

Original Research Article

Analysis of the quality of health services in inpatient installations on patient satisfaction

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Received: 12 June 2023

Revised: 12 July 2023

Accepted: 17 July 2023

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ABSTRACT

Background: The quality of health services is the level of service perfection carried out with applicable service standards and must be assessed from the point of view of service users and organizers. This study aims to analyse the quality of health services at the Royal Prima Medan Hospital Inpatient Installation against the level of satisfaction of BPJS user patients.

Methods: This type of research is descriptive quantitative, and cross-sectional, conducted at Royal Prima Medan Hospital in May 2022. The population is patient data for the last three months totalling 1,653, the sample using SEM (Structural Equation Modelling) obtained 250 respondents, and sampling using an accidental sampling technique. Data analysis is bivariate (Chi-Square test) and multivariate (multiple logistic regression) with a significance level of Sig. 0.05, using SPSS Version 25 software.

Results: Tangible variables (0.000), reliability (0.047), responsiveness (0.000), and assurance (0.001) have a significant relationship with the level of patient satisfaction with a p-value ≤ 0.05 . At the same time, the empathy variable has no relationship with a p-value of $0.133 \geq 0.05$. The results of multivariate analysis of the variables that have the most influence on patient satisfaction are the responsiveness variable with a sig value of 0.000 and an R square value in this study of 0.905.

Conclusions: The variable that has the most influence on BPJS patient satisfaction at the Royal Prima Medan Hospital inpatient installation in 2022 is the responsiveness variable. Patients can feel service satisfaction if hospital employees are quick and responsive to their complaints.

Keywords: Health services, Quality, Patient satisfaction, Responsiveness

INTRODUCTION

The government has passed Law Number 24 of 2011 concerning the Social Security Organizing Agency (BPJS Law), which mandates the establishment of 2 (two) Social Security Organizing Agencies, namely BPJS Health and BPJS Employment. In 2019, JKN membership was mandatory for the entire community, which certainly impacts the need for more health facilities than before to serve JKN participants. So, quality control is prioritized to achieve patient

satisfaction with the facilities and services promised.¹ However, the high public interest in becoming BPJS Health participants is not accompanied by satisfaction with the health services obtained. The JKN development and roadmap states that 75% of patients were satisfied with the services provided by health facilities that collaborated with BPJS in 2014 and increased in 2019; patient satisfaction reached 85%.²

The approach to service quality and customer satisfaction is one crucial strategy that cannot be ignored; if

customers are satisfied with the service received, it will create loyalty so that they become loyal customers to continue using the facility.³ The quality of health services is the degree or level of perfection of health services carried out by applicable service standards. The quality of health services can be seen from three points of view: the service user, the organizer, and the quality funder. Therefore the quality of health services is multi-dimensional.⁴ The five service quality indicators are tangibles, reliability, responsiveness, assurance, and empathy. Andi's research (2021) states that the quality of service of physical evidence (Tangibles) and compassion (heart) has no relationship with patient satisfaction (p-value ≥ 0.05), while the reliability variable (reliability) responsiveness (responsiveness) assurance (assurance) has a relationship with patient satisfaction (p-value ≤ 0.05) at Labuang Baji Makassar Hospital.⁵

Assessment of the quality of health services is increasing; this is in line with the increasing number of educated consumers who are able and want a suitable type and quality of service.⁶ Therefore, hospitals, one of the healthcare facilities that spearhead JKN services, must change the hospital management paradigm towards a consumer point of view to survive and thrive in a rapidly changing and competitive environment. Based on a survey conducted on three patients and three families of inpatients as recipients of BPJS health services at Royal Prima Hospital, patient complaints were obtained, such as officers who were less friendly in providing services and directions they received when explaining the requirements that must be met for administration, thus causing dissatisfaction in patients with the benefits obtained. Based on the results of the background description above, the researcher is interested in researching the quality of health services at the Royal Prima Medan Hospital Inpatient Installation on the level of satisfaction of BPJS user patients.

METHODS

This type of research is descriptive research with a quantitative approach, which was conducted at Royal Prima Medan Hospital in May 2022. The population in this study was the average BPJS patient who came for treatment to the Royal Prima Medan Hospital Inpatient Installation in the last three months, totaling 1,653 patients, the sample in this study were inpatients of BPJS users as many as 250 patients. The sampling technique used was accidental sampling.

This study's dependent variable (Y) is BPJS patient satisfaction at the inpatient installation of Royal Prima Medan Hospital. The independent variable (X) in this study is health services at the inpatient installation, which consists of (X1) tangible (real/actual), (X2) reliability (expertise), (X3) responsiveness (responsiveness), (X4) assurance (guarantee), (X5) empathy (empathy). The data collection method uses a questionnaire. Data analysis used bivariate analysis (Chi-Square test) Sig. 0.05,

variables with a p-value ≤ 0.025 will be included for multivariate analysis (multiple logistic regression) with a level of Sig. 0.05, data processing using SPSS Version 25 statistical software.

RESULTS

Table 1 shows that the majority of respondents were aged > 41 years, as many as 95 people (38%). The gender of the respondents was mainly female, with as many as 135 people (54%). Most respondents last education had a bachelor's degree, as many as 192 people (76.8%). The majority of respondents' jobs work as private employees, as many as 89 people (35.6%).

Table 1: Data on respondent characteristics of inpatient BPJS patient satisfaction at Royal Prima Medan Hospital in 2022.

Category	Sub-category	n	%
Age	<20 years	15	6.0
	21 - 30 years	48	19.2
	31 - 40 years	92	36.8
	> 41 years	95	38.0
	Total	250	100.0
Gender	Male	115	46.0
	Female	135	54.0
	Total	250	100
Last education	Elementary school	2	0.8
	Junior high school	3	1.2
	Senior high school	27	10.8
	Diploma three	26	10,4
	Bachelor	192	76.8
	Total	250	100.0
Jobs	Not employed	9	3.6
	Private employee	89	35.6
	Civil servant	87	34.8
	Self-employed	59	23.6
	Housewife	6	2.4
	Total	250	100.0

Data Source: Primary Data Year 2023

Based on Table 2, it is found that the tangible variable (p-value 0.000), reliability (p-value 0.047), responsiveness (p-value 0.000), and assurance (p-value 0.001) have a significant relationship with the level of patient satisfaction with a p-value ≤ 0.05 . At the same time, the empathy variable has no relationship with a p-value of $0.133 \geq 0.05$. Variables that qualify for multivariate processing are tangible, responsive, and assurance variables with a p-value ≤ 0.025 . In contrast, reliability and empathy variables were not included because they had a p-value of 0.025.

Based on Table 3, of the three independent variables tested, it is found that the variable that has the most influence on BPJS patient satisfaction at Royal Prima Medan Hospital in 2022, namely the responsiveness

variable with a sig value of 0.000. To see how much the independent variable in influencing the dependent variable in this study.

Table 2: Chi-square test bivariate analysis results of tangible, reliability, responsiveness, assurance, and empathy variables on inpatient BPJS patient satisfaction at Royal Prima Medan Hospital in 2022.

Variable	Category	Patient satisfaction				Total		P value
		Not satisfied		Satisfied		N	%	
		N	%	N	%			
Tangible	Not good	3	1.2	0	0	3	1.2	0.000
	Good	2	0.8	245	98	247	98.8	
	Total	5	2	245	98	250	100	
Reliability	Not good	3	1.2	44	17.6	47	18.8	0.047
	Good	2	0.8	201	80.4	203	81.2	
	Total	5	2	245	98	250	100	
Responsiveness	Not good	3	1.2	0	0	3	1.2	0.000
	Good	2	0.8	245	98	247	98.8	
	Total	5	2	245	98	250	100	
Assurance	Not good	4	1.6	27	10.8	31	12.4	0.001
	Good	1	0.4	218	87.2	219	87.6	
	Total	5	2	245	98	250	100	
Empathy	Not good	1	0.4	6	2.4	7	2.8	0.133
	Good	4	1.6	239	95.6	243	97.2	
	Total	5	2	245	98	250	100	

Data Source: SPSS Data Processing Results Year 2023

Table 3: Results of multivariate analysis of multiple logistic regression tests of tangible, responsiveness, and assurance variables on BPJS inpatient patient satisfaction at Royal Prima Medan Hospital in 2022.

Model	Unstandardized coefficients		Standardized coefficients beta	t	Sig.
	B	Std. Error			
(Constant)	-1.004	0.062		-16.267	0.000
Tangible	0.733	0.027	0.57	27.235	0.170
Responsiveness	0.733	0.027	0.57	27.235	0.000
Assurance	0.037	0.009	0.086	4.272	0.028

Data Source: SPSS Data Processing Results Year 2023

Table 4: Results of R square (R²) independent variables on dependent variables model summary.

Model	R	R square	Adjusted R square	Std. the error in the estimate
1	0.951 ^a	0.905	0.904	0.043

a. Predictors: (Constant), Assurance, Responsiveness, Tangible; Data Source: SPSS Data Processing Results Year 2023

Based on Table 4, it can be seen that the R square value in this study is 0.905 or 90.5%, which means that in this study, the independent variable can influence the dependent variable by 90.5%, the remaining 9.5% may be affected by other variables that are not included in this research variable.

DISCUSSION

The effect of tangible on BPJS patient satisfaction at the Royal Prima Medan Hospital Inpatient Installation

Based on the statistical test, the tangible service quality variable at RSU Royal Prima Medan has a significant

relationship with a p-value of 0.000 ≤ 0.05 on BPJS patient satisfaction in the inpatient installation. This study's results align with Mohammadi's research (2019), which states that the tangibles variable (p-value 0.000) has a relationship and is the most influential factor in patient satisfaction at Imam Khomeini Hospital, Jiroft, Iran.⁷

Tangible or physical evidence is an assessment based on the form of actual physical actualization that can be seen or used by the service provider by its use and utilization that can be felt and accepted by people who want service so that they are satisfied with the service they think, which at the same time shows work performance for the

service provided. Indicators of service quality physical evidence (tangible) can be reflected in the ability to demonstrate benefit in using work equipment efficiently and effectively, the ability to demonstrate mastery of technology in various data access and work automation inventories by the dynamics and development of the world of work it faces and the ability to demonstrate personal integrity by appearances that show proficiency, authority, and dedication to work.⁸

The effect of reliability (expertise) on BPJS patient satisfaction at the inpatient installation of Royal Prima Medan Hospital.

Based on statistical tests, the reliability variable of service quality at RSU Royal Prima Medan has a significant relationship with a p-value of $0.047 \leq 0.05$ on BPJS patient satisfaction in the inpatient installation. This study's results align with research by Supartiningsih (2017), showing that the reliability aspect at the Sarila Husada Sragen Hospital has a positive and significant effect on patient satisfaction. This can mean that the hospital can provide immediate and satisfactory service per what is promised.^{9,10}

The reliability dimension relates to the ability to provide accurate services from the first time without making any mistakes in the delivery of services by the agreed time.¹¹ Hospital is reliable if the patient admission process is carried out quickly and the administrative procedures are straightforward, fast, and precise.¹² In this study, the patient's need is the need to recover from an illness which can be achieved through proper diagnosis and proper treatment as well. In terms of officers providing services according to procedures, patients are satisfied because the officers who work already have long experience working in hospitals. Hence, the officers fully understand patient service procedures. And for the indicator that officers are ready to help patients and are not picky about these patients because most of the officers in the hospital have attended practical therapeutic communication training so that in carrying out their duties to serve patients, officers can communicate well and help patients get the desired service.

Meanwhile, the dissatisfaction factor in this dimension lies in the indicator of the readiness of officers to serve patients. Sometimes, respondents feel that officers are not fast in providing services, and officers and doctors arrive late, so sometimes the patient's waiting time becomes longer. Therefore, it is hoped that the hospital will make a recapitulation of the attendance of employees and doctors so that it can be followed up by giving rewards or punishments in the form of reprimands for employees who often arrive late so that the timely presence of health workers can improve aspects of officer reliability and increase patient satisfaction.¹³

The effect of responsiveness on BPJS patient satisfaction at the inpatient installation of Royal Prima Medan Hospital

Based on the statistical test, the service quality responsiveness variable at RSU Royal Prima Medan has a significant relationship with a p-value of $0.000 \leq 0.05$ on BPJS patient satisfaction in the inpatient installation. The results of this study are in line with Setianingsih's research (2021), which states that the responsiveness variable has an influence on patient satisfaction at "S" Hospital, with a t-count value of $2.290 \geq t\text{-table } 1.980$ and a p-value of $0.024 \leq 0.05$.¹⁴ Supported by the results of Nur's research (2020), from the effects of multivariate analysis, the variable that has the most influence on patient satisfaction at Izza Karawang Hospital is the responsiveness variable with a p (Sig) value of $0.013 \leq 0.05$ with an EXP (B) value or also known as the Odds Ratio (OR) value of 8.658.¹⁵

The responsiveness dimension is related to officers' willingness and ability to help customers, respond to their requests, and inform them when services will be provided. Hospitals are said to have responsiveness if officers are always ready at any time to help patients provide clear information to patients, a service system that is not complicated and quickly responds to patient complaints.¹⁶ Responsiveness is a policy to help and provide appropriate service to customers with precise information delivery. Therefore, the attitude and behavior of officers will significantly affect patient satisfaction. The indicator that reflects this dimension is to explain the forms of service he faces. This wise explanation leads individuals who receive benefits to be able to understand and agree to all conditions of service obtained and provide a detailed description, namely a form of proof that is substantive to the service problem at hand, which is clear, transparent, brief and can be accounted for and directs each record of service from the individual being served to prepare, carry out and follow the various service provisions that must be fulfilled.¹⁷

The limitation of this study was that the sample size is only 250 patients, of course, less to describe the actual situation. Data collection using questionnaires sometimes does not show the actual opinions of respondents.

CONCLUSION

Based on the results of research and discussion, this study concludes that concrete variables, reliability variables, responsiveness variables, and assurance variables influence patient satisfaction. In contrast, empathy variables have no relationship to patient satisfaction. Furthermore, the results of multivariate analysis obtained that the variable that has the most influence on BPJS patient satisfaction in the inpatient installation of Royal Prima Medan Hospital in 2022 is the responsiveness variable.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the UNPRI Ethics Commission with No: 018/KEPK/UNPRI/X/2022

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Cite this article as: Hendrik, Simorangkir GF, Girsang E, Ginting JB. Analysis of the quality of health services in inpatient installations on patient satisfaction. *Int J Res Med Sci* 2023;11:2780-4.