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# SERVQUAL METHOD ANALYSIS FOR GENERAL PATIENT HEALTH SERVICE SATISFACTION LEVEL

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#### Abstract

**Background**: Puskesmas Pulo Bandring is a functional implementing unit that functions as a center for health development. As a center for health services for the community, the Puskesmas always maintains patient trust, by improving the quality of its services. But in reality in the field there is no system that can measure the level of satisfaction of health services at the Puskesmas Pulo Bandring. Method : To overcome this problem, researchers use the Servqual Method, Service Quality is a method used to measure service quality from the attributes of each dimension, so that the gap value will be obtained which is the difference between consumer perceptions of the services they have. has been received and expectations about what will be received. There are 5 (five) dimensions that represent consumer perceptions of a service quality : (1. Tangible, 2. Reliability, 3. Responsiveness, 4. Assurance, 5. Empathy). **Result** : Implementation of the interface is carried out with each program that is built. The following is the implementation of the system interface for the level of satisfaction The data that was processed in this study was obtained by giving a chair containing 22 questions to 30 patients seeking treatment at the Puskesmas Pulo Bandring. Conclusion : It was found that the satisfaction of patients seeking treatment at Puskesmas Pulo Bandring Public seen from the 5 dimensions of the servqual had a reality value of 4.00 and an expected value of 4.62 so that there was a gap of -0.62. This gap occurs due to the non-fulfillment of patient expectations with the quality of services provided by the Puskesmas Pulo Bandring.

Keywords: health services, servqual method, patients, puskesmas

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## INTRODUCTION

In this era of globalization, a company or agency is required to move quickly when making decisions and actions, including improving services [1]. Service is a form of action aimed at customers both in the form of material and non-material with the aim of meeting customer needs directly in order to solve customer problems [2]. Analisis Tingkat Kepuasan Pasien Terhadap Mutu Pelayanan Sakit Rumah Berdasarkan Metode Service Ouality (ServQual). Jurnal *Keperawatan* dan Fisioterapi (JKF), 3(1), 58-64.. Efforts or efforts to improve the quality of community services in a Puskesmas is one step to improve the quality of life of the community. The quality of service provided by the Puskesmas to patients is one indicator that determines patient satisfaction with what is provided by the Puskesmas [3]. Service quality is also one of the important things that must be considered by the Puskesmas and can be implemented in various ways, including: politeness and friendliness of employees who relate to consumers and their ability fast and to convey trust, precise administrative services, product service according to the agreement, the availability of adequate facilities and infrastructure, affordable cost, timely and satisfactory for the customer or patient [4] Puskesmas Pulo Bandring is a functional implementing unit that functions as a center for health development, a center for fostering community participation in the health sector and a first-level health service center that carries out comprehensive, integrated and sustainable activities in a community residing in the

Pulo Bandring area. As a center for health services for the community, Puskesmas are required to always maintain patient trust, by improving quality service so that patient satisfaction increases it is very important as an effort to provide the best service provided by the Puskesmas.

## **RESEARCH METHODS**

Analysis and design is the first step in system development to determine needs, problems that can be overcome from the existence of a system to be built, and what system will be made. [5] In this design using a decision support system in the design. Decision support system is an information system that provides information, modeling data manipulation. This system is used to assist decision making in semi-structured situations [6]. Service Quality is a method used to measure the service quality of the attributes of each dimension, so that the gap value will be obtained which is the difference between consumer perceptions of the services that have been received and expectations of those that will be received [7]. There are 5 (five) dimensions that represent consumer perceptions of a service quality [8].

## 1. Tangible

Defined as the appearance of equipment facilities and officers who provide services because a service cannot be seen, smelled, touched, or heard, the tangible aspect becomes very important as a measure of service delivery.

## 2. Reliability (Reliability)

Dimensions that measure the reliability of a service to consumers. Reliability is

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defined as the ability to provide services in accordance with what is made accurately and reliably.

## 3. Responsiveness

Ability to help consumers and provide fast service to consumers. The responsiveness dimension is the most dynamic dimension. This is influenced by factors of technological development. One example of responsiveness in service is speed.

# 4. Assurance

Dimensions of service quality related to the ability to instill trust and confidence in consumers.

# 5. Empathy

Willingness to care and give sincere and personal attention to consumers (service users).

Service Quality Method Process The following are the process steps in the Service Quality method, namely [9]:

1. Calculating the results of customer expectations or expectations regarding services using the following calculations

$$\Sigma yi = ((\Sigma STTx1) + (\Sigma TTx2) +$$

Information:

yi : Total weighted answer to the i-th expectation question

STT : The number of people who chose the answer is very unfulfilled

ST : Number of people who chose the answer is not met

CT : The number of people who chose the answer is quite fulfilled

T : The number of people who chose the answer is fulfilled

ST : The number of people who chose the answer is very fulfilled

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1,2,3,4 : Score for the linkert scale

2. Calculate the average results of respondents' answers to the statement of expectations using the following equation [10]:

$$Yi = \frac{\sum yi}{n}$$

Information:

Yi : Average respondents' answers for the i expectation statement

yi : Total weighted answer to the i-th attribute expectation question

: Number of respondents

3. Calculating the results of reality or customer perceptions of services using the same equation as point 1 looking for the value of the results of expectations or expectations.

4. Calculate the average results of respondents' answers to the statement of reality using the same equation as point 2 looking for the average results of the expectations.

5. Determine the quality results of a service attribute or the results of the Service Quality gap using the following equation:

$$SQi = Xi - Yi$$

Information :

SQi : The value of the i-th attribute gap Xi : Average reality value of attribute i Yi : The mean value of the i expectation The larger the gap or gap (the gap is negative) resulting from a Service Quality



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gap calculation, the less good the service quality is. Therefore, the priority of service quality improvement is carried out from this gap. On the other hand, the smaller the gap value (the gap is zero or positive), the better the service quality [11].

## **RESULTS AND DISCUSSION**

Data processing using the method of service quality (servqual). The research variables were obtained based on the services provided by the Puskesmas Pulo Bandring to patients using health services, and then grouped based on five dimensions, namely tangible, reliability, responsiveness, assurance, and empathy. Questionnaires were distributed to 30 respondents who were patients at the Puskesmas Pulo Bandring.

Kode	Dimension	Question
P1	Tangiable	Puskesmas has the latest/latest equipment
P2	Tangiable	Comfortable and Clean Health Center Environment
Р3	Tangiable	Community Health Center Employees, Neat, Clean and Professional Appearance
P4	Tangiable	Availability of Poly Poli according to the Services Offered.
P5	Responsiveness	Patient Communication with Medical and Medical Team is Precise, Accurate and Clear.
P6	Responsiveness	Medics and Medical Teams Respond to Patient Requests Quickly and Efficiently.
P7	Responsiveness	Medics are always willing to help patients
P8	Responsiveness	Medics Always Provide Health Input to Patients
P9	Responsiveness	Medics are sincere in handling patient problems
P10	Empaty	Health Services Started On Time
P11	Empaty	Medics Give Individual Attention To Patients
P12	Empaty	Medics who really care about the interests of patients

P13	Empaty	Medics Pay Attention to Patient's Needs
P14	Realibility	Medics and Medical Team Provide Services As Promised
P15	Realibility	Medics can be relied on in handling patient complaints
P16	Realibility	The medical and medical team provide services correctly, so as not to provide correction in the future
P17	Realibility	Medics Provide Appropriate and Necessary Information
P18	Realibility	Employees at Puskesmas are Reliable (Can be Trustworthy)
P19	Assurance	Patients Feel Comfortable When Interacting With Medics and Medical Teams
P20	Assurance	Patients can trust the doctors and medical team
P21	Assurance	The medical staff and medical team are polite and friendly
P22	Assurance	Knowledgeable Medical and Medical Team Luan

#### Table 1. Assessment Criteria

Code	Information	Score
SA	Strongly agree	5
А	Agree	4
Ν	Neutral	3
DA	Don't agree	2
SD	Strongly Disagree	1
	<b>T</b> 11 <b>A</b> C	

 Table 2. Score Evaluation

After the questionnaires were distributed to the respondents, then the answers were recapitulated from the expectations and the reality of the services received by the patients. The following is a recapitulation of answers from patient expectations and a recapitulation of answers to the reality of services received by patients.

DIMENSI	TANCIBLE
DIMENSI	TANGIDLE

0	_		Exp	ected Va	lue	
Q	SA	Α	Ν	DA	SD	Total
P01	0	0	0	10	20	30
P02	0	0	7	14	9	30
P03	0	0	4	18	8	30
P04	0	0	5	17	8	30

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DIME	NSI RESI	ONSI	VENES	S		
0			Exp	ected Va	lue	
Q	SA	Α	Ν	DA	SD	Total
P05	0	0	10	15	5	30
P06	0	0	7	20	3	30
P07	0	0	7	17	6	30
P08	0	0	6	15	9	30
DIMEN	NSI EMP.	ATY				
0			Exp	ected Va	lue	
Q	SA	Α	Ν	DA	SD	Total
P09	0	0	5	18	7	30
P10	0	0	12	12	6	30
P11	0	0	10	15	5	30
P12	0	0	7	19	4	30
P13	0	0	7	18	5	30
DIMEN	NSI REAL	BILITY	7			
0			Exp	ected Va	lue	
Q	SA	Α	Ν	DA	SD	Total
P14	1	0	6	18	5	30
P15	0	0	9	12	9	30
P16	0	0	7	14	9	30
P17	0	0	5	19	6	30
P18	0	0	7	14	9	20
DIMEN	NSI ASSL	RANC	СE			
0			Exp	ected Va	lue	
Q	SA	Α	Ν	DA	SD	Total
P19	1	0	4	21	5	30
P20	0	0	9	4	17	30
P21	0	0	9	13	8	30
D22	0	0	6	16	8	30

# Table 3. Recapitulation of Answers fromPatient Expectations

Expectancy value shows the patient's expectation of the quality he will receive. The following is the calculation of the patient's expectation value for question P01 from the results of the data recapitulation of 30 respondents

$$\sum Y_{i} = (20 \times 5) + (10 \times 4) + (0 \times 3) + (0 \times 2) + (0 \times 1)$$
$$= 100 + 40 + 0 + 0 + 0$$
$$= 140$$
$$= \frac{Y_{I}}{Total} = \frac{140}{30} = 4.66$$

And so on until it came to question P22 from the results of the data recapitulation of 30 respondents.

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Table 4. Recapitulation of Answers from the Reality Received by Patients

The actual value (reality) indicates the assessment of the quality of service received by the patient. The following is the calculation of the patient's reality value question P01 from the for data recapitulation of 30 respondents  $\sum Y_i =$  $(9 \times 5) + (16 \times 4) + (5 \times 3) +$  $(0 \times 2) + (0 \times 1)$ = 45 + 64 + 15 + 0 + 0= 124  $=\frac{Y_{I}}{Total}=\frac{124}{30}=4.12$ 



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And so on until it came to question P22 from the results of the data recapitulation of 30 respondents.

0	Reality	Expected	GAP
Q	Value	Value	Servqual
P01	4,13	4,66	-0,53
P02	4,06	4,6	-0,54
P03	4,13	4,66	-0,53
P04	4,1	4,6	-0,5
P05	3,83	4,6	-0,77
P06	3,86	4,63	-0,77
P07	3,96	4,63	-0,67
P08	4,1	4,63	-0,53
P09	4,06	4,73	-0,67
P10	3,8	4,63	-0,83
P11	3,833	4,63	-0,797
P12	3,9	4,36	-0,46
P13	3,93	4,7	-0,77
P14	3,86	4,76	-0,9
P15	4	4,56	-0,56
P16	4,06	4,56	-0,5
P17	4,03	4,66	-0,63
P18	4,06	4,8	-0,74
P19	4,06	4,66	-0,6
P20	4,26	4,33	-0,07
P21	3,96	4,66	-0,7
P22	4,06	4,66	-0,6
Average	4,00	4,62	-0,62

# Table 5. Data Recapitulation of Respondents

From the table above, it is known that patient satisfaction at Puskesmas Pulo Bandring seen from 5 dimensions Servqual has a reality value of 4.00 and an expected value of 4.92 so that there is a gap of -0.62. This gap occurs due to the nonfulfillment of patient expectations with the quality of services provided by the Pusekesmas Pulo Bandring.

Dimensions Servqual	Realibilit y	Expectat ion	Gap
TANGIBLE	4,10	4,63	-0,52
RESPONSIVENESS	3,93	4,62	-0,68
EMPATY	3,90	4,61	-0,70
REABILITY	4,00	4,6	-0,66
ASSURANCE	4,08	4,57	-0,49

Table 6. Gap Value of Each Dimension

After processing the data on each dimension, from the table above it can be seen that all dimensions have negative gap values. ASSURANCE is ranked first with a gap value of -0.49, then the second rank is the TANGIBLE dimension with a gap value of -0.52, the third rank is the REABILITY dimension with a gap value of 0.66, the fourth rank is the **RESPONSIVENESS** dimension with a gap value of -0.58 and at The fifth rank is the EMPATY dimension with a gap value of -0.70. Thus, the priority dimension to be improved is EMPATY (Empathy).

# RESULT

Implementation of the interface is carried out with each program that is built. The following is the implementation of the system interface for the level of satisfaction of general patient health services.



Figure 1. Main Menu

0%de	E Starth	Q.
Dashboard	B Kuesloner	
	Kuesioner Evaluasi	
	Musukkon Biodata singkat anda sebelian mengisi kasedonen Nama	
	Maakkan Biada di gila izaka salakan mengiti kasalawa Nene Manakan sana anda Usa	
	Maakaba hada ada adalah sengih kualawe New Selara adalah sengih kualawe Mang Anang	12

Figure 2. Biodata Input







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Kuessoner					
VEDWINE KUESIONED HARADAN ANDA DADA DUSKESMAS DALAM DELAVANAN JA		3 DI	BED	KAN	a.
Struktur Organisasi	-cart from				
Kuesioner Evaluasi					
Berlish javakan peda setiap pertanyaan berdesarkan penantahuan anda. 55 - Sangat Setulu, 5 - Setulu, N - Netral, TS -	- Tidak Setula	515-	Cangal	Tide	Setuiu
No Pertanyaan	55	5	N	15	515
No Pertanyaan 1 Puolasinas Mant3ki Perulatan Madakitor/Sertanyi	55	•	N ()	0	0
He Pertanyaan 1 Puakaanaa Maniliki Perakaina Matakisi Pertanya 2 Singlungan Puakaanaa Yang Nejanaa dan Berah	55 0	• 0	× 0 0	0	•••
No         Performant           1         Performant           2         Upgingerin Mandemark Trigg Frysens des Banch           3         Pergener Performant Trigg Frysens des Banch           3         Pergener Performant Trigg Frysens des Banch	55 0 0 0	• 0	× 0 0 0	•• ••	515 0 0
No         Performance           1         Industrial Metallic Provides Medallic Foldows           2         Unplanger Pedaleman Yang Nyaman And Barks           3         Pergana Pedaleman Yang Nyaman And Barks           4         Bernard Metallic Structure Structure Structure Structure Structures           4         Bernard Metallic Structure Structure Structure Structures	55 00 00 00 00 00	5 0 0 0	× 0 0 0 0	** 0 0 0	575 0 0 0 0

Figure 3. Questionnaire Form

					Search 🔍 🔺
Admin Administrator	Hasil Ann Chink Engl	Analysis Losi Untuk Menempilikan Hesit.	Arasitala		
Dashboard	Pulo ban	dring			
🗖 ObjekUji	445	KENYATAAN		HARAPAN	
		30		30	
	Question	Avaylisis			
Pertanyaan	1.1	Question ID	Fact Result	Goal Result	GAP
Analisis >	1	61	4.1333	4.6667	-0.5334
	2	E2	4.0667	4.6	-0.5333
	3	63	4.1333	4.6333	-0.5
	4	E4	41	4.6	-0.5

Figure 4. Analysis Page View



Figure 5. Analysis Results Page View



Figure 6. Print Results

# CONCLUSION

The results of the analysis using the service quality method obtained the results of the calculation of the gap including Assurance ranked first with a gap value of -0.49, then the second rank of Tangible dimension with a gap value of -0.52, the third rank of Reliability dimension with a gap value of 0.66, fourth rank there is a Responsiveness dimension with a gap value of -0.58 and in the fifth rank is the Empathy dimension with a gap value of -0.70. Thus, the priority dimension to be improved is Empathy. From these results, it can be seen that the elements that are maintained and improved by the Puskesmas Pulo Bandring can help in seeing the level of satisfaction of the health services provided and can further improve the quality of their services.

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