The Relationship between Service Quality and Loyalty of Outpatient BPJS Patients at Kartini General Hospital with Patient Satisfaction Mediation as Variable

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ABSTRACT

The experience felt by patients after receiving services at health facilities is an indicator of the quality of health services that need to be considered, so that patients are always loyal to the hospital. There was a decrease in the number of out patient BPJS patient visits at RSU Kartini Lampung from 2020 - 2021 as many as 621 people and the level of patient satisfaction did not meet the standards in 2021 by 55%. Therefore, this study aims to assess the effect of service quality on outpatient loyalty at Kartini general hospital with patient satisfaction as a mediation variable. This study used a quantitative-based cross-sectional design, the population reached were patients who used outpatient services at RSU Kartini in September 2022. The sampling technique was non-probability sampling, 40 samples were selected using the purposive sampling method. To determine the direct and indirect relationship between these variables, the data were analyzed using regression analysis with the Sobel test through SPSS. The results showed that service quality had a positive effect on patient loyalty and patient satisfaction. While patient satisfaction has a positive effect on patient loyalty. The indirect effect of service quality on patient loyalty through patient satisfaction is mediated absolutely.

Keywords: Service quality, patient satisfaction, patient loyalty, outpatient, BPJS.

1. Introduction

The low rate of patient satisfaction will have an impact on the development of a hospital. Patients who are dissatisfied with the health services received will cause the patient to decide to move to another hospital that can provide better service. The patient's decision to use health services is influenced by the quality of hospital services. According to Drondahl et al, 2013, patient perceptions of health services consist of hospital image based on experience and references obtained by patients in the form of hospital skills, attitudes, and behavior, which in turn can shape patients' initial perceptions of the hospital that affect satisfaction and loyalty. patient. Thus the lack of patient satisfaction can lead to a loss of patient confidence in the hospital (Darmansjah, D., Kalra, G., & Ventriglio, 2020).

The level of satisfaction is a function of the difference between perceived performance and expectations. If the performance is below expectations, the patient will feel disappointed, otherwise, if the performance is as expected, the patient will feel satisfied. On performance that exceeds expectations, the patient will feel very satisfied. Patient expectations can be shaped by past experiences, testimonials from relatives, and promises and information from various media. Satisfied patients will be loyal longer, less sensitive to price, and give good comments about these services to create loyal patients (Christian, Smith, 2010). Outpatient services are one of the health care facilities provided by hospitals. Outpatient services are often a major concern because the number of outpatients is greater than in other health care facilities (Supartiningsih 2017). Quality hospital services can increase patient satisfaction and encourage these patients to come back to visit the hospital, increasing the credibility of the hospital in the community. This is very important for hospitals to do because of the increasingly competitive hospital business competition (Lingard, H., & Rowlinson, S, 2004). The number of BPJS outpatient visits at RSU Kartini decreased by 621 patients, from 2020 to 2021. This was followed by a decrease in patient satisfaction levels in 2020 by 60% and in 2021 by 55%. This indicates a high probability of a relationship between patient dissatisfaction and the decreased number of visits due to suboptimal service quality. This study was conducted to determine the effect of service quality on satisfaction, the effect of service quality on loyalty, and the effect of satisfaction on loyalty. The results of this study are expected to provide a reference in efforts to improve service quality to increase patient satisfaction and maintain patient loyalty in hospitals.

2. Literature Review

Service Quality
According to the American Society for Quality Control, quality is the overall characteristics and characteristics of a product or service in terms of its ability to meet predetermined or latent needs (Lupiyoadi, 2013). Zeithaml and Parasuraman (Herlambang, 2016) develop 5 dimensions of service quality, namely:
- Tangible (tangible): includes the physical appearance of facilities, equipment, employees, and communication tools.
- Reliability: the ability to perform the promised services consistently and reliably.
- Responsiveness: willingness to help customers and provide fast and appropriate services or services.
- Assurance: includes the knowledge and friendliness of employees and their ability to generate trust and confidence, courtesy and trustworthiness of the staff, free from danger, risk, or doubt.
- Empathy: understanding of giving individual attention to customers, ease of doing good communication, and understanding customer needs.

Patient Satisfaction
Patient satisfaction is a comparison of the level of patient feelings that arise as a result of the performance of health services obtained with the expected. If the results are felt the same or exceed expectations, it will lead to a feeling of satisfaction, on the contrary, will arise feelings of disappointment or dissatisfaction if the results are not in line with expectations. Customer satisfaction is a person's feelings of pleasure or disappointment with a product after he compares the results of the product he thinks with the expected product performance (Kotler, 2003). According to Raposo et al (2009) and Alryalat et al (2019), dimensions in patient satisfaction

research are satisfied with the process, satisfaction with results, satisfaction during patient interactions with medical personnel, and satisfaction with the time required. during the service visit process, satisfaction with the overall cleanliness of the hospital.

Patient Loyalty

Loyalty is someone to the object of customer loyalty or commitment to a brand, store, or supplier, based on a very positive attitude, and is reflected in consistent repeat purchases (Wu, 2011). Setiawan revealed that patient loyalty is defined as a measure of customer loyalty in using a product brand or service brand at a certain time in a situation where there are many choices of products or services that can meet their needs and customers can get them. The level of patient loyalty to a particular good or service depends on several factors, such as the cost of switching to another good or service, the similarity in quality, quantity, or service of the type of substitute goods or services, the risk of changes in costs due to substituting goods or services. Setiawan, 2011). Patient loyalty will be formed by itself if the hospital can improve the quality of services provided so that a long-term relationship between patients and hospitals will be formed Suryaningrat (2018). Loyalty can be measured by 4 indicators according to Utari (2018):

● Repurchase: repeat purchases.
● Purchase across products: purchase other products offered by the same company.
● Immunity: products or services from other organizations cannot influence consumers.
● Referrals: customers will promote the company's products/services to people.

Effect of Service Quality on Patient Satisfaction

Service quality aims to provide customer satisfaction. Customer satisfaction with a service is determined by customer interest before using the service compared to the results of customer perceptions of the service after the customer perceives service performance that is above expectations, causing a sense of satisfaction. Suzanto & Sidharta, 2015, prove that there is a relationship between perceived quality (performance) and satisfaction. Dewi's research (2016) concludes that the quality of service either in dimensions or overall has a significant influence on patient satisfaction.

Relationship of Patient Satisfaction with Patient Loyalty

Research by Huang et al (2019) states that the results of providing health services to patients, patient satisfaction, patient trust, and patient commitment related to treatment in health services will affect patient loyalty. According to Aliman & Mohamad (2013) which can shape the behavior of the patient's intention, in the end, it increases patient loyalty. Wu (2011) states that customer loyalty is an endogenous variable caused by a combination of satisfaction so customer loyalty is a function of satisfaction. If there is a positive relationship between customer satisfaction and loyalty, then high satisfaction will increase customer loyalty.

3. Research Methodology

The research method used in this study is a quantitative method with a cross-sectional design. The target population is patients or families of patients who use health services with BPJS at RSU Kartini Lampung, and the affordable population is patients or families of patients who use health services with BPJS in outpatient polyclinics at RSU Kartini in September 2022. The sampling technique uses non-probability techniques. sampling using purposive sampling, namely with the considerations: outpatient BPJS patients at RSU Kartini, aged >17 years, patients who have made

>2 visits to the outpatient polyclinic at RSU Kartini, patients are willing to fill out a questionnaire if the patient's condition is not possible then a party can be represented the family. This research was conducted at RSU Kartini Lampung in the period September 2022.

Measurement

This research instrument uses a questionnaire that has been prepared using a Likert scale based on predetermined indicators for each variable. Five levels of the Likert scale used in this study are: service quality is measured using 5 indicators, patient satisfaction variable is measured by 3 indicators, and loyalty variable is measured using 4 indicators. These three variables were measured using a Likert scale, namely: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. On the results of the validity test of all the question items on the questionnaire, valid results were obtained with a positive correlation value greater than the value of the r table (> 0.05) with a significance level of 95%. The results of the reliability test on this questionnaire instrument found that all question items were reliable after each item was tested using Cronbach's alpha formula where the r-test results were compared with the product moment table with Cronbach's alpha value greater than the r table (0.60).

The primary data source in this study was data directly taken by researchers from the source using a questionnaire technique distributed to outpatient service users at RSU Kartini in the period September 2022. The secondary data of this study were taken by researchers from reports and documents from hospitals and related agencies in the study. this. The form of report taken to assist this research is the form of a report on service indicators at RSU Kartini in the 2021 period and profile data for the Kartini Hospital in Lampung. The data collected from the questionnaire results were processed through the editing, coding, and entry processes using SPSS version 28. After the data was processed and then analyzed, a univariate analysis was carried out to get an overview or describe each variable used in the study. Statistical analysis used in this study is used so that research on more than two variables can be carried out simultaneously. The analytical technique used in this study is a regression which is operated using the SPSS version 28 program. The results of the analysis are further confirmed by the Sobel test and then the results are interpreted to know the effect statistically.

4. Results

The research was conducted in September 2022 at RSU Kartini Lampung. Data from research on 40 respondents who meet the inclusion criteria. The results of this study describe the characteristics of general data including age, gender, education, occupation, income, and the number of visits.

Table 1.

No	Gender	Frequency (n)	(%)
1	Male	17	42.5
2	Female	23	57.5
	Age		
1	17-25	4	10
2	26-35	10	25
3	36-45	14	35
4	46-55	9	22.5
5	>55	3	7.5

	Level of Education		
1	Primary school	4	10
2	Junior high school	6	15
3	Senior high school	16	40
4	D1/D2/D3	2	5
5	S1/S2/S3	10	25
6	Others	2	5
	Occupation		
1	Civil servant/Government staff	2	5
2	Private sector employee	14	35
3	Self employee	17	42.5
4	Students	5	12.5
5	Not working / others	2	5
	Income (IDR)		
1	<500.000	4	10
2	500.000 – 1.000.000	7	17.5
3	1.000.000 – 2.000.000	19	47.5
4	2.000.000 – 5.000.000	7	17.5
5	>5.000.000	3	7.5
	Number of Visits		
1	2	6	15
2	3	19	47.5
3	>3	15	37.5

Based on table 1, the largest number of respondents were 23 women (57.5%), and the dominant age range was 36-45 years as many as 14 people (35%). The educational background of most respondents is high school as many as 16 people (40%), for the occupation that dominates is self-employed as many as 17 people (42.5%), the highest income level is the salary range of 1-2 million as many as 19 people (47.5%), for the number of visits to RSU Kartini, 47% of respondents visited 3 times. This study uses SPSS version 28 software in conducting data analysis. The three variables were tested using a regression test which went through several stages and then tested to prove the mediation of the indirect variable on the dependent variable to produce a conclusion.

Table 2

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.542	1.243		-1.240	.222
	Quality of Service	.188	.012	.926	15.145	<,001

Dependent Variable: Patient Loyalty

Table 3

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.287	1.166		-1.961	.057
	Quality of Service	.198	.012	.940	17.013	<,001

Dependent Variable: Patient Satisfaction

Table 4
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.207	.921		.225	.823
	Quality of Service	.036	.026	.180	1.419	.164
	Patient Satisfaction	.765	.122	.794	6.263	<,001

Dependent Variable: Patient Loyalty

Based on the results of statistical analysis in table 2, it was found that service quality influences patient loyalty at RSU Kartini, where r = 0.188 with a significance <0.001 p <0.05 so the first hypothesis can be accepted. Then proceed to test the next variable, in table 3 the quality of service is tested on patient satisfaction and the results show that service quality has a significant effect on patient satisfaction with a value of r = 0.198 and a significance of <0.001 p <0.05, which means that hypothesis 2 is accepted. In the last regression stage, the relationship between service quality and patient satisfaction on patient loyalty was tested and it was found that r = 0.765 with a significance <0.001 p <0.05, which means that the relationship between service quality and patient satisfaction with patient loyalty is significant so that hypothesis 3 is accepted. Then the final test can be done by means the value of c must be compared with the value of c', so in the analysis of this study, it was found that the value of c = 0.188 decreased to the value of c' = 0.036 while the significance changed to insignificant. In the final stage to prove that patient satisfaction mediates between service quality and patient loyalty, a confirmation test is carried out with the Sobel test. In the Sobel test, a variable is said to mediate other variables if the Z arithmetic value > the Z table value, in this study the Z arithmetic value = 6.265 > the Z table value 1.96 so it can be concluded that patient satisfaction mediates the absolute causal relationship between service quality and patient loyalty.

5. Discussion

Title Based on the results of statistical analysis in Table 3, it was found that the quality of service has an influence on patient satisfaction at RSU Kartini. This is correlated with Tan's (2010) theory where service quality is an expectation, desire, or expectation of customers who want to be fulfilled. Meanwhile, according to Zeithmal (1998), service quality is a general description or customer assessment of service and product. Service quality has 5 dimensions consisting of reliability, assurance, responsiveness, empathy, and physical evidence. In the results of this study, from the analysis, it was found that of the five dimensions that respondents felt were lacking in service quality, namely empathy and physical evidence from RSU Kartini.

Reliability is the ability to provide services as promised at the beginning. Based on the results of research at RSU Kartini, the statement item indicator used the lowest value for item number 3, while item number 1 and 2 had the same value. Item number 1 describes the procedure for accepting patients in the outpatient poly section of RSU Kartin quickly and precisely, and item number 2 describes the fast and precise examination, treatment, and care for the outpatient poly section of RSU Kartini. While item number 3 regarding the service schedule at the outpatient clinic of RSU Kartini was carried out quickly and precisely.

Responsiveness in the world of health is awareness, a desire to help the complaints of patients and their families quickly and accurately. Based on the results of this study, the item that has the highest contribution value is item no. 4 while the lowest is item number 3. Item number 4 is about the staff, nurses, and doctors in the outpatient clinic who are ready to help patients. While item number 3 regarding the outpatient poly division officers control the information that needs to be conveyed to the patient.

Assurance is the knowledge and ability of employees to provide a sense of confidence and trust in patients. Based on the results of this study, the belief dimension consisting of 5 statement items found the largest value on item no 1, while the lowest was on item no 3. Item no 1 explained that the knowledge and ability of doctors to establish patient diagnoses at RSU Kartini was quite good, while item 3 regarding the courtesy and courtesy and friendliness of hospital employees.

Empathy is the personal care and attention that service providers give to customers so that customers feel their needs can be understood by service providers (Alaan, 2016). In health services, it can be defined that empathy is the attention of medical and non-medical employees to the needs of patients and their families. Based on the results of the analysis in this study, the dimensions of empathy at RSU Kartini have the greatest value contribution to the service quality variable. The empathy dimension consists of 5 statement items that have been tested with the results of numbers 2 and 4 being equal while the lowest is item number 5. Item number 2 states that medical employees at RSU Kartini pay attention to patient and family complaints, and item number 4 states that service providers at RSU Kartini understand the needs of patients. While item number 5 regarding service providers in outpatient polyclinics provides the right time setting to serve patients.

Tangibles are the facilities and equipment provided or owned by health service providers. Based on the results of this study, physical evidence contributes to service quality. In the statement items tested, it was found that the lowest score was obtained in item number 4, which is regarding the outpatient polyclinic at RSU Kartini which has a clean and comfortable waiting room, toilet, and examination room facilities. While the other items have the same value.

In a study conducted by Kim et al (2008), satisfaction is a patient's response related to the stimulus before and after the use of health services. A study conducted by Rosyidah et al (2018) stated that patient satisfaction can affect patient behavior, such as; loyalty having a more positive effect, the patient will recommend the hospital to others to use the hospital's services, which in turn will benefit the hospital. Patient experience also has an impact on other people who want to use hospital services, because recommendations from people who have experience using services are valuable references.

Based on the results of this study on the satisfaction indicator which consists of 4 measurement items, the results are the same for all items. The four items include that patients are satisfied with the facilities at RSU Kartini, service to patients at RSU Kartini is satisfactory if anyone needs health services, the patient will recommend him to get treatment at RSU Kartini, and the last one is regarding if the patient needs service again. health, patients will come back to get health services at RSU Kartini. In the indicator of patient loyalty, the lowest value was obtained on measuring item number 2, which is about the patient not going to move to another hospital to get health services, while item numbers 1, 3, and 4 have the same value.

Kartini General Hospital is a private hospital that serves BPJS participant patients. From 2020 to 2021 there will be a phenomenon of a decrease in the number of patients at this hospital which can be seen in the outpatient service indicators. The research of Yilmaz et al (2019) stated that the most important dimensions in health services are empathy and responsiveness. Empathy is the most important dimension in the health industry, especially health services because the doctor-patient relationship is a sensitive matter and must be considered by hospital management because it has a large effect on patient loyalty. Kartini General Hospital has a low value of empathy for setting the right time to serve patients, with this weakness being one of the factors that weaken the value of patient loyalty to the hospital. Patient loyalty at RSU Kartini includes the tendency of patients to repeat the use of hospital services, and recommend them to others.

6. Conclusion

This study evaluates the effect of service quality and patient satisfaction on patient loyalty in the outpatient polyclinic of Kartini General Hospital in Lampung. The results of this study can help health care providers better understand the relationship between service quality, patient satisfaction, patient loyalty, and mechanisms to improve patient loyalty.

Indication for Further Research

This research is quantitative, qualitative research is recommended for further research. Furthermore, the characteristics of the respondents need to be analyzed to find out whether these variables can cause distortion (confounding) in estimating parameters.

References

Aliman, N. K., & Mohamad, W. N. (2013). Perceptions of Service Quality and Behavioral Intentions: Mediation Effect of Patient Satisfaction in the Private Health Care in Malaysia. *International Journal of Marketing Studies,* 5(4), 15-29. doi:10.5539/ijms. v5n4p15.

Alryalat, Saif Aldeen, Wesam Ahmad, Mahmoud Abu-abeeleh, and Quality Assurance. (2019). "Factors Affecting Patient ' s Satisfaction in Outpatient Clinics in Jordan: Cross-Sectional Study*." Journal of Hospital Management and Health Policy* 3(2): 1–6.

Christian, Smith. Christian America?: What evangelicals really want. Univ of California Press; (2010).

Darmansjah, D., Kalra, G., & Ventriglio, A. Religion, psychiatry, and alternate sexuality. *East Asian Archives of Psychiatry*, 29(1), 26;(2020)

Kotler, P. A. G.(2003). Principles of Marketing, Pearson Education, Singapore

Lingard, H., & Rowlinson, S. Occupational health and safety in construction project management. Routledge; (2004)

Lupiyoadi, R. (2013). *Manajemen Pemasaran Jasa.* Jakarta: Salemba Empat. Diakses dari http/books.google.com/books

Raposo, Mário Lino, Helena Maria Alves, and Paulo Alexandre Duarte. (2009). "Dimensions of Service Quality and Satisfaction in Healthcare: A Patient's Satisfaction Index." Service Business 3(1): 85–100

Setiawan, Supriadi. *Loyalitas pelanggan jasa*. PT Penerbit IPB Press, (2011)

Supartiningsih, Solichah.(2017). "Kualitas Pelayanan dan Kepuasan Pasien Rumah Sakit: Kasus Pada Pasien Rawat Jalan." *Jurnal Medicoeticolegal dan Manajemen Rumah Sakit* 6(1): 9–15.

Suzanto, B., & Sidharta, I. (2015). Pengukuran End-User Computing Satisfaction Atas Penggunaan Sistem Informasi Akademik. *Jurnal Ekonomi, Bisnis & Entrepreneurship*, 9(1), 16-28.

Wu, C-C. (2011). The impact of hospital brand image on service quality, patient satisfaction, and loyalty. *African Journal of Business Management*, 5(12), 4873-4882. DOI: 10.5897/ AJBM10.1347. headings in the style used above. They will automatically be ordered A, B, C, etc.