



Evaluation of layman's attitude and knowledge in regards to orthodontic treatment and malocclusion, in India

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Abstract

Aims & Objectives: - To assess Layman's attitude and knowledge in regards to orthodontic treatment and malocclusion, in Rajasthan, India.

Materials & Methods: A cross sectional, observational (non- experimental) descriptive questionnaire survey was conducted among the Rajasthan population. Questionnaire, where distributed among non-Dental professionals, followed by which a small awareness program was conducted. The questionnaire was given to each sample which comprises of basic question to evaluate if they knew the department of orthodontics and how they were handling, in case they had malocclusion. Total of 17 questions were present.

Results: 150 proper filled questionnaire were returned. Out of which 67% were females and 33% were males. About 65(40.6%) people are aware of the Orthodontic specialty, leaving about 85(56.6%) without any awareness. Only 15 (23%) knew that the specialty treats irregular teeth, about 12 (18.4%) claimed that they work with Replacing missing teeth and about 5 (7.6%) claimed that they carry out Root canal treatment, 8 (5.3%) said oral surgeries and about 14(21.5%) Skipped the question. About 25 (16.6 %) had undergone orthodontic treatment and 125 (83%) had not under gone orthodontic treatment.

Conclusion: The study concludes that, although mere amount of awareness and positive attitude towards treatment is present. A large scale is unaware also. More awareness programs are to be produced such as in media and newspaper, school program

Keywords: attitude, Malalignment, orthodontist

Introduction

Orthodontic begin a department that deals with malocclusion, has lately gain peak popularity in the midst of people. This can be appreciated with the more number of children and even adult seeking orthodontic treatment. The factors that contribute to this popularity are the change in the lifestyle, development in technologies also, people gain more awareness through internet such as Facebook, YouTube, Instagram etc. The Demand for orthodontic treatment is influenced by several factors such as gender, socioeconomic status, and ethnic origin, as well as availability and funding of orthodontic services [1]. However orthodontic treatment has increased the quality of life, which is defined by the World Health Organization as "people's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns Although, the field provides treatment for all ages, the efficiency and retention of the treatment in influenced by the age of the patient. There are two set of people who we come across, one group who not aware of the Orthodontic treatment options available whereas another set of group, who are aware but they feel comfortable or not aware of that they have malocclusion. Certain Malocclusion are considered as normal among layperson such as a midline disatema is said to bring you good wealth and a buccally placed canine considered as esthetically pleasing "Dracula smile"

What happens when a Malocclusion is left untreated? Malocclusion pave the way for a number of problems, such as social discrimination, oral function problems which

includes difficulties in jaw movements (lack of muscle coordination or pain), temporomandibular joint disorder (TMD), problems of masticatory system, swallowing or speech, and increased susceptibility to trauma, periodontal disease and caries [2]. Children who feel into the handicapping category of malocclusion had scored lower in regards to measurement of OHQoL in comparison to those categorized in the "minor/no malocclusion"; these differences emerged only in the emotional and social wellbeing domains and not in the areas of oral symptoms or functional limitations [3].

Thus, the current study aims to assess and evaluate the layman's attitude and knowledge in regards to orthodontic treatment and malocclusion, in India

Material and Method

The study was conducted under the supervision of the department of orthodontics and den to facial ortho Paedics, Maharaja Ganga Singh Dental College and Research Centre. In Sri Ganganar, Rajasthan. A total of 156 People responded to our study.

Inclusion criteria

1. Patients in the age group of 18–30 years
2. Patients may or may not be taking orthodontic treatment
3. Patients who have had undertaken orthodontic treatment in the past.

Exclusion criteria

1. Mentally compromised patients

2. People who belonged to dental profession

A questionnaire was given to each sample which comprises of basic question to evaluate if they know the department of orthodontics and how they were handling, in case they had malocclusion. They were given a time period of 15 minutes to fill it so that, the participants answered the questionnaire by their own knowledge. The people were not encouraged to use Google or discuss with anyone. Once, the questionnaire was filled and returned, the people were educated in terms of orthodontic awareness, which highlighted who they should visit when it concerns to

malocclusion, when will it be the correct time to get orthodontic checkup done.

All the data obtained in the questionnaire was computerized and sent for statistical analysis.

Results

Out of the 156 forms, only 150 proper filled questionnaire were returned. Out of which 67% were females and 33% were males. The results of the questionnaire have been tabulated in table 1

Table 1

Questions	Results (N/%)	
	Yes –	No
1. Are you aware whether your teeth is malaligned or not?	60 (40%)	90 (60%)
2. If yes, how did you come to know	Self – 20(33.3%) Other – 35 (58.3%) Doctor – 5 (8.3%)	
3. Whom should you visit for the treatment of malalignment of teeth	a. General dentist – 48 (32.5%) b. Orthodontist -65 (43.3%) c. Endodontist – 6 (25%) d. Pedodontist – 31(20.6%)	
4. Are you aware of the specialty – Orthodontics	YES 65(40.6%)	NO 85(56.6%)
5. If yes, orthodontics work on?	a. Treating irregular teeth - 15 (23%) b. Replacing missing teeth - 12 (18.4%) c. Root canal treatment - 5 (7.6%) d. Oral surgeries - 8 (5.3%) e. Skipped the question - 14(21.5%)	
6. Who gave you the information about the orthodontist?	a. Colleagues: 12 (18.4%) b. Self: 25 (16.6%) c. Media: 11 (7.3%) d. Social network (facebook, Instagram): 17(11.3%)	
7. Have you undergone ortho treatment?	a. Yes: 25 (16.6%) b. No: 125 (83%)	
8. How did you get motivated for orthodontic treatment	a. Self-16 (26%) b. Parents 32 (53.3%) c. Friends 8 (13.3%) d. Colleagues 4 (6.6%)	
9. Why people are scared of orthodontic treatment	a. Headache\ Health issues 10 (6.6%) b. Cost 60 (40%) c. Extraction of teeth 49 (32.6%) d. Others 10(6.6%)	
10. Are you aware of the problems that would arise due to malaligned teeth	a. Yes: 56 (37.3%) b. No: 94 (62.6%)	
11. If yes what the problem you consider the most	a. Gum problem 5 (8.9%) b. Food entrapment 16 (28.5%) c. Difficulty in cleaning 9 (16%) d. Oral malodour 22(39.2%) e. All the above 4 (7.1)	
12. In case someone is having gap between front teeth or canine teeth place up (like a vampire) what do you think are the effect?	a. Looks good 25 (16.6%) b. Considered lucky 10 (6.6%) c. After effect of orthotreatment 30 (20%) d. Skipped the question - 85(56.6%)	
13. Are you aware that orthodontic treatment can be done without effecting your esthetic?	a. Yes 30 (20%) b. No 120 (80%)	
14. If you were given an option which mode of treatment you opted more	a. Lingual orthodontic (braces placed at the back of your teeth) 25 (16, 6%) b. Ceramic (toothcolouredbracket) 75 (50%) c. Clear aligner (transparent plates that you can remove and put) 50(33.3%)	
15. What you think about the after effects of orthodontic treatment	a. Tooth moves back to how it was 76 (50.6%) b. Gum diseases come 35 (23.3%) c. Tooth will become weak 27(18%) d. You might get malnutrition 12(8%)	
16. Do you consider the orthodontic treatment will be a full-fledged treatment for your malaligned teeth	a. Yes 90 (60%) b. No 60 (40%)	

17. In Case, needed will you suggest or undergo orthodontic treatment, if needed?	a. Yes 80 (53.3%)
	b. No 70 (46.6%)

Discussion

Oral Health plays a very important role in the lifestyle of an individual, affecting the general health and well begin. Malocclusion, which can be both dental and skeletal, is not a disease in itself but a variation in the arrangement of teeth, morphology of jaws, face and cranium. The factors that influence an individual from accruing orthodontic treatment are the awareness among people, socioeconomic factors, and availability of the Doctors, ethnic trends and values. In the present study about 65(40.6%) people are aware of the Orthodontic specialty, leaving about 85(56.6%) without any awareness. which is actually high in comparison to the study conducted by Harrish *et al.* [5] where only 550 (27.5%) were aware or heard of the Orthodontic Specialty.

In the present study although about 65(40.6%) knew the specialty. Only 15 (23%) knew that the specialty treats irregular teeth, about 12 (18.4%) claimed that they work with Replacing missing teeth and about 5 (7.6%) claimed that they carry out Root canal treatment, 8 (5.3%) said oral surgeries and about 14(21.5%) Skipped the question. According to a study by Adegbite, *et al* [5], 39% of the respondents selected filling and extracting teeth, 29.4% scaling and polishing teeth, and 54.1% agreed that orthodontists arranged teeth

In the present study, a question was asked if the participants aware whether your teeth is malaligned or not, which showed that 60 (40 %) were aware and 90 (60%). Among which 20 (33.3%) had come to know about this by self-evaluation and 35 (58.3%) from other sources very alarming that about 5 (8.3%) only became aware of the fact they were having malocclusion by visiting a Doctor, this also Highlights the percentage of people visiting a dentist. About 30 (20%) are aware that orthodontic treatment can be done without effecting your esthetic. And when given a choice in concern with esthetics, 75 (50%) Ceramic (toothcolouredbrackect, followed by 50(33.3%) Clear aligner (transparent plates that you can remove and put) and 25 (16, 6%) Lingual orthodontic (braces placed at the back of your teeth)

With the advancement in technology, assessing to knowledge is made at hand reach. The present study evaluated the source of awareness, in regards to where the participant had gained information about the orthodontist which revealed that, only about 11 (7.3%) gained from media, which highlights that more advertisement and health care awareness through short film should be telecasted in television more frequently. about 11 (7.3%) gained from self-evaluation, whereas about 12 (18.4%) from Colleagues. The majority had been informed through Social network (facebook, Instagram): 17(11.3%).

In the present study, to evaluate the knowledge regarding orthodontic treatment. The participant were asked to whom they would visit for the treatment of malalignment of teeth only 65 (43.3%) had said Orthodontist the remaining 48 (32.5%) preferred a General dentist, 6 (25%) Endodontist, 31(20.6%) Pedodontist. In the study by Adegbite, *et al.* [5]. Only 45.9% were familiar with the term orthodontics and only 20% correctly answered that orthodontics involves malocclusion and its management. It is quiet alarming that, in the present study about 25 (16.6 %) had undergone orthodontic treatmentand 125 (83%) had not under gone

orthodontic treatment. Which shows that there is some negligence towards that treatment. The study also highlights the reason for the withdrawn from getting treated is primarily the cost 60 (40%), followed by fear of Extraction of teeth 49 (32.6%), fear of having any side effects Headache\ Health issues 10 (6.6%) and other casuses 10(6.6%) The participants of the present study also have an estimation in regards to the outcome of not getting a malocclusion treated. Majority of the claim, Oral malodour 22(39.2%) followed by Food entrapment 16 (28.5), Difficulty in cleaning 9 (16%), Gum problem 5 (8.9%), All the above 4 (7.1)

Conclusion

The study concludes that although, people are quiet aware of the need for braces in case of malaligned teeth. The knowledge in regards to the various treatment options available is very less. The confusion between various myths and fear in regards to the orthodontic treatment still are present. The limitation of this study was, it had concentrated with small population, no comparison where made between groups. Furthermore studies are to be carried out, in regards to the fear factor concern with orthodontic treatment. More awareness programs are to be produced such as in media and newspaper, school program. Parents should be the main target of orthodontic education. Similarly to the AOA, Orthodontic check-up at age of 7 years are to be made mandatory in India also.

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