



Comparison Analysis of Patient's Satisfaction Towards Dental Treatment by Dental Co-Ass Students and Dentist Practitioner on RSGMP Jenderal Soedirman University

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Abstract User satisfaction in a health system is defined as the way the person perceived the service and its judgements about the care received. In Indonesia, health provider who could give dental treatments are Dentist, Dental Specialist, and Dental Co-ass Students under the supervision of Dentist in Charge of Service (DPJP) and under applicable laws and regulations. The objective of this research was to analyze whether there was a significant difference between patient's satisfaction towards dental and oral treatment by dental co-ass students and dentist practitioner on RSGMP Jenderal Soedirman University, and measured using the Patient Satisfaction Questionnaire-18 (PSQ-18) that was modified according to field condition. Hypothesis of this research was there was a significant difference between patient satisfaction who received dental and oral treatment by co-ass students and dentist practitioner on RSGMP Jenderal Soedirman University. Result show that patient received treatment from general dentist showed higher level of satisfaction compared to patient received treatment from dental co-ass. The management of RSGMP Universitas Jenderal Soedirman as a service provider needs to evaluate aspects which are still lacking in order to improve the quality of health services. Further research is needed to compare between patient satisfaction at RSGMP Universitas Jenderal Soedirman and patient satisfaction at other hospitals.

Keywords: treatment, dentist, co-ass, patient, satisfaction.

1. INTRODUCTION

Health, in the perception from ancient Greece, is a balance between a person and the environment, the unity of soul and body, and the natural origin of disease. Within the last few decades, WHO defines health as a state of complete physical, mental, and social well-being, and not merely the absence of disease infirmity, which by this definition implicates that all of our physical body parts play the same role in an individual's health and wellbeing, including our dental and oral health (Sartorius, 2006 and Svalastog et al., 2017). In Indonesia, dental and oral health problems are ranked in the top ten diseases, this shows that dental and oral health problems in Indonesian community environment requires more attention from health care provider.

Healthcare service is an intangible product and cannot physically be touched, felt, viewed, counted or measured like manufactured goods. Producing tangible goods allows quantitative measures, since they can be sampled and tested for quality throughout the production process and in later use. However, healthcare service quality, because of its intangibility, depends on service process, customer and service provider interactions. Some healthcare service quality dimensions,

such as consistency, completeness and effectiveness are hard to measure beyond the customer's subjective assessment (Mosadeghrad, 2010).

User satisfaction in a health system is defined as the way the person perceived the service and its judgements about the care received. It is multidimensional concept that evaluates patient-professional interactions, the physical environment, and internal management processes. Patient satisfaction is one of the best quality indicators, and at the dental level, it has been reported that the more satisfied patients are with their dental treatments, the more likely they are to comply with professional recommendations and return for future care (Marin and Solo, 2022).

At the university level, dental school clinics play a prominent role in promoting oral health care. They try to achieve a balance between satisfying the needs of the patient and those of the students, always bearing in mind that patients and their satisfaction are fundamental to students education (Marin and Solo, 2022).

Several instruments are used to measure the satisfaction of users when receiving dental treatments, one of the most used is the "Patient Satisfaction Questionnaire" (PSQ). This questionnaire was developed Marshall and Hays and has been widely modified to its newest version with 18 questionnaires, the PSQ-18. PSQ-18 consists of seven dimensions: general satisfaction, technical quality, interpersonal manner, communication, financial aspects, time spent with doctor, and accessibility-convenience (Marin and Solo, 2022).

2. LITERATURE REVIEW

2.1. Health Care

Oral and dental health is one of the indicators of overall human health and an individual's quality. According to the 2018 dental and oral health research (Riskesdas), 57.6% of the population faces dental and oral health issues, with only 10.2% of medical professionals available. One of the efforts to address various dental and oral health problems is through the provision of dental and oral health services. Providing dental and oral health services is an essential first step in delivering basic, quick, and accurate health care related to oral and dental health, aiming to resolve public health issues.

Health services in general must meet several essential requirements, as follows:

2.1.1. Available and Continuous

The service must be available in the community (available) and continuous (continuous), meaning that all types of health services needed by the community should be easy to find, and their availability in the community must be present whenever needed.

2.1.2. Accessible

The term "accessible" here refers primarily to location. In order to achieve good health services, the distribution of health facilities must be properly managed. Health services that are overly concentrated in urban areas and absent in rural areas are not considered good health services.

2.1.3. Affordable

The concept of affordability here refers mainly to cost. To achieve this, the cost of health services must be aligned with the economic capabilities of the community.

2.1.4. Quality

Quality here refers to the level of excellence in the health services provided, which, on the one hand, should satisfy the users of the service, and on the other hand, the service delivery should comply with ethical codes and established standards.

2.2. Service Quality

Service quality is an indicator of the quality or standard of the services provided. Total quality management can be achieved if there is continuous development and improvement of the quality of services offered, until consumers can experience the benefits of the service. Companies must be able to design service quality, through five dimensions of service that are superior to competitors, in order to anticipate and ensure the company can compete and provide maximum service.

According to Kotler (2012), service quality refers to the overall characteristics and attributes of a product or service that influence its ability to satisfy both stated and implied needs. Therefore, health service quality refers to the level of excellence in healthcare services that generates satisfaction for each patient. The five dimensions of service are tangibility, reliability, responsiveness, assurance, and empathy. These five dimensions are often known as service quality.

2.3. Patient Satisfaction

A patient is a person who is treated by a doctor and other healthcare professionals at a practice site (Yuwono, 2003). Satisfaction, on the other hand, is a person's feeling of pleasure that arises from the comparison between their enjoyment of an activity and a product with their expectations (Nursalam, 2011). Kotler in Nursalam (2011) states that satisfaction is the feeling of pleasure or disappointment that arises after comparing one's perceptions or impressions of the performance or results of a product with their expectations. Westbrook & Reilly in Tjiptono (2007) argue that customer satisfaction is an emotional response to experiences related to a specific product or service, retail outlets, or even behavior patterns (such as shopping behavior and buyer behavior), as well as the market as a whole. According to Yamit (2002), customer satisfaction is the outcome perceived from the use of products and services, which meets or exceeds the desired expectations. Meanwhile, Pohan (2007) mentions that patient satisfaction is the level of feeling experienced by a patient as a result of the healthcare service they receive, after comparing it to what they expected. Another view from Endang in Mamik (2010) states that patient satisfaction is an evaluation or assessment after using a service, where the chosen service at least meets or exceeds expectations.

Based on the explanations from several experts above, it can be concluded that patient satisfaction is the result of an evaluation in the form of an emotional response (feeling of pleasure and satisfaction) from the patient due to the fulfillment of expectations or desires in using and receiving nursing services. Patient satisfaction is typically measured by comparing the difference between a patient's expectations and the actual service received. Although different models might express this concept differently, a common way to represent patient satisfaction is: $\text{Patient Satisfaction} = \text{Perceived Service} - \text{Expected Service}$, and if the perceived service exceeds the expected service, the patient is satisfied. If the perceived service is less than or equal to expected service, dissatisfaction may occur.

2.3.1. Perceived Service

Perceived Service refers to the patient's perception of the actual quality of care and services they received.

2.3.2. Expected Service

Expected Service refers to the patient's expectations or standards of care before receiving the service.

3. METHODS

The type of research used in this study is quantitative research with a post-test only with no control group design. The research will be conducted at the RSGMP Universitas Jenderal Soedirman over a period of 3 months, from February 2024 to April 2024. The sample used in this study will consist of patients of dental co-assistants and general dentists. Modified Patient Satisfaction Questionnaire-18 (PSQ-18) is a valid and reliable measure of patient satisfaction.

After determining the population size for each research subject, the next step is to calculate the sample size using the Lemeshow formula to calculate the sample size from two different populations (Lameshow and Lwanga, 1991). The total sample size after being calculated using the Lemeshow formula is 80 samples. Then, the sample size is multiplied by the proportion value of dental doctors and dental co-assistants to determine the sample size for each population. The total sample size and population for this study can be seen in Table 1.

Table 1. Total Sample

Patient	Population	Proportion	Sample
Co-ass	188	37%	30
General Dentist	318	63%	50
Total	506	100%	80

(Personal data, 2024)

The research data is then collected, processed, and subsequently analyzed. Univariate analysis is conducted to examine the frequency distribution of respondents based on age and gender, as well as the distribution of patient satisfaction levels. Bivariate analysis is used to compare the satisfaction levels of respondents who received treatment from dental co-assistants and general dentists at the RSGMP Universitas Jenderal Soedirman, using the Mann-Whitney test.

RESULT

The research titled "Comparison Analysis of Patient's Satisfaction Towards Dental Treatment by Dental Co-Ass Students and Dentist Practitioners at RSGMP Jenderal Soedirman University" was conducted from February to April 2024. This study involved 80 respondents, with the majority being male. In terms of age, the largest group of respondents was from the 36-45 year age range.

Table 2. Distribution of patient satisfaction treated by general dentist

Level of Satisfaction	Frequent (n)	Percentage (%)
Dissatisfied	0	0%
Satisfied	20	40%
Very Satisfied	30	60%
Total	50	100%

(Personal data, 2024)

It is known that the majority of the satisfaction levels of respondents who received dental treatment from dentists fall into the "very satisfied" category, with 30 respondents (60%). Meanwhile, there were no respondents who rated their satisfaction as "dissatisfied."

Table 3. Distribution of patient satisfaction treated by dental co-ass

Level of Satisfaction	Frequent (n)	Percentage (%)
Dissatisfied	5	16%
Satisfied	18	60%
Very Satisfied	7	24%
Total	30	100%

(Personal data, 2024)

It is known that the majority of respondents who received dental treatment from dental co-assistants rated their satisfaction in the "satisfied" category, with 18 respondents (36%). This was followed by the "very satisfied" category with 7 respondents (24%). Meanwhile, 5 respondents (16%) rated their satisfaction as "dissatisfied."

Table 4. Analysis of the comparison of patient satisfaction levels between dentists and co-assistants using the Mann-Whitney test

Group	Mean Rank	P Value
Dentist	62,52	0,000
Dental Co-ass	38,48	

(Personal data, 2024)

Based on Table 4, the results of the Mann-Whitney test analysis for the respondent groups receiving dental treatment from dentists and dental co-assistants show a significance value of $0.000 < 0.005$, which indicates that H_0 is rejected. This means there is a difference in satisfaction levels between patients receiving dental treatment from dentists and dental co-assistants. The mean rank for the dentist group is higher than that of the dental co-assistant group, indicating that the

4. DISCUSSION

The average value for professional behavior aspect is categorized as good with the highest average value is on general dentist patient and the lowest average on dental co-ass patient. This shows that the majority of respondents were quite satisfied with the professional behavior aspect from doctors and nurses at RSGMP Universitas Jenderal Soedirman. Dental co-ass patients have different procedures and requirements to receive health services, meanwhile general patients pay their own way to get the services. These differences tend to make dental co-ass patients feel lower than general patients. Research at Muhammadiyah Medan Hospital also shows that some patients with health insurance (like BPJS) have a lower satisfaction compared to general patients. This can be caused by ineffective and inefficient services such as convoluted systems, no clear funding limits, delays in doctor and nurse services, limited medicines and infrastructure, and health workers who pay little attention to patient and family complaints (Odi dkk, 2019).

Competent health workers will always be able to provide quality services that can be experienced clearly by patients without any discrimination of services. Professional behavior is an important aspect that has a positive effect on patient satisfaction. Dentists who have a good competence will have good professionalism, self-awareness and self-development, as well as good and effective communication in dealing with patients so that they are able to provide the best treatment for patients (Chabibah, 2018). Patient tend to feel very satisfied with the reliability and skill of health workers in handling patient's explanation of their sickness. Patient considers the health workers are they who able to provide health services accurately, right on time, and without making mistakes so that patients can trust the abilities and responsibilities of health workers. The attitude given by dentists in dealing with patients and complaints is important in order to make patients feel the competence and capability of dentists to fully handle their health problems. This is what makes patient feel very satisfied with the professional behavior given by the dentists to deal with the dental and oral health problems from patient (Arighi dkk, 2023).

The majority of respondents have a level of satisfaction in the satisfied category, inseparable from the good service provided by the co-ass students without discriminating between patient status (Sholehah and Hikmawati, 2020). Satisfaction is based on the performance process of health workers from the procedures, the friendly attitude of co-ass students shows good empathy and will give a remarkable meaning for the service. Most of the patients were quite satisfied with the services provided by co-ass students due to the reputation of the hospital which was considered

by patients to be capable of handling & treating their dental and oral problems (Kusumastiti dkk, 2022). Patients with high levels of satisfaction tend to have better health condition thanks to these services. Patient satisfaction is a feeling of pleasure or disappointment that is generated by comparing the services provided by the hospital should be at least according to or exceeding patient expectations. If the service provided meets the expectations, patient will feel satisfied while dissatisfaction arises if the results of health services do not meet the patient's expectations. Good service quality is especially important in order to improve service quality and patient satisfaction. Therefore, every health service unit must provide the best and fair service for all patients (Sofiana dkk, 2020).

5. CONCLUSION

Based on the results of analysis using the PSQ-18, it is found that patient satisfaction at RSGMP Universitas Jenderal Soedirman is relatively good. The management of RSGMP Universitas Jenderal Soedirman as a service provider needs to evaluate aspects which are still lacking in order to improve the quality of health services. Further research is needed to compare between patient satisfaction at RSGMP Universitas Jenderal Soedirman and patient satisfaction at other hospitals.

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