THE INFLUENCE OF CUSTOMER VALUE, QUALITY OF SERVICE, AND CUSTOMER SATISFACTION TOWARDS LOYALTY
(Case Study Patient at RSU. Persahabatan)

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Abstract - This study aims to determine the effect of customer value, service quality, and customer satisfaction on patient loyalty at the Persahabatan General Hospital, East Jakarta.

The strategy used is an associative strategy. The research method used in this research is a survey method, using a questionnaire as a data collection tool. Respondents who were the samples in this study were 100 patients at the Persahabatan General Hospital, East Jakarta. The analytical tool used SPSS with the coefficient of determination analysis techniques and hypothesis testing both partially and simultaneously.

The results showed that the contribution of the influence of customer value to patient loyalty was 20.52%; the contribution of the influence of service quality to patient loyalty was 6.97%; contribution of the influence of customer satisfaction to patient loyalty by 17.98%; the contribution of the influence of brand image to patient loyalty was 17.1% and the contribution of the influence of customer value, service quality, and customer satisfaction to patient loyalty was 91.01%. The result of hypothesis testing partially and simultaneously shows a significant influence on customer value, customer satisfaction, and service quality on patient loyalty at the Persahabatan General Hospital, East Jakarta.

The findings of this study are useful for the East Jakarta Persahabatan General Hospital to always maintain patient loyalty..

Keywords: Customer Value, Service Quality, Customer Satisfaction, Patient loyalty

Abstrak– Penelitian ini bertujuan untuk mengetahui pengaruh nilai pelanggan, kualitas pelayanan, dan kepuasan pelanggan terhadap loyalitas pasien pada Rumah Sakit Umum Persahabatan Jakarta Timur.

Strategi yang digunakan adalah strategi asosiatif. Metoda penelitian yang digunakan dalam penelitian ini adalah metoda survei, dengan menggunakan kuesioner sebagai alat pengumpulan datanya. Responden yang menjadi sampel dalam penelitian ini adalah pasien Rumah Sakit Umum Persahabatan Jakarta Timur berjumlah 100 orang. Alat analisis yang digunakan SPSS dengan teknik analisis koefisien determinasi dan pengujian hipotesis baik secara parsial dan simultan.

Hasil penelitian menunjukkan bahwa kontribusi pengaruh nilai pelanggan terhadap loyalitas pasien sebesar 20,52% ; kontribusi pengaruh kualitas pelayanan terhadap loyalitas pasien sebesar 6,97% ; kontribusi pengaruh kepuasan pelanggan terhadap loyalitas pasien sebesar 17,98% ; kontribusi pengaruh citra merek terhadap loyalitas pasien sebesar 17,1% dan kontribusi pengaruh nilai pelanggan, kualitas pelayanan, dan kepuasan

pelanggan terhadap loyalitas pasien sebesar 91,01%. Hasil pengujian hipotesis secara parsial dan simultan nilai pelanggan signifikan, kepuasan pelanggan, dan kualitas pelayanan terhadap loyalitas pasien pada Rumah Sakit Umum Persahabatan Jakarta Timur.

Temuan hasil penelitian ini bermanfaat untuk Rumah Sakit Umum Persahabatan Jakarta Timur untuk senantiasa mempertahankan loyalitas pasien.

Kata kunci : Nilai Pelanggan, Kualitas Pelayanan, Kepuasan Pelanggan, Loyalitas Pasien

I.   PRELIMINARY

The hospital is the main link for health services which has a main function in healing and recovery efforts. One of the steps taken by the government to make the SKN (National Health System) program a success is to increase the quantity and quality of hospitals. As a service company, the hospital must be able to anticipate any changes in the environment so that it can compete and survive in the health service business competition, and always aim at the spearhead of its marketing, namely customer satisfaction from all offers provided with high and adequate service levels.

Customer satisfaction contributes to a number of crucial aspects, such as creating customer loyalty, improving company reputation, reducing price elasticity, reducing future transaction costs, and increasing employee efficiency and productivity. With increased customer satisfaction, the surviving customers also increase. A high level of satisfaction can increase customer loyalty and prevent customer turnover, reduce customer sensitivity to prices, reduce the cost of marketing failure, reduce operating costs caused by increasing customer numbers, increase advertising effectiveness, and improve business reputation. This is reinforced by research by Hasan and Putra (2018), Rif'adarajad et.al., (2016), Wardani (2015), Bukhari et.al., (2018), Sumitro and Wahjono (2018), Permana et.al .,

1.1.   Formulation of the problem

Based on the background above, the problems that will be investigated by researchers are:
1. Does customer value affect patient loyalty at the Friendship General Hospital, East Jakarta?
2. Does the quality of service affect patient loyalty at the Friendship General Hospital, East Jakarta?
3. Does customer satisfaction affect patient loyalty at the Friendship General Hospital, East Jakarta?
4. Do customer value, service quality, and customer satisfaction simultaneously influence patient loyalty at the Friendship General Hospital, East Jakarta?

1.2.   Research purposes

Based on the formulation of the problems that have been determined above, the objectives of this study are:
1. To analyze the effect of customer value on patient loyalty at the Friendship General Hospital, East Jakarta.
2. To analyze the effect of service quality on patient loyalty at the Friendship General Hospital, East Jakarta.
3. To analyze the effect of customer satisfaction on patient loyalty at the Friendship General Hospital, East Jakarta.
4. To analyze the effect of customer value, service quality, and customer satisfaction simultaneously on patient loyalty at the Friendship General Hospital, East Jakarta.

II.   LITERATURE REVIEW
2.1.   Service marketing

Yazid (2012: 13) suggests that service marketing is a link between organizations and their consumers. This linking role will be successful when all marketing efforts are oriented towards the market. The involvement of all parties, from top management to non-managerial employees, in formulating or supporting the implementation of consumer-oriented marketing is something that cannot be negotiated anymore.

2.2.   Customer value

According to Kotler and Keller (2012: 136), customer value is the difference between the prospective customer assessment of all the benefits and costs of an offering against its alternatives. Total customer value is the monetary value of a collection of economic, functional, and psychological benefits that customers expect from a market offering caused by the products, services, personnel, and images involved. Total customer cost (total customer cost) is a collection of perceived costs that customers expect to spend in evaluating, obtaining, using, and eliminating a market offering, including monetary, time, energy, and psychological costs.

2.3.   Service quality

Service quality is one of the factors that influence the level of customer loyalty to a product or service. Companies need to improve service quality to develop customer loyalty, because low quality products or services will make customers unfaithful. That is, it can be concluded that if quality is considered, customer loyalty will be easier to obtain (Lupiyoadi, 2013: 97). As for Jasfar (2015: 47), service quality is how consumers respond to services that are consumed and felt

2.4.   Customer satisfaction

According to Kotler (2014: 138), satisfaction with feelings of pleasure or disappointment arises from comparing the product's perceived performance (or results) against their expectations. Meanwhile, according to Tjiptono (2013: 146), satisfaction is an after-purchase evaluation where the alternatives chosen are at least the same or exceed customer expectations.

2.5.   Patient loyalty

Hasan (2013: 81) defines consumer loyalty as people who buy, especially those who buy regularly and repeatedly.reset. Customers are said to be loyal if the customer continuescontinuously or repeatedly coming to the same place to satisfy their desires by having a product or getting a service and paying for the product or service

2.6.   Relationship between Research Variables
2.6.1.   The effect of customer value on patient loyalty

Customer value can be considered as a basic construct of cognition that captures the difference in benefit-sacrifice, while customer loyalty is an affective and evaluative response (Lam et.al., in Restiarti, 2014: 91). The better customer value, will have an impact on creating customer loyalty. According to Hasan (2013: 82), loyalty is formed first by creating customer value. By offering increasing value to consumers, that is, better value than what they obtain elsewhere, means companies are contributing to consumers' decisions to remain loyal to the company, and therefore turning them into more valuable consumers.

This is reinforced by the research of Hasan and Putra (2018), Rif'adarajad et.al., (2016), Permana et.al., (2019), which conclude that customer value is significant for patient loyalty.

2.6.2. Effect of service quality on patient loyalty

Quality of service is very important in a very competitive market competition such as today, appearance, reliability and assurance of hospitals in providing services to patients are the main factors in the impression that patients will feel while utilizing the services provided by the hospital, so it will emerge. the perception of service users, in this case the patient, of the perceived service quality. Perceptions of good service quality will result in patient loyalty.

This is reinforced by research by Hasan and Putra (2018), Rif'adarajad et.al., (2016), Wardani (2015), Bukhari et.al., (2018), Sumitro and Wahjono (2018), Kesuma et.al ., (2013), Jamaluddin and Ruswanti (2017), who concluded that service quality is significant for patient loyalty.

2.6.3. The effect of customer satisfaction on patient loyalty

Customer satisfaction is important to marketing because it will encourage repeat purchases. Customer satisfaction can be used as a positioning strategy that can help a company gain market access. Customer satisfaction can influence purchasing behavior which forms a tendency that satisfied customers will be loyal, but loyal customers are not necessarily satisfied. Fornell in Lupiyoadi and Hamdani (2013: 192) states that high levels of satisfaction can increase customer loyalty.

Customer loyalty is a customer commitment to the company which is reflected in a positive attitude by making repeat purchases and the desire to recommend to others. According to Kotler and Keller (2012: 139), customer loyalty will increase when customers are satisfied after making a purchase. Customer satisfaction is an important indicator in determining customer loyalty. Customer satisfaction will occur when the selected product exceeds customer expectations or at least according to customer desires. Meanwhile, dissatisfaction will occur if the selected product does not meet the expectations of the customer

This is reinforced by research by Hasan and Putra (2018), Rif'adarajad et.al., (2016), Wardani (2015), Bukhari et.al., (2018), Sumitro and Wahjono (2018), Permana et.al ., (2019), Jamaluddin and Ruswanti (2017), who concluded that customer satisfaction is significant for patient loyalty.

The identification of the variables in this study, namely:

1. Independent variable (free)
   Independent variables are variables that can influence or be a cause for other variables. In this study, the independent variables are:
   Customer value (X1), service quality (X2), and customer satisfaction (X3).
2. Dependent variable (dependent)
   The dependent variable in this study is patient loyalty (Y).

The thinking framework is a conceptual model of how the theory relates to various factors that have been identified as important problems, then the research framework as can be seen in
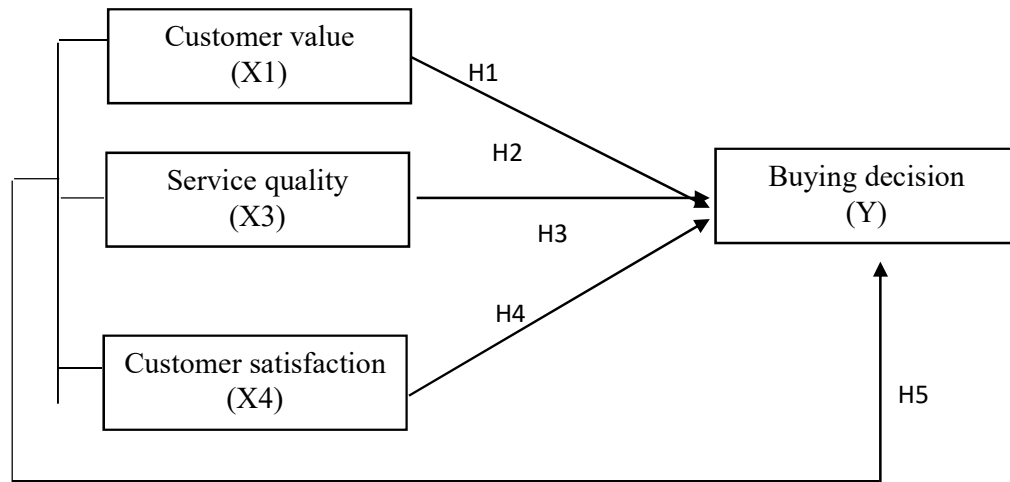
Figure 2.1 follows:

Figure 2.1. conceptual framework

2.7. Hypothesis Development

Sugiyono (2016: 88) states that a hypothesis is a provisional statement or the most likely conjecture that remains to be sought. In the following, the authors propose the following research hypothesis:

H1:   It is suspected that there is a significant influence on customer value on patient loyalty

H2:   It is suspected that there is a significant effect of service quality on patient loyalty

H3:   It is suspected that there is a significant influence on customer satisfaction on patient loyalty

H4:   It is suspected that there is a simultaneous significant effect on customer value, service quality, and customer satisfaction on patient loyalty

III.   RESEARCH METHOD

3.1.   Research Strategy

The research strategy used in this study is an associative strategy. The associative research strategy according to Sugiyono (2016: 12) is research that aims to determine the effect or relationship between two or more variables. Based on the objectives and conceptual framework of the research, the associative strategy is used to determine the effect of customer value, service quality and customer satisfaction on patient loyalty at the Friendship General Hospital, East Jakarta.

3.2.   Population and Sample Research

Population is a comprehensive collection of an object which is the researcher's concern. Research objects can be in the form of living things, objects, systems and procedures, phenomena and others (Sugiyono, 2016: 116). The general population in this study were all patients at the East Jakarta Friendship General Hospital, while the target population in this study were patients at the East Jakarta Friendship General Hospital in 2019.

Based on this study, because the population is not greater than 100 people, the determination of the number of samples is determined using the Margin of Error formula (Arikunto, 2014: 75), as follows:

$$n \quad = \frac{Z^2}{4(moe)^2} \quad \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots \text{.......} \quad (3.1)$$

Information :

         n   = number of samples

         Z   = the level of confidence required in determining the 95% sample

                 So that the Z value is 1.96

      Moe   = *Margin of error*, that is the maximum error rate

can be tolerated, and in this study used Moe 10%

      Based on the above calculations, the following is obtained:

$$n = \frac{(1,96)^2}{4(10\%)^2}$$

$$n = \frac{3,8416}{0,04} = 96.54 \approx 97$$

Based on the above calculations, it can be obtained that the number of samples studied is 97, or a rounding is made to 100 respondents, because if the number of represented populations is increasing so the statistics are getting better. Thus, the number of samples used for this study were 100 patients who visited the East Jakarta Friendship General Hospital more than once as the unit of analysis in this study.

3.3. Data Analysis Methods
3.3.1. Data processing methods

The data obtained were then processed using SPSS software. SPSS software is used to facilitate data processing, so that the results are faster and more precise. Where editing and coding are done. Editing is the first stage in processing data obtained by researchers from the field by checking the possibility of respondent's answer error and the uncertainty of respondent's answer. Coding is giving or a certain sign or code to alternative answers of a kind or classifying so that it can facilitate researchers about tabulation.

3.3.2. Method of presenting data

In this study the data collected is presented in tabular form to make it easier to analyze and understand the data so that the data presented is more systematic. Where tabulation is done. Tabulation is the calculation of data that has been collected in each category until it is arranged in an easy to understand table. The data obtained, after being processed and sorted, will be used for statistical analysis of the data in accordance with the research objectives. The data analysis used is the analysis of the coefficient of determination and hypothesis testing.

3.3.3. Statistical analysis of data

To discuss the results of the study, the authors used paired data based on the data obtained. Because there is more than one independent variable, namely three independent variables and one dependent variable, the analysis method used in this study is the analysis of the coefficient of determination and hypothesis testing (partial and multiple) as follows:
3.3.3.1. Analysis of the Coefficient of Determination (R^2)

Analysis of R^2 (R square) or the coefficient of determination is used to determine how much the percentage contribution of the influence of the independent variables together on the dependent variable. The coefficient of determination is between zero and one (0-1). If the value of R^2 is close to 1 (one), it can be said that the stronger the model is in explaining the independent variables against the dependent variable. conversely, if R^2 is close to 0 (zero), the weaker the variation in the independent variable explains the dependent variable. (Priyatno, 2014: 125) To state the size of the contribution of the

independent variable to the dependent variable, it can be determined by the formula for the coefficient of determination as follows:

1. Contribution of the influence of customer value on patient loyalty at the Friendship General Hospital, East Jakarta

    $R21 = (r_{Y1.23}) 2. 100\%$ .... (3.5)

2. Contribution of the influence of service quality on patient loyalty at the Friendship General Hospital, East Jakarta

    $R22 = (r_{Y2.31}) 2. 100\%$ .... (3.6)

3. Contribution of the influence of customer satisfaction on patient loyalty at the Friendship General Hospital, East Jakarta

    $R23 = (r_{Y3.12}) 2. 100\%$ .... (3.7)

4. Contribution of the influence of customer value, service quality, and customer satisfaction together on patient loyalty at the Friendship General Hospital, East Jakarta

    $R24 = (r_{Y123}) 2. 100\%$ .... (3.9)

    Information :

    $r_{Y1.23}$ = The partial correlation coefficient between X1 and Y (X2 and X3 = constant)

    $r_{Y2.31}$ = The partial correlation coefficient between X2 and Y (X3 and X1 = constant)

    $r_{Y3.12}$ = The partial correlation coefficient between X3 and Y (X1 and X2 = constant)

    r_{Y123} = Multiple correlation coefficient

    $R12$ = Coefficient of determination between X_1 with Y

    $R22$ = Coefficient of determination between X_2 with Y

    $R32$ = Coefficient of determination between X_3 with Y

    $R42$ = The coefficient of determination multiple between X_1 X2 X3 with Y

    X1 = Customer value

    X2 = Quality of service

    X3 = Customer satisfaction

    Y = Patient loyalty

3.3.3.2. Hypothesis test

Hypothesis testing is used to test the effect partially and multiple. The hypotheses to be tested in this study are:

1. Effect of X1 on Y

    Ho: $\rho_{y1.23} = 0$ (Partially customer value is not significant to patient loyalty at the East Jakarta Friendship General Hospital).

    Ha: $\rho_{y1.23} \neq 0$ (Partially significant customer value on patient loyalty at the East Jakarta Friendship General Hospital).

2. Effect of X2 on Y

    Ho: $\rho_{y2.31} = 0$ (partially service quality is not significant to patient loyalty at the East Jakarta Friendship General Hospital).

    Ha: $\rho_{y2.31} \neq 0$ (partially service quality is significant towards patient loyalty at the Friendship General Hospital, East Jakarta).

3. Effect of X3 on Y

    Ho: $\rho_{y3.12} = 0$ (Partially customer satisfaction is not significant towards patient loyalty at the Friendship General Hospital, East Jakarta).

    Ha: $\rho_{y3.12} \neq 0$ (Partially significant customer satisfaction on patient loyalty at the Friendship General Hospital, East Jakarta).

    To test the effect of the independent variable on the dependent variable partially, it is seen from the P-value compared to α (5% = 0.05)

Ho is rejected, Ha is accepted if the P-value <0.05 and
Ho is accepted, Ha is rejected if the P-value is> 0.05 or
Ho is rejected, Ha is accepted if tcount> ttable and
Ho is accepted, Ha is rejected if tcount <ttable

4. Effect of X1X2and X3 against Y

Hypothesis testing is used to test multiple effects. The hypotheses to be tested in this study are:

Ho: $\rho_{y123} = 0$ (Simultaneously customer value, service quality, and customer satisfaction are not significant to patient loyalty at the Friendship General Hospital, East Jakarta).

Ha: $\rho_{y123} \neq 0$ (Simultaneously customer value, service quality, and customer satisfaction are significant on patient loyalty at the Friendship General Hospital, East Jakarta).

As for testing the effect of independent variables on the dependent variable simultaneously, the value of Significance F is used compared to α (5% = 0.05).

Ho is rejected, Ha is accepted if Significance F <0.05 and
Ho is accepted, Ha is rejected if Significance F> 0.05 or
Ho is rejected, Ha is accepted if Fcount> Ftable and
Ho is accepted, Ha is rejected if Fcount <Ftable

IV.   RESULTS AND DISCUSSION

4.1.   Description of Research Object

At the beginning of its establishment, the Friendship Hospital was a branch hospital (satellite) of the Dr. Cipto Mangunkusumo (RSCM). The medical personnel who worked at the Friendship Hospital in this period consisted of specialist doctors and assistant doctors from RSCM-FKUI and specialists from Russia. The period 1975-1992 was marked by a change in the "status" of Friendship Hospital to become an independent hospital, separated from RSCM, and subsequently became a general hospital (RSU) class B-3 in the East Jakarta area.

On March 3, 2011 there was an increase in the class and function of the Friendship Hospital to become a Class A hospital because the assessment conducted by the Ministry of Health stated that "the facilities and capabilities of the Central General Hospital have met the requirements and service capabilities as a Class A General Hospital." Decree of the Minister of Health of the Republic of Indonesia Number 514 / MENKES / SK / III / 2011. This is not only an acknowledgment and appreciation of the ability of health services provided by the Friendship Hospital, but also an increase in the burden of responsibility on the community to always be able to provide the highest level of health services on a class scale of referral hospitals in Indonesia.
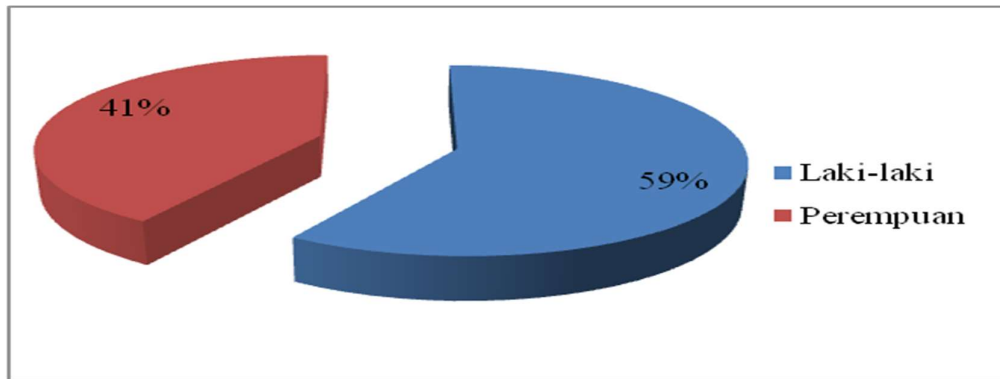
4.2.   Respondent Description

The identities of respondents in the study were divided into 6 categories based on gender, age, education, frequency of visits to hospitals, occupation and health facilities used.

1. Gender

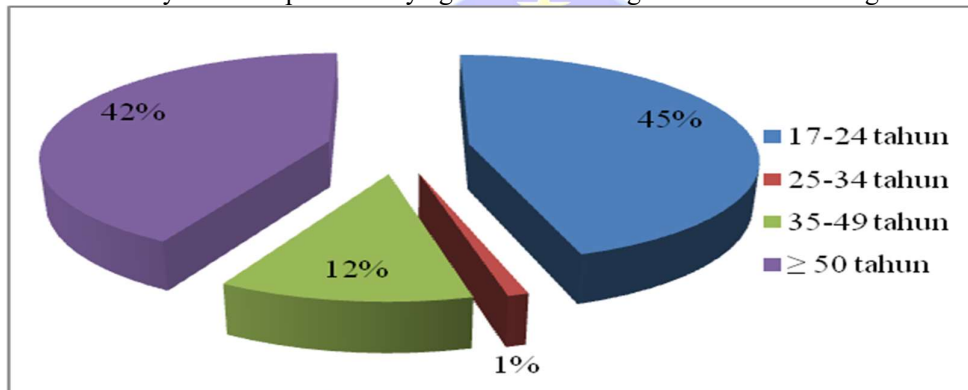Respondent identity based on gender is shown in Figure 4.1. the following:

Source: Data processed (2019)

Figure 4.1. Respondent Gender

Figure 4.1. The above shows that the male respondents are 59% while 41% are female. This means that patient loyalty is dominated by men because of the tendency for sick patients at the Friendship General Hospital in East Jakarta to be generally male.

2. Age

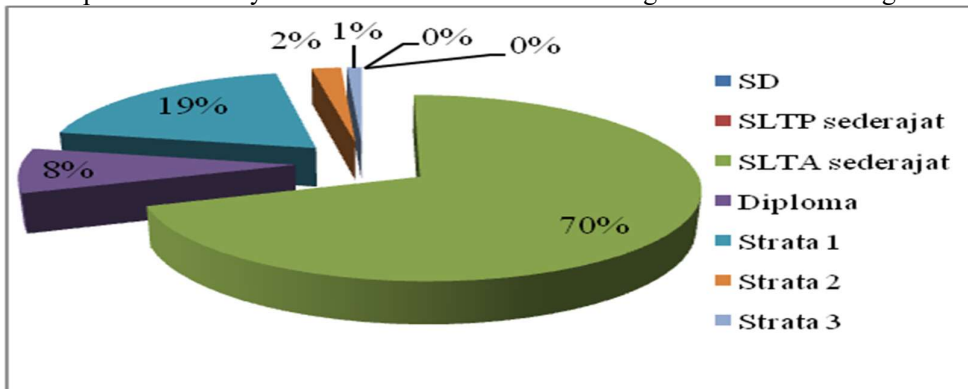The identity of the respondents by age is shown in Figure 4.2. the following:

Source: Data processed (2019)

Figure 4.2. Respondent Age

Figure 4.2. above shows that 45 respondents aged 17-24 years, 1 person 25-34 years old, 12 34-49 years old and 42 ≥ 50 years old.This means that patients are dominated by respondents aged 17-24 years due to their susceptibility to illness.

3. Education

Respondent identity based on education is shown in Figure 4.3. the following:
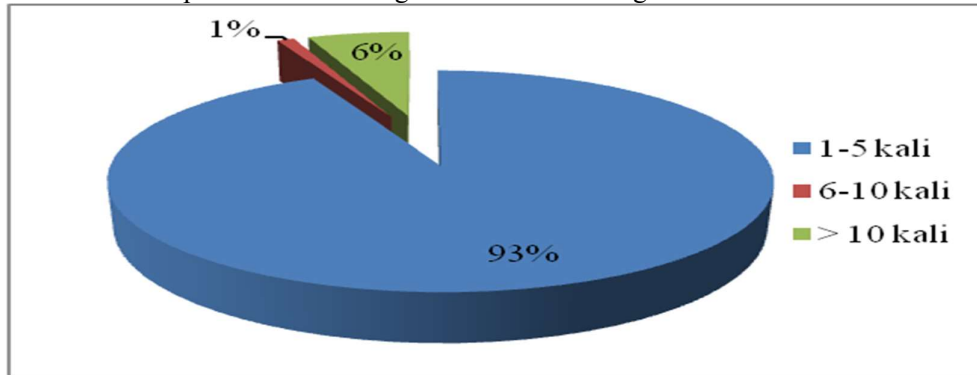

Source: Data processed (2019)

Figure 4.3.   Respondent Education

Figure 4.3. above shows that there are no respondents with elementary and junior high school education, 70% of the same degree, Diploma as much as 8%, Strata 1 as much as 19%, strata 2 as much as 2% and strata 3 as much as 1%.This means that patients are dominated by patients with high school education / equivalent because they do not prioritize their lifestyle.

4. Frequency of Hospital Visits

    The identity of the respondents based on the frequency of visits at the Friendship General Hospital is shown in Figure 4.4. the following:
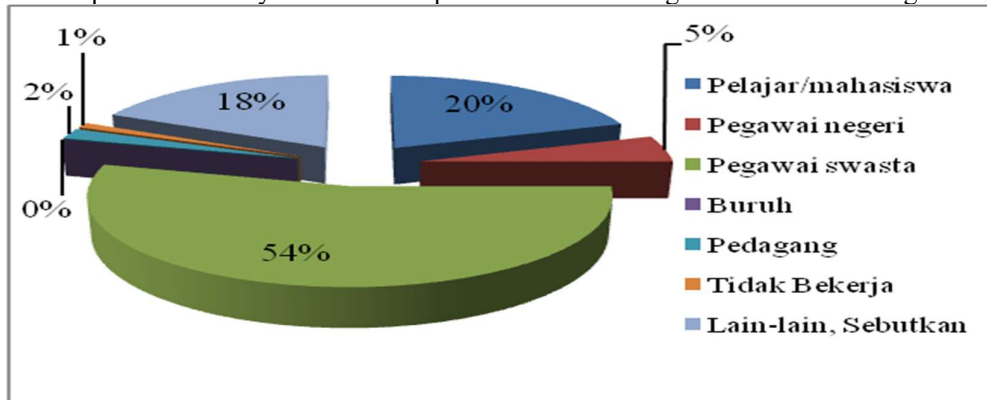

Source: Data processed (2019)

Figure 4.4.   Respondent Visit Frequency

Figure 4.4. above shows that respondents with a frequency of visits 1-5 times were 93%, 6-10 times as much as 1% and> 10 times as many as 6%. This means that the majority of patients visit the Friendship General Hospital 1-5 times, which are generally inpatients.

5. Profession

    Respondent identity based on occupation is shown in Figure 4.5. the following:

Source: Data processed (2019)

Figure 4.5.   Respondent Occupation

Figure 4.5. above shows that the respondent's student / student occupations are 20%, civil servants are 5%, private employees are 54%, there are no respondents with labor jobs, traders are 2%, do not work as much as 1% and respondents with other jobs are as much 18%. This means that the majority of patients work as private employees seeking treatment at the Friendship General Hospital.

6. Health Facilities Used

    The identity of the respondents based on the health facilities used is shown in Figure 4.6. the following:
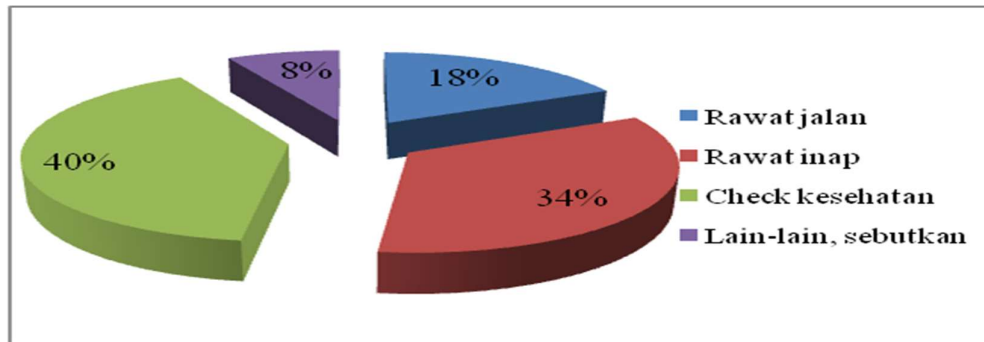
Source: Data processed (2019)

Figure 4.6. Health Facilities Used by Respondents

Figure 4.6. The above shows that the respondents who used outpatient health facilities were 18%, inpatients were 34%, health checks were 40% and used other facilities as much as 8%. This means that the majority of patients use inpatient health facilities.

4.3. Instrument Testing Results

This study uses primary data. The data were collected using a questionnaire distribution technique, namely by providing written statements to the respondents. Furthermore, the respondent gave a response to the statement given. This questionnaire is closed in nature where the answers are readily available. It is hoped that this questionnaire will be completed quickly. To find out whether each statement of the research instrument is valid or not, the validity test is carried out per item. After the data is declared valid, the instrument testing is continued by conducting a reliability test.

4.3.1. Test the validity and reliability of the customer value variable (X1)

Based on the results of data processing (Appendix 8) to test the validity of the customer value variable (X1), obtained the following results:

Table 4.5. Test Results of Customer Value Validity (X1)

No.	No. Item	rhitung	critical	Decision
1.	X1.1	0.496	0.197	Valid
2.	X1.2	0.524	0.197	Valid
3.	X1.3	0.628	0.197	Valid
4.	X1.4	0.559	0.197	Valid
5.	X1.5	0.501	0.197	Valid
6.	X1.6	0.494	0.197	Valid
7.	X1.7	0.517	0.197	Valid
8.	X1.8	0.465	0.197	Valid

Source: Data processed (2019)

Based on Table 4.5., Obtained results for all statements on customer value variables (X1), has a value of r count greater than r table (0.197) so that as many as eight statements on the customer value variable are declared valid and all statements can be included in the reliability test.

The reliability value of the customer value variable instrument (X1) was 0.801. The reliability test results for the customer value variable (X1) show the value of ralpha (0.801)> 0.60, so that the customer value variable instrument (X1) is declared reliable.

4.3.2. Test the validity and reliability of service quality variables (X2)

Based on The results of data processing (Appendix 9) to test the validity of service quality variables (X2), obtained the following results:

Table 4.6. Service Quality Validity Test Results (X2)

No.	No. Item	rhitung	critical	Decision
1.	X2.1	0.463	0.197	Valid
2.	X2.2	0.474	0.197	Valid
3.	X2.3	0.501	0.197	Valid
4.	X2.4	0.402	0.197	Valid
5.	X2.5	0.559	0.197	Valid
6.	X2.6	0.550	0.197	Valid
7.	X2.7	0.571	0.197	Valid
8.	X2.8	0.501	0.197	Valid
9.	X2.9	0.505	0.197	Valid
10.	X2.10	0.468	0.197	Valid

Source: Data processed (2019)

Based on Table 4.6, the results obtained for all statements on the service quality variable (X2), has a value of r count greater than r table (0.197) so that as many as ten statements on the service quality variable are declared valid and all statements can be included in the reliability test.

The reliability value of the service quality variable instrument (X2) was 0.817. The reliability test results for the service quality variable (X2) show the value of ralpha (0.817)> 0.60, so that the instrument of service quality variable (X2) is declared reliable.

4.3.3. Test the validity and reliability of customer satisfaction variables (X3)

Based on The results of data processing (Appendix 10) to test the validity of customer satisfaction variables (X3), obtained the following results:

Table 4.7. Validity Test Results for Customer Satisfaction (X3)

No.	No. Item	rhitung	critical	Decision
1.	X3.1	0.541	0.197	Valid
2.	X3.2	0.560	0.197	Valid
3.	X3.3	0.558	0.197	Valid
4.	X3.4	0.574	0.197	Valid
5.	X3.5	0.563	0.197	Valid
6.	X3.6	0.607	0.197	Valid

Source: Data processed (2019)

Based on Table 4.7., The results obtained for all statements on customer satisfaction variables (X3), has a value of r count greater than r table (0.197) so that as many as six statements on the customer satisfaction variable are declared valid and all statements can be included in the reliability test.

The reliability value of the customer satisfaction variable instrument (X3) was 0.806. The reliability test results for the customer satisfaction variable (X3) show the ralpha value (0.806)> 0.60, so that the customer satisfaction variable instrument (X3) is declared reliable.

4.3.4. Test the validity and reliability of the patient loyalty variable (Y)

Based on The results of data processing (Appendix 11) to test the validity of the patient loyalty variable (Y), obtained the following results:

Table 4.8. Results of Patient Loyalty Validity Test (Y)

No.	No. Item	rhitung	critical	Decision
1.	Y.1	0.491	0.197	Valid
2.	Y.2	0.413	0.197	Valid
3.	Y.3	0.444	0.197	Valid
4.	Y.4	0.451	0.197	Valid

5.	Y.5	0.446	0.197	Valid
6.	Y.6	0.442	0.197	Valid
7.	Y.7	0.521	0.197	Valid
8.	Y.8	0.473	0.197	Valid

Source: Data processed (2019)

Based on Table 4.8., The results obtained for all statements on the patient loyalty variable (Y), has a value of r count greater than r table (0.197) so that as many as eight statements on the patient loyalty variable are declared valid and all statements can be included in the reliability test.

The reliability value of the patient loyalty variable instrument (Y) was 0.757. The reliability test results for the patient loyalty variable (Y) show the value of ralpha (0.757)> 0.60, so that the instrument of the patient loyalty variable (Y) is declared reliable.

4.4. Statistic analysis

In carrying out a series of statistical analysis the data will be divided into several parts consisting of the analysis as described below:

4.4.1. Analysis of the coefficient of determination

The results of data processing with SPSS version 25.0 (Appendix 14 and Annex 15), obtained the results of the analysis of the coefficient of determination which are summarized in Table 4.9. below this:

Table 4.9. Score Partial and Concomitant Coefficient of Determination

No.	Information	Correlation coefficient	Coefficient of Determination	
1.	The effect of customer value on patient loyalty	$rY1.23 = 0.453$	KD1.23	$= rY1.23^2 \times 100\%$ $= 0.453^2 \times 100\%$ $= 20.52\%$
2.	Effect of service quality on patient loyalty	$rY2.13 = 0.264$	KD2.13	$= rY2.13^2 \times 100\%$ $= 0.264^2 \times 100\%$ $= 6.97\%$
3.	The effect of customer satisfaction on patient loyalty	$rY3.12 = 0.424$	KD3.12	$= rY3.12^2 \times 100\%$ $= 0.424^2 \times 100\%$ $= 17.98\%$
4.	The influence of customer value, service quality and customer satisfaction on patient loyalty	$rY1.2.3 = 0.954$	KD1.2.3	$= rY1.2.3^2 \times 100\%$ $= 0.954^2 \times 100\%$ $= 91.01\%$

Source: Data processed (2019)

Based on Table 4.9., It can be interpreted as follows:
1. The effect of customer value on patient loyalty
   Based on the calculation of the value of KD1.23, it shows that the effect of customer value on patient loyalty is 20.52%, which means, 20.52% of patient loyalty is a contribution of customer value, and the remaining 79.48% is influenced by other factors. This shows that KD1.23 of 20.52% can explain the significant effect of customer value on patient loyalty, which means that perceived good customer value will increase patient loyalty at the Friendship General Hospital, East Jakarta.
2. Effect of service quality on patient loyalty
   Based on the calculation of KD2.13 value, it shows that the effect of service quality on patient loyalty is 6.97%, which means, 6.97% of patient loyalty is a contribution to service quality, and the remaining 82.86% is influenced by other factors. This shows that KD2.13 of 6.97% can explain the significant effect of service quality on patient

loyalty, which means that the quality of service that is perceived as good by customers will increase patient loyalty at the Friendship General Hospital, East Jakarta.

3. The effect of customer satisfaction on patient loyalty

Based on the calculation of the value of KD3.12, it shows that the effect of customer satisfaction on patient loyalty is 17.98%, which means, 17.98% of patient loyalty is a contribution to customer satisfaction, and the remaining 82.02% is influenced by other factors. This shows that KD3.12 of 17.98% can explain the significant influence of customer satisfaction on patient loyalty, which means that the higher the level of customer satisfaction will increase patient loyalty at the Friendship General Hospital, East Jakarta.

4. The influence of customer value, service quality and customer satisfaction on patient loyalty

Based on the calculation of the value of KD1.2.3, it shows that the influence of customer value, service quality and customer satisfaction on patient loyalty is 91.01% which means, 91.01% patient loyalty is a contribution of customer value, service quality and customer satisfaction, and the rest is equal to 8.99% is influenced by other factors. This shows that KD1.2.3 of 91.01% can explain the significant influence of customer value, service quality and customer satisfaction on patient loyalty, which means that the better customer value, service quality and customer satisfaction will increase patient loyalty at the Friendship General Hospital Jakarta. East.

4.4.2. Hypothesis test

The results of data processing with SPSS version 25.0 (Attachment 14 and Annex 15), obtained the results of hypothesis testing which are summarized in Table 4.10. below this:

Table 4.10. Score Partial and Joint Hypothesis Testing

Hypothesis	Information	KD	Sig	Decision
1.	The effect of customer value on patient loyalty	20.52%	0,000	Significant
2.	Effect of service quality on patient loyalty	6.97%	0.009	Significant
3.	The effect of customer satisfaction on patient loyalty	17.98%	0,000	Significant
4.	The influence of customer value, service quality and customer satisfaction on patient loyalty	91.01%	0,000	Significant

Source: Data processed (2019)

Based on Table 4.10. above, it can be interpreted as follows:

1. Partial testing
   a. The effect of customer value on patient loyalty

   $Ho:\rho y1.23 = 0$ partially, customer value is not significant to patient loyalty at the Friendship General Hospital, East Jakarta

   $Ha:\rho y1.23 \neq 0$ partially significant customer value on patient loyalty at the General Hospital of Friendship East Jakarta

   Hypothesis test results obtained a significance value of t of $0.000 < 0.05$, thus Ha which states that "partially, the customer value is significant to patient loyalty East Jakarta Friendship General Hospital" is accepted.

   b. Effect of service quality on patient loyalty

   $Ho:\rho y2.13 = 0$ partially service quality is not significant patient loyalty at the General Hospital of Friendship East Jakarta

   $Ha:\rho y2.13 \neq 0$ partially the quality of service is significant towards patient loyalty at the Friendship General Hospital, East Jakarta

   Hypothesis test results obtained a significance value of t of $0.009 < 0.05$, thus Ha2 which states that "Partially, the quality of service is significant towards patient loyalty of Friendship General Hospital, East Jakarta" is accepted.

   c. The effect of customer satisfaction on patient loyalty

   $Ho:\rho y3.12 = 0$ Partially, customer satisfaction is not significant towards patient loyalty at the Friendship General Hospital, East Jakarta

   $Ha:\rho y3.12 \neq 0$ partially significant customer satisfaction on patient loyalty at the Friendship General Hospital, East Jakarta

   Hypothesis test results obtained a significance value of t of $0.000 < 0.05$, thus Ha3 which states that "Partially, customer satisfaction is significant towards patient loyalty East Jakarta Friendship General Hospital" accepted.

2. Simultaneous testing

   $Ho:\rho y123 = 0$ Simultaneously customer value, service quality, and customer satisfaction are not significant to patient loyalty East Jakarta Friendship General Hospital

   $Ha:\rho y123 \neq 0$ simultaneously customer value, service quality, and customer satisfaction have a significant impact on patient loyalty at the Friendship General Hospital, East Jakarta

   The test results, obtained the value KD1.2.3 = 91.01%. Hypothesis test results obtained F significance value of $0.000 < 0.05$, thus Ha4 which states that

"Simultaneously, customer value, service quality and customer satisfaction are significant on patient loyalty East Jakarta Friendship General Hospital" accepted.

4.5. Research Findings
4.5.1. The effect of customer value on patient loyalty
The results of the study concluded that customer value is significant for patient loyalty. This shows that the better customer value, the more customer loyalty will be. Loyalty is formed first by creating customer value. By offering better value to patients, that is, better value than what they earn elsewhere, means that the hospital is contributing to consumers' decisions to remain loyal to the hospital, and therefore turning them into more valuable consumers.

The results of this study are in line with research conducted by Hasan and Putra (2018), Rif'adarajad et.al., (2016), Permana et.al., (2019), which concluded that customer value is significant for patient loyalty.

1.6.2 Effect of service quality on patient loyalty
The results of the study concluded that the quality of service is significant for patient loyalty. This shows that the quality of service is very important in a very competitive market competition such as today, appearance, reliability and hospital assurance in providing services to patients are the main factors in the impression that patients will feel while using the services provided by the hospital. that way the patient's perception of the perceived quality of service will emerge. Perceptions of good service quality will result in patient loyalty.

The results of this study are in line with research conducted by Hasan and Putra (2018), Rif'adarajad et.al., (2016), Wardani (2015), Bukhari et.al., (2018), Sumitro and Wahjono (2018), Kesuma et.al., (2013), Jamaluddin and Ruswanti (2017), who concluded that the quality of service is significant for patient loyalty.

4.5.2. The effect of customer satisfaction on patient loyalty
The results of the study concluded that customer satisfaction is significant for patient loyalty. This shows that customer satisfaction is important to marketing because it will encourage repeat purchases. Customer satisfaction can influence purchasing behavior which forms a tendency that satisfied customers will be loyal, but loyal customers are not necessarily satisfied. A high level of satisfaction can increase patient loyalty. Customer satisfaction is an important indicator in determining customer loyalty. Customer satisfaction will occur when the products / services provided exceed customer expectations or at least according to customer desires.

The results of this study are in line with research conducted by Hasan and Putra (2018), Rif'adarajad et.al., (2016), Wardani (2015), Bukhari et.al., (2018), Sumitro and Wahjono (2018), Permana et.al., (2019), Jamaluddin and Ruswanti (2017), who concluded that customer satisfaction is significant for patient loyalty.

4.5.3. The influence of customer value, service quality and customer satisfaction on patient loyalty
The results of the study conclude that customer value, service quality and customer satisfaction are simultaneously significant towards patient loyalty, which means that patient loyalty at the Friendship General Hospital, East Jakarta is determined by customer value, service quality and customer satisfaction perceived by the patient.

V. CONCLUSIONS AND SUGGESTIONS
5.1. Conclusion
Based on the results of research that has been done in the previous chapter, it shows that:

1. Partially, customer value is significant towards patient loyalty at the Friendship General Hospital, East Jakarta and the contribution of the influence of customer value on patient loyalty is 20.52%.
2. Partially service quality is significant towards patient loyalty at the Friendship General Hospital, East Jakarta and the contribution of the influence of service quality on patient loyalty is 6.97%.
3. Partially, customer satisfaction is significant on patient loyalty at the Friendship General Hospital, East Jakarta and the contribution of the influence of customer satisfaction on patient loyalty is 17.98%.
4. Partially significant brand image on patient loyalty at the General Hospital of Friendship, East Jakarta and the contribution of the influence of brand image on patient loyalty by 17.1%.
5. Simultaneously customer value, service quality, and customer satisfaction are significant on patient loyalty at the East Jakarta Friendship General Hospital and the contribution of the influence of customer value, service quality, and customer satisfaction to patient loyalty is 91.01%.

5.2. Suggestion

1. BeBased on the above conclusions, the following suggestions can be proposed: Customer value and customer satisfaction have a fairly dominant influence on patient loyalty. The hospital should still maintain the value that is well perceived by customers and continue to provide satisfaction to customers so that patients remain loyal to the Friendship General Hospital.
2. Service quality has the lowest influence among other variables, which means the Friendship General Hospital needs to further optimize the services provided to further increase patient loyalty to the hospital.

5.3. Limitations and Further Research Development

This research has been attempted to follow scientific procedures, however, it still has limitations and can be carried out for further research development, namely:

1. The research was only conducted at one hospital, namely Pers Friendship Hospital, East Jakarta.
2. The study only involved variables of customer value, service quality and customer satisfaction which were investigated for their effect on patient loyalty.
3. Further research development can be carried out by researching other hospitals so that the results of the research can be used as a comparison to enrich research on marketing. Then the study examines other variables that are thought to affect patient loyalty such as product quality, hospital image, price, and other variables.

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REFERENCE LIST

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Augusty, Ferdinand. 2011. Management Research Methods: Research Guidelines for Thesis, Thesis and Management Science Dissertation. Semarang: Diponegoro University.

Bukhari, Imam., Bahri Kamal., Mella Katrina Sari."The Influence of Service Quality, Company Image and Satisfaction on Loyalty of Inpatients at Mitra Keluarga Tegal Hospital". Monex Journal Volume 7 Number 1 January 2018 p-ISSN: 2089-5321, e-ISSN: 2549-5046.

Daryanto. 2013. Sari Lecture in Marketing Management. 2) mold. Bandung: PT Sarana Tutorial Nurani Sejahtera.

Ghozali, Imam. 2015. Application of Multivariate Analysis with the IBM SPSS Program. Semarang: Diponegoro University Publishing Agency.

Griffin, Jill. 2013. Customer Loyalty: Growing and Maintaining Customer Loyalty. Jakarta: Erlangga.

Hasan, Ali. 2013. Marketing and Choice Cases. Yogyakarta: CAPS (Center for Academic Publishing Service).

Hasan, Sabri and Putra, Aditya Halim Perdana Kusuma. "Loyalty of Government Hospital Patients: Viewed from the Perspective of Service Quality, Image, Value and Satisfaction". Indonesian Journal of Management Vol. 18 (3), pp. 184-196, 2018, ISSN: 1411-7835.

Ika, SA Graduated Prapti. And Lilik Kurniawan. 2011. "Analysis of Factors Affecting Customer Satisfaction: A Case Study at the Honda Semarang Center". FEB - SWCU - SALATIGA Lecturer Scientific Week: 21-34.

Jamaluddin, and Endang Ruswanti. "Impact of Service Quality and Customer Satisfaction on Customer Loyalty: A Case Study in a Private Hospital in Indonesia". IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 19, Issue 5. Ver. I (May 2017), PP 23-33.

Jasfar, Farida. 2015. Theory and Application of Nine Keys to Success of Service Business. Jakarta: Four Salemba.

Kesuma, Ida Ayu Werdiningsih., Djumilah Hadiwidjojo., Ni Luh Putu Wiagustini and Fatchur Rohman. "Service Quality Influence on Patient Loyalty: Customer Relationship Management as Mediation Variable (Study on Private Hospital Industry in Denpasar)". International Journal of Business and Commerce Vol. 2, No.12: Aug 2013 [01-14] (ISSN: 2225-2436).

Kotler, Philip and Gary Armstrong. 2014. Principles of Marketing. Edition 13. Volume 1. Jakarta Erlangga.

_____ and Kevin L. Keller. 2012. Marketing Management. 12. Jakarta Edition: Erlangga.

Lupiyoadi, slow. 2013. Competency-Based Service Marketing Management. Edition 3. Jakarta: Four Salemba.

_____ and A. Hamdani. 2013. Service Business Marketing Mix. Jakarta: Four Salemba.

Permana, Agus Wahyu., I Nengah Suardika, Wayan Sujana, Anik Yuesti. "Analysis of Service Quality and Value Effect on Patient Satisfaction and Its Effect on Loyalty of Hospital Patients in Hospital and Children of Pucuk Permata Hati". International Journal of Contemporary Research and Review Volume 10, Issue 02, February, 2019, ISSN 0976-4852.

Rangkuti, Freddy. 2013. Marketing Research. Jakarta: Gramedia Pustaka Utama.

Restiarti, Maria Resina, "The Influence of Customer Satisfaction Caused by Service Quality and Customer Value on Customer Loyalty Mediated by Company Image Cases at Pharmacy X Yogyakarta". Journal of Economics and Business, Vol. 8, No. 2, July 2014: 89-101, ISSN: 1978-3116.

Rif'adarajad S, Buyung Sarita, and Muhammad Yani Balaka."Factors Affecting the Loyalty of Inpatient Users of the Buton District General Hospital". Journal of Economic Development Progress Volume 1, No.2, 2016 e-ISSN: 2502-5171.

Saidani and Samsul Arifin. 2012. "The Effect of Product Quality and Service Quality on Consumer Satisfaction and Purchase Intention at Ranch Market". Indonesian Science Management Research Journal (JRMSI), Vol. 3, No.1, 2012.

Setiawan, Supriadi. 2011. Customer Loyalty Services. Bogor: Publisher IPB Press.

Sugiyono. 2016. Quantitative Research Methods, Qualitative and R & D. Bandung: PT. Alfabeta.

Sumitro, Yanus and Wahjono. "Analysis of the Influence of Service Quality, Price and Satisfaction on Loyalty of Inpatients at the Hospital. Bhakti Rahayu Surabaya ". Economic Magazine Vol. XXIII No. 1, July 2018, ISSN No. 1411-9501.

Tjiptono, Fandy. 2014. Marketing Services. Jakarta: Gramedia Cawang.

_____and Gregorius Chandra. 20113. Service, Quality and Satisfaction. Edition 3. Yogyakarta. Andi.

Wardani, Nina. "The Effect of Service Quality and Patient Satisfaction on Loyalty of Inpatients at Tiara Pematangsiantar Hospital". ISSN Sultanist Journal: 2338-4328 Vol. 3, No. 2, December 2015.

Yang, Z., and Robin T. Peterson. 2014, "Customer Perceived Value, Satisfaction and Loyalty: The Role of Switching Costs". Journal of Psychology & Marketing, 21 (10): 799-822

Yazid. 2012. Marketing Services. Second Edition. Yogyakarta: Ekonisia Campus, Faculty of Economics, UII.