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Analysis of patient satisfaction with health services at Sei Berombang Labuhanbatu Health Center

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Abstract

The quality of health services is an essential factor in creating patient satisfaction and trust in health facilities. Puskesmas, as a critical health service, plays a central role in meeting the community's health needs, especially in remote areas such as Sei Berombang Labuhanbatu. However, the challenges faced by Puskesmas in providing adequate services often lead to variations in patient satisfaction levels. Lack of resources and infrastructure are barriers to improving service quality. This study aims to analyze the effect of health service quality dimensions on patient satisfaction at Puskesmas Sei Berombang in 2024. The method used was a quantitative approach with a cross-sectional analytic design involving 160 respondents from a population of 256 patients selected incidentally. Data were collected through interviews and online questionnaires and then analyzed using the Chi-Square test and multiple logistic regression. The results showed that reliability, assurance, tangibles, responsiveness, and empathy had a significant relationship with patient satisfaction, with p-values of 0.001, 0.008, 0.009, 0.002, and 0.003, respectively. The empathy variable has the most important influence on patient satisfaction, with an odds ratio (OR) of 8.256, indicating that increased empathy in service increases the chance of patient satisfaction by more than eight times. These findings highlight the importance of improving the quality of health services, especially empathy, to achieve optimal patient satisfaction. Therefore, service quality improvement strategies are recommended to focus on all five quality dimensions to effectively improve patient satisfaction in community health centers.

Keywords: Patient satisfaction; Service quality; Health center; Empathy

1. Introduction

Patient satisfaction is a key indicator of the quality of health services, reflecting the extent to which services meet expectations. Factors such as effectiveness, affordability, and empathy affect satisfaction. Dissatisfaction indicates the need for improvement (Mundung et al., 2019). Measuring patient satisfaction helps health facilities identify areas of improvement and ensure services meet expected standards (Rianasari, 2019). Patient satisfaction is calculated by comparing expectations with the experience received. A high level of satisfaction indicates service as expected, while low satisfaction suggests the need for improvement (Sujarwo & Subekti, 2019). Patient loyalty to the health center is formed from satisfaction with the quality of service—such as interaction, speed, facilities, and support. This satisfaction creates a positive experience that encourages patients to return and recommend puskesmas services (Marzuq & Andriani, 2022). Conversely, if the service does not meet expectations, the patient may look for alternatives, lowering the loyalty level (Rerung et al., 2021). Patient dissatisfaction is negatively impacted by spreading bad experiences, affecting reputation, and lowering public trust, which can decrease patient numbers and financial losses (Imran et al., 2021). Handle patient complaints and make essential improvements to maintain reputation and quality of service. Increasing patient satisfaction is key to loyalty, strengthening relationships, and building a good reputation in the health center (Maharani et al., 2023); (Engkus, 2019). Based on the Regulation of the Ministry of Health of the Republic of

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Indonesia in 2016, the minimum standard of patient satisfaction must be above 95%. Services with satisfaction below this number do not meet the standard (Ali et al., 2021). The quality of service is assessed based on the suitability of patient expectations and the services received, using *the SERVQUAL concept* with five dimensions (physical evidence, reliability, responsiveness, guarantee, and empathy). Improvements must be made if the satisfaction index is below the standard (Hasanah et al., 2020).

Quality services at health centers are essential to increase patient satisfaction and loyalty, encouraging them to remain loyal and recommend services (Andi Rizky Amaliah, 2021). High quality indicates service effectiveness, and dissatisfaction suggests a problem that needs to be fixed (& Sitio, 2020). Previous research has shown a significant influence of service quality on patient satisfaction, such as influential physical evidence at the Langsa Lama Health Center (Meutia 2019) and a significance value of 0.000 (Meutia & Andiny, 2019). Mundung (2019) also reported the significant effect of physical evidence on patient satisfaction in hospitals, with a significance value of 0.000 and a t-count of 3.791 (Mundung et al. 2019). Based on the above background, the researcher is interested in researching and analyzing the influence of the quality of health services on patient satisfaction at the Sei Berombang Labuhanbatu Health Center in 2024.

2. Research methods

This study uses a quantitative approach and statistical analysis based on the philosophy of positivism. Data is collected through instruments to test hypotheses. The study's design is an analysis with a cross-sectional approach that compares two variables simultaneously. The research location is the Sei Berombang Labuhanbatu Health Center, with the research time from September to completion in 2024. The population consisted of 256 patient visits over the past three months, and the sample was determined with the Slovin formula, resulting in a minimum of 160 people through incidental techniques. Primary data was collected through interviews and questionnaires on Google Forms, while secondary data came from health center records. Data analysis included univariate analysis, bivariate using the Chi-Square test, and multivariate with multiple logistic regression to determine the influence of independent variables on dependents, with the best model determined by *p-value* (p ≤ 0.05). This research uses ethical principles, namely utility, confidentiality, and justice, and it obtains an honest license with number 047/KEPK/UNPRI/IX/2024.

3. Results and discussion

Table 1 Overview of Respondent Characteristics at the Sei Berombang Labuhanbatu Health Center in 2024

Category	Sub-Category	n	Percentage
Age	≤ 20 Years	10	6%
	21-30 Years	40	25%
	31-40 Years	30	19%
	≥ 41 years	80	50%
	Total	160	100%
Gender	Male	68	43%
	Woman	92	58%
	Total	160	100%
Education	No School	10	6%
	SD	16	10%
	SMP	24	15%
	SMA	30	19%
	D3	5	3%
	S1	65	41%
	Total	160	100%

Table 1. describes the characteristics of 160 respondents at the Sei Berombang Labuhanbatu Health Center in 2024. The majority of respondents were over 41 years old (80 people, 50%), followed by the 21-30 years old group (40 people, 25%), 31-40 years old (30 people, 19%), and under 20 years old (10 people, 6%). Regarding gender, women dominated, with 92 people (58%), while men dominated 68 people (43%). The education level of the respondents consisted of 65 people (41%) with S1 degrees, 30 people (19%) in high school, 24 people (15%) in junior high school, 16 people (10%) in elementary school, ten people (6%) not attending school, and five people (3%) D3. Most visitors to health centers are educated individuals, which can affect their awareness of health services.

Table 2 Chi-Square *Test Table* of Research Variables Analysis of Patient Satisfaction with Health Services at the Sei Berombang Labuhanbatu Health Center in 2024

Category	Sub-Category	Service Satisfaction		Total	df	p-value
		Satisfied	Dissatisfied			
Reliability	Good	95	10	105	1	0.001
		59%	6%	66%		
	Bad	30	25	55		
		19%	16%	34%		
	Total	125	35	160		
		78%	22%	100%		
Jaminan (*Assurance*)	Good	70	15	85	1	0.008
		44%	9%	53%		
	Bad	55	20	75		
		34%	13%	47%		
	Total	125	35	160		
		78%	22%	100%		
Displays (*Tangibles*)	Good	80	20	100	1	0.009
		50%	13%	63%		
	Bad	45	15	60		
		28%	9%	38%		
	Total	125	35	160		
		78%	22%	100%		
Data Responsiveness	Good	85	15	100	1	0.002
		53%	9%	63%		
	Bad	40	20	60		
		25%	13%	38%		
	Total	125	35	160		
		78%	22%	100%		
Empathy (Empathy)	Good	90	10	100	1	0.003
		56%	6%	63%		
	Bad	35	25	60		
		22%	16%	38%		
	Total	125	35	160		
		78%	22%	100%		

Table 2 presents the Chi-Square test results to analyze patient satisfaction at the Sei Berombang Labuhanbatu Health Center in 2024 with 160 respondents. In the reliability variable, of the 105 respondents who received good service, 95 people (59%) were satisfied, while ten people (6%) were dissatisfied. For poor service, 30 out of 55 respondents (19%) were satisfied. A P-value of 0.001 indicates a significant relationship. This finding aligns with the research of Komaling (2023), which also found a significant relationship between service quality and patient satisfaction with a p-value of 0.015 (Komaling, 2023). Puskesmas managers need to improve the quality of services to maintain and increase patient satisfaction, an indicator of the success of health services. Steps that can be taken include regular training for medical personnel, ensuring infrastructure and equipment standards, and gathering patient feedback for improvement. The development of standard operating procedures and improved communication between patients and healthcare workers are also significant. These efforts will maintain patient satisfaction, create loyalty, and enhance the reputation and number of patients served, supporting the achievement of public health goals.

For the guarantee variable, of the 85 respondents who felt they received good service, 70 people (44%) were satisfied, while of the 55 respondents who were dissatisfied, 34% were satisfied. The p-value of 0.008 also shows a significant relationship. This finding aligns with Meutia (2019), who reported a p-value of 0.001 for a substantial effect of assurance on patient satisfaction at the Langsa Lama Health Center (Meutia & Andiny, 2019). In health services, assurance includes health workers' reliability, skills, and knowledge. When patients feel that the service is reliable and the staff is competent, they are more satisfied, creating a sense of security and trust.

These findings emphasize the importance of the guarantee aspect in increasing patient satisfaction. Health centers must provide high-quality services, conduct ongoing training for medical personnel, and improve communication between staff and patients to meet their expectations. Puskesmas should also identify areas to improve service assurance, such as officers' communication skills and standard operating procedures, and provide clear information about services. Focusing on enhancing insurance will positively impact patient satisfaction and the reputation of the Health Center.

In the tangibles, out of 100 respondents who rated it well, 80 people (50%) were satisfied, while out of 60 respondents who rated it poorly, 45 people (28%) were satisfied. A p-value of 0.009 indicates a significant relationship. These findings underscore the importance of physical aspects in health services, including cleanliness and comfort. Ilmianti's research (2022) also supports this finding, stating a significant influence of physical appearance on patient satisfaction at the Kolakaasi Health Center with a p-value of 0.004 (Ilmianti et al., 2022). Therefore, Puskesmas needs to improve display elements, such as the physical condition of the waiting room, the cleanliness of facilities, and the accessibility of information. A comfortable and professional environment will make patients feel valued. Providing adequate facilities like comfy seating and sanitation will contribute to a positive patient experience. Focusing on the display element increases satisfaction and the perception of service quality, encouraging patients to return to using Puskesmas services.

For the responsiveness variable, 85 out of 100 respondents (53%) were satisfied, while out of 60 respondents who were dissatisfied, 40 people (25%) were satisfied. A P-value of 0.002 indicates a significant relationship. Al Rajab's research (2023) also supports this finding, stating a substantial relationship between responsiveness and patient satisfaction with a p-value of 0.046 (Al Rajab & Andilah, 2023). These findings emphasize the importance of the speed and precision of healthcare workers' responses to patient needs, which can increase satisfaction. Therefore, increasing responsiveness is highly recommended to improve patient satisfaction at the Health Center.

Finally, on the empathy variable, out of 100 respondents who rated it well, 90 people (56%) were satisfied, while out of 60 respondents who rated it inadequate, 35 (22%) were satisfied. A p-value of 0.003 indicates a significant relationship. Safitri's (2022) research supports this finding, with a p-value of 0.043, which shows a meaningful relationship between empathy and patient satisfaction in Puskesmas (Safitri et al., 2022).

These results confirm the importance of empathy in health services. When healthcare workers show care and concern, this can reduce anxiety and improve patient comfort. The empathy variable had the highest odds ratio (OR), which was 8,256 (Table 3), meaning that patients who felt empathy were more than eight times more likely to feel satisfied than those who did not. Empathy is not only crucial in direct interactions but also in a holistic approach to healthcare. Understanding patients' physical and emotional condition allows healthcare workers to be more responsive. Empathic service also encourages patient involvement in treatment, speeding up recovery. Empathy is a key factor in patient satisfaction at the Sei Berombang Labuhanbatu Health Center, so health institutions must invest in empathy skills training for healthcare workers. By prioritizing empathy, health centers can improve the patient experience and strengthen the relationship between healthcare workers and patients, contributing to better health service quality.

Overall, all the variables tested showed a significant relationship with patient satisfaction levels, underlining the importance of these factors in health services in health centers and deserving of further testing with multivariate analysis.

Table 3 Table of Logistic Regression Test Entry Method Analysis of Patient Satisfaction Level with Health Services at the Sei Berombang Labuhanbatu Health Center in 2024

Variable	B	S.E.	Forest	df	Mr	*OR*	EXP(B)	Lower	Upper
Physical Evidence (Tangibles)	-0.195	1.023	3.014	1	0.801	0.829	0.829	0.155	4.488
Reliability	1.001	0.715	13.062	1	0.037	2.787	2.787	0.964	7.702
Responsiveness	1.111	0.713	0.960	1	0.027	3.065	3.065	1.002	9.192
Jaminan (Assurance)	1.016	1.023	3.014	1	0.055	2.743	2.743	0.903	8.454
Empathy (Empathy)	2.022	0.715	13.062	1	0.002	8.256	8.256	1.438	39.29

Based on Table 3, the most significant odds ratio (OR) variable is the empathy variable, with an *OR* of 8,256. This shows that the increase in service empathy is associated with an increase in the chance of patient satisfaction by more than eight times, making it a very influential factor in patient satisfaction at the Sei Berombang Labuhanbatu Health Center.

4. Conclusion

This study found a significant relationship between health service variables and patient satisfaction at the Sei Berombang Labuhanbatu Health Center in 2024. The reliability variables (*p-value* 0.001) and guarantee (*p-value* 0.008) showed that reliable services and a sense of security contributed to patient satisfaction. Physical appearance (tangibles) is also essential, with *a p-value* of 0.009, while responsiveness has a *p-value* of 0.002, emphasizing the importance of the speed of response of health workers. The empathy variable, with *a p-value* of 0.003 and *the highest odds ratio* of 8.256, showed that increased empathy was closely related to patient satisfaction. The main conclusion is that empathy is the most influential factor, and its improvement is expected to improve patient satisfaction significantly.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

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