

Assessment of Tongue Cleaning Habits in Suburban and Rural Areas: A Questionnaire Based Survey

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Abstract:

The dorsal surface of the tongue serves as a significant reservoir for harbouring oral bacteria. The mechanical act of tongue cleaning helps in remarkable reduction of this bacterial load. The present survey aims to assess the prevalence and acceptance of tongue cleaning amongst the rural and suburban population. This survey also tries to identify the different factors influencing the habit of tongue cleaning. A questionnaire-based method was employed to determine the tongue cleaning habits amongst individuals residing in suburban and rural regions.

Keywords: Tongue Cleaning, Tongue scraping, Oral Hygiene, Oral Habits.

Introduction:

The tongue, although small, is a powerful muscle of the body as it carries out functions like taste perception, speech, chewing, and swallowing.^[4] The papillae present on dorsal surface of the tongue create an area for plaque retention due to its varied projection^[4]. Subsequently, it becomes necessary to include tongue cleaning habit in our daily oral hygiene practices. The benefits of cleaning the tongue include preventing malodour, as well as lowering the risk of dental caries.^[4]

A variety of commercial products for tongue cleaning have become accessible in recent years. The knowledge regarding tongue care is often propagated through public media. As a result, it is anticipated that awareness about tongue cleaning will increase among the general population. This can possibly lead to greater opportunities for dental professionals to offer guidance on tongue care^[2]. It is therefore necessary to assess the knowledge about the general population before instructing about tongue cleaning practices. Although a review^[1,2,3] of existing literature revealed several recommendations for tongue cleaning, the prevalent practices and rates of TCH in specific populations have been rarely documented^[3]. Accordingly, in the present survey, we have utilized a questionnaire to assess the prevalence, methods, and insights of TCH, along with other health behaviours and individuals' awareness of their oral health status among healthy participants. Moreover, we examined the factors for initiating a TCH and experiences related to receiving professional instructions for tongue cleaning.

Methods:

1. Subjects:
2. A questionnaire was distributed in suburban and rural regions. The respondents were both male and female of all age groups. A consent was taken before recording the responses. All the responses were kept confidential and were used solely for the research purpose. We summed up the results from the time period of 1 week and the following results were analysed.^[2]
3. Questionnaire:
A set of 13 questions were arranged. A questionnaire was formulated in English, Hindi and Marathi. The questionnaire included 1 open ended and 10 closed ended questions, and 2 pictorial questions. The questionnaires were validated by the faculty of D Y Patil Deemed to be University School of Dentistry.

Result:

The questionnaire was circulated among 220 people. It was noted that 54% people were from suburban areas and remaining 46% were from rural areas. Out of the total participants, majority of participants (83.7%) were aware about the practice of tongue cleaning habit. Greater number of the participants (89.5%) considered tongue cleaning as a part of oral hygiene, thus incorporating the same in their oral hygiene. Very few people (15%) found it difficult to clean their tongue. Some common problems faced by the responders were Vomiting sensations (70%), Pain (21.2%), Gag reflex (72.7%) and Bleeding (15.5%). 112 people registered that they engage in the activity of tongue cleaning once a day which accounts for 57.1%. Moreover, 75.6% of people clean their tongues after brushing their teeth. A vast majority of the participants use toothbrush as a tool for cleaning their tongue. It was observed that only 24.5% of people clean their lateral portion of the tongue while 61.7% of people predominantly clean their tongue up to middle third portion. Majority of the participants (71.6%) incorporated tongue cleaning habit for over 5 years. 58.2% of participants were advised to practice tongue cleaning by someone, demonstrating the impact of social or professional recommendations. More than half (58.2%) of the participants observe reduction in tongue coating, and a large number of people observed reduction in level of bad breath.

Discussion:

The findings from the questionnaire-based survey provide a valuable insight into the habit of tongue cleaning among the respondents. The data collected reflects a diverse demography. Significant portion of respondents (54%) were from suburban areas. It was an impressive observation that a prevailing fraction of the participants (83.7) are aware of tongue cleaning practices and even larger percentage (89.5%) appreciates its importance as part of oral hygiene. This suggests a growing awareness of oral health practices in the general masses.

In contrast, the survey also reveals some challenges faced by individuals when it comes to tongue cleaning. The high prevalence of vomiting sensations (70%) and gag reflex (72.7%) indicates that many people experience discomfort during the process. This discomfort could potentially discourage individuals from maintaining a consistent tongue cleaning routine. It was also noted that only a small percentage (15%) found it difficult to clean their tongue. This finding suggests that majority of the population have adapted to their methods, despite the discomfort of tongue cleaning habit. The preference for using a toothbrush (74.5%) over other tools like finger or tongue scrapers suggests that participants are utilizing familiar methods for oral hygiene. The fact that only 24.5% of respondents clean the lateral portion of their tongue

indicates a potential area for education, as this part can harbour bacteria and contribute to oral health issues. Moreover, the predominance of participants (61.7%) cleaning only up to the middle third of their tongue highlights a need for awareness regarding the importance of cleaning the entire surface. Additionally, a considerable portion of individuals (71.6%) has maintained tongue cleaning habits for over five years, and 58.2% have been influenced by social or professional recommendations. This emphasizes the significance of community and peer support in improving oral hygiene practice. Additionally, the observation that more than half of the participants (58.2%) notice a reduction in tongue coating after cleaning suggests that many perceive substantial benefits from their efforts. This can further encourage the continuation of this practice. Overall, the survey guides us on the current state of tongue cleaning habits and highlights areas for potential improvement and education to enhance oral hygiene practices within the community.

Conclusion:

The results from the present survey reveal some useful information related to tongue cleaning habits in suburban and rural population. The findings show a good level of tongue cleaning awareness and incorporation in the daily oral hygiene.

From the findings from the current survey, it can be concluded that a better educational and promotional approach if better techniques is needed. Additionally, social and professional influence in encouraging tongue cleaning further highlights the need for awareness campaigns and dental health initiatives focused on this particular element. Though these gaps need to be addressed and existing awareness built on, oral health practices in these communities can further be optimized. Subsequently, it will lead to better overall health and overall well-being.

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