Determination of Loyalty Through Mediation of Patient Satisfaction at Indriati Boyolali Hospital

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INDEXING	ABSTRACT
	This study aims to reveal the influence between CRM, SST, customer satisfaction and loyalty variables with the mediation of patient satisfaction in outpatients of Indriati Boyolali Hospital. This research used a quantitative descriptive approach—data collection using questionnaires, observations and documentation. The research location was Indriati Boyolali Hospital which is located at Jl. Raya Boyolali-Semarang No.KM. 02, Mojosngopermai, Mojosongo, Boyolali District, Boyolali Regency, Central Java. In conducting this study, the time needed was six months, and the sample of respondents was 230 outpatients at Indriati Boyolali Hospital. Some of the following conclusions Customer relationship marketing affects patient loyalty. Customer Relationship Marketing affected Patient Satisfaction. Self Service Technology affected Patient Loyalty, Self Service Technology affected Patient Satisfaction, Patient Satisfaction affected Patient Loyalty, and Patient Trust as an Intervening Variable did not affect patient loyalty. Customer Relationship Marketing affected patient commitment with patient satisfaction mediation. Self Service Technology affected patient loyalty with patient satisfaction mediation.
	Penelitian ini bertujuan untuk mengungkapkan pengaruh antar variabel CRM, SST, kepuasan dan loyalitas pelanggan dengan mediasi kepuasan pasien pada pasien rawat jalan Rumah Sakit Indriati Boyolali. Penelitian ini menggunakan pendekatan deskriptif kuantitatif. Pengumpulan data menggunakan kuesioner, observasi dan dokumentasi. Lokasi Penelitian adalah RS Indriati Boyolali yang terletak di Jl. Raya Boyolali-Semarang No.KM. 02, Mojosngopermai, Mojosongo, Kec. Boyolali, Kabupaten Boyolali, Jawa Tengah. Dalam melakukan penelitian ini waktu yang dibutuhkan yaitu selama 6 bulan demgam sampel responden adalah 230 Pasien rawat jalan di RS Indriati Boyolali. beberapa kesimpulan sebagai berikut Customer relationship marketing berpengaruh terhadap Loyalitas pasien ' Customer relationship marketing berpengaruh terhadap kepuasan pasien , Self Service Technology berpengaruh terhadap Loyalitas Pasien, Self Service Technology berpengaruh terhadap Kepuasan Pasien, Kepuasan Pasien berpengaruh terhadap Loyalitas Pasien, Kepercayaan pasien sebagai Variabel Intervening tidak berpengaruh ke loyalitas pasien, Customer Relationship Marketing berpengaruh terhadap loyalitas pasien dengan mediasi kepuasan pasien, Self Service Technology berpengaruh terhadap loyalitas pasien dengan mediasi kepuasan pasien.

INTRODUCTION

The hospital is a health business organization currently widely developed by health foundations, and companies engaged in services. The community highly regards the hospital's existence as a health servant, so the hospital needs to maintain trust to increase the effectiveness of the role and function of the hospital. According to (Trisnantoro, 2018), the number of hospitals in the last six years has been relatively rapid. The number of private hospitals is higher than government hospitals, with an average growth of 7%. Meanwhile, the development of government hospitals is only 3%. This data shows that the hospital business will be good in the future. Since people in the current era are aware of health, what can show the magnitude of the potential for hospital development in Indonesia from the high level of

need for health services that can be measured by the degree of public health? Hospitals are required to improve the quality of their services further to attract public trust and compete with other houses because with the same hospital facilities, what distinguishes one hospital from another besides facilities is the service.

Currently, hospitals compete to maintain and increase the number of patients by relying on the quality of service. In addition to selling existing healthcare facilities, hospitals must develop in the information technology field. Patient loyalty is the pinnacle of achievement of business people in the hospital world. Hospitals must retain loyal patients because finding new patients will cost more and longer times. Consumer loyalty is a strong positive attitude towards a brand or company. Consumers are said to be loyal to a specific brand or company when. Consumers consistently repurchase a particular brand at the same company, tell and give recommendations to others, are not affected by attractive price offers from rival companies and submit complaints to the company in a good way and according to procedures (Yusmalinda, 2021). Hospitals need to maintain patient loyalty that those patients expect to be able to recommend to others.

The expected result of hospitals improving patient services is a formation in patient satisfaction. Patient satisfaction can be a determining factor for the success of the hospital business in the long term. It has been generally accepted that consumers who have been satisfied will be less price sensitive, less likely to be affected by the attacks of competitors and will be loyal to the company longer than dissatisfied customers. According to Kotler (2010), today's customers are increasingly difficult to satisfy. Customers are already getting more intelligent, more price-conscious, more demanding, and less forgiving and are approached by many competitors with the same or even better offers. Patient satisfaction is a reflection of the quality of health services received. The quality of health services focus on the perfection of health services in creating a sense of satisfaction in the person of each patient—the more perfect the satisfaction, the better the quality of health services (Supartiningsih, 2017).

Currently, relationships are the main topic in business activities. Most companies, financially, aim to get maximum profit from their operations' results by maximizing their shares' value. On the other hand, in marketing, customer satisfaction is the goal of every company. Improving the quality of superior products and services to the market (consumers) is an effort to realize customer satisfaction with the products and services. This business is inseparable from the changes in the business environment, increasingly fierce competition, technological advances and changes in market needs and desires, which require marketers to change their strategies and tactics from product-oriented to market-oriented. In recent decades, customer marketing patterns have also changed, traditional marketing approaches have been deemed less effective, and customer relationship marketing (CRM) has been suggested as an alternative option. Customer relationship marketing is used to build good relationships with customers in the long term by combining the ability to respond directly

and to serve customers with high interactions. A management approach is needed to support implementing a relationship marketing customer strategy. Improving customer relationships is a crucial factor in maintaining customer loyalty. The fostered relationship is not just a short-term one but a long-term one. The company is oriented towards sales transactions and establishes long-term relationships with consumers and customers. Therefore, the Customer Relationship Marketing approach needs to be applied within the company (Kori, 2018).

In today's information technology era, what cannot separate a company's success from the support of technology that can integrate functions into an effective and efficient work unit? Information and communication technologies have played a role in transforming the interaction of service companies with consumers and have provided improved service standards. Service quality continues to be a topic of extensive investigation, and now it has even emerged in the form of self-service technology that profoundly affects how consumers interact with companies to create positive service outcomes towards consumers. Self-service technology is constructive in providing convenient consumer services and has become vital, especially in achieving productivity and satisfaction. The progress in information technology and information systems provide companies with more options to replace or increase personal services with self-service technology. The technical reliability of self-service technology has become a strong determinant of information technology-based service satisfaction. Business people must make innovations, namely providing convenience to consumers in meeting consumer needs. Simultaneously, it must remain competitive in reducing costs and eliminating human error in implementation in the field. SST services are technologies that allow consumers to produce independent services without direct involvement from employees (Teviningrum, 2021).

In Boyolali district today, the development of private and public hospitals is increasing quite rapidly. Business people are competing to improve their facilities and service quality.

Table 1. Comparison Table of Hospital Types in Boyolali District

Hospital	Hospital Types
RSUD Pandan Arang Boyolali	B
RSUD Simo	D
RS Hidayah Boyolali	D
RSI Banyu Bening	D
RSUD Waras Wiris	D
RS Umi Barokah Boyolali	C
RSU Asy Syifa Sambi	D
RS Sisma Medika Karanggede	D
RS PKU Aisyiyah	D
RS UMUM ISLAM	C
RS Indriati	D
RS Natalia Boyolali	D

Source: data from the Central Statistics Agency (2020)

Based on Table 1, the competition for type D hospitals, the first referral hospitals for guarantors of BPJS Kesehatan patients from health facilities, is quite tight. Indriati Boyolali Hospital, a type D Private Hospital currently developing, continues to improve the quality of services to get patients who are satisfied with the hospital facilities and aim to get loyal patients. Indriati Boyolali Hospital has collaborated with BPJS Kesehatan services, BPJS Ketenagakerjaan, and several other private insurances so that patients can use the facility for treatment at Indriati Boyolali Hospital. However, in marketing, Indriati Boyolali Hospital must increase patient satisfaction and loyalty. One of them is improving the quality of service through an approach with patients or customer relationship marketing and looking at the digital aspect through services using information technology. At the Indriati Boyolali Hospital, it is currently being developed for the website application process, namely, e-patient, which is a reservation application and patient booking to make reservations online. The IT team of the Indriati Boyolali Hospital carried out this development. It aims to make it easier for patients to make reservations, book online and see doctors' schedules on outpatients. All transactions are connected to a hospital application system called "Anjungan e-Pasien", so patients do not need to queue when they want to register. This further streamlines patient waiting times and makes it easier for the administration to make reservations.
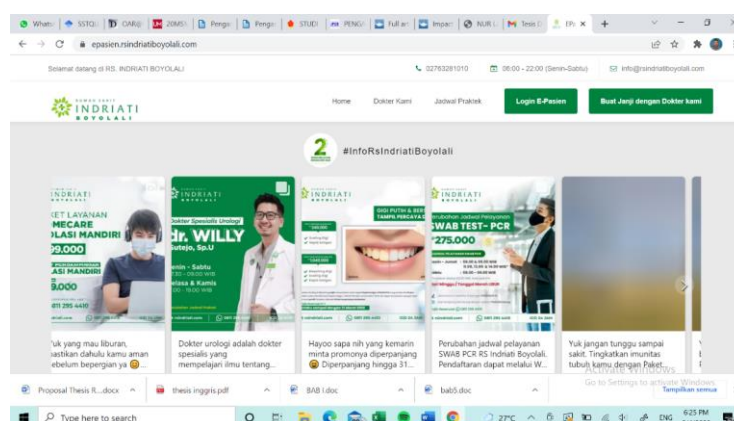

Figure .1 Website e-patient Indriati Boyolali Hospital

They were based on the problems in the Indriati Boyolali Hospital and considered the importance of customer satisfaction and customer loyalty for the sustainability of the hospital business. The researchers want to retest patient loyalty regarding Self Service Technology, Customer Relationship Marketing with Customer Satisfaction Mediation and patient trust as moderation variables.

RESEARCH METHOD

This research used a quantitative descriptive approach. This study aims to reveal the influence between CRM, SST, customer satisfaction and loyalty in this study using explanatory patterns. The pattern of the impact that will announce in this study is the

influence of Customer Relationship Marketing and Self Service Technology on patient loyalty by mediating patient satisfaction in outpatients of Indriati Boyolali Hospital.

This study was used to see the effect of Self Service Technology and Relationship Marketing on customer loyalty in outpatients of Indriati Boyolali Hospital by collecting data using questionnaires, observations and documentation. The research location was Indriati Boyolali Hospital which is located on Jl. Raya Boyolali-Semarang No.KM. 02, Mojosngopermai, Mojosongo, Boyolali District, Boyolali Regency, Central Java. In conducting this study, the time needed was six months, from observation to data results and research conclusions. The population in this study was outpatients who went to Indriati Boyolali Hospital with a total of 27,795 patients (January 2021 - December 2021). Determining the samples in this study referred to Roscoe's opinion above, which was at least 10 times the number of observed variable indicators. This study used 4 variables and had 23 hands, so the sample was 10 times 23 indicators, with 230 respondents. The sampling technique in this study was Purposive sampling, so the sample of respondents was 230 Outpatients at Indriati Boyolali Hospital.

The basis for this study used the Partial Least Square (PLS) analysis tool. The reason for using Partial Least Square (PLS) is that it is possible to model structural equations with adjustable sample sizes and does not require normal multivariate assumptions. It is a powerful analysis method that can be applied to all data scales. In addition to being able to confirm the theory, it is used to build relationships. There is no theoretical basis or proposition testing. It is used as structural modeling with reflective indicators, considered to be influenced or reflect a latent construct.

RESULT AND DISCUSSION

1. Convergent Validity Test Results

Convergent validity test using outer loading value parameters of more than 0.5 (Ghozali & Latan, 2012) as well as Average Variance Extracted (AVE) values of more than 0.5 (Hussein, 2015). The following are the results of convergent validity testing.

Table 1. Factor Loading and AVE

Construct	Indicator	Item	Factor Loading	AVE
	Trust	CRM1	0.874	
		CRM2	0.923	
	Commitment	CRM3	0.933	
		CRM4	0.916	
Customer Relationship Marketing		CRM5	0.902	0.824
	Communication	CRM6	0.914	
		CRM7	0.918	
	Conflict Handling	CRM8	0.907	
		CRM9	0.878	
Mediation	*Customer Relationship Marketing*	CRM * KP * LP	1.007	1.000
	Functionality	SST1	0.894	
		SST2	0.909	
	Enjoyment	SST3	0.898	
Self Service Technology	*Design*	SST4	0.905	0.825
		SST5	0.915	
	Assurance	SST6	0.920	
	Convenience	SST7	0.922	
	Customization	SST8	0.902	
Mediation	*Self Service Technology*	SST * KP * LP	1.026	1.000
	Service exceeds expectations	KP1	0.923	
	Saying positive things	KP2	0.921	
Patient Satisfaction		KP3	0.941	0.864
	Intend to continue to be a customer	KP4	0.942	
		KP5	0.921	
	Brand consumption habits	LP1	0.926	
	Confidence in a particular brand	LP2	0.930	
Patient Loyalty	Brand branding to others	LP3	0.930	0.874
	Provisions on the brand	LP4	0.936	
	The belief that a particular brand is the best	LP5	0.952	
	Competent	KKP1	0.866	
Patient Trust	Responsible	KKP2	0.868	0.769
	High integrity	KKP3	0.897	
Intervening	Patient Trust	KKP * LP	1.154	1.000

2. Discriminant Validity Test Results

The second stage is the discriminant validity test. The parameter is that the AVE root value must be more than the latent variable correlation, and the cross-loading value must be more than 0.5. The following are the results of testing the validity of discriminants against constructs in the study.

Table 2 AVE root values and Correlation of Latent Variables

	CRM	INTERVENING KKP_	KKP	KP	LP	MODERATION CRM	MODERATION SST	SST
CRM * KP	-0.816	0.723	-0.791	-0.853	-0.838	1.000	0.948	-0.865
CRM1	0.874	-0.576	0.788	0.830	0.824	-0.697	-0.741	0.806
CRM2	0.923	-0.650	0.717	0.837	0.844	-0.763	-0.799	0.838
CRM3	0.933	-0.628	0.748	0.865	0.861	-0.735	-0.779	0.856
CRM4	0.916	-0.630	0.728	0.863	0.869	-0.760	-0.770	0.856
CRM5	0.902	-0.627	0.726	0.818	0.824	-0.734	-0.743	0.812
CRM6	0.914	-0.636	0.714	0.848	0.840	-0.744	-0.772	0.833
CRM7	0.918	-0.653	0.734	0.825	0.827	-0.748	-0.779	0.816
CRM8	0.907	-0.607	0.737	0.847	0.835	-0.758	-0.774	0.827
CRM9	0.878	-0.625	0.693	0.814	0.787	-0.723	-0.772	0.815
KKP * KKP	-0.690	1.000	-0.757	-0.709	-0.694	0.723	0.736	-0.676
KP1	0.813	-0.624	0.793	0.923	0.871	-0.780	-0.813	0.904
KP2	0.884	-0.652	0.810	0.921	0.919	-0.798	-0.795	0.895
KP3	0.855	-0.627	0.814	0.941	0.904	-0.756	-0.759	0.888
KP4	0.872	-0.708	0.804	0.942	0.904	-0.819	-0.823	0.890
KP5	0.872	-0.686	0.806	0.921	0.901	-0.814	-0.798	0.855
KPP1	0.858	-0.676	0.866	0.906	0.923	-0.818	-0.796	0.885
KPP2	0.576	-0.632	0.868	0.635	0.616	-0.579	-0.568	0.578
KPP3	0.612	-0.675	0.897	0.665	0.642	-0.622	-0.625	0.629
LP1	0.836	-0.636	0.763	0.882	0.926	-0.766	-0.750	0.869
LP2	0.890	-0.673	0.809	0.920	0.930	-0.800	-0.794	0.888
LP3	0.833	-0.658	0.812	0.911	0.930	-0.783	-0.765	0.882
LP4	0.868	-0.610	0.812	0.916	0.936	-0.773	-0.761	0.887
LP5	0.873	-0.668	0.824	0.896	0.952	-0.793	-0.787	0.883
SST * KP	-0.848	0.736	-0.778	-0.858	-0.825	0.948	1.000	-0.889
SST1	0.857	-0.626	0.776	0.874	0.869	-0.807	-0.796	0.894
SST2	0.834	-0.609	0.733	0.863	0.851	-0.788	-0.813	0.909
SST3	0.826	-0.623	0.740	0.869	0.859	-0.780	-0.813	0.898
SST4	0.846	-0.618	0.735	0.858	0.857	-0.797	-0.820	0.905
SST5	0.837	-0.616	0.741	0.877	0.865	-0.797	-0.827	0.915
SST6	0.824	-0.598	0.742	0.877	0.872	-0.764	-0.786	0.920
SST7	0.816	-0.619	0.748	0.854	0.841	-0.765	-0.807	0.922
SST8	0.797	-0.605	0.783	0.858	0.839	-0.783	-0.795	0.902

Table 2 shows that the loading value of each item against its construct is greater than its cross-loading value. From the results of the cross-loading analysis, there is no problem with the validity of the discriminant.

3. **Reliability Test Results**

Table 3 Values of Cronbach's Alpha and Composite Reliability

	Cronbach's Alpha	rho_A	Composite Reliability
CRM	0.973	0.973	0.977
INTERVENING KKP	1.000	1.000	1.000
KKP	0.855	0.893	0.909
KP	0.961	0.961	0.970
LP	0.964	0.964	0.972
MODERASI CRM	1.000	1.000	1.000
MODERASI SST	1.000	1.000	1.000
SST	0.970	0.970	0.974

Source: Primary Data Processed, 2022.

Table 3 shows that all constructs have Cronbach's Alpha values above 0.6 and Composite Reliability values above 0.7. Hence, all constructs used in this study have met the reliability test or can be said to be reliable. Based on all validity and reliability tests that have been carried out and fulfilled, all indicators in this research instrument are valid and reliable so that hypothesis testing can be carried out.

4. **Inner Model Evaluation Test**

The inner model can be evaluated using Goodness of Fit (GoF).

a. **Structural Model Evaluation Through Goodness of Fit (GoF)**

Goodness of Fit (GoF) measures the model's overall accuracy and is considered a single measurement of the outer and inner models.

Table 3 Evaluation Goodness of Fit (GoF)

Variabel	Koefisien Determinasi (R-square/R^2)	AVE
Kepuasan Pasien	0.927	0.864
Loyalitas Pasien	0.954	0.874

From this calculation, a GoF value of 0.904 was obtained. Hence, the structural model of this study generally has good predictive properties (GoF large) (Ghozali and Latan, 2012), meaning that the model can highly explain empirical data. So that hypothesis testing can be done.

5. **Hypothesis Testing Results and Mediation Effect Test Results**

a. **Hypothesis Testing Results**

Hypothesis testing is carried out to determine the influence of customer relationship marketing and self-service technology on customer loyalty directly or indirectly through customer satisfaction. Figure 3 and Table 4 summarize bootstrapping results of the direct influence of independent variables on dependents.
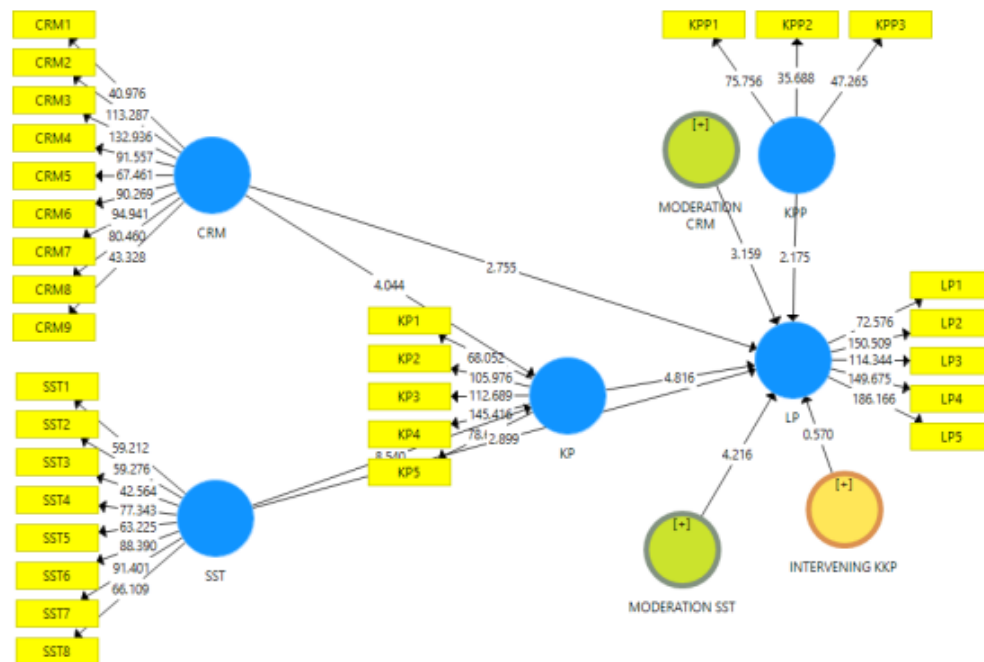
Figure .1 Results of Direct Influence Hypothesis Testing Analysis

Table 4 Results of Direct Influence Hypothesis Testing Analysis

	Original Sampel (O)	T Statistics (|O/STDEV|)	P Values	Hasil Analisa
CRM -> KP	0.322	4.139	0.000	Berpengaruh
CRM -> LP	0.187	2.734	0.006	Berpengaruh
INTERVENING KKP -> LP	-0.012	0.544	0.587	Tidak Berpengaruh
KKP -> LP	0.078	2.217	0.027	Berpengaruh
KP -> LP	0.542	5.077	0.000	Berpengaruh
MODERATION CRM -> LP	-0.202	3.125	0.002	Berpengaruh
MODERATION SST -> LP	0.311	4.424	0.000	Berpengaruh
SST -> KP	0.660	8.694	0.000	Berpengaruh
SST -> LP	0.290	3.036	0.003	Berpengaruh

Source: Primary data processed, 2022.

H1. Customer relationship marketing affects patient loyalty
The data analysis shows that the coefficient of the customer relationship marketing path with patient loyalty has a positive value of 0.287 with a t-statistical value of 2.734 with a significance level (p-values) of 0.006. Considering the results of the t-statistics > t-table (1.96) and the p-values value of <0.05, it is stated to have an effect. Thus, customer relationship marketing affects patient loyalty. Therefore the first hypothesis is accepted.
H2. Customer relationship marketing affects patient satisfaction
The data analysis shows that the customer relationship's marketing path coefficient for patient satisfaction has a positive value of 0.322 with a t-statistical value of 4,139 with a significance level (p-values) of 0.000. Considering the results of t-statistics > t-table (1.96) and p-values value of <0.05, it is stated to have an effect, so customer relationship marketing affects patient satisfaction. Therefore the second hypothesis is accepted.

H3. Self Service Technology affects Patient Loyalty

The data analysis shows that the coefficient of the self-service technology path to customer loyalty has a positive value of 0.290 with a t-statistical value of 3,036 with a significance level (p-values) of 0.003. Considering the results of t-statistics>t-table (1.96) and p-values<0.05 values, self-service technology significantly affects patient loyalty. Therefore the third hypothesis is accepted.

H4. Self Service Technology affects Patient Satisfaction

The data analysis shows that the self-service technology path to satisfaction coefficient has a positive value of 0.660 with a t-statistical value of 8,694 with a significance level (p-values) of 0.000. Considering the results of t-statistics>t-table (1.96) and p-values of <0.05, it is stated to have an effect. Thus, self-service technology significantly affects patient satisfaction. Therefore the fourth hypothesis is accepted.

H5. Patient Satisfaction affects Patient Loyalty

The data analysis shows that the patient satisfaction pathway coefficient for patient loyalty has a positive value of 0.542 with a t-statistical value of 5,077 with a significance level (p-values) of 0.000. Considering the results of t-statistic>t-table (1.96) and p-values of <0.05, it is stated to have an effect. Thus, patient satisfaction affects patient loyalty. Therefore the fifth hypothesis is accepted.

H6. Patient trust as an Intervening variable affects the relationship between patient satisfaction and patient loyalty

The data analysis shows that the patient trusts customer path coefficient as an intervening variable between patient satisfaction and patient loyalty had a negative value of 0.012 with a t-statistical value of 0.544 with a significance level (p-values) of 0.587. Given the t-statistic<t-table (1.96) result and the p-values value of >0.05, it is stated to have no effect. Thus, as an Intervening Variable, patient trust does not affect the relationship between patient satisfaction and loyalty. Therefore the fifth hypothesis is not accepted.

RESULT AND DISCUSSION

A. Effect Effect of Customer Relationship Marketing on Patient Loyalty

In this study, data was obtained that customer relationship marketing impacts patient loyalty. It can be interpreted to mean that the closer the relationship between the patient and the hospital, the more loyal the patient will be to the hospital. According to Apriliani, Kumadji, & Kusumawati (2017), Relationship Marketing significantly and positively affects Customer Loyalty with a sample of 101 respondents. According to research by Synathra & Sunarti (2018), Relationship Marketing positively impacts customer loyalty.

From the loading factor variables in customer relationship marketing, the highest indicator is commitment. Outpatients at Indriati Boyolali Hospital prioritize an exemplary commitment between patients and hospitals. Since it has a vast influence, patients who commit to the company will also have positive feelings for it and show a desire to continue to be part of it (Ramadhan, 2019). Indriati Boyolali Hospital prioritizes a commitment to patients by improving the quality of service in each service and also providing the best service for patients without discriminating between social strata.

Furthermore, judging from the value of the loading factor variable, the second highest is handling problems. From the management of Indriati Boyolali Hospital, a special committee

has been formed regarding handling issues brought under the auspices of the deputy director of services. This committee is called the patient care committee, whose main task is resolving complaints about hospital services. With this patient service committee, Indriati Boyolali Hospital is more focused on resolving patient complaints and also providing excellent complaint services to patients. Dwyer et al. in Ndubisi (2017) said that dealing with conflict is defined as the ability of suppliers to avoid potential conflicts, i.e., by addressing potential conflicts before forming a problem and discussing its solution openly when problems arise.

Then the communication item is one of the essential indicators in customer relationship marketing. The communication in question is practical, informative and efficient communication delivered to patients. In this case, Indriati Boyolali Hospital has appointed a marketing and communication division which is contact between management and patients and also management with internal. The marketing and communication team is in charge, one of which is to determine the appropriate communication strategy to run according to plan. Strategy is essentially planning and management to achieve a goal.

However, to achieve this goal, the strategy does not function as a roadmap that only shows the direction but must show the operational tactics. Similarly, communication strategy combines communication planning and management to achieve a goal. The communication strategy must show how its operations tactically must be carried out because the approach can differ depending on the situation and conditions. Communication strategy effectively determines the success or failure of communication activities (Rayasa, 2019).

Customer trust in producers or service providers will increase the value of the relationship, so trust is the main element in assessing the quality of the service provider's relationship with its consumers. A low level of trust will affect the increasing risk of moving consumers from one service provider to a similar service provider or turnover (Ramadhani, 2022). Indriati Boyolali Hospital is increasing patient trust through technology, service quality, and complaint handling in the trust indicator so that patients do not move to other hospitals.

B. Effect of Self-Service Technology on Patient Loyalty

In the descriptive discussion, the indicators of trust, communication, commitment and handling conflicts/complaints showed positive values at Indriati Boyolali Hospital. These indicators can be used as a benchmark for patient satisfaction. If the four customer relationship marketing indicators have a positive and positive impact, it will affect patient satisfaction more positively. Astuti (2020) stated that Customer Relationship Marketing increased, so Consumer Satisfaction increased. On the other hand, if Customer Relationship Marketing decreases, consumer satisfaction also decreases.

In the results of the descriptive analysis, trust, commitment, communication and problem management were able to have a positive impact on patient satisfaction at Indriati Boyolali Hospital. If these indicators can run well, they will also positively affect patient satisfaction. In practice, Indriati Boyolali Hospital has a reliable frontline and marketer and can provide solutions for patients if they have difficulty receiving the information. The relationship between marketers and patients at Indriati Hospital in Boyolali has a good bond. Therefore marketers need to understand business processes and know about a good hospital so that patients can explain it professionally when they want information.

C. Effect of Self-Service Technology on Patient Loyalty

Based on the finding, Self Service Technology affected patient loyalty. Wismantoro (2016) tested Self Service Technology on 152 respondents, with the results of Self Service Technology having a positive and significant impact on consumer loyalty. The research was also conducted by Andjarwati and Rosyidah (2021) with McDonald's customers in Surabaya, resulting in a positive and significant influence between self-service technology quality and loyalty. Meanwhile, Syah (2021) found that self-service technology and service quality positively affect consumer loyalty.

According to Kho (2017), technological developments have developed rapidly, especially in marketing. Marketers use technology to communicate their products to customers, reduce costs, increase product values, and increase customer satisfaction through self-service technology. Indriati Boyolali Hospital has implemented an e-patient website to facilitate reservations online. With online reservations, patients can make control reservations or self-register online, making it easier for patients without queuing. In addition, the e-patient website also has a feature to see the queue in real-time so that patients can make estimates to come to the hospital so that patients get started quickly.

D. The Effect of Self-Service Technology on Patient Satisfaction

The results showed that self-service technology (SST) influenced patient satisfaction. This study has satisfied patients with SST, which uses e-patient websites and independent patient platforms. The previous study discussing the Influence of Self Service Technology by Hidayanti (2017) tested 96 BRI KC customers. She found that Self Service Technology positively and significantly affects Customer Satisfaction. Iftihatul (2020) and Stevano (2021) also tested SO. They both proved that Self Service Technology positively affected consumer satisfaction.

Along with the times, competition in the current era of globalization is getting tighter, characterized by the faster development of technology among the public. The faster development of technology will significantly influence all aspects of human life (Ramadhanti et al., 2019). Satisfaction is a summary of the psychological state produced when emotions surrounding unconfirmed expectations are combined with the consumer's previous feelings about the experience of using it. Perceived usefulness and perceived ease of use are two factors that significantly affect satisfaction. The more valuable and easy it is to use Self Service Technology, the more satisfying it is. Customers are more satisfied with Self Service Technology if they believe it will improve their performance and productivity (Chen, 2019).

A digital marketing division at Indriati Boyolali Hospital can help improve business, especially in marketing. It also has a reliable and professional information technology team that is fast and responsive in improving the hospital information system process and conducting regular maintenance to minimize customer complaints. Then there is the renewal of technology infrastructure and business process reviews to improve operational performance and support business strategies digitally.

E. Effect of patient satisfaction with patient loyalty

The result revealed that patient satisfaction affected patient loyalty. Hidayanti (2017) proved that consumer satisfaction affected consumer loyalty. Also, Widodo's research (2018) on 83 respondents of Telkomsel prepaid card users revealed a significant influence of customer satisfaction on brand loyalty. In the increasingly intense competition among

companies today, customer loyalty is the top priority where the level of customer interests and expectations and the implementation or performance must be appropriate. Companies must pay attention to things considered necessary by customers so they feel satisfied. Customer loyalty in using the services offered can be used as input to the company to improve and improve the quality of services provided and the trust offered. Customer trust can be fulfilled through customer satisfaction so that customers will continue transactions with the company. Customer satisfaction will be fulfilled if they get what they want. The higher the level of customer loyalty. Research results (Norhermaya & Soesanto, 2016) and (Mariska & Shihab, 2016). In this case, patient satisfaction at Indriati Boyolali Hospital positively influenced patient loyalty at Indriati Boyolali Hospital.

F. Effect of Customer Relationship Marketing on Patient Loyalty with Patient Satisfaction Mediation

In this study, customer satisfaction mediated the relationship between customer relationship marketing (CRM) and patient loyalty. The mediating nature of patient satisfaction is partial. Thus, patient satisfaction can bridge customer relationship marketing to patient loyalty, but customer relationship marketing can affect patient loyalty without patient satisfaction.

This study follows research conducted by Synathra & Sunarti in 2018. The relationship between Customer Relationship Marketing to customer loyalty and the mediation of consumer satisfaction has a positive and significant effect. Darmayasa (2021) and Alomari (2020) also stated that Customer Relationship Marketing positively and significantly affected customer loyalty by mediating customer satisfaction.

The relationship between CRM and patient loyalty is already significant in this study. However, this relationship will be stronger if the patient is satisfied with the CRM. Therefore, the role of customer satisfaction in service industries such as hospitals is critical.

G. Effect of Self Service Technology on patient loyalty with patient satisfaction Mediation

In this study, patient satisfaction mediated the relationship between self-service technology (SST) and patient loyalty. The nature of customer satisfaction mediation is partial. Thus, patient satisfaction can bridge SST to patient loyalty, but SST can affect patient loyalty without patient satisfaction. Andjarwati and Rosyidah (2021) tested 200 respondents. Syah (2021) also supported that Self Service Technology positively affected customer loyalty by mediating customer satisfaction. Rondiyah (2018) and Iqbal, Hassan and Habibah (2018) stated that Self Service Technology positively and significantly affected customer loyalty by mediating customer satisfaction.

With the high acceptance rate of new Self Service Technology in the work environment, more and more hospitals are implementing different Self Service Technology to improve service quality, operational efficiency and, most importantly, overall patient satisfaction. Pasein feels uncomfortable and frustrated if there are obstacles to the existing information system.

In this context, the trust serves as a protector of relationships already built in a way that (1) remains in cooperation with existing partners, (2) rejects short-term alternatives that seem attractive for the benefit of long-term relationships with existing partners, and (3) observes the potential for high-risk actions as a precautionary principle of the belief that its partners will not behave opportunistically (Morgan & Hunt, 1994). The results of this study support

the data conducted by (Iskandar, 2022), showing the results of the analysis of the relationship between variables with the results of the path analysis test. The total influence of the results showed that the variables of customer satisfaction and trust have not been able to mediate as intervening variables.

H. Effect of Patient Trust as an Intervening Variable in the relationship between patient satisfaction and patient loyalty

The study showed that patient trust as an Intervening Variable did not affect the relationship between patient satisfaction and patient loyalty. Therefore patient trust will not necessarily give rise to patient loyalty. Customer trust in hospital services can make customers reuse the services of Indriati Boyolali Hospital in the future. Lau & Lee (1999) shows that at a time when consumers believe that a particular brand can deliver what they hope will spark loyalty to the brand.

CONCLUSION

From the results of the discussion on the Determination of Loyalty through Patient Satisfaction Mediation at Indriati Boyolali Hospital, several conclusions were drawn as follows:

1. Customer relationship marketing affected patient loyalty as evidenced by having a positive value of 0.177 with a *t*-statistical value of 2.188 with a significance level (p-values) of 0.029. Given the results of the *t*-statistic > t-table (1.96) and the p-values value of <0.05, it was stated to have an effect. 2. Customer relationship marketing affected patient satisfaction as evidenced by having a positive value of 0.374 with a *t*-statistical value of 3.676 with a significance level (p-values) of 0.000. Given the results of the *t*-statistic > t-table (1.96) and the p-values value of <0.05, it was stated to have an effect.

2. Patient Satisfaction affected Patient Loyalty, as evidenced by having a positive value of 0.238 with a *t*-statistical value of 2.739 with a significance level (p-values) of 0.006. The result of t-statistic>t-table (1.96) and p-values value of <0.05 was stated to have an effect.

3. Patient trust as an Intervening Variable did not affect patient loyalty the results of data analysis show that the customer path coefficient of patient trust as an intervening variable between patient satisfaction and patient loyalty has a negative value of 0.012 with a *t*-statistical value of 0.544 with a significance level (p-values) of 0.587. Given the *t*-statistic<t-table (1.96) result and the p-values value of >0.05, it is declared to have no effect.

4. Customer Relationship Marketing affected patient loyalty by mediating patient satisfaction, as evidenced by a path coefficient value of 0.089 with *t*-statistical test results of 2.084 (t-statistics> 1.96) and P-values of 0.038.

5. Self Service Technology affected patient loyalty by mediating patient satisfaction, as evidenced by a path coefficient value of 0.149 and *t*-statistics test results of 2.461 (*t*-statistics> 1.96) and P-values of 0.014.

6. On testing, the R^2 value showed that the R^2 value for Patient Satisfaction was 0.894, and the R2 value of the patient loyalty variable was 0.948.

7. Evaluation of Structural Models Through Q-Square Predictive Relevance (Q^2) obtained a value of 0.99, meaning this research model was categorized as strong.
8. Evaluation of Structural Models Through Goodness of Fit (GoF) obtained a value of 0.902. The structural model of this study, in general, had good predictive properties.
9. Mediation Nature Testing showed the results of the VAF calculation of patient satisfaction as a mediator of the relationship between customer relationship marketing and patient loyalty obtained 0.335 or 33.5% to show patient satisfaction as a partial mediator.
10. Testing the Nature of Mediation-The results of the calculation of VAF patient satisfaction as a mediator of the relationship between self-service technology and patient loyalty obtained 0.202 or 20.2%, thus showing patient satisfaction as a partial mediator.

IMPLICATION

Based on the research findings previously described, the results of this study contribute to the concept of factors that affect patient loyalty. The theoretical implications of this study are as follows:

1. First, finding a causality relationship between several factors that influence patient loyalty will contribute to thinking for developing marketing management science, especially consumer behavior. This research also emphasizes previous studies on the determinants of loyalty.
2. Second, according to the findings, patient satisfaction is one of the most dominant factors in increasing patient loyalty. Patient satisfaction is one of the conditions that must be met first for customers to be loyal. Meanwhile, applying customer relationship marketing (CRM) can also encourage customers to be loyal. Meanwhile, customers' use of self-service technology (SST) can directly affect loyalty customers.
3. Third, this study proves that CRM and SST can become antecedents for customer satisfaction. CRM positively influences customer satisfaction, so if the CRM runs well between bank staff and patients, then patient satisfaction also increases. Likewise with SST, using the e-pasien website and independent patient platforms can increase patient satisfaction in hospital services.

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