

## Original Article

### Awareness and Knowledge about Orthodontic Treatment Needs in Children- A Questionnaire Survey

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#### ABSTRACT:

**Background:** Adult orthodontics is becoming a larger proportion of many dental practices. The present study was conducted to assess the awareness of orthodontic treatment needs in adult age group and their perceptions regarding orthodontic treatment. **Materials & Methods:** The cross sectional questionnaire survey comprised of 7 questionnaires was conducted on 840 children of both genders. Following questions were asked- 1. Do you know what orthodontic treatment is? 2. Have you undergone orthodontic treatment? 3. At what age? 4. If yes, was your treatment completed? 5. Did you wear removable orthodontic plates after treatment? 6. Did you discontinue the treatment in between? 7. Do you require treatment now? **Results:** Out of 840 subjects, males were 430 and females were 450. In response to question 1, 490 said yes and 350 no. In question 2, 520 responded yes and 320 no. 310 underwent treatment at age of 10 and 210 at age of 210. In response to question 4, 410 said yes and 110 no. In response to question 5, 435 said yes and 85 said no. In response to question 6, 125 said yes and 395 said no. In response to 7, 115 said yes and 405 said no. The difference was significant ( $P < 0.05$ ).

**Conclusion:** Most of the subjects were aware of the treatment needs. However, there is need of guiding their parents about follow up and regularly visiting the orthodontics prevention of malocclusion in future.

**Key words:** Knowledge, Malocclusion, Orthodontic.

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#### INTRODUCTION

Adult orthodontics is becoming a larger proportion of many dental practices. There has been a rising influx of adult patients seeking orthodontic treatment in the recent era. 20-25% of orthodontic patients were reported to be adults and this trend is likely to rise by leaps and bounds in the near future in view of society becoming more aesthetic and health conscious.<sup>1</sup>

In the past three decades, a major reorientation of orthodontic thinking has occurred regarding adult patients. Changed lifestyles and patient awareness have increased the demands for adult orthodontic treatment and multidisciplinary dental therapy has allowed better management of the more complicated patient population, thereby greatly improving the quality of care and treatment prognosis.<sup>2</sup>

The term was coined by Edward Angle, the "father of modern orthodontics", as a derivative of occlusion. Occlusal and dentofacial characteristics affect the physiological functions of the facial appearance of a human. Therefore, dentofacial deformities and deviations from normal occlusal relationship can cause severe problems for individuals, including difficulties in mastication, speech problems, gingival traumas, pain, temporomandibular disorders, and diminished self-esteem and self-confidence due to perceived poor appearance.<sup>3</sup> Increased concern for dental appearance during childhood and adolescents to early adulthood has been observed. The social interactions that have a negative effect on self-concept, career advancement and peer group acceptance have been associated with unacceptable dental appearance. In general, societal forces define the norms for acceptable,

normal and attractive physical appearance. The social interactions that have a negative effect on self-concept, career advancement and peer group acceptance have been associated with unacceptable dental appearance. In general, societal forces define the norms for acceptable, normal and attractive physical appearance.<sup>4</sup>The present study was conducted to assess the awareness of orthodontic treatment needs in adult age group and their perceptions regarding orthodontic treatment.

**MATERIALS & METHODS**

The cross sectional questionnaire survey comprised of 7 questionnaires was conducted in the department of Orthodontics. It included 840 children of both genders. Parents of children were informed regarding the study and written consent was obtained. Ethical clearance was taken prior to the study. General information such as name, age, gender etc was recorded.

The questionnaire was distributed among children and response was recorded as simple yes or no choices, or multiple tick boxes. Parents were also involved in assisting

their children in filling questionnaire. Following questions were asked- 1. Do you know what orthodontic treatment is? 2. Have you undergone orthodontic treatment? 3. At what age? 4. If yes, was your treatment completed? 5. Did you wear removable orthodontic plates after treatment? 6. Did you discontinue the treatment in between? 7. Do you require treatment now?

Results thus obtained were subjected to statistical analysis using chi- square test. P value less than 0.05 was considered significant.

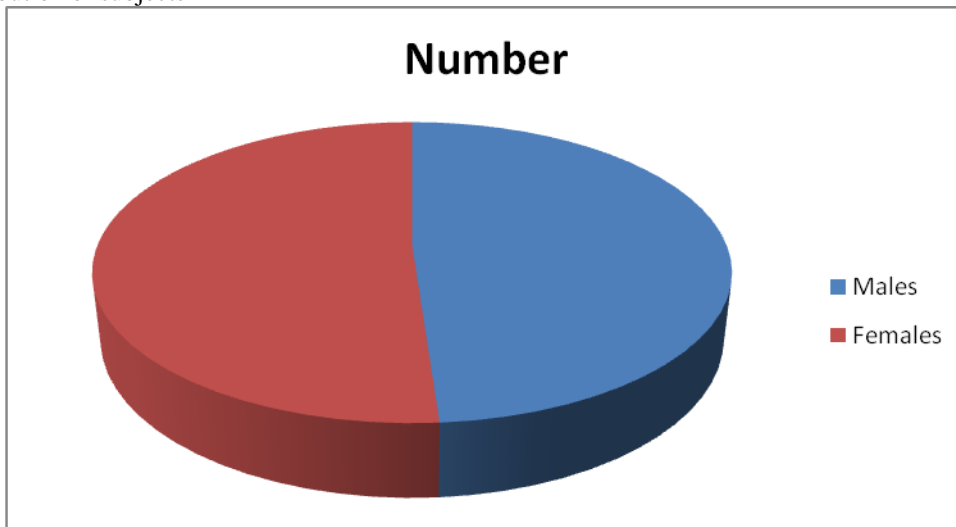
**RESULTS**

Out of 840 subjects, males were 430 and females were 450. In response to question 1, 490 said yes and 350 no. In question 2, 520 responded yes and 320 no. 310 underwent treatment at age of 10 and 210 at age of 14. In response to question 4, 410 said yes and 110 no. In response to question 5, 435 said yes and 85 said no. In response to question 6, 125 said yes and 395 said no. In response to 7, 115 said yes and 405 said no. The difference was significant (P< 0.05).

**Table I** Distribution of subjects

Total- 840		
Gender	Males	Females
Number	430	450

**Graph 1:** Distribution of subjects



**Table II** Response to questionnaire

Questionnaire	Yes	No	P value
1.	490	350	0.1
2.	520	320	0.01
3.	10 years	320	1
	14 years		
4.	410	110	0.001
5.	435	85	0.001
6.	125	395	0.04
7.	115	405	0.01

## DISCUSSION

The demand for adult orthodontic treatment has grown rapidly worldwide, hence the importance of clinicians gaining insight into how and why they seek treatment. This aids orthodontists in their communications with patients, and this understanding is a vital part in achieving patient satisfaction with treatment. The epidemiological data on the prevalence of malocclusion is an important determinant in planning appropriate levels of orthodontic services. The occurrence of occlusal anomalies varies between different countries, ethnic and age groups.<sup>5</sup>The incidence of malocclusion has been reported to vary from 12% up to 90%. The prevalence of malocclusion in India varies from 20 to 43%. Malocclusion can be defined as appreciable deviation from normal or ideal occlusion. Malocclusions are classified into two major groups: dental and skeletal malocclusions, depending on skeletal relationships. Severe malocclusions are frequently skeletal and often referred to as 'dentofacial deformities'. Dentofacial deformities have been described as deviations from normal facial proportions and dental relationships severe enough to be handicapping.<sup>6</sup>

Keluskar et al<sup>7</sup> conducted a cross sectional questionnaire study on parents of school children who were randomly selected from Private schools of Belgaum city. Questionnaire forms were distributed both in Hindi and English to a sample of 800 school students. Majority of the subjects in the study knew about orthodontic treatment and took treatment in their early age group with more percentage of males. Out of which only 46% subjects stated that their treatment was completed with proper retention and stability. Near about half of the subjects reported that they need orthodontic treatment in adult age.

In present study subjects were asked following questions- Do you know what orthodontic treatment is? 2. Have you undergone orthodontic treatment? 3. At what age? 4. If yes, was your treatment completed? 5. Did you wear removable orthodontic plates after treatment? 6. Did you discontinue the treatment in between? 7. Do you require treatment now?

We found that in response to question 1, 490 said yes and 350 no. In question 2, 520 responded yes and 320 no. 310 underwent treatment at age of 10 and 210 at age of 210. In response to question 4, 410 said yes and 110 no. In response to question 5, 435 said yes and 85 said no. In response to question 6, 125 said yes and 395 said no. In response to 7, 115 said yes and 405 said no. This is accordance to Sharma et al.<sup>8</sup>Adult population is aware about orthodontic treatment needs and to improve smile and to straighten their teeth were the prime motivating factors for seeking treatment.

## CONCLUSION

Most of the subjects were aware of the treatment needs. However, there is need of guiding their parents about follow up and regularly visiting the orthodontics prevention of malocclusion in future.

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