

Nursing Services Impact on Patient Satisfaction at Kedaton Healthcare Center in Bandar Lampung Indonesia

Novita Verayanti Manalu

Universitas Advent Indonesia, Indonesia

verayantimanalu@unai.edu

Abstract

Patient satisfaction is a quality measurement of service that is always expected, both at the hospital and at the health center. It is important to assess whether service standards and other factors have been met. One way to assess service quality is to use the RATER model, which has five aspects, namely responsiveness, assurance, tangibles, empathy, and reliability. The purpose of this study was to determine the relationship between nursing services and patient satisfaction at Kedaton Healthcare Center in Bandar Lampung. This study used an analytical survey method with a cross-sectional approach. The sampling technique used was purposive sampling with a total sample of 44 patients. The results showed that only 21.4 percent of patients assessed that nursing services were good, and 64.1 percent of patients stated that the service was not good. For the level of patient satisfaction, 51.3 percent of patients have moderate satisfaction, and 45.4 percent of patients have low satisfaction. The data analysis technique used the chi-square test, with a significance level of $p\text{-value} = 0.016$ ($\alpha = 0.05$) and OR 10.766. This means that there is a significant relationship between nursing services and the level of patient satisfaction at the Kedaton Public Health Center Bandar Lampung Indonesia, and good nursing services have a 10,766 times greater chance of getting higher patient satisfaction. Nursing service standards are needed to increase patient satisfaction.

Keywords: Nursing services, RATER, patient satisfaction, in-patient

INTRODUCTION

One way to maintain the high value of the Bed Occupancy Rate (BOR) is to improve the quality of service because this is directly felt by patients so that patients themselves feel satisfied with the services provided. One of the prime services is health services at the Public Health Center. Health services aim to address a person's health problems. The results of the research by the Indonesian Central Statistics Agency that the percentage of the population experiencing health complaints from 2018 to 2020 is still a figure that has almost no change, although there has been an increase both overall and specifically in Lampung Province, 30.66% (2018), 35.32 % (2019), and 31.35% (2020). Based on this situation, people need special attention for good quality health, so this number is decreasing. Patient satisfaction is a benchmark for assessing nursing services that show quality.

RATER Model

In assessing service quality, the author used a smaller version (RATER Model)) of the Service Quality Model or SERVQUAL (Mulder, 2018). The RATER model consists of five aspects: responsiveness, assurance, tangibles, empathy, and reliability. This framework is expected to be used to assess client satisfaction. In these aspects, services can be identified. Where the RATER is detailed as follows:

1. **Responsiveness** - This aspect refers to the ability and willingness of nurses to provide fast and quality services. The time needed to respond is very short, especially when the client requires a fairly critical treatment.
2. **Assurance** - This aspect emphasizes the responsibility that becomes trust. Able to generate confidence in the quality of service. Have high credibility while providing nursing services. This includes how nurses can respond to client concerns effectively and professionally.
3. **Tangible** - The form of tangible aspects is physical services such as facilities and equipment that show tangible evidence of an attractive physical environment. Some clients may not pay attention to this, but this has a huge impact on the service, even affecting the marketing system, which makes a decrease in visits indirectly.
4. **Empathy** - The aspect that the client wants to directly feel when he needs support for the problem at hand, where the client needs someone who wants to hear and understand his feelings. Based on this situation, nurses are expected to be able to provide support and be active listeners, with little or no interruption, willing to apologize, offer help, and find solutions to resolve it.
5. **Reliability** - Through the skills possessed, nurses are expected to be able to provide care that is fast, responsive, timely, and accurate. A slight possibility that might occur is when the nurse does not provide adequate care, or the client fails to understand the care provided. One of the keys to success is communication. If you do not determine the goals of treatment correctly, then the nurse may experience an imbalance.

Patient Satisfaction

Aspects that emphasize client satisfaction with services that are felt directly at the time of treatment, where the assessment given represents the value and sense of being perpendicular (Kotler, 2007). There are two things that affect patient satisfaction are:

1. *Factor influencing patient satisfaction.* The factors that influence patient satisfaction are divided into internal factors (age, gender, educational level, work, social, emotional factors, and culture) and external factors (Product characteristics, price, service, location, facilities, image, visual design, atmosphere, and communication).
2. *Patient satisfaction mechanism.* Customer (patient) satisfaction occurs when what is needed, desires or expectations can be fulfilled. These expectations can be fulfilled through the services

(health services) received by him. Therefore, patient satisfaction is the difference (gap) between the service received by the patient and the patient's expectations for the service (Supriyanto, 2010). Satisfaction is the difference between perception and expectation, meaning that there are two important elements in causing satisfaction to the patient, including patient/customer perception and patient/customer expectations. (Potter & Perry, 2005)

3. *Satisfaction Measurement.* According to Potter & Perry (2005), there are several techniques for measuring satisfaction, including the following: rating technique (direct measurement, simple ranking method, and pairing method). Patient satisfaction is the result of the gap between expectations and the reality of the service received. The two things are compared and then analyzed. Here are some methods of measuring gaps: satisfaction feeling (indirect and direct), satisfaction feeling (emotional feeling), satisfaction outcome (word of mouth).
4. *Satisfaction Index.* Satisfaction is measured using factors that affect customer satisfaction, namely product, service, and value.

METHODOLOGY

This study uses an analytical survey research type with a cross-sectional approach. The variables to be studied are nursing services as the independent variable and the level of satisfaction of in-patients as the dependent variable. Research with a cross-sectional approach

The research was conducted at the Kedaton Health Center, especially in the in-patient room. Researchers determined the population in this study using the average number of in-patients per month in the period 2020 in the in-patient room of Kedaton Health Center, which was 120 patients. Samples were obtained using a purposive sampling technique. Gay and Dhiel (Aritonang, 2005) stated that for a small population, at least 20% of the population is needed. Based on these calculations, the sample in this study amounted to 44 in-patients, with the following criteria: in-patients who are willing to be respondents, are conscious and able to communicate, who have undergone treatment for 72 hours, or patients who will go home after being declared cured by the health care worker, and who are in the treatment room which have been specified.

Data Collection

The primary data in this study were obtained from the results of filling out in-patient questionnaires. The researcher accompanied the respondent when filling out the questionnaire. Data from the results of filling out the questionnaire can provide an overview of the level of patient satisfaction which can be seen from the large difference between patient expectations and the reality of nursing services received by patients. Secondary data is also needed in this study. Secondary data was obtained from the Kedaton Public Health Center; data on the number of in-patients and treatment rooms. The data collection technique used a cross-sectional approach (Setia, 2016).

The questionnaire sheet in this study consisted of two types; a questionnaire sheet for nursing services and a questionnaire sheet for in-patients' expectations for nursing services (patient's satisfaction). The two questionnaires are interrelated so that later the results can be linked to the level of satisfaction. The measuring instrument for nursing services uses a patient perception questionnaire sheet containing 20 statements that have been validated, and this reliability test

yielded a Cronbach's alpha of $0.945 > 0.6$, then 20 questions were declared reliable. This questionnaire sheet uses a Likert Scale answer format for scoring nursing services, namely very poor is given a score of 1, poor is given a score of 3, good is given a score of 2, and very good is given a score of 4; and for scoring patients satisfaction used (1) very low, (2) low, (3) moderate, (4) high, and (5) very high.

RESULTS

Univariate Analysis

Univariate analysis was used to find the distribution of frequency and percentage of patients characteristics, patient perceptions of nursing services and patient expectations of nursing services, and the level of patient satisfaction in nursing services.

Table 1: Characteristics of Patients in Kedaton Health Center Lampung

| Characteristics | Frequency | Percentage |
|--------------------|-----------|------------|
| Age (Years) | | |
| 6 – 12 | 7 | 15.9 |
| 13 – 17 | 7 | 15.9 |
| 18 – 21 | 4 | 9.1 |
| 22 – 40 | 8 | 18.2 |
| 41 – 65 | 18 | 40.9 |
| Total | 44 | 100 |
| Gender | | |
| Male | 18 | 40.9 |
| Female | 26 | 59.1 |
| Total | 44 | 100 |
| Occupation | | |
| Housewife | 8 | 18.2 |
| Employee | 18 | 40.9 |
| Farmer | 4 | 9.1 |
| Unemployment | 14 | 31.8 |
| Total | 44 | 100 |
| Education | | |
| Elementary | 9 | 20.5 |
| Junior High School | 13 | 29.5 |
| Senior High School | 10 | 22.7 |
| College | 12 | 27.3 |
| Total | 44 | 100 |

Table 1 shows the proportion of patients' characteristics by age, and the highest number is the age group of 41 – 65 years with a total of 18 patients (40.9%). The female gender has the highest number of as many as 26 patients (59.1%). Based on the job status of the respondents, the highest number were respondents who worked as an employee with a total of 18 patients (40.9%). Meanwhile, based on the current education status or the latest education, the junior high school category has the highest number, which is 13 patients (29.5%).

Table 2: Distribution of Patients Characteristics Based on Length of Stay in Kedaton Health Center

| | Mean | SD | Minimum-maximum | 95% CI |
|----------------|------|------|-----------------|-------------|
| Length of stay | 3.96 | 0.92 | 0.91 | 3.83 – 4.13 |

Table 2 shows that the average patient who was the respondent in this study had been treated for four days. The length of stay was between 3 to 6 days. 95% believe that the average length of stay of respondents at the Kedaton Health Center Lampung is in the range of 3.83-4.13 days or average on four days.

Assessment of nursing services in this study was carried out by the patient. Patients can judge services because they act as recipients of services. Following is the result of nursing service research that refers to several aspects covering aspects of responsiveness, assurance, tangibles, empathy, and reliability.

Table 3: Distribution of Patients' Perceptions About Aspects of Nursing Services at Kedaton Health Center Lampung March – April 2021(n=44)

| Nursing Services | Frequency of Nursing Service | | | | | | | | Total | |
|------------------|------------------------------|------|------|------|------|------|-----------|---|-------|-----|
| | Very Poor | | Poor | | Good | | Very Good | | | |
| | f | % | f | % | f | % | f | % | f | % |
| Responsiveness | 9 | 20.5 | 27 | 61.4 | 8 | 18.2 | 0 | 0 | 44 | 100 |
| Assurance | 5 | 11.4 | 30 | 68.2 | 9 | 20.5 | 0 | 0 | 44 | 100 |
| Tangible | 5 | 11.4 | 32 | 72.7 | 7 | 15.9 | 0 | 0 | 44 | 100 |
| Empathy | 3 | 6.8 | 24 | 54.5 | 17 | 38.6 | 0 | 0 | 44 | 100 |
| Reliability | 10 | 22.7 | 28 | 63.6 | 6 | 13.6 | 0 | 0 | 44 | 100 |
| Average | 6.4 | 14.6 | 28.2 | 64.1 | 9.4 | 21.4 | 0 | 0 | 44 | 100 |

Table 3 above presents the distribution of nursing service data at the Kedaton Health Center in Lampung. The results of the study concluded that, on average, there were only 9 patients (21.4%) who rated the nursing service at the Kedaton Health Center as being in the good category, 28 patients rated poor (64.1%), and 6 patients (15%) rated very poor.

As we can see from the results of the nursing service on the responsiveness aspect, only 8 patients (18.2%) rated it in the good category while 27 patients (61.4%) rated it in the very poor category. A total of 9 patients (20.5%) assessed that nursing service in the assurance aspect was in the good category. However, as many as 30 patients (68.2%) rated poor. Nursing services in the tangible aspect were rated in the good category by 7 patients (15.9%). At the same time, the highest 32 patients (72.7%) rated poor. A total of 17 patients (38.6%) assessed that nursing service in the empathy aspect was in the good category; 24 patients (54.5%) rated poor. Nursing services on the aspect of reliability were rated in the good category by 6 patients (13.6%), 28 patients (63.6%) rated poor, and 10 patients (22.7%) rated very poor.

Table 4: Distribution of Patient Satisfaction Levels on Aspects of Nursing Services at Kedaton Health Center Lampung March – April 2021(n=44)

| | Frequency of Patient Satisfaction Level | | | | | | | | | | Total | |
|----------------|---|-----|-----|------|----------|------|------|---|-----------|---|-------|-----|
| | Very Low | | Low | | Moderate | | High | | Very High | | f | % |
| | f | % | f | % | f | % | f | % | f | % | | |
| Responsiveness | 0 | 0 | 25 | 56.8 | 19 | 43.2 | 0 | 0 | 0 | 0 | 44 | 100 |
| Assurance | 0 | 0 | 28 | 63.6 | 12 | 27.3 | 0 | 0 | 0 | 0 | 44 | 100 |
| Tangible | 0 | 0 | 20 | 45.5 | 24 | 54.5 | 0 | 0 | 0 | 0 | 44 | 100 |
| Empathy | 1 | 2.3 | 10 | 22.7 | 33 | 75 | 0 | 0 | 0 | 0 | 44 | 100 |
| Reliability | 2 | 4.5 | 17 | 38.6 | 25 | 56.8 | 0 | 0 | 0 | 0 | 44 | 100 |
| Average | 1.5 | 3.3 | 20 | 45.4 | 22.6 | 51.3 | 0 | 0 | 0 | 0 | 44 | 100 |

Based on Table 4, the level of patient satisfaction in nursing services was at a moderate level of satisfaction as many as 23 patients (51.3%) 20 patients (45.4%) were at a low level of satisfaction.

In the responsiveness aspect, only 19 patients (38.6%) were moderately satisfied, and the remaining 27 patients (61.4%) were at a low level of satisfaction. The level of satisfaction in the assurance aspect is at a moderate level of satisfaction as many as 12 patients (27.3%) and the remaining 28 patients (63.6%) are at a low level of satisfaction. The level of satisfaction in the tangible aspect is at a moderate level of satisfaction as many as 24 patients (54.5%), and as many as 20 patients (45.5%) are at a low level of satisfaction. In the empathy aspect, 33 patients (75.0%) have a moderate level of satisfaction, but there are 10 patients (22.7%) who have a low level of satisfaction and even very low satisfaction. The level of satisfaction in the reliability aspect is at a moderate level of satisfaction as many as 25 patients (56.8%), and as many as 17 patients (38.6%) are at a low level of satisfaction even those who have a very low level of satisfaction.

Bivariate Analysis

This research is an analytic study that analyzes the relationship between two variables. The analysis used the Chi-Square test. From the results of these statistical tests, it can be concluded that the relationship between the two variables is significant or not by comparing the p-value with the value of $\alpha = 0.05$.

Table 5: The relationship between Patient Satisfaction and Aspects of Nursing Services at Kedaton Health Center Lampung March – April 2021(n=44)

| Nursing Services | Patient Satisfaction Level | | | | | | Total | | p-Value | OR |
|------------------|----------------------------|------|-----|------|----------|------|-------|------|---------|--------|
| | Very Low | | Low | | Moderate | | | | | |
| Good | 0 | 0 | 3 | 30 | 7 | 70 | 10 | 21.4 | 0,016 | 10.766 |
| Poor | 1 | 3.6 | 14 | 50 | 13 | 46.4 | 28 | 64.5 | | |
| Very Poor | 1 | 16.7 | 3 | 50 | 2 | 33.3 | 6 | 14.6 | | |
| Total | 2 | 3.3 | 20 | 45.4 | 22 | 51.3 | 44 | 100 | | |

Table 5 shows the relationship of nursing services with the level of satisfaction of in-patients at the Kedaton Health Center, with statistical test results $p\text{-value} = 0.016$. H_a failed to be rejected ($p\text{-value}$), so it can be concluded that there is a significant relationship between nursing services and the level of satisfaction of in-patients at the Kedaton Health Center Lampung. The Odds Ratio value in the statistical test results is 10,766, so it can be concluded that good nursing services have 10,766 times more chances to achieve a high level of patient satisfaction compared to poor nursing services.

DISCUSSION

Characteristics of patients in this study include age, gender, education level, and occupation (Karaca et al., 2019). Based on the data obtained, older adults (42 - 65 years) were treated more often because they experienced a natural decline in health, coupled with other factors (Xue, 2011). At the same time, the sex ratio of more women is possible because women are physically weaker. These results are in line with a study from Austria, which also found a high score for women in gender. Women and younger adults significantly felt more anxiety and multitasking. (Christoph et al., 2020). This is also in line with Verbrugge (1985). The research author has reviewed annual data for 1957-81 from the National Health Interview Survey. The indications of faster health decrements for women appear: Injury rates have risen, respiratory conditions of women have had more bed days, Chronic possibly increased faster for women ages 45-64, and total disability days rose slightly faster for women than men. Characteristics that affect health are seen more for respondents who work as employees (40.9%). Another researcher showed a large number of persons (approximately 18,4% or 26,7 M) employed in occupations with frequent exposure to infection. This requires health education to prevent and protect its employees, as well as the communities it serves. This requires health education to prevent and protect its employees, as well as the communities it serves (Baker, 2020). Perceptions are influenced by educational background, and most of these respondents who have reached college and high school seniors can still share the same perception, except for those who still and or only reached elementary (Mulia et al., 2017). And the length of stay is considered enough time to assess satisfaction when treated for three days or more (Baek, 2018).

The results of the study showed that overall RATER; responsiveness, assurance, tangible, and reliable service quality dimensions of the nursing service at the Kedaton Health Center Lampung were marked in the poor category (64,1% or $2 <$ on a scale of 4). This assessment is possible because the characteristics and level of service are still very basic, which patients are very aware of. Almost the average nursing service is under-perceived, except in the assurance dimension. The patient thought that they could be referred to the hospital so that they would have better service, but they did not know that their illness could be treated at the health center. This is in line with Tutuk et al. (2020) that the results showed less quality service in the health center. This is assessed because accreditation and not done in a balanced way. The highest service quality dimension in a positive value was on the empathy dimension of 38.6% is enough to show the care of nurses and the health team to patients. Good perception is the result of interpretation of the stimuli it receives and is an integrated activity within the individual. (Tyng, 2017).

The level of patient satisfaction in Kedaton health care was found in the moderate (51.3%, or 3 on a scale of 5) respondents who felt moderately satisfied with the nursing services dimensions

of responsiveness, assurance, tangible, and reliability. But there was one dimension that showed patient satisfaction is the empathy dimension. The findings of Karaca (2019) showed 63,9% less satisfied with the information given and more satisfied with the concern and caring by nurses. This is possible because the level of handling of the nursing process is not much on procedural actions, only general care and drug administration, and the empathy that nurses have is already imbued with the profession.

The relationship between nursing service and patient satisfaction shows an attachment where this activity is the main focus to improve in order to maintain the quality of service. Good service not only can increase patient satisfaction but can improve the nursing profession in front of other professions and increase the value of the health center itself, so improvements need to be made. (Febri, 2019; Sari, 2018; Tati, 2021).

CONCLUSION

Patient satisfaction was affected by all dimensions of health service quality (RATER) that consist of responsiveness, assurance, tangibles, empathy, and reliability. There are many things that must be improved to achieve good quality nursing services. This is very important to maintain the quality of service, which has an impact on the continuity of the health care itself.

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