# Patient Satisfaction in a Rural Health Facility: Reliability, Responsiveness and Assurance

**Tusy Novita Dwi Wardani[a], Aulia Ramadhani[b], Nadia Rifqi Cahyani[c], Hanifiya Samha Wardhani[d], Windhu Purnomo[e]\*,** [a,c,d]Graduate Student of Policy and Health Administration Department , Faculty of Public Health, Universitas Airlangga, [b]Department of Dental Public Health, Faculty of Dental Medicine, Universitas Airlangga, [e]Department of Biostatistics and Population, Faculty of Public Health, Universitas Airlangga, Email: [e]\*purno.win20@gmail.com

**Background:** Puskesmas are the health service facilities in Indonesia that organise public health efforts and first-level individual health service. Patient satisfaction is very important for Puskesmas to assess its quality service towards the public by measuring the level of patient satisfaction from the dimensions of reliability, responsiveness, and assurance. **Purpose:** This study is to determine whether the performance of health services in the Community Health Centre can be considered good or not by measuring the level of patient satisfaction from the dimensions of reliability, responsiveness, and assurance **Method:** The sampling technique was accidental sampling with a sample size of 138 people. This study used a questionnaire instrument. The data analysis conducted in this research was descriptive analysis and bivariate analysis with the chi-square test. **Result:** the results of this study found that the level of satisfaction obtained from the three dimensions was low. Reliability has a low result with a percentage of 55.1%, responsiveness has a low result with a percentage of 71.7% and an assurance assessment has a low-value percentage of 88.4%. **Conclusion:** From this study, Puskesmas' health services were considered insufficient by the community, according to the level of patient satisfaction specific to reliability, responsiveness, and assurance.

**Key words:** *Health services, patient satisfaction, service quality.*

## Introduction

A health service facility (Puskesmas) is a place that conducts preventive, promotive, curative and rehabilitative health care efforts, whether organised as a government service or private enterprise. *Puskesmas* organise public health efforts and first-level individual health efforts, prioritising promotive and preventive efforts, to achieve the highest degree of local area public health (Kemenkes, 2014). Currently, the demand for health sector services is very high, and patients expect a high quality of service (Calisir et al., 2012). The health sector plays an important role in developing and maintaining public health physically and mentally (Irfan et al., 2012). According to Anber and Shireen (2011), quality relates to specification of products and meeting client needs. However, Borkar and Sameer said that 'service' is a set of attributes that focus on satisfying consumers and meeting their needs and desires.

The vitality of service quality is now of interest in the health sector. Service quality evaluations conducted by recognised services ask users to assess service standards, detail expectations based on convenience and compare criteria (Canny and Hidayat, 2012).

Customer satisfaction is the desire, hopes, and needs of customers (Darmawanty et al., 2018). A service is considered satisfying if it can meet the expectations and needs of customers (Sipayung et al., 2019). It is important to identify the elements of customer satisfaction in order to identify the quality of health services (Rashid et al., 2011).

Customer or patient satisfaction is not only determined by the quality of goods and services but also satisfaction with the services provided and quality of communication. Patient satisfaction is experienced due to the ease in accessing health services (Susilawati et al., 2018), the availability of health services (Tome, 2019), access to ongoing treatment, efficiency, well coordinated service delivery (Nahlah et al., 2019), and a reasonable cost for patients (Park et al., 2017). The determinant factor for the level of patient satisfaction is influenced by the characteristics of the patients that distinguish one individual from another. These characteristics range from age, sex, educational background, occupation, ethnicity, religion, etc (Sangadji and Sopiah, 2013).

Generally, in Puskesmas, the health officer provides the same service to all patients but the level of satisfaction may be different due to several factors. Assessment of the quality of the health service can be measured objectively and subjectively (Sembiring et al., 2017). Objective measurement is based on Standard Operating Procedure (SOP) while the subjective measurement is obtained through patient satisfaction. Measurement of health service satisfaction through these patients is also an effort to assess and improve the quality of services available at Puskesmas (Umniyati, 2010). The level of customer satisfaction is

divided into two dimensions, namely perception of service based on performance and second is behaviour predictors.

Patient satisfaction is very important in relation to Puskesmas health facilities in rural areas. The vision of the rural Puskesmas studied is to make the primary health service unit equitable and affordable to the community to support the achievement of optimal health status. The purpose of this study is to determine whether the performance of health services in the Community Health Centre can be considered good or not by measuring the level of patient satisfaction from the dimensions of reliability, responsiveness, and assurance. It is expected that by measuring the level of patient satisfaction, the Puskesmas can always maintain and improve the quality of services to the community, especially in rural areas.

**Method**

This research used analytical research methods to determine the influence of independent variables on the dependent variable with a cross-sectional study design (Lubis and Laturiuw, 2018). The population in this study were all patients who visited the Jatiwates Tembelang Health Centre within a month.138 patients completed the survey making a sample size of 138. The independent variables in this study were age, sex, number of visits to the health centre and education. The dependent variables were reliability, responsiveness and assurance. This study uses a questionnaire instrument with three domains. Each domain consists of four questions and uses primary data derived from the results of the questionnaire. Data analysis conducted in this research was descriptive analysis and bivariate analysis with the chi-square test. The presentation of data in the form of frequency distribution tables was accompanied by narration.

**Result**

From the results of the study in Table 1, the largest percentage of the population taken was aged 17-34 years with a percentage of 52.2%. This result showed that the questionnaire was filled by visitors of the productive age, and mostly dominated by women (80.4%). The highest number of patients who visited the Jatiwates Tembelang Health Centre (Puskesmas) in this study were patients who visited less than twice in a month and had a percentage of 72.5% compared with patients who visited more than twice per month with a percentage of 27.5%. In this population, respondents with lower education were dominating the result (93, 5%), ranging from elementary school, junior high school, and senior high school.

**Table 1:** Distribution of Respondent Characteristics in Puskesmas and Patient Satisfaction from Reliability, Responsiveness, and Assurance Dimensions

| Variable | | n | % |
|---|---|---|---|
| Age | 17-34 | 72 | 52.2 |
| | >35 | 66 | 47.8 |
| Sex | Male | 27 | 19.6 |
| | Female | 111 | 80.4 |
| Number of Visits | >2x/month | 38 | 27.5 |
| | <2x/month | 100 | 72.5 |
| Education | Low | 129 | 93.5 |
| | High | 9 | 6.5 |
| **Variable** | | **n** | **%** |
| Reliability | Low | 76 | 55.1 |
| | High | 62 | 44.9 |
| Responsive | Low | 99 | 71.7 |
| | High | 39 | 28.3 |
| Assurance | Low | 122 | 88.4 |
| | High | 16 | 11.6 |

The level of satisfaction from Table 1 obtained from the results of this study from all three dimensions was quite low, consisting of reliability (55.1%), responsiveness (71.7%) and assurance assessment (88.4%). The results of the study in Table 2 showed that from a total of 138 respondents assessed, the reliability of Puskesmas with the quality of services provided, 76 respondents (55.1%) expressed satisfaction, and 62 respondents (44.9%) said they were not satisfied. This low-reliability value was seen from the characteristics of patients based on age, gender, number of visits and education. Characteristics of patients who had a level of satisfaction with low responsiveness were young age, aged 17-34 years (52.8%), male sex with a percentage of (48.1%), patients with several visits more than twice per month (39.5%) and patients with low education (55.0 %).

**Table 2:** Relationship between Patient Characteristics and Patient Satisfaction towards Reliability, Responsiveness, and Assurance Dimensions

| Variabel | N | % | Reliability | | | | P | Responsive | | | | P | Assurance | | | | P |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Low | | High | | | Low | | High | | | Low | | High | | |
| | | | n | % | n | % | | n | n | % | n | | n | n | % | n | |
| Age | | | | | | | | | | | | | | | | | |
| 17-34 | 72 | 52.2 | 38 | 52.8 | 34 | 47.2 | 0.51 | 52 | 72.2 | 20 | 27.8 | 0.895 | 52 | 72.2 | 20 | 27.8 | 0.895 |
| > 35 | 66 | 47.8 | 38 | 57.6 | 28 | 42.2 | 7 | 47 | 71.2 | 19 | 28.8 | | 47 | 71.2 | 19 | 28.8 | |
| Sex | | | | | | | | | | | | | | | | | |
| Male | 27 | 19.6 | 13 | 48.1 | 14 | 51.9 | 0.42 | 17 | 63.0 | 10 | 37.0 | 0.259 | 17 | 63.0 | 10 | 37.0 | 0.259 |
| Female | 111 | 80.4 | 63 | 56.8 | 48 | 43.2 | 0 | 82 | 73.9 | 29 | 26.1 | | 82 | 73.9 | 29 | 26.1 | |
| Number of Visits | | | | | | | | | | | | | | | | | |
| >2x/month | 38 | 27.5 | 15 | 39.5 | 23 | 60.5 | 0.00 | 30 | 78.9 | 8 | 21.1 | 0.246 | 30 | 78.9 | 8 | 21.1 | 0.246 |
| <2x/month | 100 | 72.5 | 61 | 61.0 | 39 | 39 | 2 | 69 | 69.0 | 31 | 31.0 | | 69 | 69.0 | 31 | 31.0 | |
| Education | | | | | | | | | | | | | | | | | |
| Low | 129 | 93.5 | 71 | 55.0 | 58 | 45.0 | 0.62 | 92 | 71.3 | 37 | 28.7 | 0.507 | 92 | 71.3 | 37 | 28.7 | 0.507 |
| High | 9 | 6.5 | 5 | 55.6 | 4 | 44.4 | 7 | 7 | 77.8 | 2 | 22.2 | | 7 | 77.8 | 2 | 22.2 | |

In the assessment of responsiveness in Table 2 of this health centre (Puskesmas), from 99 respondents (71.7%) said that it was not good and were not satisfied by the quality of services provided, and 39 respondents (28.3%) expressed satisfaction with the responsiveness of the Puskesmas. This low responsiveness value was seen from the characteristics of the patient based on age, gender, number of visits and education. Characteristics of patients who had a level of satisfaction with low responsiveness were young age, aged 17-34 years (72.2%), female (73.9%), patients with several visits more than twice per month (78.9%), and patients with higher education (77.8%).

Whereas in the Assurance assessment from Table 2, it was found that most respondents were in the age range of 17-34 years (52.2%), and as many as 89.4% of respondents were aged > 35 years and experienced or felt a low assurance. Variables in the assurance dimension were the doctor's ability to diagnose, satisfaction with the drugs provided, a sense of being rewarded by the officer, a sense of security during the service and in regards to their patient medical records. On the other hand, the sex of most respondents as female (80.4%), and as many as 90.1% of the female respondents felt low assurance following the appointment. Of the 72.5 % of respondents who visited the Puskesmas less than twice a month, 91.0% felt they received low-security assurance. Respondents with low education levels were from elementary school, junior high school, and senior high school (93.5%), while those with higher education levels were as much as 6.5%.  100% of them felt a low level of assurance in relation to their appointment.

**Discussion**

Based on the statistical data there was no significant correlation between age, sex, number of visits and the level of education of patients in terms of reliability, responsiveness, and assurance. This was based on the analysis using the chi-square test that obtained a p-value greater than α (0.05). The null hypothesis was not rejected. The dimensions of service reliability were dimensions of service quality in the form of promises offered in relation to an optimal and accurate service (Umniyati, 2010). The dimension of reliability was the effectiveness of providing services immediately and satisfactorily. From the results obtained, the values were insignificant. This was seen also from the number of percentage of satisfied and dissatisfied dimensions of reliability which mostly show results of 50:50. This was likely due to heterogeneous patient perceptions and below optimal services provided by health workers.

The reliability dimension is the ability and reliability of the Puskesmas staff to provide services quickly and reliably when requested by the public. Fast service should be accounted for reliably and not deviate from what was promised, be accurate, consistent, and provide well-assured products (Sangadji and Sopiah, 2013). Based on this description, the indicators

of reliability include the speed of service delivery, accuracy in tending patient issues, providing detailed information for patients in relation to illness and disease, and the treatment including how to take appropriate medication.

The responsiveness of medical staff is the most important component to the health service. Assessment of each patient in terms of speed of service can vary depending on the perception of the individual. The responsiveness of the nurses has influence and positive signification upon patient satisfaction. It will alter and determine a patient's perception on the quality of their treatment.

Responsiveness is the desire of the staff to help patients and provide responsive services. Responsiveness has a significant influence on patient satisfaction at the Puskesmas. If the responsiveness provided by the Puskesmas is satisfactory then the patient will recommend it to relatives or others if they need treatment. In this study, there are four aspects in assessing patient satisfaction: Responsiveness including the responsiveness of medical personnel when serving patients, the proper acceptance and service, a quick and proper treatment, and procedural treatment. From the four aspects of this assessment, the results obtained from 138 respondents (71.7%) stated that they were not satisfied with the responsiveness of the Puskesmas.

The results of the study for service assurance dimensions illustrated low satisfaction. The expectations and the reality of patients were not as expected. In particular, clients were unhappy with the ability of doctors, the appropriateness of medication, the awards performed by health workers, the sense of security in the service provided by health workers, and medical record-keeping. The assurance dimension is a guarantee from medical personnel. And it is one of the most important components in service. The Assurance dimension emphasises whether clients can believe in a health workers' ability to fulfil their hopes and desires (Al-Damen, 2017). If the customers are not satisfied, they have a low level of trust in the service provided by health workers. Low trust can occur due to several things. Patient satisfaction related to assured security is influenced by interactions with the staff. A quick response from the staff will increase the satisfaction of the customers (Alrubaiee and Alkaa'ida, 2011). Moreover, the communication factor is the strongest predictor of satisfaction in the assurance dimension (Kahn et al., 2015).

The absence of correlation between patient characteristics namely age, sex, the number of visits and the level of patient education with patient satisfaction could be caused by other factors. This is suggested in the number of respondents from the study visiting the Puskesmas less than twice a month, showing a high percentage (72.5 %). In the era of the implementation of the JKN system, commonly known as BPJS (the National Health Insurance), the people who wanted to go to a bigger hospital using a BPJS card must first get

a referral from the Puskesmas. The Puskesmas is a primary health care centre that functions as a gatekeeper or first contact for formal health services and referral references according to medical service standards in Indonesia (Iannuzzi et al., 2015).

This referral system is aimed at BPJS patients and organised to provide good quality health services so that the service goals are achieved without having to use expensive costs. The tiered referral system is one of the efforts made in strengthening primary services, as an effort to carry out quality and cost control. This referral is given to BPJS patients when the Puskesmas is unable to provide health services according to the patient's needs. This occurs due to limited facilities, services, and staff for the diagnoses of patients beyond 155 diagnoses who must be served at the Puskesmas. Increasing cooperation with health facilities is one of the quality control strategies and health service costs (Ratnasari, 2018).

Based on patient referral data, several JKN patients were also found to have referral letters by their sole request. The high number of patient referrals showed that the Puskesmas had not been able to perform its health services optimally as a gatekeeper for health services in the community. The function of the Puskesmas as a gatekeeper is to coordinate health services in the community and to maximize efficiency and improve service effectiveness. This has become one of the causes of the Patient Satisfaction value from the dimensions, namely reliability, responsiveness, and low assurance, because the common reason for patients visited the Puskesmas to get a referral to the Hospital regarding the inadequate health services provided by the Puskesmas (Zuhrawardi, 2007).

**Conclusion**

The results of this study concluded that there was no correlation between sex, age, education, and number of visits towards the reliability, responsiveness and assurance dimensions at Jatiwates Tembelang Health Center (Puskesmas). The results indicate that the performance of health services at the Puskesmas was considered to be insufficient by the community. It can be seen from the level of patient satisfaction in relation to the dimensions of reliability, responsiveness, and assurance that the potential quality of service has not been maximized. It is expected that by measuring the level of patient satisfaction, the Puskesmas can work to improve the quality of services to the community, especially in rural areas.

This research suggests that the Tembelang Jatiwates Health Centre (Puskesmas) work to improve the quality of their services by increasing the speed of response time for patient services and to improve effective communication. Further attention here will gain patient trust toward the services provided by health workers.

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