

THE IMPACT OF PATIENT SATISFACTION ON PATIENT LOYALTY WITH THE MEDIATING EFFECT OF HOSPITAL IMAGE AT UKRIDA HOSPITAL

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Abstract

The rapid advancement of technology and information has encouraged public organizations to develop innovative products and services that can meet the needs and desires of customers. Customers are thus pleased with the services they receive. Image and patient satisfaction are critical factors in influencing true loyalty in order to reuse and recommend to others. Data collected through questionnaires was analyzed using Structural Equation Modeling (SEM) and Partial Least Squares (PLS) software. The 100 participants in this study were outpatients who visited Ukrida Hospital more than once. According to the findings of the study, the direct effect of hospital image influences patient satisfaction and loyalty, whereas the indirect effect of hospital image can mediate patient satisfaction on patient loyalty. Ukrida Hospital desperately needs this to improve its image and increase patient satisfaction and loyalty.

Keywords: Hospital image, Patient satisfaction, Patient loyalty, Ukrida hospital

1. INTRODUCTION

The rapid development of technology and information encourages public organizations to create innovative products and services that can meet customers' needs and desires, so that customers are satisfied with what they get from their service products.¹ With the increasing and development of technological advances, particularly in the health sector, hospitals are becoming increasingly important.^{2,3} The more hospitals there are, the more intense the competition, so they must continuously provide different and varied services.⁴ In a competitive environment, health care success is determined not only by good technical skills and high-quality service providers, but also by satisfying customers and encouraging them to return. Patient loyalty is regarded as a critical factor in hospital business success. Patients, as satisfied customers, will return and recommend services. This will result in more patient visits. It emphasizes that the number one priority should be patient satisfaction.

Consumer loyalty is a deeply held commitment to consistently repurchase or re-patronize a product or service they like in the future, resulting in the purchase of the same image.^{5,8,9} In general, a loyal patient or consumer is someone who uses a service provider on a regular basis, makes multiple purchases of services or products from the same company, and does not consider other service providers. Patient loyalty is critical for health care providers and can be defined as a situation in which the patient maintains the relationship with the hospital and recommends hospital services to other patients by spreading positive word of mouth and can improve the hospital's image to others because the patient is satisfied. Patient satisfaction with the services provided is critical for loyalty and positive perceptions of the hospital. Dissatisfied customers cannot become loyal customers, whereas satisfied customers will remain loyal customers. One of the most important ways to keep patients satisfied is to provide services that meet their expectations, forming an image that can be a patient preference to form optimal patient satisfaction and increase patient loyalty. Image and patient satisfaction are critical factors in influencing true loyalty in order to reuse and recommend to others.

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Investigate the problem of this hospital's image in order to achieve long-term success and survival. A positive image leads patients to choose Ukrida Hospital as the hospital of choice with a good image when compared to other hospitals based on the patient's priority. The hospital is portrayed as a mediator or intermediary. Hospital image is important in the health sector and is primarily determined by patient satisfaction. Ukrida Hospital, as a newly established and operating hospital, is an excellent research site for the first time. It is hoped that this research will help managers (management) create a positive hospital image.

2.RESEARCH METHODS

Intpatient treatment at the Ukrida Hospital polyclinic was the study population. Patients who were sampled in this case were those who returned for intpatient treatment at the Ukrida Hospital polyclinic a second time and were able to provide information or communicate well enough to understand and fill out the questionnaire after being explained by the researcher. The minimum sample size was calculated using the rule of thumb (Herr, 2017), which stated that the number of research samples was 5-10 times the number of indicators studied (15 indicators) and obtained 75-150 respondents, while the number of respondents collected in the study was 100. Patients seeking treatment at the Ukrida hospital polyclinic from April to August 2022 were included in the study.

The research method used in data analysis was a quantitative approach to measuring indicators, forming variables, and investigating the influence of variables. This was a survey-type study with an instrument, namely a questionnaire, and applied a quantitative research technique based on the questionnaire results, which would be processed using the Smart Partial Least Square (PLS) software. Data from the questionnaire, as well as the initial data that was chosen, would be coded according to the variable and variable classification. The data can then be processed with the Partial Least Squares (PLS) software program, which is an alternative model estimation method for Structural Equation Modeling (SEM). The purpose of this PLS design is to overcome the limitations of the SEM method. The SEM method requires large amounts of data, no missing values, and data that is normally distributed and does not have multiple collinearities, whereas the PLS method applies a distribution fee approach, which means that the data can have a specific distribution. Furthermore, PLS can be applied to small samples. The quantitative research paradigm was used in this study because it emphasized testing theories by measuring research variables with numbers and conducting data analysis.

3.RESULTS AND DISCUSSION

The total number of respondents was 100, with 63% being female and 37% being male, divided into 5 age groups, with the majority of patients visiting Ukrida Hospital being aged 65 years and over (29%), and the least number being aged 17-24 years (13%). The analysis showed that patients aged 65 years seek inpatient treatment at the Ukrida Hospital polyclinic for routine treatment or control of their disease. The majority of the 100 respondents (49% were private employees), with unemployed (24%) using Askes health insurance or BPJS as the second highest rank.

3.1.Outer Model Analysis

Test the instrument validity, which included convergent validity, average variance extracted (AVE), discriminant validity, and composite reliability. The construct model was processed using Structural Equation Modeling (SEM) software and Partial Least Square (PLS), and it would be analyzed based on the factor loading values in the indicators in each variable.



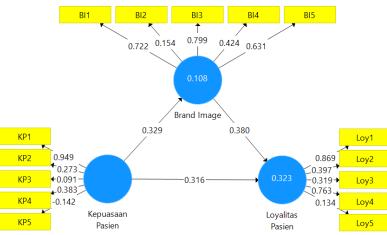
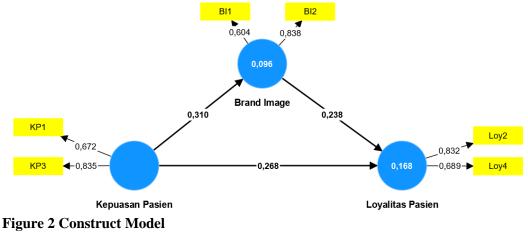


Figure 1 Initial Model Constructs

Many indicators in the initial model construct are invalid, including KP2, KP4, KP5, BI3, BI4, BI5, Loy1, Loy3, and Loy5, which have a loading factor of 0.6, so these indicators are removed and are not included as indicators measuring the variable, and the model appears in figure 4.2 below with the indicators used KP1 and KP3 for patient satisfaction, BI1 and BI2 for hospital image, and Loy2 and Loy 4 for patient loyalty.



Source: Processing Data from SmartPLS Data (2022)

Of all the variables and indicators (Figure 2), it was found that all indicator measurements had a loading factor > 0.6 and were declared valid. Invalid indicators, namely KP2, KP4, KP5, BI3, BI4, BI5, Loy1, Loy3, and Loy5, which had a loading factor 0.6, were deleted and not included as an indicator for measuring the variable. As a result, all of the indicators included in this study met convergent validity.

Source: Processing Data from SmartPLS Data (2022)

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| Construct | AVE Value | Description |
|----------------------|-----------|-------------|
| Patient satisfaction | 0,575 | Valid |
| Hospital image | 0,533 | Valid |
| Patient loyalty | 0,583 | Valid |

Table 1. Value of Average Variance Extracted (AVE)

Source: Processing Data from SmartPLS Data (2022)

Table 1 shows that the average variance extracted (AVE) value is greater than 0.5, indicating that a variable meets the validity criteria and that there are no convergent validity issues in the model tested in this study.

| Indicator | Hospital | Patient | Patient |
|-----------|----------|--------------|---------|
| | image | satisfaction | loyalty |
| BI1 | 0,604 | 0,088 | 0,277 |
| BI2 | 0,838 | 0,328 | 0,212 |
| KP1 | 0,176 | 0,672 | 0,238 |
| KP3 | 0,282 | 0,835 | 0,279 |
| Loy2 | 0,179 | 0,377 | 0,832 |
| Loy4 | 0,335 | 0,114 | 0,689 |

Table 2. Value of Cross Loading

Source: Processing Data from SmartPLS Data (2022)

Table 2 shows that the value of the indicator factor loading on the latent variable is greater than the factor loading on the other variables. The BI1 loading factor for hospital image is 0.604, which is higher than the loading factor for patient satisfaction, which is 0.088, and higher than the loading factor for patient loyalty, which is 0.277. Similarly, other indicators. As a result, there is no discriminant validity issue in the measurement model.

Table 3 Value of Composite Reliability

| Construct | Composite reliability |
|----------------------|-----------------------|
| Patient satisfaction | 0,728 |
| Hospital image | 0,690 |
| Patient loyalty | 0,735 |

Source: Processing Data from SmartPLS Data (2022)

Table 3 shows that the composite reliability produced by all constructs is > 0.6, indicating that all measurement variables are reliable.

3.2.Inner Model Analysis

The inner model test was used to investigate the previously hypothesized relationship between exogenous and endogenous constructs. The R-Square (R2) method can be used to analyze inner models. The R-square value of this study on the patient loyalty variable was 0.168, indicating that patient satisfaction and hospital image variables explained 16.8 percent of the variation in the patient loyalty variable. Other variables not examined in this study account for the remaining 83.2 percent.



3.3.Hypothesis

The bootstrapping results showed that hypothesis testing was analyzed with a significance value (p-value). Hypothesis testing was carried out by examining both direct and indirect influence (mediation).

Direct Influence

Table 4. Value of Direct Influence

| | coefficient | p-value |
|--|-------------|---------|
| Hospital Image \rightarrow Patient loyalty | 0,238 | 0,000 |
| Patient satisfaction \rightarrow Hospital image | 0,310 | 0,000 |
| Patient satisfaction \rightarrow Patient loyalty | 0,268 | 0,000 |

The first hypothesis was that hospital image influenced patient loyalty positively. This showed that the better the hospital's image, the greater the patient loyalty. These findings showed that the Ukrida hospital could project a positive image in order to shape the mindset of inpatients. For example, when an inpatient had a health problem, the patient did not need to look for another hospital and instead chooses the Ukrida hospital directly. This study supported Vimla's (2020) findings that hospital image had a direct and indirect impact on patient loyalty. The second hypothesis was that patient satisfaction improved hospital image. This showed that patient satisfaction had an impact on the hospital's image; the more patients who were satisfied with the services provided by the hospital, the better or worse the hospital's image. This study supported the findings of Ramli AH (2017), who stated that patient satisfaction should be a top priority for hospitals looking to improve their image. However, patient loyalty must also be supported because the effect on the hospital's image was positive and significant.

Patient satisfaction, according to the third hypothesis, had a positive effect on patient loyalty. This showed that patient loyalty to Ukrida hospital could be affected by inpatient satisfaction. When a hospital provided adequate service, it created its own perception/impression. Patient satisfaction could be used to keep current patients and attracted new ones. This study agreed with Angela and Adisasmito (2019), who stated that patient satisfaction had a positive influence on patient loyalty, implying that increasing patient satisfaction would result in patients returning or making repeat visits to the hospital.

3.4.Indirect Influence

Table 5 Value of Indirect Influence (Mediation)

| | coefficient | p-value |
|---|-------------|---------|
| Patient Satisfaction \rightarrow Hospital image \rightarrow Patient loyalty | 0,074 | 0,000 |
| Source: Processing Data from SmartPLS Data (2022) | | |

The fourth hypothesis stated that the effect of patient satisfaction on patient loyalty was mediated by hospital image. This showed that the presence of a hospital image could be related to patient satisfaction and patient loyalty. Inpatient satisfaction at Ukrida could improve the good image of Ukrida hospitals, which could indirectly affect inpatient loyalty at Ukrida hospitals. Inpatients who were satisfied with Ukrida hospital services might form a favorable perception of the hospital's image, which might influence patient loyalty. This study was in a line with the Vimla literature study (2020), which showed how increasing patient satisfaction had a mediating effect on patient loyalty by building the hospital's image both directly and indirectly. It was also stated that

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increasing patient visits could be accomplished through hospital management or health organizations by developing a strong image of the hospital in its field.¹⁵

4.CONCLUSION AND SUGGESTIONS

4.1.CONCLUSION

The more positive a hospital's image, the more loyal its patients. If the patient is more satisfied with the services provided by this hospital, the hospital's image will improve. Patient satisfaction is a major concern for the hospital; increasing patient satisfaction will result in patient loyalty, as patients will return to the hospital and recommend it to others. Patient satisfaction and patient loyalty can be related by hospital image. Patient satisfaction can improve the hospital's image, which can influence and increase patient loyalty.

4.2.SUGGESTIONS

According to the data collected in this study, several respondents did not give maximum ratings for service quality, patient satisfaction, hospital image, and patient loyalty. As a result, patients visiting Ukrida Hospital for the first time, which was recently inaugurated at the end of 2020, require a positive and pleasant experience while receiving treatment. Good service quality will improve the hospital's image and patient satisfaction, which will increase patient loyalty. Patients will tell others about their pleasant experiences while being treated at Ukrida Hospital, and these patients will return when they need treatment. Continuing research with more homogeneous research subjects that distinguish general patients from Askes or BPJS patients, a larger sample size, and considering the patient's condition is still very possible.

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