# Effect of Service Quality on Patient Satisfaction with the Hospital's Image as a Moderator at Royal Prima Hospital Medan

## Ade Jona Prasetyo

Master of Management / University Prima, Indonesia

**ABSTRACT:** Customer loyalty has become an interesting issue in the field of marketing. This customer loyalty arises because of the influence of the satisfaction felt by customers. Imaging is an important stage for hospitals because it can encourage customer loyalty. Customer service is a very important element to foster customer satisfaction which ultimately fosters loyalty to customers. This study aims to examine the influence of hospital image and service quality on customer loyalty through patient satisfaction. This research method is a descriptive quantitative conducted at RSU Royal Prima Medan in July 2022. The total population of outpatients and inpatients using hospital services in the last 3 months ± 35,456 people with an average per month of ± 11,818 patients. The minimum sample using the sem structural equation modeling (SEM) analysis technique was determined by 100 people. Sample determination technique using nonprobability sampling method purposive sampling approach. Data analysis using bivariate and multivariate with multiple regression analysis models and simulates hypothesis assessment using the F test and T-test. The calculated F value of 45,213 is greater than that of F table 3.07 with a sig of 0.002 < 0.05. The Service Quality Variable has a calculated t of 4.522 and a t table value of 1.977 then the calculated t value of > t tabel at α=5% (4,522>2,627) with a significant value of 0.002 is less than 0.05 (0.002<0.05), so the results of the H0 study were rejected and H1 was accepted. The conclusion of the Service Quality variable (X1) and the Image variable (X2) partially had a significant effect on Patient Loyalty (Y) at Royal Prima Hospital Medan. The result of the value of the coefficient of determination (Adjusted R Square) is 0.460. This shows that 46% of the Patient Loyalty variable (Y) can be explained by the service quality variable (X1) and the Image variable (X2), while the remaining 64% is a variation of other variables that are not described in this study, for example, discipline, leadership, and so on.

**KEYWORDS:** Customer loyalty, image, service quality.

## I. INTRODUCTION

Customer loyalty has become an interesting issue in the field of marketing. This customer loyalty arises because of the influence of the satisfaction felt by the customer (1). Customer loyalty itself is inseparable from customer satisfaction (2). Image is a valuable intangible asset of the company. A positive image allows a company to gain reputation value and competitive advantage. A good image will increase customer satisfaction, quality of service, loyalty, and repurchase intentions (3). A good image will be able to increase the success of a company and conversely a bad image will deteriorate the stability of a company. The image of the hospital has an impact on the attitude and behavior of patients towards the hospital. Thus, an understanding of the relationship between the image of the hospital and its effect on the patient's intentions is indispensable (4).

Imaging is an important stage for hospitals because it can encourage customer loyalty. The image of the hospital has the function of liaison and maintains the harmony of its relationship with its customers (5). Wu's research (2011) shows that the image of the hospital has an influence both directly and indirectly on patient loyalty. This indicates that a good hospital image not only increases patient satisfaction through direct patient loyalty but also increases patient satisfaction by improving the quality of perceived services. Likewise, Darlina's research (2015), company image variables have a positive effect on customer loyalty, providing service quality has a significant effect on customer loyalty and a significant influence between company image and service quality on customer loyalty (6).

Customer loyalty is good customer service to customers. Customer service is a very important element to foster customer satisfaction which ultimately fosters loyalty to customers. The service quality is an absolute thing that must be owned by the company or agency that offers services because, with the service quality to customers, the company or agency can measure the level of performance that has been achieved. The high and low service quality depends on how the customer receives the real

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service he gets about what they expect. Consumers who feel satisfied will indirectly create loyalty, encourage recommendations from mouth-to-mouth, and can even improve the company's image in the eyes of consumers.

The results of Safitri's research (2016), showed that customer satisfaction played a role in mediating the influence of service quality on customer loyalty (7); (8). However, Sari's research (2021) shows that the service quality has a negative influence on patient loyalty at Bhayangkara Tk II Sartika Asih Hospital Bandung (9). Problems related to the image of the hospital and the service quality are also experienced by the Royal Prima Hospital Medan. The results of the pre-survey related to hospital imagery and quality, some patients gave positive and negative complaints. Based on these problems, the author is interested in conducting a study entitled "The Influence of Hospital Image and Service Quality on Customer Loyalty through Customer Satisfaction (Study at Royal Prima Medan Hospital)".

## II. LITERATUR REVIEW

Having loyal patients is the ultimate goal of all companies. Patient loyalty has an important role in a company. Understanding patient loyalty is actually not only seen from transactions or repeat customer purchases (10). There are four dimensions of loyalty, namely: transaction, relationship, partnership and ownership. That when patients are loyal, then not only their desire to transact but also to relate, to establish the same may even want to have. In order to create customer loyalty, companies must think about being able to create customer satisfaction or patient satisfaction first. One of them is through relationship marketing which not only prioritizes how to create sales but how to retain patients on the basis of the same relationship and trust in order to create maximum patient satisfaction and sustainability marketing (11).

Image is what consumers think about a product. This includes perceptions and attitudes that are based on reactions and stimuli related to the company received through the five senses. Image is a set of beliefs, ideas, and messages that a person has towards an object Sutisna (2001:33). Image is the main goal and at the same time is the reputation and achievements to be achieved by public relations. Quality is a key success factor for an organization or company. Five dimensions in determining the quality of services or services, namely: Tangibles (real facilities / direct evidence), Reliability (reliability), Responsiveness (Agility), Assurance (Certainty / assurance), Competence (Competence), Courtesy (Courtesy), Credibility (Credibility), Emphaty (Empathy) (12); (13).

## III. RESEARCH METHODS

The research method used in this study is a descriptive quantitative research method (14). This research was conducted at Royal Prima Hospital Medan in July 2022. The total population of outpatients and inpatients using hospital services in the last 3 months ± 35,456 people with an average per month of ± 11,818 patients. Hair et al. mentioned that the number of representative samples to use the SEM Structural Equation Modelling (SEM) analysis technique was 100-200 (15). Based on the minimum number of samples, the number of samples taken in this study was determined to be 100 people. Sample determination technique using non probability sampling method purposive sampling approach (14). The criteria used as samples in this study are as follows:

1. Patients who are undergoing road treatment / staying at Royal Prima Hospital.

2. Willing to be a respondent and be able to read and write.

3. Cooperative patients.

The instrument used is a questionnaire, which is further tested for validity and reliability. The validity test uses a validity construct test using Confirmatory Factor Analysis (CFA) assisted by the AMOS program. The items of the states that have a valid loading factor are≥ 0.5. To measure reliability with the Cronbach Alpha (α) statistical test >0.60. Data analysis uses bivariate and multivariate with multiple regression analysis models. Simulation hypothesis assessment using F test and T-test (14).

**Table 1. Identification and Operational Definition of Variables**

| No Scale | Variable | Definisi | Indicators | Ratio |
|---|---|---|---|---|
| 1 | Service quality (X1) | The service quality is an effort to meet the needs and desires of the patient and the accuracy of its delivery in keeping pace with the expectations of the patient. The service quality in this study was measured using 5 indicators from Lupiyoadi (2001: 148) which | Tangibles, reliability, responsiveness, assurance, empathy | Likert |

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| | | | | |
|---|---|---|---|---|
| | | include: tangibles, reliability, responsiveness, assurance, | | |
| 2 | Image (X2) | The image referred to in this study is the perception of Royal Prima Medan Hospital as a reflection on the evaluation of the company concerned. The company must be able to prove that the company is trustworthy. Having a good image in the eyes of society will be a consequence of image formation. Imagery can support and undermine the value that consumers feel. A good image will be able to increase the success of a company and conversely a bad image will deteriorate the stability. | 1. Location<br>2. Good impression<br>3. Attributes<br>4. Public Service<br>5. Reputation<br>6. Recommendations Health Services | Likert |
| 3 | Patient Loyalty (Y) | Patient loyalty is patient behavior shown from the patient's willingness to repurchase or subscribe using the services of Royal Prima Hospital Medan | Patients who make regular repurchases, patients who buy for other products/services in the same place, patients who refer to others, and patients who cannot be influenced by competitors to move in. | Likert |

## IV. RESULT AND DISCUSION

**Table 2. Descriptive Statistics**

| Variable | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Service quality | 100 | 22,00 | 35,00 | 30,22 | 2,70 |
| Image | 100 | 19,00 | 35,00 | 28,99 | 3,24 |
| Patient Loyalty | 100 | 20,00 | 38,00 | 29,47 | 2,55 |
| Valid N (listwise) | 100 | | | | |

**Source:** 2022 Research Results (SPSS Processed Data)

**Table 3. Multiple Linear Regression Test Results**

| Model | Unstandardized Coefficients | | Standardized Coefficients |
|---|---|---|---|
| | B | Std. Error | Beta |
| 1 (Constant) | 11,202 | 1,786 | |
| 2 Service quality | ,310 | ,078 | 391 |
| 3 Imagery | ,244 | ,067 | , 335 |

a Dependent Variable:ABS_RES

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**Table 4. Coefficient of Determination Test Results**

| Model | R | R Square | Adjusted R Square | Std. Error ofthe Estimate |
|---|---|---|---|---|
| 1 | ,664ª | ,440 | ,460 | 1,89397 |

**Source:** Primary data processing results
(questionnaire SPSS 2019)

**Table 5. Test Results -F**

| Model | | Sum of Squares | Df | Mean Square | F | Sig |
|---|---|---|---|---|---|---|
| 1 | Regresion | 382,762 | 2 | 191, | 45, | ,002 ª |
| | Residual | 488,847 | 136 | 882 | 213 | |
| | Total | 872,622 | 138 | 3,587 | | |

**Source:** Primary data processing results (SPSS questionnaire 2019)

From table 2. Above it can be seen that the average value of Service Quality (X1) is 30.22 with a standard deviation of 2.70, and Citra (X2) with an average of 28.99 with a standard deviation of 3.24, as well as Patient Loyalty (Y) with an average of 29.47 with a standard deviation of 2.55.

From table 3. above, then a multiple linear regression equation can be formulated as follows: Y=11.202+0,310 X1+0,244X2. The value of the constant = 11.202 which means that although the free variable (X1) is the Service quality and the free variable (X2) namely Citra is worth 0, then patient loyalty at Royal Prima Hospital Medan remains at 11,202. The coefficient X1(b1) = 0.310 and is positive. Variable Service quality to Patient Loyalty with a regression coefficient of 0.340 units. This means that every time there is an increase of 1 unit, the Patient Loyalty of Royal Prima Medan Hospital will increase by 0.310 units. The coefficient X2 (b2) = 0.244 and is positive.  Image variable to Patient Loyalty with a coefficient of 0.244 units. This means that every time there is an increase of 1 unit, the Patient Loyalty of Royal Prima Medan Hospital will increase by 0.244 units.

Based on table 4. above it can be seen that the value of the coefficient of determination (Adjusted R Square) is 0.460. This shows that 46.0% of the Patient Loyalty variable (Y) can be explained by the service quality variable (X1) and the Image variable (X2), while the remaining 64% is a variation of other variables that are not described in this study, for example, discipline, leadership, and so on.

Based on table 5. it can be seen that the calculated F value of 45,213 is greater than that of F table 3.07 with a Sig of 0.002<0.05. This indicates that H0 is rejected and H1 is accepted. This means that the Service quality variable (X1) and the Hospital Image variable (X2) simultaneously have a significant effect on Patient Loyalty at Royal Prima Hospital Medan.

The Service Quality variable has a calculated t of 4,522 and a t table value of 1.977, then the calculated t value of > t table at α = 5% (4,522>2,627) with a significant value of 0.002 is less than 0.05 (0.002<0.05) so that the H0 research results are rejected and H1 is accepted. Thus, it can be concluded that the variable of Service Quality (X1) partially has a significant effect on Patient Loyalty (Y) at Royal Prima Hospital Medan. The results showed that the service quality variable partially had a significant effect on patient loyalty at Royal Prima Hospital Medan. The results of this study are in line with the research hypothesis that states that Service Quality has a significant effect on Patient Loyalty at Royal Prima Hospital Medan.

The results of this study are by research conducted by Nafisa (2018), the results of the study show that when customers receive a better service quality than the money they spend, they believe in receiving good value, which will increase their loyalty to the Sultan Agung Islamic Hospital Semarang (16). Consumers can also often conclude the service quality based on their assessment of the place or location, people, equipment, means of communication, and prices they see before they decide to make a future repurchase. The results of this study are by the opinion expressed by Kotler (2014), that the quality of service/service is the form and total characteristics of a product of goods and services that show its ability to satisfy or meet the needs of patients (17). Implementation Of the service quality carried out by a company is to provide the best service for patients to create patient satisfaction and will eventually form loyalty (18). The quality of services provided by the company will cause patient perceptions. A good perception of the service quality he receives, the greater the patient's desire to be loyal in using the services of the hospital and be willing to recommend them to others (19).

The Citra variable has a calculated t value of 3,622 and a t table value of 1.977, then the calculated value of > t tabel at α = 5% (3,622>2,627) with a significant value of 0.000 is smaller than 0.05 (0.00 <0.05), so the results of this study H0 rejected H1

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were accepted. Thus, it can be concluded that the Citra variable (X2) partially has a significant effect on Patient Loyalty (Y) at Royal Prima Hospital Medan. The results showed that the Citra variable partially had a significant effect on Patient Loyalty at Royal Prima Hospital Medan. The results of this study are in line with the research hypothesis which states that the Hospital Image has a significant effect on Patient Loyalty at Royal Prima Hospital Medan. The results of this study are by research conducted by Eka Widya (2021), which found that the image of the hospital has a significant effect on loyalty (20). This means that the higher the hospital's image according to the patient's perception, the higher the loyalty of the hospital patient (21). The image of the hospital is a variable that can affect patient loyalty. The image of the hospital is the patient's perception of the quality related to the brand or company name (19).

At the company level, the image of a hospital is defined as a perception of an organization that is reflected in the patient's memory (22). Royal Prima Medan Hospital is a company that has a good image in the eyes of patients, both the image of the brand and the image of the hospital, so that it can influence the patient's perception that the hospital service is a quality service so that it has greater product performance and benefits. Hospital services that are believed to be able to provide greater comfort and benefits will certainly be better maintained by patients, so they do not want to change to other hospital services, even though they offer cheaper medical expenses.
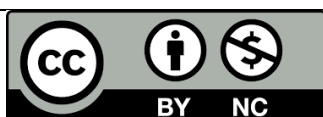
**CONCLUSIONS**

The test results partially showed that the service quality variable and the Citra variable had a calculation of 4,522 and 3,622 with a table t value of 1,977, then the calculated > table value at α= 5% (4,522 and 3,870 > 2,627), with significant values of 0.002 and 0.000 smaller than 0.05 (0.002 and 0.000 < 0.05) so that the H0 research results were rejected and H1 was accepted. Thus, it can be concluded that the service quality variables (X1) and image variables (X2) partially have a significant effect on Patient Loyalty (Y) at Royal Prima Hospital Medan. The results of simultaneous testing showed that the variables of Service Quality (X1) and Image (X2) had a significant effect on Patient Loyalty (Y) at Royal Prima Hospital Medan. The value of the coefficient of determination is 46%, while the remaining 64% is a variation of other variables that were not studied in this study, such as discipline, leadership, and so on. The result of the value of the coefficient of determination (Adjusted R Square) is 0.460. This shows that 46% of patient loyalty variables (Y) can be explained by the service quality variable (X1) and image variable (X2), while the remaining 64% are variations of other variables that are not explained in this study, for example, discipline, leadership, and so on.

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