



## Patient Satisfaction on Hospital Outpatient Service Quality Based on the Donabedian Model

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### Abstract

**Introduction:** The Community Satisfaction Index at BS Hospital in 2021 and 2022 were low, with an average of 86.92 and 89.73, respectively. This levels was lower than the standard set of at least  $\geq 90\%$  by the Minister of Health Decree of number 129/ Menkes/ SK/ II/ 2008. This study aimed to determine the description of patient satisfaction with the quality of outpatient services.

**Methods:** This study is a quantitative study with a descriptive approach and data collection using interview techniques on 134 subjects who were outpatients and non-patients who were the families or members of hospital employees. This study used Donabedian theory with a structure, process, and outcome approach. Data collection were done through interviews using structured questionnaires. Data analysis were conducted

**Results:** The study results showed that the lowest satisfaction was attributed to the structure (hospital facilities) in parking services (76%), the process of doctor services (87%) and nurse services (90%).

**Conclusion:** Overall, patients' satisfaction to the quality of the structure, process, and the results at the Outpatient Installation were less than the minimum service standards of the Hospital according to the Ministry of Health. Actions should be taken to improve the parking facilities

**Keywords:** Patients' satisfaction, Outpatient Service, Hospital, quality services

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### Introduction

A good hospital management system, at present, makes a high level of competition among the hospitals. Thus, service quality improvements becomes an absolute requirement for fulfilling the expectations of patients and families as the clients. The fulfillment of patient and family expectations will lead to a sense of satisfaction to the service provider agency/ institution. Family and patient satisfaction is the key for the loyalty to hospitals that

can provide the most excellent service.<sup>1</sup> Patient satisfaction is a concept broadly defined as an individual's evaluative judgment of the quality of medical care received from doctors, nurses, and other relevant sources. This broad definition can include aspects of healthcare such as convenience, cost, availability of resources, continuity of care, outcomes of care, clinical environment, and physician competence. If the health services received by the patient do not meet

expectations, it means that the patient is not satisfied, otherwise if the health services received by the patient match or exceed the patient's expectations, the patient will feel a sense of satisfaction with the health services he receives.<sup>2</sup> Better satisfaction will result in increased medical compliance, fewer medical disputes and greater readiness to make subsequent visits to the same healthcare provider.<sup>3</sup> Assessment of the patient satisfaction index is carried out through an assessment of the services that have been carried out to patients where this must be based on service standards set by the Ministry of Health known as the minimum service standards of the hospital. The Community Satisfaction Index (CSI) from the results of the patient satisfaction survey at Bhayangkara Hospital from 2021 to 2022 was still below the minimum service standards that must be met by the hospital. The average CSI score was 86.92 in 2021 and 89.73 in 2022 in the Inpatient, Outpatient and Support Installations. This shows that one of the CSI indicators is still low, patient satisfaction was less than the standard set by the Decree of the Minister of Health Number 129 / Menkes / SK / II / 2008, that should be at least at 90%.

Care services in hospitals must always be evaluated and improved continuously to improve the quality of care services. The Donabedian model is a conceptual model that provides a framework for examining health services and evaluating the quality of health services.<sup>4</sup> The model proposes a comprehensive approach that includes Structure, Process, and Outcome. Structure refers to the health facility's organizational factors (management, administration, and financing), physical attributes (infrastructure and equipment), and staffing (availability and qualifications of health workers); b). process is the engagement between the patient and the care provider. The process component is essentially the various activities that constitute the interaction between the health care provider (e.g. doctor) and the patient receiving health care. Process measures include elements of service delivery that influence the desired outcome. For example, waiting time to see

a health practitioner, staff hygiene standards, and proper record keeping. Process measures include the actions of healthcare providers in diagnosing conditions and recommending treatment and the actions taken by patients in seeking and implementing personalized care. c). outcomes refer to patient satisfaction. Outcomes also impact care such as the health status of patients or populations with various changes in conditions after accessing and using health care facilities. The components of outcomes include morbidity, mortality, and patient satisfaction levels. Decreased hospital admissions, lifestyle and medication adherence, and improved patient experience, among others.<sup>5,6</sup>

BS Hospital is a Police Hospital that serves general patients, patients of Indonesian Police, Police civil servants, and Police families. This hospital is a Type C hospital and has collaborated with National Government Insurance (BPJS Health). Based on data over five years (2018-2022) old patient visits in outpatients decreased from a total of 43275 patients in 2018 to 42665 patients in 2022 and an 8% decrease in old patient visits from a total of 51548 patients (2018) to 47548 (2022). Inpatient visits increased from 5008 patients in 2018 to 5436 patients in 2022. Based on the fact that the number of hospital patients and health services decline, as well as the low CSI, the authors examined the patient satisfaction to the quality of outpatient services at BS Hospital using the Donabedian model approach through the process structure and results approach.

## **Methods**

This descriptive study aimed to find out how satisfied patients with the actions of doctors, nurses and hospital facilities. This study was conducted in May to June 2024 at BS Hospital. The population of this study were outpatients at BS Hospital. The subjects were 134 subjects who fulfilled the inclusion and exclusion criteria. The inclusion criteria were the outpatients who came to the BS Hospital in May and June 2024. The exclusion criteria were the patients who were the hospital employees and/or their families. Data were collected

through the anquette technique using a structured questionnaire. The secondary data were also collected from from the patients' medical records as well as patient visit reports at BS Hospital. Data were analyzed univariately in the percentage of patient satisfaction level in the form of tables and narratives.

## Results

Based on the socio-demographic characteristics of the respondents, this study found that about 61.2% of the respondents were males, aged 51-60 years (26.9%) and about 82.8% were BPJS patients. Most of the respondents'

occupations (53%) were unemployed/retired and had visited the outpatient clinic more than three times (64.2%). These data can be seen in Table 1.

Patient satisfaction with the services provided by doctors and nurses as well as hospital facilities is shown in Table 2. This Table shows that the average of overall patient satisfaction was 87%, with 84% of the average satisfaction from the structure aspect. This level was relatively a low level of satisfaction to the hospital facilities. The process aspect includes medical services with an average satisfaction of 87%. The average nurse satisfaction was 90%.

Table 1. Socio-demographic characteristics of the subjects

Characteristic	Category	N	%
Gender	Women	51	38.1
	Male	83	61.9
Age (year)	<18 years	8	6.0
	18-30 years	24	17.9
	31-40 years	14	10.4
	41-50 years	25	18.4
	51-60 years	36	26.9
	>60 years	27	20.1
Patient type	General patient	11	8.2
	General BPJS patient	111	82.8
	Member of PNPP BPJS patient	12	9.0
	Others	12	9.0
Job	Student	12	9.0
	labourer/ farmer/ trader	12	9.0
	Civil servant/ Army/ Police	8	6.0
	private employee	31	23.1
	Others	71	53.0
Visits to the hospital	First visit	25	18.7
	Second visits	12	9.0
	Thrice visits	11	8.2
	More than 3 visits	86	64.2

Table 2: Patient Satisfaction to the Hospital Facility Services in Outpatient Installations

Variable	Satisfied		Dissatisfied	
	n	%	N	%
<b>STRUCTURE</b>				
<b>Facilities</b>				
Waiting Room Comfortness in Medical Support (MCU / Radiology / Laboratory)	119	89	15	11
Satisfaction of Hospital Toilet Cleanliness	115	86	19	14
Parking Satisfaction	102	76	32	24
Satisfaction of Washbasin Cleanliness	116	86	18	14
Satisfaction of Registration Waiting Room	112	83	22	17
Average facility satisfaction		84		16
<b>PROCESS</b>				
<b>Doctor Service</b>				
Doctor Explains Medical Actions	119	89	15	11
The doctor can provide solutions	121	90	13	10
A doctor can act quickly	120	89	14	11
The doctor gives enough time	117	87	17	13
The doctor arrives on time	118	88	16	12
The doctor looks neat	112	83	22	17
Doctor is friendly	114	85	20	15
Average doctor service satisfaction		87		13
<b>Nurse Service</b>				
Nurse Explains Treatment Actions	120	89	14	11
Nurse Willing to Help	119	89	15	11
The nurse's appearance is neat	121	90	13	10
Friendly Nurse	122	91	12	9
Average nurse service satisfaction		90		
<b>OUTPUT</b>				
Average patient satisfaction		87		

## Discussion

The average of overall satisfaction of 87%, shows that it was below the standard set by the Minister of Health Decree Number 129/ Menkes/ SK/ II/ 2008 concerning minimum service standards that must be met by hospitals, which is at least 90%.<sup>7</sup> The average satisfaction of hospital parking shows the lowest 76% among the satisfaction of facilities and services of doctors and nurses. In line with previous research, it was found that hospital parking facilities were one aspect of the patient satisfaction in addition to tangible aspects such as the hospital atmosphere and canteen.<sup>8</sup> The average nurse service satisfaction of 90% was higher than the doctor services with an average satisfaction of 87%. The quality of nursing services as an indicator of the quality of health services is one of the factors determining the image of healthcare institutions in the eyes of the community. This happens because nursing is a professional group with the largest number, the front and closest to the patient, pain,

and misery experienced by patients and their families. One indicator of the quality of nursing services is whether the nursing services provided are satisfactory or not.<sup>9</sup> Other studies mention important factors that influence patient satisfaction timely visits, compassionate professionals, accurate medical bills, effective communication skills, timeliness in providing health services, and willingness to help others.<sup>10</sup> Patient satisfaction is also influenced by the attitude of healthcare workers towards patients, their ability to provide immediate attention, waiting time, ability to transmit information, and the doctor's tolerance for clearly explaining to patients what is wrong before giving detailed messages regarding their medication and environment.<sup>11</sup> Physician-related determinants of patient satisfaction such as the attitude of doctors, the attitude of nurses, and other medical staff, and the knowledge and skills of doctors are key elements of healthcare organizations. Patients express a high level of satisfaction when they get proper

treatment after diagnosis of the disease.<sup>8</sup> In this study, the lowest dissatisfaction with the quality of the structure is the parking facility. Dissatisfaction with the quality of the structure also existed in the comfort of the patient waiting room in the registration room, the cleanliness of the hospital toilets, the cleanliness of the sink, and the patient waiting room in medical support. Patients are also dissatisfied with process quality, namely the neat and friendly appearance of doctors, doctors giving time to patients, the timeliness of doctors' arrival, and doctors' services in providing sufficient time for patients. The quality of the process in nurse services occupies the highest percentage of satisfaction of 91% indicated in the indicator of nurses being friendly to patients. Some of the above shows that many factors affect patient satisfaction and dissatisfaction at Bhayangkara Tk II Semarang Hospital. Low patient satisfaction with hospital services will have an impact on the hospital's image. A low hospital image can hurt hospital stability. Low hospital service will provide an idea of the quality of the hospital service. Several things can cause low patient satisfaction with hospital services, namely the quality of doctors, treatment facilities and technology, diagnostic facilities, and overall quality of care.<sup>12,13</sup>

Based on the results of this study and relevant to previous research, hospitals need to prevent obstacles in providing quality health services through improving facilities and infrastructure. It is hoped that the hospital will be able to anticipate various technical obstacles in the field faced by patients in obtaining quality services.<sup>16</sup> According to the Minister of Health Regulation No.56 of 2014, it is stated that hospital buildings must provide a proportional parking area.<sup>14</sup> The condition of the parking area at Bhayangkara Tk II Semarang Hospital is very limited along with the increase in visiting patients, it can be said that the parking area is not proportional. Therefore, a good parking arrangement is needed, so that the parking area can be used efficiently and does not cause problems for other activities. Bhayangkara Tk II Semarang Hospital has long regulated the use of parking. The parking lot is not only

for patients but also for hospital employees with PNPP status (Public Servants at the Police) class III and above. Hospital employees with the status of KTT (Non-Permanent Employees) and PNPP class III and below are not allowed to park in the hospital yard to reduce parking density. The need for parking in hospitals based on the results of a study by the Directorate General of Land Transportation in 1998 depends on the number of rooms/beds.<sup>14</sup> The number of patient beds at Bhayangkara Tk II Semarang Hospital to date is 168 TT (beds), causing the need for further parking arrangements. Further research should be conducted as has been done by other researchers in Pringsewu Hospital, Lampung by analyzing parking space requirements, parking accumulation, parking duration, turnover, parking index, parking volume and space utilisation in the parking lot at Bhayangkara Tk II Semarang Hospital and determine whether or not the growth in parking space capacity in the next five years is sufficient and whether modelling is required.<sup>15</sup> With increasingly fierce competition today, where more and more hospitals are being established to provide for public health needs, every hospital must increase patient satisfaction as its main goal. It is hoped that future research can spread appropriate strategies to improve the quality of hospital services to provide high satisfaction to hospital patients.

## **Conclusion**

Overall, patients' satisfaction with the quality of the structure, process, and the results at the Outpatient Installation were less than the minimum service standards of the Hospital according to the Ministry of Health. Actions should be taken to improve the satisfaction. Further research is still needed to find out the more details caused of low satisfaction.

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## Author Contribution

The author conducts research and research, then makes preparation of results reports and analyzes articles. All authors read and approved the final manuscript."

## Ethics

This research was approved by the Research Ethics and Legal Committee of BS Hospital before the research was conducted (No 01/IV/2024/KEPK).

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