

Comprehensive Knowledge Regarding Oral Habits Amongst General and Specialist Dental Practitioners

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Abstract

Context: Dentists play an important role in identifying the existence of deleterious oral habits, verifying the association between habits and malocclusion and planning and establishing the treatment for it. **Aims:** The aim of the present study was to assess the comprehensive knowledge of BDS and MDS practitioners on oral habits. **Subjects and Methods:** The study was conducted in the Department of Pedodontics and Preventive Dentistry, Thai Moogambigai Dental College and Hospital. A total of 90 dental surgeons, selected randomly by stratified sampling method, were involved in this study, of which 32 were BDS and 58 were MDS from different specialties. **Statistical Analysis Used:** The absolute and percentage frequencies were obtained for data analysis (descriptive statistical techniques). The existence of a significant association between BDS and MDS practitioners was verified using bivariate analysis (Yates' Chi-square and Fisher's exact tests). **Results:** This questionnaire-based study depicts the response of the dental practitioners toward the prevalence, etiology, clinical features, and treatment plan of adverse oral habits. When compared to MDS practitioners, BDS practitioners had less knowledge on the identification and early diagnosis of the adverse effects on oral habits. **Conclusions:** As deleterious oral habits in children are devastating conditions to be noted in literature of dentistry, more importance should be emphasized by the dentist.

Key words: BDS practitioners, knowledge, MDS practitioners, oral habits

INTRODUCTION

Boucher defined habit as a tendency toward an act or an act that has become a repeated performance, relatively fixed, consistent, easy to perform, and almost automatic. Habits are acquired automatisms, represented by an altered pattern of muscle contraction with complex characteristics, which proceed unconsciously and on a regular basis.^[1] Deleterious habitual patterns of muscle behavior often are associated with perverted or impeded osseous growth, tooth malposition, disturbed breathing habits, difficulties in speech, imbalance the facial musculature, and psychological problems.^[2] The habit may have a deep-rooted emotional factor involved and may be associated with insecurities, loneliness, or neglect experienced by the child. The relative prevalence of oral habit in school-going children in India has been reported to be as low as 3% in North India^[3] and 30% in South India.^[4] Oral habits, especially if they persist beyond the preschool age, have been implicated as an important environmental etiological factor associated with the development of malocclusion.^[5]

Oral habit-induced malocclusion depends on the frequency, intensity, and duration of habit action.^[6] Hence, dentists play an important role in verifying the existence of association between malocclusion and deleterious oral habits and planning and establishing the treatment for it. The present study was conducted with the aim of assessing the comprehensive knowledge of BDS and MDS practitioners on oral habits and their appropriate treatment for it.

SUBJECTS AND METHODS

The study was conducted in the Department of Pedodontics and Preventive Dentistry, Thai Moogambigai Dental College and Hospital, Chennai, Tamil Nadu.

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A total of 90 dental surgeons, selected randomly by stratified sampling method, were involved in this study [Table 1], of which 32 were BDS and 58 were MDS from different specialties such as Prosthodontics, Endodontics, Oral Pathology, Periodontics, Oral Medicine, Orthodontics, Oral and Maxillofacial Surgery, and Public Health Dentistry [Table 2].

Inclusion criteria

1. The study included BDS and MDS practitioners who are designated in various department at Thai Moogambigai Dental College and Hospital
2. MDS specialties other than pedodontics and preventive dentistry are included in the study.

Exclusion criteria

1. Postgraduate students
2. Dental degree holders who are in administration section.

Questionnaire

It is a questionnaire-based study with 20 self-explanatory questions. Scoring was given to each question to make up to 100 marks, which means 100%. Thus, the questionnaires were given to practitioners individually, and scores had been valued and assessed.

Statistical analysis

The absolute and percentage frequencies were obtained for data analysis (descriptive statistical techniques). The existence of significant association between BDS and MDS practitioners was verified using bivariate analysis (Yates' Chi-square and Fisher's exact tests).

RESULTS

The most prevalent adverse oral habit that the practitioners of our study had come across was thumb sucking habit (60%), of which 43.8% were BDS and 69% were MDS [Table 3]. About 44.4% of practitioners had told that oral habits have to be treated between the ages of 3 and 6 years. In that, almost 41.4% of MDS practitioners have suggested that these oral habits have to be treated between the ages of 6 and 10 years and 56.3% of BDS practitioners have suggested between the ages of 3 and 6 years [Table 4]. For tongue thrusting habit, 68.9% of practitioners had told that proclination of maxillary anteriors was the predominant intraoral finding seen in children, of which 75.9% were MDS and 56.3% were BDS practitioners [Table 5]. Around 88.9% of practitioners had told that oral screen would be preferred as habit breaking appliance for the patient with mouth breathing habit, of which 89.7% were MDS and 87.5% were BDS practitioners [Table 6].

DISCUSSION

Quashie-Williams *et al.* found that 34.1% of children had deleterious oral habit.^[7] A very few studies have been reported in literature about the prevalence of deleterious oral habits in children aged 10 years and above.^[8] Thumb sucking is the

Table 1: Total number of practitioners involved

Qualification	n (%)
BDS	32 (35.6)
MDS	58 (64.4)
Total	90 (100.0)

Table 2: Number of practitioners from different specialities

MDS branch	n (%)
Prosthodontics	4 (6.9)
Endodontics	10 (17.2)
Oral pathology	4 (6.9)
Periodontics	14 (24.1)
Oral medicine	8 (13.8)
Orthodontics	4 (6.9)
Oral and maxillofacial surgery	10 (17.2)
Public health dentistry	4 (6.9)
Total	58 (100.0)

Table 3: Prevalence rate of various adverse oral habits

Q01	Qualification, n (%)		
	BDS	MDS	Total
Thumb sucking	14 (43.8)	40 (69.0)	54 (60.0)
Tongue thrusting	12 (37.5)	4 (6.9)	16 (17.8)
Mouth breathing	6 (18.8)	12 (20.7)	18 (20.0)
Nail biting	0	2 (3.4)	2 (2.2)
Total	32 (100.0)	58 (100.0)	90 (100.0)
Chi-square test	Value	P	
Fisher's exact test	6.611	0.069	

Table 4: Preferred age group for the treatment of adverse oral habits by different practitioners

Q02	Qualification, n (%)		
	BDS	MDS	Total
2-3 years	2 (6.3)	10 (17.2)	12 (13.3)
3-6 years	18 (56.3)	22 (37.9)	40 (44.4)
6-10 years	12 (37.5)	24 (41.4)	36 (40.0)
10-12 years	0	2 (3.4)	2 (2.2)
Total	32 (100.0)	58 (100.0)	90 (100.0)
Chi-square test	Value	P	
Fisher's exact test	2.121	0.598	

most common oral habit, and it is reported that its prevalence is between 13% and 100% in some societies.

Kharbanda *et al.* observed the occurrence of digit sucking, most frequently, in 50% of the children.^[5] The prevalence of this habit is decreased as age increases, and mostly, it is stopped by 4 years of age.^[9,10] Hence, an attempt was made in the present study to find out the knowledge of BDS and MDS about the prevalence of adverse oral habits and their features in young children and adolescents and to find out their treatment

Table 5: Predominant intraoral finding of tongue thrusting habit

Q03	Qualification, n (%)		
	BDS	MDS	Total
Proclination of maxillary anteriors	18 (56.3)	44 (75.9)	62 (68.9)
Maxillary constriction	12 (37.5)	8 (13.8)	20 (22.2)
Posterior teeth cross-bite	2 (6.3)	6 (10.3)	8 (8.9)
Retroclination of mandibular anteriors	0	0	0
Total	32 (100.0)	58 (100.0)	90 (100.0)
Chi-square test	Value		P
Fisher's exact test	3.240		0.222

Table 6: Preferred habit breaking appliance for mouth breathing habit

Q04	Qualification, n (%)		
	BDS	MDS	Total
Oral screen	28 (87.5)	52 (89.7)	80 (88.9)
Hawley's appliance	4 (12.5)	6 (10.3)	10 (11.1)
Monobloc activator	0	0	0
Twin block	0	0	0
Total	32 (100.0)	58 (100.0)	90 (100.0)
Chi-square test	Value		P
Fisher's exact test	-		0.995

plan for those children. Mouth breathing habit was the second most prevalent habit in the study conducted by Bhayya and Shyagali,^[11] which correlates with our current study in which 20% of total practitioners had told the same.

Oral habits may cause disorders on teeth and supportive tissues, depending on intensity or how often the action is performed, frequency or how often the action is repeated per day, and duration or how long the action has been performed.^[12] Malocclusion present as anterior open-bite, anterior protrusion, anterior-posterior cross-bite, high tapered palate, and crowded dentition may be caused by finger sucking, tongue thrusting, and mouth breathing.^[6] Such habits are considered to be normal up to 4–5 years of age;^[9] hence, the question of what age it has to be treated was included in the questionnaire of the present study.

Continuation of the habit past the age at which the permanent incisors erupt may, however, prove detrimental. Thus, there are very few reports which describe a coordination and thorough psychological investigation associated with oral habits that may be one of the causative factors associated with oral habits. The habit of sucking the finger (or thumb) is considered to be performed for oral gratification and psychological reassurance.^[13] Thus, in this study, most of the MDS practitioners (51.7%) had told that psychological disturbances would be probable etiological factor for thumb sucking habit.

Apart from these questions, other parameters were also dealt and assessed regarding oral habits. For mouth breathing habit, 42.2% of practitioners had told that enlarged adenoids were the most common etiological factor, of which 44.8% were MDS and 37.5% were BDS practitioners.

For children with thumb sucking habit, appliances consisting of cribs in the anterior region are found to be very effective as reminders as well as physical restrainers.^[14-17] About 53.3% of practitioners had told that they would prefer palatal crib as the habit breaking appliance for a child with sucking habit, in which 56.3% were MDS and 51.7 were BDS practitioners. Around 40% had told that they would like to educate the parents regarding adverse oral habits by giving pamphlets, in which 48.3% were MDS practitioners.

CONCLUSION

This questionnaire-based study depicts the response of the dental practitioners toward the prevalence, etiology, clinical features, and treatment plan of adverse oral habits. When compared to MDS practitioners, BDS practitioners had less knowledge on the identification and early diagnosis of the adverse effects on oral habits. As deleterious oral habits in children are devastating conditions to be noted in literature of dentistry, more importance should be emphasized by the dentist.

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Conflicts of interest

There are no conflicts of interest.

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