

Patient Satisfaction with Dental and Oral Health Services in Independent Dental Practices in Medan City in 2025

Emerentia Angela¹, Susanna Halim^{2*}, Alamsyah³

¹ Faculty of Dentistry, University of North Sumatra, Indonesia.

² Aesthetic and Dental Implant Department, Faculty of Medicine, Dentistry and Health Sciences, University of Prima Indonesia.

³ Open College Executive MBA with Collaboration Open College ASIA, UK and Portman College Malaysia.

Received: December 28, 2024

Revised: February 20, 2025

Accepted: April 25, 2025

Published: April 30, 2025

Corresponding Author:

Susanna Halim

susannahalim@unprimdn.ac.id

DOI: [10.29303/jppipa.v11i4.10925](https://doi.org/10.29303/jppipa.v11i4.10925)

© 2025 The Authors. This open access article is distributed under a (CC-BY License)



Abstract: Patient satisfaction is a crucial indicator of healthcare service quality, particularly in dental and oral health services. This study aims to analyze the factors influencing patient satisfaction in an independent dental practice in Medan. A quantitative, descriptive-analytic approach was used, involving 50 patients who completed a structured questionnaire assessing various service dimensions, including timeliness, dentist competence, communication, and facility conditions. The findings indicate that dentist expertise had the highest impact on satisfaction, followed by responsiveness and communication. Statistical analysis revealed a significant correlation between service quality and patient satisfaction, with the strongest association found in professional expertise. Based on these results, recommendations include implementing a digital appointment system to optimize patient flow, providing continuous training for dentists on technical skills and patient interaction, and upgrading clinic facilities to improve patient comfort. Regular satisfaction surveys are also suggested for ongoing service evaluation and improvement. This study contributes by providing recent data in the post-pandemic dental care context in Medan.

Keywords: Dental care; Dentist expertise; Patient experience; Patient satisfaction; Service quality

Introduction

The healthcare sector plays a crucial role in enhancing and maintaining the quality of life in society (Widya et al., 2021). Among the various aspects of healthcare, dental services hold a significant place in ensuring overall well-being (Abdullah, 2018). Oral health is not only essential for physical health but also contributes to psychological and social confidence. A healthy mouth is integral to overall health, as untreated dental issues can lead to complications such as infections, chronic pain, and systemic diseases (National Institute of Dental and Craniofacial Research, 2021). Within this context, patient satisfaction has become a vital parameter in evaluating the quality of dental care services. Patient satisfaction reflects how well

expectations are met and serves as an essential benchmark for healthcare providers in continuously improving service delivery (Ferreira et al., 2023). High satisfaction rates not only enhance patient experience but also contribute to better oral health outcomes by encouraging individuals to seek timely and regular dental care.

In dentistry, patient satisfaction is influenced by several key factors, including waiting time, communication between the dentist and the patient, quality of treatment, clinic environment, and overall patient experience (Szabó et al., 2023). Research has shown that a positive interaction between the dentist and the patient can enhance trust and compliance, ultimately leading to better treatment outcomes (Anang et al., 2020; Szabó et al., 2023). Trust in a dental

How to Cite:

Angela, E., Halim, S., & Alamsyah. (2025). Patient Satisfaction with Dental and Oral Health Services in Independent Dental Practices in Medan City in 2025. *Jurnal Penelitian Pendidikan IPA*, 11(4), 834-838. <https://doi.org/10.29303/jppipa.v11i4.10925>

professional is particularly significant, as dental procedures often induce anxiety in patients (Theresia et al., 2024). When dentists exhibit empathy, transparency, and effective communication, they help alleviate patient fears and enhance treatment adherence. Conversely, factors such as prolonged waiting times, lack of clear communication, and discomfort in the clinical setting may lead to dissatisfaction and negatively affect the perception of dental care services (Tang, 2013). A negative experience can discourage patients from seeking future dental care, leading to untreated dental conditions that may exacerbate over time.

Despite advancements in dental technology and healthcare management, many dental facilities still face challenges in meeting patient expectations. Some of these challenges include a shortage of skilled professionals, inefficient appointment scheduling, and limited patient education regarding oral health. Additionally, the level of empathy and responsiveness demonstrated by dental practitioners plays a crucial role in shaping patient perceptions of care quality. A dentist's ability to provide personalized care, explain procedures, and address patient concerns significantly impacts overall satisfaction levels. Addressing these issues is essential to enhance the overall patient experience and improve dental healthcare services (Ferreira et al., 2023; J. C. Y. Ho et al., 2025). The integration of digital solutions, such as electronic appointment systems and tele-dentistry, has the potential to improve service efficiency and patient satisfaction (Németh et al., 2023).

Furthermore, patient satisfaction is directly linked to patient loyalty and the reputation of dental facilities. Patients who have positive experiences are more likely to return for future treatments and recommend the services to others. This word-of-mouth recommendation can significantly impact the growth and success of a dental practice. Retaining satisfied patients is cost-effective for dental practices, as acquiring new patients often requires substantial marketing and promotional efforts. Moreover, a strong reputation built on positive patient experiences can attract a broader clientele and enhance community trust in dental services (J. Ho et al., 2024). Therefore, understanding the determinants of patient satisfaction is crucial for healthcare providers seeking to enhance service quality and build long-term patient relationships.

Additionally, patient education and awareness campaigns can play a pivotal role in increasing satisfaction. Many patients have misconceptions about dental treatments, pain levels, and expected outcomes. By improving patient knowledge through informative consultations, brochures, and digital resources, dental practitioners can help set realistic expectations and

reduce anxiety. Ensuring patients are well-informed fosters a sense of empowerment and involvement in their own oral health, contributing to greater satisfaction and adherence to recommended treatments (Mills et al., 2023).

A few study have investigated patients' satisfaction in dental and healthcare services settings. Maramis et al. (2023) have found that there is a significant effect of reliability and assurance dimensions with patients' satisfaction, meanwhile tangibles, responsiveness, and empathy dimensions have no significant effect with patients' satisfaction (Maramis et al., 2023). Another study by Sulviana et al. (2024) found otherwise, responsiveness is the most dominant factor with dental health service satisfaction (Sulviana et al., 2024). However, these studies are done on public health services.

Hence, this study aims to examine patient satisfaction with dental care services at an independent dental practice in Medan. By identifying key service dimensions that most influence patient satisfaction, this research seeks to provide evidence-based recommendations for improving the quality of dental care. Through a comprehensive analysis, this study will contribute to the existing body of knowledge on patient-centered care in dentistry and highlight strategies that dental practitioners can adopt to optimize patient experiences. The findings of this study can also guide future policy decisions regarding dental care service improvements and contribute to the broader discourse on healthcare quality management. Ultimately, a deeper understanding of patient satisfaction determinants will enable dental professionals to implement targeted interventions that enhance both patient experience and clinical outcomes.

Method

This study employs a quantitative method with a descriptive-analytical approach to analyze patient satisfaction with dental care in a private practice in Medan City. Data is collected through a questionnaire measuring aspects such as service quality, facility comfort, and interactions with medical personnel.

The study is conducted in a private dental practice in Medan City over two weeks, from January 20 to February 3, 2025. The sample consists of 50 patients selected through purposive sampling, ensuring they meet criteria such as being at least 18 years old and voluntarily completing the questionnaire.

The independent variable is service quality, covering timeliness, dentist attitude, expertise, and facility conditions. The dependent variable is patient satisfaction, assessed through perceptions of these

factors. The questionnaire uses a five-point Likert scale and includes demographic questions and satisfaction-related statements. A pilot test with 10 patients confirmed its reliability, with a Cronbach's alpha above 0.7.

Data collection involves distributing questionnaires with researchers available for clarification. Patients complete them anonymously in about 15-20 minutes post-treatment. Descriptive analysis examines frequency distribution and percentages, while inferential analysis uses Pearson correlation tests to explore relationships between variables. Data is processed using IBS SPSS Statistics (RRID:SCR_016479) v.22.0 software, and findings are presented in tables.

Ethical approval was obtained from the relevant research ethics committee. Patient identities remain confidential, and findings are solely for academic purposes, with results shared in an anonymized clinic report.

Table 1. Patient Satisfaction Distribution Based on Dimensions

Dimension	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Timeliness of Service	15 (30%)	25 (50%)	7 (15%)	3 (5%)	0 (0%)
Attitude and Friendliness of Dentist	20 (40%)	22 (45%)	5 (10%)	3 (5%)	0 (0%)
Dentist's Expertise	25 (50%)	20 (40%)	5 (10%)	0 (0%)	0 (0%)
Cleanliness and Comfort of Clinic	17 (35%)	25 (50%)	5 (10%)	3 (5%)	0 (0%)

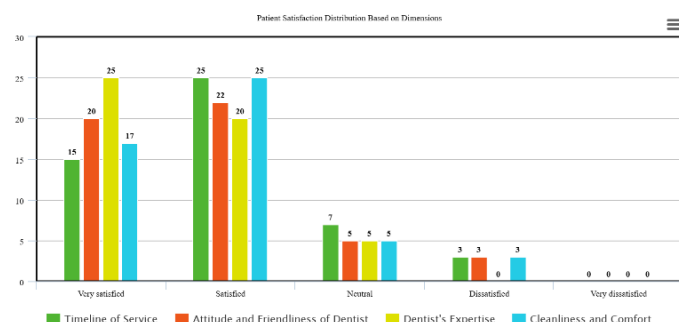


Figure 1. Patient satisfaction distribution based on dimensions

The dimension of dentist's expertise recorded the highest satisfaction level (50% very satisfied and 40% satisfied). This indicates that the professional competence of dentists is a key factor in building patient trust and comfort during treatment. Effendi's (2020) study emphasized the importance of quality assurance to ensure services are provided professionally and optimally, contributing to treatment success and increased patient satisfaction (Effendi, 2020). Furthermore, the ability of dentists to explain procedures, offer treatment solutions, and demonstrate empathy further strengthens the positive perception of the services provided.

The dimension of dentist's attitude and friendliness also showed high satisfaction levels, with 40% of

Result and Discussion

The results of this study indicate that patient satisfaction with services at an independent dental practice in Medan is highly influenced by service quality dimensions, namely timeliness of service, dentist's attitude and friendliness, dentist's expertise, as well as cleanliness and comfort of the clinic. This is in line with the study by Fatrida et al. (2019), which emphasized that patient satisfaction is achieved when the services provided meet patient needs and expectations (Fatrida et al., 2019). In this Medan practice, this is reflected in how dentists and staff pay full attention to patient needs, ensuring that every procedure is carried out with high professionalism and clear communication, all of which contribute to a positive patient experience.

patients being very satisfied and 45% satisfied. A friendly demeanor and personal attention from the dentist enhance patient comfort, consistent with findings by Nurilawaty et al. (2021), which stated that services that consider patients' emotional needs significantly improve satisfaction. The role of the dentist in creating a relaxed atmosphere during treatment was also an important factor recognized by patients.

Table 2. Pearson Correlation Test Results

Service Quality Factor	Correlation Coefficient (r)	Significance (p)
Timeliness of Service	0.75	<0.01
Attitude and Friendliness of Dentist	0.82	<0.01
Dentist's Expertise	0.88	<0.01
Cleanliness and Comfort of Clinic	0.79	<0.01

For the cleanliness and comfort dimension, 85% of patients reported being satisfied or very satisfied. A clean and comfortable environment creates a professional impression and increases patient confidence in the services received. This finding aligns with the study by Salsabila et al. (2021), which showed that well-represented physical facilities are one of the key indicators in assessing service quality. A well-organized waiting area, modern medical equipment,

and calming decor contribute positively to the patient experience.

However, in the dimension of timeliness of service, 15% of patients felt neutral, and 5% were dissatisfied. To address this, the practice could consider implementing a digital queue management system that allows patients to monitor wait times in real time. Additionally, better-organized scheduling and increasing the number of medical staff during peak hours can help reduce wait

times. This strategy can enhance the clinic's operational efficiency while also improving patient satisfaction. These findings indicate that time management still needs improvement to reduce patient wait times. Jalias et al. (2020) also highlighted that long wait times can reduce patient satisfaction, even when other aspects of service meet expectations. Moreover, uncertain wait times can cause frustration, particularly for patients with busy schedules.

Table 3. Patient Satisfaction Level Based on Demographic Characteristics

Characteristic	Very Satisfied (%)	Satisfied (%)	Neutral (%)	Dissatisfied (%)	Very Dissatisfied (%)
Age					
18-25 years	25	55	15	5	0
26-35 years	35	50	10	5	0
36-45 years	40	45	10	5	0
>45 years	30	40	20	10	0
Gender					
Female	38	50	10	2	0
Male	30	45	20	5	0
Education Level					
High School	20	50	20	10	0
Diploma	35	45	15	5	0
Bachelor's	45	40	10	5	0

Based on the questionnaire results on service quality, the five service quality dimensions – tangible, reliability, responsiveness, assurance, and empathy – were all categorized as excellent. The responsiveness dimension recorded the highest percentage (87.12%), while the tangible dimension recorded the lowest (82.71%). These results are consistent with the study by Rosalia et al. (2018), which found that four quality dimensions (tangible, reliability, assurance, and empathy) significantly affect patient satisfaction, while responsiveness had a relatively smaller influence. Observations at the dental care center also indicated that dentists and nurses demonstrated high responsiveness to patient complaints without distinguishing social status (Rosalia et al., 2018).

Conclusion

This study aims to analyze the factors that influence patient satisfaction with dental and oral health services at independent dental practices in Medan City. The results of the study indicate that patient satisfaction is greatly influenced by the quality of service, especially the professional competence of dentists, friendly attitude, timeliness of service, and cleanliness and comfort of facilities. As a service improvement strategy, it is recommended that independent dental practices implement a digital queuing system to reduce waiting times and increase operational efficiency. In addition, regular training for medical staff, especially in aspects of communication and patient service, is important to

improve more empathetic and informative interactions. To ensure continuous service improvement, it is also recommended that practices routinely conduct patient satisfaction surveys as part of the quality assurance system. This regular survey can be a tool for evaluating the effectiveness of the strategies implemented and help identify the need for further improvement to maintain responsive and patient-oriented service quality.

Acknowledgments

In this study, we would like to express our gratitude to all individuals who have contributed to the research process, as well as to our parents and friends for their unwavering support and prayers in the completion of this work.

Author Contributions

Susanna Halim developed the research concept and data analysis, while Alamsyah carried out the literature review. Both authors reviewed and approved the final manuscript.

Funding

In this research there was no external funding.

Conflicts of Interest

The authors declare no conflict of interest.

References

- Abdullah, N. (2018). Tingkat Kepuasan Pasien terhadap Pelayanan Kesehatan Gigi dan Mulut di Puskesmas Bangkala Kabupaten Jeneponto. *Media MKesehatan Gigi: Politeknik Kesehatan Makassar*,

- 17(2). <https://doi.org/10.32382/mkg.v17i2.541>
- Anang, A., Haryanti, F., & Meliala, A. M. (2020). Quality of dental care services and satisfaction of patients visiting dental treatment center of Kahuripan public health center, Tawang sub district, Tasikmalaya city. *Majalah Kedokteran Gigi Indonesia*, 5(2), 62. <https://doi.org/10.22146/majkedgiind.41019>
- Effendi, K. (2020). Tingkat Kepuasan Pasien Terhadap Pelayanan Kesehatan di UPTD Puskesmas Mutiara Tahun 2019. *Excellent Midwifery Journal*, 3(2), 82–90. <https://doi.org/10.55541/emj.v3i2.127>
- Fatrida, D., & Saputra, A. (2019). Hubungan Waktu Tunggu Dengan Tingkat Kepuasan Pasien Dalam Mendapatkan Pelayanan Kesehatan. *Jurnal 'Aisyiyah Medika*, 4(1), 11–21. <https://doi.org/10.36729/jam.v4i1.229>
- Ferreira, D. C., Vieira, I., Pedro, M. I., Caldas, P., & Varela, M. (2023). Patient Satisfaction with Healthcare Services and the Techniques Used for its Assessment: A Systematic Literature Review and a Bibliometric Analysis. *Healthcare*, 11(5), 639. <https://doi.org/10.3390/healthcare11050639>
- Ho, J. C. Y., Chai, H. H., Luo, B. W., Lo, E. C. M., Huang, M. Z., & Chu, C. H. (2025). An Overview of Dentist–Patient Communication in Quality Dental Care. *Dentistry Journal*, 13(1), 31. <https://doi.org/10.3390/dj13010031>
- Ho, J., Chai, H., Lo, E., Huang, M., & Chu, C. H. (2024). Strategies for Effective Dentist–Patient Communication: A Literature Review. *Patient Preference and Adherence*, Volume 18, 1385–1394. <https://doi.org/10.2147/PPA.S465221>
- Jalias, S. J. F. D., & Idris, F. P. (2020). Pengaruh mutu pelayanan kesehatan gigi dan mulut terhadap minat kembali pasien melalui tingkat kepuasan di puskesmas tamalate makassar 2020. *Journal of Muslim Community Health*, 1(2), 37–49. Retrieved from <http://pasca-umi.ac.id/index.php/jmch/article/view/243>
- Maramis, J. L., Yuliana, N. M., & Tobeonda, F. I. (2023). Dental And Oral Health Services On Patient Satisfaction At The Dental Clinic In Increasing Patient Satisfaction. *JDHT Journal of Dental Hygiene and Therapy*, 4(1), 18–24. <https://doi.org/10.36082/jdht.v4i1.1008>
- Mills, A., Berlin-Broner, Y., & Levin, L. (2023). Improving Patient Well-Being as a Broader Perspective in Dentistry. *International Dental Journal*, 73(6), 785–792. <https://doi.org/10.1016/j.identj.2023.05.005>
- National Institute of Dental and Craniofacial Research. (2021). *Effect of oral health on the community, overall well-being, and the economy*. Bethesda, MD: National Institutes of Health. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK578297/>
- Németh, O., Uhrin, E., Girasek, E., Boros, J., & Gyórfy, Z. (2023). The impact of digital healthcare and teledentistry on dentistry in the 21st Century: a survey of Hungarian dentists. *BMC Oral Health*, 23(1), 1025. <https://doi.org/10.1186/s12903-023-03770-w>
- Nurilawaty, V., Ngatemi, Priharti, D., Purnama, T., & Milan, R. L. (2021). How Do Patient Satisfaction in Dental Polyclinic? - Patient Characteristics and Quality of Dental Health Services. *Indian Journal of Forensic Medicine & Toxicology*, 15(4), 2814–2819. <https://doi.org/10.37506/ijfnt.v15i4.17129>
- Rosalia, K. J., & Purnawati, N. K. (2018). Pengaruh Kualitas Pelayanan Terhadap Kepuasan Pasien RSU Surya Husadha di Denpasar. *Jurnal Manajemen Unud*, 7(5), 2442–2469. <https://doi.org/10.24843/EJMNUNUD.2018.v07.i05.p05>
- Salsabila, N. A., Mulyanti, S., Supriyanto, I., & Insanuddin, I. (2021). Effect of Quality Dental and Oral Health Services on Patient Re-visit at Puskesmas. *Jurnal Kesehatan Siliwangi*, 2(2), 665–671. <https://doi.org/10.34011/jks.v2i2.676>
- Sulviana, F., Ali Harokan, Lilis Suryani, & Akhmad Dwi Priyatno. (2024). Analysis of Patient Satisfaction with Dental Health Services at the Community Health Centre. *Lentera Perawat*, 5(2), 201–208. <https://doi.org/10.52235/lp.v5i2.355>
- Szabó, R. M., Buzás, N., Braunitzer, G., Shedlin, M. G., & Antal, M. Á. (2023). Factors Influencing Patient Satisfaction and Loyalty as Perceived by Dentists and Their Patients. *Dentistry Journal*, 11(9), 203. <https://doi.org/10.3390/dj11090203>
- Tang, L. (2013). The Chinese community patient's life satisfaction, assessment of community medical service, and trust in community health delivery system. *Health and Quality of Life Outcomes*, 11(1), 18. <https://doi.org/10.1186/1477-7525-11-18>
- Theresia, T. T., Lestari, S., Asia, R. R. A., & Astoeti, T. E. (2024). Scooping Review: Kepuasan Pasien terhadap Kualitas Pelayanan Kesehatan Gigi. *Jurnal Kesehatan Tambusai*, 5(1), 371–382. <https://doi.org/10.31004/jkt.v5i1.24212>
- Widya, N. A., Heriyanto, Y., Koesoemah, H. A., & Laut, D. M. (2021). Gambaran Kepuasan Pasien Terhadap Pelayanan Kesehatan Gigi Dan Mulut Di Praktek Dokter Gigi Bersama X Kota Bandung. *Jurnal Kesehatan Siliwangi*, 1(1), 191–198. <https://doi.org/10.34011/jks.v1i1.600>