

Perception of Dental Esthetics among Netizens in South India

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Running title: Awareness of dental esthetics among netizens.

ABSTRACT:- Dental esthetic has become an important issue in modern society, as it seems to define one's character. The aim of this study is to evaluate the awareness & knowledge about dental esthetics among netizens (user of social media). This study was conducted among 500 participants. A questionnaire composed of 25 close ended type of questions are formulated and randomly distributed to public using social media. According to the results, only half the participants were found to be more concerned about their teeth appearance. This study suggests that further educational interventions are needed to improve the awareness of dental esthetics among general public.

KEY WORDS: Tooth colour, teeth alignment, Self-confidence.

I. INTRODUCTION:

In Assessing the beauty of a face, dental esthetics is an important aspect and thus plays a central role in human social interactions [1]. A smile is a main feature of facial aesthetics that plays a key role in attractiveness of one's face. Dental appearance is usually determined by the colour of the teeth, alignment of the teeth, shape, size and position of teeth compared with its surrounding structures, especially anterior teeth. [2]. An engaging smile is one of the crucial features in sustaining and enhancing the aesthetic attractiveness of an individual and ultimately improving self-esteem of an individual. Moreover, dental aesthetics plays a major role in impacting one's self confidence. [3]. In the current social media era , where the media and entertainment industries are projecting a high profile beauty standards which has an strong influence on society thereby influencing the people to enhance their own appearance led to an increased demand for aesthetic dentistry and cosmetic surgery among the general public[4]. Some prestigious jobs and professional groups demand for a good dental appearance as a requirement and usually a first impact on a person is made based on the facial and dental appearance, so in general smile plays an important role for an individual's self-confidence and helps in influencing people[5]. But unfortunately, not everyone has a perfect and proportionate smile, usually teeth are not in perfect balance with the surroundings [6]. A pleasing facial appearance in our current competitive world also implies the distinction between achievement and failure in both our personal and professional lives. Men and women are highly mindful of their looks. In many ways, the present generation is giving significance to their aesthetics to enhance their personalities. Not only is aesthetics concerned with smile correction, but also with improving the face profile and correction of the jaw. In general, aesthetics plays an important role in improving self-confidence in one's life.[7]. Generally, colour of the teeth is an important factor in determining people's satisfaction with their dental appearance. People usually prefer pristinely white teeth and having teeth positively correlates with social and psychological adaptability of a person and helps to enhance their self-esteem [8]. Another common aesthetic problem among general population is malocclusion (or) irregularly arranged teeth. Any occlusion that is deviated from normal/ideal occlusion is considered as malocclusion. It is a widespread oral condition that occurs worldwide. Thus, many people opt for orthodontic treatment [9]. Improving the appearance of the smile is one of the main reason patients seek orthodontic treatment as the field and available technologies have continued to evolve, dental esthetics took a gradual shift towards an increased emphasis in treatment planning [10]. The following survey is a study to understand the perception of dental

aesthetics among netizens. The aim of present survey is to assess the awareness of dental esthetics among 500 people in a particular population.

II. MATERIALS AND METHODOLOGY:

This survey study was conducted to assess the awareness and knowledge about dental esthetics among the Netizens (user of internet). This study was conducted randomly among the netizens of Tamil Nadu in India. To ensure the participation of the netizens alone, the was made in online filling format through Google forms. Then the link of the google forms was circulated among the population through social media platforms like WhatsApp and Facebook groups. The link of the google forms was opened on Aug 2020 and closed on Oct 2020. The study sample included 500 participants. People aged 15 and above was considered for this study. A structured custom-made questionnaire composed of 20 questions in e forms (written in English) was designed to assess their awareness and knowledge level about Dental esthetics. The questionnaire 's intent was specifically outlined to the participants. The questionnaire was structured under five aspects that were dental self-confidence, social impact, psychological impact, esthetics concern and knowledge about dental esthetics. Apart from this the questionnaire also included demographic details and socio-economic status of the participant. The questionnaire composed of close ended type of questions. The questionnaire consisted of six demographic variables includes males – females; younger age – older age; rural – urban to assess the level of awareness and knowledge.

III. RESULTS:

The study was about the awareness of dental esthetics among netizens and it was conducted among 500 participants randomly from the southern part of India. On analysis of the given data the mean age of the study population was observed to be 32.186% with minimum being 15yrs and maximum being 79yrs of age showing std. deviation of 15.0094%. Among all the participants 53.6% (n=268) people were from urban areas. There were 58.4% (n=292) male and 41.6% (n=208) female participants.

Subjects were asked to answer wide range of questions regarding the dental esthetics, satisfaction of their smile, self-confidence and treatment modalities. Teeth plays an important role in making an esthetically pleasing smile. It should be uniformly positioned with a balanced arrangement within the arch. In general, 49.2% of the individual were aware of the term dental esthetics. When subjects were asked about their satisfaction with smile, colour and alignment of the teeth, only half of the individual seems to be satisfied with their smile, colour and alignment of the tooth. About 45.4% are satisfied with their smile. 56.4% and 50.6% people are satisfied with their colour and alignment respectively. It was also found that the patient's general dissatisfaction is highly correlated with hiding one's teeth during smiling i.e. 43.4 % of people answered that they hide their teeth during their smile. when the people were asked about the confidence level of their smile, majority of people that is about 59.4% answered that the smile has a major impact in their self-confidence. 43% of people answered that vigorous/hard brushing has no impact on their esthetics which is correct. similarly, when participants were raised a question about the necessity of improving their dental esthetics only 44.4% said that it is necessary to improve their esthetics. (Table 1)

Table 1: Awareness of Dental Esthetics among Netiznes

QUESTIONS	Options	Frequency(n)	Percentage (%)
Are you aware of The term dental Esthetics	Yes	246	49.2
	No	164	32.8
	May be	90	18.0
Do you think smile Has any impact on self-confidences	Yes	297	59.4
	No	143	28.6
	May be	60	12.0
Are you concerned about you smile while taking photos or selfies	Yes	297	59.4
	No	136	27.2
	May be	67	13.4
Have you ever asked your friends or families about your smile or teeth	Yes	324	64.8
	No	176	35.2
Does your teeth appearance make you more conscious around other people	Yes	324	64.8
	No	176	35.2
Are you satisfied with alignment of your teeth	Yes	253	50.6
	No	147	29.4
	Some	100	20.0

	what		
Are you satisfied with the colour of your teeth	Yes	282	56.4
	No	121	24.2
	Some what	97	19.4
Have you ever consulted a dentist regarding your appearance or alignment of your teeth	Yes	281	56.2
	No	219	43.8
Have you ever undergone any ortho treatment or teeth whitening procedures	Yes	246	49.2
	No	254	50.8
Are you willing to get treatment for enhancement of appearance of your teeth	Yes	291	58.2
	No	209	41.8
Do you think it is necessary to improve your dental esthetics	Yes	222	44.4
	No	146	29.2
	May be	132	26.4
Do you wish your teeth look better	Yes	345	69.0
	No	155	31.0
How much are you satisfied with your smile	High	227	45.4
	Moderate	234	7.8
	Low	39	46.8
Do you think brushing harder makes your teeth look better	Yes	202	40.4
	No	215	43.0
	May be	83	16.6
Have you ever tried a home remedy to improve your colour of the teeth	Yes	253	50.6
	No	247	49.4
Do you think teeth whitening is important to enhance your Appearance?	Yes	251	50.2
	No	151	30.2
	May be	98	19.6
Do you encourage your colleague or your friends to perform dental esthetics procedures	Yes	325	65.0
	No	175	35.0
Have you ever noticed that you hide your teeth when you smile	Yes	217	43.4
	No	181	36.2
	May be	102	20.4
Did you ever fail to perform well in you school or college activities because of your teeth appearance	Yes	214	42.8
	No	219	43.8
	May be	67	13.4
Do you think well maintained teeth will improve your social success	Yes	273	54.6
	No	137	27.4
	May be	90	18.0

IV. DISCUSSION:

Esthetic dentistry is one of the rapidly developing dental technique in dental practice and teeth plays major role in making an aesthetically pleasing smile, it should be uniformly positioned with a balanced arrangement within the arch. Many studies and digital smile analysis have attempted to formulate a technique to help dentists determine smile aesthetics in order to obtain an effective diagnosis and schedule the care required[11, 12]. Until few decades ago dental esthetics was far less important and had less awareness among the general public, due to the developing internet access which are easily available for public, so they are more aware of dental esthetic procedures. The perception of esthetics varies from person to person and is influenced by various factors such as age, gender, level of education, and cultural and ethnic backgrounds, For the same reasons, there can be differences of opinion regarding the beauty of dentofacial characteristics between common public and dentists[19].

Aim of the study was to evaluate the subjects perceived awareness, satisfaction of their dental appearance and to compare it with various attitudes and practices which may have social and psychological impact, which may affect individual's confidence and his/her desire to have good appearance, and to further evaluate the component of dental aesthetics which is causing most dissatisfaction among subjects. Based on the study results almost half of the participants (49.2%) were aware of the term dental aesthetics. According to the study done by marzieh karimi et al [8]. 69.60% of the responders were satisfied with their dental appearance which is more than what was observed in this study, studies done in different countries had different results, for

example(42.2%) in Malaysia (57.3%) in Turkey and 76% in UK. Dental Self-confidence reflects the level of satisfaction or dissatisfaction with the appearance of one's dentition and seeks to assess the effect of dental attractiveness on the self-image of a person. The appearance of the mouth and grin plays an important role in evaluation of facial attractiveness ,which undoubtedly contributes to self-concept and self-esteem[13].This study shows that majority of the individuals who participated agreed that dental appearance had an impact on their self-confidence, The tooth colour was the major reason of their dissatisfaction This is in accordance with some studies where patient's opinion of their smile was significantly higher than the clinician's assessments and the patients were most dissatisfied with their tooth colour compared to the dentist the reason being that dentists are aware of the natural tooth colour compared to the general public.while taking selfies , when being photographed by people or while looking at his/her own image in the mirror a person may become self-conscious because a feeling of surveyed or being evaluated feeling arises and the individual becomes self-aware.

In this study 43.4% of participants have noticed that they hide their teeth when they smile and 20.4% occasionally hide their smile, similarly in a study done in Saudi Arabia 40.5% of the people in the study group were often or occasionally hide their smile [8]. This implicates that they are not satisfied with their smile and it has a negative effect on their social well-being. Self-satisfaction, social behaviour and psychological well-being are inter-related; this is proved through this study when significant number of people agreed to the fact that well maintained teeth had positive correlation with their chances of success [14]. Many researchers have consistently found that self-evaluation was mostly based on others opinion, similarly in this study most of the people agreed that they take opinion from their family friends and relatives about their smile and appearance. According to the study done by Ulrich klages et al[15] the subjects who were highly attentive to social or public gatherings had stronger relationship with dental esthetics and were more concerned about their own appearance and subjects with low public self-consciousness or who didn't have much public interactions had no association with dental appearance, this study shows that Significant number of participants have noticed that they hide their teeth when they smile in public which implicates that they are not satisfied with their smile and they are socially conscious which has a negative effect on their social well-being and more than half of the responders agreed that they have public-self-consciousness.

According to this study 24.2% were not satisfied with their tooth colour and 19% of the people were somewhat satisfied with their tooth colour, similarly a study done by Shulman JD et al[16] done in North America 31.6% of participants were not satisfied with their tooth colour but contrast to this result a study done in Turkey reported that 55.1% of the people were not satisfied with their teeth colour. The colour of the present teeth was not determined as it was not an aim of the study and therefore we could not determine whether the patients actually had discoloration .According to the study done by Zuhre Zafersoy Akarslan et al most of the people were interested in improving their tooth colour and were willing to enhance their teeth colour and wanted to opt for teeth whitening procedures , Our results show consistency with their results [17].General population usually prefer pearly white teeth which makes teeth whitening a more desired option, Some people opt for teeth whitening paste as a regular product in their daily routine,and others believe that brushing their teeth harder has an positive effect on their tooth colour, while other people use home remedies which is suggested to them by their friends and family or through internet. Another most common dental esthetic problem is the alignment of teeth otherwise called as malocclusion. Malocclusion has both psychological as well as oral health effects not only in adolescence also in adults, malocclusion can be best made out in the age of 13 to 15 which is a common age were an individual becomes socially interactive and develops public consciousness [18].

The malocclusion is not a disease, yet the demand for orthodontic services among public exists. In this study significant percentage of participants were willing to enhance their dental appearance. Seeking for professional care regarding this has increased in the current generation; the study shows that more than half of the participants had visited a dentist regarding the aesthetics of their teeth. But only 49.2% of the people proceeded with the treatment. Failure to proceed with dental treatment may have many reasons for example duration of the treatment or high cost range.

V. CONCLUSION:

This study presents a unique comparison of data designed to evaluate the awareness of dental esthetics among netizens. It shows that only half of the people are aware of the term dental esthetics and are satisfied with their smile, colour and alignment of the teeth. Although there are several treatment modalities for improving dental esthetics, the awareness about the dental esthetics seems to be inadequate among the dental population. To conclude, further educational interventions are needed to improve the awareness level of dental esthetics as it plays a major role in improving one's self confidence.

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