

Survey on awareness about orthodontic treatment in students of Raichur population

¹Dr. Rakesh Kumar, Professor, Department of Orthodontics, Navodaya Dental College, Raichur, Karnataka, India

²Dr. Durga Prasad, Professor, Department of Orthodontics, Navodaya Dental College, Raichur, Karnataka, India

³Dr. Bhargavkrishna Sriram, PG student, Department of Orthodontics, Navodaya Dental College, Raichur, Karnataka, India

⁴Dr. Vishala G K, PG student, Department of Orthodontics, Navodaya Dental College, Raichur, Karnataka, India

Corresponding Author: Dr. Rakesh Kumar, Professor, Department of Orthodontics, Navodaya Dental College, Raichur, Karnataka, India

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Abstract

Introduction: Malocclusion is not a disease in itself but a variation in the arrangement of teeth, morphology of jaws, face and cranium. But awareness and attitude about the problem differs within the neighborhood, depending upon their understanding and education. Hence, observation is essential to diminish and avoid the deleterious effects of malocclusion.

Aim: To evaluate the knowledge of young population of Raichur regarding the orthodontic problems and its treatment.

Materials and methods: A well prepared questionnaire consisting of 15 questions was given to the participants in a form of printed format to assess their knowledge and attitude towards orthodontic treatment.

Results: About 59% parents are aware of the specialty Orthodontics. A total of 75% were aware that alignment of teeth brings better facial appearance. Only 33% were aware that improper habits can cause malocclusion.

Conclusion: The awareness among students regarding orthodontic problems and treatment is found to be average

Keywords: Malocclusion, Awareness, Survey, Young adults.

Introduction

Malocclusion is defined as “an appreciable deviation from ideal occlusion”.¹ Various factors influence malocclusion such as incorrect oral habits, anomalies in the number of dentition, shape and developmental position of teeth. If not treated at the right age, it can lead to various problems like periodontitis, temporomandibular joint disorders, improper facial appearance and loosing self-confidence.

Desire and need for orthodontic treatment is influenced by awareness, socioeconomic factors, and availability of the experts, ethnic trends and values.² Awareness forms the basis for planning oral health which is an inseparable part of general health. As most of the individuals report for treatment at later stages it makes the treatment prolonged. So far, very few studies have been published regarding awareness of malocclusion among young adults and concern towards orthodontic treatment. Hence the purpose of the study is to evaluate the awareness of population regarding malocclusion and create awareness for the consequences if not treated at the early age.

Aims and objectives

To evaluate the knowledge of young population of Raichur regarding the orthodontic problems and its treatment.

Materials and methods

Method of study: A cross sectional descriptive questionnaire survey

Place of study: Students were randomly selected from colleges of Raichur.

Sample size: 570 college students

Methodology

A well prepared questionnaire consisting of 15 questions was given to the participants in a form of printed format to assess their knowledge and attitude towards orthodontic treatment. The forms were distributed to the college students of Raichur city and asked them to fill it. Once the forms were collected, it was subjected to statistical analysis for evaluation of awareness among Raichur population for orthodontic treatment while keeping the level of significance to $p < 0.05$

Inclusion criteria

Young adults from the ages 17–25 years who were willing to participate.

Exclusion criteria

Those who had or undergoing orthodontic treatment.

Questionnaire

1. Have you ever visited a dentist?
a) Yes b) No
2. Do you know there is a specialty in dentistry called ORTHODONTICS?
a) Yes b) No
3. Are you unhappy to smile for photographs?
a) Yes b) No
4. Are you aware that an Orthodontist can bring your teeth in proper position?
a) Yes b) No
5. Do you think that teeth should be properly positioned for a better facial appearance?
a) Yes b) No
6. Do you know that taking proper orthodontic treatment at an early age would improve your facial appearance?
a) Yes b) No
7. Do you know the cost of orthodontic treatments?
a) Yes b) No
8. Do you know about orthodontic braces and its types?
a) Metallic Braces ,Ceramic Braces
b) Lingual Braces , invisalign braces
9. Are you aware that the improperly positioned teeth can be corrected at the age of 35-40 yrs also?
a) Yes b) No
10. Do you know different types of habits that can cause improper positioning of teeth?
a) Yes b) No
11. Are you aware that irregularly placed teeth can cause various problems?
a) Yes
b) No

12. Do you think that similar arrangement of teeth is seen among the family members?

- a) Yes b) No

13. Do you know how much time, orthodontic treatment takes?

- a) <1 year b) 2-3 year

14. In which situation you think braces (orthodontic treatment) is necessary?

- a) To avoid your child being teased and improve facial appearance

- b) Marriage

15. Do u want to get your teeth into alignment?

- a) Yes b) No

Results

Table 1: Distribution of sample size according to gender.

| Gender | Total | Percentage |
|--------|-------|------------|
| Male | 353 | 61.9% |
| Female | 217 | 38.1% |
| Total | 570 | 100% |

Table 2: Distribution of responses according to questionnaire

| Criteria | | Option a | Option b | X ² | P value | Significance |
|----------|--------|----------|----------|----------------|---------|--------------|
| Q 1 | Male | 316 | 37 | 7.27 | .0070 | Ns |
| | Female | 177 | 40 | | | |
| Q2 | Male | 209 | 144 | 0.072 | .856 | Ns |
| | Female | 126 | 91 | | | |
| Q3 | Male | 182 | 171 | 0.4286 | .5126 | Ns |
| | Female | 118 | 99 | | | |
| Q4 | Male | 209 | 144 | 0.0724 | .7879 | Ns |
| | Female | 126 | 91 | | | |
| Q5 | Male | 238 | 115 | 3.159 | .0032 | Significant |
| | Female | 192 | 25 | | | |
| Q6 | Male | 141 | 212 | 0.261 | .6086 | Ns |
| | Female | 82 | 135 | | | |
| Q7 | Male | 68 | 285 | 0.146 | .7015 | Ns |
| | Female | 39 | 178 | | | |
| Q8 | Male | 270 | 83 | 3.663 | 0.023 | Significant |
| | Female | 193 | 24 | | | |
| Q9 | Male | 107 | 246 | 4.657 | .0315 | Significant |
| | Female | 32 | 185 | | | |
| Q10 | Male | 103 | 250 | 3.803 | .023 | Significant |
| | Female | 88 | 129 | | | |

| | | | | | | |
|-----|--------|-----|-----|-------|-------|-------------|
| Q11 | Male | 202 | 151 | 4.432 | .001 | Significant |
| | Female | 149 | 68 | | | |
| Q12 | Male | 293 | 60 | 3.056 | .0334 | Significant |
| | Female | 195 | 22 | | | |
| Q13 | Male | 228 | 125 | 4.532 | .0125 | Significant |
| | Female | 168 | 49 | | | |
| Q14 | Male | 183 | 170 | 6.596 | .0083 | Significant |
| | Female | 137 | 80 | | | |
| Q15 | Male | 208 | 145 | 3.137 | .0157 | Significant |
| | Female | 123 | 94 | | | |

The results from the present survey explains that many of the students have visited dentist (Q1) and also have awareness about the speciality called orthodontics (Q2). About 52.6% of people have told that they were unhappy with their smile (Q3). The awareness among the people that orthodontist can correct their teeth is not significant (Q4). These people have awareness that facial profile improves the appearance of the face (Q5) but were not aware that treatment at early age can improve facial profile (Q6). Most of them were not aware of the cost of the treatment (Q7), but have a better idea regarding metal and ceramic braces when compared to lingual braces or aligners (Q8). The people did not have an idea that adult patients can get treated at age of 35-40 years (Q9). The survey revealed that people were not aware that adverse habits can cause malocclusion (Q10). The sample size has an idea that irregular teeth can cause various problems (Q11). About 73% have revealed that their family also has similar type of teeth arrangement (Q12). Many of the students are in the opinion that treatment can be completed as fast a less than an year (Q13). About 56% feel that orthodontic treatment is needed to psycho-social reasons (Q14) and 58% of students were willing to get their orthodontic treatment done (Q15).

Discussion

The important question regarding orthodontic treatment is why do People don't come for Orthodontic treatment? The best possible answer for this could be lack of awareness, mental display, expensive treatment, duration of treatment. The present survey gives the satisfactory response for the question araised.²

In our present study, almost 41% of people do not know about orthodontics which could be due to lack of awareness about orthodontic speciality and did not differ much between the genders. A study conducted by Dr. Rajvinder Singh, et al. where majority of male and female participant had responded that they did not have much knowledge about orthodontist which is similar to our study.³

According to American Association of Orthodontists, early orthodontic correction can be started as early as 7 yrs. of age.⁸ Most of growth correction is done during mixed dentition period. In our study, almost 60.9% of population did not have an idea that treatment done at earlier age results in faster changes and enhances better facial appearance. The perception towards dental appearance differs among population and among individuals. Almost 47.3 % of population was not confident enough to smile for photographs and 75% of population feels that proper teeth alignment improves

facial appearance. This result was similar to study done by McCance who explained that 46% have believed an attractive smile could improve their appearance.⁴ Harish et.al⁵ stated that 60.5% were aware of different brackets which is similar to our study that showed 81% of people knew about it but 19% of people were not aware of invisalign or lingual brackets. Almost 42% of population refrain from taking orthodontic treatment as they think that they do not have any problem for the moment.⁷ About 66.5% did not realise that adverse habits can affect the arrangement of teeth, mastication and gum problems. This throws a light on the act that knowledge on oral health is limited in young adults. The present study is in accordance with the study done by Murad et.al⁶ who also reported that many of the subjects were not aware that para functional habits cause malocclusion.

It is evident from our study that there is a moderate awareness among young adults about the ill effects of malocclusion.

Conclusion

From the present study, the following conclusion can be drawn:

The awareness among students regarding orthodontic problems and treatment is found to be average.

To increase the awareness, efforts should be made to conduct health care camps on a larger scale and educate people regarding the benefits of orthodontic treatment.

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