

Exploring Students' Experiences in Maintaining Oral Health: A Qualitative Study

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ABSTRACT

Background: Oral health is an important component of overall health and quality of life among university students. Although students generally have access to oral health information, maintaining consistent preventive practices remains challenging due to academic demands, lifestyle changes, social influences, and barriers to dental care.

Research Objective: This study aimed to explore university students' experiences in maintaining oral health, including their perceptions, daily practices, motivations, barriers, social influences, and adaptive strategies.

Methods: A qualitative phenomenological study was conducted from March to May 2024 at a higher education institution in Makassar, South Sulawesi, Indonesia. Fifteen undergraduate students aged 18-25 years were recruited using purposive sampling until data saturation was achieved. Data were collected through semi-structured in-depth interviews lasting approximately 40-60 minutes. Interviews were audio-recorded, transcribed verbatim, and analyzed using Braun and Clarke's six-phase thematic analysis with the support of NVivo 14. Trustworthiness was established through credibility, transferability, dependability, and confirmability strategies.

Results: Five major themes emerged: understanding the importance of oral health, daily oral health maintenance practices, barriers to maintaining oral health, social and environmental influences, and personal motivation and adaptive strategies. Students generally recognized the importance of oral health for comfort, confidence, communication, and academic activities. However, consistent practices were challenged by academic workload, fatigue, financial limitations, fear of dental treatment, and low motivation in the absence of symptoms. Family, peers, lecturers, social media, and health campaigns influenced oral health behaviors. Students developed adaptive strategies including reminders, carrying toothbrushes, dietary control, increased water intake, and scheduling dental visits.

Conclusion: Oral health maintenance among university students is a dynamic process shaped by individual, social, psychological, and environmental factors. Student-centered and contextually responsive oral health promotion is needed.

Keywords: Oral Health; University Students; Oral Hygiene; Health Behavior; Qualitative Study

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BACKGROUND

Oral health is an integral component of general health that influences quality of life, communication, nutrition, psychological well-being, academic performance, and social interactions among university students (Y. Zhang et al., 2024). The World Health Organization (WHO) recognizes oral diseases as one of the most prevalent non-communicable diseases worldwide, affecting approximately 3.5 billion people. Dental caries of permanent teeth remains the most common health condition globally, while periodontal disease and tooth loss continue to contribute significantly to disability and reduced quality of life (Y.-F. Wu et al., 2024). Despite advances in preventive dentistry and increasing availability of oral health information, many young adults continue to experience preventable oral health problems because daily preventive behaviors are inconsistent and influenced by multiple personal, social, cultural, and environmental factors (Zechner et al., 2022). University students represent a critical population because the transition from adolescence to adulthood is accompanied by greater autonomy in health-related decision-making, changes in dietary habits, academic stress, irregular lifestyles, and reduced parental supervision, all of which may influence oral hygiene practices (X. Zhang et al., 2024).

In Indonesia, oral health remains a significant public health concern. Results from the Indonesian Health Survey (SKI) 2023 indicate that oral and dental health problems continue to affect a large proportion of the population, while utilization of professional dental services remains relatively low compared with the burden of disease (Weening-Verbree et al., 2021). Previous national surveys have also shown that although many Indonesians brush their teeth daily, only a small proportion perform tooth brushing at the recommended times, namely after breakfast and before bedtime. This discrepancy suggests that knowledge alone does not necessarily translate into appropriate oral health behavior (West et al., 2024). Among young adults, particularly university students, unhealthy dietary patterns, frequent consumption of sugary beverages, smoking, lack of regular dental check-ups, and inadequate oral hygiene practices contribute to the persistence of dental caries and periodontal diseases. Consequently, improving oral health behaviors among university students has become an important priority in achieving national health promotion goals and reducing the future burden of oral diseases (C. Wu et al., 2023).

Within South Sulawesi Province, oral health problems remain prevalent despite ongoing preventive programs implemented through community health centers and educational institutions. Provincial health reports consistently identify dental caries and periodontal diseases among the most frequently encountered oral conditions requiring treatment. In Makassar City, the rapid urbanization, increased availability of sugary foods and beverages, busy academic lifestyles, and changing behavioral patterns among young adults create additional challenges for maintaining good oral health. University students often experience demanding academic schedules, financial limitations, and competing priorities that may reduce attention to preventive oral care (Vakili et al., 2023). Although educational campaigns regarding proper tooth brushing and regular dental visits are increasingly available, variations in individual experiences indicate that behavioral change is influenced by more complex factors than knowledge alone. Students' perceptions of oral health, family upbringing, peer influence, cultural beliefs, accessibility of dental services, previous treatment experiences, self-efficacy, and motivation may all shape their daily oral hygiene practices (Volgenant et al., 2022).

Most previous studies investigating oral health among university students have employed quantitative cross-sectional designs, focusing primarily on measuring knowledge, attitudes, oral hygiene status, dental caries prevalence, or statistical associations between demographic characteristics and oral health behaviors. While these

studies provide valuable epidemiological evidence, they often fail to explain why students adopt or neglect healthy oral hygiene practices, how they interpret oral health within their everyday lives, and what contextual barriers or facilitators influence their behaviors (Tobias et al., 2021). Quantitative findings frequently describe the magnitude of oral health problems but offer limited insight into the lived experiences underlying those behaviors. Consequently, interventions developed solely from quantitative evidence may inadequately address the complex psychological, social, environmental, and cultural dimensions that determine students' oral health practices (Toft et al., 2022).

Furthermore, qualitative investigations exploring university students' experiences in maintaining oral health remain relatively limited in Indonesia, particularly within the context of South Sulawesi and Makassar. Existing qualitative studies conducted internationally have identified themes such as perceived importance of oral aesthetics, fear of dental treatment, financial constraints, influence of family habits, peer norms, and accessibility of dental services. However, these findings may not fully reflect the socio-cultural characteristics, educational environment, healthcare accessibility, and behavioral contexts experienced by Indonesian students (Tan et al., 2021). Differences in cultural values, family dynamics, health literacy, and health service utilization necessitate locally generated evidence to better understand students' perspectives and support context-specific oral health promotion strategies (Tobias et al., 2021).

The novelty of the present study lies in its exploration of university students' lived experiences in maintaining oral health using a qualitative approach. Rather than merely assessing knowledge levels or measuring oral hygiene status, this study seeks to understand the meanings students assign to oral health, the motivations that encourage healthy behaviors, the challenges they encounter in daily oral hygiene practices, the influence of family, peers, educational environments, and healthcare access, as well as the coping strategies they develop to maintain oral health during university life. By capturing rich narratives directly from students, this research offers a deeper understanding of behavioral determinants that are often overlooked in quantitative investigations. The findings are expected to contribute to the development of student-centered oral health promotion programs, strengthen preventive strategies within higher education institutions, and provide evidence for integrating behavioral, educational, and contextual perspectives into oral health interventions. In addition, the study enriches the existing literature by providing qualitative evidence from Makassar, South Sulawesi, thereby addressing regional knowledge gaps and expanding understanding of oral health behaviors among Indonesian university students.

Therefore, this study aims to explore the experiences of university students in maintaining oral health by understanding their perceptions, daily oral hygiene practices, motivations, barriers, facilitating factors, and adaptive strategies, in order to generate comprehensive evidence that can support the development of culturally relevant, student-centered, and sustainable oral health promotion interventions within higher education settings in Makassar, South Sulawesi, Indonesia.

METHODS

This study employed a qualitative research design using a phenomenological approach (Kajal & Mohammadnezhad, 2023) to explore university students' lived experiences in maintaining oral health. A phenomenological design was chosen because it enables an in-depth understanding of how individuals perceive, interpret, and give meaning to their daily oral health practices within the context of their personal, social, and academic lives. The study was conducted from March to May 2024 at a higher education institution in Makassar, South Sulawesi, Indonesia. Undergraduate students aged 18–25 years who were actively enrolled during the study period, willing to participate voluntarily,

and able to communicate their experiences effectively were recruited using purposive sampling. Participants who had severe communication difficulties or were undergoing extensive dental treatment that might substantially influence their daily oral health experiences were excluded. Recruitment continued until data saturation was achieved, resulting in a total of 15 participants representing different academic programs and years of study.

Data were collected through face-to-face semi-structured in-depth interviews conducted in a private setting on campus to ensure participant comfort and confidentiality. An interview guide was developed based on previous literature and expert consultation in dental public health and qualitative research. The interviews explored students' perceptions of oral health, daily oral hygiene practices, motivations for maintaining oral health, barriers encountered in practicing healthy behaviors, the influence of family, peers, and educational environments, experiences in accessing dental care services, and strategies adopted to maintain oral health during university life. Each interview lasted approximately 40–60 minutes and was conducted in the Indonesian language by the principal researcher, who had received formal training in qualitative interviewing techniques. With participants' written informed consent, all interviews were audio-recorded and complemented by field notes documenting contextual information and non-verbal observations.

The interview recordings were transcribed verbatim immediately after data collection and checked against the original recordings to ensure transcription accuracy. Data were analyzed using Braun and Clarke's six-phase thematic analysis, involving familiarization with the data, generation of initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final report. The coding and organization of qualitative data were facilitated using NVivo version 14 software to improve data management and support systematic analysis. To enhance analytical reliability, two members of the research team independently coded selected transcripts before discussing and resolving discrepancies through consensus.

The trustworthiness of the findings was established according to Lincoln and Guba's criteria. Credibility was strengthened through prolonged engagement with participants, member checking, and peer debriefing. Transferability was achieved by providing detailed descriptions of the study context, participant characteristics, and research procedures. Dependability was maintained through an audit trail documenting methodological decisions throughout the research process, while confirmability was supported through reflexive note-taking and regular discussions among the research team to minimize potential researcher bias.

RESULTS

Characteristics of Informants

Table 1.
Characteristics of Informants (n = 15)

Informant	Age (years)	Gender	Year of Study	Faculty
P1	18	Female	First	Health Sciences
P2	19	Male	First	Pharmacy
P3	20	Female	Second	Nursing
P4	21	Female	Third	Midwifery
P5	22	Male	Fourth	Public Health
P6	19	Female	First	Dentistry
P7	20	Male	Second	Pharmacy
P8	21	Female	Third	Nursing

P9	22	Female	Fourth	Public Health
P10	20	Male	Second	Health Sciences
P11	23	Female	Fourth	Midwifery
P12	21	Male	Third	Nursing
P13	19	Female	First	Pharmacy
P14	22	Female	Fourth	Public Health
P15	20	Male	Second	Health Sciences

A total of 15 undergraduate students participated in this study. Data saturation was achieved after the fifteenth interview, as no new concepts or themes emerged. Participants represented various academic programs and years of study, providing diverse perspectives on maintaining oral health during university life. The thematic analysis generated five major themes: (1) understanding the importance of oral health, (2) daily oral health maintenance practices, (3) barriers to maintaining oral health, (4) social and environmental influences, and (5) personal motivation and adaptive strategies.

Among the participants, nine were female and six were male, ranging in age from 18 to 23 years. Participants represented different years of study and academic disciplines, allowing the study to capture varied experiences related to oral health maintenance.

Theme 1. Understanding the Importance of Oral Health

Most participants perceived oral health as an essential component of overall health and self-confidence. They associated healthy teeth and gums with comfort, attractive appearance, effective communication, and prevention of disease. Several participants explained that oral health became increasingly important after experiencing dental pain or receiving oral health education.

P3: *"I realized that healthy teeth are not only about appearance but also about avoiding pain that can interfere with studying."*

P11: *"If my mouth feels clean, I become more confident when talking to friends or presenting in class."*

These findings indicate that participants viewed oral health beyond physical well-being, recognizing its influence on academic activities, interpersonal relationships, and psychological confidence.

Theme 2. Daily Oral Health Maintenance Practices

Participants described various routines to maintain oral health, including brushing teeth twice daily, using fluoride toothpaste, replacing toothbrushes regularly, reducing sugary foods, drinking sufficient water, and occasionally using mouthwash or dental floss. However, consistency varied depending on academic workload and daily schedules.

P6: *"I always brush my teeth after breakfast and before sleeping because it has become a habit since childhood."*

P10: *"Sometimes when assignments pile up, I only brush my teeth once because I sleep very late."*

Although participants generally understood recommended oral hygiene practices, maintaining consistent routines was often challenging during busy academic periods.

Theme 3. Barriers to Maintaining Oral Health

Participants reported several barriers affecting their oral health behaviors. The most common obstacles included busy academic schedules, fatigue, financial limitations, fear of dental treatment, and low motivation when no symptoms were present.

P7: *"I know I should visit the dentist regularly, but I usually wait until my tooth hurts because treatment is expensive."*

P14: *"When exams come, I often skip many routines, including taking care of my teeth."*

The findings demonstrate that oral health behavior was influenced not only by knowledge but also by practical, psychological, and economic constraints.

Theme 4. Social and Environmental Influences

Family members were identified as the strongest influence in developing oral hygiene habits from childhood. During university life, peers, lecturers, social media, and health campaigns also shaped students' awareness and behaviors. Some participants admitted that observing friends with good oral hygiene encouraged them to improve their own habits.

P2: *"My parents always reminded me to brush my teeth before sleeping, so it became a routine."*

P8: *"Watching educational videos on social media motivates me to take better care of my teeth."*

Participants emphasized that positive social support reinforced healthy behaviors, while living independently sometimes reduced supervision and consistency.

Theme 5. Personal Motivation and Adaptive Strategies

Students developed various adaptive strategies to maintain oral health despite academic demands. These included setting reminders on mobile phones, carrying toothbrushes during campus activities, limiting sweet snacks, increasing water intake, and scheduling regular dental visits during semester breaks.

P5: *"I set an alarm every night because sometimes I forget to brush my teeth after studying."*

P12: *"I always keep a toothbrush in my bag, so I can brush my teeth after lunch if I'm on campus all day."*

These adaptive strategies reflected participants' awareness of the importance of oral health and their efforts to integrate preventive behaviors into busy university lifestyles.

Overall, the findings reveal that maintaining oral health among university students is a dynamic process influenced by individual knowledge, personal motivation, family upbringing, peer support, environmental conditions, financial considerations, and academic responsibilities. While participants generally demonstrated good awareness regarding oral health, translating knowledge into consistent daily practice remained challenging due to multiple contextual barriers. Nevertheless, students actively developed practical coping strategies to sustain healthy oral hygiene behaviors throughout their university experiences.

DISCUSSION

The findings of this study demonstrate that maintaining oral health among university students is a dynamic and multidimensional experience shaped by the interaction between individual understanding, daily routines, academic demands, social influences, and personal adaptation. Although participants generally demonstrated an adequate

understanding of the importance of oral health, this understanding was not always translated into consistent preventive practices. The five themes identified—understanding the importance of oral health, daily oral health maintenance practices, barriers to maintaining oral health, social and environmental influences, and personal motivation and adaptive strategies—illustrate that oral health behavior among university students is embedded within their everyday academic and social experiences.

Understanding the Importance of Oral Health

The first theme indicates that students perceived oral health as an important component of general well-being, confidence, communication, and academic functioning (P.-Y. Lin et al., 2022). Participants did not conceptualize oral health merely as the absence of dental disease but also associated it with comfort, physical appearance, social interaction, and psychological confidence. The experience of dental pain appeared to strengthen this awareness, particularly because pain could interfere with concentration and academic activities. This finding suggests that students' understanding of oral health is constructed not only through formal health information but also through personal experiences (Llanos et al., 2023).

The perception that oral health affects confidence during communication and classroom presentations is particularly important in the university context. Students frequently engage in presentations, discussions, group activities, and social interactions, making oral appearance and comfort relevant to their daily functioning. Thus, oral health may have both direct and indirect implications for students' quality of life. The experiences expressed by participants suggest that oral health is perceived as part of their social identity and self-presentation (H.-P. Lin et al., 2022).

However, awareness alone does not guarantee consistent preventive behavior. The findings demonstrate a distinction between knowing what should be done and being able to implement it regularly. This distinction is important because oral health promotion programs that focus predominantly on transferring knowledge may have limited effectiveness if they do not address the contextual conditions affecting students' behavior. The findings therefore support a broader behavioral perspective in which oral health practices are understood as the result of interactions between personal factors and environmental circumstances (Liao et al., 2024).

Daily Oral Health Maintenance Practices

The second theme demonstrates that participants were familiar with several recommended oral health practices, including brushing twice daily, using fluoride toothpaste, replacing toothbrushes, reducing sugary food consumption, drinking water, and occasionally using mouthwash or dental floss. These practices indicate that students possessed relatively positive preventive orientations. Nevertheless, the consistency of these behaviors varied, particularly during periods of high academic workload.

The experience of skipping or reducing oral hygiene routines during periods of assignments and examinations highlights the influence of academic demands on health behavior. University students often experience irregular sleep schedules, prolonged study periods, fatigue, and competing responsibilities. Under such conditions, oral hygiene may become a secondary priority even when students recognize its importance. This finding demonstrates that health behavior should be understood within the broader context of everyday life rather than as an isolated individual decision (Lee et al., 2021).

The discrepancy between knowledge and practice also indicates that habitual behavior plays an important role. Participants who had developed tooth brushing as a routine since childhood were more likely to describe consistent practices. In contrast, participants whose routines were more dependent on their daily schedules experienced greater fluctuations. This suggests that early-established habits may provide behavioral stability when students encounter the increased autonomy and irregular routines associated with university life (Lau et al., 2021).

From a health promotion perspective, interventions should therefore move beyond information provision and focus on strengthening sustainable habits. Practical strategies such as establishing fixed brushing routines, using reminders, and integrating oral hygiene into existing daily activities may be more useful than education alone. The students' own adaptive strategies provide evidence that relatively simple behavioral mechanisms can help maintain preventive practices under demanding circumstances.

Barriers to Maintaining Oral Health

The third theme reveals that students experienced several barriers to maintaining oral health, including academic workload, fatigue, financial limitations, fear of dental treatment, and low motivation in the absence of symptoms. These findings indicate that oral health behavior is shaped by structural and psychological factors in addition to individual knowledge.

Academic workload emerged as an important contextual barrier. During examinations or periods of intensive assignments, students reported neglecting routine oral care. This finding illustrates how competing priorities can influence preventive behavior. Preventive health activities are often perceived as less urgent than academic responsibilities, particularly because their benefits are not immediately visible. In contrast, acute dental pain creates a more immediate motivation to seek treatment (La Rosa et al., 2024).

Financial limitations represent another important barrier, particularly in relation to professional dental care. Some participants reported delaying dental visits until symptoms became apparent because they perceived dental treatment as expensive. This pattern suggests that students may adopt a symptom-driven model of healthcare utilization rather than a preventive model. Such behavior can potentially contribute to delayed diagnosis and treatment and may increase the complexity of dental problems over time (Kiprotich et al., 2021).

Fear of dental treatment also influenced decisions to seek professional care. Dental anxiety can create avoidance behavior even among individuals who understand the importance of regular dental examinations (Khan et al., 2024). Consequently, improving oral health among students requires attention not only to access and affordability but also to the quality of the dental care experience. Student-friendly services, clear communication, preventive counseling, and approaches that reduce fear may contribute to greater willingness to use professional dental services.

The finding that some students had low motivation when they experienced no symptoms is also significant. It suggests that the perceived absence of disease can create a false sense of security and reduce preventive behavior. Oral diseases may develop without obvious symptoms during their early stages, making preventive examinations and routine self-care important. Oral health promotion should therefore emphasize the value of prevention rather than focusing exclusively on the treatment of existing problems.

Social and Environmental Influences

The fourth theme demonstrates that oral health behavior is socially and environmentally embedded. Family emerged as an important influence in establishing oral hygiene practices during childhood, while peers, lecturers, social media, and health campaigns continued to shape students' behavior during university life. These findings highlight the continuity between early socialization and adult health behavior.

Parental reminders about brushing before bedtime were described as becoming internalized routines. This indicates that family-based health education may have long-term effects because repeated behaviors during childhood can become habitual. However, the transition to university life changes the social environment. Students often experience greater independence and reduced parental supervision, creating opportunities for previously established habits either to persist or to decline (Ivanoff & Ivanoff, 2023).

Peers also played a meaningful role. Students reported that observing friends with good oral hygiene could encourage them to improve their own practices. This suggests that peer modeling can function as a positive mechanism for health promotion within university settings. Rather than treating students solely as recipients of health information, interventions could utilize peer influence by developing student health ambassadors, peer education, or collaborative oral health campaigns (Ibiyemi et al., 2022).

Social media was another source of oral health information and motivation. Educational content accessed through digital platforms could reinforce students' awareness and encourage healthier practices (Hu et al., 2024). Nevertheless, the effectiveness of social media-based education depends on the quality and accuracy of the information provided. Universities and health professionals may therefore consider developing credible, accessible, and engaging digital oral health content specifically designed for young adults.

The environmental context of higher education is equally relevant. Students' access to dental services, campus facilities, schedules, and opportunities to practice oral hygiene can either facilitate or constrain preventive behavior. This finding reinforces the importance of creating supportive environments rather than placing the entire responsibility for oral health on individual students.

Personal Motivation and Adaptive Strategies

The fifth theme reveals that students were not passive in responding to the challenges they encountered. Participants developed practical strategies such as setting mobile reminders, carrying toothbrushes on campus, reducing sweet snacks, increasing water intake, and scheduling dental visits during semester breaks. These behaviors demonstrate students' capacity for self-regulation and adaptation.

The use of mobile reminders is particularly relevant to the contemporary university environment. Students are highly engaged with digital devices, making reminders a feasible mechanism for supporting routine health behavior (Ene & Ajibo, 2023). Similarly, carrying oral hygiene equipment allows students to maintain their practices despite spending long periods on campus. These strategies demonstrate that students can actively modify their environment to reduce barriers to preventive behavior (Hidaka et al., 2023).

The findings also indicate that motivation is closely connected to perceived relevance and convenience. When oral hygiene activities are easy to integrate into daily routines, students may be more capable of sustaining them. Conversely, when oral care requires additional time, financial resources, or changes to established routines, adherence becomes more difficult (Fu et al., 2022).

The adaptive strategies identified in this study therefore provide an important basis for designing student-centered interventions. Rather than imposing standardized behavioral recommendations, oral health programs can encourage students to identify their own barriers and develop practical strategies suited to their schedules, resources, and living environments. Such an approach may enhance self-efficacy and increase the sustainability of preventive practices.

Integration of Findings

Taken together, the findings indicate that university students' experiences of maintaining oral health are characterized by a continuous negotiation between awareness and everyday constraints. Students generally understand the importance of oral health and are familiar with appropriate preventive practices, yet academic pressure, fatigue, financial concerns, dental anxiety, social influences, and environmental conditions affect their ability to maintain these practices consistently. The findings therefore demonstrate that oral health behavior cannot be adequately explained by knowledge alone.

The phenomenological perspective further highlights that students give personal meaning to oral health through their experiences of pain, confidence, social interaction, academic performance, family upbringing, and independent living. Oral health becomes

meaningful when students perceive its consequences in their everyday lives. At the same time, the transition to university represents an important period in which previously established family habits are renegotiated within a new social and academic environment.

These findings have important implications for higher education institutions. Oral health promotion should adopt a comprehensive and student-centered approach that combines education, behavioral support, accessible dental services, supportive campus environments, and peer-based interventions. Preventive programs should address practical barriers such as time and cost while also considering psychological barriers such as fear and low perceived susceptibility.

Universities can potentially strengthen oral health promotion by integrating routine oral health education into student orientation programs, providing accessible preventive dental services, developing peer education initiatives, disseminating credible digital content, and encouraging healthy dietary environments on campus. Interventions may also incorporate behavioral tools such as reminders, goal setting, self-monitoring, and personalized action plans.

Overall, this study demonstrates that maintaining oral health among university students is not simply a matter of individual discipline. It is a socially situated and context-dependent process involving knowledge, habits, motivation, family experiences, peer relationships, academic demands, economic circumstances, and access to health services. Understanding these interconnected experiences provides an important foundation for developing oral health promotion strategies that are realistic, culturally appropriate, and responsive to the everyday lives of university students in Makassar.

CONCLUSION

This study concludes that maintaining oral health among university students is a dynamic process influenced by individual understanding, daily habits, personal motivation, academic demands, social relationships, environmental conditions, financial considerations, and access to dental care. Although students generally understand the importance of oral health and are aware of recommended oral hygiene practices, translating this knowledge into consistent daily behavior remains challenging, particularly during periods of intensive academic activities, fatigue, and irregular schedules. Family upbringing plays an important role in establishing oral hygiene habits from childhood, while peers, lecturers, social media, and health campaigns continue to influence students' perceptions and behaviors during university life. At the same time, financial limitations, fear of dental treatment, and the tendency to seek dental care only when symptoms occur may reduce preventive utilization of dental services. Nevertheless, students demonstrate the ability to adapt by using practical strategies such as setting reminders, carrying toothbrushes during campus activities, limiting sugary foods, increasing water consumption, and scheduling dental visits during semester breaks. These findings indicate that improving students' oral health requires an approach that goes beyond knowledge transfer and addresses the behavioral, social, psychological, and environmental factors that shape everyday practices. Therefore, higher education institutions are recommended to strengthen student-centered oral health promotion through continuous education, peer-based activities, accessible preventive dental services, and credible digital health information. Health professionals should provide supportive and affordable dental care while applying communication strategies that reduce students' fear of dental treatment. Students are encouraged to develop sustainable oral hygiene routines, maintain healthy dietary practices, use practical reminders when necessary, and seek preventive dental examinations rather than waiting for symptoms to appear. Future researchers are encouraged to explore oral health experiences across different universities and socio-cultural contexts and to combine qualitative findings with quantitative assessments of oral

hygiene status, oral health literacy, dietary behavior, and dental service utilization to support the development of more comprehensive and contextually appropriate oral health promotion interventions.

ACKNOWLEDGMENTS

The authors would like to express their sincere gratitude to the university institution where this study was conducted for providing the opportunity, facilities, and academic support throughout the research process. The authors also extend their appreciation to all university students who participated voluntarily and shared their experiences, perceptions, and personal perspectives regarding oral health maintenance. Their openness and willingness to participate were essential to the completion of this study. Special appreciation is also extended to the lecturers, academic staff, and all parties who provided assistance, guidance, and support during data collection and the preparation of this manuscript. Finally, the authors are grateful to everyone who contributed directly or indirectly to the successful completion of this research.

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