The Relationship Between Patient Satisfaction in Independent Dental Practices and the Rate of Repeat Visits in Cikoko Pancoran

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ABSTRACT

The level of patient satisfaction can influence revisit behavior, which in turn is related to the sustainability of practice and the improvement of healthcare service quality. This study aims to determine the relationship between patient satisfaction and revisit rates in private dental practices and to analyze healthcare service quality based on the five dimensions of healthcare service quality in private dental practices. This research employs a cross-sectional design. The sample was selected using convenience sampling. The research method used is a mixed method with an explanatory sequential design. The quantitative approach was conducted first to measure the level of patient satisfaction and the number of patient visits, followed by a qualitative approach to explain the quantitative findings, particularly the factors influencing patient satisfaction. The analysis was performed using the chi-square test to examine the relationship between patient satisfaction and revisit rates. The study found a significant link between patient satisfaction and revisit rates ($p < 0.05$). Highly satisfied patients were more likely to return. Thus, patient satisfaction is key to increasing revisit rates and improving service quality and patient loyalty in private dental practices.

Keywords: Patient satisfaction, revisit rate, dental practice, service quality, patient loyalty

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INTRODUCTION

The 2018 Indonesian Health Survey (SKI) reported that 57.6% of the population experienced dental and oral health problems. However, only 10.2% of those affected received treatment from dental health professionals [1]. By 2023, these figures had slightly changed: the proportion of people with dental and oral problems decreased to 56.9%, while those receiving dental health care increased to 11.2%. Among them, the majority (81.4%) received treatment from dentists, 4.5% from dental therapists, and the rest from general practitioners or other health personnel [2]. These data indicate that although access to dental care services has improved, their utilization by the public remains suboptimal.

Several quality indicators in dental practice can be measured through patient satisfaction, the availability of facilities and infrastructure, dentist competence, administrative systems, post-treatment complaint rates, and visit frequency. Currently, there are limited studies that specifically examine the relationship between patient satisfaction and repeat visits in private dental practices. Therefore, the researcher intends to conduct a study entitled:

"The Relationship Between Patient Satisfaction in Independent Dental Practices and the Rate of Repeat Visits in Cikoko Pancoran."

The Indonesian Ministry of Health Regulation No. 30 of 2022 establishes the National Quality Indicators (INM) for healthcare services, including independent dental practices, which consist of [3]: patient satisfaction, compliance with hand hygiene facility standards, and reduction in patients' Oral Hygiene Index Simplified (OHIS) scores.

The National Quality Indicators of Health Services, known as Quality Indicators, serve as benchmarks to assess the achievement level of service quality targets in independent medical and dental practices, clinics, community health centers, hospitals, health laboratories, and blood transfusion units [3]. The goal of measuring quality indicators is to evaluate whether efforts made have genuinely improved service quality continuously, provided feedback, maintained public transparency, and served as a benchmark for identifying best practices. Patient satisfaction is one of the key indicators of healthcare quality. Satisfaction is defined as the level of pleasure or disappointment a person feels after comparing their expectations of a service with the actual experience received. In the healthcare context, patient satisfaction is not only related to medical outcomes but also includes communication, healthcare providers' attitudes, comfort, and service affordability [4]. According to Avedis Donabedian, a prominent figure in healthcare quality evaluation, the quality of health services can be analyzed through three dimensions [5]:

- Structure, which refers to the foundation supporting good service delivery, such as the quality of physical facilities, cleanliness of the practice area, completeness of equipment, and the competence of health professionals;

- Process, which refers to the way care is provided, including communication, courtesy, and accuracy of medical actions; and

- Outcome, which is the final result of healthcare delivery, including health improvement, satisfaction, positive experience, and willingness to return for future care.

According to Donabedian, patient satisfaction is classified as an outcome that reflects service quality from the user's perspective. Satisfied patients tend to comply with treatment, return for follow-up visits, and recommend the service to others [6]. Service quality dimensions affecting patient satisfaction are further elaborated through the SERVQUAL Model, which consists of five key dimensions: Tangibles (Physical Evidence), Reliability, Responsiveness, Assurance, and Empathy [7].

Previous studies have shown that patient satisfaction with service quality plays an important role in influencing patients' willingness to return for follow-up care. Aryono et al found that patients who rated the quality of dental and oral clinic services as good were more likely to revisit for future treatment [4]. This indicates that patient satisfaction not only reflects their immediate service experience but also affects patient loyalty and visit frequency to healthcare facilities [8].

Therefore, it is essential to analyze healthcare service quality based on the five dimensions of service excellence, determine the level of patient satisfaction toward healthcare quality, and identify the relationship between patient satisfaction and repeat visit rates in independent dental practices.

METHOD

This study employed a quantitative method with a cross-sectional design aimed at analyzing the relationship between patient satisfaction levels and repeat visit rates using the Chi-square test [9]. The sample was selected using convenience sampling, involving patients who visited the dentist during the study period, allowing for practical and efficient data collection.

The study population consisted of all patients who visited the Independent Dental Practice of Drg. Nanda Bella Hayana. The primary data were collected using accidental sampling, a technique in which samples are chosen from individuals who happen to be available to the researcher and meet the inclusion criteria, along with data from patients' medical records.

Inclusion criteria included: all competent patients (adults or those legally recognized as adults, e.g., married individuals), fully conscious, able to communicate properly, not experiencing developmental delay (mental retardation) or mental illness, having received dental services at least twice at Drg. Nanda Bella Hayana's practice, willing to participate as respondents, having signed informed consent, and completed the questionnaire.

Exclusion criteria included: patients who were not competent to complete the questionnaire or were not accompanied by a family member. Secondary data were obtained from dental practice medical records, patient visit frequency, or patient self-reports.

Data processing was performed using computer-based software. Multivariate analysis was conducted because there were potential confounding variables (such as age, gender, education level, employment status, and number of visits). This multivariate approach was used to assess the influence of multiple service quality factors on patient satisfaction and repeat visit intention simultaneously. The multivariate approach allows the researcher to evaluate the contribution of each variable and identify interactions among them, leading to more accurate results that can be used as a basis for service quality improvement [10].

The measurement of patient satisfaction in this study applied the SERVQUAL (Service Quality) model [7], which evaluates service quality based on the gap between patients' expectations of ideal service and their perceptions of the actual service received. GAP analysis was performed to determine the extent to which the service provided met patient expectations. The results showed patient satisfaction levels across each service dimension. A positive GAP value indicated that the service exceeded patient expectations (very satisfactory),

zero GAP indicated that the service met expectations (satisfactory), and a negative GAP indicated that the service did not meet expectations (less satisfactory).

RESULTS AND DISCUSSIONS

Table 1. Frequency of Patients by Gender *Independent Dental Practice of Drg. Nanda Bella Hayana*

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	74	45.1	45.1	45.1
Female	90	54.9	54.1	100.0
Total	164	100.0	100.0	

The data from the Independent Dental Practice of Drg. Nanda Bella Hayana (Table 1) show that out of 164 patients, 90 (54.9%) were female.

Table 2. Frequency of Patients by Number of Visits *Independent Dental Practice of Drg. Nanda Bella Hayana*

Number	Frequency	Percent	Valid Percent	Cumulative Percent
1	121	73.8	73.8	73.8
2	22	13.4	13.4	87.2
3	8	4.9	4.9	92.1
4	8	4.9	4.9	97.0
5	4	2.4	2.4	99.4
6	1	0.6	0.6	100.0
Total	164	100.0	100.0	

The data in Table 2 show that most patients (73.8% or 121 individuals) made only one visit. This indicates that the repeat visit rate among patients was relatively low, as the majority came only once, and very few returned more than twice. Possibly due to patient dissatisfaction with the services provided at the clinic.

Table 4. Average Patient Satisfaction Score by Dimension Using the SERVQUAL Approach

Service Quality Dimension (SERVQUAL)	Indicator	Expectation Score (E)	Perception Score (P)	GAP (P-E)	Interpretation
Tangibles (Physical Evidence)	Waiting room condition, cleanliness of equipment, staff appearance	4.50	4.00	-0.50	Less satisfactory
Reliability	Accuracy of schedule, precision of examination results, service consistency	4.75	4.25	-0.50	Less satisfactory
Responsiveness	Speed of service, readiness to answer questions, ease of obtaining help	4.60	4.00	-0.60	Less satisfactory
Assurance	Dentist competence, patient safety, staff friendliness	4.80	4.60	-0.20	Nearly satisfactory
Empathy	Attention to patients, willingness to listen to complaints, comfort in communication	4.70	4.30	-0.40	Less satisfactory

Data from dental patients of Drg. Nanda Bella Hayana who filled out the questionnaire showed that patients' expectations were higher than the actual experience. Based on the gap analysis between expectation scores and perception scores across the five dimensions of service quality, it was found that all dimensions had negative gap values. This indicates that the service provided is still below patients' expectations.

The Tangibles (physical evidence) dimension had a gap of -0.50, meaning the facilities and infrastructure are not yet fully adequate. The Reliability dimension also showed a gap of -0.50, indicating that services were not entirely consistent or in line with promises made. The Responsiveness dimension had the largest gap of -0.60, suggesting that patients perceived health workers as not being quick enough to respond their needs or complaints. Meanwhile, the Empathy dimension showed a gap of -0.40, indicating that attention and care given to patients were not yet optimal.

From the patient satisfaction table, the results show that all service quality dimensions have negative gap values, meaning that the services provided did not yet meet patients' expectations. This finding aligns with Parasuraman's service quality theory, which states that patient satisfaction is achieved when perception meets or exceeds expectation.

The dimension with the largest gap was Responsiveness (-0.60), indicating that the speed and responsiveness of staff in providing services still need improvement. Possible influencing factors include a limited number of health workers, heavy workload, or an inefficient service system.

The dimension with the smallest gap was Assurance (-0.20), meaning that although there was still a difference, patients were relatively satisfied with staff competence, friendliness, and the sense of safety during service. This is an important finding, as patient trust is a key factor in maintaining a successful healthcare relationship.

The relatively large gaps in Tangibles (-0.50) and Reliability (-0.50) show the need for improvements in physical facilities and greater consistency in delivering services according to established standards. The Empathy (-0.40) dimension also deserves attention, as the care and concern of staff greatly contribute to patient loyalty.

Overall, this study emphasizes that efforts to improve service quality should focus on the dimensions of Responsiveness, Tangibles, and Reliability, while maintaining the Assurance aspect, which is already relatively good.

CONCLUSION

The results of this study show that the rate of patient revisit is relatively low, indicating that service quality needs to be improved in order to encourage patient loyalty and repeat visits. It is expected that this private dental practice can implement improvements to meet patient expectations and enhance the quality of healthcare services, paying more attention to the SERVQUAL dimensions as key indicators for evaluating healthcare service quality. This study revealed that all dimensions of healthcare service quality have negative gap values, meaning that patients' expectations are higher than their perceived experiences. The dimension with the largest gap is Responsiveness, which indicates that the responsiveness of healthcare staff in providing services is still unsatisfactory. The Tangibles and Reliability dimensions also show patient dissatisfaction

related to physical facilities and service consistency. The Empathy dimension highlights the need to improve staff attentiveness and care toward patients.

Healthcare services are expected to focus on improving quality in aspects that still show significant gaps—particularly Responsiveness, Tangibles, Reliability, and Empathy—so that patients feel served more promptly, receive adequate facilities, and experience consistent service quality.

Maintaining excellence in the Assurance dimension is also crucial, as patients' trust and confidence in healthcare providers are key factors in building satisfaction and loyalty.

By improving the overall quality of services, it is expected that patient revisit rates will increase, patient satisfaction will be maintained, and the quality of healthcare services will continue to develop sustainably.

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