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THE ANTECEDENT OF SATISFACTION AND ITS IMPACT ON LOYALTY IN IN-PATIENT CARE (STUDY AT XYZ HOSPITAL CIREBON)

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ABSTRAK

Loyalitas pasien merupakan faktor penting yang berkontribusi pada peningkatan kunjungan pasien rawat inap ke rumah sakit. Penelitian ini bertujuan untuk memahami pentingnya loyalitas pasien dalam konteks peningkatan kunjungan pasien. Penelitian ini menguji dampak variabel kualitas layanan, citra merek rumah sakit, nilai yang dirasakan pasien, dan kepuasan pasien terhadap loyalitas pasien. Penelitian ini dilakukan di Kota Cirebon, Indonesia, dengan sampel sebanyak 160 pasien yang memenuhi kriteria dari rumah sakit XYZ milik perusahaan negara. Kriteria sampelnya adalah pasien dengan status rawat inap. Penelitian ini kemudian mengembangkan 8 hipotesis untuk menguji hubungan statistik antara model langsung, intervening, dan multiple-effect. Pendekatan metode kuantitatif digunakan dalam fokus pemecahan masalah dan penelitian dengan alat uji berbasis PLS-SEM. Metode bootstrapping digunakan dengan langkah bootstrapping konstan untuk menunjukkan hasil pengujian hipotesis; kami menemukan bahwa hipotesis secara keseluruhan memiliki pengaruh positif dan signifikan. Dalam pengujian analisis importance-performance map analysis (IPMA), penelitian ini menyimpulkan bahwa nilai yang dirasakan pasien (Perceived Value) perlu ditingkatkan, sementara kualitas layanan perlu dipertahankan untuk mencapai loyalitas pasien yang tinggi.

Kata kunci: loyalitas pasien, kepuasan pasien, nilai yang dirasakan, citra merk, kualitas layanan.

ABSTRACT

Patient loyalty is an essential factor contributing to increased in-patient hospital visits. This study aims to understand the importance of patient loyalty in the context of increasing patient visits. This study examines the impact of service quality variables, hospital brand image, patient-perceived value, and patient satisfaction on patient loyalty. This study was conducted in Cirebon City, Indonesia, with 160 eligible samples from state-owned XYZ hospitals. The sample criteria were patients with hospitalization status. Then, this study developed eight hypotheses to examine the statistical connection between direct, intervening, and multiple-effect models. Problem-solving and research emphasis are conducted utilising a numerical technique with a PLS-SEM-based testing tool. The bootstrapping technique is employed alongside the consistent bootstrapping procedure to showcase the findings of hypothesis testing; we discover that the overall hypothesis has a favourable and noteworthy impact. In testing the importance-performance map analysis (IPMA), it was concluded that the patient's perceived value needs to be improved. In contrast, service quality must be maintained to achieve high patient loyalty.

Key words: patient loyalty, patient satisfaction, perceived value, brand image, service quality.

INTRODUCTION

Loyalty is described as a customer's capacity to commit or hold firmly to re-patronize or repurchase selected items or services in the future, even though situational circumstances and marketing efforts have the potential to modify behavior.

A health service that can cultivate and sustain patient loyalty will reap several benefits, including more significant revenue and favorable word-of-mouth communication. It can also lead to better patient health outcomes and financial benefits for healthcare providers (Chang et al., 2013). Patient

loyalty is defined as a patient's willingness to return to the healthcare provider, share good words about the healthcare provider, and suggest the healthcare provider to others (Huang et al., 2021). Based on a study in Damascus, Syria, which consisted of 321 patients who participated from six hospitals, to increase patient loyalty in healthcare settings, healthcare professionals should focus on improving service quality dimensions (AlOmari, 2022).

Patient comfort and experience in the hospital are some of the factors that will determine whether the patient will decide or choose to undergo further health services. In research conducted in Central Java, Indonesia, it was identified that service quality significantly influences patient satisfaction and loyalty. Specifically, this study presents empirical evidence that service quality significantly impacts patient satisfaction and, consequently, patient loyalty. Involving a sample of 184 hospital patients, the research underscores the vital role of service quality in achieving and sustaining patient loyalty (Fatonah, 2019).

Effective healthcare service delivery gives enterprises or the public an advantage over competitors and persuades people to choose the finest hospital for them. Many variables influence patient loyalty to a hospital, including service quality, value, brand image, and happiness (Akob et al., 2020).

A fundamental concept in healthcare dynamics, perceived value captures patients' subjective evaluation of the advantages they believe they obtain about the perceived costs of hospital treatments. It goes beyond the material and includes the total value and satisfaction one derives from healthcare. Patient-perceived value is a multidimensional construct that provides for functional value, emotional value, economic value, and environmental value that can differ from the perspective of the consumer's assessment of the benefits obtained compared to the costs incurred by consumers (Shao et al., 2019). A vital study at Harran University Research and Application Hospital in Şanlıurfa, Turkey, highlights the impact of perceived worth. This study sheds light on the significant effect of perceived value on patient happiness and loyalty, with 783 patients getting outpatient clinic treatments (Eris, 2022).

Brand image is a crucial factor in making a purchase decision. It includes what customers believe and their emotions about the brand. Therefore, a favourable brand could help the company get a competitive edge in the market (Hien et al., 2020).

As a crucial element in healthcare, brand image is explored through a study in Indian hospitals. This study emphasizes the multifaceted influence of brand image, revealing its direct impact on service quality, patient satisfaction, and, ultimately, patient loyalty. The intricate relationship involves partial and complementary mediation, highlighting how brand image fortifies patient loyalty through service quality and patient satisfaction channels. This data, with 210 patients, serves as a foundational lens for exploring the dynamics shaping patient loyalty within the chain hospital landscape, with IHC hospitals as our focal point.

The hospital chain correlates with the brand image of the hospital. A hospital chain is a collection of hospitals that share centralized strategic leadership. Chain hospitals have their advantages compared to ordinary hospitals because that means the hospital has one brand; this also means the hospital has its uniqueness, has a standard of operation, and competes with each other.

State-owned Enterprises, or in Bahasa Indonesia called Badan Usaha Milik Negara (BUMN) BUMN companies in Indonesia, besides managing their core business, also have hospitals initially used to support the company's operations. However, in its development, the BUMN hospital must be able to focus more on its management and be able to compete with other public and private hospitals. The potential of these BUMN hospitals can further develop and become a business corporation that can compete at the national and international levels.

Hence, it needs to be synergized by establishing a BUMN hospital holding. PT. The Ministry of BUMN appointed Pertamina Bina Medika to become the BUMN Hospital Holding under Indonesia Healthcare Corporation (IHC) (Saifudin, 2018).

The achievements of in-patient services were off target, namely as much as 85.40% compared to the accomplishments of in-patients, which reached 112.90% (IHC Annual Report, 2021). Of course, this is a problem. However, the need for in-patient services should be explained in detail below. Target, but we can assume that the lack of achievement is due to the lack of patients who want to be treated at the IHC Hospital.

In-patient services at IHC hospitals still need to be below the target; therefore, it is necessary to determine how to increase them. Patient loyalty is essential for hospitals to increase in-patient numbers. Loyal patients are likelier to continue using medical services, follow prescribed treatment plans, and maintain relationships with specific healthcare providers.

One of the BUMN hospitals in the province of West Java is the XYZ Hospital. XYZ Hospital is a type C hospital in the Cirebon district area. XYZ Hospital was originally part of the Cirebon state-owned company Health, which manages the health facilities of BUMN employees and their families. In addition, XYZ Hospital also provides services to a vast community.

Due to the discovery of subpar services at IHC, the researcher performed his research at the XYZ Hospital, Cirebon Regency, West Java. Because XYZ Hospital is known as the primary source of health services for BUMN employees and the larger community, it offers a chance for researchers to assess and enhance the quality of healthcare services provided to patients. By conducting their research at this facility, the researchers hope to evaluate the current services and work toward improvements that will benefit both BUMN employees and the residents of Cirebon. This research initiative is committed to addressing IHC's flaws and offering everyone in society access to inexpensive, high-quality healthcare.

THEORETICAL REVIEW

Patient Loyalty

This patient loyalty may be found in Oliver and Berry's theory of consumer loyalty. Loyalty is described as a customer's capacity to commit or hold firmly to re-patronize or repurchase selected items or services in the future, even though situational circumstances and marketing efforts have the potential to modify behavior. A health service that can cultivate and sustain patient loyalty will reap several benefits, including more significant revenue and favorable word-of-mouth communication. Affective preferences or attitudes toward the brand are based on applying cumulative overall pleasure (Chang et al., 2013; Huang et al., 2021).

Patient loyalty is critical for healthcare providers because it increases corporate performance and improves patient health outcomes (Zhou et al., 2017). A study conducted in Indonesia discovered that patient loyalty to healthcare services is positively influenced by satisfaction, perceived value, and trust (Sumaedi et al., 2014). Patient happiness is an essential aspect of developing patient loyalty. Patients are likelier to return to practitioners who go above and beyond to deliver a positive experience. Increased patient loyalty translates into more excellent recommendations and word-of-mouth business (Liu et al., 2021).

Consequently, if a consumer purchases the same thing twice or three times, they are immediately classified as a loyal customer. Patient happiness is an essential aspect of developing patient loyalty. Patients are likelier to return to practitioners who go above and beyond to deliver a positive experience. Increased patient loyalty translates into more extraordinary recommendations and word-of-mouth business. Improving patient happiness, perceived value, trust, and dedication can help increase patient loyalty.

Influence of Patient Satisfaction towards Patient Loyalty

Patient loyalty is influenced positively by patient satisfaction (Liu et al., 2021; Suriyanto, 2020). Patient satisfaction may be enhanced by dependability, empathy, and responsiveness. The better the patient satisfaction, the more loyal the patient. Greater customer satisfaction results in higher customer loyalty; pleased consumers are also prepared to pay more than dissatisfied customers, which can result in more significant profits. Loyalty and repurchase intent have the most beneficial influence on a company's profitability.

Descriptive analysis and regression were utilized as statistical tests. According to the study, perceived healthcare quality considerably impacts patient loyalty. The study also discovered that patient happiness and loyalty are essential for healthcare providers to enhance their services and reduce costs.

H_1: Patient Satisfaction has a positive effect on Patient Loyalty

Influence of Patient Perceived Value against Patient Loyalty

Patient loyalty is heavily influenced by patients' perceived value, trust, and commitment. Patients' judgments of the worth of medical treatments affect their commitment to the patient-provider relationship. A study has shown that patients who see healthcare services as valuable are more likely to be loyal to their healthcare provider. The study examined and confirmed the impact on the perceived worth, reliance, and dedication affecting patient loyalty (Huang et al., 2021). Another study discovered that patient-perceived engagement directly influenced patient loyalty and indirectly positively impacted patient loyalty through satisfaction (Zhang et al., 2021).

Improved healthcare quality and patient provider connections are essential factors in enhancing patient loyalty. Patients who value healthcare services more are more likely to refer their providers to others. Finally, patient's opinions of the value of medical services influence their commitment to the patient-provider relationship. Patients and healthcare professionals must have a sense of value, trust, and dedication to form good relationships.

H_2: Patient Perceived Value has a positive influence on Patient Loyalty

Influence of Patient Perceived Value against Patient Satisfaction

Perceived value influences Customer satisfaction positively (Slack et al., 2020; Shao et al., 2019). There are four types of perceived value: practical, social, emotional, and environmental. The influence of functional values is more significant than social and emotional values. According to one study, there is a correlation between perceived worth and willingness to pay a more excellent price. According to the findings, when customers see a better value in a product or service, they are prepared to pay more for it.

According to research, functional value has a more significant beneficial influence on consumer satisfaction than social or emotional value. Customers' perception of value greatly affects their satisfaction. Marketers may affect a product's perceived value by describing its qualities in terms of utility or the additional advantages and values the consumer expects from utilizing it.

Perceived value is crucial in determining consumer satisfaction. Consumers perceive various values in products and services, including functional, social, emotional, and environmental values. Emotional value is the most critical predictor of consumer satisfaction and retention intention. The influence of practical value (price/worth for money) is more significant than that of social and emotional values. Customers are willing to pay more for a product or service they believe to be of better value.

H_3: Patient Perceived Value has a positive influence on Patient Satisfaction

Influence of Brand Image against Patient Satisfaction

In the healthcare business, brand image substantially influences patient happiness (Wu et al., 2011). According to the hypothesis test results, hospital brand image has a favorable and significant effect on patient satisfaction (Sukawati, 2021). According to research published in the International Journal of Health Care Quality Assurance, brand trust and image influence consumer satisfaction in the healthcare business (Hosseini et al., 2017). Another study, published in Health Services Management Research, offered a conceptual framework that connects brand image to loyalty via perceived service quality and patient happiness (Vimla and Taneja, 2021).

H_4: Brand Image has a positive effect on Patient Satisfaction

Influence of Brand Image against Patient Perceived Value

According to the search findings, brand image favors patients' perceived value (Lin and Yin, 2022). Another study found that brand image has a substantial beneficial influence on both consumer satisfaction and loyalty.

The link between brand image, perceived pricing, and service quality substantially influences consumer satisfaction (Witama and Keni, 2020). According to this study, patients who perceive high-quality services from healthcare providers with solid brand images are more likely to be happy with their experience.

In conclusion, the available search results support the idea that brand image positively influences patients' perceived value.

H_5: Brand Image has a positive influence on Patient Perceived Value

Influence of Service Quality against Patient Satisfaction

Most empirical investigations in healthcare research have revealed that service quality favors patient satisfaction (Nguyen, 2021). The perception of interpersonal-based medical care interactions also affects service quality and patient satisfaction (Chang et al., 2013). Another study found that empathy and assurance are the most important elements influencing patient satisfaction with hospital care using a structural equation model (Kitapci, 2014). Patients' unhappiness with hospital evaluations can be used to improve service quality. The SERVQUAL methodology, which measures five aspects of service quality: tangibles, dependability, responsiveness, assurance, and empathy, may be used to assess the quality of private healthcare (Baia, 2020).

In short, there is evidence to support the hypothesis that service quality influences patient satisfaction positively. Improving interpersonal based medical service encounters, focusing on patients' dissatisfactions with hospital assessments, meeting customer expectations with improved service quality, and measuring private healthcare quality with the SERVQUAL model are all ways to improve service quality and patient satisfaction.

H_6: Service Quality has a positive influence on Patient Satisfaction

Influence of Service Quality against Patient Perceived Value

Numerous studies have found that service quality significantly influences patient-perceived value (Lin and Yin, 2022; Nguyen, 2021). Patients' perceived value of healthcare service quality is critical, and a variety of factors, including pricing, acceptability, and accessibility, influence it.

Nguyen's study is a mixed-methods study with a sample size of five in-patients from Vietnamese hospitals for the qualitative phase and 368 in-patients for the quantitative phase (Nguyen, 2021). The research examines the many aspects of service quality in private healthcare and how they affect in-patient happiness, perceived value, and customer loyalty in Vietnam. According to these research conclusions, healthcare practitioners should invest resources to enhance service quality. To reach their patients,

practitioners should support social branding and e-services. Healthcare providers should prioritize price, acceptability, and accessibility to increase patients' perceived value of healthcare service quality.

H_7: Service Quality has a positive influence on Patient Perceived Value

Influence of Service Quality against Brand Image

High service quality would boost customer satisfaction with the company (Wu et al., 2011). As a result, when customers form a positive impression of a company based on its service quality, they also include a positive brand image. The study sought to investigate the influence of brand image and service quality on customer loyalty by means of customer satisfaction.

This study supports Mai's findings that service quality has a favorable impact on brand image. According to the findings, service quality has a beneficial influence on customer happiness and loyalty (Mai and Ketron, 2022). The link between service quality and brand image is critical for organizations since it may affect their reputation and revenue. A strong brand image may attract new consumers, keep existing ones, and boost revenue (Mai and Ketron, 2022). Poor service quality, on the other hand, can harm a company's image, result in unfavorable word-of-mouth advertising, and eventually result in lost revenue (Shabbir, 2020).

H8: Service Quality has a positive influence on the Brand Image of the Hospital

Conceptual framework for this research shows in figure 1.

RESEARCH METHOD

The object of the research related to this hospital management study is to test and analyze the effect of service quality as an independent variable on patient behavior in hospital services, that is, brand image, patient-perceived value, patient satisfaction, and patient loyalty as the dependent variables. This research variable is the focal point because it relates to the problem, which is the background of the research on in-patient services at Type C XYZ Hospital. The relationship between research variables can provide information obtained from the empirical data analyzed so that it can be drawn and conclusions can be drawn (Bougie and Sekaran, 2020).

The unit of analysis in a study is an aggregate classification of the data set obtained on predetermined subjects (Bougie and Sekaran, 2020). The unit of analysis in this study is the individual, where data is obtained from each individual and then collected for analysis. The respondents used in this study were in-patients at XYZ Hospital. Respondents must meet several mandatory criteria. First, the respondent is an in-patient at XYZ Hospital who has visited at least once.

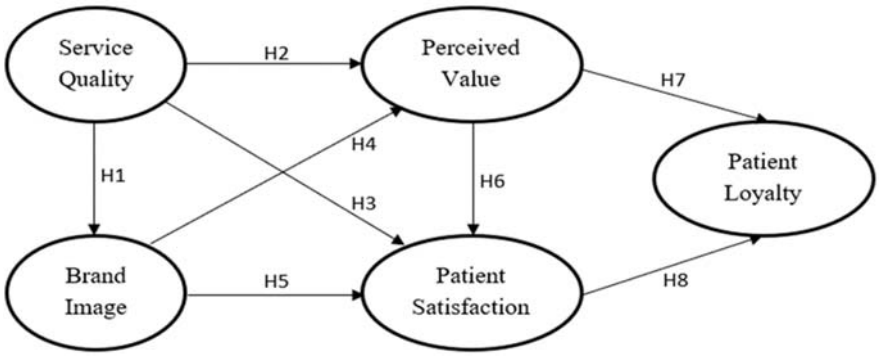

Figure 1
Conceptual Framework

Source: Processed Author

Second, outpatient visits are at least carried out within the last five years. With these criteria, the respondent is considered to understand and still have a reasonably accurate memory regarding the experience of being hospitalized at the in-patient care facility XYZ Hospital so as to reduce bias.

The study can be viewed from the type of research that is determined; based on the time of data collection, this research is classified as a cross-sectional study. Cross-sectional study research is defined as research in which all data is collected only once at a specific time or in only one period (Bougie and Sekaran, 2020). Research data can generally be used to understand, find solutions, and predict problems. The research object is a scientific target to obtain data with specific goals and uses about an objective, valid, and reliable matter (certain variables). Data from data collection on the variables in this study were then processed for further analysis so that they could answer research questions based on specific considerations and a quantitative research design with surveys, where data collection at one time can be declared sufficient (Bougie and Sekaran, 2020).

Based on its type, this research is classified as quantitative research with hypothesis testing. The number of samples utilized in this investigation was adjusted to fit the analytical method, Structural Equation Model (SEM). This study used a non-probability sampling method, where the people who may fill out the questionnaire can provide the information needed according to specific criteria determined in the survey (Bougie and Sekaran, 2020).

Research Variable Measurement

A research variable is an object or something that can be observed, measured, and analyzed and has different or varied values. Variable operationalization is needed to determine the type of data, dimensions, or indicators, as well as the scale of the variables involved in the research, so that hypothesis testing with statistical methods can be carried out appropriately, according to the research objectives. The values observed in variable data can be in the form of an ordinal, nominal, ratio, or interval, where this value can be different at different times for the same object or at the same time for other objects or people (Bougie and Sekaran, 2020).

In conducting research design, an important step is to determine the variables that will be arranged in a research model. The dependent variable is the primary variable in the research model, which will be studied as a variable that will be predicted and know the effect of other variables significantly in a modeling context (Bougie and Sekaran, 2020). Meanwhile, this study's related or dependent variable is patient loyalty, according to the considerations from the references described in the previous chapter. The measurement of variables in the research model uses a scale according to the reference and operationalization of these variables. In measurement, data is used on a scale to distinguish one unit of analysis from another, namely individuals as research respondents (Bougie and Sekaran, 2020). In this study, the measurement scale is divided into four types: nominal scale, ordinal scale, interval scale, and ratio scale. A discrete interval scale was used to determine the differences in each construct, which made it possible to convert the data received from respondents via questionnaire question items into a numerical form. A 5-point Likert scale was used as a measurement method in this study. The Likert scale is a scale that is commonly used in social research, including in business management research. This Likert scale includes 5 (five) points with a range of 1 (one), which is strongly disagree; 2 (two), disagree; 3 (three), is neutral; 4 (four), is agree, and 5 (five), is very decide. The advantage of using the Likert scale as a measurement method in a questionnaire is that it is easy to use-respondents can easily and quickly understand how to answer the question items. The Likert scale makes it easier for respondents to convey their affirmation or agreement more precisely for each statement sentence proposed. Respondents

are only allowed to choose one answer option among the five available points, which is the most appropriate according to the respondent.

Conceptual Definition and Operationalization of Variables.

The operational definition is to reduce the abstract concept of a variable so that it can be measured clearly. The conceptual definition describes the purpose of an idea, whereas the operational definition describes how to measure it. There are several steps to operationalize, in the form of making a conceptual definition of a construct, developing items that are related or essential to the construct, determining the answer format for respondents (usually using a Likert scale), collecting data from samples, selecting items using item analysis, and conducting reliability and validity tests of the instrument used. The following table 1 summarizes the variables, their conceptual and operational definitions, and the scale used in this study (Bougie and Sekaran, 2020). The definition and indicators are adopted from the research model of Akob et al. (2020).

Population and Sample

The population in the study is the total number of individuals whose data is to be analyzed. At the same time, the sample is part of the population whose characteristics can represent the population. Sampling is the process of accurately selecting a sufficient number of samples from the population to study the sample's properties or characteristics. Therefore, a representative sample may generalize the sample analysis results to the population (Bougie and Sekaran, 2020). Thus, the sample is part of the population whose characteristics are being investigated and can represent the entire population, so the number is less than the population. The population in this study were in-patients at XYZ Hospital Cirebon.

The number of samples utilized in this investigation was adjusted to fit the analytical method, Structural Equation Model (SEM). Another sample approach is the Inverse Square Root, which requires at least 160 samples. The sample size was calculated using power analysis following what was advised for the number of samples in the study utilizing the PLS-SEM approach (Memon et al., 2020). The G-power analysis (Figure 2) program uses the power analysis method with f-squared 0.15, and the results suggest that 138 samples are required. The number of samples used in this investigation was 160, which matched the requirements for the two methodologies mentioned above.

Table 1
Conceptual Definition

Variable	Conceptual Definition	Indicators
Service Quality	A basis in service marketing, i.e., a product that is sold in the form of quality services with target buyers by the consumer.	1. The food menu in the hospital is of high quality. 2. The Cleanliness in the hospital is of high quality. 3. The food served in the hospital is of high quality. 4. Facilities in the hospital are of high quality. 5. The hospital's tools are complete and sufficient. 6. The hospital's tools are complete enough. 7. Medical actions that are performed in hospitals have been well validated.

		8. The hospital has given good attention. 9. The hospital medical team provides clear patient information. 10. Patient comfort in the hospital
Hospital Brand Image	Brand awareness is reflected by brand associations and organized within the consumer mind. This opinion can be derived from experienced customers, the information collected, or the impact of the association available to consumers.	1. The hospital as a whole is trusted 2. The service at the hospital is trusted 3. The hospital is successful in its field 4. The hospital is patient-friendly enough.
Patient Perceived Value	The difference between the perspective of the consumer's assessment of the benefits obtained compared to the costs incurred by consumers.	1. Ease to get health services at the hospital 2. Comfortable when the patient is treated at the hospital. 3. Cared for when Patients were treated at the hospital. 4. The level of satisfaction with hospital care is high. 5. Medical workers at the hospital are responsible. 6. The medical officers follow the rules appropriately. 7. The hospital officers are by the standards of hospitality in Indonesia.
Patient Satisfaction	The state that someone feels as a result of comparing the presentation or product outcome perceived in comparison to one's expectations	1. Medical services of the hospital are satisfied. 2. The facilities of the hospital are satisfactory. 3. The doctor's services at the hospital are satisfied. 4. The nurse services at the hospital is satisfied 5. Willingness to return to the hospital if they need medical services 6. Satisfaction with the hospital overall.
Patient Loyalty	The patient is willing to revisit the healthcare provider, spread positive word-of-mouth about the healthcare provider, and recommend the healthcare provider to others.	1. Willingness to recommend the hospital to others 2. Comfortable to share the experience at hospital 3. Considering going back to the hospital.

Source: Akob et al. (2020)

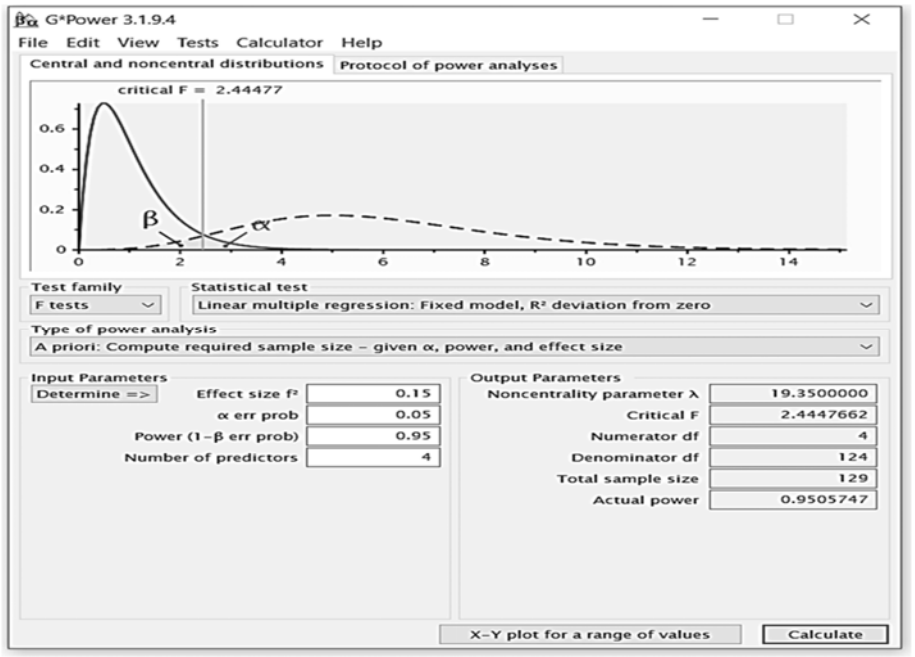

Figure 2
G-power Analysis

Source: Research Data Processed by G*Power (2023)

This work analyzed the data using Partial Least Squares Structural Equation Modeling (PLS-SEM) with the Smart PLS program version 4. PLS-SEM is a prominent analytical approach for estimating latent variable path models and their linkages. The study aims to uncover the critical success factors and sources of competitive advantage for the primary target constructs. Compared to the factor-based SEM approach, PLS-SEM allows researchers to estimate more complicated models with numerous constructs and indicator variables and has a smaller sample size (Sarstedt et al., 2021).

The path model consists of two components: the structural model, or inner model, which reflects the causal-predictive link between constructs, and the measurement model, or outer model, which shows the relationship between each construct and its related indicators. Researchers must employ structural and measurement theories to demonstrate the link between path model parts (Sarstedt et al., 2021).

The hypothesis-testing stage is carried out after completing all the preceding procedures. SmartPLS™ is bootstrapped during this step. The link between these variables may be examined using one of two methods: one-tailed when searching for direction in the relationship between variables or two-tailed when not looking for direction in the relationship between variables. The IPMA, or Importance-Performance Map Analysis, is the final stage in the SmartPLS™ study. This approach combines descriptive analysis, which uses the mean value as a reference to performance, with inferential analysis, which uses the total effect value as a guide to the importance or degree of importance (Hair et al., 2017). The T-statistic value with the T-table indicates the significance test. The influence between these variables is considerable if the T-statistic value surpasses the T-table value.

ANALYSIS AND DISCUSSIONS

Results

Online surveys were given out to participants in this study in April and May 2023. The survey was created as a Google form link, and responders who complied with the

requirements to complete the study were sent the link containing the survey. The results of the respondents' measurements can be seen in Table 2.

The gender breakdown of the respondents revealed that there were more women than men, with 58.1% of the 160 total respondents being women and 41.9% being men. According to the age distribution of the respondents, 31.9% of the 160 respondents, or respondents between the ages of 31 and 40, visited the hospital the most frequently. Respondents between the ages of 51 and 60 made up the second-largest majority, with a percentage of 23.1%, followed by respondents between the ages of 41 and 50, with a percentage of 16.9%, respondents between the ages of 21 and 30, with a percentage of 14.4%, respondents over the age of 60 with a percentage of 10%, and respondents under the age of 20 with a percentage of 4.4%. According to respondents' educational levels, those with high school diplomas had the highest percentage (45.6%), followed by those with junior high school diplomas (18.8%), elementary diplomas (16.9%), and high school diplomas (11.3%). Those with bachelor's and master's degrees had the lowest percentages (5.6% and 1.9%, respectively), and no respondents with doctoral degrees were in this study.

The statistical test results in Table 3 show that each variable's total loading factor value is more than 0.60, indicating that the loading factor measurement met the PLS test requirements. According to Cronbach's alpha, composite reliability, and average variance extracted (AVE) values, the item's dependability against the variable also passes the PLS validity and reliability assessment standards. Cronbach's alpha, composite reliability (CR), and AVE values fit. The HTMT approach for measuring validity explains the relationship between valid variables.

Table 2
Respondent Profile

Description	Category	Quantity	Percentage
Sex	Male	67	41,9
	Female	93	58,1
Total		160	100
Age	<20 Years	7	4,4
	21-30 Years	23	14,4
	31-40 Years	50	31,3
	41-50 Years	27	16,9
	51-60 Years	37	23,1
	>60 Years	16	10
Total		**160**	**100**
Education	Primary School (SD)	27	16,9
	Junior High School (SMP)	30	18,8
	Senior High School (SMA)	73	45,6
	Diploma	18	11,3
	Bachelor (S1)	9	5,6
	Master (S2)	3	1,9
	Doctoral (S3)	0	0
Total		**160**	**100**

Source: Processed Author

Table 3
Variables Measurement and Statistics Analysis

	HI	PL	PS	PV	SQ
HI1	0.889				
HI2	0.864				
HI3	0.779				
HI4	0.819				
PL1		0.889			
PL2		0.888			
PL3		0.874			
PS1			0.730		
PS2			0.757		
PS3			0.808		
PS4			0.811		
PS5			0.815		
PS6			0.773		
PV1				0.732	
PV2				0.757	
PV3				0.719	
PV4				0.722	
PV5				0.772	
PV6				0.761	
PV7				0.721	
SQ1					0.917
SQ2					0.911
SQ3					0.897
SQ4					0.905
SQ5					0.892
SQ6					0.902
SQ7					0.894
SQ8					0.899
SQ9					0.890
SQ10					0.924
Variable	AVE	Result		R-squared	Category
HI	0.704	Valid	HI	0.426	Weak
PL	0.781	Valid	PL	0.523	Moderate
PS	0.613	Valid	PS	0.609	Moderate
PV	0.549	Valid	PV	0.570	Moderate
SQ	0.816	Valid			
Variable	Cronbach's alpha	Composite reliability		Result	
HI	0.859	0.905		Reliable	
PL	0.860	0.915		Reliable	
PS	0.873	0.905		Reliable	
PV	0.863	0.895		Reliable	
SQ	0.975	0.978		Reliable	
HTMT	HI	PL	PS	PV	SQ
HI					
PL	0.881				
PS	0.758	0.784			
PV	0.821	0.762	0.824		
SQ	0.706	0.569	0.744	0.716	

Source: Research Data Processed by Smart PLS (2023)

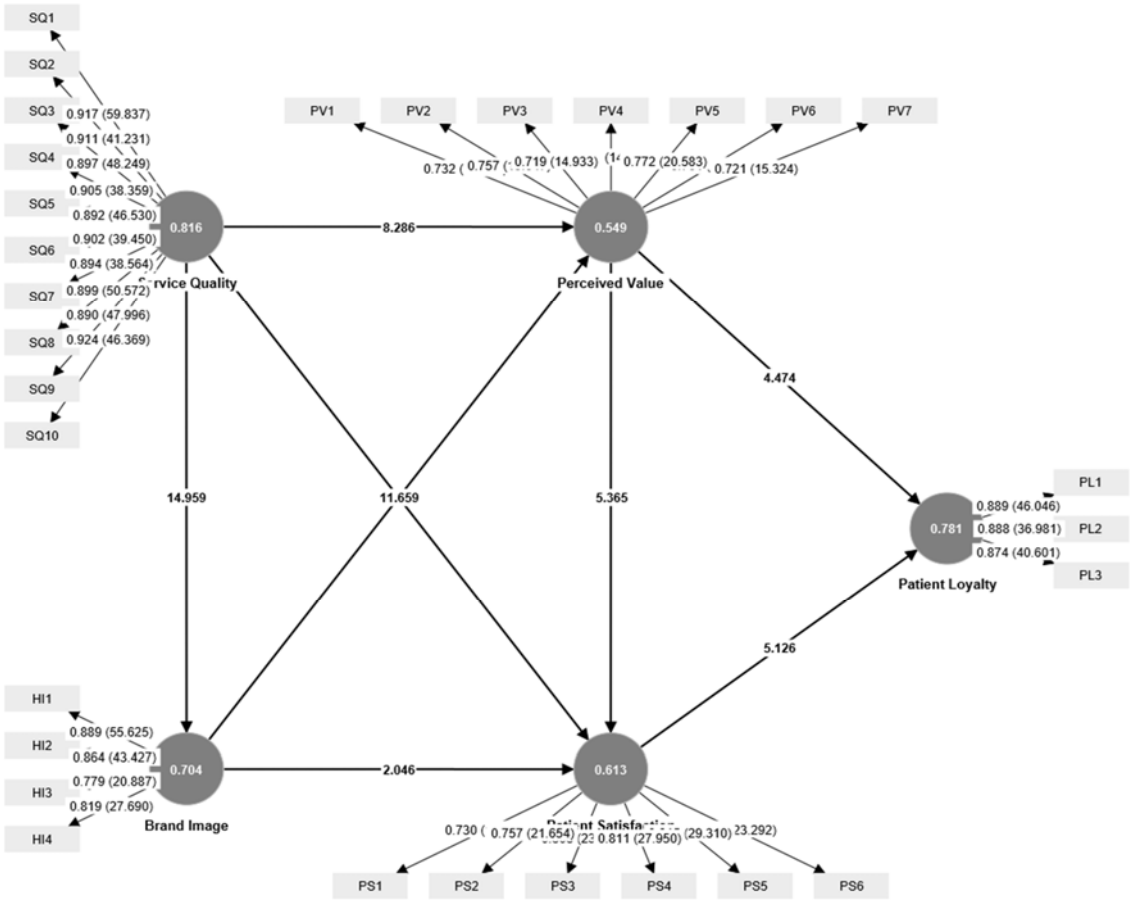

Figure 3
Bootstrapping PLS Result

Source: Research Data Processed by Smart PLS (2023)

Table 4
Hypothesis Test Results

Hypothesis	Path	Path Coeff.	T Statistics	p-value	significance	Result
H1	PS -> PL	0.429	5.126	0.000	Significant	Hypothesis Accepted
H2	PV -> PL	0.351	4.474	0.000	Significant	Hypothesis Accepted
H3	PV -> PS	0.380	5.365	0.000	Significant	Hypothesis Accepted
H4	HI -> PS	0.177	2.046	0.041	Significant	Hypothesis Accepted
H5	HI -> PV	0.491	11.659	0.000	Significant	Hypothesis Accepted
H6	SQ -> PS	0.321	4.536	0.000	Significant	Hypothesis Accepted
H7	SQ -> PV	0.337	8.286	0.000	Significant	Hypothesis Accepted
H8	SQ -> HI	0.652	14.959	0.000	Significant	Hypothesis Accepted

Path	Path Coeff.	T Statistics	p-value	Significance
SQ -> PS -> PL	0.138	3.971	0.000	Significant
SQ -> PV -> PS -> PL	0.055	4.870	0.000	Significant
SQ -> PV -> PL	0.118	3.770	0.000	Significant
SQ -> HI -> PV -> PL	0.112	3.594	0.000	Significant
SQ -> HI -> PS -> PL	0.050	1.500	0.134	Not Significant
SQ -> HI -> PV -> PS -> PL	0.052	3.276	0.001	Significant

Source: Research Data Processed by Smart PLS (2023)

According to the average coefficient of determination (R-square) measurement for the variables Hospital Image, Patient Loyalty, Patient Satisfaction, and Patient Perceived Value of 0.781, the independent variable has a 78.1% influences how Patient Loyalty at XYZ Hospital is formed. The detailed illustration of the analysis path model is illustrated in Figure 3.

Table 4's results of the hypothesis testing demonstrate that, of the eight model demonstrations, direct links have a favorable and significant influence (P-value 0.05). Except for the SQ -> HI -> PS -> PL model, which has a p-value of 0.134, the indirect relationship yields significant results in 6 models.

Importance Performance Map Analysis (IPMA) is a more complex analysis menu made available through SmartPLS™ data analysis. This approach is a computation used to get variables and indicators that have performance or performance that can also be quantified, as well as variables and indicators that can be quantified in terms of importance. The impact on the dependent variable or the construct chosen as the study model's target construct can be determined jointly in the two dimensions. A mix of descriptive and inferential analysis (mean) (total effect) was used to conduct IPMA analysis on SmartPLS as a result of respondents' responses on latent variables in a map or mapping. The results of the total effect coefficient values are merged with the value of the average (mean) of those results. The importance value in this mapping is based on the value of the total effect on the x-axis, while the performance value is based on the mean value on the y-axis. The effect size value can be used as a reference for a fictitious line to divide the IPMA quadrants, specifically which quadrants need improvement. The 50% value can be utilized in reading as a performance cut-off and the effect size value for importance. The IPMA analysis can determine which factors have performed well and should be preserved and which factors still require improvement. It is possible to decide on what issues hospital management should prioritize so they may distribute available resources using the IPMA tables and data.

Based on the results of this study, it can be seen in Figure 4 that SQ is in the upper right quadrant, HI is in the upper left quadrant, PV is in the lower right quadrant, and PS is in the lower left quadrant.

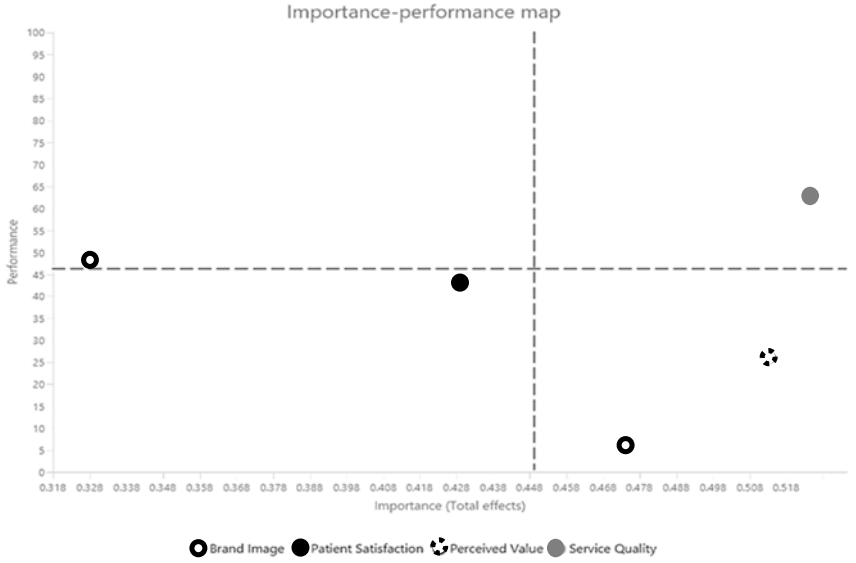

Figure 4
IPMA Result Test

Source: Research Data Processed by Smart PLS (2023)

Discussion

Patient Satisfaction is known to positively influence Patient Loyalty with a T-statistic value of 5.126 as a consequence of evaluating the H1 hypothesis, as indicated in Table 4 above. The standardized coefficient value for the H1 hypothesis was found to be 0.429, meaning that it has a positive direction and is consistent with the hypothesis' direction. These two empirical findings conclude that the H1 hypothesis is correct. This result is consistent with earlier research conducted in hospitals with various demographics (Liu et al., 2021).

Patient Perceived Value positively impacts Patient Loyalty with a T-statistic value of 4,474 based on the findings of testing the H2 hypothesis, displayed in Table 4 above. The standardized coefficient value for the H2 hypothesis was 0.351, indicating that it has a positive direction and is consistent with the hypothesis' direction. This result is consistent with earlier research conducted in hospitals with various demographics. This study (Huang et al., 2021; Zahra et al., 2022; Zhang et al., 2021), which focused on the Patient Perceived Value as its sole independent variable, can therefore support the hypothesis that rising patient-perceived value is positively correlated with the patient's willingness to receive care at the same hospital. The findings above have managerial implications for the importance of focusing on values like cost, accountability, consistency, and obedience in hospitals, particularly in patient care areas. As a result of improving this, the patient may perceive the treatment is worth more favorably while receiving it.

With a T-statistic value of 5.365, it is known that Patient Perceived Value positively influences Patient Satisfaction based on the findings of testing the H3 hypothesis, displayed in Table 4 above. The standardized coefficient value for the H3 hypothesis was 0.380, indicating that it has a positive direction and is consistent with the hypothesis' direction. This result is consistent with earlier studies (Slack et al., 2020; Shao et al., 2019). As a result, this research supports the theory that elevating patient values during in-patient care has a favorable link with patient satisfaction with the hospital. The results above have managerial implications for considering costs, responsibility, consistency, and adherence to hospital standards, particularly in patient care areas.

Hospital brand image favors patient satisfaction, with a T-statistic value of 2.046 based on the findings of testing the H4 hypothesis, displayed in Table 4 above. This result has a considerable influence because it is higher than the T-table value for one-tailed that has been calculated, which is equal to 1.645. According to T, his intern, relation to the effect can be used at the population level. The standardized coefficient value for the H4 hypothesis was 0.177, indicating that it has a positive direction and is consistent with the hypothesis's direction. This result is consistent with earlier study (Wu et al., 2011). The hypothesis is that enhancing hospital image has a positive link to patients' satisfaction with in-patient treatments at the hospital; this study was done using just one independent variable, namely hospital brand image. The findings discussed above have managerial ramifications for maintaining the hospital's brand image, which may be done by providing excellent customer service, enhancing management, and acting professionally to promote in-patient satisfaction.

Hospital Brand Image positively impacts Patient Perceived Value with a T-statistic value of 11.659 based on the findings of testing the H5 hypothesis, displayed in Table 4 above. This result has a considerable influence because it is higher than the T-table value for one-tailed that has been calculated, which is equal to 1.645. According to this interpretation, The effect can be used at the population level. The standardized coefficient value for the H5 hypothesis was found to be 0.491, indicating that it has a positive direction and is consistent with the hypothesis' direction. These two empirical findings confirm the H5 theory. Suppose the

hospital's brand image is positive, like the previous study (Lin and Yin, 2022). The patient will likewise perceive a positive value when receiving care there. The findings above have managerial ramifications for how critical it is to consider the hospital's reputation. Of course, the patient will benefit more if the hospital has a positive reputation. As a result, patients frequently decide to receive in-patient care at a hospital.

Based on the results of testing the H6 hypothesis, Service Quality positively increases Patient Satisfaction with a T-statistic value of 4.536, as shown in Table 4 above. This finding has a significant influence because it is greater than the T-table value for one-tailed that has been determined, which is 1.645. These two empirical observations lead us to believe that the H6 hypothesis is valid. Patient satisfaction will grow if Service Quality improves while the patient receives care at the hospital. The findings presented above are the same as the previous study (Nguyen, 2021) and have managerial implications for the importance of focusing on service quality when providing hospital treatment.

With a T-statistic value of 8.286 and the results of testing the H7 hypothesis, as stated in Table 4 above, it is known that Service Quality positively influences Patient Perceived Value. These two empirical findings allow us to conclude that the H7 hypothesis is correct. At the population level, it is possible to apply the impact of service quality on patient satisfaction with the hospital while receiving care there. The idea was the same with prior studies (Lin and Yin, 2022; Nguyen, 2021) that service quality has a positive association with the importance of patients' considerations when choosing a hospital, which this study can thus support.

Based on the results of the H8 hypothesis test, shown in Table 3 above, it is known that Service Quality positively influences Hospital Brand Image with a T-statistic value of 14.959. The H8 hypothesis' standardized coefficient value was discovered to be 0.652, showing that it has a positive direction and is consistent with the direction of the hypothesis. These two empirical results might support the H8 theory. This outcome aligns with past studies on other demographics (Wu et al., 2011). This study supports the idea that service quality and hospital image are favorably connected with patients receiving in-patient care.

In the specific indirect effect, A T-statistic value of 3.971 indicates that the Service Quality path through Patient Satisfaction has the highest influence from the independent variable to the dependent variable, with a coefficient value of 0.138. The patient satisfaction variable can mediate the relationship between service quality and patient loyalty. In addition to this road, there are five more paths, one of them, Service Quality, passing through Brand Image and, subsequently, patient satisfaction with a coefficient value of 0.050 and a T-statistic value of 1.500, deemed inconsequential. Thus, of a total of 6 research pathways, three are significantly mediated by the variable patient satisfaction, which serves as a mediating variable in the research model. The study methodology can still be applied because of the significant role that patient satisfaction plays as a mediating variable. These results show that patient satisfaction is critical to hospital in-patient care. Patient satisfaction, which eventually results in long-term patients, will be impacted by hospitals that already provide high-quality care when satisfied patients are more likely to stay hospitalized for their subsequent appointment, demonstrating their loyalty.

The objective construct for the study model is Patient Loyalty, and the Service Quality variable is located in the upper right quadrant of Figure 4, which displays the results of IPMA. This quadrant denotes a crucial sector and is already operating effectively. As a result, it is advised for hospital administrators to constantly pay attention to, maintain, and improve service quality, which is currently good, as this may impact how in-patients perceive their experience receiving care at the hospital.

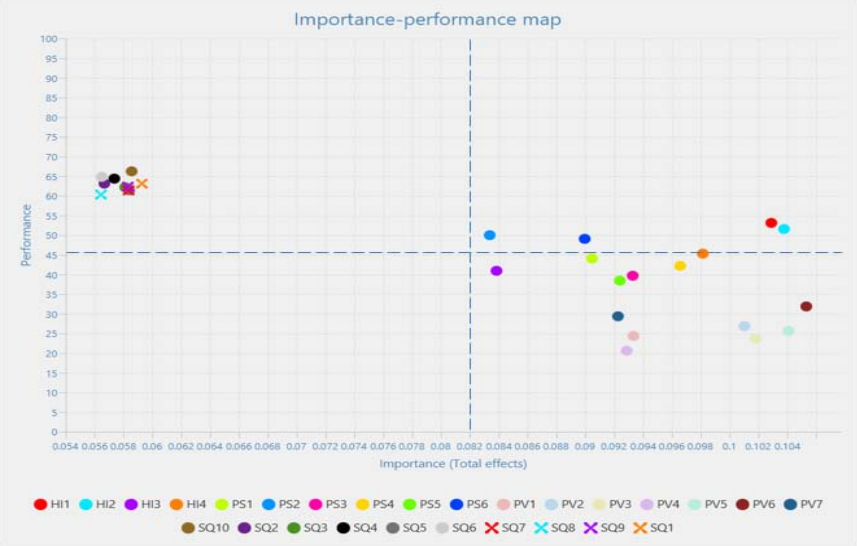

Figure 5
IPMA Indicator Result
Source: Research Data Processed by Smart PLS (2023)

Figure 4, which displays the results of IPMA. Therefore, the respondents, in this case, the in-patients of XYZ Hospital, regarded the Service Quality variable as the most crucial characteristic. Hospital budgets and resource allocation are advised for the upkeep and improvement of hospital service quality. It also can be shown in Figure 4 above that Perceived Value is the variable that performs the least well. Given that the socioeconomic community in the Cirebon area is still low, this can be linked to XYZ Hospital, which just welcomed new BPJS patients. Additionally, the IHC name is still connected with a pricey hospital. It is advised that hospital management prioritize initiatives to enhance Patient Perceived Value.

At the indicator level, as depicted in Figure 5, there are 4 (four) indicators—HI1, HI2, PS2, and PS6—that are already in the upper right quadrant. This indicator has performed well and is thought to be necessary. Therefore, XYZ Hospital's hospital management must maintain factors connected to trust in its services, facilities, and infrastructure.

As for the variable indicators, including HI3, HI4, PS1, PS3, PS4, PS5, PV1, PV2, PV3, PV4, PV5, PV6, and PV7, which are just beyond the 50% boundary line, this indication still needs to be improved. For instance, HI3 has the statement, "The hospital is successful in its field." it must look at the competition map and consider the next service strategy. The hospital is patient-friendly enough." is variable HI4. There is a need for standard operational ways of service and communication to patients, PS1, PS3, and PS4, with the statement "Medical services of the hospital is satisfied." "The doctor's services at the hospital are satisfied." Moreover, "The nurse services at the hospital are satisfactory." The Same can be improved by making standard operations suitable for all workers, including doctors and nurses.

Indicator PV1, "Ease to get health services at the hospital," can be improved by socializing that XYZ Hospital has accepted BPJS patients; indicator PV2, "Cared for when Patients are treated at the hospital;" PV3, "Level of satisfaction with hospital care is high;" PV5 "The medical officers follow the rules appropriately;" PV6 "The hospital officers are by the standards of hospitality in Indonesia, and the PV4 indicator "Level of satisfaction with hospital care is high." So, all the above indicators are considered.

CONCLUSION AND SUGGESTIONS

Patient Loyalty is the dependent variable in this study. This study aimed to discover and assess the beneficial influence of elements influencing patient loyalty in hospital in-patient treatment, including Service Quality, Hospital Brand Image, Patient Perceived Value, and Patient Satisfaction. Eight hypotheses are evaluated in this research model in in-patient services at XYZ Hospital Cirebon.

The structural model analysis results show that the research model for hospital services has modest predictive accuracy and relevance on the dependent variable, Patient Loyalty. Based on these findings, this study paradigm can still be employed, although it needs more development in future research.

This study delivers scientific advancement in the health business about Service Quality, Hospital Brand Image, Patient Perceived Value, Patient Satisfaction, and Patient Loyalty. According to the findings of this study, Service Quality has a favorable influence on Hospital Brand Image, Patient Perceived Value, and Patient Satisfaction. Patient Perceived Value and Patient Satisfaction are positively influenced by hospital brand image. Patient Perceived Value positively influences Patient Satisfaction and Patient Loyalty. Patient Satisfaction influences Patient Loyalty positively.

Loyalty is a crucial factor for the hospital since it demonstrates that the quality of its services is good because customers return for treatment. Several characteristics were discovered in this study that had a favorable effect on patient loyalty, including service quality, brand image, perceived value, and contentment.

The management of XYZ Hospital should consider this to promote patient loyalty by improving perceived value, maintaining service quality, and not forgetting brand image and satisfaction. Thus, service quality, brand image, perceived value, and satisfaction are all important. Improving the patient's perceived value entails many methods and actions to enhance the hospital's good perception and reputation in the eyes of patients, society, and other stakeholders to assist in boosting the hospital's favorable image and reputation.

As a result, the XYZ Cirebon Hospital must improve its patients' perceived value. Maintaining service quality is critical to retaining patient loyalty at the hospital. Patients who are satisfied with the services provided are more likely to return to the hospital. In this instance, XYZ Cirebon Hospital must maintain and improve the quality of its services, particularly in-patient care.

Limitations and Suggestions for Future Research

This study has limitations because it was only conducted in one hospital. This study does not use the SERVQUAL model of Parasuraman et al. in the dimensions of service quality in measurement and sampling; this needs to be considered to obtain a more specific measurement method. This research proposal can still be improved by including additional elements that promote the development of patient loyalty, such as trust, patient behavior, and commitment. More variables can enhance the quality of research by offering more options and opportunities for customization, providing a more comprehensive understanding of the phenomenon under study, and broadening the scope of research.

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