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# Satisfaction with Health Services in General Hospital in Sumenep Regency

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#### **ABSTRACT**

Local governments as providers of health services for public should provide good quality services that are in accordance with the standard procedures for each general hospital. Mostly, the general hospitals had a problems with quality and effectiveness in services such as complaints that are often experienced by patients who use health services such as the friendliness of employees, nurses and doctors. This study aims to determine the priority of the health service quality that are concerned in order to meet the satisfaction of the people of Sumenep regency, to determine the public satisfaction index and the pattern of relationships between dimensions of satisfaction to health services in general hospital in Sumenep Regency. This study using a sample of 100 respondents where the sampling technique uses purposive sampling and the respondents were patients who visited for treatment at the general hospital in Sumenep Regency. Result showed that public were prioritized the speed and reliability of nurses and doctors in handling patients and the public satisfaction index is 86.4, means the quality of service is at the value of A, which means the service of the general hospital in Sumenep Regency is very good. The pattern of relationships that affect community satisfaction lies in the emphaty and tangible attributes.

**KEYWORDS**: satisfaction, health service, general hospical, public satisfaction index

#### INTRODUCTION

Customer service assessments have been carried out based on the concept of quality of service performed by Patawayati, et al. [1]. Assessment of service quality by customers is assessed from several aspects, namely service company services, customer perceptions and differences between consumer expectations of service and actual performance of the service itself. Public services organized by the local government are one of the public services in the health sector. The general hospital as the organizer should provide services that are in accordance with the standard of service quality procedures that have been determined by each general hospital and that has been determined by the local government. This efforts aims to carry out health services for the community in increasing customer satisfaction.

Some of the main causes of public dissatisfaction with health services include lack of drugs supplies, long waiting times, poor information provision, poorly maintained privacy, a dirty environment, and insufficient visiting hours [2]. Users generally feel dissatisfied with the organization inefficiencies, delays and problems of hospital infrastructure, while they are quite satisfied with the behavior and work of health professionals. To solve this problem, a strategy is needed with the objectives and priorities set, namely by planning actions, monitoring and controlling training without dividing the two service factors above [3]

But in the reality that is in the field all this time, especially poor people tend not to pay attention to their health. This is because of their inability to get expensive services. Many of them, if they experience illness, usually take them to a shaman or are given traditional medicine, which of course is not necessarily safe for consumption by people. One of the reason the patient will return to visit the hospital is the service that provided by the organizing party to the patient according to the procedure and providing effective and efficient services. But, in most general hospitals there are still problems with quality and effectiveness in services such as complaints that are often experienced by patients who use public health services such as the friendliness of employees and nurses and doctors. And also there are still problems such as, inadequate facilities, drug supplies, service delays, medical equipment, health service rates and others. Therefore, this study was conducted to determine how satisfied patients who use health services in the general hospital of Sumenep Regency.

The aim of this study is to determine the priority quality of health services that are prioritized in order to meet the public satisfaction in Sumenep Regency, to determine the public satisfaction index and to determine the pattern of relationships between dimensions of service satisfaction to health services in Sumenep Regency general hospitals.

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#### **METHODS**

In this study using the population of Sumenep Regency who have used health services in the regional general hospital Sumenep Regency, so the population is not known with certainty, then using sampling techniques [4-7] as follows:

$$n = \left(\frac{Z\alpha/2}{E}\right)^2 = > n = \frac{1.96}{0.20} = 96 \text{ participants}$$

Information:

n = Sample size

 $Z\alpha/2$  = Normal standard value with 5% confidence level

E = The level of determination used by suggesting a maximum error of 20%.

This study using a sample of 96 respondents will be rounded to 100 respondents, where the sampling technique uses purposive sampling in which the respondents in this study were patients who visited for treatment at the Sumenep Regency general hospital.

In this study using a measurement tool, where to conduct a satisfaction analysis of the people of Sumenep Regency towards health services, identify the variables as Table 1 follows:

### Table 1. Variable attributes

#### Responsive

- 1. The speed and accuracy of the services of doctors and nurses in handling patients
- 2. Response of doctors and nurses to give services in handling patients

#### Reliability

- Knowledge of doctors in diagnosing disease
- 2. Ease of procedure in service
- 3. Accuracy of operating hours
- 4. Discipline of doctors and nurses at work

#### Emphaty

- 1. Hospitality when handling patients
- 2. Nurse friendliness when handling patients

#### Assurance

- Accuracy of diagnosis of the disease by a doctor
- 2. Accuracy of prescriptions given by doctors
- 3. The cost of checking a doctor is still reasonable

#### Tangible

- 1. The facilities in the room are good
- 2. Completeness of medical equipment
- 3. The hospital environment is clean
- 4. Comfort of the waiting room
- 5. Wear uniforms while on duty for doctors and nurses
- 6. Using identification on the duty of doctors and nurses

#### RESULTS AND DISCUSSION

#### Validity Test and Reliability

Before analyzing the data obtained, the validity test is the initial step to do, aims to know that the questionnaire used in making a statement can measure the public satisfaction as provided in Table 2.

Table 2. Validity Test

Varial	ole Attributes	Importance	Satisfaction	Decision
Respo	nsive			
1.	The speed and accuracy of the services of doctors and nurses in handling patients	0.502	0.674	Valid
2.	Response of doctors and nurses to give services in handling patients	0.502	0.674	Valid
Reliab	ility			
1.	Knowledge of doctors in diagnosing disease	0.450	0.709	Valid
2.	Ease of procedure in service	0.536	0.882	Valid
3.	Accuracy of operating hours	0.537	0.931	Valid
4.	Discipline of doctors and nurses at work	0.562	0.895	Valid
Emph	aty			
1.	Hospitality when handling patients	0.555	0.443	Valid
2.	Nurse friendliness when handling patients	0.555	0.443	Valid

1. 2. 3.	Accuracy of diagnosis of the disease by a doctor Accuracy of prescriptions given by doctors The cost of checking a doctor is still reasonable	0.449 0.411 0.229	0.411 0.680 0.387	Valid Valid Valid
Tangible		0.484	0.442	Valid
1.	The facilities in the room are good	0.590	0.418	Valid
2.	Completeness of medical equipment	0.373	0.486	Valid
3.	The hospital environment is clean	0.437	0.387	Valid
4.	Comfort of the waiting roo	0.437	0.447	Valid
5.	Wear uniforms while on duty for doctors and nurses		4.1.1,	
6.	Using identification on the duty of doctors and nurses	0.505	0.301	Valid

To find out the valid or not value, r-table calculations are performed. The following is how to calculate the r-table, the number of samples 100 (df = n - 2) and  $\alpha$  = 5%, then the r-table value is 0.1654. Data from the table above, it is found that r-table < r-count so that all attributes of community satisfaction are declared valid.

After testing the validity, then proceed with the reliability test, this test is done to find out the error of the questionnaire that we have distributed, the questionnaire can be carried out further testing if it meets the requirements. Table 3 showed the value is still above, it can be concluded that the questionnaire data obtained is reliable.

**Table 3. Reliability Test** 

General hospital	Interest	Satisfaction
Responsive	0,668	0,805
Reliability	0,731	0,759
Emphaty	0,714	0,599
Assurance	0,539	0,665
Tangible	0,737	0,682

#### **Priorities in the Quality of Health Services**

This analysis is conducted to find out which attributes are most preferred by the community in the process of health services in general hospitals. The following are the priority results of the 17 attributes of community satisfaction determined by respondents.

**Table 4. Priority Attributes of General hospital** 

Priority Attributes of General hospital	Scale
The speed and accuracy of the services of doctors and nurses in handling patients	1
Alertness of doctors and nurses in handling patients	2
The cost of checking a doctor is still reasonable	3
Knowledge of the doctor in diagnosing disease	4
Accuracy of operating hours	5
The discipline of doctors and nurses at work	6
Nurse friendliness when handling patients	7
Hospitality friendliness when handling patients	8
Ease of procedure in service	9
The accuracy of the diagnosis of the disease by a doctor	10
The facilities in the room are good	11
Accuracy of prescriptions given by doctors	12
Completeness of medical devices	13
The hospital environment is clean	14
Comfortable waiting room	15
Wear uniforms while on duty for doctors and nurses	16
Use identification on the duty of doctors and nurses	17

Table 4 showed that the most important priority for the community is the first order "speed and accuracy of the services of doctors and nurses in handling patients". Public considers nurses and doctors who are in hospital are

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competent in their fields, so they want speed and accuracy in handling patients. The the lowest priority is "using the identity tandal on the duty of doctors and nurses, because this attribute is not so much noticed.

#### Public Satisfaction Index of Health Service in General Hospital

**Table 5. Public Satisfaction Index in General hospital** 

Index	Index Conversion	Service Quality	Service Unit Performance
3,45	86,4	A	Very Good

Table 5 interpreted that the majority people who have used health services at Sumenep Regency general hospital expressed satisfaction, because the public satisfaction index got a value of 3.45 and was converted to 86.4 so the quality of service getting A, indicates that the service performance was very good.

# Relationship Pattern of Service Satisfaction Dimensions to Health Services Sumenep Regency General Hospital

Determining the pattern of health services by using logistic regression analysis, the dependent variable is public satisfaction and independent variable is reliability, empathy, assurance and tangible. If the dependent variable (Y = 0), then the community does not feel satisfied with the general hospital services, and then the dependent variable (Y = 1) then the community towards the general hospital services. Here are the steps:

#### **Parameter Significance Test**

The formation of a simultaneous logistic regression model aims to obtain an appropriate and simple model based on factors that are considered to influence the response variable. The results of the multivariate significance test on hospital satisfaction data are as follows.

Hypothesis:

H0:  $\beta 1 = \beta 2 = \beta 3 = \beta 4 = \beta 5 = 0$  (There is no significant effect between independent variables and hospital satisfaction)

H1: There is at least one  $\beta j \neq 0$  with j = 1,2,3,4,5 (There is at least one of the independent variables that has a significant effect on satisfaction in the hospital)

Table 6 shows the results of multivariate parameter significance testing. By using a significant level ( $\alpha$ ) of 0.05 and the rejection area H0 is rejected if  $\chi 2 > \chi 2$  (0.025; 5) and / or P-value < $\alpha$  then the decision is accepted H0 because 43.998> 11.0705 and 0.000 <0.05 so it can be concluded that there is at least one independent variable that has a significant effect on satisfaction in the hospital.

Table 6. Parameter of Significance Test

		Chi-square	df	Sig.
	Step	43,987	5	,000
Step 1	Block	43,987	5	,000
	Model	43,987	5	,000

#### **Model Estimation Test**

This test aims to estimate model that is formed to ensure that there really is a significant independent variable. Based on the Table 7. the logistic regression model as follows:

$$\pi = \frac{e(-13,331 - 0,164X_1 - 0,303X_2 + 0,825X_3 - 0,344X_4 + 3,904X_5)}{1 + e(-13,331 - 0,164X_1 - 0,303X_2 + 0,825X_3 - 0,344X_4 + 3,904X_5)}$$

**Table 7. Model Estimation Test** 

		В	S.E.	Wald	df	Sig.	Exp(B)
	Responsive	-,164	,337	,237	1	,626	,849
	Reliability	-,303	,478	,400	1	,527	,739
C4 1a	Emphaty	,825	,404	4,162	1	,041	2,282
Step 1 <sup>a</sup>	Assurance	-,344	,542	,401	1	,526	,709
	Tangible	3,904	,898	18,880	1	,000	49,577
	Constant	-13,331	3,014	19,566	1	,000	,000

At a significant value <0.05, the dimensions of satisfaction that have an influence on health services in general hospitals are two, they are emphaty and tangible dimensions with each significant value of 0.041 and 0.000.

In empathy dimensions have a positive relationship with public health services, that means when doctors and nurses who handle patients should have a sense of friendliness towards the person who is treated there, by serving with all their heart and smile because the patient will feel comfortable and satisfied with the treatment. Therefore, every doctor and nurse on duty should serve with all their heart so that the patient will be satisfied 2,282 times compared to the ignorant and unfriendly.

Then for tangible dimensions, the positive relationship with public health services happened when they chooses a hospital based on the building and environment condition in the hospital, they need a comfortable place and complete facilities. Therefore, if the hospital implements it, the patient will feel satisfied by 49,577 times compared to the hospital that does not make improvements in the building or facilities.

#### The suitability of the model

This test was conducted to determine the feasibilty of the model produced based on multivariate logistic regression. There is no difference between the results of observations and possible predictions of the model. Model suitability testing is carried out with the following hypothesis.

Hypothesis:

- H0: Appropriate model (there is no significant difference between the results of observations with possible predictions of the model)
- H1: The model is not suitable (there is a significant difference between the results of observations with possible predictions of the model)

Table 8. Test of The Suitability of the Model

Step	Chi-square	Df	Sig.
1	6,533	8	,588

By using a significant level of 0.05 and the rejection area H0 is rejected if >2>  $\chi 2$  (0.025; 5) and / or P-value < $\alpha$  then the decision of H0 is rejected because 6.533 <15.507 and 0.588> 0.05 so it can be concluded that the model corresponding.

**Table 9. Determination Test** 

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	93,199ª	,356	,477

The model formed has a  $R^2$  value of 0.477 which means that the variability of the model explained by the five independent variables is 47.7% while the remaining 52.3% is explained by other independent variables that are thought to affect the model.

## Classification accuracy

**Table 10. Data Classification** 

	Predicted	Y		D
Observed		1	2	Percentage Correct
	1	31	13	70,5
Y	2	10	46	82,1
Overall Perce	ntage			77,0

The classification accuracy of this model is useful to find out whether the data is classified correctly or not. Table 10 shows that, of the 41 respondents who were satisfied with general hospital, there were 31 respondents correctly predicted by the model. As well as 59 respondents who felt dissatisfied with the general hospital, there were 46 respondents correctly predicted by the model. So that as a whole there are 77 out of 100 respondents can be predicted correctly by the model that is equal to 77%.

# CONCLUSION

The main priority of patients towards health services in Sumenep General hospital is the speed and accuracy of the services of doctors and nurses in handling patients. The majority of the public feel satisfied with the service carried out by the hospital with the index of value of 3.45 (conversion value is 86.4) which means that the quality of service is A grade (very good). Service attributes that have a direct impact on patient satisfaction are emphaty and tangible attributes, namely satisfaction with the friendliness of doctors and nurses in serving

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patients so that patients feel comfortable in treatment. In addition, buildings and environments in hospitals that do not seem shabby, and are well organized so that patients treated there feel calm.

#### REFERENCES

- [1]. Patawayati, D. Z., Setiawan, M., & Rahayu, M. (2013). Patient satisfaction, trust and commitment: Mediator of service quality and its impact on loyalty (an empirical study in Southeast Sulawesi Public hospitals). *IOSR Journal of Business and Management*, 7(6), 1-14.
- [2]. Assefa F, et al. 2011. Assessment of Clients Satisfaction With Health Service deliveries at Jimma University Specialized Hospital. 21(2): 101-109.
- [3]. Ekaterina G, et al. 2017. Measurenment of Patient Satisfaction as a Quality Indicator of Hospital Health Services: The Case of Outpatient Clinics in General Hospital. 5(2): 128 135.
- [4]. Hosmer, D., & Lemeshow, S. (2000). Apllied Logistic Regressions. USA: John Wliey & Sons.
- [5]. Hair et al. (2010). Multivariate Data Analysis, Seventh Edit ion. Pearson Prentice Hall
- [6]. Lovelock dan Wirtz, 2011. Service Marketing: People Technology, Strategy, New Jersey: Pearson Education, Inc.
- [7]. Tjiptono, Fandy. 2001. Strategi Pemasaran. Edisi Pertama. Andi Ofset. Yogyakarta.