

## ORIGINAL ARTICLE

### Assessment of Parental Knowledge in Relation to the Oral Habits in the Children in Ahmedabad City, Gujarat

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#### ABSTRACT:

**Introduction:** An oral habit is a sign of lack of harmony between an individual and his environment. Parents usually are the primary decision makers on matters affecting their children's health. Thus parental awareness regarding oral habits may be an important consideration in attempts to improve children's oral health. Therefore, parents should be considered as key persons in ensuring the overall well-being of children. So the present study was under taken with the aim of understanding awareness and attitude of parents regarding oral habits in their children. **Materials & Methods:** In the present study total no of 500 parents were included from Ahmedabad city Gujarat. A self-administered questionnaire including multiple choice questions were distributed among the parents to assess their awareness and attitude regarding oral habits in their children. **Results:** It showed that awareness and attitude amongst parents regarding oral habits is average and a small fraction of parents do not know about the ill effects of oral habits and its implications in overall general health. **Discussion & Conclusion:** it is concluded that the parents in urban and rural populations have to be educated by using various aids, so that the ill effects of oral habits in future population of children can be minimize.

**Keywords:** Ahmedabad, Awareness, Knowledge, Oral Habits, Parents.

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#### INTRODUCTION

A habit is a sign of lack of harmony between an individual and his environment. The American Academy of Paediatric 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.<sup>1</sup>

Adverse oral habits as thumb sucking, tongue thrusting, lip and cheek biting may produce harmful effects on the development of maxillofacial complex, facial hyper divergence resulting in anterior open bites<sup>2, 3</sup> and posterior cross bites in children<sup>4, 5</sup>. The effects of harmful nail biting include oral carriage of enterobacteriaceae,<sup>6</sup> small fractures at the edges of incisors, gingivitis and orthodontic complications.<sup>7</sup>

Non-nutritive sucking behaviours (eg, finger or pacifier sucking) are considered normal in infants and young children and usually are associated with their need to satisfy the urge for contact and security.<sup>8</sup>

Deleterious habitual patterns of muscle behaviour often are associated with perverted or impeded osseous growth, tooth malposition, disturbed breathing habits, difficulties in speech, imbalance the facial musculature, and

psychological problems.<sup>9</sup> 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 and 30% in South India.<sup>10</sup>

Oral habits are considered harmful based on some determining factors, such as duration, frequency, and intensity. These determinants, associated with genetic factors, will define the occurrence, type, and severity of facial, occlusal and muscular changes. In view of therefore mentioned complications, there arises a need to highlight the current ill-practices in the society and encourage the cultivation of healthful habits and lifestyle.<sup>11</sup>

In the study by Galvao et al.<sup>12</sup> in 106 children in public and private schools, the most harmful oral habits found in the range of aged from 4 to 6 years were the bottle and pacifier use. Simultaneously Zapata et al.<sup>13</sup> conducted a study in a school with children with aged from four to six years and concluded that 83.1 % of children had some oral habits, the most common being the pacifier use, bottle and nail-biting.

A concept of health care, viz., self care, refers to those activities undertaken by the person themselves in promoting their own health, preventing diseases and illness. Motivation of the population in regard to maintenance of good hygiene should be emphasized. The paucity of studies on the subject necessitates an assessment of the prevalence of such habits and education of the common masses. Hence the present study was conducted to know the attitude and the knowledge of parents regarding various oral habits in their children of Ahmedabad city.

**MATERIALS & METHODS:**

A cross-sectional study was conducted on 500 parents within the age group of 10 years. A well organized and meticulously structured questionnaire, cleared and approved by the ethical committee, was presented to the mothers. Parents who were living in Ahmedabad and who could understand Gujarati were included. A letter of consent was presented to the parents before they could fill out the questionnaire. Any child with a legal guardian in the form of a mother was included in the study.

Any child with systemic conditions and mental illness were not considered as part of the study. Parents who had children above 10 years were excluded. Parents who were not willing to participate in study and who could not read and write Gujarati were also excluded from the study. Finally 500 parents, who had children below 10 years, were selected and were given a self-administered questionnaire.

The study followed the recommendations of the World Health Organization. The informed consent and all measurements were taken at the clinic of the Faculty of Dentistry. All children filled a questionnaire and underwent a clinical examination (on a dental chair, directly with a buccal mirror No. 5, a periodontal probe with depth marks, forceps, a disposable spatula, retractors and a millimetre ruler of the lips and cheeks). The evaluation included the following items: existence of abnormal pressure habits such as sucking (pacifier, lip, lingual, thumb or other), lip-biting, nail-biting, tongue thrust, cheek-sucking and biting. The obtained results were analyzed in SPSS version 18 and the differences were tested for statistical analysis using chi-square test.

**RESULTS**

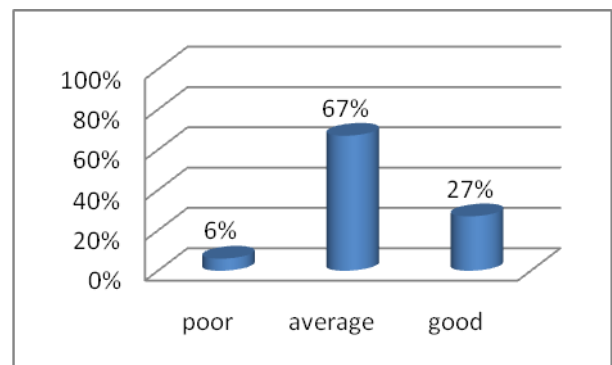
Awareness and attitude among most of the parents regarding oral habits were found to be average (Fig.1). 335 parents were aware regarding oral habits and 339 parents had positive dental attitude.

In the survey 426 parents (88.4%) believed that the health of mouth and dentition impact the health of the body, whereas rest 74 parents (11.6%) denied of the same (Fig.2). 260 parents (52%) agreed that oral habit may be a part of normal development and rest 240 parents (48%) disagreed for the same (Fig.3). 255 parents (51%) were aware of the deleterious effects of oral habits and rest 245 parents (49%) were not aware of those effects (Fig.4).

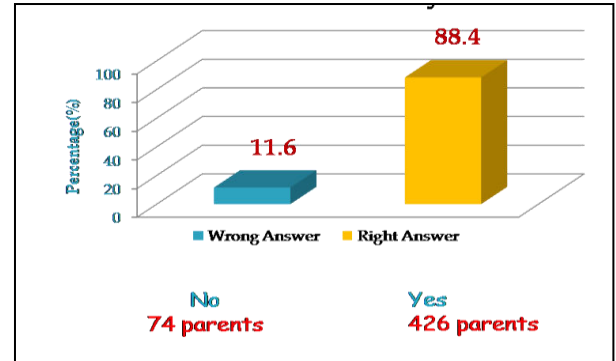
Out of 500 parents, 340 parents (68%) knew that oral habits can be preventable whereas other 160 parents

(32%) did not know this fact (Fig.5). 179 parents (35.8%) knew various methods to prevent oral habits whereas rest 321 parents (64.2%) did not know about the methods to prevent such oral habits (Fig.6). 167 parents (33.4%) reported that they had visited the dentist for check up regarding these habits and other 333 parents (66.6%) had never visited the dentist for the same (Fig.7). 449 parents (89.8%) showed interest in educating themselves about oral habits and its implication in prevention of such habits whereas rest 51 parents (10.2%) were not even interested in educating themselves regarding these habits (Fig 8).

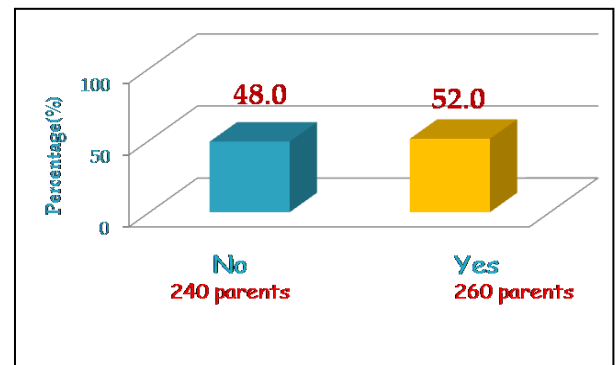
**Fig 1:** Awareness and attitude among most of the parents regarding oral habits



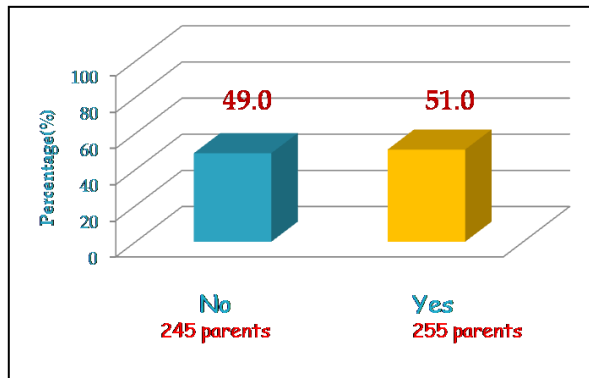
**Fig 2:** Distribution whether parents think health of mouth and dentition impact the health of the body



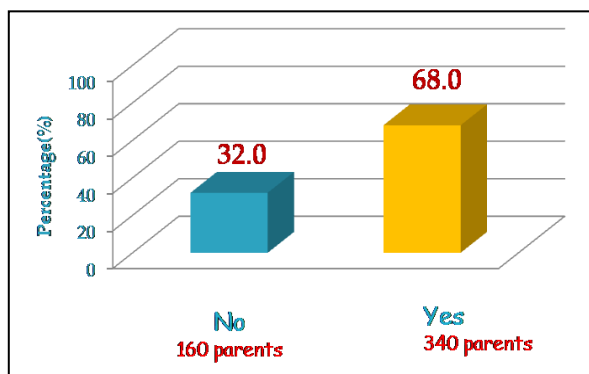
**Fig 3:** Distribution whether parents think oral habit may be a part of normal development



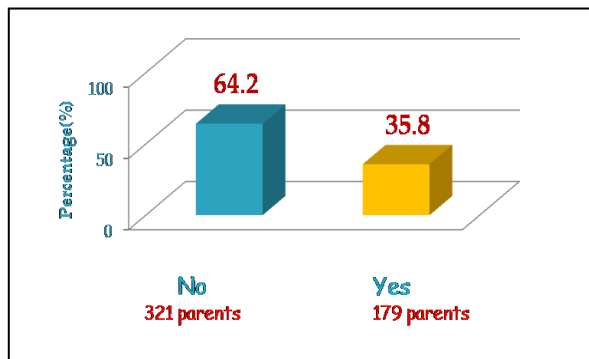
**Fig 4:** Distribution whether parents were aware of any deleterious effects of oral habits or not?



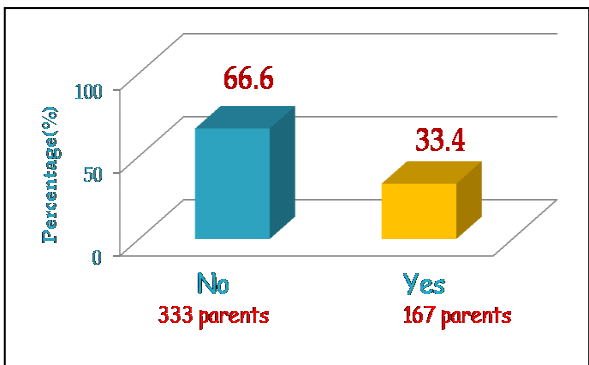
**Fig 5:** Distribution whether parents were aware that oral habits can be preventable.



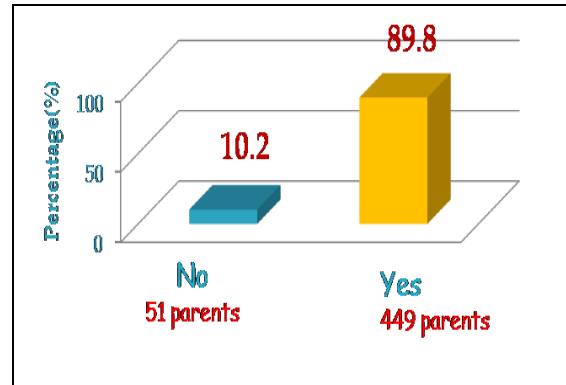
**Fig 6:** Distribution whether parents had knowledge regarding the different methods to prevent oral habits.



**Fig 7:** Distribution whether parents did ever visited the dentist to check up for these oral habits.



**Fig 8:** Distribution whether parents were interested in educating themselves about oral habits.



**DISCUSSION**

Quashie-Williams *et al.* found that 34.1% of children had deleterious oral habit.<sup>14</sup> A very few studies have been reported in literature about the prevalence of deleterious oral habits in children aged 10 years and above.<sup>15</sup> Thumb sucking is the 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.<sup>16</sup> The prevalence of this habit is decreased as age increases, and mostly, it is stopped by 4 years of age.<sup>17</sup> 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 plan for those children. Mouth breathing habit was the second most prevalent habit in the study conducted by Bhayya and Shyagali,<sup>18</sup> which correlates with our current study in which 20% of total practitioners had told the same.

An astonishing finding that nearly 83.56% of the mothers believed that the presence of primary teeth is temporary and hence does not require extreme care while only 16.44% gave utmost importance to maintaining the primary dentition. Most mothers would brush the teeth of the kids with the help of toothpaste and manual brush, however, the brush was changed only once every three months. About 91.76% of the mothers were uninformed about the number of deciduous teeth and merely 08.24% of them know the precise number of primary teeth.

An oral habit is probably a lack of harmony between an individual & his environment. Popovich and Thompson in 1973 found high incidence of oral habits among the children of working parents.<sup>19</sup> Prevalence studies in parts of India by Kharbanda OP *et al*, Munshi AK and Shetty depict 25.5% and 29.7% of children respectively as victims of such oral habits. Subtelny JD reported the prevalence of oral habits to be higher in children below 7 years of age. But very few studies have been conducted regarding the awareness and attitudes of parents.

## CONCLUSION

The data herein presented evidence the high prevalence of oral habits in children. The most commonly observed oral habits were suction of conventional bottle and pacifier, onychophagia, lip suction, and thumb sucking. We conclude that a habit may become harmful if maintained for at least two years. However, duration of harmful oral habits is associated with the perception of changes in the structures and functions of the SS, mainly those associated with occlusion and breathing and speech functions, with a demand for rehabilitation, considering that these disorders are included in public health. Thus we conclude that the parents were having average knowledge as well as attitude regarding oral habits in their children of Ahmedabad city. Consequently more efforts are required to increase the awareness among the parents regarding such habits and their prevention.

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