

Evaluation of Perception and Awareness regarding Orthodontic Procedures among Subjects attending a Teaching Dental Institution

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ABSTRACT

Introduction: The need for an orthodontic treatment mainly depends upon the individual's self-perception. And it increased among adolescents and young adults because of their concern toward their appearances and also due to improved awareness regarding dental treatments.

Aim: The aim of the present study is to evaluate the perception and awareness regarding orthodontic procedures among subjects attending a teaching dental institution.

Materials and methods: A total of 196 participants aged from 18 to 30 years were included from the outpatient department of the Department of Orthodontics, Faculty of Dentistry, SEBHA University, Libya. A structured questionnaire was prepared, and all relevant data were collected regarding the perception and awareness about orthodontic treatment. Totally, 196 participants received the questionnaires and sufficient time was given to answer the questionnaire. The same day it was collected back.

Results: The majority of the participants (61.2%) were females when compared with males (38.8%). About 77.5% of the study participants were unhappy with the alignment of their front teeth, and 86.7% of the participants were likely to correct their teeth to improve the appearance. Maximum number of (73%) participants considered that for overall appearance of face, well-aligned teeth is very important. About 85.2% of the participants wanted to get braces and 63.3% of the participants replied that they had never taken any treatment to correct their teeth arrangement.

Conclusion: As a conclusion, most of the participants in the present study desired to improve their esthetic appearances.

Keywords: Awareness, Dental appearance, Orthodontic treatment, Perceived need.

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INTRODUCTION

A variety of social, cultural, psychological, and personal factors influence the perception of dental appearance. Unhappy with dental appearance is the main reason to undergo orthodontic treatment. Thus, an individual's appreciation of dental esthetics affects normative assessments regarding the need for orthodontic treatment.¹

The need for orthodontic treatment is observed as increased among adolescents and young adults because of their concern toward their appearance and also due to improved awareness regarding dental treatments. An orthodontist's final goal is to improve the function and esthetics to patient's satisfaction. Hence, it is a great engrossment to the clinician regarding the awareness of patients' appearance.²

Measuring and recording the prevalence of malocclusion and treatment needed in a population is useful for the planning of orthodontic services. Any orthodontic service should meet the satisfactory level of the patient's desire and demand for treatment.³ Esthetic improvement and psychological aspect are the two main factors influencing the decision for treatment. Patient's awareness and attitude toward the malocclusion are the main criteria in orthodontics.⁴

Early orthodontic treatment would be much benefited by preadolescents' and adolescents' group. Also, the malocclusion complications can be prevented if there is a sound knowledge about orthodontic treatment. It is important to gain a better understanding of the biopsychosocial aspects of malocclusion and its effect on the quality-of-life among such individuals, thus addressing

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the issue as a public health problem. Irregular placement of teeth can also lead to many dental problems, such as periodontal problems, dental caries, temporomandibular joint problems, etc. Most malocclusion cases are still not treated properly due to ignorance of patients, parents, inadequacy of resources, lack of knowledge about malocclusion, and other influencing factors like literacy rate and socioeconomic status.⁵

Orthodontic treatment is a highly technique-sensitive and time-consuming⁶ clinical procedure. Patients' understanding of its technical aspect and compliance in appliance maintenance is important for management and successful outcome of the treatment. Hence, the present study was conducted to evaluate the perception and awareness regarding orthodontic procedures among subjects attending teaching dental institution.

MATERIALS AND METHODS

A total of 196 participants aged between 18 and 30 years were taken for the study from the Department of Orthodontics, Faculty of Dentistry, SEBHA University, Libya. Study was carried out from October to December 2014. A structured questionnaire was prepared and all relevant data were collected regarding the perception and awareness about orthodontic treatment.

The ethical approval for the study was obtained. Consent was taken from all the participants.

The questionnaire was divided into two parts, the first part of questionnaire consisted of questions on sociodemographic variables and second part of questionnaire consisted of questions on perception and awareness regarding orthodontic treatment. A total of 196 participants received the questionnaires, and sufficient time was given to answer the questionnaire. The same day, it was collected back.

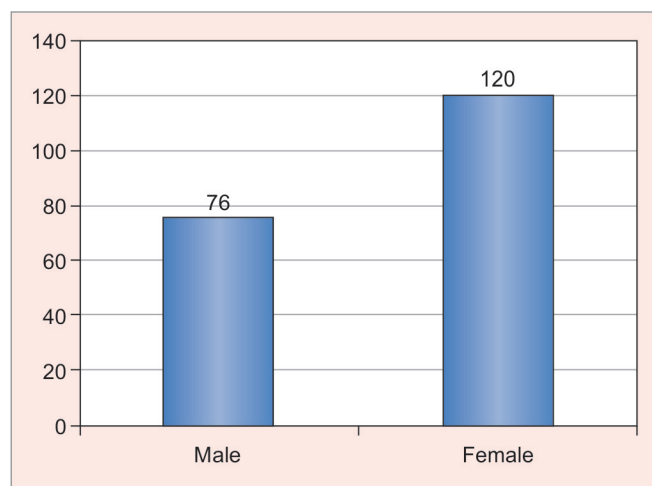
Statistics Used

Statistical Package for the Social Sciences software version 20 was used to analyze the data. To summarize the results, descriptive statistics were used.

RESULTS

The present study comprised 196 participants, out of which majority of the participants (61.2%) were females when compared with males (38.8%) (Graph 1).

As reply to question 1, 77.5% of the study participants were unhappy with the alignment of their front teeth. It is evident from the response to question 2 that 86.7% of the participants were likely to correct their teeth to improve the appearance. Reply to question 3, the maximum number of (73%) participants considered that for overall appearance of face, well-aligned teeth are very important.



Graph 1: Gender distribution

Question 4 reveals that the 69.9% of the study participants replied that they were uncomfortable to show their teeth. In question 5, 33.1% of the study participants have a pet name at school due to their arrangement of teeth. About 58.1% of the study participants have difficulty while speaking, chewing, and facial muscle pains due to teeth arrangement (question 6). In responses to question 7, 85.2% of the study participants needed to get braces. Majority of the study participants (69.3%) responded that they tried to avoid smiling because of the appearance of their teeth (question 8). In question 9, 81.1% of the participant responded positively that smile could be better if teeth were better aligned. In reply to question 10, 63.3% of the participants replied that they had never taken any treatment to correct their teeth arrangement (Table 1).

Table 1: Distribution of respondents by question and score

| Questions | | n (%) |
|--|-----|-------------|
| Are you happy with the arrangement of your front teeth? | Yes | 44 (22.4%) |
| | No | 152 (77.5%) |
| Would you like to correct your teeth to improve the appearance? | Yes | 170 (86.7%) |
| | No | 26 (13.3%) |
| Do you consider well-aligned teeth important for overall appearance of your face? | Yes | 143 (73%) |
| | No | 53 (27%) |
| Are you embarrassed to show your teeth? | Yes | 137 (69.9%) |
| | No | 59 (30.1%) |
| Do you have a nickname at school due to your teeth? | Yes | 65 (33.1%) |
| | No | 131 (66.9%) |
| Do you have any trouble while speaking, chewing, and have facial muscle pains caused by teeth arrangement? | Yes | 114 (58.1%) |
| | No | 82 (41.9%) |
| Do you need braces treatment? | Yes | 167 (85.2%) |
| | No | 29 (14.8%) |
| Do you try to avoid smiling because of the appearance of your teeth? | Yes | 136 (69.3%) |
| | No | 60 (30.7%) |
| Do you think your smile could be better if teeth were better aligned? | Yes | 159 (81.1%) |
| | No | 37 (18.9%) |
| Have you had any treatment to correct of your teeth arrangement? | Yes | 72 (36.7%) |
| | No | 124 (63.3%) |

DISCUSSION

The demand for orthodontic treatment as well as the patient's cooperation and motivation during the course of treatment are determined not only by the clinician's assessment, but also by patients' self-perception of dental appearance.⁷

The importance of patients' appreciation toward orthodontic treatment cannot be neglected, as it is the patients who accept the treatment and need to gain gratification from improved esthetics and function.⁸

In the current study, 63.3% participants never undergone any treatment to correct their teeth arrangement. The current study results were in contrast with the study conducted by Bos et al,⁶ which found a significantly encouraging attitude regarding orthodontists in previously treated subjects compared with untreated ones.

The patient's attitude toward their dental appearances was important in regulating both treatment demand and the subsequent level of cooperation during treatment. It was suggested that subjects of adult age group were capable of making objective esthetic evaluations of their teeth, but that there was a broad range of what was considered to be acceptable for their subjects.⁹

The awareness of malocclusion and dissatisfaction with dental appearance among participants agreed with their objectively determined and perceived orthodontic treatment. This finding is in agreement with other studies^{10,11} but in contrast to the study by Shue-Te Yeh M et al.⁸ Hence, the desire for treatment for individuals who are dissatisfied with their appearance underlies most orthodontic treatments. Patient's awareness of their appearance and their satisfaction are, therefore, important to orthodontists to achieve patient satisfaction.

The decision-making process that a person undertakes when judging his/her own dental esthetic satisfaction may be broken down into several steps. The first is to know about the awareness about their own dentition; after this step, their self-satisfaction is important, and finally their attitude toward orthodontic treatment.

CONCLUSION

As a conclusion, most of the participants in the present study desired to improve their esthetic appearance. It is important for practicing orthodontists to inform patients about the importance of placing braces and they should build interpersonal rapport with the patients.

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