

The Role of Service Time in Shaping the Utilization of Dental and Oral Health Services at the Dental Clinic

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ABSTRACT

This study addresses the absence of research analyzing patient satisfaction in relation to the utilization of dental and oral health services at Dental Clinics of Health Center in Jember, particularly based on key determinants such as provider expertise, interpersonal relationships, service time, access, and comfort. The objectives of this study were to assess patient satisfaction with the utilization of dental and oral health services and to identify the dominant determinant influencing service utilization. A cross-sectional design with purposive sampling was employed. Data were collected using a structured questionnaire and analyzed using Pearson correlation and ordinal logistic regression. The average level of patient satisfaction was categorized as very satisfied (89%), while the average level of service utilization was classified as high (85.6%). All determinants of patient satisfaction demonstrated significant relationships with service utilization ($\alpha < 0.05$). Time emerged as the dominant factor influencing the utilization of dental and oral health services, with a significance value of 0.035. These findings indicate a significant relationship between patient satisfaction and the utilization of dental and oral health services at the Dental Polyclinic of the Jember Health Center, with service time identified as the most influential determinant.

Keywords: patient satisfaction; utilization of dental and oral health services; health center dental clinic

INTRODUCTION

Dental and oral health constitute essential indicators of an individual's overall health status, as disturbances in oral structures can affect fundamental bodily functions and general well-being [1]. The 2018 National Basic Health Research (*Riskesdas*) reported that only 10.2% of Indonesians sought professional medical care for dental and oral problems. This low utilization rate is largely attributed to the prevailing perception that dental complaints will resolve spontaneously without professional intervention. Such attitudes reflect a limited awareness of the importance of early dental treatment and indicate that dental and oral health services remain underutilized by the community.

One of the primary strategies to address dental and oral health problems is through optimal utilization of dental services provided at Dental Clinics of Health Center. These clinics offer a range of essential services, including dental fillings, tooth extractions, abscess drainage, scaling, and denture fabrication. The aim is to promote oral health, prevent and treat disease, and restore dental function for individuals, families, groups, and communities through comprehensive, integrated, and high-quality care [2].

Jember Regency has 50 Health Centers distributed across 31 districts, each serving as a provider of basic health services, including dental and oral care delivered through Dental Clinics. According to the Jember District Health Office, Health Centers in the region experienced a 25%–30% increase in dental clinic visits between 2022 and 2024. This upward trend in service utilization may be influenced by patient satisfaction. As widely recognized, fluctuations in dental service utilization; reflected in rising or declining patient visits are closely associated with several determinants, one of which is patient satisfaction [3].

Patient satisfaction encompasses multiple dimensions, including the expertise of health personnel, interpersonal relationships between providers and patients, service time, accessibility, and comfort [4]. Satisfaction arises from the alignment between patient expectations and the actual service received, making it a critical determinant of service utilization. Nationally, patient satisfaction with health services in Indonesia remains below the established target of at least 95% [5]. Dental and oral health services differ from other health services due to their more personal and intimate nature, requiring repeated interactions and close communication. Consequently, patient satisfaction becomes a pivotal factor in optimizing the utilization of dental and oral health services [6].

Previous studies conducted in various Health Centers across Indonesia have highlighted the significant role of patient satisfaction in influencing service utilization. Research at Bantarbolang Health Center in Pemalang Regency reported a decline in patient visits due to dissatisfaction with service quality, particularly long waiting times of 120–180 minutes and inadequate facilities such as insufficient seating, uncomfortable room temperature, unclear patient calling systems, slippery floors due to leaking air conditioners, and unpleasant odors; factors that directly affect patient comfort [7]. Similar findings were reported at the Dental Clinic of Duduk Sampayan Health Center in Gresik Regency, where annual declines in patient visits were attributed to dissatisfaction with facilities, provider attitudes, and service time [8]. In Bandung Regency, decreased visits at the Dental Clinics of Babakan Sari and Babakan Surabaya Health Centers were linked to mismatches between patient expectations and actual service delivery, including unclear explanations of procedures, incomplete dental equipment, and poor communication by health personnel [9].

Despite these findings from other regions, no study has yet examined patient satisfaction with dental and oral health services at Health Centers in Jember Regency. Therefore, this research was conducted to analyze patient satisfaction based on key determinants; provider expertise, interpersonal relationships, service time, access, and comfort and to assess their relationship with the utilization of dental and oral health services. Additionally, the study aims to identify the dominant determinant influencing patient satisfaction, thereby providing evidence-based insights to support future improvements in dental service utilization at Dental Clinics of Health Centers in Jember.

METHODS

The study was conducted in December 2025 across four Health Centers in Jember Regency; Arjasa, Pakusari, Kaliwates, and Jenggawah which were selected to represent the geographical distribution of dental service users in the region. The research employed a quantitative analytical approach using a cross-sectional design to examine the relationship between two variables measured simultaneously: the independent variable, consisting of patient satisfaction determinants, and the dependent variable, namely the utilization of dental and oral health services. The study

population comprised outpatients who had received dental treatment at the Dental Clinics of the four selected Health Centers. Respondents were recruited using a non-probability sampling technique with purposive sampling criteria, resulting in a total sample of 100 participants.

The independent variables included five determinants of patient satisfaction: the expertise of health personnel, interpersonal relationships between providers and patients, service time, access, and comfort. The dependent variable was the level of utilization of dental and oral health services. Data collection was carried out using two structured questionnaires. The first questionnaire assessed patient satisfaction and consisted of 20 statements, with each determinant represented by four items. Responses were measured using a five-point Likert scale ranging from 1 to 5. The second questionnaire measured the utilization of dental and oral health services and comprised eight dichotomous items assessed using the Guttman scale with "Yes" and "No" response options. The collected data were analyzed using Pearson correlation tests to determine the relationship between the independent and dependent variables. To identify the dominant determinant influencing service utilization, ordinal logistic regression analysis was performed.

RESULTS

The findings indicate that most respondents were female (77%). The largest age group was 36–45 years (40%), while the smallest was 56–65 years (6%). Most respondents had completed senior high school (44%) or tertiary education (28%). The majority were skilled workers; such as mechanics, drivers, farmers, tailors, welders, and similar occupations (35%) with most earning below the Jember Regency minimum wage (< Rp 2,838,642; 82%). Furthermore, 90% of respondents reported visiting the Dental Clinic of Health Center more than once (Table 1).

Table 2. Distribution of patient satisfaction

Patient satisfaction	Not satisfied: f (%)	Less satisfied: f (%)	Fairly satisfied: f (%)	Satisfied: f (%)	Very satisfied: f (%)
Health personnel expertise	0 (0)	0 (0)	3 (3)	33 (33)	64 (64)
Interpersonal relationship	0 (0)	0 (0)	3 (3)	29 (29)	68 (68)
Time	0 (0)	0 (0)	1 (1)	39 (39)	60 (60)
Access	0 (0)	0 (0)	0 (0)	31 (31)	69 (69)
Comfort	0 (0)	0 (0)	1 (1)	36 (36)	63 (63)

The results show that 64% of respondents were very satisfied with the expertise of health personnel, 68% were very satisfied with interpersonal relationships, 60% with service time, 69% with access, and 63% with comfort (Table 2). All determinants of patient satisfaction, as well as overall satisfaction, were categorized as very satisfied (89%) (Table 3). The results show that 36% of respondents had high utilization, 35% had moderately high utilization, and 26% had very high utilization (Table 4). Additionally, 99% of respondents chose the Dental Clinic of Health Centers as their primary facility for dental care, and 95% used health insurance (*BPJS Kesehatan*) for dental treatment. The most frequently utilized services were denture fabrication (88%), scaling (88%), tooth extraction (85%), dental fillings (77%), and abscess drainage or pain relief (75%) (Table 5). The average utilization percentage was 85.6%, categorized as high utilization (Table 6).

The results show that respondents who reported being very satisfied with the expertise of health personnel demonstrated very high utilization (22%). Additionally, respondents who reported being satisfied also showed high utilization (22%) (Table 7). Respondents who were very satisfied with interpersonal relationships showed very high utilization (23%). Those who were satisfied also demonstrated high utilization (24%) (Table 8). Respondents who were very satisfied with service time demonstrated very high utilization (26%). Respondents who were satisfied also showed high utilization (20%) (Table 9). Respondents who were very satisfied with access demonstrated very high utilization (25%). Respondents who were satisfied also showed high utilization (25%) (Table 10). Respondents who were very satisfied with comfort demonstrated very high utilization (26%). Respondents who were satisfied also showed high utilization (20%) (Table 11).

The Pearson test results show that all determinants of patient satisfaction were significantly associated with the utilization of dental and oral health services ($\alpha < 0.05$) (Table 12). The ordinal logistic regression analysis shows that *time* was the only dominant determinant influencing service utilization, with a significance value of 0.035 (< 0.05). The estimate value of 2.702 indicates a positive effect, meaning that better service time efficiency increases the likelihood of higher utilization by 14.92 times (Table 13).

Table 1. Distribution of respondent characteristics

Respondent characteristics	Frequency	Percentage
Sex		
Male	23	23
Female	77	77
Age		
17–25 years	10	10
26–35 years	18	18
36–45 years	40	40
46–55 years	26	26
56–65 years	6	6
Education		
No schooling	0	0
Elementary school	12	12
Junior high school	16	16
Senior high school	44	44
Higher education	28	28
Occupation		
Educated workers	23	23
Skilled workers	35	35
Uneducated & unskilled workers	16	16
Unemployed	26	26
Income		
< Rp 2,838,642	82	82
≥ Rp 2,838,642	18	18
Visit frequency		
Once	10	10
More than once	90	90

Table 3. Average percentage of patient satisfaction

Determinant of patient satisfaction	Average percentage
Health personnel expertise	87.7
Interpersonal relationship	88.2
Time	88.3
Access	90.8
Comfort	89.7
Overall average	89

Table 4. Distribution of dental and oral health service utilization

Utilization category	Frequency	Percentage
Very Low	1	1
Low	0	0
Moderate	2	2
Moderately high	35	35
High	36	36
Very high	26	26

Table 5. Questionnaire responses on dental and oral health service utilization

No.	Question	Yes	Percentage
1	Is the Dental Clinic of Health Center your primary facility for dental care?	99	99
2	Do you visit the Dental Clinic of Health Center every 6 months within the last 2 years?	76	76
3	Do you use health insurance for dental care at the Dental Clinic of Health Center?	95	95
4	Have you ever received dental filling services?	77	77
5	Have you ever received tooth extraction services?	85	85
6	Have you ever received scaling services?	88	88
7	Have you ever received abscess drainage or pain relief services?	75	75
8	Have you ever received denture fabrication services?	88	88

Table 6. Average percentage of dental and oral health service utilization

Variable	Average percentage
Dental and oral health service utilization	85.6

Table 7. Cross-tabulation of health personnel expertise and dental–oral health service utilization

Health personnel expertise	Dental and oral health service utilization					
	Very low: f (%)	Moderate: f (%)	Moderately high: f (%)	High: f (%)	Very vigh: f (%)	Total: f (%)
Fairly satisfied	0 (0)	0 (0)	1 (1)	1 (1)	1 (1)	3 (3)
Satisfied	1 (1)	2 (2)	14 (14)	13 (13)	3 (3)	33 (33)
Very satisfied	0 (0)	0 (0)	20 (20)	22 (22)	22 (22)	64 (64)

Table 8. Cross-tabulation of interpersonal relationship and dental–oral health service utilization

Intepersonnel relationship	Dental and oral health service utilization					
	Very low: f (%)	Moderate: f (%)	Moderately high: f (%)	High: f (%)	Very vigh: f (%)	Total: f (%)
Fairly satisfied	0 (0)	0 (0)	1 (1)	1 (1)	1 (1)	3 (3)
Satisfied	1 (1)	2 (2)	13 (13)	11 (11)	2 (2)	29 (29)
Very satisfied	0 (0)	0 (0)	21 (21)	24 (24)	23 (23)	68 (68)

Table 9. Cross-tabulation of time and dental–oral health service utilization

Time	Dental and oral health service utilization					
	Very low: f (%)	Moderate: f (%)	Moderately high: f (%)	High: f (%)	Very vigh: f (%)	Total: f (%)
Fairly satisfied	0 (0)	0 (0)	0 (0)	1 (1)	0 (0)	1 (1)
Satisfied	1 (1)	1 (1)	22 (22)	15 (15)	0 (0)	39 (39)
Very satisfied	0 (0)	1 (1)	13 (13)	20 (20)	26 (26)	60 (60)

Table 10. Cross-tabulation of access and dental–oral health service utilization

Access	Dental and oral health service utilization					
	Very low: f (%)	Moderate: f (%)	Moderately high: f (%)	High: f (%)	Very vigh: f (%)	Total: f (%)
Satisfied	1 (1)	1 (1)	17 (17)	11 (11)	1 (1)	31 (31)
Very satisfied	0 (0)	1 (1)	18 (18)	25 (25)	25 (25)	69 (69)

Table 11. Cross-tabulation of comfort and dental–oral health service utilization

Comfort	Dental and oral health service utilization					
	Very low: f (%)	Moderate: f (%)	Moderately high: f (%)	High: f (%)	Very vigh: f (%)	Total: f (%)
Fairly satisfied	0 (0)	0 (0)	0 (0)	1 (1)	0 (0)	1 (1)
Satisfied	1 (1)	1 (1)	19 (19)	15 (15)	0 (0)	36 (36)
Very satisfied	0 (0)	1 (1)	16 (16)	20 (20)	26 (26)	63 (63)

Table 12. Pearson test results

Determinant of patient satisfaction	p
Health personnel expertise	0.012
Interpersonal relationship	0.007
Time	0.000
Access	0.000
Comfort	0.000

Table 13. Parameter estimates

Determinant of patient satisfaction	Estimate	p
Health personnel expertise	-0.427	0.667
Interpersonal relationship	0.809	0.420
Time	2.702	0.035
Access	0.834	0.147
Comfort	-1.553	0.225

DISCUSSION

Patient satisfaction at the dental clinic of health centers

The study findings indicate that respondents were highly satisfied with dental and oral health services at the Dental Clinics of Health Centers in Jember Regency. This high level of satisfaction was largely driven by the clinical competence of dentists and dental nurses, including their skills in conducting examinations, establishing diagnoses, explaining treatment procedures clearly, and providing appropriate care aligned with patient complaints. Respondents also expressed strong satisfaction with the friendliness, politeness, trust, and empathy demonstrated by dental care providers.

Time efficiency contributed significantly to satisfaction, particularly the punctual start of services, short waiting times from registration to treatment completion, and adequate consultation time with dentists. Accessibility factors; such as easily reachable clinic locations, ease of meeting dental staff, affordable treatment costs, and the availability of *BPJS Kesehatan* insurance further enhanced satisfaction. Comfort-related aspects, including clean and organized treatment rooms, good lighting, sterile instruments, and sufficient seating in waiting areas, also played an important role.

These findings are consistent with Presilia et al., who reported that provider expertise plays a major role in improving patient satisfaction at the Padangsari Dental Clinic in Semarang, with similar indicators such as professional skills, knowledge, qualifications, responsiveness, and the ability to address patient complaints effectively [10]. The present study similarly shows that most respondents were very satisfied with provider expertise.

Interpersonal relationships also contributed substantially to satisfaction. Presilia et al. emphasized that positive interactions between health workers and patients help reduce emotional burden, accelerate healing, and support effective decision-making, with patients reporting high satisfaction regarding politeness, friendliness, concern, and attention from staff [10]. The current study aligns with these findings, although Mahayati et al. (2021) reported dissatisfaction in another setting due to perceived lack of empathy and attentiveness from dental providers [11].

Time was also identified as an important determinant of satisfaction. Presilia et al. (2026) found that fast service delivery significantly increased patient satisfaction [10]. Sagay et al. (2023) similarly noted that long waiting times reduce satisfaction and may outweigh the importance of provider knowledge and skills [12]. Akbar et al. (2020) reported dissatisfaction among patients who experienced prolonged waiting times in Bantaeng, which negatively affected perceptions of provider competence [13]. In this study, respondents were very satisfied with time-related indicators, including punctual service initiation, short queues, and sufficient consultation time.

Accessibility also played a key role. Nasikun (2025) found that ease of access; such as short travel distance, good road conditions, and available public transportation significantly increased patient satisfaction [14]. The present study supports these findings, although Boy et al. (2021) reported dissatisfaction in a remote area where patients faced difficulties reaching the clinic and meeting providers due to geographic barriers and unclear information boards [15].

Comfort was another important determinant. Aulia et al. (2025) highlighted the importance of cleanliness, good lighting, and sterile instruments in improving patient satisfaction, although some facilities still lacked adequate infrastructure [16]. In this study, most respondents were very satisfied with comfort-related aspects at the Puskesmas Dental Clinics in Jember.

Utilization of dental and oral health services at the dental clinics of health centers

The study findings show that respondents demonstrated a high level of utilization of dental and oral health services at the Dental Clinics of Health Centers in Jember Regency. This aligns with service-use data from 2022–2024, which recorded a 25%–30% increase in dental clinic visits, indicating that more patients sought dental care at Health Centers facilities. Questionnaire responses further revealed that respondents selected the Dental Clinic of Health Centers as their primary facility for dental treatment, reflecting increased awareness of the importance of seeking care and the influence of patient satisfaction on service utilization.

These results are consistent with Napitulu and Carolina (2018), who noted that the number of patient visits is a key indicator of utilization, with low visit rates suggesting underutilization. Their study also reported that most respondents fell into the high-utilization category due to growing awareness of the importance of maintaining health, not only for treatment but also for preventive care [17]. Desiderius et al. (2019) similarly found that individuals who did not utilize Health Centers services often preferred traditional healers, self-medication, or avoided care due to distance or the belief that treatment was unnecessary unless symptoms worsened [18].

High utilization in this study may also be attributed to the availability of *BPJS Kesehatan*, which offers affordable monthly premiums compared to private insurance. Most respondents reported using *BPJS Kesehatan* for dental treatment, while a smaller proportion paid out-of-pocket at relatively low cost. This is closely related to the fact that most respondents had incomes below the regional minimum wage, making *BPJS Kesehatan* coverage and low treatment fees important facilitators of service utilization. These findings align with Firdausi et al. (2022), who reported that *BPJS Kesehatan* significantly increases access to dental services at Puskesmas due to its affordability and comprehensive coverage [19].

The study also found that respondents visited the Dental Clinic of Health Centers at least once every six months over the past two years, indicating adherence to recommended preventive dental care. This pattern supports the Ministry of Health's 2018 guideline that routine dental visits every six months are essential for prevention and early detection of oral health problems. Regular visits require motivation, knowledge, and awareness, and individuals with dental anxiety, limited knowledge, or low awareness often fail to attend routine check-ups, reducing opportunities for prevention.

Respondents utilized a range of dental services, including fillings, extractions, scaling, abscess drainage or pain relief, and denture fabrication. Denture fabrication was highly utilized, likely because *BPJS Kesehatan* covers prosthodontic services, reducing financial barriers and providing functional benefits such as improved chewing, speech, and confidence. Scaling services were also frequently used, typically for localized complaints such as plaque accumulation or gingival inflammation. Respondents preferred Health Centers for scaling due to lower costs, *BPJS Kesehatan* coverage, and the availability of functional dental equipment.

Tooth extraction was also widely utilized, particularly among respondents with hopeless teeth, who could undergo extraction at low cost or through *BPJS Kesehatan* coverage and subsequently receive dentures. Dental fillings were commonly used as well, supported by the availability of adequate restorative materials at the Dental Clinics of Health Centers. The number of respondents utilizing extraction services exceeded those receiving fillings, possibly because more respondents preferred extraction as a definitive solution or had dental conditions that were better managed through extraction.

Abscess drainage or pain-relief procedures were the least utilized. This may be due to individuals choosing to endure pain in hopes of spontaneous recovery, self-medicating with over-the-counter drugs, or delaying care until swelling occurred. Utilization of these services is also influenced by the availability of functional dental equipment and provider competence. This is consistent with Zharifah and Andriani (2025), who reported that adequate dental instruments and materials support high utilization of dental services at Darul Kamal Health Center [20].

Relationship between patient satisfaction and the utilization of dental and oral health services

Patient satisfaction is a key indicator of healthcare quality and is achieved when the services received exceed patient expectations [21]. Variations in service utilization, reflected in fluctuations in patient visits, are closely associated with several factors, one of which is patient satisfaction [3]. In this study, five determinants of satisfaction; health personnel expertise, interpersonal relationships, time, access, and comfort were all found to have significant relationships with the utilization of dental and oral health services at the Dental Clinics of Health Centers in Jember Regency.

These findings are consistent with Mudlikah et al. (2020), who reported that patient satisfaction at Pagentanan Pamekasan Health Center increased service utilization [22]. Similarly, Alamsyah et al. (2021) demonstrated that higher satisfaction at Dinoyo Health Center of Malang led to higher utilization, whereas lower satisfaction resulted in reduced service use [23].

The present study shows that respondents who were very satisfied with the expertise of health personnel demonstrated very high utilization. This indicates that provider expertise is strongly associated with service use, as satisfaction with the competence of dentists and dental nurses; particularly in examination, diagnosis, treatment, and appropriate management encourages patients to utilize services more frequently. These findings align with Widayati et al. (2020), who reported that competent dental providers increased utilization at the Kintamani IV Dental Clinic [24].

Respondents who were very satisfied with interpersonal relationships also showed very high utilization. This suggests that interpersonal factors; such as friendliness, politeness, empathy, and effective communication play an important role in encouraging service use. Presilia et al. (2026) similarly found that therapeutic communication, empathy, and positive provider attitudes significantly influenced dental service utilization by strengthening patient trust [10].

Time efficiency was also strongly associated with utilization. Respondents who were very satisfied with time-related aspects demonstrated very high utilization, indicating that punctuality and efficient service processes increase the likelihood of patients seeking care. Santoso et al. reported similar findings, showing that shorter service times increased satisfaction and subsequently improved utilization of dental services [25].

Access was another determinant significantly associated with utilization. Respondents who were very satisfied with access demonstrated very high utilization, reflecting the importance of affordable costs, convenient clinic locations, ease of meeting dental staff, and the availability of complete and functional dental equipment. These findings are supported by Zharifah and Andriani (2025), who reported that easy access to dental services at Darul Kamal Health Center increased patient visits [20].

Comfort also showed a strong relationship with utilization. Respondents who were very satisfied with comfort demonstrated very high utilization, indicating that cleanliness, organized clinic environments, sterile instruments, good lighting, and adequate seating in waiting areas contribute to increased service use. Lestari et al. (2021) similarly found that inadequate facilities; such as poor cleanliness, incomplete equipment, and insufficient waiting room capacity led to lower dental clinic visits, highlighting the importance of comfort in influencing utilization [26].

Dominant factor influencing the utilization of dental and oral health services

Time is one of the service components most likely to generate dissatisfaction when poorly managed, as prolonged waiting periods; particularly those exceeding 60 minutes, the minimum standard set by the Ministry of Health in 2008 can reduce patient satisfaction and subsequently decrease service utilization. Several factors may influence time efficiency in dental services at Health Center, including the duration of medical record preparation, registration queue length, delays in dentist arrival, length of clinical examinations, patient behavior and understanding of service procedures, adherence to administrative requirements, patient initiative in seeking information, availability and competence of health personnel, and the adequacy of supporting infrastructure [27,28].

The present study identifies time as the single most dominant factor influencing the utilization of dental and oral health services at the Dental Clinics of Health Centers in Jember Regency. This indicates that shorter service duration and more efficient processes encourage patients to utilize dental services more frequently and more optimally. Respondents expressed very high satisfaction across all time-related indicators. They reported satisfaction with punctual service initiation, as registration and clinic operations begin precisely at 07:00, allowing patients to be attended to immediately. Respondents also noted short waiting times due to responsive and efficient administrative staff. During treatment, patients were given sufficient consultation time, contributing to high satisfaction. Additionally, the efficiency of dentists in conducting examinations, treatment, and procedures; described as fast, careful, and precise further strengthened satisfaction with time.

These findings align with Arafah et al. (2025), who reported a significant relationship between waiting time and patient satisfaction, with shorter waiting times associated with higher satisfaction [29]. Usman et al. (2021) similarly found a significant relationship between waiting time and service utilization, noting that longer waiting periods reduce utilization due to declining satisfaction [30]. However, Ambarita and Nainggolan (2025) reported that although waiting time influences utilization, the effect was not statistically significant [31]. Overall, evidence from previous studies supports the conclusion that time, as a key determinant of patient satisfaction, is significantly associated with the utilization of dental and oral health services at Dental Clinics of Health Center in Jember Regency. In this study, time emerged as the dominant factor.

CONCLUSION

The study concludes that patient satisfaction at the Puskesmas Dental Clinics in Jember Regency is very high, accompanied by a high level of service utilization. All determinants of satisfaction; expertise, interpersonal relationships, time, access, and comfort were significantly associated with the utilization of dental and oral health services. Among these determinants, time emerged as the most dominant factor influencing patient utilization at the Puskesmas Dental Clinics in Jember Regency.

Ethical consideration, competing interest and source of funding

- Prior to data collection, ethical approval was obtained from the Research Ethics Committee of the Faculty of Dentistry, University of Jember, under approval number 3555/UN25.8/KEPK/DL/2025.
- No conflict of interest related this research.
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