

## Assessment of Parental Awareness about Dentofacial Deformity and Relation to the Oral Habits in Children in Taif City

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### Abstract

**Background:** In all domains of health care, including dentistry, there is a perceptible emphasis on prevention rather than treatment. In the rarefied field of Malocclusion and its economic and psychological ramifications, education and avoiding going into expensive orthodontic treatment happens to be of importance.

**Objective:** To determine the present level of knowledge and sources of information about malocclusion and relation to the oral habits among the parents of 7 - 9-year-old children at Taif city in Kingdom of Saudi Arabia.

**Materials and Methods:** The cross-sectional survey was conducted during December 2018 - March 2019. A study was conceded out on 633 parents (age range of 24 - 55). A well organized and meticulously structured questionnaire cleared and approved by the ethical committee.

**Result:** The response rate was ranging from 92% to 100% (n = 633). A total of 640 parent completed the questionnaire, a total of 63% of people they didn't visit dentist regularly only when they have pain also 54% they don't know a normal occlusion while a 46% know a normal occlusion.

**Conclusion:** From this survey it is identified that parents have basic knowledge of dental irregularities and relation to the oral habits.

**Keywords:** Dentofacial Deformity; Malocclusion; Oral Habits

### Introduction

The focus in dentistry is shifting to prevention of disease rather than treatment and repair of damage, and the public's role has changed from passive recipient to participant in prevention. Assisting patients to conserve their oro-dental structures is an important milestone which cannot be attempted in absence of health information and dedicated inclination [1-4].

Quality health data usually helps the patients to take responsibility, to improve their health and choose rational treatments together with their practitioners [5].

The necessity for better oro-dental health education about problems of crooked teeth has been noted [6] but to boost the level of public knowledge about the mal-aligned teeth we must find out whether the current knowledge is reliable and sufficient.

The purpose of this study in Taif, Kingdom of Saudi Arabia was to evaluate knowledge about malocclusion among the parents of 7 - 9-year-old children.

To mitigate the ignorance about the oro-dento-facial asymmetries, we have to ascertain the contemporary levels of knowledge [7].

Academy of Pediatric Dentistry (AAPD) recognizes that an infant's, children, or adolescent's well being can be affected by oral habits creating a need for effective individual management of the same [8].

Malaligned oral structures have an financial, psychological and socio-functional issues which circum-ambulate the issues of beauty [9-11].

Although malocclusion is the result of a combination of genetic or environmental influences, anthropological studies have shown that the primary etiology for changes noticed in the populations' pat- tern of occlusion is environmental condition.

Dysfunctional oro-dental habits may be classified as nutritive and non-nutritive [12,13].

Early weaning, pacifier and the extensive use of bottle feeding constitutes the non-nutritive. The incidence of Early weaning which is a common occurrence in different populations ranges from nil to 46%.

The length of the occurrence of oro-dental habits is considered destructive, together with its severity and how often they occur on a daily basis.

The interaction of these habits and the genetic factor ultimately will decide on the incidence, types and how severe the facial and muscular changes will be precipitated.

We need to currently underscore the contemporary dysfunctional practices in the Saudi society and encourage the healthy oro-dental habits and positive lifestyles [17].

Galvao., *et al.* [18] determined that use of milk bottle and pacifier were the negative oro-dental habits found in the children of 4 to 6 years age group, that impacted on the mal-alignment of dental structures.

In the same time frame Zapata., *et al.* [19] added a negative habit of nail-biting to the earlier factors and confirmed the work of Galvao., *et al.* Zapata., *et al.* concluded that a majority of children (83.1%) of this age group of four to six definitely had negative oro-dental habits.

### Materials and Methods

A standard cross- sectional survey was done in the dental clinics of Taif University health center. The duration was December 2018 - March 2019. A study was conducted by surveying a random 633 parents (age range of 24 - 55) of the child dental patients who serially came to the dental clinics.

A unique and structured questionnaire was designed by a committee for graduate research and later ratified by the ethical committee of the Faculty of Dentistry, Taif.

To test the questionnaire, 26 copies of the questionnaire were distributed to dental student (males only) and they were requested to write any note regarding the questionnaire. Then, the questionnaires were collected and modified. To test the patient's opinion on the

questionnaire, 26 copies of the questionnaire were distributed to the first attended patients in the Registration Appointments and Records Division (RARD) in Taif University Taif, Kingdom of Saudi Arabia as a pilot test. The questionnaire was distributed electrical form to any Saudi parent. The questionnaire were prepared in both English and Arabic and the choice of language was made by the participant (parent). The questionnaire had two parts and a total of 13 questions, consisting of “demographic” data and “parents” knowledge section. The “knowledge” section consisted of four sets of questions.

Two questions about “complications of oral habits and dentoskeletal discrepancies” without treatment.

Three questions for awareness about “normal occlusion and dentoskeletal relations”.

Three questions about “awareness about treatment and relation with age of children”.

**Result**

	Yes %	No %	*Pain %
Do you visit a dentist regularly?	11.4	25.6	63

**Table 1:** Awareness about dentist.  
\*When i have pain.

	Yes %	No %	Don't Know %
Did you know the normal occlusal (bite) of teeth	46	54	00
Do you have a son suffering from abnormal occlusion (bite)?	22.2	63.2	14.7
Do you believe that teeth should be properly aligned for better facial appearance?	68	30	2

**Table 2:** Awareness about irregular teeth (malocclusion).

	Yes %	No %	Don't Know %
Do you think that the primary teeth take off at an early age affects the permanent teeth?	44.8	18.9	36.3
Do you think that there are wrong behaviors such as (sucking finger) affects the teeth?	79.7	6.9	13.4
Do you think incorrect breastfeeding methods affect teeth?	65.1	6.9	29
Do you think that a child who has malocclusion suffering from speech problems and shyness to communicate with others?	70.8	9.4	19.8

**Table 3:** Awareness about complications of oral habits and dentoskeletal discrepancies.

	Yes %	No %	Don't Know %
Do you think a response of treatment differ with age of child	47	13	40
Do you know the treatment period needed by the son to correct his teeth?	8.6	44.3	47.1
Do you know that oral habits can be preventable?	40	60	00

	Yes and TX%	Yes, not treated %	No %
Do you have family members have malocclusion? Have they been treated?	38	24	38

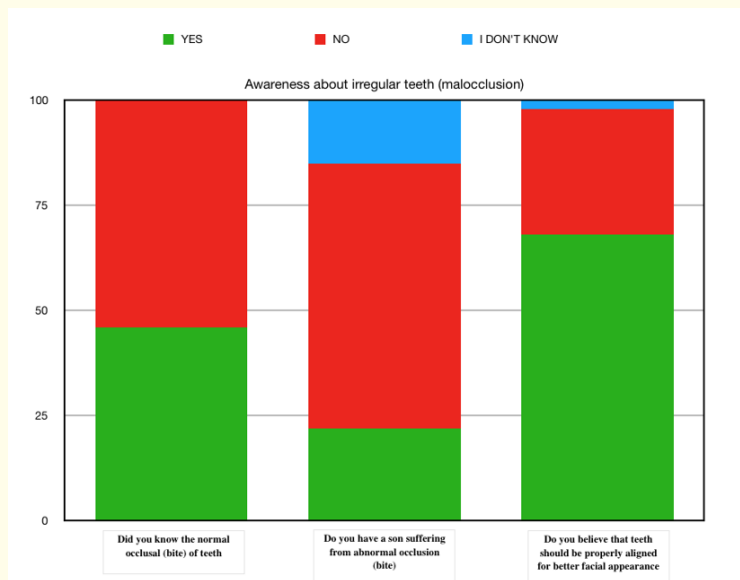
**Table 4:** Awareness about treatment a malocclusion and prevent oral habits.

601 parents submitted the completed the questionnaire, which were audited to be complete and without errors, during this period. Ratio of the care givers interviewed were mothers, baby sitters and fathers (400, 195, 6).

The questionnaire included three parts of questions, the first part for assessing Awareness about dentist, the second part for assessing Awareness about irregular teeth (malocclusion), third part about Awareness about complications of oral habits and dentoskeletal discrepancies and the last part is about assessing Awareness about treatment a malocclusion and prevent oral habits.

**In first part of questionnaire**

A total of 63% of people said that they didn't visit dentist regularly, but only when they had pain.



**Figure 1**

**In second part**

- Q1: 54% they don't know a normal occlusion while a 46% know a normal occlusion.
- Q2: 22% of parent have a son has malocclusion while a 63% of parent they don't have son has malocclusion and 17% they don't know if their son has malocclusion or not.
- Q3: 68%.

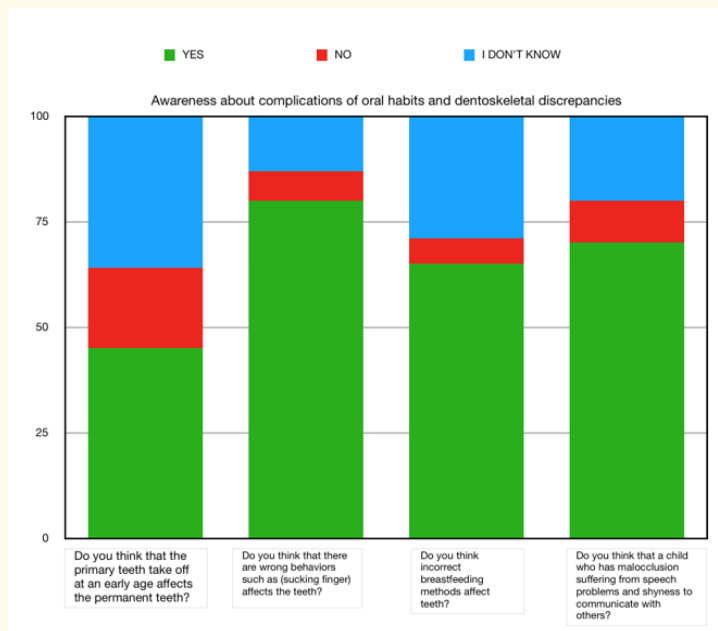
**In third part**

- Q1: 45% of parent they think premature loss of primary teeth effecting in permanent teeth while 19% they says no effect, and 36% of parent don't know if their relation between primary and secondary teeth.

- **Q2:** 80% of parent they know that oral habit effect on teeth while 7% of parent no effect and 13% of parent don't know if the oral habit effect on teeth or not.
- **Q3:** 65% of parent they know incorrect breastfeeding methods effect on teeth while 7% they says no effect and 29% of parent don't know if their effect or not.
- **Q4:** 70% of parent their child who has malocclusion he will suffer from speech problems and shyness to communicate with others, while 10% they says no and 20% they don't know.

**In the last part**

- **Q1:** 47% of parents think a response of treatment effect with age of child, while 13% they don't and 40% of parents the don't know if their any relation between a treatment and an age.
- **Q2:** 9% of parent they know the treatment period needed for the son to correct his teeth while 44% they don't know and 47% they don't know the period of treatment differ.
- **Q3:** 40% of caregivers knew oro-dental habits are preventable while 60% of them were ignorant of this fact.
- **Q4:** 38% they have family member has malocclusion and treated while 24% have family member has malocclusion but not treated and 38% they haven't family member has malocclusion.



**Figure 2**

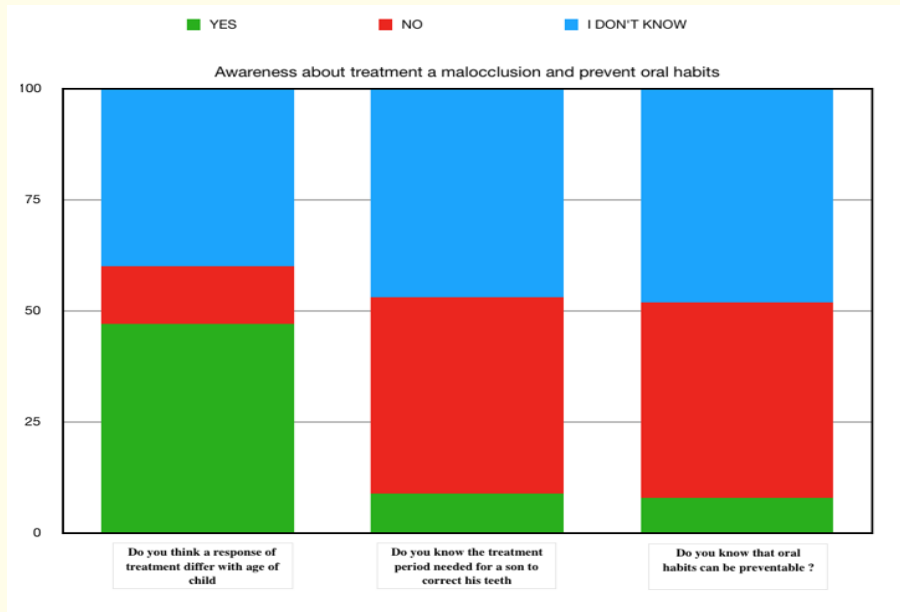


Figure 3

### Discussion

All over the world, including the kingdom of Saudi Arabia there is a perceptible increase in the knowledge that Orthodontics is an crucial domain of treatment for both adults and children.

The caregivers including the parents must be educated on the importance of oro-dental habits and their impact on the oral environment and generally on the quality of life.

Care-givers attitude regarding the mal-aligned teeth and their knowledge about the broad causes can help in initiating the preventive measures from early childhood.

Early loss of deciduous teeth has been highlighted by researchers as the most contributory etiology in the malocclusion.

The developing malocclusion has been attributed to the detrimental habits of tongue thrusting and digit sucking. Early detection of these habits and rectification will go a long way in preventing the long and expensive orthodontic treatment.

In this study when 54% who had no idea about normal occlusion while a 46% knew what a normal occlusion was.

The malalignment of teeth are so commonly prevalent that they will affect the Psycho-social and physical aspects of oro-dental functioning. Parental education in this area would encourage regular dental check up, especially when the children had no pain, and consequently no fear of the dentist and the clinic.

When all these key elements were compared, parents' behaviors appeared to be more strongly related to children's behavior than are parents' knowledge and attitudes, supporting the findings that children learn behaviors from their parents.

This survey unfolded the fact that there was a clear asymmetry between the oro-dental malalignment and the linking of dysfunctional oro-dental habits.

### Conclusion

This study concludes that parents have a fundamental knowledge of crooked teeth and their correlation with dysfunctional oro-dental habits.

From this survey it is identified that parents have basic knowledge of dental irregularities and relation to the oral habits.

Our survey reveals that while the parental knowledge about caries is existing but this does not seem to show in the behaviour of the parents, in increased incidence of supervised tooth brushing or seeking regular and routine dental appointments when children are symptom free.

Results suggest that general public information about malocclusion needs to be improved. We have concluded that they need better education about normal occlusion and complication of oral habits, also about orthodontic treatments, length of treatments, the alternatives available and the risks and benefits of treatments with emphasis on the implementation of appropriate behavior in the daily routine.

Oro-Dental education is to be critically done not only by dental professionals but also should be supplemented by help of school teachers and other health professionals like the children's specialists.

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