

Public Awareness and Behaviours Regarding Dental Health: A Cross-Country Survey

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Abstract

Background: Understanding behaviors toward dental health (Bhat et al., 2022). is pivotal for preventive care and treatment outcomes. This study evaluates public awareness and personal dental health practices across five countries (Jiang et al., 2023), focusing on insurance coverage (Naser et al., 2023), hygiene habits, professional care frequency, and knowledge of specific dental issues and treatments.

Objective: To investigate the public's awareness and behaviors related to dental health insurance, ideal oral hygiene practices, professional dental visit frequency, and knowledge of stress effects on oral health (Soares-Silva et al., 2024; Bhat et al., 2022; Cao et al., 2023), bruxism treatments, smoking impacts, tobacco-related disorders, and available cessation centers, as well as familiarity with dental implants (Gupte et al., 2024; Sivaswamy et al., 2022), teeth whitening procedures, and the importance of medical history in dental care.

Methods: A structured questionnaire with 19 items was administered to 113 participants from the United States, India, Canada, Australia, and the UK. The survey assessed various aspects of dental health awareness and practices (Gizaw et al., 2024), including insurance coverage, hygiene routines, professional care, knowledge of treatments, and the effects of lifestyle factors on oral health.

Results: The survey uncovered a diverse range of awareness and behaviors regarding dental health. Notably, there were significant gaps in knowledge about the importance of dental insurance (Saghiri et al., 2021), ideal oral hygiene frequency, and the need for regular professional dental care. Awareness of the impact of stress (Cao et al., 2023), smoking, and tobacco use on oral health varied, as did knowledge of available treatments for conditions like bruxism (Soares-Silva et al., 2024) and the availability of tobacco cessation centers. (Gupte et al., 2024).

Conclusion: The study highlights the necessity for comprehensive educational programs to improve public awareness and behaviors concerning dental health. By addressing the knowledge gaps identified, dental health professionals can better guide the public toward optimal oral health practices and preventive care.

Introduction

Oral health is a critical component of overall well-being, yet it often goes overlooked in the broader public health discourse. The intricate relationship between dental care and systemic health necessitates a deeper understanding of public awareness and attitudes toward common dental procedures. (Al-Haj Husain et al., 2023). Despite advancements in dental medicine and increased access to information, misconceptions and

lack of knowledge persist, potentially leading to neglect and adverse health outcomes.

This article presents the findings of a survey-based research study conducted across five countries— the United States, India, Canada, Australia, and the UK —aimed at assessing the general public's awareness of common dental procedures. The study's impetus stems from the hypothesis (Sivaswamy &

Vasudevan, 2022) that enhanced public awareness can lead to better oral health practices and, consequently, improved health indicators.

Through a meticulously crafted questionnaire, we explored various facets of dental health awareness, including insurance coverage, ideal oral hygiene practices, frequency of dental visits, and knowledge of specific dental conditions and treatments. The survey's intent was not only to gauge the current state of awareness but also to identify the sources from which individuals derive their dental health knowledge.

The responses gathered from 113 participants offer a panoramic view of the public's perceptions and behaviors, shedding light on the disparities in dental health literacy. This article delves into these findings, providing a narrative that underscores the importance of targeted educational initiatives to bridge the knowledge gap and empower individuals with the information necessary for optimal oral health.

Methods and Materials

Survey Design and Distribution: A comprehensive survey consisting of 19 questions was designed to assess public awareness and behaviors regarding dental health. The survey was distributed to a sample of 113 individuals, ensuring a diverse representation of demographics to enhance the reliability of the findings.

Questionnaire Structure: The questionnaire was categorized into three sections:

- General Information (5 questions):** This section collected basic demographic data and general health information from the participants.
- Awareness of Dental Procedures (1 detailed question):** Participants were asked to elaborate on the dental procedures they were familiar with, providing insights into their depth of knowledge.
- Specific Dental Health Topics (13 questions):** These questions delved into various aspects of dental health, including insurance coverage, oral hygiene practices, professional care frequency, and knowledge of dental conditions and treatments.

Data Collection

Participants were approached through various channels, including dental clinics, community centers, and online platforms, to ensure a wide range of responses. The survey

was administered both in paper format and electronically, depending on the participant's preference, to maximize participation and accessibility.

Data Analysis

Responses were anonymized and analyzed to identify trends and patterns in public awareness and behaviors. The analysis focused on comparing the responses across different countries (Mesko, 2017), age groups, and other demographic factors to understand the diversity in dental health literacy.

Ethical Considerations

All participants provided informed consent, and the study was conducted in accordance with ethical standards, ensuring confidentiality and the right to withdraw at any time.

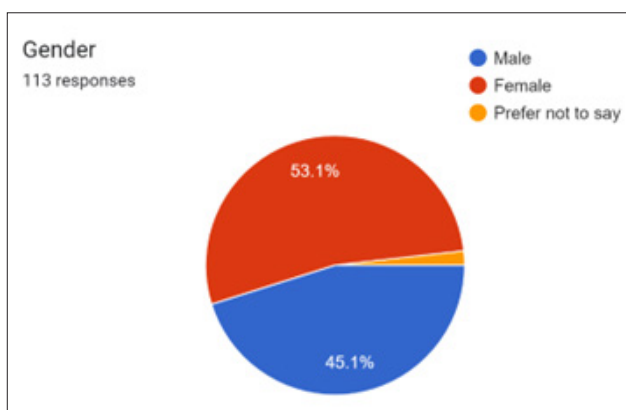
Results

The results are summarizing the responses to each of the questions in the survey and analyzing them using the SPSS software.

Total Participants: 113

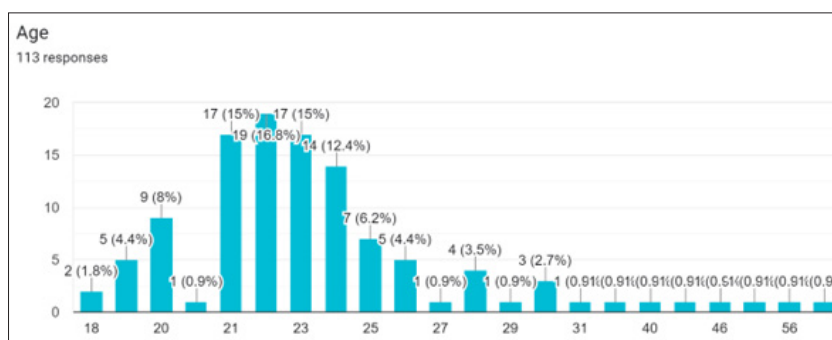
Gender Distribution

Female : 60 participants (53.1%)
 Male : 51 participants (45.1%)
 Prefer Not to Say : 2 participants (1.8%)



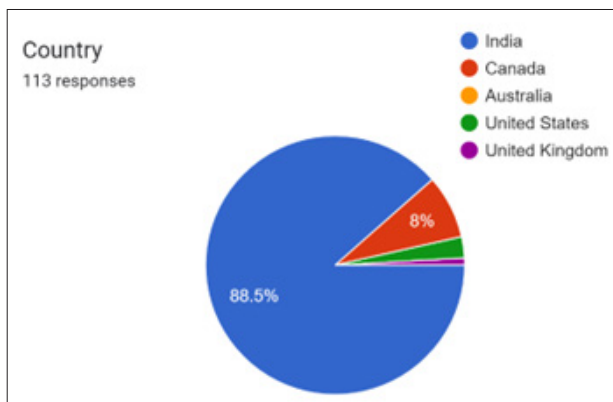
Age Distribution

18-20years : 17
 21-25years : 74
 26-35years : 16
 >35 years : 6



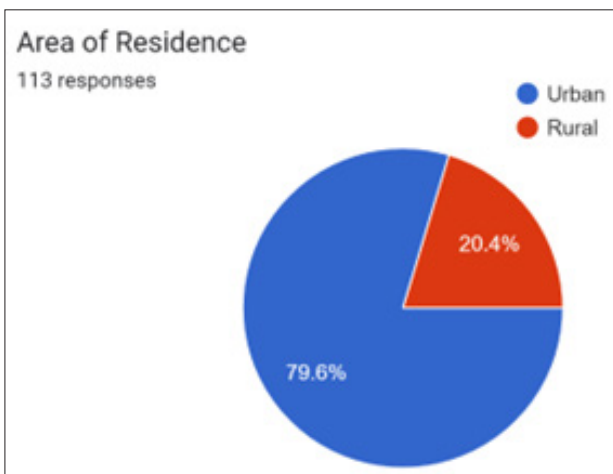
Country

India	: 99(87.6%)
Canada	: 9(8%)
Australia	: 1(0.9%)
United States	: 3(2.7%)
United Kingdom	: 1(0.9%)



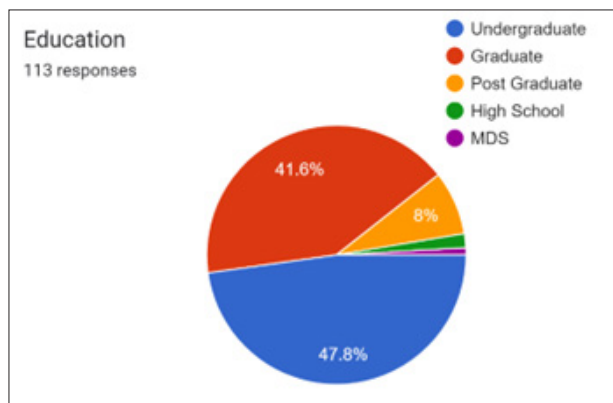
Area of Residence

Rural Areas	: 23(20.4%)
Urban Areas	: 90(79.6%)



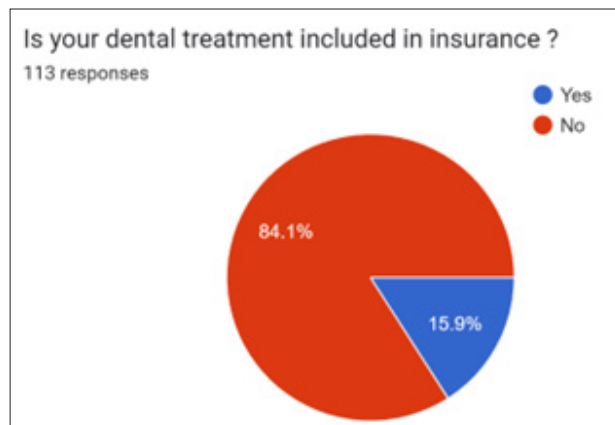
Education

Undergraduate	: 54(47.8%)
Graduate	: 47(41.6%)
Post Graduate	: 10(8.8%)
High School	: 2(1.8%)



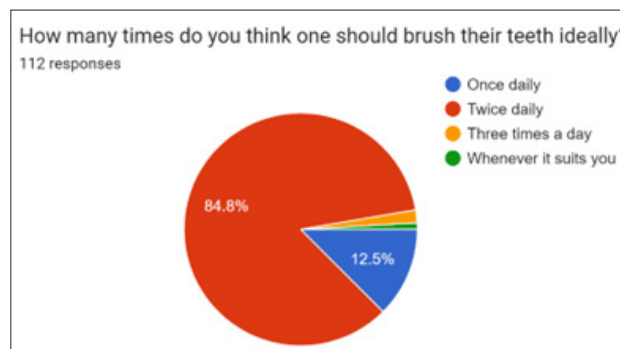
Is your dental treatment included in the insurance?

Yes	: 18(15.9%)
No	: 95(84.1%)



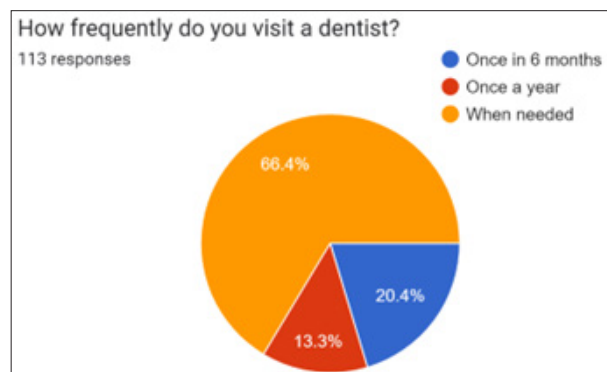
How many times do you think one should brush their teeth ideally?

Once daily	: 14(12.5%)
Twice daily	: 95(84.8%)
Three times a day	: 2(1.8%)
Whenever it suits you	: 1(0.9%)



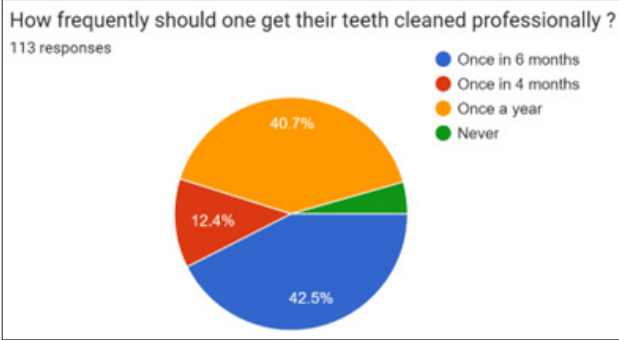
How frequently do you visit a dentist?

Once in 6 months	23(20.4%)
Once a year	15(13.2%)
When needed	75(66.4%)



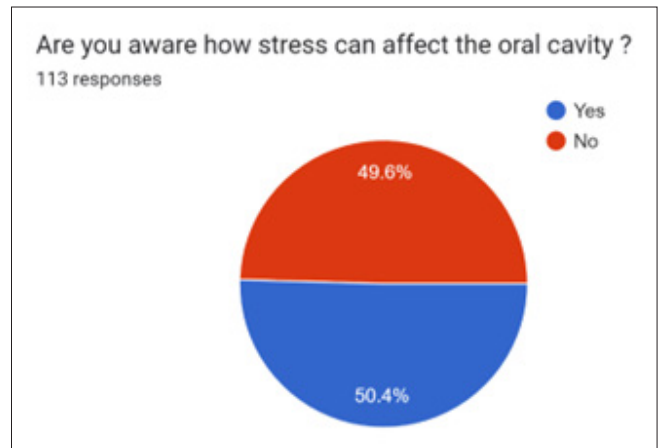
How frequently should one get their teeth cleaned professionally?

Once in 6 months	48(42.5%)
Once in 4 months	14(12.4%)
Once a year	46(40.7%)
Never	6(4.4%)



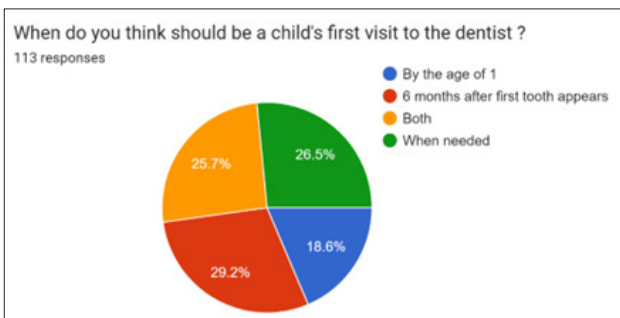
Are you aware of how stress can affect the oral cavity?

Yes : 57(50.4%)
No : 56(49.6%)



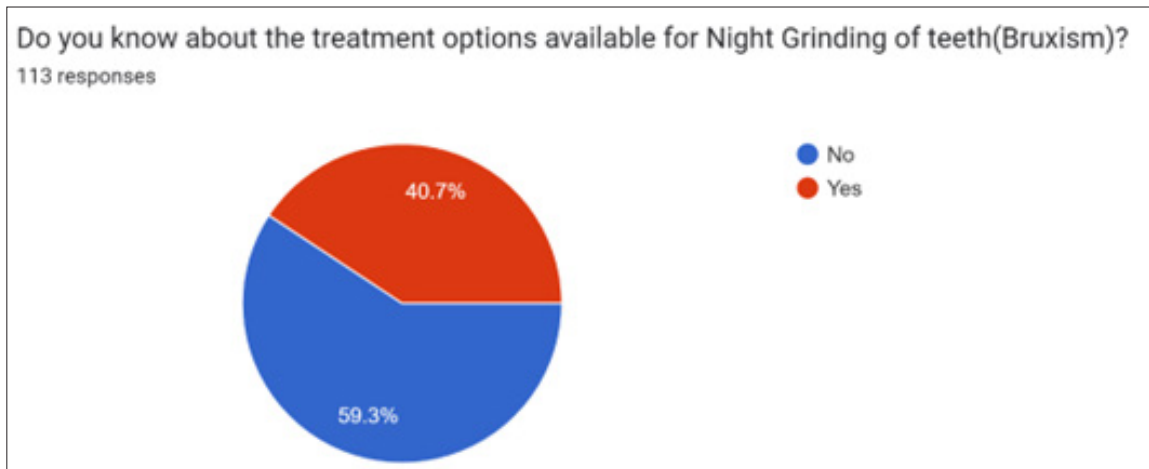
When do you think should be a child's first visit to the dentist?

By the age of 1 : 21(18.6%)
6 months after the first tooth appears: 33(29.2%)
Both : 29(25.7%)
When needed : 30(26.5%)



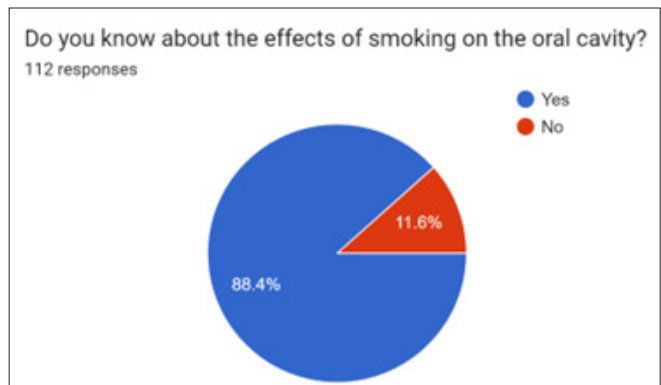
Do you know about the treatment options available for Night Grinding of teeth(Bruxism)?

No : 67(59.3%)
Yes : 46(40.7%)



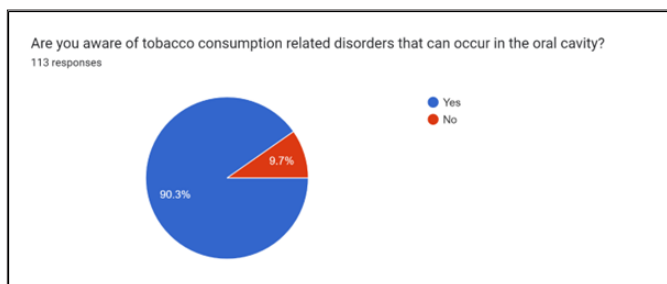
Do you know about the effects of smoking on the oral cavity?

Yes : 99(88.4%)
No : 13(11.6%)



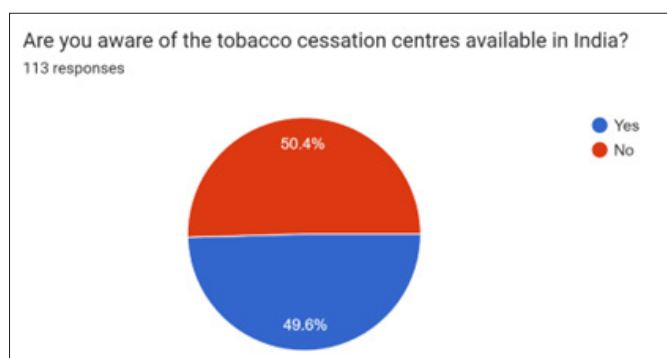
Are you aware of tobacco consumption-related disorders that can occur in the oral cavity?

Yes : 102(90.3%)
 No : 11(9.7%)



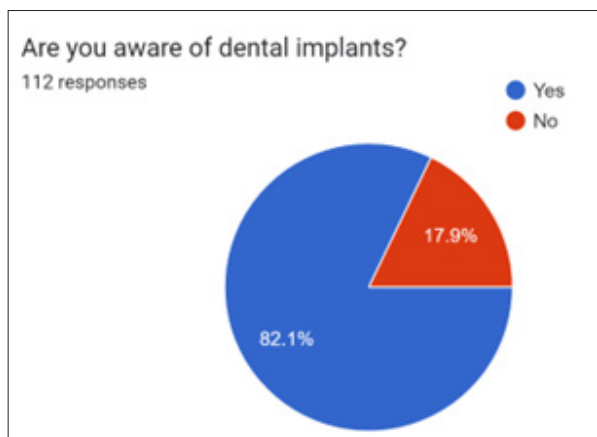
Are you aware of the tobacco cessation centers available in India?

Yes : 56(49.6%)
 No : 57(50.4%)



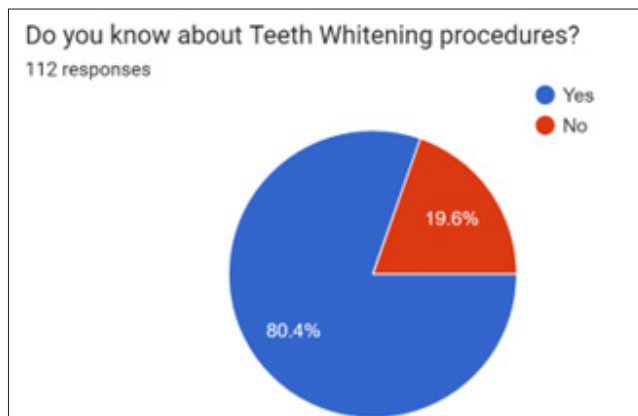
Are you aware of dental implants?

Yes : 92(82.1%)
 No : 20 (17.9%)



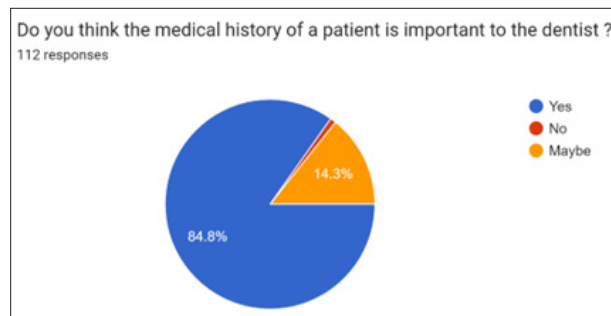
Do you know about Teeth Whitening procedures?

Yes : 90(80.4%)
 No : 22(19.6%)



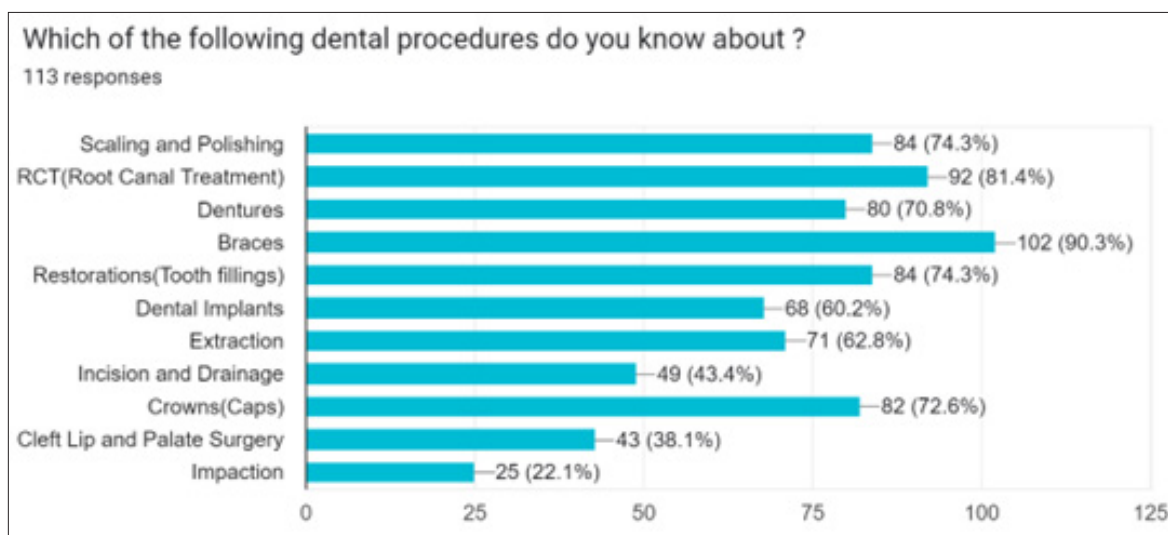
Do you think the medical history of a patient is important to the dentist?

Yes : 95(84.8%)
 No : 1(0.9%)
 Maybe : 16(14.3%)



Which of the following dental procedures do you know about?

Scaling and Polishing	: 84(74.3%)
RCT(Root Canal Treatment)	: 92 (81.4%)
Dentures	: 80(70.8%)
Braces	: 102(90.3%)
Restorations(Tooth fillings)	: 84(74.3%)
Dental Implants	: 68(60.2%)
Extraction	: 71(62.8%)
Incision and Drainage	: 49(43.4%)
Crowns(Caps)	: 82 (72.6%)
Cleft Lip and Palate Surgery	: 43(38.1%)
Impaction	: 25(22.1%)



Statistical Analysis

This comprehensive study covers insights from a survey conducted across five countries: the United States, India, Canada, Australia, and the UK. The study aimed to assess the general public's awareness of common dental procedures and practices. The survey was administered to a diverse sample of 113 individuals, with a gender distribution of 53.1% female, 45.1% male, and 1.8% preferring not to say. The age distribution was varied, with the majority (65.5%) falling in the 21-25 years age group. The majority of participants were from India (87.6%) and resided in urban areas (79.6%).

The survey revealed that only 15.9% of participants had dental treatment included in their insurance, while a significant 84.1% did not. When asked about ideal oral hygiene practices, 84.8% believed that brushing twice daily was ideal, while 12.5% thought once daily was sufficient. In terms of professional dental visits, 66.4% visited a dentist as needed, but only 20.4% adhered to the recommended 6-month interval.

The study also explored knowledge of specific dental conditions and treatments. It was found that 59.3% of participants were unaware of treatments for night grinding (bruxism). In terms of lifestyle factors affecting oral health, 88.4% were aware of the effects of smoking on the oral cavity, and 90.3% were aware of tobacco consumption-related disorders. However, awareness of tobacco cessation centers was evenly split, with 49.6% aware and 50.4% unaware. (Gupte, 2024).

In terms of specific dental procedures, 82.1% were aware of dental implants (Sivaswamy & Vasudevan, 2022; Saghiri, 2021) and 80.4% knew about teeth whitening procedures. Interestingly, 84.8% of participants believed that a patient's medical history is important to the dentist.

Discussion

Oral health plays a pivotal role in overall well-being, yet it often goes overlooked in the broader public health discourse. The intricate relationship between dental care and systemic health necessitates a deeper understanding of public awareness

and attitudes toward common dental procedures. Despite advancements in dental medicine and increased access to information, misconceptions and lack of knowledge persist, potentially leading to neglect and adverse health outcomes (Wehby, 2022).

Our study, conducted across five countries—the United States, India, Canada, Australia, and the UK—aims to assess the general public's awareness of common dental procedures. We hypothesize that enhanced public awareness can lead to better oral health practices and improved health indicators. Through a meticulously crafted questionnaire, we explored various facets of dental health awareness, including insurance coverage, ideal oral hygiene practices, frequency of dental visits, and knowledge of specific dental conditions and treatments.

The responses gathered from 113 participants offer a panoramic view of the public's perceptions and behaviors, shedding light on disparities in dental health literacy.

Only 15.9% reported having insurance coverage for dental treatment, while a striking 84.1% lacked any insurance coverage. Respondents' beliefs about toothbrushing frequency varied: 84.8% considered twice-daily brushing ideal, but 12.5% deemed once-daily sufficient. When it came to professional dental visits, 66.4% visited a dentist as needed, but only 20.4% adhered to the recommended 6-month interval. Knowledge gaps were evident, with 59.3% unaware of treatments for night grinding (bruxism) (Mesko, 2017), 11.6% lacking knowledge about smoking's impact on oral health (Amaral, 2023), and 17.9% unfamiliar with dental implants (Saghiri, 2021; Sivaswamy & Vasudevan, 2022). These findings highlight the importance of targeted educational efforts to bridge gaps and promote optimal oral health practices.

Conclusion

The study underscores the importance of thorough educational programs in dental health (Arafa, 2024). It's crucial to correct misconceptions and spread proven knowledge. Understanding insurance options is key, as is the role of regular dental visits

in prevention. Lifestyle choices like stress management and avoiding smoking are vital for oral health (Amaral, 2024). Dentists must work together to fill in knowledge gaps. Ultimately, informed communities are the cornerstone of better oral health and overall wellness.

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