



The Influence Of Service Quality On The Satisfaction And Loyalty Of Hemodialysis Patients At Mitra Medika Amplas Hospital, Medan

Elly Novalina Sihaloho¹, Destanul Aulia², Diah Arruum³

¹Master Student, Faculty of Public Health, Universitas Sumatera Utara, Medan, Sumatera Utara, Indonesia

² Faculty of Public Health, Universitas Sumatera Utara, Medan, Sumatera Utara, Indonesia

³ Faculty of Nursing, Universitas Sumatera Utara, Medan, Sumatera Utara, Indonesia
Email : ellynovalinasilaloho@gmail.com

Article details:

Published: 31th July 2024



Abstract

Hemodialysis is a therapy that must be given to patients with chronic kidney failure, whose number is increasing. This study aims to determine the effect of service quality on patient satisfaction and patient loyalty in the Hemodialysis unit of Mitra Medika Amplas Hospital, Medan. Good service quality will increase patient

satisfaction and can also increase patient loyalty in implementing hemodialysis, which is an indicator of the dimensions of service quality, namely reliability, reality, responsiveness, assurance and empathy. This research uses a quantitative descriptive method with a cross sectional design, with a purposive sampling method. The results of the research show that there is an influence of patient quality on patient satisfaction and loyalty, so it is hoped that the hospital will continue to improve the quality of service, especially in the hemodialysis unit as well as evaluate and monitor the existing facilities , facilities and infrastructure at Mitra Medika Amplas Medan Hospital.

keywords : patient satisfaction, patient loyalty, hemodialysis, Mitra Medika Amplas Hospital

To cite this article :

Novalina Sihaloho, E., Aulia, D., & Arruum, D. (2024). THE INFLUENCE OF SERVICE QUALITY ON THE SATISFACTION AND LOYALTY OF HEMODIALYSIS PATIENTS AT MITRA MEDIKA AMPLAS HOSPITAL, MEDAN. *International Journal of Health, Education & Social (IJHES)*, 7(7). <https://doi.org/10.1234/ijhes.v7i7.340>



Introduction

The quality of health services is important in health service organizations, increasing public awareness about health and health services encourages every health service organization to be aware of quality in providing services to service users of health service organizations (Susatyo, 2016).

The quality of health services in health units, for example hospitals. A hospital is an organization that, through organized professional medical personnel and medical facilities, provides medical services, continuous nursing care, diagnosis and treatment of diseases suffered by patients. According to Republic of Indonesia Law Number 44 of 2009 concerning hospitals, it is stated that a hospital is a health service institution that provides comprehensive individual services that provide inpatient, outpatient and emergency services. One of the outpatient service units is medical services for hemodialysis.

Hemodialysis treatment can be performed to prevent death, but it cannot cure chronic kidney disease and cannot balance metabolic activity in the kidneys, so it can affect kidney function and the patient's quality of life. According to research by Endang S (2023), kidney function failure is chronic and irreversible, where the body can no longer carry out its functions, so hemodialysis is really needed to restore kidney function with the help of a hemodialysis machine. The patient's hope is that the need for good health services can be met so that patients can feel satisfaction with the health services provided by nurses in the hemodialysis unit.

WHO data (2017) shows that there are 697.5 million sufferers of chronic kidney disease and 1.2 million of them have died. The prevalence of chronic kidney disease sufferers worldwide reaches 10% of the population, with stages 1-5, which is estimated at 843.6 million (Kovesdy, 2022). The number of people suffering from chronic kidney disease in Asia is estimated to be 434.3 million adults suffering from chronic kidney disease in Asia (Liyanage et al., 2022). Many factors cause chronic kidney failure, including diabetic nephropathy (52%), hypertension (24%), birth defects (6%), gout (1%) and lupus (1%) (Ministry of Health, 2018). IRR data (2017), kidney failure patients increased by 77,892 new patients. Every year the number of chronic



kidney disease (CKD) sufferers with hemodialysis treatment also increases, in 2019 (IRR) there were 185,901 chronic kidney disease patients with hemodialysis throughout Indonesia and in 2020 (IRR), the highest number of cases was chronic kidney disease with the number 61786 cases.

According to Minister of Health Regulation No. 812 of 2010, a Hemodialysis unit is a hemodialysis therapy health service unit that has a minimum of 4 dialysis machines, with a water purification unit or also known as water treatment and includes supporting equipment and has medical personnel, consisting of a minimum of 3 skilled Hemodialysis Nurses, 1 Hemodialysis certified Doctor, and supervised by 1 Hemodialysis certified Internist Doctor also supervised by 1 Hypertension Kidney Consultant Internist (KGH) and must have a good waste processing system.

According to IRR data (2020), in North Sumatra there are 57 hemodialysis service units, 33 internal medicine specialist doctors, 6 internist specialist doctors (KGH), 548 nurses and 874 hemodialysis machines. This increase in the number of patients also has a significant impact on increasing the need for hemodialysis divisions in every hospital in Indonesia and is important for reducing the death rate of chronic kidney disease (CKD) sufferers who are treated with hemodialysis.

Mitra Medika Hospital is located at Jl. Sisingamangaraja No. 11 Harjosari Village 1 Medan Amplas District is a type C hospital which is one of the referral hospitals for hemodialysis services in the city of Medan with a total of 10 Hemodialysis machine units. To get hemodialysis treatment at the Medan Amplas Medan Partner Hospital , patients can use a personal guarantor or BPJS. Around the Medika Amplas Partner Hospital, there are several nearby hospitals which are competitor hospitals which also provide hemodialysis treatment facilities. In the current JKN era, patients diagnosed with chronic kidney failure and requiring hemodialysis treatment will be referred to a referral hospital for immediate treatment. After the validity period of the referral letter has expired , the patient can freely choose a BPJS referral hospital for hemodialysis treatment provided it is in the same rayon as the first health facility.



The number of patients receiving hemodialysis treatment at the Medan Amplas Medan Partner Hospital experiences an up and down trend every month. Data on the number of patients receiving hemodialysis treatment in December 2022 experienced an increase in the number of patients receiving hemodialysis services, namely 58 people, while in December 2023 there was a decrease, namely 50 people receiving services at the Hemodialysis unit at Mitra Medika Amplas Hospital.

Based on the data above, the number of patients receiving hemodialysis treatment at Mitra Medika hospitals experienced an up and down trend so researchers wanted to know the cause of this trend. Patient loyalty in making return visits is because patients feel satisfied with the quality of service provided at the Hemodialysis unit at Medan Amplas Medan Partner Hospital .

Patient satisfaction with the guaranteed service of the Mitra Medika Amplas Medan Hospital Hemodialysis Unit can have a positive influence on patient loyalty in the Hemodialysis Unit at Mitra Medika Amplas Medan Hospital . The higher the patient's satisfaction with the trust, honesty of service providers, skills and knowledge received at the Hemodialysis Unit at Mitra Medika Amplas Medan Hospital. Patient satisfaction with guaranteed services at the Hemodialysis Unit at Mitra Medika Amplas Hospital has a dominant influence on patient loyalty at the Hemodialysis Unit at Mitra Medika Amplas Hospital, Medan. Patient satisfaction with the quality of service based on reliability, responsiveness, assurance, empathy and physical evidence has a positive effect on patient loyalty in obtaining service again at the Hemodialysis Unit at Mitra Medika Amplas Hospital, Medan. Patient satisfaction with services, aspects of service guarantees, have a dominant influence on patient loyalty in obtaining services again at the Hemodialysis Unit, Mitra Medika Amplas Hospital, Medan.

Health services are said to be of quality if they can meet patient expectations according to predetermined standards , resulting in patients feeling very satisfied after receiving medical services. Competent and quality care must have adequate knowledge, technical and interpersonal excellence to provide care based on legal standards of practice and ethics (Syahrudin, et al,



2014) and implementing nurses who work in the Hemodialysis unit must apply five dimensions of service quality, namely tangible/ *tangible*), skills (*reliability*), quick/critical reactions (*responsiveness*), assurance (*assurance*), willingness to care (*empathy*) (Tjiptono, 2007). If these five dimensions work well, the quality of service in the hospital's hemodialysis unit will also be good and reliable.

The quality of health services in the hemodialysis unit is a comprehensive assessment or impression felt by patients in the hemodialysis unit regarding the entire service process carried out by health service providers. A high rating will create trust and motivate patients to come back to the health service unit rather than its competitors.

According to Oliver (1999), Patient loyalty has become the main focus of discussion in the market. Patient Loyalty is part of the organization's priorities because revenue is derived from loyal Patients. Gaining patient loyalty to one hospital has become a major challenge because many patients look for other primary care providers based on the information they have (George & Sahadevan, 2019).

George & Sahadevan's (2019) research shows that families or individuals use more than one hospital at a time in some cases by accessing government and private hospitals depending on the situation and nature of the disease. The reasons may be due to differences in provider specialization, patient care, time spent assessing health services, costs involved, distance, convenience, emergency cases and other variables measured by various researchers (Kamra et al., 2016). As competition between health service providers increases, establishing strong relationships with patients will increase their satisfaction, and this can result in patients returning to the same health institution, thereby generating loyalty. SERVQUAL has been established to determine service quality in the service industry. With a five- dimensional approach to service quality, including physical evidence, real evidence, reliability, responsiveness, assurance and empathy. Previous research used SERVQUAL for healthcare evaluation, and it is considered an important factor that can help organizations achieve success and stability in the market because it



increases the organization's competitive advantage and its superiority in the long term (Bon & Mustafa, 2013).

Methods

This type of research is quantitative descriptive research. This research design uses a cross sectional design in which causal variables that occur in the research object are measured and collected at a certain time. This research will be conducted at Mitra Medika Amplas Hospital, Medan. This location was chosen because it has a Hemodialysis unit in the suburban area of Medan. The time required for this research is December 2023-June 2024. This research was carried out after approval by the Health Sector Research Ethics Committee at the hospital. The population of this study was all patients undergoing hemodialysis treatment at the Hemodialysis unit at Mitra Medika Amplas Medan Hospital, the exact number of patients is not known. The selection of patients as samples (respondents) in this study used 2 (two) sampling techniques, namely probability sampling and non-probability sampling. The total sample that will be studied is 106 respondents. Data collection was carried out by distributing questionnaires, namely distributing questionnaires (questionnaires). Bivariate analysis in this research uses the Pearson product moment test. Multivariate analysis uses multiple logistic regression tests at a confidence level of 95%.

Results

General Description of Research Locations

RSU Mitra Medika Amplas is one of the private hospitals in Medan Amplas District which is privately owned under the auspices of the Mitra Medika Foundation with a Class C classification which has received class designation from the National Ministry of Health through the Minister of Health's Determination Decree Number HK.02.03/I/ 0972/2014. Amplas Medan Mitra Medika Hospital is located on Jl. Sisingamangaraja, Harjosari I, Medan Amplas District, Medan City.



Some of the facilities at Mitra Medika Amplas Hospital are radiology installations, central surgery, delivery room, pharmacy installation, treatment room, laboratory, intensive care installation, hemodialysis installation, medical rehabilitation installation, emergency department.

Univariate Analysis Results

Description of Respondent Characteristics According to Gender

As for data regarding the gender of respondents from the hemodialysis unit at Mitra Medika Amplas Hospital, it can be seen that 63 people were men (59.4 %) and 43 people (40.6%) were women. From these data, it shows that the majority of respondents from the hemodialysis unit at Mitra Medika Amplas Hospital studied were men.

Description of Respondent Characteristics According to Age

The data regarding the age of respondents in this study was grouped into three categories, namely 26-45 years, 46-60 years and over 60 years. Based on the data, it can be seen that respondents aged 26-45 years were 27 people (25.5%), respondents aged 46-60 years were 53 people (50%), and respondents aged over 60 years were 26 people (24.5%). From these data, it shows that the majority of hemodialysis patient respondents at Mitra Medika Amplas Hospital are aged between 46-60 years.

Description of Respondent Characteristics According to Education

The data regarding the education of respondents in this study was grouped into five categories, namely elementary school, middle school, high school, diploma and bachelor's degree. Based on the data, it can be seen that respondents with elementary education amounted to 1 person (0.9%), junior high school amounted to 12 people (11.3%), high school amounted to 49 people (46.2%), diploma numbered 15 people (14.2%). %) and undergraduates amounted to 29 people (27.4%). From these data, it shows that the majority of hemodialysis patient respondents at Mitra Medika Amplas Hospital have a history of education at the end of high school.



Description of Respondent Characteristics According to Occupation

Based on the data, it can be seen that the occupation of the respondents as hemodialysis patients at Mitra Medika Amplas Hospital can be seen that the respondents' occupation as civil servants/TNI/POLRI/BUMN/Pensioners is 13 people (12.3%), self-employed employees are 93 people (87.7%) , and there are no patients who work as students and housewives/not working/others.

Description of Respondents' Characteristics According to Length of Suffering from Pain

Based on the data, it can be seen that the majority of respondents for hemodialysis patients at Mitra Media Amplas Hospital were between 1 - 5 years as many as 105 people (99.1%), more than 5 years as many as 1 person (0.9%) and no patients suffered from sick for less than 1 year.

Description of Respondent Characteristics According to Expenditures Per month

Based on the data table , it can be seen that the majority of respondents' expenses for hemodialysis patients at Mitra Medika Amplas Hospital are around Rp. 1,000,000- Rp. 2,000,000, namely 56 people (52.8%), while less than 1 million amounted to 41 people (38.7%) and above 2 million amounted to 9 people (8.5%).

Description of Respondent Characteristics According to Number of Frequency of Visits to the Hemodialysis Unit

Based on the data, it shows that the majority of hemodialysis patient respondents at Mitra Medika Amplas Hospital visited the hemodialysis unit 5-8 times per month totaling 61 people (57.5%), 1-4 visits per month totaling 45 people (42.5%) and no patient visited the hemodialysis unit more than 8 times per month.

Description of Service Quality (X)



Based on data from the frequency distribution of service quality, out of a total of 106 respondents, 68 respondents (65%) chose good service quality and 48 respondents (45.3%) chose poor service quality . Based on this data, it can be concluded that Mitra Medika Amplas Medan Hospital has good quality health services.

Description of Patient Satisfaction (Y1)

Based on data from the frequency distribution of patient satisfaction, out of a total of 106 respondents, 80 patients chose to be satisfied with the service at the Hemodialysis Unit at Mitra Medika Amplas Medan Hospital in Medan and those who chose to be dissatisfied with the service at the Hemodialysis Unit at Mitra Hospital Medika Amplas Medan amounted to 26 people (24.5%) . Based on this data, it can be concluded that patients who receive services at Mitra Medika Amplas Hospital in Medan have a satisfactory level of satisfaction.

Description of Patient Loyalty (Y21)

Based on data from the frequency distribution of patient loyalty, out of a total of 106 respondents, 106 patients had a loyal attitude towards Mitra Medika Amplas Hospital in Medan (100%) and none were disloyal towards Mitra Medika Amplas Hospital in Medan. Based on this data, it can be concluded that all respondents who received treatment at the Hemodialysis unit at Mitra Medika Amplas Medan Hospital had a high level of loyalty.

Correlative Hypothesis Testing

The Pearson Correlation Test is a parametric test to test the relationship between 2 variables with a measurement scale. The Pearson Correlation Test is carried out if the assumption that at least one of the variables is normally distributed is met. The closeness of the relationship can be used by Guilford's (1956) criteria, namely: 1) less than 0.20: The relationship is very small and can be ignored. 2) 0.20 - < 0.40: Small relationship (not close). 3) 0.40 - <



0.70: Fairly close relationship. 4) 0.70 - < 0.90: Close relationship (reliable). 5) 0.90 - < 1.00: Very close relationship (very reliable) 6. 1.00 : Perfect relationship.

Hypothesis Testing Service Quality (X) on Patient Satisfaction (Y1) (Simple Correlation of X to Y1)

		Service Quality (X)	Patient satisfaction (Y1)
Service quality	Pearson Correlation	1	0.307
	Sig. (2-tailed)		0.001
	N	106	106
Patient Satisfaction	Pearson Correlation	0.307	1
	Sig. (2-tailed)	0.001	
	N	106	106

From the table above, the output shows a correlation analysis in the form of a matrix between the service quality variables (X) and Patient Satisfaction (Y1). It is known that the correlation value is ($r = 0.307$) and the p value is 0.001. From these results it can be seen that the relationship between service quality (X) and patient satisfaction (Y1) shows a small relationship (not close). The results of statistical tests show that there is a relationship between service quality and patient satisfaction ($p=0.001$).

Hypothesis Testing Service Quality (X) on Patient Loyalty (Y2)

Hypothesis Test Results for Service Quality (X) on Patient Loyalty (Y2)

		Service Quality (X)	Patient Loyalty (Y2)
Service quality	Pearson Correlation	1	0.328
	Sig. (2-tailed)		0.001
	N	106	106
Patient Loyalty	Pearson Correlation	0.328	1
	Sig. (2-tailed)	0.001	
	N	106	106



From the table above, the output shows a correlation analysis in the form of a matrix between the service quality variables (X) and patient loyalty (Y2). It is known that the correlation value is ($r = 0.328$) and the p value is 0.001. From these results it can be seen that the relationship between service quality (X) and patient loyalty (Y2) shows a small relationship (not close). The results of statistical tests show that there is a relationship between service quality and patient satisfaction ($p=0.001$).

Hypothesis Testing Patient Satisfaction (Y1) on Patient Loyalty (Y2)

Hypothesis Test Results Patient Satisfaction (Y1) on Patient Loyalty (Y2)

		Patient Satisfaction (Y1)	Patient Loyalty (Y2)
Patient Satisfaction	Pearson Correlation	1	0.269
	Sig. (2-tailed)		0.005
	N	106	106
Patient Loyalty	Pearson Correlation	0.269	1
	Sig. (2-tailed)	0.005	
	N	106	106

From the table above, the output shows a correlation analysis in the form of a matrix between the variables patient satisfaction (Y1) and patient loyalty (Y2). It is known that the correlation value is ($r = 0.269$) and the p value is 0.005. From these results it can be seen that the relationship between patient satisfaction (Y1) and patient loyalty (Y2) shows a small relationship (not close). The results of statistical tests show that there is a relationship between service quality and patient satisfaction ($p=0.005$).



Multicorrelation Test

Hypothesis Testing Service Quality (X) and Patient Satisfaction (Y1) on Patient Loyalty (Y2)

Multicorrelation Test Results

	Unstandardized Coefficients		Standardized Coefficients	t	Sig	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	3,104	2.895		1,072	0.286	1,000	1,000
Service quality	0.119	0.042	0.271	2,824	0.006		
Patient satisfaction	0.239	0.124	0.186	1,932	0.056		

From the output results above, from the significance results < 0.05 it can be seen that there is a significant influence of the service quality variable with patient satisfaction on patient loyalty with a significance value of $0.006 < 0.056$ then there is a B coefficient value of 0.119 which then increases after there is an influence from the variable Y2 This amount of 0.239 indicates that there will be an increase of 0.12% in the value of variable X (service quality).

Discussion

Service Quality (X) on Patient Satisfaction (Y1)

Service quality includes *reliability, Assurance, Tangible, Empathy and Responsiveness* . Service quality is everything that consumers receive or feel regarding the services provided by the company so that the quality received between consumers can experience differences due to limited knowledge from consumers to assess employee performance in providing services. Patient satisfaction, in this case, is obtained after the patient compares consumer expectations and the performance provided by the service provider. To achieve patient satisfaction, strategies are needed that must be implemented in services, namely improving service quality and service



innovation which have an important role in improving the performance of companies or institutions. (Fahmi et al., 2020).

In the dimension of reliability, there are still some patients who feel that doctors and nurses have not given enough time to provide services. This may be due to the large number of patients in the hemodialysis unit so that satisfying all patients tends to be difficult. In the *assurance dimension*, there are still several respondents who feel that they are not safe in receiving medical treatment in the hemodialysis unit and feel that there are some medical personnel who behave unfriendly towards patients. In the *tangible dimension*, there are still many respondents who feel that the hospital's physical facilities are lacking, such as lifts which are often damaged and stop suddenly, requiring patients to be assisted by the patient's family and security guards when going to the 1st floor, medical equipment that is not well maintained, infrastructure such as floors, walls, windows and chairs that are not well maintained, as well as registration flow information that is less informative. In the *empathy dimension*, there were several respondents who felt that medical personnel were not responsive enough in serving patients, this may be due to the large number of patients undergoing hemodialysis in the unit. In the *responsiveness dimension*, there are still several respondents who feel that medical personnel are less responsive to providing consultations related to medical treatment.

Based on the research results, it shows that the service quality variable has a significant effect on patient satisfaction with a sig value ($0.001 < 0.05$). This shows that service quality has a significant effect on patient satisfaction. The better the quality of service provided, the better the patient satisfaction. The value a, namely 7.299, means that if there is no service quality (X), the consistent value of patient satisfaction (Y1) is 7.299. The b coefficient value is 0.105, which means that for every 1% increase in the level of service quality (X), patient satisfaction (Y) will increase by 0.105.

Thus, it can be concluded that service quality (X) influences patient satisfaction (Y), where increasing service quality proves that patients have quite high satisfaction.



The research results of Faris (2014) state that service quality influences patient satisfaction. The *empathy dimension* has the greatest influence on patient satisfaction, followed by *the reliability* and *responsibility dimensions* (Alghamdi, 2014). This research is in line with the results of research by Yofie, et al (2023) at the Immanuel Hospital outpatient center that there is an influence of service quality on patient satisfaction (Syarkani et al., 2023). Furthermore, research conducted by Mahfudhoh and Ikhwanul (2020) shows that there is an influence of service quality on patient satisfaction at the Cilegon City Regional General Hospital (RSUD) (Mahfudhoh & Muslimin, 2020).

The quality of service in the hemodialysis unit at Mitra Medika Amplas Hospital in Medan is quite satisfactory. This can be seen from the respondents' answers regarding the service satisfaction variable. Most of them felt quite satisfied.

Service Quality (X) to Loyalty (Y2)

According to Griffin (2002), consumer loyalty is more associated with behavior than with attitude. If someone is a loyal consumer, the consumer will show purchasing behavior which is defined as non-random purchases expressed from time to time by several decision-making units (Griffin, 2003).

Based on the research results, it shows that the service quality variable does not have a significant effect on patient loyalty with sig ($0.085 > 0.05$). This shows that service quality does not have a significant effect on patient loyalty. The value of a, namely 4.849, means that if there is no service quality (X), the consistent value of patient loyalty (Y2) is 4.849. The b coefficient value is 0.144, which means that for every 1% increase in the level of service quality (X), patient loyalty (Y2) will increase by 0.144. Because the regression coefficient value is positive, it can be stated that service quality (X) has a positive effect on patient loyalty (Y2).

Thus, it can be concluded that service quality (X) influences patient loyalty (Y2), where increasing service quality proves that patients have quite high loyalty.

Research conducted by Devis, et al (2022) on patients at Kartika Pulomas Hospital, East Jakarta shows that service quality has a significant effect on patient loyalty (Pranata Indra et al.,



2022). In line with research conducted by Heri, et al (2019) that service quality has a positive effect on the loyalty of patients using BPJS. By improving the quality of service then will increase patient loyalty to BPJS users (Sutanto et al., 2019). The results of this study are also in accordance with research conducted by Ritna Rahmawati (2016) on patients using BPJS (Dewi, 2017).

The quality of service at Mitra Medika Amplas Medan Hospital is quite good. This can be seen from respondents' answers to questions related to quality Loyalty services are already good and can be improved even better.

Patient Satisfaction (Y1) to Patient Loyalty (Y2)

According to Tjiptono (2011) states that satisfaction can refer to loyalty, therefore it is necessary to create satisfaction, patients will become loyal to health service facilities. The factors that influence patient satisfaction are services, equipment or facilities, employee education, effective handling of patient complaints (Tjiptono, 2012).

The characteristics of loyalty are based on patient attachment to the hospital which is cross-classified with repeat purchase patterns. Meanwhile, the existence of loyal consumers is not only willing to repurchase products or services when they need them, but also their willingness to recommend these products or services to their friends, family members and colleagues. Loyalty benefits are long-term and cumulative, where increased Patient loyalty can lead to higher profitability, higher employee retention, and a more stable financial base. Apart from that, other advantages of loyalty are that it can reduce marketing costs, shorten transaction time and costs, reduce turnover costs, and have positive word of mouth (Griffin, 2003).

In the dimension of service quality in the hemodialysis unit at Mitra Medika Amplas Hospital, Medan, there were several respondents who were still not satisfied with the service they received. This may be due to various influencing factors ranging from patients feeling dissatisfied with the facilities they receive, dissatisfaction with the performance of medical personnel, dissatisfaction with the services they receive and so on. In the dimension of patient



loyalty, there are still a small number of patients who do not really like the services provided by medical personnel.

Based on the research results, it shows that the patient satisfaction variable has a significant effect on patient loyalty with sig ($0.000 < 0.05$). This shows that patient satisfaction has a significant effect on patient loyalty. The value of a , namely 9.670, means that if there is no patient satisfaction (Y_1) then the consistent value of patient loyalty (Y_2) is 9.670. The b coefficient value is 0.346, which means that for every 1% increase in patient satisfaction level (Y_1), patient loyalty (Y_2) will increase by 9.670. Because the regression coefficient value is positive, it can be stated that patient satisfaction (Y_1) has a positive effect on patient loyalty (Y_2).

Thus, it can be concluded that patient satisfaction (Y_1) influences patient loyalty (Y_2), where increasing patient satisfaction proves that patient loyalty will increase.

Research by Sha Liu, et al (2021) shows that patient satisfaction does not have a significant effect on patient loyalty, this is due to the high level of specialization in the medical industry, so each hospital has a different specialization, so patients will compare several hospitals before using their services. (Liu et al., 2021). In contrast to research conducted by Tanya (2023) that the patient satisfaction variable has a significant effect on patient loyalty (Sofia, 2023). Research conducted by Daniel, et al (2016) stated that customer satisfaction was found to have a positive and insignificant effect on patient loyalty (Pereira & Sukaatmadja, 2016).

Patient satisfaction with patient loyalty at Mitra Medika Amplas Hospital in Medan is quite good. This can be seen from respondents' answers to questions related to patient satisfaction with loyalty which is good and can be improved further.

Service Quality (X) and Patient Satisfaction (Y1) on Patient Loyalty (Y2)

Patient satisfaction will arise after the patient experiences feedback from the staff. Consumer satisfaction can be shown through the patient's attitude towards the staff. Patient



satisfaction and patient loyalty are interconnected, which means that if there is an effort from the company to increase patient loyalty, if the company reduces patient satisfaction efforts then the level of patient loyalty will decrease. Customer or patient loyalty is determined by service quality variables and the level of customer or patient satisfaction. Customer loyalty can be defined as people who buy something regularly and repeatedly.

Based on the research results, it can be seen from the significance value < 0.05 so it is found that there is a significant influence of the service quality variable with patient satisfaction on patient loyalty with a significance value of $0.006 < 0.056$ then there is a B coefficient value of 0.119 which then increases after there is an influence from the variable Y2 of 0.239 indicates that there will be an increase of 0.12% in the value of variable X (service quality). Thus, it can be concluded that good service quality (X) and patient satisfaction will increase patient loyalty (Y2). Common problems related to quality of service, long waiting times, lack of effective communication with patients, or rude attitudes from medical staff can cause patients to feel dissatisfied and unmotivated to return to the same health facility . This can be used as an evaluation of the health service unit, in this case Mitra Medika Hospital, to improve the quality of its services so that it is hoped that patients will get satisfaction and ultimately increase patient loyalty to the hospital.

This is in line with research conducted by Abdulaziz, et al (2020), which states that the variable quality of hospital services has a positive effect on patient satisfaction in the Harum Hospital outpatient unit (p value = 0.000).

The service quality variable has a positive effect on patient loyalty in the Harum Hospital outpatient unit (p value = 0.003) (Bajamal. Ar Abdulaziz et al., 2020) . Furthermore, research was conducted by Dewi & Tetty (2021), where there was an influence between service quality and level of satisfaction on patient loyalty both individually and collectively (Lintang & Widiyastuti, 2021) .

Research conducted by Solehudin and Inas (2023) revealed that service quality and satisfaction simultaneously had a significant effect on patient loyalty with a sig value of 0.001



and each had an effect of 94.1 % . This means that the quality of service in hospitals and patient satisfaction have a significant influence on patient loyalty (Solehudin & Syabanasyah, 2023) .

In the end, service quality is one variable that can be achieved influence patient loyalty. In facing competition in the health service sector, health service providers are required to always provide good service to improve the quality of their services so that it can have an impact on patient loyalty. If service satisfaction can be provided optimally, it can increase patient loyalty at Mitra Medika Amplas Hospital. After the patient successfully utilizes the service and feels safe and comfortable after using the products and services, the patient will trust the hospital, in this case Mitra Medika Amplas Hospital. This will make patients continue to utilize hospital services and will ultimately recommend the hospital to others because they feel satisfied and trust the quality of the hospital's services.

Conclusion

Based on research conducted at Mitra Medika Amplas Hospital in Medan, it can be concluded that the characteristics of patients in the hemodialysis unit based on gender are dominated by men. The average age is dominated by patients in the range of 46-60 years. The final level of education was dominated by patients with high school education. Jobs are dominated by private employees/entrepreneurs. The duration of suffering from illness is predominantly in the range of 1-5 years. Monthly expenses are dominated by expenses of 1 million – 2 million / month. Based on the research results, it can be seen that there is an influence of service quality on patient satisfaction for hemodialysis patients at the Medan Amplas Medan Partner Hospital . Based on the research results, it can be seen that there is an influence of service quality on the loyalty of hemodialysis patients at the Medan Amplas Medan partner hospital . Based on the research results, it can be seen that there is an influence of patient satisfaction on the loyalty of hemodialysis patients at the Medan Amplas Medan partner hospital.



References

- Amin M, Zahora Nasharuddin S. Hospital service quality and its effects on patient satisfaction and behavioural intention. *An Int J Benchmarking An Int J Iss Int J Heal Care Qual Assur* 2013; 18: 238–254.
- Angga Zainudin,Hindyah Ike,Nurul Huda, 2014. Hubungan Mutu Pelayanan Keperawatan Dengan Tingkat Kepuasan Pasien (Studi di RSUD Dr. Wahidin Sudiro Husodo Mojokerto Tahun 2014) <https://repo.stikesicme-jbg.ac.id/4613/1/16.%20Cover%2Cdewan%20redaksi%2Cdaftar%20isi%2CHubungan%20mutu%20Pelayanan.pdf>
- Dewi, R. (2017). Pengaruh Kualitas Pelayanan Terhadap Loyalitas Pasien Pengguna Bpjs Dengan Kepuasan Pasien Sebagai Variabel Intervening. *Jurnal Manajemen Daya Saing*, 18(2), 146–156. <https://doi.org/10.23917/dayasaing.v18i2.4511>
- Griffin, J. (2003). *Customer Loyalty: Menumbuhkan dan Mempertahankan Pasien*. Airlangga.
- Hafid, A.M. (2019). Hubungan Kinerja Perawat Terhadap Tingkat Kepuasan Pasien Pengguna Yankestis Dalam Pelayanan Keperawatan Di RSUD Syech Yusuf Kab.Gowa. <https://media.neliti.com/media/publications/137588-ID-hubungan-kinerja-perawat-terhadap-tingka.pdf>
- Indonesianrenalregistry.org<https://www.indonesianrenalregistry.org/data/IRR%202018.pdf>
- Lintang, D., & Widiyastuti, T. (2021). Pengaruh Kualitas Pelayanan dan Tingkat Kepuasan terhadap Loyalitas Pasien (Studi Kasus pada Pasien Rawat Jalan di UPT Wonotirto). *Jurnal Penataran*, 6(1), 93–100
- Pereira, D., & Sukaatmadja, N. G. K. G. I. P. G. (2016). Pengaruh Service Quality Terhadap Satisfaction Dan Customer Loyalty Koperasi Dadirah Di Dili Timor-Leste. *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*, 5(3), 463.
- Rachmanto,B. (2022). Pengaruh Faktor Kualitas Pelayanan Hemodialisa Pasien Rawat Jalan Terhadap Kepuasan Pasien Di Instalasi Ginjal Hipertensi (Hemodialisa) RSUDDR.MOEWARDI.<http://eprints.ums.ac.id/99578/1/NASKAH%20PUBLIKASI.pdf>.
- Sinabutar R. Influence of the Quality of Medical and Administrative Services on the Inpatients' Loyalty at the Adventist Hospital Bandung. *Int J Heal Med Sci* 2017; 3: 13–22.



Solehudin, & Syabanasyah, I. (2023). Pengaruh Kualitas Pelayanan Dan Kepuasan Terhadap Loyalitas Pasien. *DIAGNOSA: Jurnal Ilmu Kesehatan Dan Keperawatan*, 1(3), 231–243.

Sulistyaningsih, Fitnaningsih Endang Cahyani, Nuli Nuryanti Zulala, Sri Lestari (2020) Persepsi Pasien tentang Kualitas Layanan Mempengaruhi Kepuasan Pasien Rawat Inap Kelas III Rumah Sakit, *Disease Prevention and Public Health Journal* Volume 14, Issue 1, March 2020, pp. 37 ~ 45.

Suryati, Syaifudin. Hubungan antara Mutu Pelayanan Keperawatan dengan Kepuasan Pasien Rawat Inap Di Kelas III RS. PKU Muhammadiyah Yogyakarta. Sekolah Tinggi Ilmu Kesehatan 'Aisyiyah Yogyakarta, 2012.

Teguh, A. P. P., & Oentara, S. (2022). *Pengaruh Kualitas Pelayanan Terhadap Loyalitas Pasien di Wellclinic Gading Serpong*. 4(6), 2452–2463.

Tjiptono, F. (2012). *Strategi Pemasaran*. ANDI.

Undang – Undang Republik Indonesia No.38 Tahun 2009 tentang Perawat.

Undang – Undang Republik Indonesia No.44 Tahun 2009 tentang Rumah Sakit.

Yusnaini Siagian , Dian Ning Alit , Suraidah.(2021). Analisis Faktor Yang Berhubungan Dengan Kepatuhan Pembatasan Asupan Cairan Pasien Hemodialisa. <https://media.neliti.com/media/publications/472758-none-f05e7857.pdf>