

The Effect of Service Quality, Facilities and Image / Brand image on The Satisfaction of Inpatients of Royal Prima Hospital Medan

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Abstract— The hospital seeks to build a marketing strategy that raises the image in the community to increase satisfaction through improving the quality of services, facilities, image, price, and other factors. If customer expectations are greater than the quality of service received, consumers are not satisfied. Similarly, if expectations are equal to or less than the quality of service received, then the patient is not satisfied. The purpose of this study is to see the effect of service quality, facilities, and image/brand image on the satisfaction of inpatients of Royal Prima Hospital Medan. The research approach used in this study is a quantitative research method. The population of the entire inpatient. data from the last three months obtained patient data of 15,691 patients with an average per month of 6,653 patients. The minimum number of samples using SEM, then the number of samples taken in this study was determined to be 100 people. The sample determination technique used in this study is based on the nonprobability sampling method. The validity test compares the r-count value with the r-table for the degree of freedom = n- k, in alpha 0.05. Reliability test with Cronbach Alpha statistical test > 0.70. Data analysis using multiple regression analysis models, coefficient of determination (R²), F test (simultaneous testing), and t-test (partial testing). The results of the Service Quality variable, obtained t count (6.026) > t-table (1.66) and probability value (0.006) < 0.05, Health Facility Variable, obtained t-count (5,442) > t-table (1.66) and probability value (0.001) < 0.05, variable Image / Brand image, obtained t-count (5,109) > t-table (1.66) and probability value (0.004) < 0.05, thus partially variables of service quality, facilities, and image have an influence on Patient Satisfaction. The calculated F value is 60.554 with a probability of 0.004, since the probability is smaller than 0.05, then the regression model can be used to predict Patient Satisfaction. This can also be seen from the Fhitung (60,554) > Ftabel (2.70), then H4 is accepted which means that the variables of Service Quality, Health Facilities, and Image / Brand image affect the Satisfaction of Inpatients of Royal Prima Hospital. In conclusion, based on partial analysis of t-tests and simultaneous F tests, variables of service quality, facilities, and image have a significant influence on the level of satisfaction of inpatients at Royal Prima Hospital Medan.

Keywords— quality of service, facilities, image, satisfaction, patient

I. INTRODUCTION

Population growth and increased concern for health are driving the demand for community services (1). Therefore, the field of health care is now changing itself towards customer orientation (2). The hospital seeks to build a marketing strategy that raises the image in the community to increase satisfaction, patient loyalty, and performance. The 1945 Constitution explains that the state is obliged to serve every citizen and resident to meet their basic needs to improve the welfare of society. All public interests must be implemented by the government as a state organizer, namely in various service sectors, especially regarding the fulfillment of civil rights and basic needs of the community (3). In other words, all interests that concern the lives of many people must or need a ministry. Furthermore, Law No.25 of 2009 concerning Public Services explains that the operator is obliged to provide quality services by the principle of providing public services.

Pelayanan kesehatan yang bermutu adalah pelayanan kesehatan yang dapat memuaskan setiap pemakai jasa pelayanan kesehatan in accordance with the average level of satisfaction of the population and whose implementation is in accordance with established professional standards and codes of ethics (4). People today have begun to realize the importance of health to their lives, knowing how expensive health care costs are which are often difficult to reach (5). With the increasing public awareness of the importance of health, services are needed. The increasing public awareness of the importance of health is a reason that the need for health infrastructure is also increasing, besides that people, will be better at choosing the best health service provider in accordance with what they want and need.

Therefore, currently, health service facilities such as hospitals, Puskesmas, and clinics must be able to meet the satisfaction of patients with the service strategies offered, this can make considerations for patients, the better the quality of services provided, it will make a good assessment as well (6). The healthcare industry is not only about curing diseases but also focusing on disease prevention and prevention measures (4). Customer satisfaction is a very meaningful element for a service user to be able to successfully create and retain customers (7). The satisfaction felt by patients depends on their perception of expectations and the quality of services provided by the hospital (7). If customer expectations are greater than the quality of service received, consumers are not satisfied. Similarly, if expectations are equal to or less than the quality of service received, then the patient is not satisfied (1); (3). Service quality is a measurement of the level of service provided or delivered by customer expectations (8). The purpose of this study is to see the effect of service quality, facilities, and image/brand image on the satisfaction of inpatients of Royal Prima Hospital Medan

II. LITERATURE REVIEW

The quality of service can be defined as: The extent of discrepancy between customers expectations or desire and their perceptions (7). From this statement, it is stated that the quality of service received by consumers is expressed the magnitude of the difference between the expectations or desires of consumers and the level of their perception. Image is what consumers think about a product. This includes perceptions and attitudes that are based on reactions and stimuli related to the company received through the five senses. Facilities are physical resources that must exist before something is offered to consumers" (3). Facilities are something important in the service business, therefore existing facilities, namely the condition of the facilities, interior and exterior design and cleanliness must be considered, especially those that are closely related to what consumers feel directly. Customer satisfaction is determined by customer perception of product or service performance in meeting customer expectations (4). Customers feel satisfied if their expectations are met or will be very satisfied if customer expectations are exceeded. When the individual receives service beyond or in accordance with his expectations, then the individual will feel satisfied. But when individuals receive less than their expectations or expectations, then individuals will feel less satisfied or dissatisfied. Satisfaction is the outcome of the health service process provided by health facilities (5).

III. RESEARCH METHODS

The research approach used in this study is a quantitative research method. The population that will be used in this study is all inpatients of Royal Prima Medan. From the data of the last three months, patient data was obtained as many as 15,691 patients with an average per month of 6,653 patients. The minimum number of samples that must be taken in this study and the suggestion from Hair et al. which states that the number of samples in the SEM analysis is 100-200, then the number of samples taken in this study is determined to be 100 people. The sample determination technique used in this study is based on the non probability sampling method. The validity test compares the r-count value with the r-table for the degree of freedom = n- k, in alpha 0.05. Reliability test with Cronbach Alpha statistical test > 0.70.

TABLE I. VARIABLE INSTRUMENT RELIABILITY TEST RESULTS

Variable	Cronbach's Alpha	No of Items	Information
Quality of service (X1)	0.892	10	Reliable
Health facilities (X2)	0.802	10	Reliable
Image/Brand image (X3)	0.811	8	Reliable
Patient Satisfaction (Y)	0.822	10	Reliable

Source: Research Results, 2022 (Data processed)

Based on Table 1, the reliability value of each instrument is obtained from the variables Health facilities, Patient Satisfaction and Quality of service greater than 0.70 and it can be concluded that all variables are reliable. Data analysis using multiple regression analysis models ($Y = a+b_1X_1+b_2X_2+b_3X_3+ e$), coefficient of determination (R²), F test (simultaneous testing), and t-test (partial testing).

IV. RESULTS AND DISCUSSION

In the study in the inpatient room of Royal Prima Hospital Medan, the independent variables observed were Quality of service (X1), Health facilities (X2), Image / Brand image (X3), and the dependent variable was Patient Satisfaction (Y). From Table 2. can be seen the results of descriptive statistic analysis for the variables Quality of service (X1), Health facilities (X2), Image / Brand image (X3) and Patient Satisfaction (Y). In Table IV.1, it is known that the Quality of service (X) variable with a sample of 100 respondents has an average of 35.01 minimum value of 18.00 and a maximum of 42.00 with a standard deviation of 8.22. Variable Health facilities (Z) with a sample of 100 respondents had an average of 30.12, a minimum value of 16.00 and a maximum of 37.00 with a standard deviation of 9.78. The Variable Image / Brand image (X3) with a sample of 100 respondents had an average of 29.88, a minimum value of 18.00 and a maximum of 40.00 with a standard deviation of 8.21. Patient Satisfaction Variable (Y) with a sample of 100 respondents had an average of 32.56, a minimum value of 17.00 and a maximum of 43.00 with a standard deviation of 8.78.

TABLE II. DESCRIPTIVE STATISTICAL ANALYSIS

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Kualitas Pelayanan	100	18.00	42.00	35.01	8.22
Fasilitas kesehatan	100	16.00	37.00	30.12	9.78
Citra/ Brand image	100	18.00	40.00	29.88	8.21

Source: Research Results, 2022 (Data processed)

Hypothesis testing used in the study is to use multiple linear regression analysis. The regression model used is as follows:

TABLE III. MULTIPLE LINEAR ANALYSIS

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	6.109	2.886		2.022	.026
Kualitas Pelayanan	.673	.205	.523	5.089	.002
Fasilitas kesehatan	.611	.198	.387	3.662	.023
Citra/ Brand image	.522	.201	.478	4.110	.012

Source: Research Results, 2022 (Data processed)

The meaning of the multiple linear regression equation above is:

1. A constant of 6,109 states that if the Quality of service of health facilities and image / Brand image does not exist or is constant, then the Satisfaction of inpatients of Royal Prima Hospital is 6,109 units.
2. The regression coefficient of Quality of service is 0.673 and has a positive value, this states that every increase in quality of service 1 unit will increase the satisfaction of inpatients at Royal Prima Hospital
3. The regression coefficient of health facilities is 0.611 and has a positive value, this states that every increase in health facilities 1 unit will increase the satisfaction of inpatients at Royal Prima Hospital.

4. Image regression coefficient / Brand image of 0.522 and positive value, this states that every increase in Image / Brand image 1 unit will increase inpatient satisfaction at Royal Prima Hospital.

TABLE IV. COEFFICIENT OF DETERMINATION TEST

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.837a	.783	.783	4.55782

Source: Research Results, 2022 (Data processed)

The results of the Coefficient of Determination Test obtained an Adjusted R square value of 0.783 this means that 78.3% of the variation in the dependent variables of Inpatient Satisfaction at Royal Prima Hospital which can be explained by variations in independent variables Quality of Service, Health Facilities and Image / Brand image the remaining 21.7% (100%-78.3%) explained by other variables that were not studied in this study, such as price, environment, distance, and others. The F test is used to show whether all independent variables entered in the model have a joint influence on the dependent variables. The f value of the table is obtained from:

$df1 = k - 1 = 4 - 1 = 3$, where k is: the sum of dependent and independent variables.

$df2 = n - k = 100 - 3 = 97$, where n is: the number of samples can be seen from row 97, column 3. F of the table corresponding to table F is 2.70. From table 5. it can be seen that the calculated F value is 60.554 with a probability of 0.004, since the probability is smaller than 0.05, then the regression model can be used to predict Patient Satisfaction. This can also be seen from the calculation $(60,554) > F_{table} (2.70)$, then H_4 is accepted which means that the variables of Service Quality, Health facilities and Image / Brand image affect the Satisfaction of Inpatients of Royal Prima Hospital.

TABLE V. SIMULTANEOUS TEST (F TEST)

ANOVAa

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2443.141	2	1208.514	60,554	.004b
Residual	2256.126	100	.644		
Total	2078.544	100			
	2445.233	100			

Source: Research Results, 2022 (Data processed)

TABLE VI. PARTIAL TEST (T TEST)

Coefficientsa

Model	Unstandardized		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	5.267	2.756		2.282	.021
Kualitas Pelayanan	.644	.067	.509	5.266	.002
Fasilitas kesehatan	.451	.053	.412	4.302	.010
Citra/ Brand image	.409	.050	.404	4.785	.008

Source: Research Results, 2022 (Data processed)

The value of t is determined to be significant 5% and the degree is free: $df = n - k$ ($df =$ number of samples and $k =$ number of overall variables) i.e. $df = 100 - 3 = 97$. The t-count tests performed are: Two-way test then the t-table used is t 5% or t 0.05 (97) =

1.66. From the results of the t-test above, it can be concluded that for the Service Quality variable, obtained t count (6.026) > t-table (1.66) and probability value (0.006) < 0.05 then H1 received means that there is an influence of Quality of service on Patient Satisfaction. Health facility variable, obtained t-count (5,442) > t-table (1.66) and probability value (0.001) < 0.05, then H2 received means there is an influence of health facilities on Patient Satisfaction. For the Citra / Brand image variable, a t-count (5,109) > a t-table (1.66) and a probability value (0.004) < 0.05 are obtained, then H3 is accepted means that there is an influence of Health facilities on Patient Satisfaction.

Effect of Service Quality on Patient Satisfaction

The results of research conducted by researchers prove that there is an influence of Quality of service on the Satisfaction of Inpatients at Royal Prima Hospital. In line with the first hypothesis (H1). This can be seen from the results of the partial test (t-test) where the t-count value > the t-table (6.026 > 1.66) and the significance value of 0.006 < 0.05. So the results of the study rejected H0 and accepted Ha. Quality of service, is one part of the marketing strategy. The quality of service has become a stage of factors that affect the success of the organization. Quality development is strongly driven by conditions of rivalry or competition between companies. The results of this study are in line with Hasanah's research (2020), where from the results of partial testing (t test) shows that quality of service (X1) has a significant effect on patient satisfaction in inpatients of Sarana Medika Global Clinic, from the table of t-test results with calculations, namely a t-count value of 3,833 and a t-table of 1,984 with a significant level value of 0.000 < 0.05. Meaning that t-count 3,833 > t-table 1,984 can be concluded that Ho was rejected and Ha was accepted (2).

Supported by Harfika's research (2017), from the results of the statistical test, it was found that the Quality of service (X1) variable obtained a t-count value of 6,421 and a t-table of 1,985. The calculation results show that the t-count value > the t-table at a significant 0.000 or probability below 5%. So a decision can be made that the quality of service variable partially affects patient satisfaction at the Teuku General Hospital in Southwest Aceh Regency. Thus the alternative hypothesis (Ha) is accepted and rejects the null hypothesis (H0) (3). If the services received or felt (percieved service) are as expected, then the quality of services is perceived to be good and satisfactory. This means that a good Image Quality of service is not based on the point of view or perception of the service provider, but based on the customer's point of view or perception, the customer's perception of the quality of the service is the investigator's assessment of the excellence of the service (3). According to the author's assumption, with a good quality of service, it will certainly improve the service felt by patients. So that it will make patients feel comfortable, and continue to use the services of Royal Prima Hospital Medan.

The Effect of Health Facilities on Patient Satisfaction

The results of research conducted by researchers prove that there is an influence of Health facilities on the Satisfaction of Inpatients at Royal Prima Hospital. In line with the first hypothesis (H2). This can be seen from the results of the partial test (t-test) where the t-count value > the t-table (4.302 > 1.66) and the significance value of 0.001 < 0.05 so that the research results rejected H0 accepting Ha.

The results of this study are in line with Hasanah's research (2020), which states that from the results of statistical tests, partial testing (t test) shows that the facility (X2) has a significant effect on the satisfaction of inpatients of the Sarana Medika Global Clinic. This can be seen from the table of t-test results with calculations, namely a t-count value of 5.201 and a t-table of 1.984 with a significant level value of 0.000 < 0.05. Meaning that the t-count of 5.201 > t-table 1.984 can be concluded that Ho was rejected and Ha was accepted (2). Supported by Harfika's research (2017), which states the Facility Variable (X2) with a t-count value of 5,472 and a t-table of 1,985. Indicates that the t-count value > the t-table at a significant 0.000 or probability above 5%. So a decision can be made that the facility variable partially affects patient satisfaction at the Teuku Peukan General Hospital, Southwest Aceh Regency. Thus the alternative hypothesis (Ha) is accepted and rejects the null hypothesis (H0) (3).

The results of this study are in line with supriyanto's research (2012), which states that in partial or t-test, facility variables have a significant influence on the satisfaction of outpatients at Kariadi Hospital Semarang because it has a significance level smaller than 0.05, namely 0.000 (0.000 < 0.05) (4). According to the author's assumption, with the existence of complete facilities in a hospital, it will certainly support the level of trust and the level of recovery of patients who use the services of the hospital. Because, sometimes with incomplete or inadequate facilities, it decreases patient satisfaction in the use of the hospital's services, thus having an impact on decreasing the level of trust and intention of patients to return to the hospital.

The Effect of Image / Brand image on Patient Satisfaction

The results of the research conducted by researchers prove that there is an influence of health facilities on the satisfaction of inpatients at Royal Prima Hospital. In line with the first hypothesis (H2). This can be seen from the results of the partial test (t-test) where the t-count value $>$ the t-table ($5,109 > 1.66$) and the significance value of $0.004 < 0.05$ so that the research results rejected H_0 to accept H_a . Image is a valuable intangible asset of the company. A positive image allows a company to gain reputation value and competitive advantage. A good image will increase customer satisfaction, quality of service, loyalty, and repurchase intentions. The image of the hospital has an impact on the attitude and behavior of patients towards the hospital. Thus, understanding the relationship between the brand image of the hospital and its effect on the patient's intentions is indispensable (9).

The results of this study are in line with Setyawati's research (2018), which states that the Institutional Image variable obtained a calculated t value ($8,244 >$ critical t ($2,366$) so the null hypothesis was rejected, the conclusion is that the Institutional Image has a positive effect on Patient Satisfaction (4). Supported by Nasrullah's research (2013), which states that Image Poliklinik Executive Regional Hospital dr. Deobandi affects Patient Satisfaction. This means that the better or stronger Image of the Executive Polyclinic of the Regional Hospital dr. Soebandi, the higher the patient satisfaction. imagery relates to patient satisfaction. Based on the experience that consumers (patients) already have, they will provide an assessment and evaluation of the entire performance of hospital services. Based on the comparison of the quality of expectations with the quality of service performance, the patient will give positive emotions or negative emotions and even neutral emotions, depending on whether the patient's expectations are met. Creating a strong image of the product will provide consumer satisfaction (9).

V. CONCLUSION

Based on the results of the research and discussion that has been described in the previous chapter, the following conclusions can be drawn:

1. Partial testing of results shows that the Quality of service partially has a positive and significant effect on the Satisfaction of Inpatients at Royal Prima Hospital.
2. Partial testing of the results shows that health facilities partially have a positive and significant effect on the satisfaction of inpatients at Royal Prima Hospital.
3. Partial testing of results shows that the image / Brand image partially has a positive and significant effect on inpatient satisfaction at Royal Prima Hospital.
4. Simultaneous testing of results shows that the Quality of Service, Health Facilities and Image / Brand image simultaneously have a positive and significant effect on patient satisfaction of medical personnel in the IGD Room of Royal Prima Hospital Medan.

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