

Standard Method for Oral Health Education (OHE) Among Dental Professionals—A Mixed Analysis Approach

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ABSTRACT

Aim: This study aims to identify and evaluate the methods of oral health education (OHE) used by dental professionals in Chennai, India. **Materials and Method:** A cross-sectional survey was performed among 357 dentists to assess the standard technique for providing OHE. A 15-item questionnaire consisting of demographic variables and preferred method of OHE was distributed to the participants as Google Form. The collected data were tabulated and analyzed using descriptive analysis and analysis of variance (ANOVA). **Results:** Most participants (63.4%) reported the lecture method as the standard technique for delivering OHE. Among the study participants, 80% employed OHE aids, predominantly models (33.2%), pamphlets (16.8%), and AV projections (16.5%). **Conclusion:** The lecture method predominates among dental professionals for its perceived effectiveness and versatility. These findings underscore the importance of tailored educational strategies in oral health promotion, informed by demographic considerations and practitioner preferences, to enhance public health outcomes globally.

KEYWORDS: Dentists, health education, oral health, public health, standard method

INTRODUCTION

Oral diseases pose a significant public health challenge, especially in low- and middle-income countries, significantly impacting quality of life.^[1] The Global Burden of Disease Survey 2017 identifies untreated

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INTRODUCTION

Oral diseases pose a significant public health challenge, especially in low- and middle-income countries, significantly impacting quality of life.^[1] The Global Burden of Disease Survey 2017 identifies untreated dental caries in permanent teeth as the most prevalent dental disease worldwide. Additionally, over 530 million children suffer from dental caries in primary molars, indicating a widespread pediatric issue.^[2,3]

Poor oral health in children is linked to severe negative effects on overall quality of life, growth, development, and nutrition, which can also impair academic performance and have lasting effects into adulthood.^[4,5] Improving global oral health outcomes requires preventive measures, early intervention, better access to dental care, and public health initiatives promoting oral hygiene and regular check-ups, particularly for vulnerable populations.^[6]

Oral health education (OHE) is essential for promoting oral health, with school dental health education (SDHE) specifically targeting children to improve their oral hygiene knowledge, attitudes, and practices.^[7,8] Repeated SDHE sessions can reduce plaque and enhance gingival health, though the impact on gingivitis and caries prevention remains unclear. Despite its importance, no studies have identified the most commonly used method for OHE. This research aims to determine the standard OHE technique using a mixed analysis approach.

MATERIALS AND METHOD

A cross-sectional study was conducted to assess standard methods of OHE among dentists in Chennai. The sample size of 357 was determined from a pilot study involving 30 practitioners. Institutional approval was granted by the review board of Sree Balaji Dental College and Hospital. Dentists from various Chennai regions were selected using multi-stage cluster sampling. Participants were required to sign a consent form, with incomplete questionnaires, and those from dentists under 5 years of experience were

excluded. The questionnaire, pretested for content validity and showing good internal consistency (Cronbach's alpha = 0.82), included 15 items on demographics, OHE methods, and preferences. Data were collected via Google Forms® and analyzed using IBM SPSS 26.0.

RESULTS

Figure 1 illustrates that most individuals hold a Bachelor's degree (40%) and are in Senior positions (40%), with a significant portion having 5–10 years of experience (35%).

Table 1 illustrates that working experience was statistically significant with preference of OHE.

Table 2 illustrates that designation was statistically significant with OHE preference.

DISCUSSION

OHE is vital in dental services, targeting diverse groups in schools, workplaces, and care facilities. Interventions range from basic information to complex programs focused on knowledge, attitudes, dental service use, and overall oral health improvement.^[9] Research highlights the effectiveness of OHE using various methods. Audio-visual aids led to more consistent improvements in oral health compared to other methods.

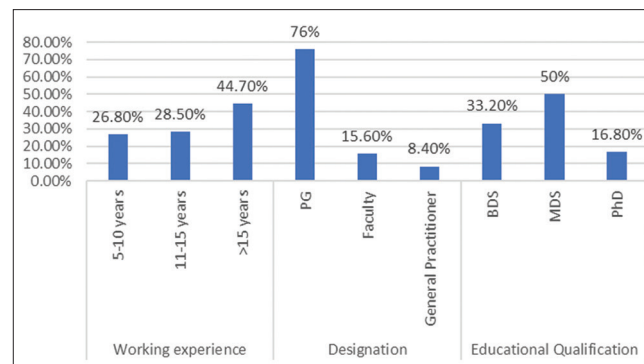


Figure 1: Percentage-wise distribution of educational qualification, working experience, and designation

Table 1: Association between OHE preferences and years of experience

Questionnaire	Variables	Working experience			P
		5-10 years	11-15 years	>15 years	
Which is your preferred method of OHE?	Lecture	62.5%	60.8%	57.5%	0.9
	AV aids	25%	27.5%	27.5%	
	Pamphlet	12.5%	11.8%	15%	
Aids used?	Models	66.7%	33.3%	33.1%	<0.01
	Pamphlets	16.7%	30.8%	17.6%	
	AV projections	16.7%	0	34.6%	
	Flash cards, flip charts	0	5.1%	14.7%	
	Puppets	0	30.8%	0	
Standard method for OHE?	Lecture	75.0%	35.3%	74.4%	<0.01
	AV projections	25%	64.7%	25.6%	

Table 2: Association between OHE preferences and designation

Questionnaire	Variables	Designation			P
		PG	Faculty	General practitioner	
Preferred method of OHE?	Lecture	63.2%	50.0%	46.7%	<0.01
	AV aids	20.6%	44.6%	50.0%	
	Pamphlet	16.2%	5.4%	3.3%	
Aids used?	Models	49.8%	14.3%	5.3%	<0.01
	Pamphlets	16.9%	31.0%	47.4%	
	AV projections	16.9%	42.9%	15.8%	
	Flash cards, flip charts	6.2%	11.9%	26.3%	
	Puppets	10.2%	0%	5.3%	
Standard method for OHE?	Lecture	63.2%	75.0%	43.3%	<0.01
	AV projections	36.8%	25.0%	56.7%	

Albandar *et al.*^[9] discovered that a comprehensive program resulted in the lowest plaque scores, while a less detailed program showed intermediate results, and a control group had minimal improvement. Similarly, Ivanovic and Lekic^[10] observed significant gains in oral hygiene among 11- to 14-year-olds using intensive instruction without professional prophylaxis, emphasizing the need for ongoing education to sustain improved gingival health. These findings align with studies^[11-13] in Western communities.

This research suggested that almost 36.6% of dental professionals had given OHE through the lecture method followed by 23.5% of dentists provided OHE using audio-visual aids. In total, 60% of dental professionals suggested that the lecture method is the most effective approach in delivering oral health education. Almost 80% of individuals had used OHE aids for providing OHE. Models (33.2%) were the most commonly used educational aid followed by pamphlets (16.8%) and AV projections (16.5%). In total, 63.4% of dentists suggested that the lecture method is the standard procedure for delivering the oral health in an effective way. Years of experience and designation were found to be statistically significant with the most preferred method of OHE used by various dental professionals.

CONCLUSION

The lecture method has long been considered a standard method for providing OHE due to its structured approach and ability to disseminate information to large groups efficiently. Enhancing the lecture method with Q and A sessions, demonstrations, and hands-on activities improves engagement and retention, ensuring theoretical knowledge translates into practical skills and better oral health outcomes.

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Conflicts of interest

There are no conflicts of interest.

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