

# The Measuring of Quality Services on Pasyandu Desa as The Effort to Enhance Mother and Children's Health Degree

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**Abstract**—The state health burden comes from the high population growth, infectious diseases, non-communicable diseases, and the higher mental health disorder. In a long period of time, this will undermine the nation's productivity level and the economy in a country. The effort to promote the population services, health, and disease prevention need to be taken seriously. Most morbidity, mortality, population explosion, and disability as the disease effect can be prevented through promotive and preventive efforts. However, the efforts to enhance public health quality in primary service level are currently not optimal.

The loose health promotion and disease prevention result the high number of morbidity and mortality. In the quarter IV 2017 there were 3.597 mothers' died during childbirth and 22.327 infants' death. The prevalence of the stunting toddlers or short stature was 27.6 percent, 3.4 percent of children under five were malnourished, and 14.4 percent of children under five were less malnourished [1]. This study is based on the consideration that it is necessary to conduct evaluation research on the quality services of Posyandu Desa through the Servqual model test, the importance of continuous research, and the consistency of the previous researcher.

In particular, this study aims to determine the gap value and the efforts to close the biggest gap through Servqual test. The population in this study are housewives who have children under five as the receiver of Posyandu Desa services. This study uses purposive sampling of 60 respondents in the village area of Klaten Regency. The attributes in the quality service questionnaire include tangibles, reliability, responsiveness, assurance, and empathy [2]. Quantitative tests to be conducted include the item validity test and Servqual Analysis confirmation test. From the result, it is obtained that there is still negative value with the largest negative value on the tangible dimension. The improvement efforts must be continued with emphasis on improving the value which have the largest negative dimension to enhance the quality service of Posyandu KB in the community

**Keywords**— *Quality, Posyandu Desa, Servqual, Health Degree*

## I. INTRODUCTION

Health disasters which hit the Asmat region of Papua in the early 2018 seemed to remind the essence and responsibility of the leader's power which are now being contested in some regions through regional election. During the last two months in the beginning of the year, there were

602 children in Asmat who suffered from malnourished and infected on measles and other diseases. A total of 69 children of them have been found dead [3]. In the mid of government's enthusiasm to build the periphery area, the health tragedy in Asmat really invites a concern.

The number of children in Asmat who died in January 2018 was triggered by some problems, such as geographical condition in the remote area, difficulties on accessing the public health facilities, lack of availability on health facilities, and low professional ability of health workers to serve people.

The other thing which becomes the weak point since most Puskesmas in Indonesia currently still have an old paradigm is curative effort. In addition, most Puskesmas are also seized in administrative activities which lead to the weak promotion and preventive efforts of public health.

Klaten Regency, which is known as a food barn with abundant sources of clean water along year in Central Java region, is currently experiencing irony. This region has the largest number of poor people so the poverty map in Bappeda of Central Java is categorized red. Bappeda in Central Java in 2018 has mapped 823 villages which are categorized in red so the handling priority needs to be taken. Those number are spread in 15 regencies or cities in Central Java and it is very ironic that the largest number of the poorest villages is in Klaten Regency with 88 regions, it is followed by Banyumas with 72 villages, and then Cilacap with 71 villages [4].

Based on the result of basic health research in 2007 [5] the number of Posyandu in Indonesia increases, but the quality service needs to be improved. Around 27.3 % of households use Posyandu, 10 % need but do not use Posyandu, around 49 % do not need because of incomplete service, 26 % can access Posyandu, and 24 % cannot access Posyandu. The findings of Istikhomah, et. al [6] in Klaten in 2013, there were a number of Posyandu-KB in the regions near the city which had some problems, such as in Health Ministry's Standard Operation Procedure stated that there should be five desk in Posyandu services, but in fact there were some places which do not use five desk, KMS administration, uncomplete toddlers' cards, unusual scale, there was a fifth table for general checking, there was no

services for KB and PUS consultation, and the minimal variation in the provision of additional food for toddlers.

From the reality of the high number of poor villages in Klaten Regency, some problems will arise which need special handling, especially in the field of health and population. It is feasible to conduct evaluation study to measure the quality of preventive promotive services of Posyandu-KB cadre as an effort to realize healthy right for the society in Klaten. From some problems in the background of the study above, it can be drawn the formulation of the problem as follow. "Is it true that mothers in village area of Klaten are not satisfied with the quality of preventive promotive services of Posyandu-KB care?"

## II. METHOD

### A. Data Collection Method

This study used the primary data that is data related to the variable studied. The data was collected through questionnaire obtained from sources who have knowledge of the topic under the study. Besides that, the secondary data in the form of sources of literature, records, archives, and documents are also used.

### B. Data Collection Technique

1. Interview is conducted to obtain matters related to the general description of the institution and strategic planning which has been done.
2. To obtain information about service satisfaction, the researchers distributed questionnaire to the society who had received Posyandu-KB care's service in 2 village in Klaten Regency, namely Posyandu Matahari Desa Nganten Kraguman Jogonalan Klaten and Posyandu Melati Desa Pucung Kragunan Jogonalan Klaten.
3. Literary studies is done to obtain the necessary supporting data.

### C. Sample Collection Method

In this study, the survey method is used as the main instrument. Thus, not all individuals in the population are studied since there is lack of time, cost, and accessibility. *Population*, what is meant by population in this study are all people in Klaten Regency who have received Posyandu-KB cadre's service in 26 sub-districts and 88 poor villages. *Sample*, the characteristics of the subjects used as sample in this study were 30 respondents who used Posyandu-KB cadre's service in 2 villages by using purposive sampling. The respondents accessed in this study are adult mothers, with the consideration that they already have a good understanding in assessing the quality of services provided by Posyandu and can feel the satisfaction or dissatisfaction of the quality of these services.

### D. Data Analysis

In this study, three analyzes were conducted in the form of quantitative data description, instrument validity test, and ServQual test of responsiveness, tangibles, assurance, reliabilities and empathy dimension models with some modifications to the improvement of the question items in Posyandu activities.

### 1. Instrument validity test

Validity test is used to determine the extent to which the accuracy of the questionnaire attributes can carry out its functions. Measuring instrument are valid if they are able to take the measurements of what is measure and the accurate result measurement. This test is done by using Pearson product moment method.

Reliability test is used to determine the extent to which the measuring instrument is able to take the measurement consistently. It is reliable when the repeated measurement is done, the result are the same. Reliability can be measured with Cronbach's Alpha which reflects the internal consistency of a measuring instrument. According to *Hair et.al* [7], to determine the reliability of a research instrument, the Cronbach's Alpha must be bigger than 0.7.

### 2. Community Confirmation Test Level

This test is conducted to measure the fifth gap through Cronin-Taylor model [8] *Weighted Average ServQual* and Martila James [9] *Importance Performance Analysis*:

$$I K_j = \sum (P_{ij} - E_{ij}) \quad (1)$$

$I K_j$  = community confirmation index toward object j

$I k_j < 0$  = negative community confirmation/unsatisfied

$I k_j \geq 0$  = positive community confirmation/satisfied

$P_{ij}$  = Performance from attribute i toward object j

$E_{ij}$  = Expectation from attribute i toward object j

## III. RESULT

In order to be optimally successful to this study, a pre survey, literature review, and consultation with related parties is conducted to obtain a description of what attributes should be measured in the dimensions of quality service. Form the results of the pre survey, the researchers obtained attributes that can be categorized into five quality service's dimensions, such as 3 items of physical evidence, 2 items of reliability dimensions, 2 items of responsive dimensions, 3 items of warranty dimensions, and 2 items of empathy dimensions. Those five dimensions are compiled into statements that are easily understood by mother in Posyandu-KB Desa.

### A. Respondent Characteristics

Respondent characteristics are used to see the respondents profile in this study. It is classified into five general characteristics, namely the age of respondent, the age of child, the sex of child, the occupation, and the mother participation on KB or not. Based in the field finding, the majority of respondents were young women of childbearing age, children who 2 to 3 years old who had exceeded the ASI stage, the majority sexes were girls, the majority of respondents are not working or housewives, and the majority of respondents did not have family planning since the young age category and they still want to have children.

### B. Model Test

The seriousness of respondents in answering question is the essence of the survey method. Because of the validity of the result study is largely determined by the measuring instrument which is used in the data collection process. If the obtained data is invalid or inaccurate, the result of the

study will not be able to describe the actual situation. Therefore, it is necessary to test the validity and reliability.

### 1. Validity Test

A measurement scale is valid if the scale is able to measure what should measure. One example is the nominal scales which are non-parametric are used to measure the nominal variables, not to measure the interval variable which is parametric. There are three types of measurement validity, namely: *a. content validity*, it concerns the level of scale items that reflects the domain of the concept in being studied. Dimension in a particular concept domain cannot be calculated all at one because it sometimes has multidimensional properties, *b. construct validity*, it related to the level at which the scale reflects and acts as the concept in being measured. This validity is theoretical and statistical, *c. criterion validity*, this validity concerns the level problem where the scale is being used can predict a variable designed as a criterion. To calculate the validity of a questionnaire, correlation techniques are used in comparing between the score in the table.

The result of validity test of the items in the table above show that all items are valid expect for item 1, 2, and 10 on the expectation factor. With no receipt of those three items above, it simultaneously drops some items of the same number in performance variable.

### 2. Reliability Test

Item reliability test is used to determine the extent to which measurements can provide the same or consistent results if measurement are done again on the same subject. This test is conducted through three methods, namely: *a. retest*, it is done by testing questionnaire to certain group, *b. parallel test*, by giving a questionnaire to a particular group, then the group is tested with an instrument that has equivalent question content. Then, both score of the test are correlated, *3. the split test*, it is done by dividing scores randomly in even and odd form of all respondents' answers. The reliability test results show that all dimension on both factors are greater than the required Cronbach Alpha that is 0.8, so that both dimensions pass the test to declare reliable and can be used in the next test phase.

### 3. ServQual Analysis

To test the confirmation level of mothers who participate Posyandu-KB Desa, *Weighted Servqual* formula [8] is used in this study. This formula is used to quantitatively calculate the gap between the expected quality service and the actual quality felt by the patient, the total value of costumer confirmation on the quality service Posyandu-KB Desa – 58.27. The maximum or minimum conformation value with the total number of 20 respondents is as follow (as attached):

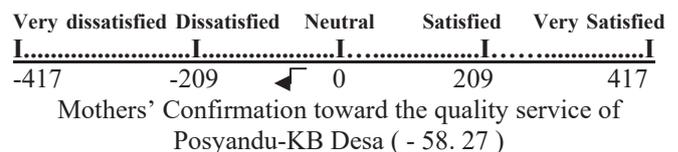
$$I_{kj} \text{ max} = 417$$

$$I_{kj} \text{ min} = -417$$

The maximum confirmation value which is achieved by mothers is assumed that the customer has a minimum expectation of the quality service to be received and feels the maximum actual performance by the quality service to be received. Vice versa, the minimum confirmation which is

achieved by mothers is assumed that they have maximum expectation of the quality service to be received, but in reality they fell minimum actual performance by the quality service to be received.

Form the qualitative calculation, the confirmation value of mothers to Posyandu have an interval of 834, the number is divided into four confirmation level scales, such as very dissatisfied, dissatisfied, satisfied, and very satisfied, according to the customer preferences so that a range of 209 points is obtained. Figure 1 shows costumer confirmation toward the quality service of Posyandu-KB Desa mothers in an interval:



**Figure 1 Mothers' Confirmation toward Quality Service**

The figure above can be concluded that the conformation value of mothers toward the quality service of Posyandu-KB Desa is -58.27 which is in the interval between 0 to -209 with the category of dissatisfied. The minimum standard that must be achieved to obtain a level of service satisfaction if the confirmation value reaches a value which equals to 0 or more (confirmation  $\geq 0$ ), from those result, it means that the quality service satisfaction for mothers who receive Posyandu Desa services is not yet achieved.

From the table, the data of physical evidence dimension is obtained the largest negative gap value of -66.50, followed by responsiveness of -63.12, empathy of -58.36, reliability dimension -58, and finally the assurance dimension of -43.50. Physical evidence dimension is related to visible equipment that can be felt to serve. The dimension which has the largest gap value must be prioritized in improving the quality service, then move on to the next dimension priority. In the other words, to increase the mothers' satisfaction, Posyandu Desa must prioritize in improving the quality service in the dimension with the greatest gap value.

### 4. Interview Findings and Field Activates

- The weight tools are not complete, especially for baby scales.
- The inaccurate of weight tool, there is a stone ballast.
- Posyandu Desa Nganten cadre is less communicative so that the villagers are less enthusiastic about trusting the Posyandu activities in the hospital.
- It is found that mothers experience young marriage and there are Junior High School students who are pregnant out of wedlock.
- It was found that the nutritional record of toddlers are lost weight.

## IV. CONCLUSION

### A. Conclusion

After the discussion in the previous chapter, some conclusions are as follow.

- Standards that must be achieved to obtain a minimum level of satisfaction if the confirmation value reaches a value equal to zero or more (Confirmation  $\geq 0$ ). The

confirmation result test of Posyandu mothers is obtained a value of -58, 27. The minimum confirmation value that can be achieved by Posyandu Desa service is -417. While, the maximum confirmation value that can be achieved is 417. This means that the level of satisfaction with the quality service perceives by mothers is still minus 14 % of the maximum level of satisfaction. To reach the minimum satisfaction level (Confirmation = 0), the Posyandu Desa must be able to close the gap of 14% of the minimum satisfaction level. From those condition, it can be concluded that Posyandu Desa were less able to provide satisfaction with the expected quality service.

2. The test results of the mothers' confirmation value on each dimension of quality service to achieve the level of society satisfaction (Confirmation  $\geq$  0), the Posyandu Desa in improving quality service must prioritize those dimensions that have the highest negative value, followed by the next negative value.
3. The value of negative satisfaction confirmation shows that the Posyandu Desa has not been able to provide the quality services according to the expectations of the mothers.

#### B. Suggestion

From the obtained conclusion, it can be suggested to the Posyandu Desa, as follow.

1. Posyandu Desa must continue to improve the quality service to the mothers.
2. The management of Posyandu Desa is periodically required to conduct a survey on the quality service. This is needed to be done since the expectation of the quality service is always changing by time and conditions, on

the other hand, the higher and more critical is the demands of the mothers to improve the quality service in Posyandu Desa.

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