THE EFFECT OF SERVICE QUALITY ON PATIENT SATISFACTION OF HOSPITAL SERVICE QUALITY (CASE STUDIES: MEASURING CONSUMER SATISFACTION)

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ABSTRACT

Background: Patient satisfaction assessment isan important tool for monitoring the quality of health services because it reflects the quality of health services received. The gap between patient expectations and the response to health services performance during or after using health services can lead to dissatisfaction. Knowing the level of patients satisfaction can improve thequality of service. This research was conducted to analyze the effect of service quality by using Service Quality model which consist ofof tangible dimensions, reliability, responsiveness, assurance, and empathy, towards the satisfaction of hospitalized patients and impact on patient satisfaction on the quality of hospital service.

Methods : The type of this research was quantitative method supported by the study of literature and design for cross sectional, with the number of sample research was 92 people of the patient population. Data collection in this study was carried out through a questionnaire method of attributes that were used as indicators. The data analysis technique in this study uses multiple linear regression analysis operated through the SPSS program.

Result : The research showed that effect of tangible influences the satisfaction of inpatients, reliability affects the satisfaction of inpatients, responsiveness influences the satisfaction of inpatients, the assurance affects the satisfaction of inpatients and empathy affects the satisfaction of inpatients and thatimpact the quality of hospital services.

Keywords : service quality, patient satisfaction, the quality of health service

1. Introduction

Currently, customers are smarter in choosing the various alternatives offered by the healthcare service industry. In an environment that is increasingly full of competition, hospitals need to be more aware of the importance of providing the best and quality services especially when dealing with someone's life and death. Patient satisfaction is closely related to expectations and expectations, it is the most widely used measure in the quality of health services to meet the values and expectations of a health service provider system (Oyvind, 2012). If these expectations are not in accordance with what is felt, it will cause a gap. There are five types of gaps in service quality that allow service delivery failure, including: 1) Gap between customer expectations and management perceptions of customer expectations (knowledge gap), 2) Gap between management perceptions of customer expectations and service quality specifications (standards gap), 3) Gap between quality specifications and service quality and service delivery (delivery gap), 4) Gap between services delivered and services communicated to customers (communications gap), and 5) Gap between perceptions of services provided / received with expectations of services (service gap) (Tjiptono, 2008).

Research to study service quality which is popular as a reference is the Service Quality model which consists of dimensions 1) physical evidence (tangible), namely the appearance of physical facilities, equipment / equipment, human resources and communication media, 2) reliability, namely the ability to provide appropriate services, 3) responsiveness (responsiveness), namely the willingness to help customers and provide services quickly or responsively, 4) assurance, which includes knowledge and courtesy of employees and their ability to generate trust and assurance or assurance, and 5) attention (empathy), namely the need for caring, giving personal attention to customers for patient satisfaction (Parasuraman A, 2004). About 30% of hospitals in Indonesia have not implemented service standards. The Director General of Medical Services said that there are still around 20% to 30% of the more than 1,000 hospitals that have not implemented the minimum service standards. Most of them are regional and district hospitals. Minimum standards are not only based on the services provided to the community, but also include the availability of facilities and infrastructure. Including, the building and equipment owned (Alwy, 2018). Based on the background described above, the researcher is interested in seeing how the effect of service quality which consists of five dimensions, namely tangible, reliability, responsiveness, assurance, and empathy on satisfaction. patients with quality hospital services.

2. Literature Review

2.1 Patient Satisfaction

The quality of health services in hospitals is a unique phenomenon, because its dimensions and indicators can differ among people involved in health services. To overcome the differences, a guideline is used, namely the basic essence of health service delivery, namely meeting the needs and demands of health service users. One of the service quality approaches that is very popular and until now has been widely used as a reference in marketing research is the Service Quality model proposed by Parasuraman, Zeithaml, and Berry (Kaihatu, 2008). Parasuraman identifies five groups of characteristics that consumers use in evaluating service quality. These characteristics are used as variables for service quality in this study including:

- *tangible* namely the appearance of officers in providing services. In the hospital, services are in the form of friendliness, greeting, politeness, and comfort in communicating
- *reliability* namely the ability of officers to provide services to consumers appropriately. In hospital services is the patient's assessment of the ability of health workers.
- *responsiveness* namely the ability of officers to provide services to consumers responsively. In hospital service is the patient's assessment of the ability of officers to respond to complaints.
- *assurance* namely the ability of officers to provide services to consumers so that they are trusted. In hospital services, it is clear that the health worker provides information about the disease and its treatment to patients.
- *empathy* namely the ability of officers to build relationships, care, and understand consumer needs. In hospital services, health workers care about providing information, patient participation in making treatment decisions, and hearing patient complaints.

2.2 Patient Satisfaction

Customer satisfaction as a comparison between expected service (expectation) and performance (performance) (Parasuraman A, 2004). Meanwhile, customer satisfaction is an after-purchase evaluation in which the chosen alternative gives at least the same outcome or exceeds customer expectations, while dissatisfaction arises if the results obtained do not meet expectations (Tjiptono, 2008). A patient is someone who receives medical services. Often times, patients suffer from illness or injury and need a doctor's help to recover. A person's interest in reusing hospital services will be greatly influenced by their past experience when using the same service in receiving services (Supranto, 2001). Customer satisfaction will be fulfilled if what is felt is more than what is expected. If expectations are not in accordance with what is felt, it will create a gap. There are five kinds of service quality gaps that allow service delivery failure (Zeithmal, 2000) :

- Gap between customer expectations and management's perception of customer expectations.
- Gap between management's perception of customer expectations and service quality specifications.
- The gap between the quality specifications and the quality of the services actually provided.
- The gap between the services provided and the services communicated with customers.
- Gap between customer expectations and perceptions formed by what he feels or receives from the service.

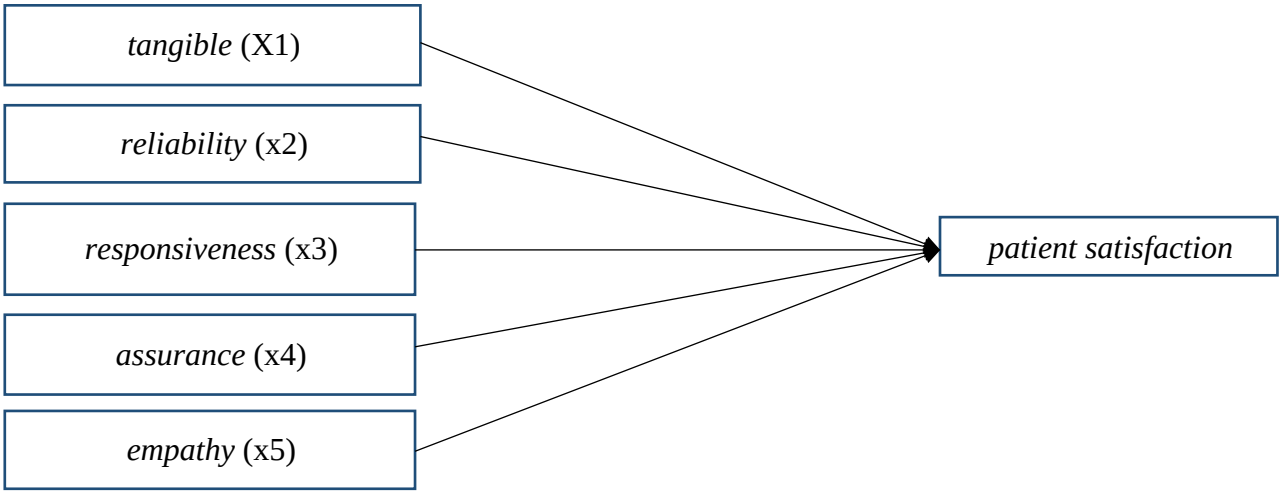
2.3 Hospital Service Quality

Quality of health services is the degree of perfection of health services in accordance with professional standards and service standards by using the potential resources available at the hospital or health center in a reasonable, efficient and effective manner and provided safely and satisfactorily in accordance with norms, ethics, law, and socio-culture. by taking into account the limitations and capabilities of the government, as well as the consumer community (Bustami, 2011). In Undang Undang No. 4 Tahun 2009 Regarding Hospitals, patient satisfaction is a challenge in providing health services today. In general, complete health services are health services that include promotive (health improvement), preventive (prevention), curative (treatment), and rehabilitative (recovery). Patients will feel satisfied if the health service performance they get is in accordance with their expectations. So it can be concluded that patient satisfaction is a level of patient feelings that arise due to the results of comparing the performance of the health services they receive with what they expect (Pohan, 2006)

Based on the explanation above, the hypothesis is as follows:

- There is an influence between tangibles on patient satisfaction.
- There is an influence between reliability on patient satisfaction.
- There is an effect between responsiveness on patient satisfaction.
- There is an effect between assurance on patient satisfaction
- There is an influence between empathy on patient satisfaction

Figure 1.shows the research model with 5 research hypotheses as follows:



3. Research Methodology

This study was intended to determine the effect of service quality on patient satisfaction and its impact on the quality of hospital services. Based on the problems studied, the method used in this study is a quantitative method supported by a literature study and a cross sectional design. The study population was all patients treated in the inpatient room. Quantitative method is by distributing questionnaires containing information on each variable that you want to study and then a statistical calculation analysis is carried out (Susyanto, 2019).

The instrument used in this study was a questionnaire from five dimensions of quality (ServQual) to determine the independent variables, namely tangible (X1), reability (X2), responsiveness (X3), assurance (X4), empathy (X5) on the dependent variable patient satisfaction. (Y). Each of the five dimensions of service quality is represented by several questions. To determine the score, a Likert scale is used, in which the importance (expectations and performance) is given a weight of one to five. Test instruments using validity and reliability tests. The formulation of the problem is answered using Importance-Performance Analysis or Analysis of the Level of Interest and Performance / Customer Satisfaction (J, 1997). All positive statements in the form of the Likert Scale include: very satisfied (score 5), satisfied (score 4), quite satisfied (score 3), dissatisfied (score 2), and very dissatisfied (score 1).

4. Result

4.1 Reabilitas and Validitas Analysis

4.1.1 Reabilitas Test

Reliability test is used to show the extent to which a measurement result is relatively consistent when measuring against the same aspect. The principle of measuring reliability uses one shot and

measures the correlation between the answers to the questions. A product is said to be reliable if the Cronbach Alpha α> 0.70. Table 1 shows that this model has met the reliability test.

Table 1. Reliability Test Results

Reliability Statistics

Cronbach's Alpha	N of Items
.920	8

4.1.2 Validitas Test

Validity test with construction validity technique using factor analysis test by correlating the total factor score with the total score. The validity test is declared valid if r> 0.312. From the analysis of the validity of the pearson correlation, it was found that all questions had valid results, namely r> 0.312.

4.2 Ordinary Least Square

4.2.1 Normalitas Test

The results of the analysis of the normality test using the Kolmogorov-Smirnov show that the Asymp. Sig. (2-tailed) or the p value of Standardized Residual (0.165)> 0.05 or p> 0.05, then the standardized residual value curve is said to be spread normally, assuming normality is met.

One-Sample Kolmogorov-Smirnov Test

		Standardized Residual
N		92
Normal Parameters[a,b]	Mean	0E-7
	Std. Deviation	.97213937
Most Extreme Differences	Absolute	.116
	Positive	.116
	Negative	-.090
Kolmogorov-Smirnov Z		1.117
Asymp. Sig. (2-tailed)		.165

a. Test distribution is Normal.

b. Calculated from data.

4.2.2 Multikolinearitas Test

Multicolonierity can be seen from (1) the tolerance value and its counterpart (2) Variance Inflation Factor (VIF). Based on the questions, it can be concluded that the regression model does not occur multicolinearity. This value is in accordance with the requirements for symptoms of multicoleniarity (tolerance> 0.10 or VIF <10). Or in other words, the independent research variable is free from symptoms of multicoleniarity, because the VIF value <10

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.001	1.492		.001	.999		
	Tangibility	.161	.057	.187	2.826	.006	.584	1.713

	Reliability	.183	.083	.163	2.217	.029	.477	2.098
	Responsiveness	.204	.081	.218	2.518	.014	.342	2.922
	Assurance	.217	.072	.258	3.028	.003	.354	2.821
	Empaty	.277	.127	.215	2.178	.032	.264	3.794

a. Dependent Variable: Kepuasan

4.2.3 Heteroskedastisitas Test

To detect heteroscedaticity symptoms, namely by calculating the regression efficiency of each independent variable on the absolute value of the residue (e), if the probability value is greater than the alpha value (0.05). The results of the heteroscedasticity test show that the regression model does not contain heteroscedasticity because the significance value of the five independent variables is obtained by a sig (p)> 0.05.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.023	1.032		.022	.983
	Tangibility	.012	.039	.043	.309	.758
	Reliability	.103	.057	.275	1.798	.076
	Responsiveness	-.003	.056	-.010	-.055	.957
	Assurance	-.018	.049	-.065	-.369	.713
	Empaty	-.069	.088	-.162	-.789	.432

a. Dependent Variable: ABRESID

4.3 Regression Analysis

4.3.1 Determinant coefficient analysis

From the calculation, the coefficient of determination (adjusted) is obtained at 0.776. This means that 77.6% Y will be explained by variations in the variables X1 X2 and X3 to X5 while 22.4% will be explained by factors other than the five independent variables.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.883[a]	.779	.766	1.700

a. Predictors: (Constant), Empaty, Tangibility , Reliability, Assurance , Responsiveness

4.3.2 Simultaneous Test (F)

The variables X1 X2 X3 to X6 simultaneously affect Y, simultaneously showing the results of the calculated F value of 60.682 with a significant F of 0.000 or the p value less than 0.05 (5%), thus stating that simultaneously all independent variables, namely X1 X2 X3 –X5 affect Y.

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	876.472	5	175.294	60.682	.000b

	Residual	248.430	86	2.889		
	Total	1124.902	91			

a. Dependent Variable: Satisfaction
b. Predictors: (Constant), Empaty, Tangibility , Reliability, Assurance , Responsiveness

1.3.3 Parsial Test (T)

To test the partial significance level, the t test was used with a confidence level of 95%. Variable X1 with a value of t count 2.826 and p value is 0.006 because the value of p <0.05, then variable X1 has a significant effect on Y. So that all variables X have a significant effect on Y.

Coefficientsa

Model		T	Sig.
1	(Constant)	.001	.999
	Tangibility	2.826	.006
	Reliability	2.217	.029
	Responsiveness	2.518	.014
	Assurance	3.028	.003
	Empaty	2.178	.032

a. Dependent Variable: Satisfaction

4.3.4 Regression equation

$$Y = 0{,}001 + 0.161\ X1 + 0.183\ X2 + 0.204\ X3 + 0.217X4 + 0.277\ X5$$

- The constant (a) is: 0.001
- b1 = 0.161 means that if X1 increases by 1 unit, the Y value will increase by 0.161 units, assuming the other X variable remains
- b2 = 0183 means that if X2 increases by 1 unit, the Y value will increase by 0.183 units, assuming the other X variable remains
- b3 = 0.204 means that if X3 increases by 1 unit, the Y value will increase by 0.204 units, assuming the other X variable remains
- b4 = 0.217 means that if X4 increases by 1 unit, the Y value will increase by 0.217 units, assuming the other X variable remains
- b5 = 0.277 means that if X5 increases by 1 unit, the Y value will increase by 0.277 units, assuming the other X variable remains

5. Discussion

5.1.1 Tangible influence on inpatient satisfaction.

Based on the results of the regression analysis, the results show that the tangible dimension has an effect on patient satisfaction. These results indicate that hypothesis one (H1) is accepted, which means that the tangible dimension has a positive effect on patient satisfaction. The results of this study are in line with research conducted by Santoso (2012) which states that physical

evidence (tangible) has a positive and significant effect on patient satisfaction. The better the customer's perception of tangible evidence, the higher the patient's satisfaction. And if the patient's perception of physical evidence (tangible) is poor, then satisfaction will be lower. In order for a hospital to be operational, it does not have enough human resources, but it must also be supported by hospital supporting facilities, both medical and non-medical, as well as hospital supporting facilities, including: laboratories, pharmaceutical installations, radiology, patient food services , and others. Hospital supporting facilities also determine the quality of hospital services so that they affect patient satisfaction, especially inpatient care (Nova, 2010).

5.1.2 Effect of reliability on satisfaction of inpatients

Based on the results of the regression analysis, the results show that the dimension of reliability has an effect on patient satisfaction. These results indicate that the second hypothesis (H2) is accepted, which means that the dimension of reliability has a positive effect on patient satisfaction. The results of this study are in accordance with research conducted by Hardiyati (2010) which states that the variable reliability (reliability) has a positive effect on customer satisfaction. In providing services to patients, servants must really realize that a person's healing is not only determined by the drugs they are given, but also influenced by the way the health workers display services such as attitudes, skills and knowledge (Gonzales, 2007). If hospital staff have general skills about the hospital, master their work, and more importantly, officers who have good communication and interpersonal skills, the customer will feel satisfied with the services provided.

5.1.3 Effect of responsiveness on inpatient satisfaction

Based on the results of the regression analysis, the results show that the responsiveness dimension has an effect on patient satisfaction. These results indicate that the third hypothesis (H3) is accepted, which means that the responsiveness dimension has a positive effect on patient satisfaction. The results of this study are in line with research conducted by Sharmila and Krishnan (2013) who examined the quality of service at private hospitals in Chenai India with 385 respondents finding that responsiveness was significantly related to patient satisfaction. Responsiveness has a positive and significant effect on patient satisfaction. The better the customer's perception of responsiveness (responsiveness), the higher the patient's satisfaction.

5.1.4 Effect of assurance on inpatient satisfaction

Based on the results of the regression analysis, the results show that the assurance dimension affects patient satisfaction. These results indicate that the fourth hypothesis (H4) is accepted, which means that the assurance dimension has a positive effect on patient satisfaction. These results are consistent with research conducted by Mustofa (2008) on 30 respondents regarding the relationship between patient perceptions of the dimensions of nursing service quality and found that there was a significant relationship between patient perceptions of the assurance dimension and patient satisfaction. Arsanam (2014) found that security is the most dominant dimension.

5.1.4 The effect of empathy on inpatient satisfaction

Based on the results of the regression analysis, it is found that the emphaty dimension affects patient satisfaction. These results indicate that hypothesis five (H5) is accepted, which means that the dimension of empathy has a positive effect on patient satisfaction. The results of this study are in line with research conducted by Pratiwi and Susanto (2016) which states that empathy (X5) has a positive effect on patient satisfaction. Based on the results of research conducted by Nurdiana (2017), the dimensions of empathy are often considered less important by nurses. However, for patients from certain circles (middle to upper class) this element is quite important. They feel that their ego, status, and prestige are maintained or even continuously improved in front of many people.

6. Conclusion

Based on the results of the research that has been done, it can be concluded that the dimensions of physical evidence (tangible) affect the satisfaction of inpatients, reliability has an effect on inpatient satisfaction, responsiveness affects inpatient satisfaction, assurance has an effect on inpatient satisfaction. inpatient satisfaction, attention (empathy) affects the satisfaction of inpatients.

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