

The Perception of Dental Appearance Among adults

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ABSTRACT:

Introduction:

The perception of beauty may be influenced by cultural, ethnic, or racial concepts of beauty. When planning treatment for aesthetics, the design of the smile cannot be isolated from a comprehensive approach to patient care. Achieving a successful, healthy, and functional result requires an understanding of the interrelationship among all the supporting oral structure. The knowledge and understanding of a patient's perception of dental appearance is an important aspect of patient management that can help dentists in the planning of treatment that is acceptable to the patient and achieving the highest level of patient satisfaction.

Aim :

The aim of this study was to investigate the aspects related to the perception of dental appearance and expectations of patients who receive dental treatment in graduation clinics of Saveetha Dental College.

Methodology: *The survey was conducted using a questionnaire. It was evaluated 100 patients of both gender aged over 18. The questionnaire included questions of demographic data, questions to assess facial and dental aesthetics, dental satisfaction and treatments considering patients notion to improve dental esthetics. The data collected was analysed using descriptive statistics.*

Results: *The factor teeth for facial analysis and factor positioning in the arch for smile analysis were considered the most important subjects regarding the esthetic according to the respondents. (70%) of patients were dissatisfied with the appearance of their teeth, and dissatisfaction with the color was the most important factor. The treatment most desired was tooth whitening and (60 %) of patients said yes to it.*

Conclusion: *Respondents place great value on the teeth on the face appearance, and it can be seen that aesthetic treatments are highly valued in all age groups. There is a need for treatments to restore the function, but treatments to improve dental appearance were the most requested.*

Key words: *Esthetics, patient perception, Patient satisfaction, Surveys and questionnaires.*

I. INTRODUCTION:

Esthetics is a branch of philosophy that studies the nature of what is considered beautiful [1]. The perception of beauty may also be influenced by cultural, ethnic, or racial concepts of beauty. When planning treatment for aesthetics, the design of the smile cannot be isolated from a comprehensive approach to patient care. Achieving a successful, healthy, and functional result requires an understanding of the interrelationship among all the supporting oral structures [2].

The face is the key feature in the determination of human physical attractiveness. A harmonious and a beautiful smile plays an important and main role in establishing a good relationship between physical and facial beauty, as the teeth are considered as important components in the architecture of facial disposition [3]. The Dental Aesthetics has become very essential nowadays, since most people dream of having a beautiful smile and bright teeth. This tendency caused a major demand in aesthetic dentistry originated by modern society's concern with beauty [4].

The ultimate objective of aesthetics in dentistry is the creation of a beautiful smile with teeth of pleasing proportions and pleasant mutual relations of teeth in harmony with the gingiva and the patient's face [5]. The appearance of the teeth can play a key role in developing the first impression about another person [6]. It was established that the judgment of some personal characteristics of other people is affected by dental appearance [7,8]. Physical appearance plays an important role in social interaction and smile and teeth have an important

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function in determining the level of attractiveness of the face. The mouth is considered extremely important in social interaction [9]. Tooth colour is the main factor associated with the satisfaction with the aesthetics of teeth. Most patients are interested in teeth whitening to improve their looks [10]. The interest in dental aesthetics has increased highly over the past few decades, in both patients and dentists, and natural-looking teeth have become an important task in the field of dentistry [11]. Dental appearance satisfaction is important among young adults because judgment concerning the personal characteristics of individuals is influenced by their dental appearance in the absence of other information [6].

The knowledge and understanding of a patient's perception of dental appearance is an important aspect of patient management that can help dentists in the planning of treatment that is acceptable to the patient and achieving the highest level of patient satisfaction [12].

Therefore, the aim of this study was to investigate the subjective aspects related to the perception of dental appearance and expectations of patients who receive dental treatment in graduation clinics of Saveetha Dental College.

II. METHODOLOGY:

The study included 100 people aged 18 to 30 years.

This evaluation was performed by analysis of a structured guided questionnaire (Table 1). The questionnaire consisted of questions on socio-demographic items including sex, age, and level of education, as well as questions related to facial, dental and smile aesthetics. Patients were also asked about their satisfaction with their then-current general dental appearance, satisfaction with tooth colour and size and perceived misalignment of teeth. In addition, patients were asked to select the aesthetic treatments they wished to undergo, including orthodontic treatment, tooth whitening, bleaching, crowns, tooth restorations and partial or total dentures.

The exclusion criterion was the patient's refusal to answer the questionnaire perception of dental appearance and expectation. The collected data were tabulated with Excel 2010 and presented by means of descriptive statistics and pie charts.

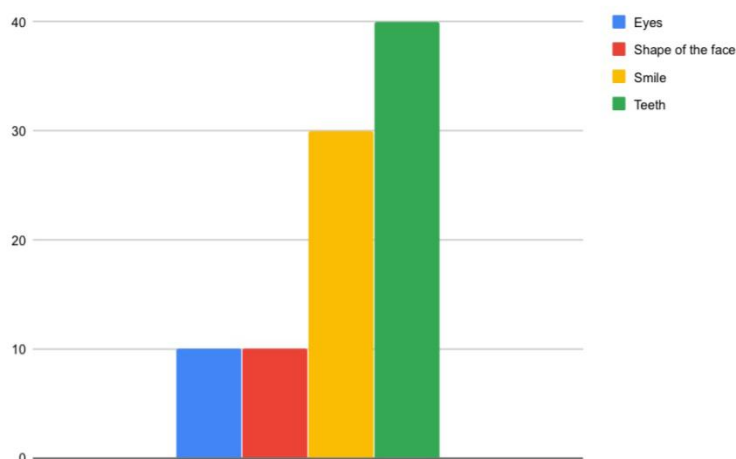
QUESTIONNAIRE:

1. Sex: Male/Female
2. Age:
3. Education level: Elementary /High School
4. Which is the most attractive facial feature? Eyes/Shape of the face/Smile/Teeth
5. Which is the most attractive smile feature?
Mouth Shape/ Teeth positioning/Teeth Colour/Teeth size
6. What do you consider to be beautiful teeth?
White Teeth/ Aligned Teeth/Small Teeth/Big Teeth
7. Do you think the appearance of teeth is important? Yes/No
8. How important are teeth in your face appearance?
Very important/Somewhat important/Indifferent
9. Are you satisfied with the appearance of your teeth?
10. Are you satisfied with your tooth color? Yes/No
11. Do you feel your teeth are misaligned? Yes/No
12. Are you satisfied with your tooth size? Yes/ No
13. Do you wish to undergo these treatments to improve the appearance of your teeth? Yes/No

If yes

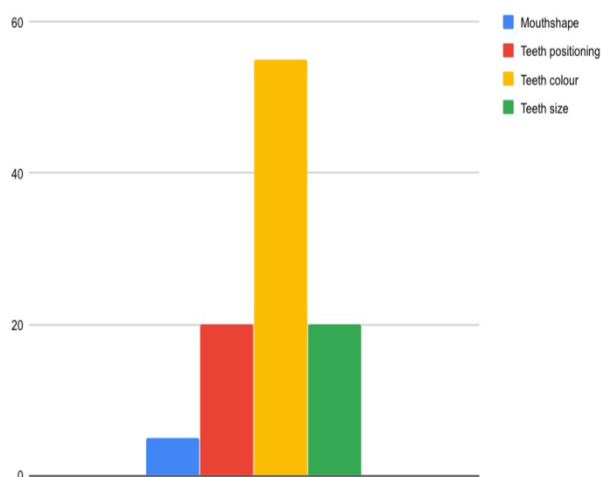
Orthodontic Treatment /Tooth Whitening/ Dental Crowns/ Restorations/Complete and Removable Dentures

III. RESULTS:



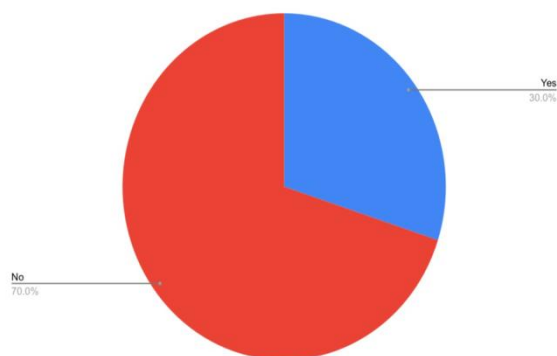
Graph 1 shows response to the most attractive facial feature.

The graph show that majority(40%) of the patient's feel that smile is the most attractive facial feature followed by the smile (30%). The eyes and the shape of the face was the least noticed feature.



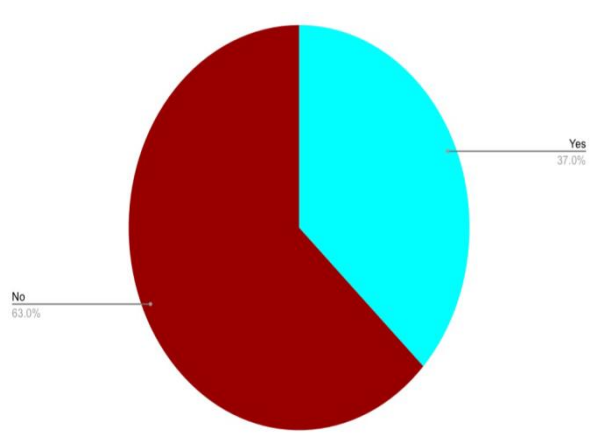
Graph 2 shows response to the most attractive smile feature.

The graph shows that majority(55%) of the patients think that teeth colour is the most attractive smile feature followed by Teeth positioning and teeth size (20%).



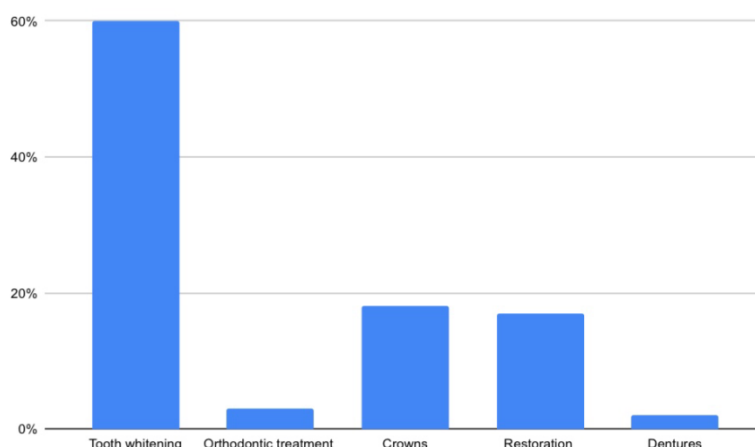
Graph 3 - patient's response on satisfaction of their appearance of teeth.

The pie chart show that majority(70%) of the patients were not satisfied with the appearance of the teeth and (30%) Of the respondents were satisfied.



Graph 4 : Patient's response on satisfaction of their colour of the teeth.

The pie chart shows that majority of the patients(63%) were dissatisfied with the colour of their teeth.



Graph 5 :Response to most opted treatment to improve the appearance of the teeth.

The highest opted treatment is tooth whitening (60%).Followed by crowns and restorationsand the least opted treatment were dentures(7%).

IV. DISCUSSION :

The questioning began with questions about the most attractive features of the face and smile. Teeth were found to be very important on facial esthetics some studies also reported teeth as the main facial feature, followed by the eyes[3].Such result was confirmed when asked about the importance of teeth in the face appearance, subjects' response was almost unanimous, 40% said that teeth are very important.

The next part of the questionnaire assessed patients' satisfaction with their dental appearance. It was found that the majority of patients were dissatisfied with their dental appearance (70%). It was a high percentage when compared to other studies. In the United Kingdom, only 24% of respondents were dissatisfied[13]. In Turkey[14] the percentage of dissatisfaction was 55.1%, in Israel[15] was 37.7% and in Malaysia[16] this percentage was 52.8%. The factor with the highest percentage of dissatisfaction was the color of teeth (66.8%), followed by lack of alignment.

Dissatisfaction towards colour was found to be the most significant to appearance satisfaction. Older patients (≥ 50) were more likely to be satisfied with tooth color and patients ranging from 30 to 49 years had the highest percentage of dissatisfaction. The majority of studies report older people to be more satisfied in an overall basis and to be more open to treatments [17]. Age is not necessarily associated with poor self-perceived dental appearance, it is possible that older people might be less influenced by the media, while there is a great pressure on the younger people to look beautiful and healthy, since there is a strong link between appearance and social status expressed by better jobs and social acceptability [18].

Women seem to have a tendency to be more concerned towards aesthetic and sometimes more dissatisfied. In similar studies in Turkey and Malaysia, [14,16] women were more dissatisfied with their dental appearance, but in a study in Israel, males showed the highest dissatisfaction, even though the research was conducted in a military clinic and the sample consisted mostly of men [15]. In this study it was not a positive association with gender and satisfaction, both men and women were equally dissatisfied.

The aesthetic treatment with the greatest impact on patients' opinion was the tooth whitening, and 60% of patients said yes to the treatment. In other studies bleaching was also the most desired by patients. Bleaching may have the highest requirement, but the percentage found requiring other treatments was also high. It was found a great lack of acceptance from patients younger than to complete and removable dentures only 2% of these patients wanted to undergo such treatment. As the age of patients increased, also increased their acceptance to such treatment. In the Fixed prosthodontics the acceptance was higher, but the same age/acceptance pattern was found.

V. CONCLUSION:

The majority of patients were dissatisfied with their dental appearance; the main dissatisfaction reason was the tooth colour and as a consequence, the bleaching was the most desired treatment. Respondents place great value on teeth regarding the appearance of the face, and it can be seen that the aesthetic treatments are highly valued in all age groups. There is some need for treatments to restore the function, but the treatments to improve dental aesthetic were patient's most required.

REFERENCES:

- [1] Peck S, Peck L. Selected aspects of the art and science of facial esthetics. *Semin Orthod.* 1995 Jun;1(2):105-26.
- [2] Davis NC. Smile design. *Dent Clin North Am.* 2007 Apr;51(2):299-318.
- [3] Jørnung J, Fardal Ø. Perceptions of patients' smiles: a comparison of patients' and dentists' opinions. *J Am Dent Assoc.* 2007;138(12):1544-53.
- [4] Spear FM, Kokich VG, Mathews DP. Interdisciplinary management of anterior dental esthetics. *J Am Dent Assoc.* 2006 Feb;137(2):160-9.
- [5] Knezović-Zlatarić D. *Fundamentals of aesthetics in dental medicine.* Zagreb: Croatian chamber of dental medicine; 2013.
- [6] Montero J, Gómez-Polo C, Santos JA, Portillo M, Lorenzo MC, Albaladejo A. Contributions of dental colour to the physical attractiveness stereotype. *J Oral Rehabil.* 2014; 41(10):768–82
- [7] Newton JT, Prabhu N, Robinson PG. The impact of dental appearance on the appraisal of personal characteristics. *Int J Prosthodont.* 2003; 16:429–34.
- [8] Carlsson GE, Johansson A, Johansson AK, Ordell S, Ekbäck G, Unell L. Attitudes toward Dental Appearance in 50 and 60-Year-Old Subject Living in Sweden. *J Esthet Restor Dent.* 2008; 20:46–56.
- [9] Kershaw S, Newton JT, Williams DM. The influence of tooth colour on the perceptions of personal characteristics among female dental patients: comparisons of unmodified, decayed and 'whitened' teeth. *Br Dent J.* 2008; 204(5):E9.
- [10] Samorodnitzky-Naveh GR, Geiger SB, Levin L. Patients' satisfaction with dental aesthetics. *J Am Dent Assoc.* 2007; 138(6):805–8.
- [11] Gržić R, Spalj S, Lajnert V, Glavičić S, Uhač I, Pavičić DK. Factors influencing a patient's decision to choose the type of treatment to improve dental aesthetics. *Military-medical and pharmaceutical review.* 2012; 69(11):978–85
- [12] Tin-Oo MM, Saddki N, Hassan N. Factor influencing patient satisfaction with dental appearance and treatments they desire to improve aesthetics. *BMC Oral Health.* 2011; 11:6.
- [13] Kokich VO, Kokich VG, Kiyak HA. Perceptions of dental professionals and laypersons to altered dental esthetics: asymmetric and symmetric situations. *Am J Orthod Dentofacial Orthop.* 2006 Aug;130(2):141-51
- [14] Akarlan ZZ, Sadik B, Erten H, Karabulut E. Dental esthetic satisfaction, received and desired dental treatments for improvement of esthetics. *Indian J Dent Res.* 2009 Apr- Jun;20(2):195-200.
- [15] Samorodnitzky-Naveh GR, Geiger SB, Levin L. Patients' satisfaction with dental esthetics. *J Am Dent Assoc.* 2007 Jun;138(6):805-8

- [16] Tin-Oo MM, Saddki N, Hassan N. Factors influencing patient satisfaction with dental appearance and treatments they desire to improve aesthetics. *BMC Oral Health*. 2011 Feb 23;11:6.
- [17] Singh BP, Pradhan KN, Tripathi A, Tua R, Tripathi S. Effect of sociodemographic variables on complete denture satisfaction. *J Adv Prosthodont*. 2012;4(1):43-51.
- [18] Alkhatib MN, Holt R, Bedi R. Age and perception of dental appearance and tooth color. *Gerodontology*. 2005 Mar;22(1):32- 6.