## Conclusion

Patients are the hospital's consumers or customers, and this study results show that hospitals must train nurses to communicate in the local language. The quality of patient care will be improved if there is adequate staffing and adequate training of nurses working in oncology units. A well-planned orientation and training will enhance the confidence of nurses. The provision of adequate essential resources will also reduce the nurse's distress. The management needs to consider the longer working hours, which may also reduce motivation and drain the energy of the nurses.

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## Conflict of Interest

None declared.

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