THE IMPACTS OF FACILITIES AND SERVICE QUALITY ON CUSTOMER SATISFACTION AT PUSKESMAS WONOSARI II

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ARTICLE INFO	ABSTRACT
	This study aimed to examine: (1) the effect of facilities on patient satisfaction at the PUSKESMAS (Health Center Technical Service Unit) Wonosari II; (2) the effect of service quality on patient satisfaction at the health unit; and (3) the combined effect of facilities and service quality on patient satisfaction at the unit. The present study employed a quantitative method with an ex post facto approach, utilizing questionnaires and documentation for data collection. The population consisted of all residents of Gunungkidul Regency who had accessed services at Puskemas Wonosari II. Data were analyzed by means of descriptive analysis, prerequisite tests, and hypothesis testing. The findings of the study indicated that : (1) there was a positive and significant effect of X1 on Y, with a correlation value (r_{x_1y}) of 0.787 and a coefficient of determination ($R^2_{x_1y}$) of 0.619; (2) there was a positive and significant effect of X2 on Y, with a correlation value (r_{x_2y}) of 0.457 and a coefficient of determination ($R^2_{x_2y}$) of 0.209; and (3) there was a positive and significant combined effect of X1 and X2 on Y, with a correlation value ($R_{y(1,2)}$) of 0.803 and a coefficient of determination ($R^2_{y(1,2)}$) of 0.645.

1. Introduction

Health is a basic human need that has a major impact on various aspects of life. According to Law of the Republic of Indonesia Number 23 of 1992, health refers to optimal physical, mental, and social conditions, allowing individuals to be more active socially and economically. Comprehensive understanding and attention to health can improve the quality of life. Therefore, maintaining health seems to be a long-term investment for individuals and society. The central and regional governments strive to provide health infrastructure in accordance with the policies stipulated in the Law of the Republic of Indonesia Number 36 of 2009 concerning Health.

Then, health facilities become an integral part of fulfilling basic health rights. Based on Republic of Indonesia Regulation Number 47 Article 11 of 2016 concerning Health Service Facilities, district/city governments are required to provide at least one health center in each sub-district. The establishment of a health unit should be based on some aspects such as service needs, population, area, and accessibility thus allowing all levels of society to visit it. Health centers are expected to become professional health service institutions focusing on

improving quality, being innovative, and meeting patient needs and satisfaction (Radito, 2014).

Gunungkidul Regency is the largest area in the Special Region of Yogyakarta Province, covering an area of 1,431.42 km² or around 45.69% of the province. This regency is inhabited by 747,161 people, with an average population density of 503.02 people/km². From 2020 to 2022, the Life Expectancy Rate of Gunungkidul Regency has always been below the average of that of the Special Region of Yogyakarta. In 2022, the rate reached 74.23%, placing this regency in fourth place out of five regencies in DIY (BPS Indonesia, 2024). This condition somehow needs concerns from the government to improve community welfare and design better strategies to meet the expectations and needs of the society

According to Arianto (2018), service quality is the ability to meet needs, standards, and timeliness in meeting customer expectations. Quality service is able to provide satisfaction to service users. Meanwhile, satisfaction, according to Kotler (2016), is measured by customer opinion after comparing the performance or results received with their expectations. On the other hand, dissatisfaction will encourage patients to have complaints regarding the services received, which reflects the mismatch between expectations and the patient's actual experience of health services.

Based on the results of observations at the Gunungkidul Regency Health Center UPT, it was found that Puskesmas Wonosari II experienced a significant increase in patient complaints. Although this Health Center has achieved *Paripurna* (Excellent) accreditation, this does not guarantee the satisfaction of all patients with the services provided. It is known that the facilities at Puskesmas Wonosari II are considered inadequate to provide services to patients. Several problems are seen, such as, examination rooms that have not been able to maintain privacy properly so that personal information between patients and health workers has the potential to be heard by others. Then, limited waiting space causes patient discomfort because of minimal air circulation. In addition, there is a queue of patients because the registration and drug collection service areas have not been separated, even though ideally these two services are in different areas with sufficient number of bench for people to wait. At last, the limited parking space made visitors to park their vehicles on the side of the road and others had to share with guests of the Wonosari Village Hall.

Patients also complained about the quality of service at the dental care unit where those who had been queuing for a long time could not receive service due to equipment damage. The registration officers were unfriendly while interacting with patients, especially in the way they communicated. The queue was also too long, with a registration waiting time that could reach more than an hour because the online registration system was not in use, so patients had to physically queue. In addition, complaints were submitted regarding the lack of explanation of service procedures, especially for referral letter services that were not differentiated from general patients, which ultimately caused waiting times to become longer. The following is the number of patient complaints at UPT Puskesmas Wonosari II.

Figure 1. The number of Patients' Complaint at Puskemas Wonosari II
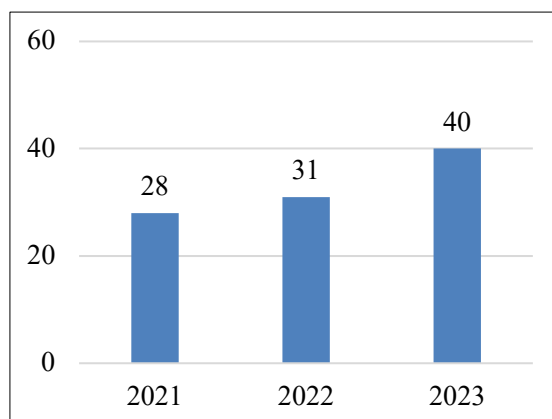
The histogram above shows an increase in the number of patient complaints from 2021 to 2023. According to Lesmana (2021), complaints submitted by patients are an indicator of dissatisfaction with health services. According to Oktaviani et al. (2024), in providing quality services, health centers must consistently maintain service quality standards with adequate facilities. Tjiptono (2016) explains that facilities include physical infrastructure that must be available before services are provided, and each facility plays an important role in facilitating service delivery and increasing patient satisfaction. The goal is to meet patient expectations and needs, which will ultimately increase their satisfaction.

Based on the explanation above, several problems that can be identified are an increase in the number of patient complaints over the past three years, limited facilities, and low quality of service that leads to patient dissatisfaction. Analysis of patient satisfaction is important because the results can be used as a basis for consideration for decision making, measurement, and continuous improvement for Puskesmas Wonosari II. Therefore, further research is needed on "The Impacts of Facilities and Service Quality on Customer Satisfaction at Puskesmas Wonosari II".

2. Method

In this study, the quantitative method with an ex post facto approach was employed. Data were collected through survey and documentation. Validity and reliability tests for the instruments were tried out at Puskesmas Karangmojo II with the consideration that they have the same characteristics. The results are considered valid when the correlation value (r count > r table) and the value is positive with (sig a = 0.05), and r table 0.361 was obtained. It is shown that there are 8 valid items while 1 item is invalid. Meanwhile, the facility variable consists of 9 valid statement items and the service quality variable contains 14 valid statement items and 1 invalid item. Based on the reliability test, the Croncach Alpha value of the facility variable is 0.808, the service quality variable is 0.803 and the patient satisfaction variable is 0.802 indicating that all variables are declared reliable. The data analysis technique used is data analysis through descriptive analysis, classical assumption testing and hypothesis testing.

The population in this study involved patients who used health services in January - July 2024. Non-probability with a purposive sampling method was used in this study. Based on the calculation, the number of samples taken is 100 respondents.
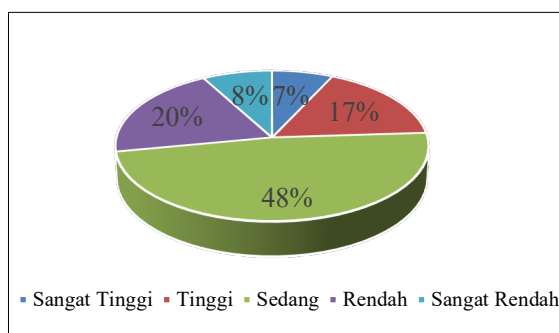
3. Results and Discussion

3.1 Results

The results of the analysis show that the highest value is 35.00 and the lowest value is 24.00, with a mean value of 31.20, a median of 31.00, and a standard deviation of 2.20. These data are then presented in the form of a frequency table in Table 1 below.

Table 1. Frequency Distribution of Patients' Satisfaction

No	Interval	Frequency
1	20 -21	0
2	22 – 23	0
3	24 - 25	1
4	26 – 27	7
5	28 – 29	6
6	30 – 31	52
7	32 - 33	15
8	34 - 35	19
	Total	100

Information on Table 1 is then shown in the pie chart below.

Figure 2. Pie Chart of Patient Satisfaction Level

The pie chart above shows that the aspect of patient satisfaction tends to be in the in the moderate category (48%).
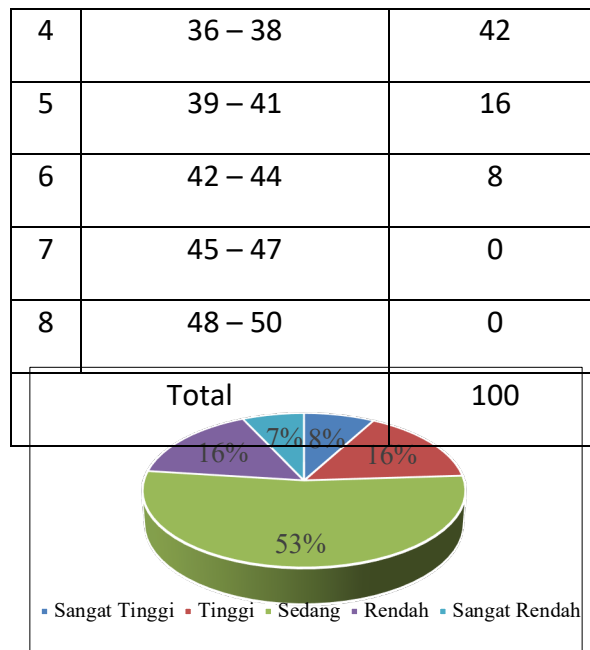
Facility

The results of the analysis show that the highest value is 43.00, and the lowest value is 27.00, with a mean value of 36.35, a median of 36.00, and a standard deviation of 3.32. The data are then presented in the form of a frequency table listed in Table 2.

Table 2. Frequency Distribution of the Aspect of Facility

No	Interval	Frequency
1	27 – 29	4
2	30 – 32	5
3	33 – 35	25

4	36 – 38	42
5	39 – 41	16
6	42 – 44	8
7	45 – 47	0
8	48 – 50	0
Total		100

The then shown in

Figure 3 Pie Puskesmas Facility

information in Table 2 is the pie chart below.

Chart of Patient

The pie chart above shows that the tends to be in the Puskemas Facility moderate category (48%).
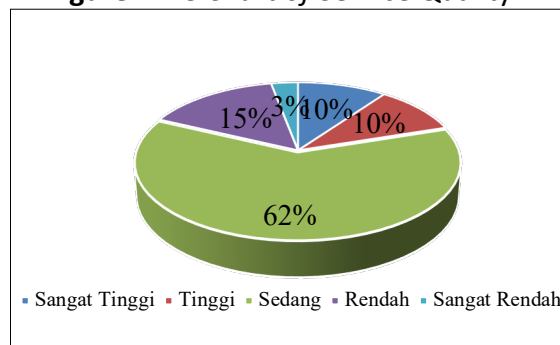
Service Quality

The results of the analysis show that the highest value is 66.00, and the lowest value is 47.00. Meanwhile, the mean is 56.73, the median is 56.00, and the standard deviation is 3.20. The data is presented in the form of the following frequency table:

Table 3 Frequency Distribution of the Aspect of Service Quality

No	Interval	Frequency
1	47 - 49	2
2	50 – 52	3
3	53 - 55	13
4	56 – 58	62
5	59 – 61	10
6	62 – 64	7
7	65 - 67	3
8	68 – 70	0
Total		100

The information in Table 3 is then illustrated in the form of a pie chart presented in Figure 4 below.

Figure 4 *Pie Chart of* Service Quality

Based on the pie chart above, it shows that the service quality variable tends to be in the moderate category, namely (62%).

The Effects of Facility on Patient Satisfaction

Based on the results of simple regression analysis, X1 has a positive and significant effect on Y. The coefficient of determination (R2x1y) of 0.619 represents that facilities have an influence on Patient Satisfaction of 61.9% while 38.1% is influenced by other factors. Research conducted by Netriadi et al. (2021) supports this finding, which shows that facilities have a positive and significant effect on patient satisfaction. If Puskesmas can provide facilities according to patient needs, this will have an impact on increasing the number of visits. Adequate facilities in health services play an important role in determining the level of patient satisfaction. In the context of health services, facilities include physical infrastructure, medical equipment, and environmental comfort, such as cleanliness and accessibility. When the facilities provided meet patient needs, they tend to feel more comfortable and satisfied with the services provided. Furthermore, good facilities not only contribute to patient satisfaction but also boost their trust to the health institutions. Satisfied patients tend to recommend services to others and return for treatment in the future. Therefore, it is important for health management to conduct periodic evaluations of existing facilities and make necessary improvements to meet patient expectations.

The Effects of Service Quality on Patient Satisfaction

Based on the results of simple regression analysis, X2 has a positive and significant effect on Y. The coefficient of determination (R2x1y) of 0.209 means that Service Quality has an effect on Patient Satisfaction by 20.9%, while 79.1% is influenced by other factors. Research by Sari (2020) supports this finding as it shows that there is a positive and significant effect of service quality on patient satisfaction. Good service quality is closely related to patient satisfaction, thus encouraging the Health Center to continue to provide the best service. This allows the Health Center to better understand the expectations and needs of visitors, so that it can increase their satisfaction. Service quality covers various aspects, such as the skills and attitudes of medical personnel, speed of service, and effective communication between patients and health workers. When patients receive quality service, they tend to feel satisfied and believe that their needs are being met well. Therefore, it is important for health management to continue to improve the quality of service by participating medical training and developing more efficient systems.

The Effects of Facilities and Service Quality on Patient Satisfaction

Based on the results of multiple regression analysis, X1 and X2 simultaneously have a positive and significant effect on Y. The coefficient of determination (R2x1y) of 0.645 means that Facilities and Service Quality simultaneously have an effect on Patient Satisfaction of 64.5%, while 35.5% is influenced by other factors. Research by Monim (2022), Widia Sari & Siska (2023), and Oktaviani et al. (2024) supports this finding. It was found that that facilities and service quality have a positive and significant effect on patient satisfaction. In addition to increasing patient satisfaction, improving facilities and service quality at the Health Center also contributes to improving public health and welfare, strengthening the health system, and creating a sustainable positive impact. The combination of good facilities and excellent service quality can create an environment that supports a positive experience for patients. Therefore, it is important for health institutions to pay attention to both aspects simultaneously. Improving the quality of service and adequate facilities will create a better experience for patients, which in turn can increase loyalty and trust.

3.2 Discussion

The results of the study show that the level of patient satisfaction was in the moderate category, with an average value of 31.20, a median of 31.00, and a standard deviation of 2.20. This phenomenon can be explained through several analytical factors. First, this result may be due to variations in patient perceptions of the quality of services and facilities received. Some patients may have realistic expectations according to the health center facilities, while others have higher expectations because they compare services with other health facilities. Demographic factors, such as age, education, and previous experience with health services, can indeed influence perceptions of satisfaction.

Besides, the concentration of data in the moderate category indicates partial success in meeting patient needs, but has not reached the optimal level. This can occur because there are still gaps in the implementation of services, such as a lack of skilled medical personnel or limitations of certain facilities. For example, if the health center experiences a shortage of medical equipment or inadequate waiting rooms, this can reduce patient comfort, even though basic services have been met. Thus, these results highlight the need for improvement in the management of facilities and human resources.

In terms of facilities, the mean value is 36.35 with the highest frequency in the interval 36–38 indicates that most patients feel that the facilities are sufficient for their needs. However, the standard deviation of 3.32 indicates a disparity in perception among patients. This imbalance may be caused by differences in accessibility or conditions of facilities in various health center areas. For example, patients who get better facilities (such as a comfortable waiting room or more complete medical equipment) tend to give more positive assessments than patients who face limited facilities. This situation indicates that the distribution of resources was not fully equal, leading to inconsistent experiences for patients.

Service quality, with a mean value of 56.73 and a standard deviation of 3.20 show that the majority of patients are quite satisfied with the competence and attitude of medical personnel. However, human factors, such as communication skills and the empathy shown by medical personnel, are critical factors that influence satisfaction. When medical personnel are able to interact effectively and show empathy, patients tend to feel appreciated, which has a positive impact on satisfaction levels. Conversely, the merely

transactional communication can lead to negative perceptions, even though technically the service has met the standards.

Simultaneously, the influence of facilities and service quality of 64.5% on patient satisfaction indicates that these two aspects complement each other. When facilities are adequate, medical personnel can provide more optimal services, and patients feel more comfortable. Conversely, inadequate facilities can limit the effectiveness of services even though medical personnel have worked optimally. This shows that efforts to improve facilities must be carried out hand in hand with the development of service quality. If one aspect is neglected, the positive impact on patient satisfaction will be limited.

The results of this study indicate the importance of a systemic approach in health service management. Health centres must be able to identify patient needs specifically and sustainably. Ensuring that facilities and medical personnel training are well managed may lead to real improvements. It is also important to truly address patient needs and create a consistent experience, so patient satisfaction levels may increase.

4. Conclusion

a. The results of the study show a positive and significant influence between X1 on Y with a value of (rx1y) of 0.787 and a value of (R2x1y) of 0.619. This means that the facility contributes to patient satisfaction by 61.9%, while 38.1% is influenced by other factors.

b. The results of the study show a positive and significant influence between X2 on Y with a value of (rx1y) of 0.457 and a value of (R2x1y) of 0.209. This means that service quality influences patient satisfaction by 20.9%, while 79.1% is influenced by other factors.

c. The results of the study show a positive and significant influence between X1 and X2 simultaneously on Y with a value of (rx1y) of 0.803 and a value of (R2x1y) of 0.645. This shows that the influence of both aspects is 64.5%, while 35.5% is influenced by other factors.

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