Original Research Article

Quality of polyclinic services at public health centers in Padang city, Indonesia

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ABSTRACT

Background: One of the efforts in health development is the improvement of service quality at Public Health Center. The two main factors affecting service quality are expected service and perceived service. The objective of this study was to analyze factors associated to the quality of polyclinic services at public health centers in Padang, Indonesia.
Methods: A cross sectional study was conducted in three selected polyclinics at public health centers in Padang, Indonesia, during September to October 2017. One hundred eight participants who has visited public health centers were selected. Data was collected by using questionnaire.
Results: 86.1% respondents stated the quality of health services was good. The dimension of tangible (p=0.0001), reliability (p=0.0001), responsiveness (p=0.002), assurance (p=0.027), and empathy (p=0.0001) were associated with the quality of polyclinic service in the Public Health Centers at Padang. Empathy dimension (Exp B=6.182) was the most influencing factor of service quality in polyclinic.
Conclusions: Overall the quality of polyclinic service was good, but it suggests that officers should increase attention and communication to patients as it were the most influencing factors of patient satisfaction.

Keywords: Public health center, Quality, Service, Polyclinic

INTRODUCTION

One of the efforts in health development is the improvement of service quality.[1] The Public Health Center as the primary health service is responsible for the primary health care. Polyclinic is one part of public health center which is a place to serve general examination by doctor including observation, diagnosis, medication, and medical rehabilitation without staying in the inpatient room.[2]

Since the National Health Insurance program has implemented, the number of patient visits in almost public health center has increased, while the number of officers serving in polyclinic is only one doctor and two nurses. Patient as user, expect a good service that is timely, appropriate standards, and appropriate procedures. Convenience factor is also a thing that is desirable when the patient went to the health center. This factor is supported by the physical facilities and hospitality of officers.

There are two main factors that affect service quality, expected service and perceived service. The quality of health services can be seen from the five dimensions of quality namely tangible, reliability, responsiveness, assurance, and empathy.[3]

The objective of this study was to analyze factors associated to the quality of polyclinic services at public health centers in Padang, Indonesia.

METHODS

It was a quantitative research with cross sectional design. The study was conducted at selected Public Health Centers in Padang for 2 months (August - September 2017). The population of this study were all patients who received services in the polyclinic of Public Health Center. The samples were 108 respondents. Sample was calculated from hypothesis testing method using following assumptions: 95% confidence intervals, 50% proportion, 10% absolute precision. Calculated sample size was inflated with 10% of nonresponse rate. Samples were taken using consecutive sampling technique which is patients who are willing to be interviewed and meet the inclusion criteria will be used as samples.

The inclusion criteria were patients aged 17-64 years old, Patients willing to be interviewed and able to answer questions properly, Patients were conscious when they were to be interviewed. The exclusion criteria for the sample of this study was the circumstances that interfere with the ability of patients to become respondents.

Data were collected by interview using questionnaire. Data were entered and through SPSS version 17. The data was analyzed with univariate to get an overview of the frequency of each variable category, bivariate to know the relation between independent variable (dimension of tangible, reliability, responsiveness, assurance, and empathy) with dependent variable (health service quality), and multivariate to find out the most dominant factors that affect service quality. Data is presented in tabular form and narrative text.

RESULTS

Table 1 shows the characteristics of the respondents. It includes age, level of education, and gender.

Table 1: Characteristics of the respondents.

Characteristics	f	%
Age (in years)		
17-44	73	67.6
45-60	28	25.9
>60	7	6.5
Gender		
Male	18	16.7
Female	90	83.3
Level of education		
Primary	6	5.6
Secondary	15	13.9
Higher secondary	46	42.6
Graduate	41	38.0
Total	108	100

More than half of respondents who visited the health center were in productive age (67.6%) with good education (80.6% of respondents had high school and college education). Most of the respondents who visited health center were dominated by women (83.3%) (Table 1).

Table 2 shows distribution of frequency of polyclinic service quality and dimensions of service quality.

Table 2: Variable frequency distribution.

Variable	f	%
Quality of service		
Not excellent	15	13,9
Excellent	93	86,1
Tangible		
Not excellent	23	21,3
Excellent	85	78,7
Reliability		
Not excellent	30	27,8
Excellent	78	72,2
Responsiveness		
Not excellent	24	22,2
Excellent	84	77,8
Assurance		
Not excellent	17	15,7
Excellent	91	84,3
Emphaty		
Not excellent	16	14,8
Excellent	92	85,2
Total	108	100

The majority of respondents stated that good service quality (86.1%) and good dimension of service quality in tangible (78.7%), reliability (72.2%), responsiveness (77.8%), assurance (84.3%), and empathy (85.2%) (Table 2).

Table 3 shows association between polyclinic service quality and dimension of quality.

The result of statistical test showed that there is a significant relationship between tangible (p=0.0001), reliability (p=0.0001), responsiveness (p=0.002), assurance (p=0.027), and empathy (p=0.0001) with the quality of service in the Public Health Center at Padang (Table 3).

Table 4 shows a multivariate analysis that have showed a dominant factor related to health service.

From the analysis it can be seen that empathy was the most dominant factor related to health service quality at polyclinic of public health center in Padang. The exponent beta value (exp B) for the empathy dimension is 6,182, it means that if empathy dimension is applied well then the service quality is also 6 times better (Table 4).

Table 3: Association between polyclinic service quality and dimension of quality.

Dimensions of quality	Service quality				Total		P value
	Nor excellent		Excellent				
	f	%	f	%	f	%	
Tangible							
Not excellent	11	47.8	12	52.2	23	100	0.0001
Excellent	4	4.7	81	95.3	85	100	
Reliability							
Not excellent	12	40	18	60	30	100	0.0001
Excellent	3	3.8	75	96.2	78	100	
Responsiveness							
Not excellent	10	41.7	14	58.3	24	100	0.002
Excellent	5	6	79	94	84	100	
Assurance							
Not excellent	11	64.7	6	35.3	17	100	0.027
Excellent	4	4.4	87	95.6	91	100	
Empathy							
Not excellent	12	75	4	25	16	100	0.0001
Excellent	3	3.3	89	96.7	92	100	

Table 4: Multivariate analysis.

Variable	B	Exp (B)	Initial value of p (Step 1)	The p value of the elimination stage			
				Step 2	Step 3	Step 4	Step 5
Tangible	0.177	1.194	0.844	-	-	-	-
Reliability	-0.220	0.803	0.779	0.882	-	-	-
Responsiveness	-0.921	0.398	0.333	0.312	0.272	0.293	-
Assurance	0.363	1.437	0.687	0.661	0.677	-	-
Empathy	1.822	6.182	0.070	0.063	0.044	0.006	0.000
Constant	0.946	2.296	0.816	0.234	0.158	0.332	0.000

DISCUSSION

The results showed that most respondents stated that service quality was good. The results of this study are in line with research conducted by Widawati in 2015 in outpatient Wara Utara Palopo Health Center where 92.4% of respondents stated the quality of service was good and 7.6% of respondents said the quality of service was not good.[4] Another study conducted by Sundari at Sanglah Hospital Denpasar showed that the quality of health services from the perspective of patients is 83.82% which was already quite good.[5]

Service quality is not only how clinical activity is performed, but also concerns various aspects beyond it, such as comfortability, service procedures, and staff-patient communication.[6] In other words, service quality can be assessed from the service quality dimension which is tangible, reliability, responsiveness, assurance and empathy that perceived by the patient.

This study indicates that there was a significant relationship between tangible and the quality of health services at polyclinic at Public Health Center in Padang (p=0.0001). The results of this study are in line with research conducted by Nadi conducted in four hospitals in Iran who found that the dimension of tangible is one of the two dimensions that became priority for respondents in assessing the quality of service.[7] Another study conducted by Oliaee at the health clinic in Isfahan showed different results. In this study it was found that the dimension of tangible is the dimension that has the biggest gap between the value of perceived service and expected service, it means that patient has not satisfied with tangible dimension at the health clinic.[8]

According to Lee to show the existence of an organization to an external stakeholder is with the availability of tangible of the organization itself.[9] Tangible includes the physical appearance of service facilities (buildings, parking lots, and warehouses), equipment used, and appearance of service personnel.

Service cannot be seen, cannot be smelled and cannot be touched so tangible aspect becomes important as measure to service. Patient will use the sense of sight to judge a quality from the physical dimension.[10] Public Health Center needs to provide concrete evidence so that the patient can assess how good the quality of services provided, in addition to the health center staff who

certainly already have a high skill in health.[11] The study by Efendi et al found that there was a strong relationship between convenience (p=0.001, φ=0.656), punctuality (p=0.001, φ=0.634), and interpersonal relations (p=0.001, φ=0.598), with patient satisfaction at Aeng Towa Public Health Center in Takalar District.[6,12]

The result of the research showed that there was a significant correlation between officer reliability with service quality at polyclinic Public Health Center in Padang (p=0.0001). This research is in line with research conducted by Jusriani on outpatients at Puriala Public Health Center, getting the result that 53% of respondents stated the reliability of the officers is enough. This study obtained the result that the reliability of officers in providing services related to outpatient satisfaction at Puriala Public Health Center with p=0.018.[13] Another study by Tulumang et al also gave similar results which 62% of respondents stated good officer reliability and there was a relationship between reliability and patient satisfaction with p=0.00.[14]

In general, the reliability dimension reflects consistency and reliability of service providers. This is closely related to whether the organization provides the same level of service over time.[15] Ability to keep up with service time, registration time, and start time of treatment/ examination become assessment of service quality in terms of reliability.[16] The reliability of the officer will bring the patient's trust to the service related to dealing with the problem quickly and precisely to the patient.

Ramez in his study of 235 patients at several health care centers in Bahrain, found that there was a significant and positive relationship between service quality and patient satisfaction (p=0.00 and r=0.779). The most important dimension for patients was reliability dimension with an average value of 0.214 and the less important dimension was assurance dimension with an average value of 0.175.[17]

This study found that there was a significant relationship between the dimension of responsiveness and the quality of health services in Public Health Service Padang (p=0.002). The results of this study are in line with research conducted by Trimurthy on outpatient services Pandanaran Public Health Service, Semarang. He found that there was a significant correlation between respondents perceptions of service responsiveness with an interest in reusing outpatient services with p=0.000.[18] Another study by Ali & Khan who conducted a study on patient satisfaction in a Pakistani hospital using the Servqual method showed results that patients were satisfied with all the items of dimension of responsiveness that had been done by the hospital.[19]

When providing services, the officer should use an efficient time that is not too long and not too fast.[18] Too long time for service tends to cause patients to become bored and assume officers are not professional so that will cause the queue on the service process. While the services are too fast will give the impression of not careful, random, rushed, and not professional.

This study found that there was a significant relationship between the dimension of assurance with the quality of health services at the Polyclinic of Public Health Centre (p=0.027). The results of this study are in line with research conducted by Mumu, et al in the RSUP Prof. Dr. R. D Kandou Manado, respondent said the assurance dimension given by the officer is good equal to 62,5% and there is a significant relation between assurance with patient satisfaction with p=0.00.[20] Another study conducted by Oliaee at a health clinic in Isfahan found that of the five dimensions of service quality, assurance is the dimension that has the smallest gap between perception and patient expectation of -0.9.[8] This means that the level of patient satisfaction on assurance of the officers is good.

Assurance focuses on the competencies that someone have to provide a sense of security, free from harm, risk or doubt and certainty that includes knowledge, behavior, and credibility.[5] Dimensions of competence, courtesy, and credibility are the components that form the dimension of assurance.[16] Jusriani, et al in his research in outpatient of Puriala Public Health Center in Konawe District found that the dimensions of assurance, tangible, responsiveness, and reliability were related to patient satisfaction.[13]

This study found that there was a significant relationship between the empathy dimension and the quality of health services at the polyclinic of Public Health Center (p=0.0001). The result of multivariate analysis using logistic regression test with backward LR method found that empathy dimension is the most dominant dimension related to health service quality at polyclinic of Public Health Center. The empathy dimension has an OR or exponent betha (exp B) value of 6.182. The conclusion is that if empathy dimension is well implemented by public health center, it is possible to improve the quality of public health center service 6 times.

The results of this study are in line with research conducted by Mumu, et al in the RSUP Prof. Dr. R. D Kandou Manado obtained results that there is a significant relationship between the empathy dimension with patient satisfaction with p=0.00.[20] Furthermore, another study by Trimurthy in Semarang found that there was a significant correlation between perceptions of patients to empathy dimension with interest to re-use of outpatient care with p=0.000.[18] Nadi et al in his research at three hospitals in Bosnia found that based on the Servqual, patients placed empathy dimension as the top priority and reliability being the last priority in health care.[7]

Empathy begins with a good communication process. This can be seen from how the officer communicates

with the patient, handles the patient's complaints, and informs the patient's service procedure.[16] Communication is the ability to convey information to customers or obtain input from customers. Understanding of the customer includes the Public Health Center effort to know and understand the needs and desires of the customer.

CONCLUSION

There is a significant relationship between the dimensions of tangible, reliability, responsiveness, assurance, and empathy with the quality of health services in polyclinic of Public Health Center in Padang. The most dominant factor related to the quality of health service is the empathy dimension.

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