Knowledge and Awareness of Habits and Appliances for Breaking Habits: A Questionnaire Survey

1. Dr.Parag Gangurde

Professor and Head, Department of Orthodontics, Bharati Vidyapeeth (Deemed to be) Dental College and Hospital, Navi Mumbai, Maharashtra

2. Dr Shashank Gaikwad

Professor, Department of Orthodontics and Dentofacial Orthopedics Bharati Vidyapeeth (Deemed to be University) Dental College and Hospital, Navi Mumbai.

3. Dr. Mansi Semwal

Associate Professor, Department of Pediatric & Preventive Dentistry, Babu Banarasi Das College of Dental Sciences, Lucknow

mansisemwal3388@gmail.com

4. Dr. Aarti S. Bedia

Associate Professor, Department of Oral Medicine & Oral Radiology, Bharati Vidyapeeth (Deemed to be University) Pune, Bharati Vidyapeeth (Deemed to be University) Dental College and Hospital, Navi Mumbai.

drarti2000@yahoo.co.in

5. Dr Hrushikesh Aphale

Professor and PG guide

Department of Orthodontics and Dentofacial Orthopedics, SMBT Dental College and Hospital, Sangamner. hrushiaphale@gmail.com

6. Dr. Shirish Goel

Professor & HOD Department of Orthodontics and Dentofacial Orthopedics, Maitri College of Dentistry & Research Centre, Anjora, Durg, Chattisgarh

Abstract:

Background: Malformations of the dentofacial structures may be traced back to ingrained customs and behaviors. It is possible to classify oral routines as either healthy or unhealthy. Dental malocclusion is known to arise from a number of etiological factors, including parafunctional habits. The most prevalent oral behaviors are tongue thrusting and thumb sucking. The purpose of the research is to gauge parents' familiarity with habit and habit-breaking devices.

Method: A questionnaire survey was administered to guardians. Eighty parents brought their children with poor oral hygiene to the clinic for treatment as part of this study. There were a total

of nine questions pertaining to the behavior and its after-effects. Chi-square tests and statistical analysis using SPSS were run on the data that was loaded into MS Excel. Results indicated that 93.8% of parents knew about thumb sucking, 76% knew about mouth breathing, 71% didn't know about tongue thrusting, and 65% knew about bruxism. 28% of women and 38.7% of men knew that bad oral practices can result in malocclusion. The chi-square test yields a substantial p-value of 0.000.

Conclusion: Most parents knew that habit-breaking gadgets helped with oral habits, but few knew that they might also be used to prevent malocclusion.

Keywords: Adverse oral habits, Awareness, Habit breaking appliance, Malocclusion

Introduction:

The establishment of a habit requires the repetition of an activity until it becomes automatic. An individual's lifestyle choices are a major etiologic factor in the development of dentofacial deformity [1]. The mouth may be a symbol for both good and bad habits. Normal occlusion is established by nasal breathing, chewing food, and swallowing, all of which are regarded physiological and functional habits [2]. This, in turn, supports the formation of a harmonious face that is free of aberrations. But bad oral habits include things like digital suction, mouth breathing, pacifier and bottle usage, pacifier and bottle attachment, lower lip interposition and suction, tongue suction, onychophagy, and mandibular propulsion [3]. These behaviors, when allowed to persist, lead to the development of malocclusions and phonetic abnormalities because they affect the growth and development of the muscles and bones in the jaw. These changes can occur as a result of the jaw.

Parafunctional behaviors are a major contributor to the development of dental malocclusion as an etiological factor. Oral behaviors such as thrusting the tongue forward and sucking the thumb are the most common [4,5]. Children who have bad oral habits like sucking their thumbs, extending their tongues, and biting their lips or cheeks are more likely to have an open bite in front of their upper teeth and a crossbite in the back of their upper teeth [6]. Other bad oral habits include pacifier use. People often say that oral health is an essential component of overall health. Children who have had their anterior teeth extracted and have a tendency of sucking their thumb need special care, typically for aesthetics, function, and the maintenance of space, but they also need an appliance to help them break the habit of sucking their thumb.

A tongue thrust, also known as an infantile, is a movement that occurs during swallowing in which the tongue moves forward to come close to touching the lower mouth [7]. It is possible to break the behavior of tongue thrusting with the assistance of tongue crib appliances [8]. A few weeks after the appliance has been fixed in place, the entire appliance will begin to descend superiorly as a result of biting forces in the anterior region. It will then either impinge on the mucosa or become submerged under it. Parents and caregivers are endangering children's health

by failing to provide them with the best possible oral health care due to a lack of knowledge about preventive measures and accessible treatments. Hence, it is crucial to take care of one's dental health, which may be achieved by meticulous brushing and flossing. Hence, it's for everyone's advantage if there are other devices that may be used in tandem with permanent orthodontic ones to help stop bad habits like thumb sucking and finger sucking.

Method: Eighty parents participated in this research through a questionnaire survey. Participants in the study were parents whose children were seen at the Outpatient Procedures Desk (OPD) of the Department of Pediatric and Preventive Dentistry. Informed consent was given by the parents who took part in the survey. According to the study's inclusion and exclusion criteria, it included all parents who accompanied their children to the Department of Pediatric and Preventive Dentistry for dental treatment and who also consented to take part in a survey.

Children in need of immediate dental treatment and those whose parents declined to take part in the study were not included. The questionnaire used in the survey was a closed-ended, pretested form that included the following questions. Nine questions were developed for a systematic, closed-ended survey on oral habits and their management. The validity of the questionnaire was based on sound reasoning and the appropriateness of the selected topics. The study was given the go light by the university's ethical review board.

The gathered information was input into a Microsoft Excel spreadsheet and put through statistical testing with SPSS version 20. There was a chi-square analysis. The significance threshold was fixed at $p<0.05$.

Results: There were 42 ladies and 38 guys that filled out the survey. Respondents, on average, were 35 years old.

Table 1: Distribution of responses toKnowledge

Questions	Responses N (%)	
	Yes	No
Do you know thumb sucking habits?	75 (93.8%)	5 (6.2%)
Do you know about mouth breathing habits?	76 (95%)	4 (5%)
Do you know about bruxism?	65 (81.2%)	15 (18.8%)
Do you know about tongue thrusting habits?	9 (11.2%)	71 (88.8%)
Are you aware all these habits can lead to malocclusion?	73 (91.2%)	7 (8.8%)
Do you know these habits can be break with	18 (22.5%)	62 (77.5%)

habit breaking appliances?		
Do you know these appliances should be used for 6 months?	24 (30%)	56 (70%)
Do you think these habits are caused due to feeling of insecurity?	16 (20%)	64 (80%)
Do you think habits can be stopped by psychological counselling?	20 (25%)	60 (75%)

The research found that 95 percent of parents knew their children were mouth breathers, 71 percent didn't know their children were tongue thrusters, and 65 percent knew their children were bruxers.

Table 2: Distribution of responses to awareness

Question	Male (N=42)		Female (N=38)		P value
	Yes	No	Yes	No	
Are you aware all these habits can lead to malocclusion?	31 (38.7%)	11 (13.8%)	28 (35%)	10 (12.5%)	0.001
Do you know these habits can be break with habit breaking appliances?	37 (46.3%)	5 (6.3%)	31 (38.7%)	7 (8.7%)	0.001

A majority of respondents (38.7% of men and 28% of females) knew that poor oral hygiene may cause malocclusion, and a similar number knew that using habit-breaking gadgets can prevent malocclusion.

Yet, the numbers showed a clear separation. Chi-square test: (p0.000). Our research showed that although most parents were aware of potentially harmful oral activities including thumb sucking, mouth breathing, and bruxism, few understood about the dangers of tongue thrusting.

Discussion: Most parents knew that habit-breaking tools can stop the development of malocclusion, but few knew that they may also help with bad dental hygiene. Yet, the parents knew that malocclusions might be avoided with the use of habit-breaking tools. The vast majority of parents did not realize that the gadget for changing bad habits should be utilized for

more than six months. Just a tiny percentage of people thought that stress or insecurity may cause poor dental hygiene. Moreover, they were not optimistic that psychological therapy might alter their harmful dietary habits or their poor oral hygiene practices. The vast majority of males surveyed had heard that habit-breaking tools help prevent malocclusion and that bad oral habits are a contributing factor to the development of the condition. Our data suggest that most parents take their children to the dentist regularly and pay attention to their dental health. Our results mirror those of Mahesh et al., who discovered that parents had a full understanding of why it's crucial for their children to maintain good dental hygiene. Approximately 53% of the parents thought it was important to restore baby teeth, whereas 30% said it depended on the situation [9]. Findings by Gurunathan et al. [10] show that those living in cities are more likely to disregard their oral health. Caries and basic dentition gaps were not given much importance, as reported by Ng et al. [11], suggesting that the care of primary teeth was regarded as very poor in certain cultures. Negative habits are harmful to children's well-being, thus parents should do everything they can to assist their kids break them. If negative habits can be broken at an early age, many problems may be avoided later on. Just around one-third of parents know how important it is to regularly see the dentist and take care of their teeth and gums. The number of parents who were visible in public while monitoring their children's nonfunctional behaviors was relatively low. Only 37% of the parents were responsible for their children's dysfunctional behaviors, which included bruxism, tongue thrusting, and thumb sucking. This would eventually result in a malocclusion, which would require their children to undergo orthodontic treatment at some point in the future. The number of parents who were visible in public while monitoring their children's nonfunctional behaviors was relatively low. In this study, dysfunctional behaviors including bruxism, tongue thrusting, and thumb sucking were seen in 61% of the sample, yet only 37% of the parents were held accountable. Because of this, their offspring would be at risk for developing malocclusion and would eventually need orthodontic treatment. Proclination of teeth with open bite and cross bites, as well as a history of thumb sucking, have all been linked to a higher risk of dental problems in studies [12]. The current study's strengths are its strong internal validity and the generalizability of its findings to the community under investigation. This study exhibited excellent internal validity despite its limitations, which include a limited sample size and a focus on a single demographic. Nevertheless, in the future, this study aspires to collect responses from a bigger sample size of participants from a wider range of ethnic origins in order to get more generalizable research results.

Conclusion: It was found within the parameters of the study that the majority of parents knew that habit-breaking appliances may be used to prevent malocclusion; however, the majority of parents did not know that habit-breaking appliances are used to cure bad oral habits. Parents may be educated more about the dangers of bad dental hygiene practices, their long-term impacts, and the effectiveness of habit-breaking devices via the implementation of further awareness campaigns.

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