

Original Article

# Oral Hygiene Awareness and Practice amongst Patients Visiting Locum Dentist at Private Clinic

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## ABSTRACT

**Background:** Oral hygiene is a fundamental aspect of general health, yet its importance is often overlooked. In regions like Pakistan, there is a notable deficiency in the awareness and practice of oral health maintenance, influenced by cultural norms and varying levels of education.

**Objective:** The study aimed to assess the oral hygiene awareness and practices among patients visiting a private clinic, focusing on the usage of toothbrushes, secondary cleaning methods, the incidence of halitosis, and patterns in dental visits.

**Methods:** A cross-sectional survey was conducted with a sample size of 384 patients selected via convenient sampling. Data were gathered using a pre-validated questionnaire and analyzed using SPSS version 22. The statistical analysis included descriptive statistics to report frequencies, percentages, and a comparison of oral hygiene practices based on educational level and gender.

**Results:** The majority of participants (59%, n=236) possessed a Bachelor's degree, while 32% (n=128) held a Masters/PhD. Toothbrushing twice a day was reported by 48% (n=192) of the sample, with medium bristles being the most popular choice. Secondary cleaning methods were less frequently employed, with flossing being the most common (39%, n=150). About 27% (n=104) of patients experienced halitosis, and only 40.5% (n=162) practiced tongue cleaning. Dental visits were primarily need-based, with 46.3% (n=178) of participants visiting a dentist only when required.

**Conclusion:** There is a pressing need for public health interventions to enhance the understanding and implementation of oral hygiene practices in Pakistan. The study indicates a critical link between educational initiatives and improved oral health behaviors.

**Keywords:** Oral Hygiene Awareness, Dental Health Practices, Preventive Oral Care, Halitosis, Health Education, Dental Visits, Cross-Sectional Study, Pakistan.

## INTRODUCTION

Oral diseases constitute a significant societal concern due to their profound impact on individual health, quality of life, and self-esteem (1, 2). Oral hygiene is not merely a personal health issue but an integral component of overall well-being, influencing various aspects of life and intersecting with genetic, behavioral, and cultural factors (3, 4, 5, 7). Despite its importance, oral hygiene often receives inadequate attention, with many individuals neglecting proper oral care practices until significant health problems arise (6). This neglect can be attributed to a variety of factors, including cultural norms and personal beliefs about health care (7).

Good oral health enhances not only the patient's self-confidence but also serves as a model for healthy behaviors within their community (8, 9). Awareness of the consequences of poor oral hygiene is critical as it fosters better personal practices and influences public health outcomes. Effective oral hygiene practices, such as regular brushing, flossing, tongue cleaning, and the use of oral rinses and fluoridated mouthwashes, are fundamental in preventing dental caries and halitosis, thereby improving overall oral health (9, 10). The primary aim of this study is to evaluate the awareness and practices related to oral hygiene among patients at a private dental clinic, exploring how well patients understand and implement effective oral hygiene measures.

This research is pivotal as it sheds light on the prevailing oral health practices and the level of awareness among patients. By identifying gaps in knowledge and practice, dental health professionals can better tailor their educational and preventive strategies to improve patient outcomes and promote broader public health benefits.

## MATERIAL AND METHODS

A cross-sectional study was designed to assess oral hygiene awareness and practices among patients at a private dental clinic. Utilizing the World Health Organization’s (WHO) sample size calculator, the study determined a required sample of 384 participants to achieve a statistical power of 80% and a 5% level of significance (10). Patients were selected through convenient sampling to participate in the study.

Data collection was conducted using a pre-validated questionnaire that was designed to gather comprehensive information on participants' oral hygiene practices and awareness (7). Each participant was informed about the study's objectives and the confidentiality of their responses, and informed consent was obtained prior to their participation. This procedure ensured adherence to ethical standards consistent with the Declaration of Helsinki, guaranteeing that all ethical considerations regarding participant involvement were met.

Upon collection, the data were analyzed using the Statistical Package for Social Sciences (SPSS) version 22. Descriptive statistics were employed to characterize the study population, particularly focusing on the quantitative variable of age. The responses were quantitatively assessed, with the results presented in terms of frequencies and percentages to illustrate the distribution of oral hygiene practices and awareness among the clinic's patients. This methodological approach provided a robust framework for understanding the impact of educational and behavioral factors on oral health outcomes within the sampled population.

## RESULTS

In the study of oral hygiene practices among patients at a private dental clinic, a diverse array of educational backgrounds was represented. Individuals with a Bachelor's degree constituted the majority of the study sample, comprising 59% (n=236), indicative of a highly educated cohort. Participants with postgraduate qualifications, including Masters and Ph.D. holders, also formed a significant segment, accounting for 32% (n=128). In contrast, those with a Secondary level of education made up 2.25% (n=9), and Intermediate level participants were 6.75% (n=27), reflecting a smaller proportion of the study population (Table 1).

In terms of oral hygiene practices, the frequency of toothbrushing varied considerably. Nearly half of the patients brushed their teeth once a day, representing 47.3% (n=189) of the sample. A similar proportion, 48% (n=192), reported brushing twice daily, suggesting a strong adherence to dental health guidelines within the sample. The practice of brushing thrice a day was less common, observed in 3.5% (n=14) of respondents, whereas a minimal number, 1.3% (n=5), did not brush their teeth at all (Figure 1).

When considering the use of secondary methods for tooth cleaning, flossing emerged as the predominant technique, engaged by 150 participants, translating to 39% of the study group. The utilization of interdental brushes was also notable, with 26% (n=100) of the sample adopting this practice. Toothpicks were less frequently used, by 13% (n=50) of individuals, and an equal percentage did not engage in any secondary cleaning methods, underscoring a potential area for public health education (Figure 2).

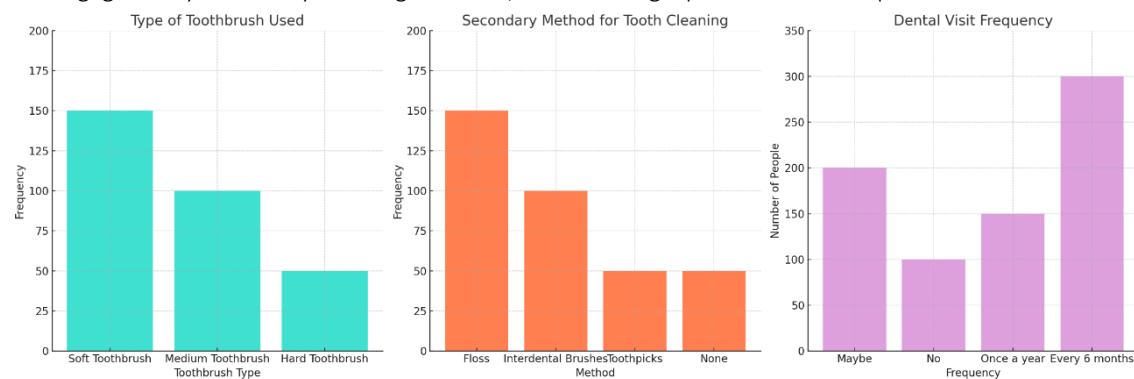


Figure 1 Dental Care Profile

The study also highlighted the habit of tongue cleaning as a regular practice, with 42% (n=162) of the participants acknowledging it as part of their oral hygiene routine. However, a higher percentage, 59.5% (n=238), reported not

cleaning their tongues, which may contribute to oral health issues such as halitosis (Table 1).

Table 1 Study Characteristics

Variable	Frequency (n)	Percentage (%)
<b>Education Level</b>		
Secondary	9	2.25
Intermediate	27	6.75
Bachelors	236	59.0

Variable	Frequency (n)	Percentage (%)
Other (Masters/PhD)	128	32.0
<b>Frequency of Brushing Teeth</b>		
None	5	1.3
Once a day	189	47.3
Twice a day	192	48.0
Thrice a day	14	3.5
<b>Habit of Tongue Cleaning</b>		
Yes	162	40.5
No	238	59.5

These findings underscore the importance of educational interventions targeted at enhancing oral hygiene practices, particularly among those with lower educational levels and those who do not currently engage in comprehensive oral care routines.

## DISCUSSION

The findings of the present study highlight a pervasive lack of awareness regarding the significance of oral hygiene and regular dental visits among the patient population in Pakistan. Despite the increasing global emphasis on preventive dental care, the concept appears to be in a nascent phase among the Pakistani populace. It is evident that further population-based educational endeavors, such as seminars and the implementation of comprehensive oral health programs, are imperative (Figure 2).

An intriguing gender disparity was observed in the reception of dental treatments, with male patients reportedly seeking more dental care than their female counterparts, a trend aligning with the research presented by Daljit Kapoor et al. (7). This contrasts with the findings from Helsinki et al., which posited that female patients were more proactive in seeking dental treatment. A potential contributing factor to these discrepancies could be cultural influences affecting health-seeking behaviors among genders in different regions. Moreover, it was noted that patients with higher educational degrees frequented dental clinics more regularly, suggesting that education level may play a role in health awareness and the pursuit of preventative care.

The study revealed that tooth brushing was the primary method of oral cleansing, with a majority of patients favoring a medium bristled toothbrush, followed by soft and hard varieties. This preference is supported by Wafaa Abdelraouf Khalil, who asserts that medium bristles are more efficacious in plaque removal than their softer or harder counterparts (11). Nonetheless, the bi-daily tooth brushing prevalence of 48% observed in this cohort is notably lower compared to the 90% reported in the United States, indicating a possible area for public health intervention.

Secondary methods for dental cleansing were not universally adopted, with some patients eschewing these altogether or opting for toothpicks, floss, and interdental brushes in descending order of frequency. This reluctance to adopt adjunct cleaning methods mirrors findings from a Saudi Arabian study conducted in 2001, which documented similar tendencies (12).

Halitosis was reported by 27% of the study's participants, a figure that is consistent with findings from Kumar et al., where a 21% prevalence was reported. Comparatively, a Japanese survey found a 24% incidence rate (7). The practice of tongue cleaning was observed in only 40.5% of the study's cohort, contrasting with the higher rates reported by Kapoor et al. (7).

Regarding dental visits, the study found that 46.3% of participants sought dental care only when deemed necessary, rather than on a regular preventative basis. This behavior echoes findings from Jain et al., where 54% of participants displayed a similar pattern (13). Such attitudes reflect an overarching lack of understanding about the importance of preventative measures in oral health maintenance.

The study's strength lies in its comprehensive assessment of oral hygiene practices within the patient population. However, it is not without limitations. The use of convenient sampling may limit the generalizability of the results, and the self-reported nature of the data collection can introduce bias. In terms of recommendations, the study underscores the critical need for targeted educational programs aimed at promoting the importance of regular oral hygiene and preventative dental visits. Additionally, future research should strive to elucidate the underlying causes behind the observed gender disparities in dental health practices and the apparent correlation between educational level and oral health maintenance.

## CONCLUSION

The conclusion of this study posits a significant gap in the awareness and practice of oral hygiene among patients, underscoring an urgent need for educational interventions and public health programs in Pakistan. The low adherence to regular dental visits and preventive measures revealed in the findings has substantial implications for human healthcare, highlighting the necessity to bolster

public awareness and foster behaviors that support the maintenance of oral health as a critical component of overall well-being. Such efforts could mitigate the consequences of poor oral health and bridge the existing knowledge gap, leading to improved health outcomes on a societal level.

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