
Effect of Service Quality on the utilization of Healt Center Penerokan Bajubang District Batanghari Regency

Andy Amir¹⁾, Adila Solida²⁾, Arnild Augina Mekarisce³⁾, Nurmala Sari⁴⁾

^{1,2,3,4)} Study Program Ilmu Kesehatan Masyarakat, Fakultas Kedokteran dan Ilmu Kesehatan, Universitas Jambi

*Corresponding Author

Email : andy_amir@unja.ac.id

Abstract

Utilization of Healt Center services in a region can be a reflection of public health status in the region. For 4 (four) consecutive years there was a significant decrease in the number of visits at the Panerokan Health Center, Batanghari Regency. This indicates a decrease in the quality of services at the Panerokan Health Center. This study aims to identify the influence of service quality with the utilization of Panerokan Health Center, Bajubang District, Batanghari Regency. Quantitative research using cross sectional design with a population of 1,549 people. Sample calculation using lemeshow formula, which is as many as 63 samples with accidental random sampling technique. The research instruments used questionnaire sheets, then the data were processed through data editing, data coding, data entry, data cleaning, and data processing, then analyzed univariate, bivariate with chi-square test, and multivariate with double logistic regression test. The results showed that 74.6% utilization of Healt Center included in the good category. There is a significant influence of reliability factor (p-value = 0.007), responsiveness factor (p-value = 0.003), assurance factor (p-value = 0.005), and empathy factor (p-value = 0.000) on the utilization of Healt Center Penrokan. The most dominant factor affecting the utilization of Penerokan Health Center is reliability (OR=0.023). there is the influence of reliability, responsiveness, assurance and empathy to the utilization of Panerokan Health Center. Reliability factor becomes the most dominant factor affecting the utilization of Healt Center. It is recommended that the Panerokan Healt Center conduct periodic evaluations related to the reliability of Healt Center employees in providing services that are in accordance with the provisions and increase responsibility and discipline during working hours.

Keywords: Utilization Of Health Centers, Reliability, Responsiveness, Empathy

INTRODUCTION

Healt Center as the frontline in maintaining public health into a facility that is expected to provide the best service. Healt Center, which is also the first Health Service Center for the community, should be the first facility sought by the community when they need health services. Utilization of Healt Center is an effort made by the community to maintain their health(Azwar A, 2012). Excellent and adequate health services will encourage people to always take advantage of health center services. The high or low utilization rate of Healt Center is one of the benchmarks for public health status in the region(Shao S, Wang, 2018).

In Indonesia, the trend of utilizing Healt Center services can be seen based on the fluctuating number of visits in 2017 to 2019. Utilization of Healt Center services amounted to 43.06% in 2017, then increased to 47.86% in 2017, but again decreased to 46.12% in 2019(3). In Jambi province, the trend that occurred was an increase in the number of visits as much as 42.22% in 2017 increased to 47.21% in 2018 and 48.88% in 2019. However, these conditions are different from the trends that occur in Batanghari Regency. There was a decrease in visits in 2018 which in 2017 the number of visits was 190,704 visits to 181,461 visits. The decline again occurred in 2019 to 160,561 (Central Bureau of Statistics,2019).

Panerokan health center is one of the health centers located in the Batanghari district which also experienced a decrease in visits for four consecutive years. The recorded number of Healt

Center visits in 2016 amounted to 17,389 visits, in 2017 amounted to 18,530 visits, in 2018 amounted to 19,376 visits and in 2019 amounted to 17,487 (Penerokan Health Center, 2020).

The number of visits that shows the size of Health Center utilization is a reflection of people's behavior in finding health facilities to maintain their health. Public interest in utilizing Health Center can be influenced by factors one of which is the quality factor. Quality States the level of integrity of health services carried out and can satisfy patients as service users (Tampubolon, 2019).

Based on preliminary studies conducted that there are indications of decreased performance of Penrokan Health Center Services felt by patients. Of the 10 patients interviewed, 5 of them stated that problems about the speed of Health Center officers in responding and serving patients, less friendly officers, delays in health service delivery and referral services and services that are not timely are problems that cause patients to be more likely to seek or utilize other health facilities available than by utilizing Health Center services. In Batanghari Regency there are several independent doctor clinics, mandiri midwife practices and public hospitals which are other alternatives for the community in utilizing health services that should be the attention of the Panerokan health center as the main guard who should provide the best service for the community.

The quality of Health Center services is an indicator of the community or Health Center patients in perceiving the performance of Health Center in meeting their needs and expectations for health services. The quality of service will be perceived as good if it matches or exceeds the expectations of patients who take advantage of the Health Center services. The results of several previous studies show that the utilization of Health Center services is strongly influenced by the quality of Health Center services (Gobel, 2019). The quality of health services can be measured from the measurement of 5 dimensions, namely reliability, responsiveness, assurance, empathy and physical evidence (Parasuraman, 2005). Therefore, in this study will be analyzed the influence of service quality variables with the utilization of Panerokan Health Center.

RESEARCH METHODS

The type of research used is quantitative research using cross sectional design with a population of 1,549 people. Sample calculation using lemeshow formula, which is as many as 63 samples with accidental random sampling technique. Research instruments using questionnaire sheets, then the data is processed through data editing, data coding, data entry, data cleaning, and data processing, then performed bivariate tests using Chi-square statistical tests with a significant level of 95% to determine the relationship of each independent variable with the dependent variable and multivariate tests using multiple logistic regression with a significant level of 95%.

RESULTS AND DISCUSSION

Univariate Analysis

Table 1. Frequency Distribution Of Respondent Characteristics

Variable	n	%
Gender		
Men	23	36,5
Girls	40	63,5
Education		
Not in school/not finished	2	3,2

elementary school		
Bachelor degree	5	7,9
Bachelor degree	14	22,2
High school/equivalent	32	50,8
College	10	15,9
Jobs		
Does not work	5	8,0
Self-employed/trade	12	19,0
Workers/employees	7	11,1
Farmers	31	49,2
Instructor	5	7,9
PNS	3	4,8
Amount	63	100,0

Description of the characteristics of respondents, dependent variables and Independent can be seen in the frequency distribution table of univariate analysis results. In Table 1. it is known that most of the respondents were female (63.5%), most of the respondents had high school education/equivalent (50.8%) and most of the respondents ' jobs were farmers (49.2%).

Table 2. Frequency distribution of Healt Center Penerokan utilization, reliability, responsiveness, assurance, empathy, and physical evidence.

Variable	n	%
Utilization Of Healt Center		
Good	47	74,6
Less good	16	25,4
Reliability		
Good	36	57,1
Less good	27	42,9
Quick response		
Good	41	65,1
Less good	22	34,9
Guarantee		
Good	40	63,5
Less good	23	36,5
Empathy		
Good	34	54,0
Less Good	29	46,0
Physical evidence		
Good	50	79,4
Less good	13	20,6
Amount	63	100,0

In Table 2. described that 74.6% utilization of Panerokan Health Center is included in the category of good. The percentage is greater than the utilization of Healt Center in the poor category (25.4%). Utilization of Healt Center is the use of Healt Center as a facility to meet the needs of health services by the community either individually or family, either in the form of outpatient, inpatient, as well as other activities in maintaining, improving health, preventing, curing diseases and restoring health(Azwar A, 2012). Utilization of Healt Center is categorized as good if every

need handling of health problems or public health checks always utilize the services of Health Center. This means that in this study most of the people in the Working Area of the Panerokan Health Center have used the health center as a facility to meet the needs of Health Services.

The percentage of Health Center service quality factor is 57.1% of respondents stated good reliability factor, 65.1% fast response factor stated Good, 63.5% guarantee factor stated Good, 54% empathy factor stated good and 79.4% physical evidence factor stated Good. The reliability factor is measured based on the suitability of the Health Center to carry out services according to the specified standards, including in setting the service time and explaining information about the patient's health. Quick response factor is measured based on the speed of the officer in serving the needs of patients including in terms of management of patient complaints, responding to patient suggestions and professional attitude of the officer in carrying out the task.

The guarantee factor is measured based on the security provided by the Health Center to patients while utilizing services at the Health Center. Empathy factor is seen based on the friendliness of officers in serving patients. Physical evidence factors include the facilities available at the Health Center to support service delivery. Assessment of this physical evidence includes the state of the Health Center building, the availability of clean toilets, adequate parking space and waiting room capacity that can accommodate patients well. Each frequency distribution of Service Quality Factors in Health Center Panerokan has a magnitude above 50%, meaning that most respondents stated that the service quality factor in Health Center Panerokan has been good.

Bivariate Analysis

Table 3. Effect of Health Center Panerokan utilization on reliability, responsiveness, assurance, empathy, and physical evidence.

Independent Variable	Utilization Of Health Center				Total		p-value
	Less good		Good		n	%	
	n	%	N	%			
Reliability							
Less good	12	44,4	15	55,6	27	100,0	0,007
Good	4	11,1	32	88,9	36	100,0	
Quick response							
Less good	11	50,0	11	50,0	22	100,0	0,003
Good	5	12,2	36	87,8	41	100,0	
Guarantee							
Less good	11	47,8	12	52,2	23	100,0	0,005
Good	5	12,5	35	87,5	40	100,0	
Empathy							
Less good	14	48,3	15	51,7	29	100,0	0,000
Good	2	5,9	32	94,1	34	100,0	
Physical evidence							
Less good	6	46,2	7	53,8	13	100,0	0,075
Good	10	20,0	40	80,0	50	100,0	

In the results of bivariate analysis test using chi-square test can be seen the significance of the influence of independent variables on the dependent variable. Based on the picture in Table 3. it can be seen that the utilization of good health centers is more common in respondents who stated good reliability factor (88.9%) compared with the statement of less good reliability factor (55.6%). The percentage was also found in four other factors that the utilization of good health centers occurred more in the quick response factor (87.8%), assurance (87.5%), empathy (94.1%), and

physical evidence (80%) which was stated as good compared to the statement of poor service quality factors. Each p-value with a significance limit of $p\text{-value} < 0.05$ indicates that there is a significant influence of reliability factor (0.007), responsiveness (0.003), assurance (0.005), and empathy (0.000) on the utilization of Healt Center. Meanwhile, there was no significant influence of physical evidence factor on the utilization of Healt Center (0.075).

The results of the bivariate analysis showed that for the community in the Working Area of the Panerokan Health Center, reliability, responsiveness, assurance, and empathy factors will affect the utilization rate of the Health Center. The better the four factors, the utilization of Healt Center will be better. However, it is different from the physical evidence factor that does not have a significant influence on the utilization of Healt Center. This means that the state of the Healt Center building, the availability of adequate parking or clean toilets does not have a significant influence on the community to take advantage of Panerokan Healt Center services.

This finding is in line with several previous studies that show a relationship between service quality factors and the use of Healt Center (Sofiati I, 2018). There was a significant relationship between responsiveness ($p=0.000$), reliability ($p=0.023$), assurance ($p=0.001$), and empathy ($p=0.040$) with the interest of reuse in Healt Center Teling (12). Subsequent research using spearman correlation test resulted that there was a significant relationship between physical appearance ($p=0.000$), reliability ($p=0.000$), responsiveness ($p=0.000$), assurance ($p=0.000$), empathy ($p=0.000$) and the level of utilization of dental and oral health services at Healt Center I Kemranjen (Kurnianda E, 2022).

Multivariate Analysis

At the multivariate analysis stage, the test used is multiple logistic regression using backward Wald modeling with the aim of obtaining significant variables without ignoring insignificant variables. This means that the steps in eliminating insignificant variables can still be seen because the procedure in this method is to insert all explanatory variables into the model, then gradually eliminate insignificant variables. The final step of this method is to show the variables that are significant and worthy of entering into the multiple logistic regression model. Significant variables are considered related and have a meaningful influence on the response variable (Hosmer D, 2020). The significance level used in the model significance test as well as the significance coefficient is 0.05.

Candidate Model

Table 4. Candidate multiple logistic regression model based on utilization of Healt Center with reliability, responsiveness, assurance, empathy, and physical evidence

Variable	P-value	Description
Reliability	0,007	Candidate model
Quick Response	0,003	Candidate model
Guarantee	0,005	Candidate model
Empathy	0,000	Candidate model
Physical Evidence	0,075	Candidate model

Table 4. shows that there are 5 (five) variables included in the candidate model ($P\text{-value} < 0.25$), namely variable reliability ($P\text{-value}=0.007$), fast response ($P\text{value}=0.003$), assurance ($P\text{-value}=0.005$), empathy ($P\text{-value}=0.000$) and physical evidence ($P\text{-value}=0.075$). Furthermore, these five variables enter the measurement step of Pseudo R Square value.

Pseudo R Square Value

Table 4. Pseudo R Square

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	7,271 ^a	0,639	0,942
2	27,293 ^a	0,503	0,743
3	33,097 ^a	0,456	0,672
4	21,895 ^a	0,544	0,803

In Table 4. it can be known the extent to which the ability of the independent variable in explaining the dependent variable, namely by using the value of Nagelkerke R Square, or also called Pseudo R-Square. Nagelkerke R Square value of 0.803, indicating that the ability of the independent variable in explaining the dependent variable is equal to 0.803 or 80.3%, and there are 19.7% of other factors outside the model that explain the dependent variable.

Early Modeling

Table 5. Initial Modeling Of Multiple Logistic Regression

Variable	Unstandardized Coefficients					
	B	Std. Error	Wald	df	Sig.	Exp(B)
Reliability	-48,282	4041,830	0,000	1	0,990	0,000
Quick Response	-94,680	7402,866	0,000	1	0,990	0,000
Guarantee	-64,277	5017,475	0,000	1	0,990	0,000
Empathy	-79,555	6174,512	0,000	1	0,990	0,000
Physical Evidence	-63,178	5017,475	0,000	1	0,990	0,000

Final Modeling

Table 6. Final Modeling Of Multiple Logistic Regression

Variable	Unstandardized Coefficients					
	B	Std. Error	Wald	df	Sig.	Exp(B)
Reliability	-3,765	1,464	6,612	1	0,010	0,023
Quick Response	-5,081	1,712	8,806	1	0,003	0,006
Guarantee	-4,168	1,498	7,740	1	0,005	0,015
Empathy	-5,618	2,154	6,806	1	0,009	0,004

Based on the final modeling results of multivariate analysis in Table 5. it can be seen that Healt Center with poor reliability had a risk of 0.010 times not to be used by respondents compared to Healt Center with good reliability (odds ratio=0.010), Healt Center with poor responsiveness had a risk of 0.003 times not to be used by respondents compared to Healt Center with good responsiveness (odds ratio=0.010), Healt Center with poor assurance had a risk of 0.005 times not to be used by respondents compared to Healt Center with good assurance (odds ratio=0.010), and Healt Center with poor empathy had a risk of 0.010 times not to be used by respondents compared to Healt Center with good empathy (odds ratio=0.009), so that the final result that the reliability variable is the factor that has the greatest influence on the utilization of Healt Center Penerokan..

The reliability factor becomes the main determinant for the community in the working area of the Panerokan Health Center in the utilization of the health center. This means that the provision of services from the Healt Center in accordance with the provisions or promised to the patient, including the management of service time and clarity of information about the patient's health

satisfactorily give the greatest influence to increase the number of visits to the Panerokan Health Center so that the better utilization of the Health Center. The reliability factor should be the main variable to improve and maintain the Panerokan Health Center in providing services, because services will be considered good if the agencies that provide services are serious about serving professionally in accordance with service standards (reliable) (Selvi Rianti ZR, 2019). Kemenkes RI explained about the quality of health services that the quality indicates the level of perfection of health service performance, the community can not only get satisfaction as with the satisfaction of the average population but also in accordance with existing standards and codes of professional ethics.

CONCLUSION

By 74.6% utilization of health centers included in the category of good. There is a significant influence of reliability factor (p-value = 0.007), responsiveness factor (p-value = 0.003), assurance factor (p-value = 0.005), and empathy factor (p-value = 0.000) on the utilization of Health Center Panerokan. The most dominant factor affecting the utilization of Panerokan Health Center is reliability (OR=0.023).

The findings of this study become a recommendation for the Panerokan Health Center to conduct periodic evaluations related to the reliability of puskesmas employees in providing services; services in accordance with SPM provisions, timeliness of Service, clarity of information about patient health, and improve the responsibility and discipline of employees during working hours. Application of a culture of responsiveness and empathy in responding to patient complaints and serving politely and friendly through the application of 3S (smile, greetings and greetings).

REFERENCES

- Azwar A. Pengantar Administrasi Kesehatan. Tangerang: Bima Rupa Aksara; 2012.
- Badan Pusat Statistik. Profil Statistik Kesehatan 2019. 2019
- Dinas Kesehatan Kabupaten Batanghari. Profil Kesehatan Kabupaten Batanghari Tahun 2017. 2018.
- Dinas Kesehatan Kabupaten Batanghari. Profil Kesehatan Kabupaten Batanghari Tahun 2018. 2019.
- Gobel SR, Kolibu FK, Mandagi CKF. Hubungan Kualitas Jasa Pelayanan Kesehatan Dengan Minat Pemanfaatan Kembali Di Health Center Teling Atas. KESMAS. 2019;8(7).
- Hosmer D, Lemeshow S. Applied Logistic Regression. New York: John Wiley and Sons; 2000.
- Kunjungan Ulang Pasien Di Instalasi Rawat Jalan Rumah Sakit Umum Kabupaten Tangerang Tahun 2019. J Kesehat. 2020;13(1):13–21.
- Kurnianda E, Skripsa TH, Utami A. Hubungan Kualitas Pelayanan terhadap Tingkat Pemanfaatan Pelayanan Kesehatan Gigi dan Mulut Health Center I Kemranjen. Universitas Diponegoro; 2022.
- Mutiara IA. Hubungan Kualitas Pelayanan Rawat Inap dengan Minat Pemanfaatan Ulang Pelayanan di Health Center Kabupaten Pasuruan. J Inf Kesehat Indones. 2022;8(1):40–9.
- Parasuraman A, Berry LL, Zeithaml VA. More on improving service quality measurement. J Retail. 1993;69(1):140–7.
- Parasuraman A, Zeithaml VA, Malhotra A. ES-QUAL: A multiple-item scale for assessing electronic service quality. J Serv Res. 2005;7(3):213–33.
- Health Center Panerokan. Profil Kesehatan Health Center Panerokan Tahun 2016. 2017.

- Healt Center Penerokan. Profil Kesehatan Healt Center Penerokan Tahun 2017. 2018.
- Healt Center Penerokan. Profil Kesehatan Healt Center Penerokan Tahun 2018. 2019.
- Healt Center Penerokan. Profil Kesehatan Healt Center Penerokan Tahun 2019. 2020.
- Shao S, Wang M, Jin G, Zhao Y, Lu X, Du J. Analysis of health service utilization of migrants in Beijing using Anderson health service utilization model. *BMC Health Serv Res.* 2018;18(1):1–11.
- Siregar NH. Determinan Pemanfaatan Healt Center Oleh Masyarakat Di Wilayah Kerja Healt Center Kecamatan Hutaimbaru Kota Padangsidempuan Tahun 2017. 2018;
- Rahmiati R, Temesveri NA. Hubungan Dimensi Kualitas Pelayanan Dengan Minat
- Selvi Rianti ZR, Yuliani F. Kualitas Pelayanan Publik. *JIANA (Jurnal Ilmu Adm Negara).* 2019;17(2):412–9.
- Sofiati I, Qomariah N, Hermawan H. Dampak kualitas pelayanan terhadap loyalitas konsumen. *J Sains Manaj dan Bisnis Indones.* 2018;8(2).
- Tampubolon S. Determinan Pemanfaatan Healt Center oleh Masyarakat di Wilayah Kerja Healt Center Silangit Kecamatan Siborongborong Kabupaten Tapanuli Utara Tahun 2019. 2019;