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## AWARENESS OF ORAL HYGIENE: A SURVEY BASED STUDY

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### ABSTRACT

*Periodontal diseases, dental caries, and oral cancer are the most prevalent dental diseases affecting people in the Indian community. An online survey was conducted to study awareness and oral hygiene practices commonly followed. Total 272 responses were analyzed and results were summarized. 56.6% respondents brush teeth two times a day. 25.1% respondents visit dentists regularly for check-ups. 15.1% respondents use mouthwash two times a day to maintain oral hygiene. Overall awareness regarding oral hygiene and practices is poor and needs improvement.*

**Keywords – Awareness, oral hygiene, practices, online survey**

### 1. INTRODUCTION

According to Global Burden of Disease 2017 Untreated dental caries in permanent teeth is the most common health condition<sup>1</sup>. According to American Dental Association (ADA) "Oral health is a functional, structural, aesthetic, physiologic and psychosocial state of well-being and is essential to an individual's general health and quality of life"<sup>2</sup>. Oral health is contributing to mortality and morbidity throughout one's lifespan<sup>3</sup>. Poor oral hygiene has an effect on general health and is associated with various systemic diseases<sup>4</sup>. The systemic disease also affects oral disease According to a review poor glycemic control increases risk of severe periodontitis<sup>5</sup>. Majority of these diseases can be prevented by educating at community and individual levels by providing oral health related education to improve oral health attitude and awareness among general public<sup>6</sup>. A study conducted on Indian students concluded that teenagers are not able to access their oral hygiene because of lack of oral health self-assessment skills, which resulted in poor oral hygiene<sup>7</sup>. Preventive dental care is almost nonexistent in the rural areas and very limited in the urban areas of India<sup>8</sup>. It is, therefore, important to promote oral diseases as a preventive approach, with the focus on health education and promotion, which should be given prime importance<sup>9</sup>. A majority of the Indians are unaware of the fact that good oral health not only ensures freedom from pain and suffering associated with oral health problems, but is also essential for the overall health improvement and elevation of self-esteem, quality of life, and performance at work<sup>10</sup>.

With background about oral hygiene in mind current study is conducted to study awareness about oral hygiene and products, their preferences while selecting a particular product and understanding of common oral hygiene products by conducting an online survey.

## 2. MATERIALS AND METHODS

An observational, descriptive, online survey was conducted by preparing google forms. The form was self-designed; self-constructed and pretested with 28 questions. Questions include socio demographic details of respondent like age group, gender, place of residence, awareness about good oral hygiene, oral hygiene products, frequency of oral health check-up, brand preferences etc.

Inclusion criteria: Respondent with age more than 18 years willing to participate in survey.

Exclusion criteria: Partially filled forms are excluded from final analysis.

### 2.1 Procedure and data collection

Before starting with actual study multiple choice-based questions were framed and google form was prepared by consultation with expert in the field and pre testing of same was carried out to assure its validity. Respondents were informed about the purpose of carrying out the survey and on an average 10 – 12 minutes were required to fill the forms. Prepared forms were circulated through e-mail and by posting form link on social media platforms like Facebook, Instagram etc. The overall practices concerning oral hygiene were assessed based on their responses to questions pertaining to oral hygiene practice.

### 2.2 Statistical analysis

Google sheet was generated and data was analyzed.

## 3. RESULTS AND DISCUSSION

Total 272 responses were analyzed. 42.3% male and 57.7% females responded to survey. Majority of responses received i.e. 96.2% were from age group 18-29 yrs., followed by 3.3% responses from age group 30-45 yrs. And 0.5% responses were received from age group 46 – 60 yrs.

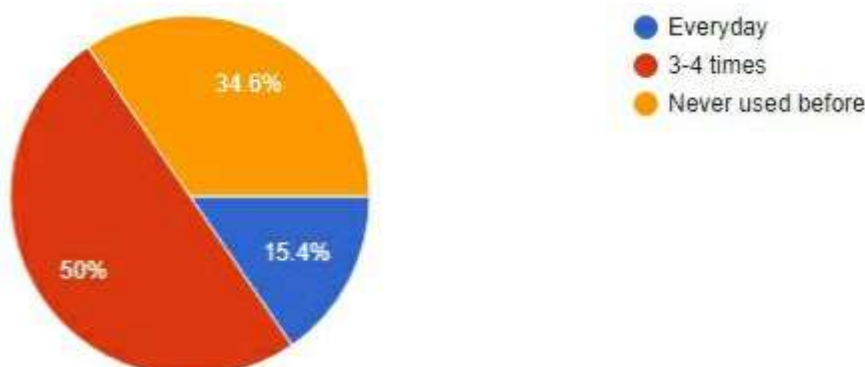
60.4% respondent reside in urban area, 29.3% respondent reside in metro area and 9.9% in rural area. Most of the respondents 56.6% brush teeth two times in a day, 42.3% brush once a day and 1.1% brush teeth more than twice a day. The survey result demonstrate that tooth brush and tooth paste are most commonly used oral hygiene product 56.6% brush teeth twice daily. Similar results were also reported by Jain *et al*<sup>12</sup>, Sharda *et al*<sup>13</sup>, Chandra Shekhar *et al*<sup>14</sup>, Bhat *et al*<sup>15</sup>, Pandya *et al*<sup>16</sup>, Paul *et al*<sup>17</sup>, However reported number was 23%, 15.4%, 22%, 11.6% and 13.96%, 35.71 which is significantly less than the present study. When asked about the awareness regarding different types of dental care products 86.6% respondents consider tooth brush as dental care product, followed by 82.4% respondents voted toothbrush and toothpaste as dental care product. Rest responses are summarized in table 1.

**Table 1: Awareness about different oral care products**

Dental care Product	Percentage (%)
Toothbrush	86.6
tooth paste, oral gel	82.4
Mouth wash, gargle	75
Mouth freshener	48.9
Dental floss	44.8
Teeth whitener	30.1

When asked about frequency of dental check-ups 41.5% respondents visit dentist for oral check-up in a period of more than one year. Surprisingly 32.1% respondent never visited a dentist. Only 25.1% respondent visited dentist regularly. Result clearly demonstrates negligence behavior towards oral hygiene. The problem people have is that many of us ignore the health of our

mouth, especially when it's compared with overall body health. People allow problems to develop before actually visiting the dentist. Survey revealed that most of the people are not bothered much about oral health check-up, unless urgent need arises. More efforts are required to educate people about importance of oral hygiene and regular dental check-ups to maintain it. Regarding visit to dentist regularly findings are much lower as compared to Paul *et al.*<sup>17</sup> and Bhat *et al.*<sup>15</sup> which is 40.62% and 80.1% respectively.



**Figure 1: Frequency of using mouthwash in oral hygiene**

When asked about the awareness regarding mouthwash and gargle as oral hygiene product 66.4 respondents were aware about mouthwash & gargle and its importance in oral hygiene. 15.5% participants use mouthwash daily for oral hygiene, 50% participants use mouthwash 3-4 times per week, 34.6% participants have never used mouthwash.

The present study concludes 15.5% participants use mouthwash two times a day which is in agreement with Paul *et al.*<sup>17</sup> and Jain *et al.*<sup>12</sup>. However, study reported by Sharda *et al.*<sup>13</sup> concludes 64.1% of mouthwash users.

#### **4. CONCLUSION**

Summarizing effect of oral hygiene on quality of life is troublesome because of the fact that idea is illusive, dynamic, emotional, individual, and multidimensional, without clear boundaries of its various segments. In addition, it evolves within and across the population groups, as culture and societal expectations change in varied situations. The limited literature on oral health awareness, oral health-related habits, and behaviors in the Indian scenario, prompted us to take up this study.

The results of this study suggest that oral hygiene awareness and practices among the study population are poor and need to be improved. The most of the oral hygiene problems can be prevented by simply providing awareness, which is a more cost-effective alternative than expensive dental procedures. Periodic oral health awareness programs at schools, colleges, universities, and community levels should be undertaken, and at each level, the major role and responsibility lies in the hands of the primary care physicians, whose interactions at the individual and family levels make them more accessible and acceptable. Dental professionals, Dental Marketing Agencies, schools and social media too may join hands with the government to help in the prevention of oral hygiene problems by improving knowledge, attitudes, behaviors, and practices toward oral hygiene among the general population.

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