The Effect of Inpatient Service Quality at Anutapura Hospital on the Patients Satisfaction

Muhammad Adzmil Rizaldi1(†), Nur Afni2, Abdul Kadri3
1,2,3Faculty of Public Health, Muhammadiyah University of Palu, Indonesia
*Corresponding Author, Email: adzmilrizaldi27@gmail.com

ABSTRACT

According to the Law of the Republic of Indonesia No. 44 of 2009, Hospital is a health service institution that organizes complete individual health services that provide inpatient and emergency services. This research aims to determine the effect of the inpatient services quality at Anutapura Hospital on patients satisfaction. This is quantitative research with a cross-sectional study design. The sampling was conducted by using the proportional method to 68 inpatients of Anutapura Hospital, Palu. The analysis technique uses simple linear regression analysis. The results of this research indicate that the variables that have a positive and insignificant effect on patient satisfaction are physical evidence variable with a coefficient value of 0.057 and a sig value of 0.731 > 0.05, a reliability variable with a coefficient value of 0.216 and a sig value of 0.119 > 0.05, responsiveness with a coefficient value of 0.295 and a sig value of 0.100 > 0.05, a guarantee with a coefficient value of 0.279 and a sig value of 0.099 > 0.05, and attention with a coefficient value of 0.404 and a sig value of 0.096 > 0.05. This research suggests that the agency should be able to improve services in terms of room provision, service support equipment such as seats for the patient’s family who visit and can consider the needs of the community who come for treatment.

Keywords – Service Quality and Patients’ Satisfaction

INTRODUCTION

According to the Law of the Republic of Indonesia No. 44 of 2009 concerning Hospital is a health service institution that provides complete individual health services that provide inpatient, emergency, and emergency services (1). The goal of a hospital as mandated by the law to provide health services to the public is to facilitate public access to health services, provide protection for the safety of patients, the community, the hospital environment, and human resources in the hospital, improve the quality and maintain hospital service standards, and provide legal certainty to patients, the community, hospital human resources, and hospitals (2).

The quality of health services needs to be improved because of the needs of the community or individuals for health by standards by utilizing natural resources that are reasonable, efficient, effective within the limitations of government and community capabilities and carried out safely and satisfactorily by good norms and ethics (3). Health
services, whether at Polindes, Pushtu, Puskesmas, hospitals, or other health service institutions, is a system consisting of various components that are interrelated, interdependent, and influence one another. The quality of health services in puskemas and hospitals is the final product of the interaction and dependence of service aspects (4).

In meeting the quality of service expected by customers, there are core points that must be considered. As stated by Parasuraman, et al (1988) there are five main dimensions in service quality, namely: Tangible (Physical Evidence), Reliability (Reliability), Responsiveness (Response), Assurance (Guarantee), Empathy (Empathy) (5). Through these five dimensions, it can give customers perception of the services provided. Good perceptions that arise on the quality of service from the services provided will provide satisfaction for customers.

In connection with the explanation above, several previous research results say that the quality of service at the hospital affects patient satisfaction, such as research conducted by Cita (2017) in his research which tested the quality of service on patient satisfaction, the results obtained were that service quality had a positive and positive effect on patient satisfaction, significant to patient satisfaction in the hospital (6).

The results of preliminary observations of the number of visitors at Anutapura Palu Hospital using inpatient services in 2016 were 30,628, in 2017 there were 28,315, in 2018 there were 22,529. While the number of patients who came for treatment per day at the Anutapura Hospital, Palu in 2016 was 83 people, in 2017 there were 78 people, in 2018 there were 76 people. (Profile of Palu Hospital Anutapura).

Based on the number of visitors to the Anutapura hospital who used inpatient services, several problems were encountered at the time of initial observation, namely that there were still patients who complained about the quality of services provided, such as the delivery of information related to illnesses suffered by patients and the lack of responsiveness of nurses in resolving patient complaints. so that it becomes a problem that can affect patient satisfaction. With this problem, researchers are interested in taking the title about "The Effect of Quality of Inpatient Services at Anutapura Hospital Palu on Patient Satisfaction".

**METHODOLOGY**

This type of research is quantitative research, where this research is used to determine the difference between the reality and expectations of customers for the services they receive or receive (7). So that there are independent variables and dependent variables. The purpose of this study is to obtain information on how strongly the independent variable affects the dependent variable. The sampling technique in this study used a proportional sampling technique. This study was conducted with 68 inpatients. Collecting data in this study using a structured interview method by providing a questionnaire, which is a data collection technique by making a list of written statements which are then given to respondents with several alternative answers that have been provided. The data analysis used the validity and reliability test. The validity test was used
to test the level of reliability and validity of the measuring instruments used. The instrument is said to be valid, meaning that the measuring instrument used to obtain the data is valid or can be used to measure what should be measured. Reliability test is useful for determining whether the instrument in this case the questionnaire can be used more than once, at least by the same respondent will produce consistent data.

Then using the classical assumption test, the classical assumption test is used to provide certainty that the regression equation obtained has estimation accuracy, is unbiased, and consistent. The classic assumption tests that are often used are the multicollinearity test, heteroscedasticity test, normality test, autocorrelation test, and linearity test. Of the five classical assumption tests, the researcher used three tests, namely the multicollinearity test, heteroscedasticity test, and autocorrelation test. And the Hypothesis Test uses the regression test, which is the test used to see which independent variable (X) has the most influence on the dependent variable (Y). Furthermore, the data that has been obtained is simplified and then presented in tabular and narrative form.

RESULTS
Validity and Reliability Test

The validity test is used to test each variable used in the study, where 24 questions must be answered by the respondent. As for how to determine whether the questions used in the study are valid or not, if the calculated r-value is greater than the r table and the r value is positive, then the question is said to be valid. Conversely, if the calculated r-value is smaller than the r table and the r value is negative, then the question can be said to be invalid. Based on the results of the validity test above, it shows that all question indicators used in the study have a correlation coefficient that is greater than the r-table value (0.239) so it can be concluded that the question indicator in this research questionnaire is valid.

A reliability test is used to measure the level of stability of a measuring device in measuring a symptom or event. The higher the reliability of a measuring instrument, the more stable the measuring device is. Based on the reliability test results above, shows that all variables have a Cronbach Alpha value that is quite large, which is more than 0.06, it can be said that the measuring concept of each variable from the questionnaire is reliable so that it can be used as a measuring tool.

Classic assumption test

The classic assumption test on the simple linear regression equation consists of 1) Multicollinearity test has the objective of testing whether the regression model finds a correlation of independent variables (independent) (10). Based on the multicollinearity test results above, it can be seen that the Variance Inflation Factor (VIF) value is below 10 and the tolerance value is above 0.10. So it can be concluded that there is no multicollinearity between the independent variables of physical evidence, assurance, reliability, responsiveness, and attention that affect patient satisfaction. 2) The heteroscedasticity test is used to test whether in a regression model there is an inequality
of variants from the residuals of one observation to another. Based on the results of the Heteroscedasticity test above, it shows that the significance value of the variables free of physical evidence, assurance, reliability, responsiveness, and attention is more than 0.05, so it can be concluded that heteroscedasticity does not occur. 3) The autocorrelation test is a test conducted to determine whether there is autocorrelation in the research data. The autocorrelation test in this study used the Durbin Watson test. Data is said to be free of autocorrelation if the Watson Durbin value is between dU and 4-dU. Based on the results of the autocorrelation test above, the Durbin Watson value is 1.932. While the dU value (seen from the Watson Durbin table) is 1.453 and the 4-dU value is 2.574. So the Watson Durbin value is between dU and 4-dU, which is 1.453 <1.932 <2.574. So it can be concluded that the results of this test are free of autocorrelation symptoms (there is no autocorrelation problem).

**Multiple Linear Regression Test**

Multiple linear regression test is used to find out how much influence the independent/independent variables consist of physical evidence (X1), assurance (X2), reliability (X3), responsiveness (X4), and attention (X5) to not independent/dependent, namely patient satisfaction (Y) (11).

Based on the results of the analysis, the multiple linear regression equation is obtained as follows (12):

\[
Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5
\]

With the description:
Y = Patient Satisfaction
X1 = Physical Evidence
X2 = Reliability
X3 = Responsiveness
X4 = Guarantee
X5 = Attention
a = Constant

Thus the results of multiple linear regression can be interpreted as follows: 1) Constant (a) of Unstandardized Coefficients, in this study amounted to 0.429. This value is a constant value which means if Physical Evidence (X1), Reliability (X2), Responsiveness (X3), Assurance (X4), and Attention (X5) is 0, then Patient Satisfaction (Y) = 0.429. 2) The coefficient of \(X_1 = 0.057\), indicating that the variable Physical Evidence (X1) has a positive effect on patient satisfaction, or in other words, if Physical Evidence (X1) is increased by one point, patient satisfaction will decrease by 0.057. 3) The coefficient \(X_2 = 0.216\) indicates that the variable reliability (X2) has a positive effect on patient satisfaction, or in other words, if the reliability (X2) is increased by one point, patient satisfaction will increase by 0.216. 4) The coefficient of \(X_3 = 0.295\) indicates that the responsiveness variable (X3) has a positive effect on patient satisfaction, or in other words, if the responsiveness (X3) is increased by one point, the patient's satisfaction will decrease by...
The coefficient of $X_4 = 0.279$ indicates that the guarantee variable ($X_4$) has a positive effect on patient satisfaction, or in other words, if the guarantee ($X_4$) is increased by one point, the patient’s satisfaction will increase by 0.279. The coefficient $X_5 = 0.404$ indicates that the individual variable attention ($X_5$) has a positive effect on patient satisfaction, or in other words, if the individual attention ($X_5$) is increased by one point, patient satisfaction will increase by 0.404.

**DISCUSSION**

**The Effect of Physical Evidence (Tangible) on Inpatient Satisfaction at Anutapura Hospital, Palu**

Physical appearance, namely the ability of a company to show its existence to external parties. The appearance and ability of physical facilities and infrastructure must be reliable, the condition of the surrounding environment is evidence of the services provided. Physical evidence includes physical facilities, equipment, employees, and communication facilities that support the provision of a service.

The results of the analysis on multiple linear regression show that the coefficient value of the influence of the tangible variable on patient satisfaction has a positive value of 0.057, and a significance value of 0.731 > 0.05. This shows that the tangible variable has a positive and insignificant effect on patient satisfaction at Anutapura Hospital, Palu.

According to the researchers’ assumptions, the insignificant effect was obtained because the availability of facilities and infrastructure was inadequate, this was supported by complaints from patients and or their families that the service facilities were not by their expectations, while the rates provided at the time of service were not by the services obtained. However, they still come to the hospital for treatment because the distance between the residence and the hospital is easy to reach.

This is in line with research conducted by Sari (2018) which states that physical evidence does not have a significant effect on patient satisfaction with a significance value obtained from 0.963 > 0.05. In line with research conducted by Novitawati (2019), physical evidence does not have a significant effect on patient satisfaction with a significance value obtained of 0.282 > 0.05.

**The Effect of Reliability (Reliability) on Inpatient Satisfaction at Anutapura Hospital, Palu**

Reliability, namely the ability to provide the promised service immediately, accurately, and satisfactorily, means that employees provide services by customer expectations. Its attributes are reliance in dealing with customer service issues, performing service at the first time, providing service at the promised time, and maintaining a defect-free record.

The results of the analysis on multiple linear regression show that the coefficient of the influence of the reliability variable on patient satisfaction has a positive value of 0.279
and a significance value of 0.099 > 0.05. This shows that the variable reliability has a positive and insignificant effect on the variable patient satisfaction at Anutapura Hospital, Palu.

According to the researchers' assumptions, an insignificant effect was obtained because the examination or treatment carried out was not by the established service standards such as the level of suitability of the doctor's visit schedule and the visit time was not on time so that the patient needed to wait a long time to get service.

This is in line with research conducted by Utami (2019) which states that the reliability variable has a positive and insignificant effect on the patient satisfaction variable with a significance value obtained from 0.496 > 0.05. In line with research conducted by Meutia (2019), it is said that the variable reliability (reliability) has a positive and insignificant effect on the patient satisfaction variable with a significance value obtained from 0.429 > 0.05.

**The Effect of Responsiveness on Inpatient Satisfaction at Anutapura Hospital, Palu**

Responsiveness, namely the desire of staff and employees to help customers and provide responsive services, namely the motivation of employees in solving problems faced by customers in using services. Responsiveness includes prompt customer service, keeping customers informed, a desire to help customers, and readiness to respond to customer requests (12).

The results of the analysis on multiple linear regression show that the coefficient of the influence of the responsiveness variable on patient satisfaction has a positive value of 0.295 and a significance value of 0.100 > 0.05. This shows that the variable responsiveness (responsiveness) has a positive and insignificant effect on the variable satisfaction of inpatients at Anutapura Hospital, Palu.

According to the researchers' assumptions, an insignificant effect was obtained because some patients who were treated felt that there were still health workers who were less responsive in serving each patient's complaint besides the lack of speed of doctor service in diagnosing diseases so that it made patients feel that they still lacked responsiveness of health workers to any complaints that given by the patient.

This is in line with research conducted by Utami (2019) which states that the responsiveness variable has a positive and insignificant effect on the patient satisfaction variable with a significance value obtained from 0.130 > 0.05. In line with the research conducted by Meutia (2019), it is said that the responsiveness variable has a positive and insignificant effect on the patient satisfaction variable with a significance value obtained from 0.828 > 0.05.

**The Effect of Assurance on Inpatient Satisfaction at Anutapura Hospital, Palu**

The assurance includes the knowledge, ability, politeness, and trustworthiness of the staff free from risk or doubt, namely regarding the good knowledge of employees in handling questions or complaints from customers (15).
The results of the analysis on multiple linear regression show that the coefficient of the influence of the assurance variable on patient satisfaction has a positive value of 0.279 and a significance value of 0.099> 0.05. This shows that the variable of assurance has a positive and insignificant effect on the variable in patient satisfaction in Anutapura Hospital, Palu.

According to the assumptions of the researcher, an insignificant effect was obtained because health workers in serving each patient's complaint were not able to provide correct answers to questions about diagnosis and complaints given by patients so that patients were not satisfied with what was provided by the health workers in the room.

This is in line with the research conducted by Riyadi (2019) saying that the assurance variable has a positive and insignificant effect on the patient satisfaction variable with a significance value obtained 0.124> 0.05. In line with research conducted by Enas (2020), the assurance variable has a positive and insignificant effect on the patient satisfaction variable with a significance value obtained of 0.244> 0.05.

The Influence of Attention (Empathy) on Inpatient Satisfaction at Anutapura Hospital, Palu

Attention includes the ease of making relationships, good communication, personal attention, and understanding the needs of customers, namely the attitude of employees who show genuine concern in serving customers (16).

The results of the analysis on multiple linear regression show that the coefficient of the influence of the attention variable (empathy) on patient satisfaction has a positive value of 0.404 and a significance value of 0.096> 0.05. This shows that the variable attention (empathy) has a positive and insignificant effect on the patient satisfaction variable. hospitalization at Anutapura Hospital, Palu.

According to the researchers' assumptions, the insignificant effect was obtained because the patient considered that the health workers had not understood every complaint said by the patient and they had not shown genuine concern in serving each patient's needs to make the patient feel satisfied with what was provided by the health worker. However, this does not become a reason for patients not to come to the Anutapura Palu hospital when they are treated because according to them this is due to the comparison between the number of patients who are met at the time of service every day so that it has an impact on the services provided.

This is in line with research conducted by Taufik (2019) which states that the significance value obtained is 0.095> 0.05, which means that the empathy variable has a positive and insignificant effect on the patient satisfaction variable. In line with research conducted by Supratiningsih (2017), the significance value obtained is 0.709> 0.05, which means that the empathy variable has a positive and insignificant effect on the patient satisfaction variable.
Coefficient of Determination

The coefficient of determination (R2) is used to measure the ability to explain the variation in the dependent variable. The small value of R2 means that the ability of the independent variables to explain the variation in the dependent variable is very limited. The value of the coefficient of determination (Adjusted R Square) obtained is 0.270. That is, the influence of the service quality variable (X) on the patient satisfaction variable (Y) is 27%. As many as 73% of the patient satisfaction variable is influenced by other variables (17).

CONCLUSIONS

This study concluded that the coefficient of the influence of the tangible variable on patient satisfaction has a positive value of 0.057 and a significance value of 0.731> 0.05. This shows that the tangible variable has a positive and insignificant effect on the satisfaction variable of inpatients at Anutapura Hospital, Palu. And the coefficient value of the influence of the variable reliability (reliability) on patient satisfaction has a positive value of 0.216 and a significance value of 0.119> 0.05. This shows that the variable reliability has a positive and insignificant effect on the satisfaction variable of inpatients at Anutapura Hospital, Palu.

SUGGESTION

Recommendations for advice to agencies, to improve services in terms of rooms, service support equipment such as seats for patients’ families who visit and to consider the needs of the community who come for treatment.

REFERENCE

8. Lingsma H. Measuring quality of care: methods and applications to acute neurological diseases. 2010;
14. Mamuaya NCI, Tumiwa RAF, Kawatu FS. Analysis of Service Quality and Public Satisfaction on Local Government Agencies in Manado City. 2018;