THE EFFECT OF SERVICE QUALITY AND HOSPITAL FACILITIES ON PATIENT LOYALTY WITH PATIENT SATISFACTION AS A MEDIATION VARIABLE (STUDY AT PKU MUHAMMADIYAH HOSPITAL BLORA)

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Abstract

The purpose of this research is to analyze the effect of service quality and facilities on customer loyalty through patient satisfaction as a mediating variable. The population used in this study were inpatients of PKU Muhammadiyah Blora Hospital. Where the sample was 256 respondents, with a research instrument in the form of a questionnaire. Data analysis using SPSS. The results of this study indicate that the quality of service and facilities has a direct effect on patient satisfaction. And patient satisfaction is able to mediate the indirect relationship between service quality and facilities to customer loyalty. To increase patient loyalty, PKU Muhammadiyah Blora Hospital needs to provide effective communication training for doctors, nurses, and support staff so that they can serve patients with empathy and professionalism. Improve the comfort of the waiting room, inpatient room, and other supporting facilities (such as free Wi-Fi, children's playroom, or lactation room). Develop hospital applications to facilitate access to information such as doctor's schedules, online registration, or control schedule reminders.

Keywords: *customer satisfaction, service quality, customer loyalty, facilities*

INTRODUCTION

Hospital management is very important because hospitals are vital institutions in maintaining public health. As a health service center, hospitals must be able to provide effective and efficient medical services. Good management is needed to ensure that hospitals can optimally meet patient needs, both in terms of care, diagnosis, and treatment. This is even more crucial considering the increasing number of patients and the increasing complexity of health cases. Hospital management must also be responsive to technological developments and regulatory changes. In this digital era, hospitals need to adapt to information technology to improve the quality of service, such as through the implementation of electronic medical records, hospital management information systems (SIMRS), and telemedicine. In addition, hospitals must also always follow changing health regulations to comply with applicable service standards and maintain hospital accreditation.

In the context of healthcare, service quality and hospital facilities are two crucial factors that can affect patient loyalty. Patient loyalty is not only important for the sustainability of the hospital, but also contributes to improving the overall quality of healthcare services3. This study aims to analyze the effect of service quality and hospital facilities on patient loyalty, with patient satisfaction as an intervening variable. Hospital service quality includes various dimensions, such as reliability, responsiveness, assurance, empathy, and tangibles. Research shows that good service quality has a positive effect on patient satisfaction. When patients are satisfied with the services they receive, the likelihood of them returning and recommending the hospital to others also increases, thereby increasing loyalty.

Adequate facilities in hospitals also play an important role in creating a positive experience for patients. Good facilities can increase patient comfort and trust in the services provided, which in turn can increase patient satisfaction. Previous studies have shown that good facilities contribute to patient satisfaction and their loyalty to health care providers. Patient satisfaction serves as an intervening variable that links the quality of hospital services and facilities with patient loyalty. When patients are satisfied, they tend to have a

THE EFFECT OF SERVICE QUALITY AND HOSPITAL FACILITIES ON PATIENT LOYALTY WITH PATIENT SATISFACTION AS A MEDIATION VARIABLE (STUDY AT PKU MUHAMMADIYAH HOSPITAL BLORA)

Mazirul Agung Santara and Wani Devita Gunardi

higher commitment to the hospital. This shows that although the quality of services and facilities are very important, patient satisfaction is the main bridge that connects the two factors with loyalty.

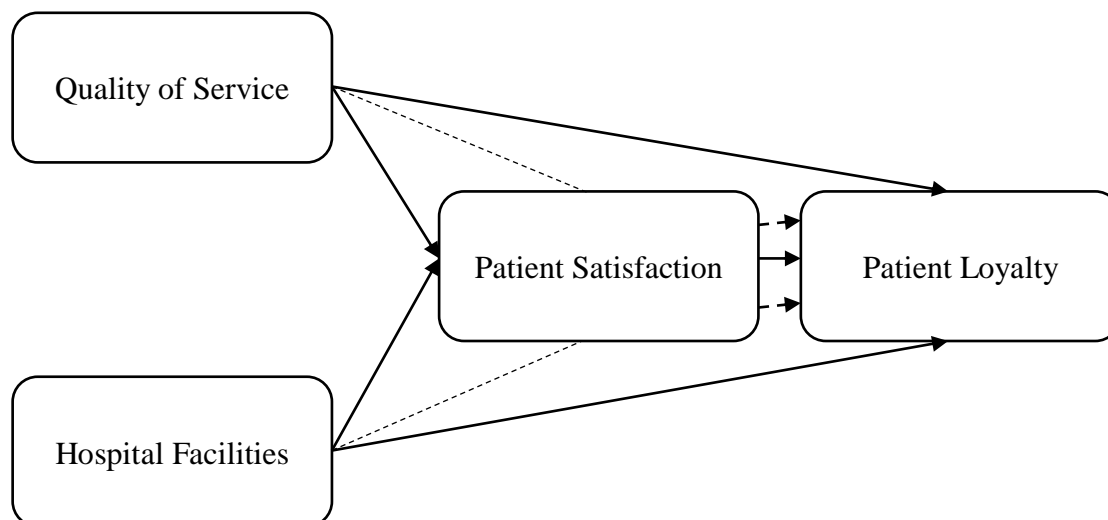**Conceptual Framework and Hypothesis**
Conceptual Framework

Figure 1. Conceptual Framework

Hypothesis
- Hypothesis 1: Service quality has a positive and significant effect on patient satisfaction.
- Hypothesis 2: Facilities have a positive and significant effect on patient satisfaction.
- Hypothesis 3: Service quality has a positive and significant effect on patient loyalty.
- Hypothesis 4: Facilities have a positive and significant effect on patient loyalty.
- Hypothesis 5: Patient satisfaction has a positive and significant effect on patient loyalty.
- Hypothesis 6: Service quality has a positive and significant effect on patient loyalty through patient satisfaction.
- Hypothesis 7: Facilities have a positive and significant effect on patient loyalty through patient satisfaction.

LITERATURE REVIEW
Patient Loyalty

Patient loyalty is the level of loyalty or attachment of patients to a hospital or healthcare provider after they receive medical services. This loyalty is formed through positive experiences experienced by patients, such as good quality of service, comfort of facilities, and satisfaction with the results of treatment. Loyal patients tend to return to use the same healthcare service when they need further treatment and recommend the service to others.

Patient Satisfaction

Customer satisfaction, which in this study is referred to as patient satisfaction, is a patient's response that feels happy because their expectations of hospital services have been met. This includes the service of officers, treatment procedures, service facilities, including food. This can be felt by patients through their experience interacting with medical personnel and employees during treatment, especially the friendliness and quick response of officers to patient needs.

THE EFFECT OF SERVICE QUALITY AND HOSPITAL FACILITIES ON PATIENT LOYALTY WITH PATIENT SATISFACTION AS A MEDIATION VARIABLE (STUDY AT PKU MUHAMMADIYAH HOSPITAL BLORA)

Mazirul Agung Santara and Wani Devita Gunardi

Quality of Service

Service quality is an expression of giving sincere and individual attention to customers, especially in understanding what they expect. Knowledge and understanding of customer needs specifically, is needed to meet customer desires and needs according to the company's capabilities for customer comfort.

Facility

Facilities are various devices that are intentionally provided by service companies so that they can be utilized by consumers which results in increased satisfaction. Facilities provided especially in the health sector certainly have a strategic role, because they can help people in maintaining health and providing a decent and better quality of life, so that the more complete the health facilities available indicate the increasing need of the community for these health facilities.

RESEARCH METHODS

The research method used is quantitative using a research instrument in the form of a questionnaire. The research was conducted using primary data collection techniques in the form of a questionnaire given directly to the research subjects using a Likert measurement scale.

Population and Sample

In this study, the population was all inpatients at PKU Muhammadiyah Blora Hospital. According to the data, the average number of inpatients in 2024 in one month was 713 patients. The sample is part of the number and characteristics of the population that are ready to be studied. The sample calculation formula uses the Slovin formula approach, as follows:

$$n = \frac{N}{1 + Ne^2}$$

Information

n = sample
N = population
e = sampling allowance degree (5%)

$$n = \frac{713}{1 + 713(0,05)e^2} = 256,47$$

The minimum number of samples obtained based on the Slovin formula was 256 inpatients at PKU Muhammadiyah Blora Hospital.

Data analysis

In this study, the dependent variable is patient loyalty, with the intervening variable being patient satisfaction, while the independent variables are the quality of hospital services and facilities. The multiple regression equation used is:

Z = a + b1X1 + b2X2 + e. . . . . (Regression Equation I)
Y = a + b3X1 + b4X2 + b5Z + e. . . . . (Regression Equation II)12

Information:

a : Constant Value
b1 – b5 : Correlation coefficient
X1 : Quality of service
X2 : Hospital facilities
Y : Patient Loyalty
Z : Patient satisfaction
e : Standard error

Intervening Test (Sobel test)

The intervening variable is a variable between which functions as a mediator.the influence between independent variables and dependent variables. To test the influence of mediating variables, the path analysis

THE EFFECT OF SERVICE QUALITY AND HOSPITAL FACILITIES ON PATIENT LOYALTY WITH PATIENT SATISFACTION AS A MEDIATION VARIABLE (STUDY AT PKU MUHAMMADIYAH HOSPITAL BLORA)

Mazirul Agung Santara and Wani Devita Gunardi

method is used. Path analysis is an extension of regression analysis used to estimate the causal influence between variables (causal models) that have been previously determined based on theory.

RESULTS AND DISCUSSION

Results

Respondent Description Based on Gender

In the research on the loyalty of PKU Muhammadiyah Blora Hospital users, 256 respondents were involved, varying by gender, as in the table below:

Table 1. Sample Description Based on Gender

No	Gender	Frequency	Percentage
1	Man	122	47.66
2	Woman	134	52.34
Amount		256	100

The table above explains the distribution of customer frequency based on gender. The sample of female gender is 134 people (52.34%), while the sample of male gender is 122 people (47.66%). This condition can be interpreted that in health services at PKU Muhammadiyah Blora Hospital, it is not segmented into a particular gender.

Respondent Description Based on Age

In this study, it was found that the youngest age encountered and assessed was able to express opinions regarding their decisions in choosing health services at PKU Muhammadiyah Blora Hospital. Based on the calculation results above, the age of respondents can be grouped as in table 2 below:

Table 2. Sample Description Based on Age

No	Age	Frequency	Percentage
1	≤ 25 years	22	8.59
2	26 – 35 years	42	16.41
3	36 - 45 years	51	19.92
4	46 - 55 years	85	33.20
5	> 55 years	56	21.88
Amount		256	100

The table above explains the distribution of customer frequency based on age. Respondents aged between 46 - 55 years were 85 people or (33.20%). Thus, the majority of respondents were aged between 46 - 55 years.

Respondent Description Based on Education

In the research on patient loyalty at PKU Muhammadiyah Blora Hospital, 256 respondents were involved, varying based on education, as in the table below:

Table 3. Description of Respondents Based on Education

No	Education	Frequency	Percentage
1	SD	2	0.78
2	Junior High School	11	4.30
3	High School	76	29.69
4	Diploma	69	26.95
5	Bachelor degree)	84	32.81
6	Master (S2)	14	5.47
Amount		256	100

Source: data processing results attachment

THE EFFECT OF SERVICE QUALITY AND HOSPITAL FACILITIES ON PATIENT LOYALTY WITH PATIENT SATISFACTION AS A MEDIATION VARIABLE (STUDY AT PKU MUHAMMADIYAH HOSPITAL BLORA)

Mazirul Agung Santara and Wani Devita Gunardi

The table above explains the frequency distribution of respondents based on education. The sample that has a Bachelor's degree (S1) is 84 people (32.81%). This condition can be interpreted that in this study the frequency of samples based on education is mostly educated at the Bachelor's degree (S1).

Respondent Description Based on Occupation

In the research on the loyalty of PKU Muhammadiyah Blora Hospital users, 256 respondents were involved, varying based on their occupation, as in the table below:

Table 4. Respondent Description Based on Occupation

No	Work	Frequency	Percentage
1	ASN	56	21.88
2	Indonesian National Armed Forces/Indonesian National Police	9	3.52
3	Private	43	16.80
4	Self Employed/Business	75	29.30
5	Farmer	56	21.88
6	Other Informal Sectors	17	6.64
Amount		256	100

The table above explains the frequency distribution of respondents based on occupation. The sample that works in the self-employed sector consists of 75 respondents (29.30%).

Descriptive Analysis of Research Variables

This analysis aims to review the answers of respondents to each statement that is the research instrument. In this case, the description of respondents' answers to the variables studied is presented, so that the intensity of the condition of each variable will be known.

Description of Patient Loyalty Variables

Patient loyalty is the level of loyalty or attachment of patients to a hospital or health care provider after they receive medical services. The results of the responses regarding patient loyalty are as follows:

Table 5. Respondents' Responses Regarding Patient Loyalty

No	Statement	Frequency					Average	Caption
		STS	TS	CS	S	SS		
1	Intention to use the service again	0	9	152	78	17	3.40	currently
2	Recommend the hospital to others	0	9	100	106	41	3.70	tall
3	Commitment to the hospital	0	53	37	122	44	3.61	tall
Patient Loyalty							3.57	tall

Respondents' responses as stated in table 4.6 show that on average respondents gave a "high" assessment on the patient loyalty variable. The highest score on the indicator recommending the hospital to others. While the lowest score on the indicator of intention to use the service again.

Description of Patient Satisfaction Variables

Patient satisfaction is the response of patients who feel happy because their expectations of hospital services have been met. The results of the satisfaction response are as follows:

THE EFFECT OF SERVICE QUALITY AND HOSPITAL FACILITIES ON PATIENT LOYALTY WITH PATIENT SATISFACTION AS A MEDIATION VARIABLE (STUDY AT PKU MUHAMMADIYAH HOSPITAL BLORA)

Mazirul Agung Santara and Wani Devita Gunardi

Table 6. Respondents' Responses Regarding Patient Satisfaction

No	Statement	Frequency					Average	Caption
		STS	TS	CS	S	SS		
1	Experience,	0	0	160	79	17	3.44	tall
2	Services according to patient expectations (Expectation)	0	0	114	95	47	3.74	tall
3	Overall satisfaction (Overall Satisfaction)	0	49	38	113	56	3.69	tall
	Satisfaction						3.62	tall

Respondents' responses as stated in table 6 show that on average respondents gave a "high" assessment on the patient satisfaction variable. The highest score on the indicator is sure that the service is in accordance with patient expectations. While the lowest score is on the experience indicator.

Description of Service Quality Variables

Service Quality is a behavior in the form of giving sincere and individual attention to customers, especially in understanding what they expect. The results of the response regarding the quality of service are as follows:

Table 7. Respondents' Responses Regarding Service Quality

No	Statement	Frequency					Average	Caption
		STS	TS	CS	S	SS		
1	Physical Evidence (Tangibles),	0	16	150	75	15	3.35	currently
2	Reliability	0	16	101	103	36	3.62	tall
3	Responsiveness	0	45	61	100	50	3.61	tall
4	Assurance	0	53	116	69	18	3.20	currently
5	Empathy	0	8	95	103	50	3.76	tall
	Quality of Service						3.51	Good

Respondents' responses as stated in table 7 show that the average respondent gave a "high" rating on the consumer satisfaction variable. The highest score on the indicator tends to continue buying. And the lowest score on the indicator based on experience, the feeling of pleasure in using Brizzi products. This is evidenced by the fact that there are still complaints from customers, because often in the use of electronic transactions it depends on the quality of the internet network used.

Description of Hospital Facility Variables

Facilities are various devices that are intentionally provided by service companies so that they can be utilized by consumers. The results of the response to these facilities are as follows;

Table 8. Respondents' Responses Regarding Facilities

No	Statement	Frequency					Average	Caption
		STS	TS	CS	S	SS		
1	Completeness, cleanliness and tidiness of health facilities	0	23	149	72	12	3.29	currently
2	Condition and function of health facilities	0	23	93	110	30	3.57	tall
3	Ease of using health facilities	0	46	39	120	51	3.69	tall
4	Health facility safety	0	21	93	112	38	3.75	tall
	Promotion						3.57	tall

THE EFFECT OF SERVICE QUALITY AND HOSPITAL FACILITIES ON PATIENT LOYALTY WITH PATIENT SATISFACTION AS A MEDIATION VARIABLE (STUDY AT PKU MUHAMMADIYAH HOSPITAL BLORA)

Mazirul Agung Santara and Wani Devita Gunardi

Respondents' responses as stated in table 8 show that the average respondent gave a "high" assessment on the facility variable. The highest score on the indicator of Health facility security. The lowest score on the indicator of completeness, cleanliness, and tidiness in health facilities.

Analysis of Research Results
Validity Test

In this study, the validity of the indicators was analyzed using df (degree of freedom) with an alpha of 5%, resulting in a table r value (two-tailed test) of 0.1809.If r count is greater than r table and r value is positive, then the statement item is said to be valid. The results of the validity test on the indicators of this study are in the following table:

Table 9. Validity Test Results

No.	Variables/Indicators	r count	r table	Caption
1	Customer Loyalty:			
	Intention to use the service again	0.867	0.1809	valid
	Recommend the hospital to others	0.956	0.1809	valid
	Commitment to the hospital	0.926	0.1809	valid
2	Patient Satisfaction			
	Experience,	0.859	0.1809	valid
	Services according to patient expectations (Expectation)	0.946	0.1809	valid
	Overall satisfaction (Overall Satisfaction)	0.930	0.1809	valid
3	Quality of Service			
	Physical Evidence (Tangibles),	0.890	0.1809	valid
	Reliability	0.938	0.1809	valid
	Responsiveness	0.940	0.1809	valid
	Assurance	0.943	0.1809	valid
	Empathy	0.957	0.1809	valid
4	Facility			
	Completeness, cleanliness and tidiness of health facilities	0.877	0.1809	valid
	Condition and function of health facilities	0.964	0.1809	valid
	Ease of using health facilities	0.876	0.1809	valid
	Health facility safety	0.957	0.1809	valid

Source: attachment (validity test results),

Table 9 shows that all indicators used to measure the variables in this study have a correlation value greater than r table = 0.1809 (r count > r table).

1. Reliability Test

A questionnaire is said to be reliable if a person's answers to the questions are consistent or stable over time12. Reliability testing is the level of stability of a measuring instrument in measuring a symptom or event. According to Nunnaly in Ghozali (2018), a construct is said to be reliable if it provides a Cronbach Alpha value> 0.7. The results of the reliability test in this study can be seen in the following table.

Table 10. Reliability Test Results

Variables	Cronbach's Alpha	Cut off value	Information
Patient Loyalty (Y)	0.891	0.70	Reliable
Patient Satisfaction (Z)	0.879	0.70	Reliable
Service Quality (X2)	0.960	0.70	Reliable
Hospital Facilities (X3)	0.931	0.70	Reliable

THE EFFECT OF SERVICE QUALITY AND HOSPITAL FACILITIES ON PATIENT LOYALTY WITH PATIENT SATISFACTION AS A MEDIATION VARIABLE (STUDY AT PKU MUHAMMADIYAH HOSPITAL BLORA)

Mazirul Agung Santara and Wani Devita Gunardi

Based on the test on the reliability table above, it is known that all variables have a Cronbach alpha greater than 0.7. So it can be concluded that all variables in this study are reliable.

Classical Assumption Test

The purpose of this classical assumption test is to provide certainty that the regression equation obtained has accuracy in estimation, is unbiased and consistent. In this study, two regression analyses were carried out in accordance with the provisions in the previous chapter.

a. **Normality Test**

The normality test is used to test whether the data in a regression model is normally distributed or not. A good regression model is data that is normally distributed or close to normal. Normality testing is carried out using the Kolmogorov-Smirnov (KS) non-parametric statistical test. If the residual data significance value is greater than 0.05, it indicates that the data is normally distributed. The results of the normality test can be seen in the table below:

Table 11. Data Normality Test Results
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		256
Normal Parametersa,,b	Mean	-.0939578
	Std. Deviation	1.61351328
Most Extreme Differences	Absolute	.074
	Positive	.074
	Negative	-.044
Kolmogorov-Smirnov Z		1.184
Asymp. Sig. (2-tailed)		.121

a. Test distribution is Normal.

b. Calculated from data.

Source: Processed primary data

Based on the results of the non-parametric Kolmogorov-Smirnov (KS) statistical test in table 11 above, the Kolmogorov-Smirnov residual regression value is 1.103 and the significance is 0.175. So it can be concluded that the residual data is normally distributed, this can be seen from the significance value which is greater than 0.05, so this model is suitable for use in research. Thus, this is one of the provisions of the multiple linear regression test through passing the normality test.

b. **Heteroscedasticity Test**

This test aims to determine whether there is inequality in the residual variance in the regression model between one and another. A good regression model that meets the requirements for testing is data that does not contain heteroscedasticity. The results of the heteroscedasticity test in this study can be seen in the following figure:

THE EFFECT OF SERVICE QUALITY AND HOSPITAL FACILITIES ON PATIENT LOYALTY WITH PATIENT SATISFACTION AS A MEDIATION VARIABLE (STUDY AT PKU MUHAMMADIYAH HOSPITAL BLORA)
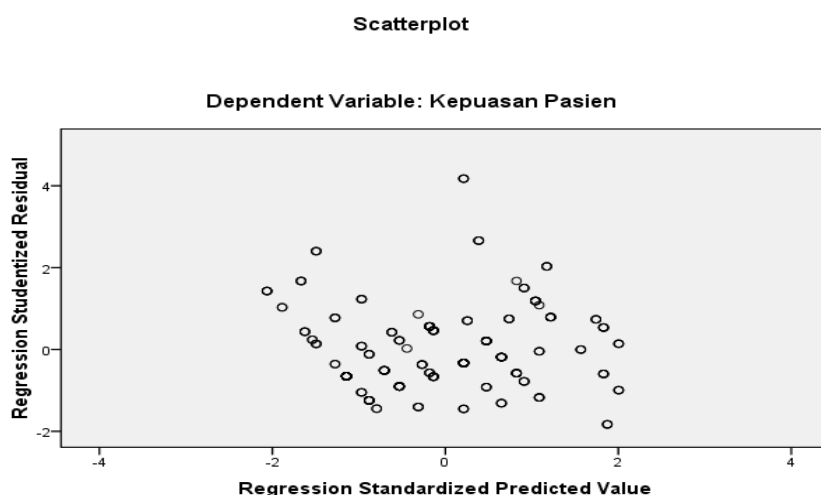
Mazirul Agung Santara and Wani Devita Gunardi

Figure 2. Heteroscedasticity Test

Based on the table above, it is known that the distribution of data is not grouped in one area, which means that the data is distributed heterogeneously or spread out. So it can be interpreted that the regression model in this study meets the requirements of the heteroscedasticity test.

c. Multicollinearity Test

The multicollinearity test aims to determine whether in the multiple regression model there is a correlation between independent variables or not. Symptoms of multicollinearity can be identified by looking at the Variance Inflation Factor (VIF) value. The results of the Multicollinearity Test can be seen in table 12 below.

Table 12. Multicollinearity Test with VIF and Tolerance
Coefficientsa

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1(Constant)	1,318	.272		4,844	.000		
Quality of Service	.263	.029	.463	9.045	.000	.248	4,040
Facility	.350	.037	.483	9.435	.000	.248	4,040

a. Dependent Variable: Patient Satisfaction
Source: Processed primary data

The test results in table 12 show that the independent variables have a tolerance value > 0.10 and a VIF value < 10. Therefore, it can be concluded that there is no multicollinearity among the independent variables and this regression model is suitable for use in research.

Multiple Linear Regression Analysis

In the study, two regression analyses were conducted. This is because it is used as the Sobel test data in the next stage. From the analysis using SPSS. From the data processing results, the following results were obtained:

THE EFFECT OF SERVICE QUALITY AND HOSPITAL FACILITIES ON PATIENT LOYALTY WITH PATIENT SATISFACTION AS A MEDIATION VARIABLE (STUDY AT PKU MUHAMMADIYAH HOSPITAL BLORA)

Mazirul Agung Santara and Wani Devita Gunardi

a. Multiple Linear Regression Analysis I

Table 13. Multiple Regression Analysis I
Coefficientsa

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1(Constant)	1,318	.272		4,844	.000		
Quality of Service	.263	.029	.463	9.045	.000	.248	4,040
Facility	.350	.037	.483	9.435	.000	.248	4,040

a. Dependent Variable: Patient Satisfaction

Source: Processed primary data

From table 13, it can be seen that all independent variables studied have a significant effect on the dependent variable. Of the three independent variables entered into the regression model, all have a significant effect on patient satisfaction.

Thus, a mathematical equation can be made as follows.

Y = 0.463service quality + 0.483facilities

a. b1 service quality regression coefficient of 0.463 has a positive value, meaning that if service quality increases, patient satisfaction will increase.
b. b2 the facility regression coefficient of 0.483 has a positive value, meaning that if the facilities increase, patient satisfaction will increase.

1. t-test

The t-test is a test to determine the significance of the influence of the independent variable partially or individually in explaining the dependent variable (satisfaction).

The results of the t-test analysis are as follows:

1. The calculated t value on the service quality variable (X1). Because 9.045 > 1.995 and 0.000 < 0.05, H0 is rejected and Ha is accepted.
   Hypothesis 1: Service quality has a positive effect on patient satisfaction.
2. The calculated t value on the facility variable (X2). Because 9.435 > 1.995 and 0.000 < 0.05 then H0 is rejected and Ha is accepted.
   Hypothesis 2: Facilities have a positive effect on patient satisfaction.

2. F Test

The F statistical test basically shows whether all independent or free variables included in the model have a joint influence on the dependent/bound variable.

Table 14. Simultaneous Test (F) I
ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1020.975	2	510,487	644,126	.000a
Residual	200,509	253	.793		
Total	1221.484	255			

a. Predictors: (Constant), Facilities, Service Quality

b. Dependent Variable: Patient Satisfaction

The F test table above shows the results of statistical tests with a significance of 0.000. With the provision that the significance value is less than 0.05, it means that there is a significant influence of the independent

THE EFFECT OF SERVICE QUALITY AND HOSPITAL FACILITIES ON PATIENT LOYALTY WITH PATIENT SATISFACTION AS A MEDIATION VARIABLE (STUDY AT PKU MUHAMMADIYAH HOSPITAL BLORA)

Mazirul Agung Santara and Wani Devita Gunardi

variables together on the dependent variable. In other words, Service Quality and Facilities together affect Patient Satisfaction.

3. Determination Coefficient Test

The coefficient of determination (R^2) measures how far the model's ability to explain the variation of the dependent variable is very limited. A value close to one means that the independent variables provide almost all the information needed to predict the dependent variable. The coefficient of determination from this study is shown in the following table:

Table 15. R2 I Determination Test
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.914a	.836	.835	.89024

a. Predictors: (Constant), Facilities, Service Quality

b. Dependent Variable: Patient Satisfaction

Source: Processed primary data

The table above shows that the adjusted R^2 value obtained is 0.835, or equal to 83.5 percent. This condition indicates that the independent variables, namely Service Quality and Facilities, contribute an influence of 83.5 percent to the level of the dependent variable, namely patient satisfaction. While the remaining 16.5 percent is influenced by other variables not mentioned in this study.

b. Multiple Linear Regression Analysis II
Table 16. Multiple Regression Analysis II

Coefficientsa

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.238	.243		.978	.329		
Quality of Service	.137	.029	.235	4.787	.000	.187	5.346
Facility	.276	.037	.372	7,507	.000	.183	5,461
Patient Satisfaction	.384	.054	.374	7.148	.000	.164	6,092

a. Dependent Variable: Patient Loyalty

Source: Processed primary data

From table 16 it can be seen that all independent variables studied have a significant effect on the dependent variable. Of the three independent variables entered into the regression model, all have a significant effect on patient loyalty. This can be seen from the level of significance for service quality 0.000, Facilities 0.000 and patient satisfaction 0.000 which is smaller than 0.05.

Thus, a mathematical equation can be made as follows:

$Y = 0.235$service quality $+ 0.372$facilities $+ 0.374$patient satisfaction

   a. b3 the service quality regression coefficient of 0.235 has a positive value, meaning that if service quality increases then loyalty will increase.
   b. b4 the facility regression coefficient of 0.372 has a positive value, meaning that if facilities increase then loyalty will increase.
   c. b5 patient satisfaction regression coefficient of 0.374 has a positive value, meaning that if patient satisfaction increases, loyalty will increase.

THE EFFECT OF SERVICE QUALITY AND HOSPITAL FACILITIES ON PATIENT LOYALTY WITH PATIENT SATISFACTION AS A MEDIATION VARIABLE (STUDY AT PKU MUHAMMADIYAH HOSPITAL BLORA)

Mazirul Agung Santara and Wani Devita Gunardi

1. t-test

The t-test is a test to determine the significance of the influence of the independent variable partially or individually in explaining the dependent variable (loyalty).

The results of the t-test analysis are as follows:
1. The t-value of the service quality variable (X1) is 4.787 with a significance level of 0.000. Because 4.787 > 1.995 and 0.000 < 0.05, H0 is rejected and Ha is accepted.
   Hypothesis 3: service quality has a positive effect on loyalty.
2. The calculated t value for the facility variable (X2) is 7.507 with a significance level of 0.000. Because 7.507 > 1.995 and 0.000 < 0.05, H0 is rejected and Ha is accepted.
   Hypothesis 4: Facilities have a positive effect on loyalty.
3. The t-value of the satisfaction variable (Z) is 7.148 with a significance level of 0.000. Because 7.148 > 1.995 and 0.000 < 0.05, H0 is rejected and Ha is accepted.
   Hypothesis 5: Patient satisfaction has a positive effect on loyalty.

2. F Test

The F statistical test basically shows whether all independent or free variables included in the model have a joint influence on the dependent/bound variable (Ghozali, 2018).

Table 17. Simultaneous Test (F) II
ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1140.365	3	380.122	656,916	.000a
	Residual	145,819	252	.579		
	Total	1286.184	255			

a. Predictors: (Constant), Patient Satisfaction, Service Quality, Facilities

b. Dependent Variable: Patient Loyalty

The F test table above shows the results of statistical tests with a significance of 0.000. With the provision that the significance value is less than 0.05, it means that there is a significant influence of the independent variables together on the dependent variable. In other words, the quality of service, facilities, patient satisfaction together affect loyalty.

3. Determination Coefficient Test

The coefficient of determination (R^2) measures how far the model's ability to explain the variation of the dependent variable is very limited. A value close to one means that the independent variables provide almost all the information needed to predict the dependent variable. The coefficient of determination from this study is shown in the following table:

Table 18. R2 Determination Test II

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.942a	.887	.885	.76069

a. Predictors: (Constant), Patient Satisfaction, Service Quality, Facilities

b. Dependent Variable: Patient Loyalty

Source: Processed primary data

THE EFFECT OF SERVICE QUALITY AND HOSPITAL FACILITIES ON PATIENT LOYALTY WITH PATIENT SATISFACTION AS A MEDIATION VARIABLE (STUDY AT PKU MUHAMMADIYAH HOSPITAL BLORA)

Mazirul Agung Santara and Wani Devita Gunardi

The table above shows that the adjusted R2 value obtained is 0.885, or equal to 88.5 percent. This condition indicates that the independent variables, namely service quality, facilities, patient satisfaction, contribute an influence of 88.5 percent to the level of the dependent variable, namely loyalty. While the remaining 11.5 percent is influenced by other variables not mentioned in this study.

2. Sobel Test

This Sobel test aims to determine the role of patient satisfaction in mediating the indirect relationship between independent variables (service quality and facilities) and Customer Loyalty.

1. Relationship between Service Quality and Loyalty through Satisfaction
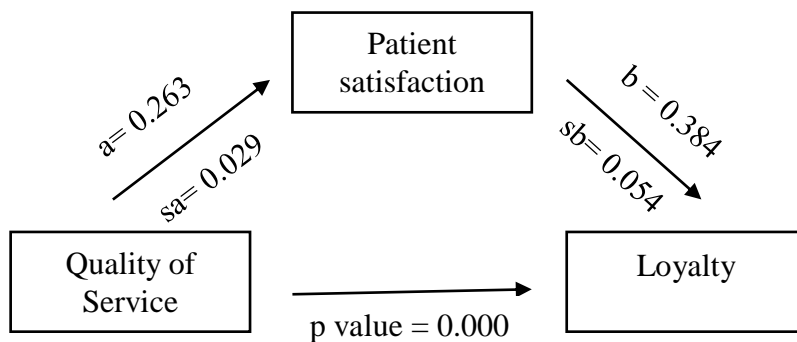
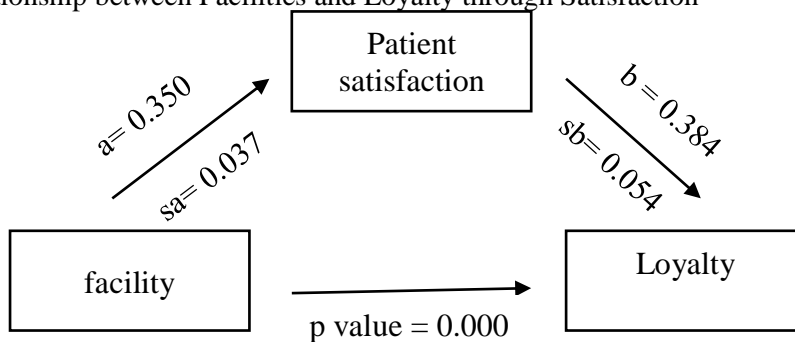2. Relationship between Facilities and Loyalty through Satisfaction

Table 19. Sobel Test Recapitulation

No	Connection	Significance	Information
1	service quality - satisfaction - loyalty	0,000	influential
2	facilities - satisfaction - loyalty	0,000	influential

Source: Attachment of Sobel test results

Based on the table above, it shows that the significance value of the indirect relationship of trust is able to mediate the relationship between satisfaction and promotion. With each significance value less than 0.05.

Discussion
1. Relationship between Service Quality and Patient Satisfaction

The results of the study showed that there was a positive and significant influence between service quality and patient satisfaction. The relationship between service quality and patient satisfaction is a crucial aspect in the healthcare industry. Service quality includes various elements, such as the competence of medical personnel, friendliness of staff, speed in providing services, and the comfort of the hospital or healthcare facility environment. When the services provided meet or even exceed patient expectations, this

THE EFFECT OF SERVICE QUALITY AND HOSPITAL FACILITIES ON PATIENT LOYALTY WITH PATIENT SATISFACTION AS A MEDIATION VARIABLE (STUDY AT PKU MUHAMMADIYAH HOSPITAL BLORA)

Mazirul Agung Santara and Wani Devita Gunardi

directly contributes to increasing their satisfaction. Good service quality creates a sense of trust and appreciation in patients, which strengthens their relationship with healthcare providers.

Patient satisfaction is not just the result of a one-time interaction, but rather the accumulation of experiences over the course of their care. Quality care creates ongoing positive experiences, such as clear communication, empathy demonstrated by staff, and openness in explaining diagnoses and treatment plans. Patient satisfaction increases when they feel heard and treated with care and respect, indicating that the hospital or healthcare provider places the patient's needs and well-being as a top priority2. On the other hand, inadequate service quality can lead to patient dissatisfaction, which can affect their perception of the overall health service. This dissatisfaction can reduce patient trust and make them look for other health service options that are considered better. Therefore, health service providers need to continuously improve their service standards through ongoing training, performance evaluation, and system improvements, to ensure that the patient experience remains at an optimal level and in line with their expectations.

2. Relationship between Hospital Facilities and Patient Satisfaction

The results of the study showed that there was a positive and significant influence between hospital facilities and patient satisfaction. Hospital facilities play an important role in shaping patient satisfaction, because complete and quality facilities provide comfort and confidence for patients while they receive treatment. Facilities such as clean and comfortable treatment rooms, modern medical equipment, adequate waiting areas, and accessibility for patients with special needs all contribute to a positive perception of the hospital. When patients feel that they are being treated in a safe, clean, and supportive environment, this creates a better experience and increases their satisfaction with the services received.

In addition to physical comfort, the existence of adequate facilities supports the smooth running of medical procedures and efficiency of services. For example, the availability of sophisticated diagnostic technology allows for faster and more accurate detection and treatment of diseases, which ultimately results in more satisfactory treatment outcomes. Additional facilities such as an in-house pharmacy, laboratory, and responsive emergency unit also add positive value to the quality of hospital services. All of this provides a sense of calm and security to patients, who feel that their medical needs can be met well in one place.

Patient satisfaction is directly proportional to their positive experience during hospitalization, and good facilities play a significant role in this. When hospital facilities are adequate and of high quality, patients are more likely to rate their experience positively, increasing their loyalty and likelihood of recommending the service to others. Conversely, inadequate or poorly maintained facilities can cause discomfort, increase stress, and reduce patient satisfaction levels. This suggests that investing in hospital facilities is an important strategy to maintain and improve patient satisfaction.

3. Relationship between Service Quality and Patient Loyalty

The results of the study showed that there was a positive and significant influence between service quality and patient loyalty. Service quality has a significant influence on patient loyalty in the context of health services. When patients receive satisfactory service, which includes staff responsiveness, medical personnel professionalism, and empathy in patient care, they tend to develop trust and emotional attachment to the health facility. Consistent and high-quality service makes patients feel valued and cared for, creating a positive experience that encourages them to return to the same hospital or clinic when they need health services in the future. Patient loyalty is not only manifested in the desire to return, but also in the form of recommendations to others. Patients who are satisfied with the quality of service often recommend hospitals or health facilities to their family and friends.

These recommendations are very valuable in building a positive reputation for a health institution and increasing public trust. Therefore, good service quality not only maintains the loyalty of old patients, but also becomes an effective marketing tool to attract new patients. On the other hand, poor service quality can damage patient loyalty and cause them to switch to other healthcare providers. Dissatisfaction arising from slow, unprofessional, or inattentive service can reduce patient trust and create a negative image of the hospital. To maintain and increase patient loyalty, hospitals and healthcare providers need to focus on continuous improvement of service quality, including staff training and improving operational procedures, to ensure every patient gets the best experience.

THE EFFECT OF SERVICE QUALITY AND HOSPITAL FACILITIES ON PATIENT LOYALTY WITH PATIENT SATISFACTION AS A MEDIATION VARIABLE (STUDY AT PKU MUHAMMADIYAH HOSPITAL BLORA)

Mazirul Agung Santara and Wani Devita Gunardi

4. Relationship between Hospital Facilities and Patient Loyalty

The results of the study showed that there was a positive and significant influence between hospital facilities and patient loyalty. The relationship between hospital facilities and patient loyalty is very close, because high-quality facilities provide comfort, trust, and satisfaction for patients while they receive treatment. Facilities that include clean treatment rooms, sophisticated medical equipment, comfortable waiting rooms, and good accessibility can make the patient experience more positive. When patients feel that their medical needs are met in a comfortable and modern environment, this increases their trust in the hospital and encourages them to return to use the service in the future.

Adequate hospital facilities also improve service efficiency and strengthen the perception of professionalism. For example, the availability of state-of-the-art diagnostic and therapeutic equipment allows medical procedures to be performed more quickly and accurately, reducing waiting times and improving treatment outcomes. These positive experiences not only make patients feel satisfied but also increase their likelihood of recommending the hospital to others. Recommendations from satisfied patients are one of the key factors in expanding the patient base and building a positive hospital reputation.

On the other hand, inadequate or neglected facilities can reduce patient trust and loyalty. Discomfort caused by inadequate facilities, such as cramped treatment rooms, outdated medical equipment, or crowded waiting areas, can make patients think twice about returning to the hospital. In fact, negative experiences related to facilities can encourage patients to switch to other hospitals that offer better comfort and quality. Therefore, investment in improving hospital facilities is very important to maintain patient loyalty and support the long-term sustainability of the hospital.

5. Relationship between Patient Satisfaction and Patient Loyalty

The results of the study showed that there was a positive and significant influence between patient satisfaction and patient loyalty. Patient satisfaction has a strong relationship with patient loyalty in the context of health services. When patients are satisfied with the services they receive—including the quality of medical services, interactions with staff, speed of treatment, and comfort of facilities—they tend to develop trust and emotional attachment to the hospital or clinic. This satisfaction fosters confidence in patients that they will receive the best care if they return, thus increasing the likelihood that they will remain loyal and return to use the service in the future.

Patient loyalty is not just a desire to return, but also manifested in the form of recommendations to others. Satisfied patients tend to share their positive experiences with friends, family, and the community, which is one of the most effective forms of marketing for healthcare facilities. These word-of-mouth recommendations help build a positive reputation for the hospital, increase public trust, and attract new patients. Thus, patient satisfaction can be seen as a foundation that strengthens loyalty and drives the growth of healthcare facilities in the long term.

On the other hand, if patients are dissatisfied due to poor service, inconvenience, or mismatched expectations, their loyalty tends to decrease. Dissatisfied patients are more likely to switch to other healthcare providers who are considered better, and can spread negative reviews that harm the hospital's reputation. Therefore, ensuring that patients have a satisfactory experience is key to maintaining their loyalty. Hospitals and healthcare facilities need to focus on improving the quality of service and a proactive approach to patient feedback to create and maintain positive long-term relationships.

6. Relationship between Service Quality and Patient Loyalty Through Patient Satisfaction

The results of the study indicate that there is a positive and significant influence between service quality and patient loyalty through patient satisfaction as a mediating variable. Service quality plays an important role in shaping patient loyalty, and patient satisfaction acts as a mediator in this relationship. When hospitals or health care providers offer professional, fast, friendly, and empathetic service, patients tend to feel satisfied with their experience. This satisfaction arises from the comfort felt by patients, trust in the competence of medical personnel, and the attention received during treatment. Good service quality encourages the creation of ongoing positive experiences, which ultimately builds a sense of attachment and trust in patients towards the health facility.

Patient satisfaction serves as a link between service quality and loyalty. Satisfied patients are more likely to trust the service they receive, feel comfortable returning, and even recommend the hospital to others.

THE EFFECT OF SERVICE QUALITY AND HOSPITAL FACILITIES ON PATIENT LOYALTY WITH PATIENT SATISFACTION AS A MEDIATION VARIABLE (STUDY AT PKU MUHAMMADIYAH HOSPITAL BLORA)

Mazirul Agung Santara and Wani Devita Gunardi

These positive experiences make patients feel valued and cared for, which is a strong reason to remain loyal to the healthcare facility. Satisfaction also influences patients' long-term perceptions, where consistent service quality results in higher and more sustained loyalty8. On the other hand, if the quality of service is inadequate, patient satisfaction decreases, which can negatively affect their loyalty. Dissatisfaction makes patients more likely to look for other options, lowers retention rates, and reduces the potential for referrals to others. Therefore, maintaining high service quality is an important step to increase patient satisfaction, which ultimately strengthens their loyalty. Healthcare facilities that want to maintain and grow their patient base need to prioritize improving service quality and ensuring that patient satisfaction is well maintained.

7. Relationship between Hospital Facilities and Patient Loyalty Through Patient Satisfaction

The results of the study showed that there was a positive and significant influence between hospital facilities and patient loyalty through patient satisfaction as a mediating variable. The relationship between hospital facilities and patient loyalty is greatly influenced by the level of patient satisfaction. Adequate and high-quality facilities, such as comfortable treatment rooms, modern medical equipment, and supporting areas such as adequate waiting rooms, provide a positive experience for patients. When hospital facilities meet or even exceed patient expectations, they feel more comfortable and satisfied with the services provided. This satisfaction is an important factor that encourages patients to develop loyalty to the hospital.

Patient satisfaction acts as a bridge connecting the quality of hospital facilities with patient loyalty. When patients are satisfied with the facilities they use, both in terms of comfort and ease of access to medical care, they are more likely to return to the hospital in the future. This satisfaction also increases the likelihood of patients recommending the hospital to others, strengthening the positive image and public trust in the health facility. On the other hand, if hospital facilities are inadequate or poorly maintained, patient satisfaction can decrease, which negatively impacts their loyalty. Dissatisfaction due to inadequate facilities can make patients feel less cared for and decide to look for other healthcare providers that better meet their needs. Therefore, hospitals need to invest in facility maintenance and improvements to ensure that patients have a positive and satisfying experience, which will ultimately build long-term loyalty.

1. CONCLUSION AND SUGGESTIONS

Conclusion

The research results and discussions that have been presented are based on research data, so the following conclusions can be drawn:

1) Service quality has a positive and significant effect on patient satisfaction
2) Facilities have a positive and significant influence on patient satisfaction
3) Service quality has a positive and significant effect on patient loyalty
4) Facilities have a positive and significant influence on patient loyalty
5) Patient satisfaction has a positive and significant effect on patient loyalty.
6) Service quality has a positive and significant indirect effect on patient loyalty through patient satisfaction.
7) Facilities have a positive and significant indirect effect on patient loyalty through patient satisfaction.

Suggestion

Based on the description of the research variables, there are several indicators that must be improved to achieve maximum results, including:

a. Provide effective communication training for doctors, nurses, and support staff so they can serve patients with empathy and professionalism.
b. Improve the comfort of waiting rooms, inpatient rooms, and other supporting facilities (e.g. free Wi-Fi, children's playroom, or lactation room).
c. Develop a hospital application to facilitate access to information such as doctor schedules, online registration, or appointment reminders.
d. Pay special attention to individual patient needs, such as providing a customized care plan or providing relevant health information.
e. Provide a platform or survey for patients to provide feedback about their experience.

THE EFFECT OF SERVICE QUALITY AND HOSPITAL FACILITIES ON PATIENT LOYALTY WITH PATIENT SATISFACTION AS A MEDIATION VARIABLE (STUDY AT PKU MUHAMMADIYAH HOSPITAL BLORA)

Mazirul Agung Santara and Wani Devita Gunardi

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