

# The Effect of Service Facilities and Brand Image on Inpatient Satisfaction of Royal Prima Hospital Medan

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**Abstract:** Health is the main service sector in various countries because it plays a vital role in maintaining and improving public health to achieve the goals of a country. The hospital is one of the health facilities that is also one of the vanguards in nourishing the entire community, of course, it must maintain a brand image and complete its facilities to maintain the satisfaction of the community as its users. This study aims to determine the influence of the brand image of hospitals and service facilities on patient satisfaction at Royal Prima Hospital Medan. Quantitative research methods, explanatory descriptive. This research was conducted at Royal Prima Hospital Medan, in March 2022. The population is an average per month of 6,653 patients. The determination of the minimum number of samples for SEM is set at 100 samples, with nonprobability sampling. The data analysis used in this study is a multiple regression analysis model, Coefficient of determination (R<sup>2</sup>), Test F, and Test t. As a result, the Service Facility variable has a calculated t of 5,798 and a t-table value of 1.98 then the calculated t value of > t-table at  $\alpha=5\%$  ( $5,798 > 1.98$ ) with a significant value of 0.016 smaller than 0.05 ( $0.016 < 0.05$ ). The Brand Image variable has a calculated t value of 4.604 and a t-table value of 1.98 then the t-count value > t-table at  $\alpha=5\%$  ( $4.604 > 1.98$ ) with a significant value of 0.009 smaller than 0.05 ( $0.09 < 0.05$ ). It can be said that the variables of service facilities and the brand image of Royal Prima Medan Hospital, partially affect patient satisfaction (Y) at Royal Prima Hospital Medan. The result of the value of the coefficient of determination is 0.785. This shows that 46% of patient satisfaction variables (Y) can be explained by the Service Facility variable (X1) and brand image variable (X2), while the remaining 78.5% is a variation of other variables that are not described in this study, for example, hospital price and distance.

**Keywords:** service facilities, brand image, inpatient, satisfaction.

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## I. INTRODUCTION

The health sector is the main service sector in various countries because it plays a vital role in maintaining and improving public health to achieve the goals of a country (Tanudjaya, 2014). Currently, the service industry in the health sector is one of the promising business opportunities with the high competition that exists and rapid growth (Puspita et al., 2020). Currently, health problems have become a very important need for the community. Health is rated as very valuable and something expensive, so everyone wants a healthy life. For this reason, many efforts have been made to support health for the entire community, one of which is the government providing health facilities for the community, one of these facilities is a hospital (Pujati, 2018). Brand Image is a valuable intangible asset of the company. A positive Brand Image allows a company to gain reputation value and competitive advantage. A good Brand Image will increase customer satisfaction, service facilities, satisfaction, and repurchase intentions (Dacosta et al., 2020). A good Brand Image will be able to increase the success of a company and conversely, a bad Brand Image will reduce the stability of a company. Companies that have a Brand Image or a good reputation will encourage consumers to buy the products offered, increase competitiveness, encourage employee morale, and increase customer satisfaction. The hospital's Brand Image has an impact on patients' attitudes and behavior toward hospitals.

A good hospital Brand Image not only increases patient satisfaction through direct patient satisfaction, but also increases patient satisfaction through improved perceived service facilities, which in turn increases the re-intention of patient visits. Patient satisfaction is a very important thing to pay attention to. Satisfaction can be felt for the services they receive from the hospital (Afrizal & Suhardi, 2018). Therefore, it is the consumers who will assess of the services they get. The times, as well as the mindset of the community that is starting to develop the importance of health to support daily activities (Setyawati, 2018), on the one hand, causes the need for health services to increase, especially in terms of maintaining a healthy life, so that people's awareness to come to the hospital to carry out treatment is getting higher (Harfika & Abdullah, 2017). On the other hand, hospitals must be able to provide satisfactory service to customers, with strategies that are by the services offered, one of which is providing satisfactory service (Mokodompit et al., 2021). Based on these problems, the

author is interested in conducting a study entitled "The Influence of The Brand Image of Hospitals and Service Facilities on the satisfaction of inpatients of Royal Prima Hospital Medan".

## II. LITERATURE REVIEW

Brand Image (image) is a person's trust, ideas, and impressions of something". For a company, a good image or Brand Image is necessary(Chou et al., 2019). So important is the meaning of the Brand Image (image) itself that the company is willing to spend extra costs and energy to achieve it(Bernarto et al., 2022). Facilities are physical resources that must exist before something is offered to consumers". Facilities are something important in the service business, therefore existing facilities, namely the condition of the facilities, interior, and exterior design, and cleanliness must be considered, especially those that are closely related to what consumers feel directly(Daissaoui et al., 2020). In an enterprise to achieve the goal, supporting tools are needed that are used in the process or activity of the company. The facilities used by each company are various forms, types, and benefits. The greater the company's activities, the more complete the supporting facilities and facilities to achieve the company's goals(Krizanova et al., 2019). Physical form (tangible) is the needs of customers who focus on physical facilities such as buildings and rooms, available parking lots, cleanliness, neatness and comfort of the room, completeness of equipment, means of communication, and the appearance of employees. Patient satisfaction is an abstract thing and the results vary greatly because it depends on each perception. Satisfaction is determined by customer perceptions of the performance of products or services in meeting customer expectations. Customers feel satisfied if their expectations are met or will be very satisfied if customer expectations are exceeded. There are several factors driving customer satisfaction(Prianggoro & Sitio, 2020).

## III. RESEARCH METHODS

The research method used in this study is quantitative, descriptive explanatory. This research was conducted at Royal Prima Hospital Medan, in March 2022. The population is the entire patient, with the number the last 3 months, an average per month of 6,653 patients. Determination of the minimum number of samples for SEM according to Hair et al, therefore the sample is set at 100 samples. The sample determination technique used in this study is based on the nonprobability sampling method. Data collection resulted in questionnaires and in-person interviews. Test validity using Confirmatory Factor Analysis. Reliability test with Cronbach alpha > 0.70. The data analysis used in this study is a multiple regression analysis models, Coefficient of determination (R<sup>2</sup>), Test F, and Test t.

## IV. RESULTS AND DISCUSSIONS

Descriptive statistics are concerned with how data can be described (described) or inferred either numerically (e.g. calculating the average of the standard deviations) or graphically (in a table or graphic form) to get a glimpse of the data so that it is easier to read and meaningful. From table 1. it can be seen that the average value of the Service Facility (X1) is 31.45 with a standard deviation of 3.23, and the Brand Image (X2) with an average of 28.99 with a standard deviation of 3.24, as well as Patient Satisfaction (Y) with an average of 29.47 with a standard deviation of 2.55.

**Table 1. Descriptive Statistics**

Variabel	N	Minimum	Maximum	Mean	Std.Deviation
Service Facilities	100	20,00	37,00	31,45	3,23
Brand Image	100	19,00	35,00	28,99	3,24
Patient Satisfaction	100	20,00	38,00	29,47	2,55
ValidN(listwise)	100				

Source: 2022 Research Results (SPSS Processed Data)

**Table 2. Multiple Linear Regression Test Results**

		Unstandardized Coefficients		Standardized Coefficients
		B	Std. Error	Beta
1	(Constant)	12,334	1,887	
2	Service Facilities	,382	,012	,322
3	Brand Image	,241	,032	,388

a Dependent Variable: ABS\_RES

Source: 2022 Research Results (SPSS Processed Data)

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From table 4.9 above, the following multiple linear regression equations can be formulated:  $Y=12,334+0,382X_1+0,241X_2$

From the multiple linear regression equation above, it can be explained as follows:

- a. The constant value (a) = 12,334 which means that even though the free variable (X1) is the Service Facility and the free variable (X2) namely the Brand Image is worth 0, then Patient Satisfaction at Royal Prima Hospital Medan remains at 12,334.
- b. Coefficient X1(b1) = 0.3820 and positive value. Variable Service Facilities to Patient Satisfaction with a regression coefficient of 0.382 units. This means that every time there is an increase of 1 unit, the Patient Satisfaction of Royal Prima Medan Hospital will increase by 0.382 units.
- c. Coefficient X2 (b2) = 0.241 and positive value. Variable Brand Image to Patient Satisfaction with a coefficient of 0.241 units. This means that every time there is an increase of 1 unit, the Patient Satisfaction of Royal Prima Medan Hospital will increase by 0.241 units.

The determination coefficient (R<sup>2</sup>) is used to measure how far the model's ability to explain the variation of the dependent variable, where the value of R<sup>2</sup> ranges from 0<R<sup>2</sup><1. The greater the value of the coefficient of determination, the better the ability of the variant of the free variable to describe the bound variable.

**Table 3. Coefficient of Determination Test Results**

Model	R	RSquare	AdjustedR Square	Std.ErroroftheEstimate
	,684 <sup>a</sup>	,744	,785	1,54533

a Predictors:(Constant),Brand Image , Service Facilities  
 b DependenVariabelKepuasan Pasien  
 Sumber:Hasilpengolahandataprimer(KuisiонерSPSS2022)

Based on table 3. it can be seen that the value of the coefficient of determination (Adjusted R Square) is 0.785. This shows that 78.5% of patient satisfaction variables (Y) can be explained by the Service Facility variable (X1) and brand image variable (X2), while the remaining 21.5% is a variation of other variables that are not described in this study, for example, price, distance and so on.

**Table 4. F-Test Results**

Model	Sum ofSquares	Df	MeanSquare	F	Sig
1 Regression	377,769	2	177,801	30,442	,012 <sup>a</sup>
Residual	402,890	134	3,441		
Total	882,452	134			

a Predictors:(Constant),Brand Image , Service Facilities  
 b DependenVariabelKepuasan Pasien  
 Sumber:Hasilpengolahandataprimer(KuisiонерSPSS2022)

Based on table 4. it can be seen that the calculated F value of 30,442 is greater than that of F table 3.07 with a Sig of 0.012<0.05. This indicates that H0 is rejected and H1 is accepted. This means that the Service Facility variable (X1) and the Hospital Brand Image variable (X2) simultaneously have a significant effect on Patient Satisfaction at Royal Prima Hospital Medan.

**Table 5. Test Results**

Model		UnstandardizedCoefficients		StandardizedCoefficients	T	Sig
		B	StdError	Beta		
1	(Constant)	12,778	1,797		7,488	,023
2	Service Facilities	,389	,071	,388	5,798	,016
3	Brand Image	,225	,060	-322	4,604	,009

b DependenVariabelKepuasan Pasien  
 Sumber:Hasilpengolahandataprimer(KuisiонерSPSS2022)

Based on table 5. above, obtained as follows:

1. Partial Hypothesis Test of Service Facility Variables  
 The Service Facility variable has a calculated t of 5.798 and a t-table value of 1.98, then the calculated t value of the > t-table at α=5% (5.798>1.98) with a significant value of 0.016 is less than 0.05 (0.016<0.05) so that the results of the H0 study were rejected and H1 was accepted. Thus, it can be concluded that the

Service Facility variable (X1) partially has a significant effect on Patient Satisfaction (Y) at Royal Prima Hospital Medan.

2. Test the Partial Hypothesis of Brand Image Variables.

The Brand Image variable has a calculated t value of 4.604 and a t-table value of 1.98, so the calculated value of  $> t$ -table at  $\alpha = 5\%$  ( $4.604 > 1.98$ ) with a significant value of 0.009 is smaller than 0.05 ( $0.09 < 0.05$ ), so the results of this study  $H_0$  rejected  $H_1$  was accepted. Thus, it can be concluded that the Brand Image (X2) variable partially has a significant effect on Patient Satisfaction (Y) at Royal Prima Hospital Medan.

### **Effect of Service Facilities on Employee Patient Satisfaction**

The results of the study showed that, the variable service facilities partially had a significant effect on patient satisfaction at Royal Prima Hospital Medan. The results of this study are in line with the research hypothesis that states that Service Facilities have a significant effect on Patient Satisfaction at Royal Prima Hospital Medan. The results of the study are in line with Setyawati's research (2018), entitled The Effect of Service Quality, Facilities, Prices and Institutional Image on Patient Satisfaction, at the Nuurul Ichsan Pujon Outpatient Clinic and the Intan Mandiri Malang Clinic. He stated that the facility variable obtained a calculated t value (3.670)  $>$  critical t (2.366) so the null hypothesis was rejected, the conclusion is that the Facility has a positive effect on Patient Satisfaction (Setyawati, 2018). Supported by Supriyanto's research (2012), shows that the three free variables, namely the quality of service, price, and facilities, have a positive effect on customer satisfaction. Of the three free variables studied (quality of service, price, and facilities), it is proven that the most dominant factor that affects consumer satisfaction to use health services in Dr. Kariadi's hospital is the variable of service quality, followed by variables of facilities, and price (Supriyanto & Soesanto, 2012). Kotler (2012) in Harfika (2017), which defines facilities is everything that is physical equipment and is provided by the seller of services to support consumer convenience (Harfika & Abdullah, 2017); (Hasanah et al., 2020).

### **The Effect of Brand Image on Employee Patient Satisfaction**

The results showed that the Brand Image variable partially had a significant effect on Patient Satisfaction at Royal Prima Hospital Medan. The results of this study are in line with the research hypothesis that states brand image has a significant effect on Patient Satisfaction at Royal Prima Hospital Medan. Hospital Brand Image has been shown to have a significant effect on patient satisfaction.

The results of this study are supported by Nurullah's research (2013), which stated that the image of the Executive Polyclinic of the Regional Hospital dr. Soebandi affects patient satisfaction. Based on testing a decision can be made that  $H_2$  research is accepted. image of the Executive Polyclinic of the Regional Hospital dr. Soebandi affects patient satisfaction (Nurullah Hidajahningtyas, Andi Sularso, 2013). According to Annisah's research (2022), From the results of his research, there is a significant and positive influence of Brand Image on Outpatient Satisfaction at Baiturrahim Jambi hospital. With a significance value of 0.05. It can be seen that the Path Coefficient ( $\beta$ ) value of the CRM variable is 0.527 and the brand image variable is 0.420. the better the performance of exogenous variables, namely customer relationship management (CRM) and the brand image of a hospital, the greater the chances of a sense of satisfaction in patients. So, Baiturrahim Hospital needs to optimize the performance of customer relationship management (CRM) and form a good brand image to the community so that the number of outpatient visits remains stable and continues to increase (Annisah Syairah Ferianda, 2022).

Brand image is an important factor for patients that shapes consumer perceptions of the quality of the service (Phonthanukitithaworn et al., 2020). The impression or what is in the mind of the consumer will affect the consumer's assessment of the quality of service. The brand image of service can be positive or negative, depending on personal experiences and stories from others about service in this case hospital services (Dewanto & Rochman, 2018). Consumers who are used to using a certain brand tend to have consistency with the brand image. Brand image is the perception and confidence carried out by consumers (Mao et al., 2020), as reflected in the associations that occur in the memory of consumers. The brand image is always related to product attributes because it is to provide satisfaction to consumers and consumers react to the attributes of the products they buy (Afrizal & Suhardi, 2018).

## **V. CONCLUSION**

Based on the results of the research and discussion that has been described in the previous chapter, the following conclusions can be drawn:

1. The test results partially showed that the Service Facility variable had a calculated t of 5.798 and a t-table value of 1.98 then the calculated t value of  $> t$ -table at  $\alpha=5\%$  ( $5,798 > 1.98$ ) with a significant value of 0.016 smaller than 0.05 ( $0.016 < 0.05$ ). The Brand Image variable has a calculated t value of 4.604 and a t-table value of 1.98 then the calculated value of  $> t$ -table at  $\alpha=5\%$  ( $4.604 > 1.98$ ) with a significant value of 0.009 smaller than 0.05 ( $0.09 < 0.05$ ). It can be said that the variables of service facilities and brand image of

Royal Prima Medan Hospital, partially have a significant effect on Patient Satisfaction (Y) at Royal Prima Hospital Medan.

- The result of the value of the coefficient of determination (Adjusted R Square) is 0.785. This shows that 46% of patient satisfaction variables (Y) can be explained by the Service Facility variable (X1) and brand image variable (X2), while the remaining 78.5% is a variation of other variables that are not described in this study, for example, hospital price and distance.

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