

# The Effect of Service Quality on Patient Satisfaction of Olak Kemang Jambi Health Center

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## ABSTRACT

Patient satisfaction is an important indicator of the quality of health services, it is crucial to ensure the sustainability of medical services at the health center. The author aims to analyze the factors that influence outpatient satisfaction at the Puskesmas Olak Kemang Jambi City during 2024. This study used a quantitative method with a cross-sectional design. The average outpatient population per month was 503 people, and a sample of 295 people was selected using the Lemeshow formula with purposive sampling technique. Data analysis included univariate analysis, bivariate analysis with chi-square test, and multivariate analysis with multiple logistic regression. The results showed that physical evidence/manifestation, reliability, responsiveness, and assurance significantly influenced outpatient satisfaction at the puskesmas, while the empathy dimension did not. This study underscores the impact of physical evidence, reliability, responsiveness, and assurance on outpatient satisfaction. The reliability variable, in particular, played a dominant role, with patients who positively rated the reliability of medical personnel 5.4 times more likely to be satisfied than those who did not. It is recommended that Olak Kemang Polyclinic in Jambi City conduct a comprehensive assessment, improve service reliability and responsiveness, and strengthen service assurance to increase patient satisfaction.

**Keywords :** Patient, Polyclinic, Puskesmas, Satisfaction

## INTRODUCTION

The Community Health Center (Puskesmas) is a part of the health services that serves as a main pillar in the field of primary health care in Indonesia. The community health center should provide better services in accordance with the potential emergence of health issues that may arise in a particular area in the future (Azwar,2020). The services of community

health centers can be assessed by the improvement in the quality and standard of care if they can reach various geographic sectors, extending into remote areas, which becomes a key aspect of initiatives to enhance public health standards (Muninjaya, 2019).

The quality of healthcare services plays a crucial role in patient satisfaction, with a tendency for patients to return to healthcare facilities that can provide service quality that meets their expectations (Asdi, 2020). Patient satisfaction is a perspective on the expectations that have been met, becoming a priority indicator for healthcare service standards and ensuring the continuity of services at community health centers. High-quality services play a crucial role in improving the health status of the community in operational areas by providing a satisfying experience for patients after receiving care and health services at the community health center (Sulaeman, 2020).

The aspect of patient satisfaction is an indicator of the success of medical services and reflects changes in the healthcare framework as expected. It is also a good indicator of the positive relationship that is established between medical staff and patients (Pohan, 2018). Measuring patient satisfaction serves as an evaluation tool that will later become the basis for decision-making in changes to the healthcare service system and an indicator of the success of a quality human resource management system (Asdi, 2020). This condition can minimize the emergence of complaints regarding service dissatisfaction and provide patients with a sense of satisfaction with the output or results delivered (Sondakh et al., 2019).

The criticism given regarding patient dissatisfaction can vary due to the different perspectives of patients on the services provided, especially in medical service situations. Community health centers play an important role as they are the most accessible healthcare service for the general public. Services at the polyclinic have become the main source of complaints often voiced by the community or patients when visiting the community health center (Tumuber et al., 2019).

Based on the research conducted by the Ministry of State for Administrative Reform, supported by the Government of the Federal Republic of Germany through the Gesellschaft für Technische Zusammenarbeit (GTZ) in collaboration with the Gresik Regency Authority, a study was carried out on patients at the Dudusampeyan health center in Gresik Regency involving 2,246 individuals. According to the results obtained from this survey, there were a total of 9,744 complaints categorized into 55 different types of grievances. The tendency of the community to complain about dissatisfaction with the long waiting times at the Puskesmas counters. In addition, there are complaints about the unavailability of on-call doctors and services not being provided according to schedule. The unwelcoming behavior

of the community health center staff and the inefficiency in explaining patient diagnoses have become the main complaints often voiced by the public visiting the health center, impacting their dissatisfaction.

The service quality indicator is formulated using the SERVQUAL method proposed by Parasuraman, Zeithaml, and Berry. Based on this theory, several factors influence patient satisfaction, including: tangible evidence, reliability, responsiveness, assurance, and empathy (Asdi, 2020; Parasuraman et al., 1988, 1991).

The importance of having a comprehensive understanding of service quality indicators greatly impacts patient satisfaction. It serves as an important determinant in the dynamics of the relationship between patients and healthcare providers, as well as the continuity of healthcare delivery. By understanding the indicators that influence patient satisfaction levels, healthcare institutions can utilize these insights for operational outcome assessment, in addition to facilitating innovation in service delivery and implementing modifications to the healthcare system and its overall quality, thereby guiding the efficacy of human resource management practices within the healthcare sector. Improved health services, in line with patient expectations, have the potential to drive improvements in the health status of people within the operational area. In addition, an understanding of the dimensions that influence patient satisfaction may act as a motivating factor for patients to revisit health facilities or to increase the inflow of new patients seeking services.

Based on the research conducted by Effendi and Junita (2020) at the UPTD Puskesmas Mutiara, from a total of 57 samples, the results regarding patient satisfaction were reviewed, concluding the results on the following factors: responsiveness 81.75%, assurance 81.92%, empathy 80.52%, and tangibles 77.77%, with an overall satisfaction level of 80.79%, which falls into the satisfied category (Effendi & Junita, 2020). Then the research by Suprpto (2020) states that the indicators of patient satisfaction are: availability of service, responsiveness of service, and professionalism of service (Suprpto, 2020).

Through the literature review above, the researcher raised the title of 'The Effect of Service Quality on Patient Satisfaction at Poliklinik Olak Kemang Health Center, Jambi City' with a research focus on knowing the effect of the dimensions of service quality on patient satisfaction to see the success of medical service delivery and describe changes in the health service framework as expected.

## **LITERATURE REVIEW**

The Institute of Medicine defines the quality of healthcare as the extent to which healthcare services improve the likelihood of achieving desired outcomes, in accordance with current professional knowledge and capabilities (Giardino et al., 2021; Spath, 2022). This definition emphasizes the availability of technical performance and up-to-date knowledge in measuring the quality of healthcare services (Upadhyai et al., 2019). In the context of healthcare, the quality of healthcare refers to the extent to which healthcare providers can deliver services that are safe, effective, and provide a good experience for patients (Swanwick & Vaux, 2020).

According to Parasuraman, Zeithaml, and Berry (1985), service quality has 10 dimensions: reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding, and physical evidence (Parasuraman et al., 1985). However, three years later, Parasuraman, Zeithaml, and Berry (1988) simplified the ten dimensions of service quality into five dimensions: physical evidence, reliability, responsiveness, assurance, and empathy (Parasurman et al., 1988).

Simply put, satisfaction is the feeling of happiness or dissatisfaction that arises after comparing or obtaining the performance or results of a product or service with the expectations that have been set (Kotler et al., 2022). In a complex system, such as a healthcare system, satisfaction can be defined as an emotional response in expressing praise, contentment, and preferences towards a healthcare provider when they are treated well and the services provided meet their expectations (Oueida, 2021).

The quality of research has aspects that are entirely within the control of hospital management, allowing for modifications to create a positive perception of quality among consumers. This investigation aims to explain the relationship between various dimensions of quality and their impact on patient satisfaction. Thus, healthcare facility management, whether in clinics or hospitals, can identify the quality dimensions that most significantly affect overall patient satisfaction, enabling them to take steps to enhance patient satisfaction.

## **METHODS**

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quality and their impact on patient satisfaction. Thus, healthcare facility management, whether in clinics or hospitals, can identify the quality dimensions that most significantly affect overall patient satisfaction, enabling them to take steps to enhance patient satisfaction. The entire outpatient population at the Olak Kemang Community Health Center, averaging 583 people per month, serves as the population for this study. A number of criteria for the sample size were determined using the Lemeshow formula, resulting in a calculated sample size of 295 individuals, who were selected using the purposive sampling method. Data collection in this study was conducted using survey and reliability methods. In addition, the review of the data collection results was conducted univariately, bivariate using the chi-square test, and multivariate with multiple logistic regression. The inclusion criteria used for the sample are a minimum age of 21 years (adult), residing in the working area of the Olak Kemang Health Center, able to communicate in Indonesian, and willing to be a respondent. This research is submitted to the Health Research Ethics Committee of Universitas Prima Indonesia for ethical feasibility assessment. This research has been deemed ethically acceptable through the Ethical Feasibility Certificate Number 100/KEPK/UNPRI/III/2024.

## RESULTS

Table 1. Demographic Characteristics of Olak Kemang Health Center Patients

Characteristics	Total	
	Frequency	Percentage (%)
Age:		
20-40 years	78	26.4
41-60 years	196	66.4
>60 years	21	7.1
Gender:		
Man	115	39.0
Woman	180	61.0
Educatin:		
Elementary (Primary and Middle School)	62	21.0
Intermdiate (High School)	162	54.9
Higher (Collage)	71	24.1
Work:		
Self-employed	68	23.1
Civil Servant	49	16.6
Trader	66	22.4
Unemployed	39	13.2
Housewife	73	24.7
Total	295	100.0

Based on the data results in Table 1, it was found that the majority of respondents are in the age range of 41-60 years, totaling 196 patients (66.4%), while a minority are over 60 years old, totaling 21 patients (7.1%). Referring to gender, the majority of respondents are female, totaling 180 patients (61.0%), with a minority being male, totaling 155 patients (39.0%). In terms of education level, the majority of respondents have a high school education (SMA), totaling 162 patients (54.9%), with a small portion having a primary education (SD & SMP), totaling 62 patients (21.0%). Regarding occupation, most respondents are housewives, totaling 73 patients (24.7%), while a small portion are unemployed, totaling 39 patients (13.2%).

Table 2. Patient Perceptions of the Quality of Service of the Olak Kemang Health Center and Patient Satisfaction with Olak Kemang Health Center Services

Variabel	Frequency	Percentage (%)
Physical Evidance (Tangibles)		
Good	199	67,5
Not Good	96	32,5
Reliability (Reliability)		
Good	197	66,8
Not Good	98	33,2
Responsiveness (Responsiveness)		
Good	187	63,4
Not Good	108	36,6
Guarentee (Assurance)		
Good	202	68,5
Not Good	93	31,5
Empathy (Empathy)		
Good	181	61,4
Not Good	114	38,6
Patient Satisfaction		
Satisfied	185	62,7
Not Satisfied	110	37,3
Total	295	100,0

Table 3. Classification of Service Quality and Patient Satisfaction Responses

Variabel	Good	Not Good
Physical Evidance (Tangibles)	26-40	10-25
Reliability (Reliability)	26-40	10-25
Responsiveness (Responsiveness)	26-40	10-25
Guarentee (Assurance)	26-40	10-25
Empathy (Empathy)	26-40	10-25
Patient Satisfaction	51-80	20-50

Based on Table 2 and the classification of respondents' responses in Table 3, it can be seen that the majority of respondents stated that the physical evidence of the Olak Kemang Community Health Center Polyclinic in Jambi City falls into the good category, with 199 people (67.5%), while a minority considered it to be less good, totaling 96 people (32.5%). Regarding reliability, a significant majority of respondents rated the reliability of the nurses as good, with 197 people (66.8%), while a minority rated it as less good, totaling 98 people (33.2%).

Based on responsiveness, the majority of respondents stated that the nurses' responsiveness was in a good category, with 187 people (63.4%), while a minority rated it as less good, with 108 people (36.6%). In terms of assurance, most respondents indicated that the assurance at the Polyclinic of Puskesmas Olak Kemang in Jambi City was in a good category, with 202 people (68.5%), while a small portion rated it as less good, with 93 people (31.5%).

Regarding empathy, the majority of respondents stated that the nurses' empathy was in a good category, with 181 people (61.4%), while a small portion rated it as less good, with 114 people (38.6%). Based on the level of patient satisfaction with the services at the Polyclinic of the Olak Kemang Health Center in Jambi City, the majority of respondents expressed their satisfaction in the satisfied category, totaling 185 people (62.7%), while a small portion expressed dissatisfaction, totaling 110 people (37.3%).

Table 4. Relationship between Quality of Service of Olak Kemang Health Center and Patient Satisfaction of Olak Kemang Health Center

Variable	Patient Satisfaction						p
	Satisfied		Less Satisfied		Total		
	n	%	n	%	n	%	
Physical/Real Evidence (Tangibles)							
Good	153	76,9	46	23,1	199	100	0,000
Not Good	32	33,3	64	66,7	96	100	
Reliability (Reliability)							
Good	159	80,7	38	19,3	197	100	0,000
Not Good	26	26,5	72	73,5	98	100	
Responsiveness (Responsiveness)							
Good	133	71,1	54	28,9	187	100	0,008
Not Good	52	48,1	56	51,9	108	100	
Guarantee (Assurance)							
Good	158	78,2	44	21,8	202	100	0,000
Not Good	27	29,0	66	71,0	93	100	
Empathy (Empathy)							
Good	130	71,8	51	28,2	181	100	0,008
Not Good	55	48,2	59	51,8	114	100	
Total	185	62,7	110	37,3	295	100	

Table 4 shows the cross-tabulation between the independent variables (tangible evidence, reliability, responsiveness, assurance, and empathy) and the dependent variable (patient satisfaction). It appears that all dimensions of service quality are related to patient satisfaction ( $p < 0.05$ ). Since all variables have a chi-square significance value smaller than 0.25, all variables can be included in the multivariate analysis (multiple logistic regression).

Table 5. The Effect of Service Quality Dimensions of the Olak Kemang Health Center on Patient Satisfaction of the Olak Kemang Health Center

Variabel	B	Sig.	Exp(B)	95% CI Exp(B)
Physical Evidence (Tangibles)	1,347	0,000	3,844	2,032-7,271
Reliability (Reliability)	1,690	0,000	5,421	2,789-10,535
Responsiveness (Responsiveness)	0,884	0,006	2,420	1,287-4,547
Guarentee (Assurance)	1,252	0,000	3,497	1,781-6,865
Constant	-7,566	0,000		



In Table 5, it can be seen that only four independent variables have a significance level of  $<0.05$ , namely physical evidence (tangibles) ( $p<0.001$ ), reliability ( $p<0.001$ ), responsiveness ( $p<0.01$ ), and assurance ( $p<0.001$ ). Meanwhile, empathy does not have a significant impact on patient satisfaction with a significance value of 0.774 ( $p>0.05$ ). Of the four variables that have a significant influence, reliability is the most impactful variable on patient satisfaction (coefficient B: 1.690; OR: 5.421). This means that if the other three variables remain constant, and reliability is increased by one point, patient satisfaction will increase by 1.690, with the likelihood of this increase being 5.421 times greater.

## DISCUSSION

The research conducted found that tangible evidence has a positive influence on the emergence of satisfaction among outpatient patients visiting the Olak Kemang Community Health Center in Jambi City ( $p<0.001$ , OR:3.844). This finding indicates that the tangible evidence at the Olak Kemang Community Health Center is categorized as good, with a likelihood of being 3.8 times higher than patients who rated the tangible evidence as poor.

Following the research results by Tamba (2022) at the Integrated Heart Center of Adam Malik Hospital in Medan City, it was found that in the data analysis, multiple linear regression methods, t-tests, F-tests, and determinant tests were used. Referring to the results of the partial test (t), it can be concluded that tangibles have a positive and significant impact on patient satisfaction (Tamba, 2022).

According to the research findings, it was shown that participants who rated the physical evidence/tangibles of the Olak Kemang Community Health Center Polyclinic in Jambi City as good exhibited a high level of satisfaction. The majority of patients felt satisfied with the condition of the building at the Olak Kemang Community Health Center Polyclinic, which made them feel safe and comfortable, tidy, with well-maintained medical equipment. Conversely, patients who felt less satisfied tended to rate the physical evidence/tangibles at the Olak Kemang Community Health Center Polyclinic as inadequate.

Based on the data obtained, it is stated that the reliability variable has a significant impact on the level of satisfaction of outpatient patients visiting the Polyclinic of Puskesmas Olak Kemang in Jambi City,  $p = 0.000 < 0.05$ . The variable that most significantly affects the satisfaction of outpatient patients visiting the Polyclinic of Puskesmas Olak Kemang is the

reliability variable, with an OR value of 5.421, meaning that patients who rate the reliability of medical staff as good have a likelihood of feeling satisfied that is 5.4 times greater compared to patients who rate the reliability of medical staff as poor.

Supported by the research findings of Mahmud (2022) at Ibnu Sina Hospital Makassar, outpatient patients obtained results indicating that the t-test for the reliability variable yielded a t-value of 2.656 with a significance level of 0.009, which states that the null hypothesis ( $H_0$ ) is rejected and the alternative hypothesis ( $H_a$ ) is accepted (Mahmud, 2022). A positive value in the regression coefficient indicates that reliability has a positive and significant impact on patient satisfaction.

According to researchers, this study shows that the reliability of medical staff in providing services at the Olak Kemang Community Health Center in Jambi City contributes to patient satisfaction levels and is the most dominant factor. Patient satisfaction with this service can encourage patients to return when experiencing health complaints, whether for themselves or their family members. Factors that make patients feel satisfied include receiving medical services as promised, services that provide consistent results in line with patient expectations, and an efficient and precise medical service process at the Olak Kemang Community Health Center in Jambi City that can be relied upon according to the issues faced by the patients.

The results of the research indicate that responsiveness has a significant effect on the satisfaction of outpatient patients visiting the Polyclinic of Puskesmas Olak Kemang in Jambi City,  $p = 0.006 < 0.05$ . The responsiveness variable has an OR value of 2.420, meaning that patients express their perception of medical staff in the good category, with a likelihood of feeling satisfied being 2.4 times higher compared to patients who rate the medical staff in the less favorable category. Supporting Hasan's (2021) research conducted at the Sungai Sariaik Community Health Center in Padang Pariaman, it was found that responsiveness has a significant impact on patient satisfaction. With a total influence on responsiveness in patient satisfaction of 0.074 or 7.4%, it means that the better the responsiveness, the more it will affect the level of patient satisfaction (Hasan, 2021).

According to researchers, the results of the study indicate that this dimension of responsiveness is an important aspect of service quality in measuring the satisfaction experienced by outpatient patients visiting the Polyclinic of Puskesmas Olak Kemang in Jambi

City. Patients' expectations regarding the speed and accuracy of service tend to change over time. The inefficient response from medical staff, as reported by respondents at the Olak Kemang Community Health Center in Jambi City, includes complaints that the medical staff do not promptly respond to or attend to patients when they arrive at the health center. This condition indicates that the patient may experience delays in receiving the attention or services needed immediately upon their arrival.

Factors that make patients at the Olak Kemang Community Health Center Polyclinic in Jambi City feel satisfied regarding the responsiveness variable include the staff's quick response to patients' requests or questions, their readiness to assist patients, and the medical personnel at the Olak Kemang Polyclinic providing attention to every outpatient. Patients feel pleased with the responses from the Olak Kemang Polyclinic staff in answering the questions of outpatients who visit.

The research data supports that the assurance variable has a significant impact on the satisfaction of outpatient patients visiting the Olak Kemang Community Health Center in Jambi City,  $p = 0.000 < 0.05$ . The assurance variable has an OR value of 3.497, meaning that patients who rate assurance as good have a 3.4 times higher chance of feeling satisfied compared to patients who rate assurance as poor. In line with the research findings of Hasan (2021) at the Sungai Saria Health Center in Padang Pariaman Regency, it was found that assurance has a significant impact on patient satisfaction (Hasan, 2021). So the total influence of assurance on patient satisfaction is 9.7%, which indicates an increase in patient satisfaction.

According to researchers, these results indicate that the quality assurance of health services at the Olak Kemang Community Health Center in Jambi City has a significant impact on the satisfaction of outpatient patients. The majority of patients feel that the assurance of healthcare services provided by the medical staff during outpatient procedures contributes to their level of satisfaction. Factors that make most outpatient patients feel satisfied include the high competence of the medical staff at the clinic in providing services, adequate knowledge, ethical behavior, respect for privacy and confidentiality of information, instilling a high level of trust in patients, and the ability of the medical staff at the clinic to clearly explain your health condition and the available treatment options.

According to researchers, these results indicate that the quality Factors that make some outpatient patients less satisfied with the assurance of the Olak Kemang Community Health

Center in Jambi City include the medical staff's ineffective communication regarding the patient's health conditions and their willingness to answer questions and address patients' concerns, as well as the medical staff's failure to instill confidence in maintaining the safety and quality of medical care.

According to the research findings, it shows that the empathy variable does not have a significant effect on fulfilling the satisfaction feelings of outpatient patients visiting the Polyclinic of Puskesmas Olak Kemang in Jambi City,  $p = 0.774 < 0.05$ . This is in line with Mahmud's (2022) study on outpatient patients at Ibn Sina Hospital in Makassar, which obtained a t-test value for the empathy variable with  $t\text{-count} = 1.218$  and a significance level of 0.226 (Mahmud, 2022). Using a significance threshold of 0.05, based on the  $t\text{-table} = 1.986$ . The calculated t-value is greater than the table t-value, which means that the null hypothesis

( $H_0$ ) is accepted and the alternative hypothesis ( $H_a$ ) is rejected. With a negative regression coefficient, it indicates that empathy does not have a significant effect on patient satisfaction. This can be interpreted that healthcare workers placing their empathy towards patients to the fullest can result in patient satisfaction.

It was found in this study that the empathy variable does not have an impact on the satisfaction of outpatient patients visiting the Polyclinic of the Olak Kemang Community Health Center in Jambi City. In fact, respondents who felt satisfied tended to give positive ratings regarding the empathy of the medical staff at the clinic, while patients who felt less satisfied mostly came from the group that still considered the empathy of the medical staff to be good. Thus, it can be concluded that the presence of empathy from the medical staff at the Olak Kemang Community Health Center Clinic in Jambi City, which has been rated positively by respondents, does not significantly influence the level of satisfaction of outpatient patients who visit.

## **CONCLUSION**

Based on the study above, it is concluded that the dominant dimension of service quality has a relationship with patient satisfaction ( $p < 0.05$ ), but only the tangible evidence (tangibles) ( $p < 0.001$ ; OR: 3.844), reliability ( $p < 0.001$ ; OR: 5.421), responsiveness ( $p < 0.01$ ; OR: 2.420), and assurance ( $p < 0.001$ ; OR: 3.497) have a significant influence.

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