

Parental Awareness about Malocclusion in their Children: A common yet unknown disorder

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Abstract

Aim- To assess the parental knowledge and awareness about malocclusion in their children. **Method-** Parents of 500 children (289 male and 211 females) aged between 6-16 years, coming to the Department OPD were included in this study. Questionnaires were presented to the parents and their knowledge and awareness regarding malocclusion in children were assessed. **Result-** Out of 500, 88.4% didn't aware about irregular teeth in a child. 58.8% parents agreed that problems of primary teeth can affect permanent teeth. 84.2% of parents were not aware of maintaining primary teeth to prevent irregular arrangement of teeth in a child. However, for 61.4% maintaining space was the main purpose of primary teeth and preserving carious primary teeth was more favoured rather than extraction. Most of the parents didn't know any kind of oral habit causing irregular teeth in children. Aesthetics was chosen as the most important reason for treating irregular teeth. Only 11.8 % of parents visit dentist for regular annual dental check up of their children, although majority of them considered dentist is the common source of dental information. **Conclusion-** Overall lack of awareness was observed among the parents about malocclusion. The level of parental awareness and knowledge needs to be improved further.

Key words- Irregular teeth ,KAP Study, Malalignment, Questionnaire.

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I. Introduction

Awareness is the status of being aware of something.[1] Oral health education starts from footprints of awareness.[2] Knowledge and awareness are essential prerequisites for changes in behavior related to health and disease anticipation.[3] Growing children require appropriate guidance for healthy growth and maintenance of their teeth.[2] Oral health of growing children is affected by parental knowledge and awareness regarding various harmful oral habits, preventive regular dental visit, care of primary teeth and apprehension for any irregularities in the dental arch etc.[4,5,6] Enhanced information usually motivates people to take responsibility of their oral health and treatment.[7]

Malocclusion is a widespread disorder of children; correction of it is often extensive and expensive. Most of the malocclusion cases are still not treated appropriately due to unawareness and lack of knowledge of parents about malocclusion. Malocclusion disorder is frequently the outcome of deleterious oral habits and also with a general misconception that milk teeth will exfoliate and there is a less necessity for professional dental advice. [2,6]

Nowadays the focus in dentistry is changing towards prevention of disease rather than its treatment and the public's role has changed from passive recipient to active participant in prevention. [7] Little data are available regarding parental awareness towards malocclusion. Hence, the present study was conducted to assess the parental knowledge and awareness about malocclusion in their children.

II. Method

Parents of 500 children (289 male and 211 females) aged between 6-16 years, coming to the Department of Pediatrics and Preventive Dentistry, M. M. College of Dental Science and Research, Mullana were included. Ethical approval was taken from the Institutional Ethical Committee (Project No.585). A cross

sectional, descriptive study was done by random sample selection. A comprehensive Questionnaire proforma “Table 1” was given to the parents. The Questionnaire proforma was translated in local language Hindi for better understanding. Parents were requested to complete the given comprehensive questionnaire proforma. Ten questions were included in the proforma and were adopted from Pandey M et al [1], Chhabra N et al [4] and Danaei S et al [7]. On the basis of the response given by the participated parents, their knowledge and awareness regarding malocclusion in children were assessed.

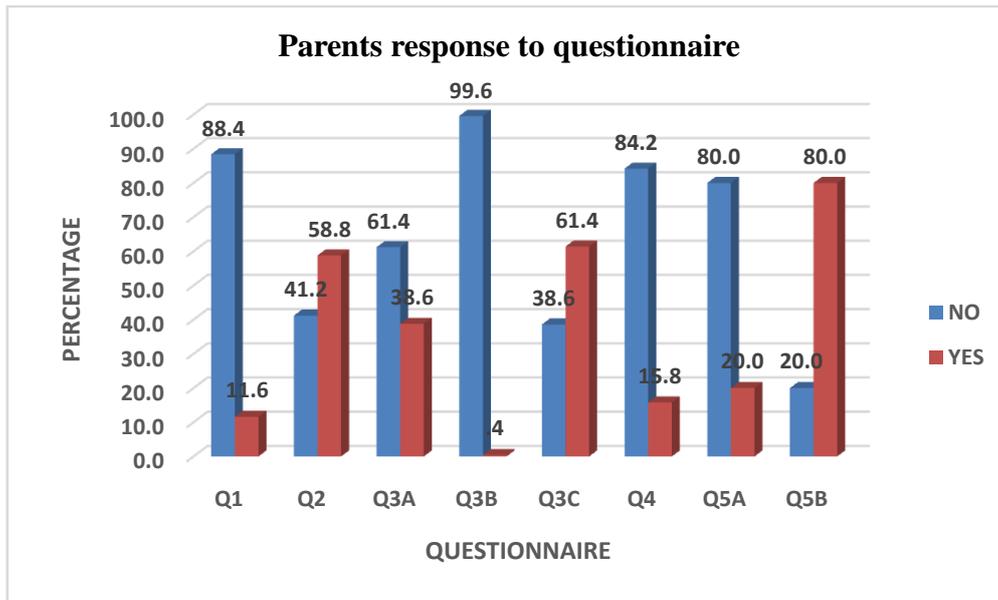
III. Result

Table: 1 Responses given by the participated parents with questionnaire

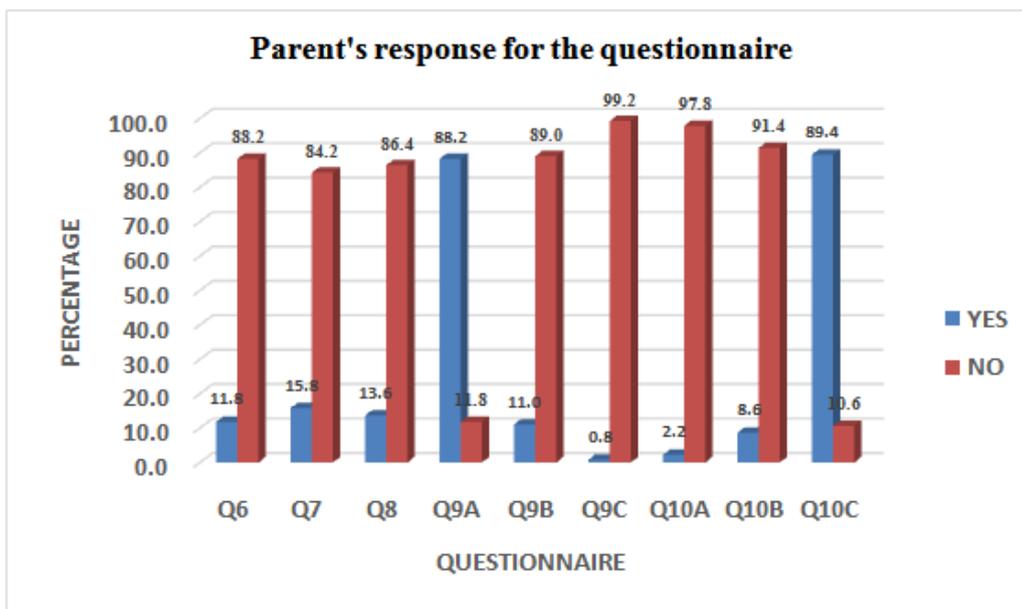
S.N	Questions	Response	Frequency	Percentage (%)
1.	Do you know about irregular teeth in a child?	No Yes	442 58	88.4 11.6
2.	Can problems of primary teeth affect permanent teeth?	No Yes	206 294	41.2 58.8
3.	What is the purpose of primary teeth?	A. Eating No Yes B. Aesthetic No Yes C. Maintaining space No Yes	306 194 498 2 193 307	61.2 38.8 99.6 0.4 38.6 61.4
4.	Are you aware of maintaining primary teeth to prevent irregular arrangement of teeth in a child?	No Yes	421 79	84.2 15.8
5.	What is your opinion about treatment of carious primary teeth?	A. Extracted No Yes B. Preserved No Yes	400 100 100 400	80.0 20.0 20.0 80.0
6.	Do you visit to dentist for yearly check up?	Yes No	59 441	11.8 88.2
7.	Are oral habits responsible for causing irregular teeth in children?	Yes No	79 421	15.8 84.2
8.	Do you know any kind of oral habit causing irregular teeth in children?	Yes No	68 432	13.6 86.4
9.	Which is the most important reason for the treatment of irregular teeth in children?	A. Aesthetic Yes No B. Functional Yes No C. Psychological Yes No	441 59 55 445 4 496	88.2 11.8 11.0 89.0 0.8 99.2
10.	Which is the most common source of dental information for you?	Television Yes No Family Yes No Dentists Yes No	11 489 43 457 447 53	2.2 97.8 8.6 91.4 89.4 10.6

In the present study, descriptive statistics was done by using SPSS (version 20). Out of 500, majority of parents (442), 88.4% didn't know about irregular teeth in a child. 58.8% (294) parents agreed that problems of primary teeth can affect permanent teeth. 84.2% (421) of parents were not aware of maintaining primary teeth to prevent irregular arrangement of teeth in a child. However, for 61.4% (307) maintaining space was the main purpose of primary teeth and for 80% (400), preserving carious primary teeth important rather than extraction. (Graph 1)

Regarding oral habits (thumb sucking, tongue thrusting, lip biting etc) most of the parents 86.4% didn't know any kind of oral habit causing irregular teeth in children and also 84.2 % didn't consider them responsible for causing irregular teeth in children. Majority of the parents 88.2% favoured aesthetics as the most important reason for the treatment of irregular teeth in children. It was observed that only 11.8 % of parents visit dentist for regular dental check up of their children, but 89.4 % agreed dentists as the most common source of dental information for them. (Graph 2)



Graph 1: Parents response for questionnaire (Q1- 5)



Graph 2 Parents response for questionnaire (Q6-10)

IV. Discussion

Malocclusion is the second most frequent dental disease in children and young adults, next to dental caries.[8] The prevalence of malocclusion in India varies from 20% to 43% .[9]The present study has presented the results of parental knowledge and awareness regarding malocclusion in their children. This survey found that majority of parents (88.4%) didn't know about irregular teeth in child's oral cavity and only 11.6 % had answered positively; however in a study done by *Pandey M et al* in 2014 [1] 55.0 % of the subjects (12-15 yrs) had seen irregularity in the dentition. In the present study ,it was observed that 58.8 % and 41.2 % agreed and didn't agree that problems of primary teeth could affect permanent teeth respectively, while in a study done by *N.Chhabra et al* in 2012 [4] majority of parents did not believe that problems of primary teeth can affect the permanent successors. Most of the parents (84.2%) did not aware of the importance of maintaining primary teeth to prevent malocclusion, they believed that primary teeth would be replaced by permanent teeth eventually, but in a study done by *S. Momeni Danaei et al* in 2011 [7] most of the respondent (83.5%) knew the importance of maintaining primary teeth to prevent malocclusion, but 22.6% of them had no information about time sequence of primary tooth exfoliation.

In the present study, most of the respondent (80%) favoured the preservation of carious primary tooth and 20% for extraction and less than one fourth of the parents (11.8%) took their child to a dentist for annual routine check up. Similar findings were seen in the study done by *S. Momeni Danaei et al.* [7] *Grewal and Kaur et al* also observed a primarily missing effort of parents for annual routine dental check up in Indian children. [10]

Oral habits (Thumb sucking, tongue thrusting, lip biting etc), if persists beyond the preschool age have been concerned as an important etiological factor associated with the development of malocclusion. Majority of parents 86.4% in the present study were unaware of any oral habit and 84.2 % didn't consider them responsible for causing irregular teeth in children. In contrast, a study done by *Chandra S et al* [4] and by *Hirst et al* [11] only 24.9% and 30% of the respondent respectively did not know about oral habits and their role in malocclusion.

Usually aesthetic is the most common and primary concern for the treatment of irregular teeth. In the present study too aesthetic is the most important reason for the treatment of irregular teeth in a child which was consistent with the findings in the study done by *Pandey M et al* [1] in which most of the respondent considered aesthetic as a prime reason for the treatment of irregularity in dentition. The present study showed that dentist is the most common source of dental information for parents, which is in contrast to the study conducted by *S. Momeni Danaei et al* [7] where television was the main source of dental information, while *Edward et al* [12] found news paper, magazines more favourable than radio and television.

V. Conclusion

Overall lack of awareness regarding malocclusion in children was observed among the parents. The level of parental awareness and knowledge about malocclusion was not satisfactory and needs to be improved further. Parents should be motivated, informed and educated regarding prevention of malocclusion. More efforts should be made to initiate guardian/parental awareness about malocclusion in their children.

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