

Quality of Service and Customer Value against the Image of the Hospital

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Abstract: The image of the hospital is very dependent on the patient's perception of the quality of service and will be a differentiator between hospitals. Hospitals with a positive image attached to it in the eyes of patients, relatively have products that are more acceptable to patients. On the other hand, a positive image can also affect employees' feelings to be more motivated to improve their performance, be more productive, and serve customers with excellent service. This study aims to analyze the effect of service quality and customer value on hospital brand image. The design of this study used a cross sectional method that is research that emphasizes the measurement time or observation of independent and dependent variable data only one time at a time, with a sample of 82 people. Method of collecting data in this study through primary and secondary data with questionnaires and interviews. The data analysis in this study is chi square analysis followed by logistic regression analysis. The results showed the quality of service and the average customer value was good. In the multivariate analysis, the simultaneous influence between service quality and customer value is 75.4% on the hospital brand image. These results indicate that the hospital's brand image is very dependent on the quality of service and customer value, for it is expected that the hospital continues to improve the quality of service.

1 INTRODUCTION

The image of the hospital is very dependent on the patient's perception of the quality of services provided. The image is a differentiator between one hospital and another hospital. In understanding and managing the relationship between the image of the hospital and the intention of inpatients, it is necessary to remember the experience of inpatients will be more attached to the patient's perception of the hospital. Hospitals with a positive image attached to it in the eyes of patients, relatively have products that are more acceptable to patients. On the other hand, a positive image can also affect employee feelings. Where employees will feel proud when working in a company that has a good name. Thus, employees are increasingly motivated to improve their performance, be more productive, and try to serve customers with excellent service.

In an effort to produce a positive image on an ongoing basis, hospital orientation needs to lead to patients who are basically buyers of services. One key is trying to meet the health needs of patients so that patients feel satisfied and happy with the experience

of being treated at the hospital. Satisfaction is an assessment or form of patient perception that states that a service has provided a level of enjoyment in accordance with expectations even more than expected. The level of enjoyment that is intended is a match between perceived service quality from experience using services and what is expected (Sutojo, 2004).

Patient satisfaction is determined by the patient's perception of the performance of the product or service in meeting patient expectations. Customers are satisfied when expectations are met or will be very satisfied if expectations of customers are exceeded. Basically all management efforts are directed at achieving customer satisfaction. Whatever management does is of no use if customer satisfaction is not achieved. So the function is an impression of performance and expectations, if the performance and service exceeds expectations, the patient will feel satisfied, but conversely if the performance and service are below expectations, the patient will not be satisfied (Tjiptono, 2016). Patient satisfaction is the basis for determining whether or not the image of a hospital. If the patient feels satisfied with the

performance of hospital services, a patient satisfaction will be formed. Satisfaction of patients will encourage patients to come back for treatment or interest in the hospital. Conversely, patients who are dissatisfied will leave and won't even recommend it to others. Because the patient is basically just someone who receives the results of the performance and service of an organization or agency, then only they can know, feel and determine.

The concept of quality is basically relative, that is, it depends on the perspective used to determine the characteristics and specifications. Basically there are three quality orientations that should be consistent with each other, namely, consumer perceptions, products / services, and processes. Quality of service is much more difficult to define when compared to quality of goods. If quality and quality control measures have long been developed and applied for tangible goods, services for various efforts are being developed to formulate such measures (Herlambang, 2016; Turnip et al, 2020; Wijaya et al, 2019).

Similarly, the value of customers, all consumers will perceive value with themselves and their families, the perceived value of these consumers will be an experience in their lives. The measurement of customer value in increasing the proportion of product value will affect subsequent consumer purchasing decisions. Customers will make decisions based on perceived benefits and the price to be paid to enjoy these benefits. The final result to be received is a positive image which will certainly benefit the hospital (Kotler, 2009).

One of the most considered the first predictor and determinant of service quality is reliability. Patients view reliability as a combination of doing the right thing and the availability of all information regarding treatment, and some criteria and offers based on these determinants including appointment and availability of information. It is believed that by paying attention to the principle of reliability in providing services in the hospital, it has the potential to help reduce defects in the process of care or care, improve consistency with which appropriate care is given, and improve patient outcomes such as satisfaction and positive words from the patient's mouth (Akdere) , 2018).

As with reliability, assurance in the hospital industry also refers to the knowledge and courtesy of medical professionals in hospitals and supporting employees. Assurance in medical services is described as the ability of the hospital to convey confidence in the minds of patients. In hospital medical care settings, guarantees are reflected by diagnostic competence, skills for interpreting laboratory reports, providing appropriate

explanations for questions. Trained doctors and nurses as well as other support staff must play an important role in providing support to patients' feelings of security and security (Mohsen, 2017).

Physical evidence also plays an important role in the brand image of the hospital. The quality of hospital physical evidence can include the appearance of physical facilities and the comfort offered to customers by the layout of physical facilities. Some literature shows that the physical appearance of the hospital is important for customers. It also shows that customers (patients) appreciate the comfort offered during treatment, especially in physical aspects such as hospital building arrangements and their facilities (Kalutharawithana, 2017).

The initial survey findings at the hospitals that were studied related to service quality, showed that some patients rated the quality of services at the hospital to be quite good. However, there are some patients who disagree because they are not satisfied with some of the performance of some services, such as nursing services which are considered not responsive to complaints from patients. From the background explanation, it can be seen that there has been no research linking the quality of service and customer value to the image of the hospital, so the authors assess the need for deeper studies regarding "Service Quality and Customer Value Against the Image of the Hospital".

2 METHOD

The design of this study uses a cross sectional method that is research that emphasizes the measurement time or observation of independent and dependent variable data only one time at a time. The study was conducted at Dr. R.M. Djoelham City of Binjai which starts from July-September 2019. The population in this study were general patients undergoing hospitalization. Based on medical records, the number of inpatients in the hospital was 567. Samples were taken using an accidental sampling technique of 82 people, with selected sample criteria must be inpatients undergoing treatment for at least 3 days as evidenced by the patient's medical record. In addition, patients must be able to communicate well (can read and write), be willing to be respondents.

Primary data were obtained directly through interviews with respondents who were undergoing hospitalization. In this study primary data include the characteristics of respondents, independent variables of service quality (reliability, responsiveness, empathy, physical evidence and guarantees),

customer value (quality, price, reputation and emotional factors) as well as and the dependent variable of the hospital's image. Interviews were conducted based on a questionnaire that had previously been tested for validity and reliability. Where, for the 5 service quality variables, the number of questions for each variable is 5 items so the total questions are 25 items. In the 4 customer value variables, the number of questions for each variable is 3 items so that the total number of questions is 12 items.

Next, the hospital image variable is measured by 10 question items. Measurement results of the questionnaire using the Guttman scale. The scale developed by Louis Guttman with a choice of positive or yes answers was given a score of 1, while for negative answers or not given a score of 0. Then the total score is converted into a percentage, then it can be described for the answer yes score $1 = 1 \times 100\% = 100\%$, while the answers are not given a score of $0 = 0 \times 0\% = 0\%$. To anticipate the measurement results that are not absolute 100% or 0%, the researchers used a range of percentage scales. The percentage range in this study is $<70\%$ which is interpreted not well and $>70\%$ is interpreted well (Sugiyono, 2014).

The results of the questionnaire were then analyzed using the chi-square test to see the relationship between the independent variables and the dependent variable. Followed by a logistic regression test to see the effect of the entire independent variable on the dependent. The research procedure can be seen in Figure 1.

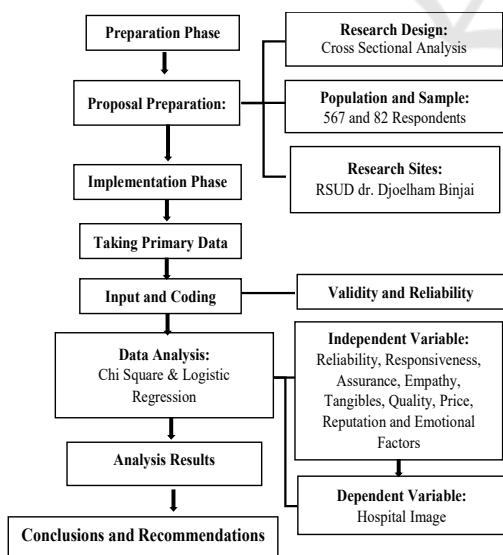


Figure 1. Research procedure

3 RESULT

3.1 Validity and Reliability Analysis

Before conducting a statistical analysis, testing the validity and reliability of the research instruments is first performed. This test is useful to find out if there are questions or questions on the questionnaire that must be removed or replaced because they are considered irrelevant. Validity test is done by using the Pearson correlation method (Pearson Correlation) where a question item can be said to be valid if the product moment correlation coefficient value is greater than the r table. In this study with a sample of 82 people, the value of n is 80 (82-2) and by using alpha of 5%, the r value of the table is 0.1966. From the test results obtained by the entire question item is valid.

Next, reliability measurements are divided into repeat shots and one shot, in this study the method used is one shot where the measurement is only once and then the results are compared with other values. In this one shot method a variable can be said to be reliable if the acquisition value of Cronbach's Alphabet is greater than 0.600. The test results show that the Cronbach's Alphabet value of the variables of reliability, responsiveness, assurance, empathy, physical evidence, quality, price, reputation, and emotional factors are greater than 0.6, which means that each variable is already reliable.

3.2 Univariate Analysis

After the research instrument has been declared valid and reliable, the analysis can be continued. Univariate analysis basically aims to describe each of the variables including the characteristics of the respondent, the independent variable (free) and the dependent variable (bound) using the frequency distribution table. Frequency distribution of respondent characteristics based on demographic data which includes gender, age, education, occupation and income. Based on the characteristics of the respondents it can be seen that of the 82 respondents observed, the majority of respondents were female, namely as many as 43 people (52.4%), aged > 30 years as many as 69 people (84.1%), educated high school / high school / equivalent as much 32 people (39.0), other types of work as many as 24 people (29.3%), with income > Rp. 3,000,000 as many as 69 people (84.1%). Next, the univariate results of the service quality, service value and hospital image variables show, of the 82 respondents studied were dominated by the same total percentage of answers for each

question. The results of this questionnaire can be summarized through the line graphs in Figure 2 and Figure 3.



Figure 2. Graph of the results of measurement of service quality questionnaire and the image of the hospital

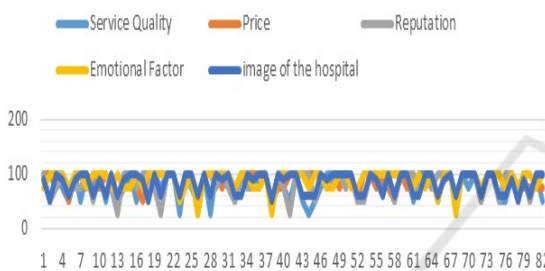


Figure 3. Graph of the results of the questionnaire measurement of customer value and the image of the hospital

3.3 Bivariate Analysis (Chi Square Analysis)

The next step was bivariate analysis using the Chi Square test at the significance level (α) = 0.05. The purpose of this analysis is to see whether there is a relationship between the independent variables (service quality which includes: reliability, responsiveness, assurance, empathy, physical, evidence and customer value which includes: quality, price, reputation, and emotional factors) with the dependent variable (image hospital). Based on the cross tabulation, it was found that on the reliability quality, of the 82 respondents observed, there were 66 people who rated reliability well with 51 people (77.3%) of whom rated the image of the hospital good, while 15 people (22.7%) the rest rated the image of the hospital is not good. Next, there were 16 people who rated reliability as not good with 15 people (93.8%) of whom rated the hospital's image not good, while 1 person (6.2%) the rest rated the hospital's image as good. In the quality of responsiveness, there were 43 people who rated the responsiveness as good with 31 people (72.1%) of whom rated the image of the hospital as good, while

12 people (27.9%) the rest rated the image of the hospital as not good. Next, there were 39 people who rated poor responsiveness with 21 people (53.8%) of whom rated the hospital's image good, while the remaining 18 people (46.2%) rated the hospital's image not good.

In the quality of guarantee there are 51 people who rate good guarantees with 41 people (80.4%) of whom assess the image of a good hospital, while 10 people (19.6%) the rest rate the image of the hospital is not good. Next, there were 31 people who rated collateral as not good with 20 people (64.5%) of whom rated the hospital's image as not good, while the remaining 11 people (35.5%) rated the hospital's image as good. In the quality of empathy, there were 53 people who rated empathy well with 35 people (66.0%) of whom rated the hospital's image good, while 18 people (34.0%) the rest rated the hospital's image not good. Next, there were 29 people who rated empathy as not good with 12 people (41.4%) of whom rated the image of the hospital as not good, while 17 people (58.6%) rated the image of the hospital as good. In the quality of fiisk evidence, there were 64 people who rated good physical evidence with 51 people (79.7%) of whom rated the image of the hospital as good, while 18 people (20.3%) the rest rated the image of the hospital as not good. Next, there were 18 people who rated the physical evidence as not good with 17 people (94.4%) of whom rated the hospital's image not good, while 1 person (5.6%) the rest rated the hospital's image good.

Next, on the quality score, of the 82 respondents observed, there were 54 people who rated good quality with 49 people (90.7%) of whom rated the image of the hospital good, while 5 people (9.3%) the rest rated the image of the hospital not well. Next, there were 28 people who rated the quality as not good with 25 people (89.3%) of whom rated the hospital's image as not good, while 3 people (10.72%) the rest rated the hospital's image as good. A total of 61 people rated the price of a good price with 42 people (68.9%) of whom rated the hospital's image as well, while the remaining 19 people (31.1%) rated the hospital's image not good. Furthermore, there were 21 people who rated the price was not good with 11 people (52.4%) of whom rated the image of the hospital as not good, while the remaining 10 people (47.6%) rated the image of the hospital as good. As many as 64 people rated good reputation with 51 people (79.7%) of whom rated the hospital's image as good, while the remaining 13 people (20.3%) rated the hospital's image not good. Furthermore, there were 18 people who rated bad reputation with 17 people (94.4%) of whom rated the hospital's image

not good, while 1 person (5.6%) the rest rated the hospital's image good.

And finally, as many as 69 people rated good emotional factors with 46 people (66.7%) of whom rated the image of the hospital as good, while 23 people (33.3%) the rest rated the image of the hospital as not good. Next, there were 13 people who rated emotional factors as not good with 7 people (53.8%) of whom rated the hospital's image as not good, while the remaining 6 people (46.2%) rated the hospital's image as good. (see Table 1).

Table 1. Chi Square results

Variables	Hospital Image				P-value
	Good		Not good		
	n	%	n	%	
Reliability					
Good	51	77,3	15	22,7	0,001
Not good	1	6,2	15	93,8	
Responsiveness					
Good	31	72,1	12	27,9	0,160
Not good	21	53,8	18	46,2	
Assurance					
Good	35	66,0	18	34,0	0,011
Not good	17	58,6	12	41,4	
Empathy					
Good	21	51,2	20	48,8	0,175
Not good	5	26,3	14	73,7	
Tangibles					
Good	51	79,7	13	20,3	0,001
Not good	1	5,6	17	94,4	
Quality					
Good	49	90,7	5	9,3	0,075
Not good	3	10,7	25	89,3	
Price					
Good	42	68,9	19	31,1	0,041
Not good	10	47,6	11	52,4	
Reputation					
Good	51	79,7	13	20,3	0,156
Not good	1	5,6	17	94,4	
Emotional Factors					
Good	46	66,7	23	33,3	0,131
Not good	6	46,2	7	53,8	

In the results of the analysis with chi square is known only the quality factors of reliability, collateral, physical evidence, and the price value which has a value of $p < \alpha$, it can be concluded that there is a significant relationship between the

variables of reliability, guarantee, physical evidence, and price with the image of the hospital. While on the quality of responsiveness, empathy, quality, reputation, and emotional factors have a value of $p > \alpha$, it can be concluded that there is no significant relationship between responsiveness, empathy, quality, reputation, and emotional factors with the image of the hospital.

3.4 Multivariate Analysis (Logistic Regression Analysis)

Table 2. Final Results of Logistic Regression Analysis

Variables	B	S.E	Wald	Df	P value	OR
Reliability	0,645	0,091	4,590	1	0,001	5,203
Assurance	0,339	0,086	6,591	1	0,003	3,652
Tangibles	0,185	0,199	3,400	1	0,001	4,103
Price	0,142	0,071	2,921	1	0,011	4,201

4 DISCUSSION

4.1 Influence of Reliability Quality on Hospital's Positive Image

In general, a positive image of a hospital is strongly influenced by the level of patient satisfaction with the services provided. This satisfaction can arise if patients get the good results they want. The thing that most contributes to the full satisfaction of patients is the reliability of those who provide services, in this case doctors, nurses, midwives, and other health workers. It is known in the hospitals studied, the level of reliability of medical personnel in handling patients is considered good. The quality of service from doctors is considered to most influence the positive image of the hospital, it is seen as many as 86.6% of patients agree that the doctor in charge of the hospital has the ability and knowledge in determining the diagnosis of the disease quite well, so as to be able to answer every patient's questions good and convincing. In providing services, doctors can explain the actions that will be done well. Doctors always show a friendly attitude towards their patients so that patients feel it is not awkward to interact with their doctors. Besides doctors, the quality of nurses is also considered quite good, as many as 75% of patients agree that nurses work deftly. The nurse always informs the patient and the patient's family about plans for medical action to be taken and routinely reminds patients to take medicine. The same thing can also be seen from the patient's nursing care record which is filled out completely. However, some patients still complain about the performance of

nurses who are less fast, such as when the schedule for fluid replacement in hospitalized patients is slightly delayed. Therefore, it is necessary to have a routine evaluation of the performance of hospital staff so that patients feel satisfied and impressed, and create a positive image in the hospital. The same results were found by Tan (2019), Almomani (2019) & Wu (2018) that reliability has the potential to make changes in the level of patient satisfaction in public hospitals and have an impact on the image of the hospital.

4.2 Influence of Quality Assurance Against Hospital's Positive Image

After reliability, quality assurance is also considered to significantly influence the positive image of the hospital. Evidenced by the results of logistic regression analysis that obtained a p value of 0.001 ($p < 0.05$) with an OR of 5.2, which means that the positive image of the hospital will increase by 5 times higher if the hospital can provide a good guarantee of service which are given. Researchers found overall hospitals can provide a good guarantee for the services provided. The idea is illustrated from the results of the questionnaire that as many as 84% of patients agree that medical personnel, especially doctors treat patients well and convincingly so that patients feel safe while undergoing treatment. The same thing was obtained at the interview session with several patients. It is known that doctors always involve patients when providing services, which before giving special actions to patients, the doctor always communicates first with the patient and the patient's family. In addition, doctors and nurses sometimes provide moral support and provide feelings of calm to patients or families of patients who are panicking about their health conditions. Things like this are considered by patients to be more value for the services provided by the hospital, so that patients always return to the hospital if they need treatment or medication. This result is supported by the findings of Oktarina (2016), Ekayanti (2013) that guarantee perceptions affect patient satisfaction

4.3 Influence of Quality of Physical Evidence on Hospital's Positive Image

The next dimension of service quality that also affects the positive image of the hospital is physical evidence or the physical appearance of the hospital. The physical appearance of a hospital is a tangible form that can be directly seen by patients. Some important

components relating to physical evidence of a hospital include, hospital facilities, hospital medical equipment and the appearance of employees and health workers when on duty at the hospital. In the hospitals studied, the majority of patients rated the hospital building as beautiful and neat. The patient care room looks clean and comfortable because it is equipped with adequate facilities. Food services are also presented with good quality, some patients revealed that the food provided was quite tasty and varied so that the patient felt happy.

4.4 Influence of Price Value on Positive Image of Hospitals

The last factor that contributes to the hospital's image is the customer's value as seen from the suitability of the price offered. The findings of researchers related to the price of services provided to patients, that the price of services is considered to be in accordance with the services provided. Some patients even consider the price offered at the hospital to be more acceptable compared to other hospitals. In the interview session, several patients who often went to the hospital also revealed that even though the price of the service would increase, it would not affect the patient to return to using the hospital's services. From the observations of researchers, it is known that many patients are loyal to the hospital, it is not uncommon for patients to recommend the hospital to their relatives and coworkers when they need care services. This result is supported by previous research by Nurlia (2012) & Santoso (2016) showing that the price variable has a significant relationship with the decision of hospitalized patients to choose health services.

4 CONCLUSION

This research found that the quality of reliability, guarantee, price and physical evidence are the factors that most influence the image of the hospital. Some conclusions that can be generated from this research are:

- a. It is known in the hospitals studied, the level of reliability of medical personnel in handling patients is considered good. The quality of service from doctors is considered to most influence the positive image of the hospital. It is predicted from the odds ratio value of the logistic regression test results that the hospital's image will increase 5.3 times higher if the quality of reliability is increasingly improved.

- b. Researchers found overall hospitals can provide a good guarantee for the services provided. The idea is illustrated from the results of the questionnaire that as many as 84% of patients agree that medical personnel, especially doctors treat patients well and convincingly so that patients feel safe while undergoing treatment. It is predicted from the odds ratio value of the logistic regression test results that the hospital's image will increase 3.6 times higher if the quality of guarantees is increasingly improved.
- c. In the hospitals studied, the majority of patients rated the hospital building as beautiful and neat. It is predicted from the odds ratio value of the logistic regression test results that the hospital's image will increase 4.1 times higher if the quality of physical evidence is improved.
- d. The findings of researchers related to the price of services provided to patients, that the price of services is considered to be in accordance with the services provided. It is predicted from the odds ratio value of the logistic regression test results that the hospital's image will increase 4.2 times higher if the price value is further adjusted.

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