

ORIGINAL ARTICLE

Service Management and Cancer Patient Satisfaction in Hospitals: Cross Sectional Descriptive Study in Indonesia

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ABSTRACT

Introduction: Quality of service refers to the ability of health services to enhance and expand professional expertise. This study aimed at determining the service management and patient satisfaction in a Cancer Center of a Regional Hospital. **Methods:** This study employed a quantitative descriptive cross-sectional approach involving 34 health workers to observe the service quality flow and 94 respondents to determine patient satisfaction, it was measured using the Customer Satisfaction Index (CSI). **Results:** The highest percentage of service quality in inter-peer communication related to therapy provision as evidence of interdisciplinary collaboration was 99.47% and 97.9% for the preparation of discharge patients. Low indicators found in the patient acceptance phase were the lack of facilitating patients for a second opinion (2.13%). Patient satisfaction based on 86.97% CSI showed that the patients were delighted. **Conclusion:** : The quality of service process based on the patient management flow in the Cancer Center of a Hospital was on average, 65.5% fulfilled. Besides, patient satisfaction based on CSI in the inpatient room showed that the patients were delighted, with a satisfaction index of 88.45%.

Keywords: Service quality, Service process flow, Patient satisfaction, Customer Satisfaction Index (CSI)

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INTRODUCTION

Service quality is a condition where the care process and existing medical knowledge can increase the achievement of goals according to the patient's wishes and reduce the possibility of unexpected incidents (1,2). There are three aspects measured in care, namely structure, process, and results. In the context of health care and patient management, quality refers to the best service provided and recorded throughout the care process based on the most significant capabilities available within the existing facilities (3,4). According to the survey, inpatient care accounts for the majority of the service flow. It begins with the care of patients admitted to the hospital admissions department (5). Next, patients go to the care room services (medical personnel

services, nursing services, natural environment, provision of medical/non-medical equipment, nutrition services), then proceed to administrative and financial services and finally, the service for discharged patients going home. Currently, the Cancer Center in West Java is a separate building with enough facilities to meet the needs of cancer patients. One factor influencing life expectancy in cancer patients is the quality of service, which involves health personnel support service process. Research on service quality for the cancer patients in the Cancer Treatment Center of America's Oncology Unit proves that satisfaction of the cancer patient's regarding quality of service affects their life expectancy, as satisfied patients have a much lower risk of death (6–9).

Patient satisfaction is one of the essential elements in reviewing the quality of services, especially in delivering health facilities; patients come with a series of hopes and desires. The patient's perception of meeting patient expectations determines patient satisfaction (6,10–12). The flow of the patient service process starts from the

patient’s admission, management of the patient (inpatient period), and the patient discharge. This study aimed at identifying the service quality in the service process flow of inpatient care, determining patient satisfaction, and identifying aspects of patient satisfaction that need improvement.

MATERIALS AND METHODS

This study employed a cross-sectional descriptive quantitative research design. This study consisted of health workers assigned to the Cancer Center inpatient unit. Samples consisted of 34 health workers (25 nurses and 9 medical personnel) and satisfaction was measured in 94 patients.

The quality service was measured by observational checklist, while the patient satisfaction was measured by Customer Satisfaction Index (CSI). CSI is an index to determine the general level of customer satisfaction with an approach that considers the importance of the features being measured (11–14).

This study used two data collection techniques: 1) Service Quality in the service process flow, collected through observations of health workers posted in the inpatient room through patient care starting from the patient’s admission until the patient’s discharge. A total of 21 service quality indicators were obtained through observation instruments. 2) Patient satisfaction data was collected with the help of a structured questionnaire given to patients with discharge plans. Alpha Cronbach analyzed instrument validity of Flow of Care and Patient Satisfaction with a value of 0.85.

The analysis process used 1) Univariate to describe the characteristics of cancer patients and the presentation of detailed results through the frequency and distribution of research variables. A quantitative analysis of happy users’ percentage was used in a user satisfaction survey is patient satisfaction with the CSI. The CSI percentage scale is shown in Table I below: the patient satisfaction aspect with important performance analysis.

Table I. Customer Satisfaction Index (CSI) Scale

Index Value	Explanation
81.0% - 100.0%	Very satisfied
66.0% - 80.9%	Satisfied
51.0% - 65.9%	Quite satisfied
35.0% - 50.9%	Less satisfied
0.0% - 34.9%	Not satisfied

This research had been through an ethical study from the Research Ethics Committee of Universitas Padjadjaran, with letter number: 1206/UN6/KEP/EC/2018.

RESULTS

In this study, out of the 94 respondents, the majority of 30.9% were respondents were aged between 51-60 years (middle-aged), while only few with 5.3% were respondents aged <20 years. Female respondents were the majority, with a percentage of 72.3%. Most respondents (91.5%) had previous experience of being treated at a hospital, with 66% of the respondents having an experience of being treated in class 3 care. Moreover, almost all patients were treated with health insurance. The majority of the length of stay in inpatient services was five days on average, amounting to 43.6%.

In the patient admission phase, the lowest percentage was for the indicator of patient orientation (10.64%), where health workers, in this case, medical personnel, did not perform well in providing direction to new patients. The indicator that had the highest percentage was patient orientation, which was implemented by nurses and had a percentage of 97.34% (Figure 1).

In the item 3B of the indicators, the nurse examined vital signs, the percentage was 69.15%; and in indicator six, the patient’s examination should be no more than one hour for patients with stable conditions, the percentage was 62.77%. Meanwhile, at the time of admission, the patient was not thoroughly examined by the health personnel. For some discussion was more for the first 10 minutes, and regarding the physician in charge, the doctor would only check the next day as the physician of the initial assessment. The following is a pie chart for the quality of medical services.

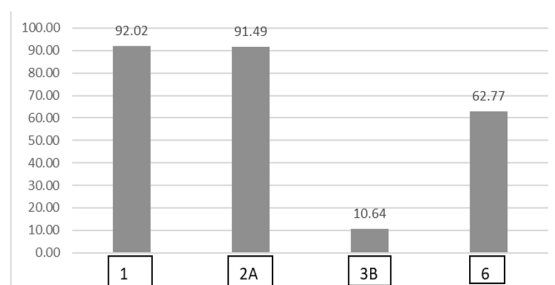


Figure 1: Quality of Service in the Patient Admission

Figure 1 above showed that the quality of service was least in the phase of patient admission was almost not performed entirely, i.e., at the time of the patient orientation, the percentage was 10.64%. Meanwhile, the indicators that were carried out but not yet fully, namely when receiving new patients, treated patients politely and friendly as much as 92.02% (Figure 2).

Figure 2 above showed that the non-performed indicator was the lowest percentage, namely the indicator 4B of the patient’s examination, in the first 10 minutes since the patient entered the ward. Apart from that, additional indicators such as welcoming patients respectfully and

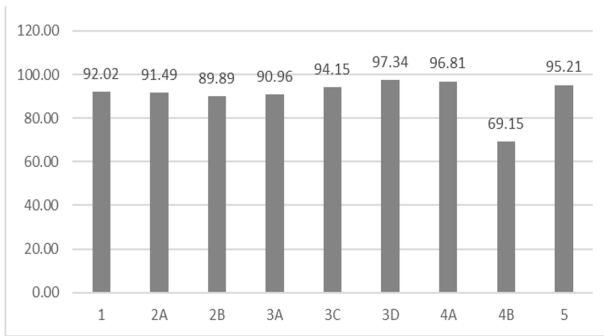


Figure 2. Quality of Service in the Patient Examination

friendly (indicator 1), orienting new patients (indicators 3, 4), and communicating new patients with colleagues (indicators 4, 5) were mainly accomplished (almost 90%).

As many as 29.79% of medical staff did not give enough consideration on the financial capabilities of patients (indicator 17) because some patients have health insurance, so that in providing therapy the medical personnel were more likely to follow the package given according to the guarantee owned by the patient. Regarding communication with patients, the medical personnel rarely provided information about consultation with other counselors, with the percentage of 37.77%.

Interdisciplinary collaboration was performed but not yet fully seen from the aspects of communicating therapy and relationship with other officials, whose percentage was 98.40% (indicator 18), and setting treatments according to medical service standards and communicating it with nurses on duty, whose percentage was 99.47% (indicator 14). Also, the percentage of medical personnel who informed the diagnostic examination that would be performed both orally and in writing, in this case, recorded in the integrated patient development record, was 97.34% (indicator 12).

In the process of patient health services, indicators 19.1-19.8 was for patient management during the treatment period with the criteria for patients with mild dependence (Figure 3). Health workers, were not adequate in serving patients with soft dependency status. During the treatment, most of the patients were accompanied by their families. The next indicators, 20.1-20.6, and 21, were the health service provided by nurses related to the fulfillment of ADL in patients with moderate and severe dependence. Health workers, in this case, nurses, provided sufficiently according to the patient's needs; in doing so, this was not entirely performed by operational standards.

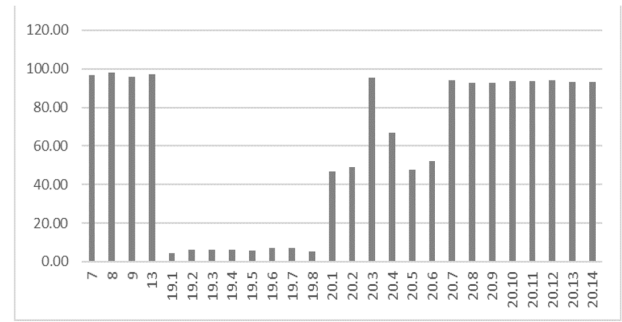


Figure 3. Quality of Services in the Treatment Period

In the patient discharge planning phase, for indicator 21, the role of nurses in providing nursing care for discharged patients was not fully implemented. The highest was 97.9% from the indicators performed at the discharge planning point, where patients were allowed to go home after fulfillment of the discharge indicators.

Table II shows that the average satisfaction index indicates that respondents were very satisfied with the service process flow in the inpatient unit, with an average of 86.97% of the CSI values obtained.

Table II. Patients Satisfaction

	Average Patient Satisfaction (Experience)	Total Patient Satisfaction (Experience)	Average Patient Satisfaction (Expectation)	Total Patient Satisfaction (Expectation)	Satisfaction Index
Average	3.78	181.60	4.38	209.99	86.97
SD	0.25	11.79	0.34	16.42	8.50
Min	3.10	149.00	3.54	170.00	68.98
Max	4.25	204.00	5.00	240.00	111.76

Based on Table III, several indicators were above the suitability index value and below the suitability index value with a gap range of -0.74 - 0.13. For indicators of attention received by patients, ease of obtaining services, ease of getting information, officials' responsiveness to requests for assistance, involvement of patients/families in decision making and care, and client and family

Table III. Satisfaction Aspects Requiring Improvement

No.	Indicator	Reality	Expectation	Suitability Index	GAP
1	Attention received by the patient	3.81	4.46	85.41	-0.65
2	Ease of getting service	3.72	4.47	83.35	-0.74
3	Ease of getting information	3.83	4.45	86.08	-0.62
4	Officer responsiveness to requests for assistance	3.86	4.46	86.68	-0.59

CONTINUE

Table III. Satisfaction Aspects Requiring Improvement

(CONT.)

No.	Indicator	Re-ality	Expec-tation	Suit-ability Index	GAP
5	Continuity of care	3.56	4.00	89.10	-0.44
6	Personal needs (privacy)	4.04	4.34	93.13	-0.30
7	Confidentiality	3.74	3.61	103.53	0.13
8	Patient/family involve-ment in decision making and care	3.72	4.28	86.88	-0.56
9	Cleanliness and comfort of the room	4.01	4.39	91.28	-0.38
10	Client and family prepa-rations for post-care care (discharge process)	3.54	4.48	79.07	-0.94
TOTAL		3.78	4.29	88.45	-0.51

preparation for post-care care, the index value was <88.45 % in this study.

DISCUSSION

Studies stated that a satisfaction survey is one of the tools to improve service quality. Information obtained through satisfaction surveys can identify gaps that arise between expectations and reality experienced by patients so that they can enhance the effectiveness of action plans for the service quality provided(12,13,15,16).

A service is an activity performed by an individual or group of individuals based on material factors using specific systems, procedures, and methods to meet other people’s needs, following their rights for the patient’s expectations to be completed. Interdisciplinary collaboration is a process of cooperation and sharing roles that help to focus on problems (17,18). Existing hospital services are multidisciplinary services, so there can be potential for inter-professional conflicts and delays in examinations and actions (19,20).

The collaboration of health workers in this study were between medical personnel and nurses. The results pointed out that some components were implemented well, and some were not implemented optimally. Indicator three provided information to patients and families about the nurse in charge of the room, the treating doctor, the inpatient room regulations, and the physical environment of the ward. Meanwhile, indicator four was regarding the examination of vital signs within the first 10 minutes. The study of vital signs is a component of the assessment, which is a systematic gathering of data to determine the client’s present and prior health and functional condition and reaction patterns (6,21).

Orientation for new patients aims at educating and informing patients and their families about hospital services (8). During orientation, nurses and patients work

together to analyze the situation, helping patients to move from worried states to more constructive requirements for addressing it. In this study, the initial examination was carried out by the attending physician on duty in the room, who then reported the patient’s condition to the doctor concerned. The duration of arrival was still not appropriate. New patients should arrive no later than 10 minutes from a nursing examination and 1 hour from a medical exam, as stated in the standard operating procedure (SOP) of the inpatient ward.

Furthermore, some items related to the management of patients with a mild dependence on indicator 19 were still lacking, with a percentage below 10%. Besides, in this case, nurses were more likely to leave this to the family to fulfill the patient’s activities of daily living (ADL). Thus, many components were not fulfilled or done. In contrast to patients with moderate levels of dependence, the family assisted in the ADL needs. In this study, this went well with almost 100% quality. As evidenced by the integrated record, the form of interdisciplinary collaboration was the legality of each health worker in providing services according to the role of their functions.

In this study, respondents were satisfied with the services provided based on ten indicators adjusted to the service process flow in the inpatient ward, with a suitability index of 88.45%.

Customer satisfaction is critical in health care. Previous studies (22,23) found that patient satisfaction with nursing care explains patient perceptions of service quality. The five highest satisfaction items were the number of care costs, the needs of the nurses, the patient needs, the extent to which the nurse wanted to respond to requests, the nurse’s care as an individual, and the nurse being registered in the office.

CONCLUSION

Based on the research results, it can be concluded that service management and patient discharge showed an average of 65.5% and patient satisfaction was average with a suitability index of 88.45%. Assessing and understanding the factors that affect patient satisfaction are crucial in developing suitable measures to improve quality of service. Therefore, it is recommended to consider this survey in other hospital departments for improving patients’ care quality. This research shall be very useful to hospital administrators for service quality management.

ACKNOWLEDEMENT

The authors are thankful to the Indonesian Ministry of Research, Technology, and Higher Education for providing the opportunity and financial assistance for this study.

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