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# THE INFLUENCE OF QUALITY OF SERVICES AND INFRASTRUCTURES ON INPATIENT SATISFACTION

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#### **Abstract**

This research was conducted at the Mother and Child Hospital "Fatimah" Lamongan with a scope of marketing which consists of service quality variables (X1), Infrastructure (X2) and patient satisfaction (Y). The study uses quantitative method. The population is the inpatients of the Mother and Child Hospital "Fatimah" Lamongan which will then be selected as the research sample. The data collection technique used a questionnaire and the sampling technique used probability sampling, with a random sampling technique and 98 patients were selected as samples. It uses primary data obtained directly from the respondents. The data obtained have tested the validity and reliability using SPSS software. The analysis of hypothesis testing used multiple linear regression analysis techniques and the results obtained that the quality of services and infrastructure have a significant effect on patient satisfaction inpatient care at the "Fatimah" Lamongan Mother and Child Hospital, while the variable infrastructure has a dominant influence on inpatient satisfaction.

**Keywords:** Service Quality, Infrastructures, Satisfaction, Hospital

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### INTRODUCTION

Indonesia is the country with the 4th most populous population in the world with a total of 237.9 million people under India, China and the United States (detik.com) or the largest in Southeast Asia. Indonesia, which is a vast archipelagic country, must have good health facilities. Based on the Government Regulation concerning health service facilities in article 1 paragraph 1 Health Service Facility is a tool and/or place used to organize health service efforts, whether promotive, preventive, curative or rehabilitative carried out by the central government, regional government, and/or public. Types of health service facilities are independent practice places for health workers, community health centers, clinics, hospitals, pharmacies, blood transfusion units, health laboratories, optics, medical service facilities for legal purposes and traditional health service facilities.

There are two types of hospitals in Indonesia, namely general hospitals and special hospitals. General hospitals provide various health services such as polyclinic services for children, surgery, cardiac, internal medicine and many others, while special hospitals are hospitals that provide specific medical services, such as maternal and child hospitals, orthopedic hospitals, mental hospital, pulmonary hospital and others.

Based on data from the Hospital Accreditation Commission, in 2019 Indonesia had 3,043 hospitals which were divided into 2,454 general hospitals and 589 special hospitals, specifically, not found in the provinces of North Kalimantan and West Papua. The most special hospitals are the Mother and Child Hospital (224 hospitals), then the Mental Special Hospital (34 hospitals),

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the third largest is the Special Surgery Hospital (23 hospitals) and the most maternal and child hospitals are on the island of Java. as in table 1.

Table 1
Number of Maternal and Child Hospitals in Java

Province	Amount	
DKI Jakarta	14	
Banten	20	
West Java	33	
Central Java	18	
In Yogyakarta	5	
East Java	50	

Data source: Hospital Accreditation Commission (KARS), 2020.

Based on table 1, it can be seen that the highest number of Maternal and Child Hospitals (RSIA) on the island of Java is in the province of East Java. To see the performance of the organization can be seen based on the results of hospital accreditation. One of the RSIA that has the highest accreditation "Plenary" is RSIA "Fatimah" Lamongan. The number of beds (TT) of RSIA "Fatimah" is 55 TT and in the span of 2014-2019 has a bed occupancy ratio (BOR) that meets national standards.

In the service industry, customer (Patient) satisfaction is the main factor in maintaining the continuity of the business run by the company. Customer satisfaction is the result of a comparison between performance or perceived results with the level of one's feelings (Kotler, 2000). Patient satisfaction can be influenced by several factors, including the quality of services and infrastructure. Sinambela (2011) states that the quality of health services is a service activity provided by public service providers who are able to meet



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expectations, desires, and needs and are able to provide satisfaction to the wider community in general and patients in particular.

This is in line with research conducted by Kartiko et al (2020), the results show that service quality greatly influences patient satisfaction. In addition, facilities and infrastructure have an influence on patient satisfaction based on research conducted by Ulandari and Yudawati, (2019).

### LITERATURE REVIEW

### **Customer Satisfaction (Patient)**

According to Pohan (2013), patient satisfaction is the outcome of health services. Thus, patient satisfaction is one of the goals of improving the quality of health services. Patient satisfaction is a level of patient feeling that arises as a result of the performance of health services obtained after the patient compares it with what he expects.

Kotler and Keller (2016) define customer or patient satisfaction as the emergence of a sense of pleasure or disappointment after comparing a service product with what a person has in mind for the results they expect. According to Irawan in Putranto (2016), consumer satisfaction can be obtained through several things, namely: a) The quality of the products or services provided, consumer satisfaction can be achieved if the products used are of good quality; b) Price, the customer is satisfied if the amount of money they spend in accordance with the quality of the products obtained. Low prices are usually a source of satisfaction; c) Service quality, one of the popular dimensions is equal; d) Cost and convenience, consumers will be more satisfied when obtaining services is relatively easy, comfortable and efficient; e) Emotional factor,



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customers will have pride if there is an emotional value given by the brand to the product (Aisa, 2021).

Analysis to get the level of patient satisfaction is useful for hospitals. It can be used as material for evaluating service quality, evaluating intervention consultations and interactions of healthy and unhealthy behavior, as a reference in making administrative decisions, evaluating changes and developments in service organizations, staff administration and as marketing promotions.

Patient satisfaction indicators consist of, 1) getting good service, 2) completing tasks quickly, 3) officers having good knowledge and expertise and 4) giving good responses every time they get complaints from patients.

# **Service Quality**

Sutopo (2000) states that there are main criteria for good service quality, namely, professionalism and skills, attitudes and behavior, easy to achieve and flexible, reliable and trustworthy, repair and reputation and credibility.

Changing the condition of someone who is sick or has complaints on his health is a general goal of service for a hospital, but the level of patient or customer satisfaction with the services provided by hospitals has different levels, this is influenced by two factors, namely the factors that exist in the hospital, patient self (intrinsic), and hospital factors.

Intrinsic factors or those within the patient include the suitability of the promotion with reality, the experience of being in another hospital with the current hospital, educational background, the large number of families and the economic level of the patient. Factors from the hospital include the ability of medical personnel, prices, availability of drugs and so forth.

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The use of health services is influenced by two factors, namely environmental and domicile factors as well as factors from the health care system consisting of the type of organization, the availability of medical personnel and facilities, the relationship between doctors, paramedics and other health workers with patients and health insurance, other health facilities, factors from customers who use health services, include socio-demographic factors and socio-economic factors.

Fandy Tjiptono (2005) states five main characteristics of services that distinguish them from goods, namely: 1. Intangibility (intangible). 2. Insperability (cannot be separated). 3. Variability (changeable). 4. Perishability (lack of durability). 5. Lack of ownership. Dimensions of service quality according to Hardiansyah (2011) there are 5 dimensions of service quality, namely, Tangible, Reliability, Responsiveness, Assurance (guarantee) and Empathy.

### Infrastructure

Health service facilities and infrastructure can be defined as a collaborative process of utilizing all health facilities and infrastructure effectively and efficiently to provide professional services in the field of facilities and infrastructure in an effective and efficient health service process.

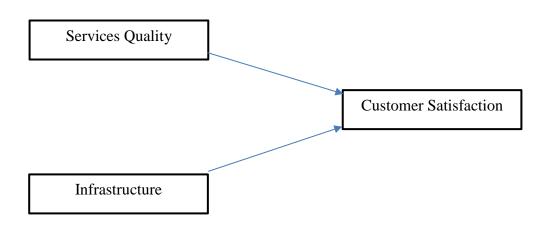
The infrastructure referred to by the researcher in this study is the patient's perception of the physical appearance and situation of the treatment room. The condition of a clean and tidy room will of course bring a sense of comfort to the patient and of course will greatly help restore the patient's health condition. The condition of the room that is not kept clean and comfortable can worsen the patient's condition and can even bring other diseases to the patient.

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### Framework

Based on the description above, the following framework can be made:

Figure 1 Framework



### **Research Hypothesis**

The hypothesis in this study is as follows: 1) The quality of service and infrastructure has an effect on customer satisfaction; 2) Service quality has more influence on customer satisfaction.

### **RESEARCH METHOD**

### Research Design

The implementation of this research uses an explanatory research method with survey techniques that aim to test hypotheses between hypothesized variables or explain the effect of causal relationships between variables through hypothesis testing. Hypothesis testing based on Singarimbun (1995:5) is a study aimed at explaining the causal relationship between research variables and testing the formulated hypothesis. In this design, the causal relationship can be predicted by the researchers so that they can state the classification of the causal variable and the dependent variable (Sanusi 2011:14).

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# Population and Sample

The population were all patients of RSIA "Fatimah" Lamongan. The sample is part of the number and characteristics possessed by the population. If the population is large, and it is impossible for researchers to study everything in the population. According to Arikunto (2006), if the subject is less than 100, it is better to take all of them. However, if the number of subjects is large or the research subjects are more than 100, the number of samples can be taken using the Slovin formula. Furthermore, Prasetya and Lina stated that the sample size taken could be representative and then it could be calculated using the Slovin formula below.

 $n = N / (1 + N. [e2]^2)$ 

Information:

n = Sample Size

N = Population Size

e = Critical Value (limit of accuracy) desired (Percentage of allowance for inaccuracy due to errors in sampling).

The sample is part of the number and characteristics possessed by the population. If the population is large, it is impossible for researchers to study everything in the population.

# **Data Collection Technique**

The data collection technique was by distributing questionnaires to 98 respondents. The respondents were patients or families of inpatients and outpatients. The results of the questionnaire are data on the expression of the patient's statement or the patient's family on the variables measured in this study.

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# **Data Types and Data Sources**

The data used in this study is primary data. Primary data is data obtained directly through respondents. The data sources of this study were outpatients and inpatients of RSIA "Fatimah" Lamongan.

### Research instrument

The measurement variables measured used a Likert scale. The Likert scale is a form of scale that indicates the answers of the respondents agree, or disagree on questions about an object. The measurement method using a Likert scale consists of five ranges of answers, namely strongly disagree (SD) 1, disagree (D) 2, Neutral (N) 3, Agree (A) 4 and strongly agree (SA) 5.

# **Data Analysis Technique**

The study uses Multiple Linear Regression analysis, with the following formula:

Y = +1X1 + 2X2 + e

Where:

Y = Patient satisfaction

a = Constant

1, 2 = Regression Coefficient

X1 = Service Quality

X2 = Infrastructure

e = Error (error rate)

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### **RESULTS AND DISCUSSION**

## Validity and Reliability Test

Based on the validity test using SPSS version 16, the results obtained are that Rcount is greater than the Rtable of 98 respondents, namely 0.220 at a significance level of 5% which means that all questionnaire items are declared valid. While the reliable test results are obtained as shown in table 2. based on these results according to Wiratna Sugerweni (2014) shows that greater than 0.6 then it is said to be reliable.

Table 2 Reliability Statistics

Variable	Cronbach's Alpha		
X1	.792		
X2	.770		
Y	.733		

Source: Processed Primary Data, 2020

# **Hypothesis Testing**

Hypothesis testing is done by testing the t test using the SPSS program analysis tool, which aims to partially determine the effect of the independent variable on the dependent variable by comparing the t value of the analysis results with the t table at a real level 0.05.

Table 3
Table of analysis results of t-test data test

Model	Unstandardized		Standardized		
	Coefficients		Coefficients		ig
	В	Std. Error	Beta		
1 (Constant)	7,580	6,931		1.094	.279
X1 - Service Quality	.398	.086	.476	4.670	.000
X2 - Infrastructure	.520	.080	.693	6.420	.000

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Based on the table above, the results of data analysis for the t-test of each independent variable can be explained as follows: a) **t test for service quality** variable. To partially test the leadership variable on employee performance, the t-test was used. The results of the regression analysis obtained the t-count value = 4.670 while the t-table value = 1.67 because the t-count value> from the t-table value so that it was proven that partially the service quality variable had a significant effect on patient satisfaction; b) **t-Test for Infrastructure Variables.** To partially test the infrastructure variable to inpatient satisfaction, the t-test was used. The results of the regression analysis obtained that the value of t count = 6.420 while the value of t table = 1.67 because the value of t count > from the value of t table so that it is proven that partially the infrastructure variable has a significant effect on inpatient satisfaction.

# Discussion

Based on the results of the study, it can be found that Service quality is formed on the dimensions of service quality, namely, Tangible, Reliability, Responsiveness, Assurance (guarantee) and Empathy as well as facilities and infrastructure are the patient's perception of the physical appearance and situation of the treatment room as well as supporting facilities for the parking area partially have a positive and significant effect on the satisfaction of inpatients at the hospital. It can be seen from the results of the data test analysis where the t-test value is greater than the t-table value. It is in line with the theory put forward by Kottler (2016) where the quality of services and infrastructure. These results are in line with the research conducted by Kartiko et al, which showed that service quality had a partial effect on inpatient satisfaction.

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Facilities and infrastructure have a greater value than service quality, which means that facilities and infrastructure have a more dominant influence on service quality. The patients are satisfied with the facilities available at the hospital. The facilities in question include comfortable parking conditions not too far from the main building, a modern building, and the most important value for patients is the condition of the room where the patient is hospitalized. The patients feel very comfortable with the inpatient rooms, having clean toilets, and each room has supporting facilities such as television, good air circulation, drinking water dispenser, waiting room that is suitable for patient waiters and each room has a good air conditioning (AC and Fan).

### **CONCLUSION**

Based on the results and discussion above, the following conclusions can be drawn. The quality of services and infrastructure has a positive and significant influence on patient satisfaction at the "Fatimah" Lamongan Mother and Child Hospital.

Infrastructure has a dominant effect on inpatient satisfaction with the dimensions of the patient feeling comfortable with the conditions of the inpatient treatment room at the "Fatimah" Lamongan Mother and Child Hospital.

### REFERENCES

Anwar Sanusi. (2011). Business Research Methods. Salemba Four. Jakarta.

Arikunto. (2006). *Prosedur Research a Practice Approach*. Jakarta: PT. Rineka Cipta Ari Kartiko et al. (2020). Research Results Seminar Procedure. *e-Prosiding* 

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e-ISSN 2798-0170

- Kotler, P. (2000). *Marketing Management*. (Indonesian edition by Hendra Teguh, Ronny and Benjamin Molan). Jakarta: PT Index.
- Kotler, Philip & Keller. (2016). *Marketing Management*, 15<sup>th</sup> Edition, United States: Pearson Education.
- Muhammad, Ali. (2010). Women's Health, Gender and Its Problems. Yogyakarta: Nuha Medika.
- Pohan S, Imbalo. (2013). Health Service Quality Assurance. Jakarta: EGC.
- Nur Aisa, R., & Hendayani, R. (2021). The Impression of Logistic Management on Customer Satisfaction in Small and Medium Enterprises. *Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE)*, 4(1), 349-366. https://doi.org/10.31538/iijse.v4i1.1708.
- Sinambela, Lijan Poltak, et al. (2011). *Public Service Reform, Theory, Policy, and Implementation*. Jakarta: Earth Literacy.
- Singaribun, Masri and Sofian Effendi. (2006). *Research Methods Survey (Editor)*. Jakarta: LP3s.
- Sutopo MPA. (2000). "Excellent Service". LAN Jakarta.
- Sripina Ulandari, Sunarsih Yudawati. (2019). *Scientific Journal of Health Sciences*, 7(2), 39-53.