FACTORS INFLUENCING PATIENT SATISFACTION

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ABSTRACT

The quality of health services needs to be improved because of the needs of the community in accordance with the standards of resource utilization in a fair, efficient, and effective manner. With the limitations of the government and community, health services are still carried out safely and satisfactorily in accordance with good norms and ethics. Health services in hospitals, health centers, clinics or other health institutions are components that are interrelated, interdependent, and influence each other. This study aims to determine the effect of reliability, responsiveness, and assurance variables simultaneously and partially on patient satisfaction at the Ismadana Muaradua Clinic. This study uses a quantitative method with 100 respondents. Data was collected directly from respondents using a previously prepared questionnaire The analysis tool uses multiple linear regression. The results of the study showed that both simultaneously (F-test) and partially (t-test) concluded that the variables Reliability (X1), Responsiveness (X2), and Assurance (X3) have a significant effect on Patient Satisfaction (Y).

Keywords: assurance; patient satisfaction; reliability; responsiveness

INTRODUCTION

Public services involve very broad aspects of life. In community life, the government has the function of providing various public services needed by the community, including health services. Hanif (2013) stated that service quality is how far the difference is between reality and customer expectations for the subscriptions they receive. According to Kotler and Keller (2017), the quality of health services needs to be improved because the needs of the community or individuals for health that is in accordance with the standards of resource utilization in a reasonable, efficient, effective manner within the limitations of the government and community, are carried out safely and satisfactorily in accordance with good norms and ethics. Health services both in hospitals, health centers, clinics or other health institutions are components that are interrelated, interdependent, and influence each other.

The quality of service provided by health workers both in clinics, health centers and hospitals is an interaction and dependence of service aspects. According to Tjiptono (2017), customer satisfaction is important to attract consumers. Because it is verymuch needed by companies including the Ismadana Muaradua Clinic, where in creating patient satisfaction, good quality of service is very much needed, so that it can create a sense of satisfaction from customers. The establishment of several clinics in the Muaradua area will create tight competition to win customers. The Ismadana Clinic is one of the clinics that has quite a lot of patients, in maintaining its customers to remain loyal, the Ismadana Clinic needs the right strategy. In determining the marketing strategy, the Ismadana Clinic needs to examine each characteristic of customer behavior that is implemented into hopes and desires. By knowing the basic reasons why customers use health services at the Ismadana Clinic, the right strategy to use can be determined. Therefore, the Ismadana Clinic must actualize every customer

expectation into satisfaction with the services provided. The Ismadana Muaradua Clinic is part of the health system that is required to be able to improve patient quality. Thus, Ismadana Muaradua Clinic is one of the competitive health service providers and must be managed by providers who have an entrepreneurial spirit that is able to create efficiency, excellence in quality and service, excellence in innovation and excellence in responding to patient needs. The purpose of the study was to determine the effect of reliability variables partially on patient satisfaction at Ismadana Muaradua Clinic, to determine the effect of responsiveness variables partially on patient satisfaction at Ismadana Muaradua Clinic, to determine the effect of Assurance variables partially on patient satisfaction at Ismadana Muaradua Clinic, and to determine the effect of Reliability, Responsiveness, and Assurance variables simultaneously on patient satisfaction at Ismadana Muaradua Clinic.

METHOD
The research method used in this study is a quantitative method with a quantitative descriptive approach (Sugiono, 2018). The location of the study was the Ismudana Muara Dua Clinic, South Sumatra. The research time was carried out from April 2023 to August 2023. The study population was 982 people, which is the average number of patients visiting the Ismudana Muaradua Clinic from December to April 2023, while the research sample was taken as many as 100 customers. Sampling in this study used the Simple Random Sampling technique by considering the inclusion and exclusion criteria (Sugiono, 2018). The independent variables (X) used in this study are Reliability (X1), Assurance, Responsiveness (X2), and Assurance (X3), while the dependent variable (Y) is Customer Satisfaction. The questionnaire that will be used to collect data is tested for Validity and Reliability so that the data collected is valid. Data analysis was carried out using Multiple Linear Regression, but previously the data had to be tested with the Classical Assumption Test first. Model fit testing is carried out using the Determination Coefficient Test (R^2). Simultaneous hypothesis testing is carried out using the F-Test, and individual hypothesis testing is carried out using the t-Test (Gujarati, 2013)

RESULTS

Table 1.
Respondent characteristics (n= 100)

Respondent characteristics	f	%
Age		
< 20 years	7	7 %
20 – 29 years	24	24 %
30 – 39 years	26	26 %
40 – 49 years	25	25 %
≥ 50 years	18	18 %
Gender		
Man	42	42 %
Women	58	58 %
Education		
SD	16	16 %
SMP	9	9 %
SMA	34	34 %
Diploma	11	11 %
Sarjana	30	30 %
Work History		
Farmer	21	21 %
Marchant	26	26 %
Laborer	20	20 %
Employee	22	22 %
PNS/Gaverment Employee	11	11 %

Based on table 1, it shows that the age of respondents ranges from 20 - 49 years as many as 75 respondents (75%). For the gender of the respondents, the majority are female, 58 respondents (58%). For the level of education, the majority of respondents have high school and bachelor's degrees as many as 64 respondents (64%), while based on the type of work, it is almost evenly distributed, namely as farmers, traders, laborers and employees as many as 89 respondents (89%).

Validity test is conducted to determine the extent to which the questionnaire can measure the indicators of the statement to be studied. Validity test is conducted on 20 using product moment correlation (Ghozali, 2016). The testing criteria for this test are if r count > r table, then the statement item is declared valid and if r count < r table, then the statement item can be concluded as invalid (Sugiono, 2017). The results of validity testing on the variables Reliability (X1), Assurance, Responsiveness (X2), and Assurance (X3) are presented in the following table 2.

Table 2.
Validity Test Results

Reliability(X_1)	R_{count}	r_{alpha}	Condition	Discription
Item 1	0,983	0,4227	$r_{count} > r_{table}$	Valid
Item 2	0,983	0,4227	$r_{count} > r_{table}$	Valid
Item 3	0,932	0,4227	$r_{count} > r_{table}$	Valid
Item 4	0,945	0,4227	$r_{count} > r_{table}$	Valid
Item 5	0,983	0,4227	$r_{count} > r_{table}$	Valid
Responsiveness (X_2)	R_{count}	r_{alpha}	Condition	Discription
Item 1	0,983	0,4227	$r_{count} > r_{table}$	Valid
Item 2	0,932	0,4227	$r_{count} > r_{table}$	Valid
Item 3	0,856	0,4227	$r_{count} > r_{table}$	Valid
Item 4	0,945	0,4227	$r_{count} > r_{table}$	Valid
Item 5	0,983	0,4227	$r_{count} > r_{table}$	Valid
Assurance (X_3)	R_{count}	r_{alpha}	Condition	Discription
Item 1	0,918	0,4227	$r_{count} > r_{table}$	Valid
Item 2	0,904	0,4227	$r_{count} > r_{table}$	Valid
Item 3	0,983	0,4227	$r_{count} > r_{table}$	Valid
Item 4	0,907	0,4227	$r_{count} > r_{table}$	Valid
Item 5	0,983	0,4227	$r_{count} > r_{table}$	Valid
Patient Satisfaction (Y)	R_{count}	r_{alpha}	Condition	Discription
Item 1	0,738	0,196	$r_{count} > r_{table}$	Valid
Item 2	0,790	0,196	$r_{count} > r_{table}$	Valid
Item 3	0,771	0,196	$r_{count} > r_{table}$	Valid

Based on the results in table 2 of the validity test above, it can be concluded that for all statement items in each variable, the rcount value is > rtable, from these results it can be concluded that all statement items in each variable are declared valid (Ghazali, 2016). Reliability testing is carried out to determine the extent of the questionnaire that will be used in this study. In testing the reliability of the questionnaire, it is used by comparing the Chronbach alpha value with the rtable value. If the Chronbach alpha value is > from rtable (0.60) it means reliable (Ghazali, 2016).

Table 3.
Reliability Test Results

Variable	*Nilai Cronbach's Alpha*	Diskription
Reliability (X_1)	0,983	Realibility
Responsiveness (X_2)	0,967	Realibility
Assurance (X_3)	0,967	Realibility
Patient Satisfaction (Y)	0,845	Realibility

From the results of the reliability test in table 3 above, the alpha coefficient value (Cronbach) of all variables is greater than the r-table value (0.60), so it can be concluded that the questionnaire is reliable and can be used for data collection. The normality test is carried out to test whether the residuals are normally distributed or not in the regression model. The normality test is carried out using the Kolmogorov-Smirnov test (Sugiono, 2017) with the following results:

Table 4.
Kolmogorov Smirnov Test Results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		100
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	.56136626
Most Extreme Differences	Absolute	.063
	Positive	.053
	Negative	-.063
Test Statistic		.063
Asymp. Sig. (2-tailed)		.400[c,d]

a. Test distribution is Normal.

Based on table 4 above, a significant value (asym.sig 2-tailed) of > 0.05 is produced, so it can be concluded that the data is normally distributed. Multicollinearity test is conducted to see whether there is a linear relationship between independent variables (Reliability (X1), Assurance, Responsiveness (X2), and Assurance (X3). Symptoms of multicollinearity can be seen from the VIF (Variance Inflation Factor) and Tolerance Value values. If the VIF value <10 and Tolerance Value> 0.1, it can be concluded that there are no symptoms of multicollinearity (Sugiono, 2017).

Table 5.
Multicollinearity Test Results

Model		Unstandardized Coefficients		Standardized Coefficients	Collinearity Statistics	
		B	Std. Error	Beta	Tolerance	VIF
1	(Constant)	4.418	3.759			
	Reliability (X_1)	.411	.084	.141	.396	2.004
	Responsiveness (X_2)	.290	.081	.376	.452	3.051
	Assurance (X_3)	.306	.104	.403	.391	2.692
	Patient Satisfaction (Y)					

From table 5 above, the VIF value of each variable is <10 or the Tolerance Value of each variable is >0.1, so it can be concluded that there are no symptoms of multicollinearity between the independent variables of reliability, responsiveness, and assurance. Autocorrelation test is conducted to see the residual data must be independent from one observation to another. Autocorrelation test is conducted using the Durbin-Watson test. The decision criterion is stated that there is no autocorrelation if dU < DW < 4-dU. The test results are presented in the following table.

Table 6.
Autocorrelation Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.861[a]	.742	.731	.397	2.102

a. Predictors: (Constant), Empati (X5), Keandelan (X2), Jaminan (X4), Bukti Langsung (x1)
b. Dependent Variabel : Kepuasan Pasien (Y)

In table 6, the Durbin-Watson (DW) value is 2.102, so the calculated value of dU (1.7804) < DW (2.102) < 4-dU (2.2196) is obtained. Based on these calculations, it can be concluded that there is no autocorrelation problem. Heteroscedasticity test is conducted to determine whether or not there is inequality of variance of residual data. In this study, heteroscedasticity test using Glejser Test (Ghazali, 2016), presented in Table 7.

Table 7.
Heteroscedasticity Test Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.434	.790		3.079	.003
	Keandalan (X1)	-.002	.029	-.009	-.083	.934
	Dayatanggap (X2)	-.049	.032	-.186	-1.537	.127
	Jaminan (X3)	-.034	.029	-.130	-1.137	.258

a. Dependent Variable: Abs_RES

Table 7 shows that the significance value of the reliability variable is 0.934 > 0.05, the responsiveness variable is 0.127 > 0.005, and the assurance variable is 0.258 > 0.05, so it can be concluded that there are no symptoms of heteroscedasticity.

Table 8.
Multiple Linear Regression Test Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.418	3.759		2.598	.012
	Reliability	.411	.084	.141	2.674	.009
	Responseveness	.271	.081	.376	4.744	.000
	Assurance	.316	.104	.403	5.997	.000

a. Dependent Variable: Kepuasan Pasien

Based on table 5 above, the multiple linear regression equation can be written and interpreted as follows:

Y = 4.418 + 0.411 + 0.271 + 0.316 + ε

1. The constant value is 4.418, meaning that when the reliability variables (X1), responsiveness (X2), and assurance (X3) are zero, customer satisfaction is 4.418 units.
2. The reliability regression coefficient (X1) = 0.411, indicating that every additional 1 unit of the reliability variable (X1) will increase customer satisfaction (Y) by 0.411 units.
3. The responsiveness regression coefficient (X2) = 0.271, indicating that every additional 1 unit of the responsiveness variable (X2) will increase customer satisfaction (Y) by 0.271 units.
4. The responsiveness regression coefficient (X3) = 0.316, shows that every 1 unit increase in the guarantee variable (X3) will increase customer satisfaction (Y) by 0.316 units.

The determination coefficient test (R^2) aims to measure the ability of independent variables to explain the variation of dependent variables. The determination coefficient value is between 0 < R2 < 1 (Gujarati, 2013). The results of the determination coefficient test are presented in table 9 below.

Table 9.
Coefficient of Determination Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.861[a]	.722	.701	.397

a. Predictors: (Constant), Reliability (X_1), Responseveness (X_2), dan Assurance (X_3)
b. Dependent Variable: Patient satisfaction (Y)

From table 9 above, the Determination Coefficient is obtained as much as 0.727 or 72.7%, meaning that the independent variables consisting of Reliability, Responsiveness, and Assurance can explain the variation in Customer Satisfaction by 72.7% while the remaining 27.8% is influenced by other factors not included in the model. Sugiono, (20118). The F-test was conducted to test the hypothesis of the influence of the independent variables of reliability, responsiveness, and assurance together on customer satisfaction. This hypothesis testing was conducted at a real level of 5%, and the results are in table 10.

Table10.
Result F-test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	43.163	2	10.791	68.355	.000[b]
	Residual	14.997	97	.158		
	Total	58.160	99			

a. Dependent Variable: Kepuasan Pasien (Y)
b. Predictors: (Constant), Reliability (X_1), Responseveness (X_2), Assurance (X_3)

Based on the calculation results in the table above, the Fcount value (68.355) > Ftable (2.469) and the probability value (0.000) < α (0.05) then, it can be concluded that the variables Reliability (X1), Responsiveness (X2), and Assurance (X3) simultaneously have a significant effect on the patient satisfaction variable (Y). Gujarati (2013) The t-test was conducted to test the hypothesis of the influence of the independent variables of reliability, responsiveness, and assurance individually on customer satisfaction. This hypothesis testing was conducted at a real level of 5%, and the results were as 11.

Tabel 11.
Result F-test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.418	3.759		2.598	.012
	Reliability	.411	.084	.141	2.674	.009
	Responseveness	.271	.081	.376	4.744	.000
	Assurance	.316	.104	.403	5.997	.000

Based on the table above, it can be explained that the reliability variable obtained a tcount value = 2.674> ttable = 1.984, which means Ho is rejected and H1 is accepted with a confidence level of 0.05, so it can be concluded that the reliability variable (X1) partially has a significant effect on patient satisfaction (Y) at Ismadana Muaradua Clinic. The responsiveness variable obtained a tcount value = 4.744> ttable = 1.984, which means Ho is rejected and H1 is accepted with a confidence level of 0.05, so it can be concluded that the reliability responsiveness variable (X2) partially has a significant effect on patient satisfaction (Y) at Ismadana Muaradua Clinic. The assurance variable obtained a tcount value = 5.977> ttable = 1.984, which means Ho is rejected and H1 is accepted with a confidence level of 0.05, so it can be concluded that the reliability assurance variable (X3) partially has a significant effect on patient satisfaction (Y) at Ismadana Muaradua Clinic.

DISCUSSION

The results of the analysis show that increasing the reliability variable increases patient satisfaction because the t-count value of reliability is 2.674> table of 1.984 or a significant value of 0.009 <0.05 so that the reliability variable has a significant effect on patient satisfaction at the Ismadana Muaradua Clinic. This shows that the Ismadana Muaradua Clinic is able to provide services that are in accordance with what was promised accurately and reliably, namely fast administration services, punctuality of service, the same service for all patients, sympathetic nature and high accuracy towards patients. The results of this study are

in line with research conducted by Munarsih, Simatupang, D, Arianto, N (2022) which found that the reliability variable has a positive effect on patient satisfaction and research conducted by Sembiring, D.I, Fordian, D (2023) which found that the reliability variable has a positive effect on patient satisfaction.

The results of the analysis show that increasing the responsiveness variable increases patient satisfaction because the t-count value of responsiveness is 4.744> t table of 1.984 or a significant value of 0.000 <0.05 so that the responsiveness variable has a significant effect on patient satisfaction at the Ismadana Muaradua Clinic. This shows that the Ismadana Muaradua Clinic is able to provide services, namely health workers immediately respond to patient complaints, good and friendly service, health workers provide clear and complete information and health workers take actions according to procedures. The results of this study are in line with previous research conducted by Sembiring, D.I, Fordian, D (2023) which found that the responsiveness variable has a positive effect on patient satisfaction.

The results of the analysis show that increasing the guarantee variable increases patient satisfaction because the t-count value of guarantee is 5.977> t table of 1.984 or a significant value of 0.000 <0.05 so that the guarantee variable has a significant effect on patient satisfaction at the Ismadana Muaradua Clinic. This shows that the Ismadana Muaradua Clinic has provided services, namely making the right diagnosis, providing the right and available medicine, health workers really respect patients and have a convincing attitude and health workers do not discriminate against patients. The results of this study are in line with research conducted by Nurmin Arianto, N, Muhfany, A.A (2021) and Manurung, M.N, Fitriani Tupa R. Silalahi, F.T.R (2023) which found that the assurance variable has a positive effect on patient satisfaction.

CONCLUSION
Based on the results of data processing and analysis, hypothesis testing and discussion can be concluded as follows.
1. The value of the Determination Coefficient (R2) is 0.722, meaning that 72.2% of the independent variables consisting of reliability, responsiveness, and assurance can explain variations in patient satisfaction at the Ismadana Muaradua Clinic, while 27.8% are influenced by other factors not included in this research model.
2. Based on the results of the Hypothesis Test using the t-test on the independent variable reliability, it has a partial significant effect on patient satisfaction at the Ismadana Muaradua Clinic.
3. Based on the results of the Hypothesis Test using the t-test on the independent variable responsiveness, it has a partial significant effect on patient satisfaction at the Ismadana Muaradua Clinic.
4. Based on the results of the Hypothesis Test using the t-test on the independent variable assurance, it has a partial significant effect on patient satisfaction at the Ismadana Muaradua Clinic.
5. Based on the results of the Hypothesis Test using the F-Test on the independent variables of reliability, responsiveness, and assurance, they simultaneously have a significant effect on patient satisfaction at the Ismadana Muaradua Clinic.

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