Patient Awareness, Attitudes, and Perceptions Toward Cosmetic Dentistry in a Dental Outpatient Setting in Karachi.

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ABSTRACT:

Objective: To assess the level of knowledge, attitudes, and perceptions of patients visiting the outpatient department (OPD) regarding cosmetic dental procedures.

Methodology: A cross-sectional study was conducted at the Department of Oral Diagnosis, Jinnah Medical & Dental College, Karachi, over a period of six months; from 10-5-2025 to 9-11-2025. A non-probability convenience sampling technique was used. Data from 385 participants were analyzed using SPSS version 26. Associations between variables were determined using the Chi-square test, with a significance level of $p \leq 0.05$.

Results: Among 385 participants, 350 (90.9%) were aware of cosmetic dental procedures. Of these, 320 (83.1%) had previously undergone at least one procedure, most commonly crowns/bridges (37.5%) and tooth whitening (31.25%). The primary motivations were improving appearance (34.38%) and peer/social influence (17.18%). Most participants considered cosmetic dental procedures safe (83.12%) and believed they improve self-esteem (79.22%). Participants' awareness, attitudes, and perception were shown to be significantly correlated with gender, age, income, and education ($p < 0.05$).

Conclusion: Awareness of cosmetic dental procedures among dental OPD patients visiting dental outpatient department was high, and attitudes and perceptions were generally positive. Demographic factors including gender, age, education, and income significantly influenced participants' knowledge and perceptions of cosmetic dentistry.

Keywords: Cosmetic Dentistry, Knowledge, Attitude, Aesthetics.

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Introduction:

Nowadays, people have become more interested in their looks as there is more emphasis being placed on cosmetic procedures especially dental procedures because of their dual importance as a means to enhance looks and improve overall facial beauty.[1,2] Having pleasing looks has many psychosocial incentives; this causes patients (probably youngsters) to seek dental esthetic procedures.[3,4] Among numerous dental principles about facial proportions, quite a number focus on anterior teeth as they are very important for creating beautiful smiles.[5,6]

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Having a perfect and attractive smile makes an individual acceptable in society and promotes good interpersonal relationships.[7] When it comes to human interaction, the grin is of utmost importance. Due to its ability to add beauty to faces, dental esthetics have gained greater significance in today's world.[8] To achieve the famous smile portrayed by social media stars, people now go through different kinds of cosmetic dental procedures including veneers, crowns, whitening, orthodontic aligners and dental implants.[9] Various dental specialties like restorative, orthodontics, prosthodontics and surgical procedures all contribute towards these cosmetic dental procedures.[10]

Recently, there has been considerable public interest in dental care as people realize how important their teeth are for function and esthetics. During communication, it is normal to give attention to the central point of one's face, the mouth, where smiles play an important role in facial expression and improvement in looks.[11,12]

With an increase in the usage of social media, people have become increasingly conscious of their looks. This has led to an increase in demand for cosmetic procedures. This can help in providing an insight into the knowledge gap and the patients' perception regarding cosmetic procedures, allowing dentists to make a more appropriate educational approach.[13] This study aimed to measure the knowledge level of the patients visiting OPD concerning cosmetic dental procedures.

Methodology:

This study took place in Department of Oral Diagnosis Jinnah Medical & Dental College Karachi, Pakistan. A convenient sampling technique was used. Data were collected over a period of six months, from 10-5-2025 to 9-11-2025, after obtaining written informed consent from each participant. Approval of institutional research ethics committee was obtained (Protocol:00090/24) on May 09,2025.

Concerning sample size, 385 subjects will be considered adequate based on 95% confidence interval, prevalence of 50% of people perceiving cosmetic procedures, and 5% margins of error as determined using OpenEpi software. The subjects to be enrolled in this study will comprise patients that had undertaken different kinds of dental procedures. This means that both restorative and aesthetically oriented procedures (e.g., teeth whitening, crowns, bridgeworks, etc.) will be included. However, there is no guarantee that all procedures may have been done with the aim of improving the patient's appearance.

Patients aged between 18 and 40 years of either gender visiting OPD of Jinnah Medical and Dental College Karachi were included. In addition, the patients must be willing to participate in this research by signing consent forms. The exclusion criteria include those below 18 years old; those with mental disorders that may impair comprehension of questionnaires; and those unwilling to take part in this study. The instrument designed for the present study is going to be based on those used previously. The questionnaire will also be subjected to testing using 20 patients prior to use and any modification will be conducted where necessary.

The questionnaire has been split into three parts: demographic data (age, gender, education, and Income), knowledge section (awareness, procedures, benefits), and attitudes and perceptions section (reasons, safety concerns, and sources of information). Variables of interest includes knowledge, attitudes, and perceptions concerning cosmetic dental procedures.

All statistical analyses will be conducted using IBM SPSS Statistics for Windows, Version 26.0. (IBM Corp., Armonk, NY, USA). The main independent variables are categorical including gender, age groups, educational attainment, and income category as well as those related to knowledge, attitudes, and perception (Yes/No). Descriptive analysis will include demographics of the study population and their knowledge, attitudes, and perceptions toward cosmetic dental procedures. Chi-square test will be used to measure the associations between independent variables (gender, age group, education, and income category) and dependent variables (knowledge, attitudes, and perceptions). A p 0.05 considered as significant.

Results:

For current survey, a total of 385 individuals participated. Ages of the participants ranged from 18 to 40 years, with the majority falling between the age group 21-25 years (37.67%).

Table No 1: Demographic profile of the study participants.

Variable	Frequency (%)
Age (Years)	
18-20	75 (19.48)
21-25	145 (37.67)
26-30	89 (23.11)
31-40	76 (19.74)
Gender	
Male	170 (44.15)
Female	215 (55.85)
Monthly Income level	
Above 50,000	308 (80)
50,000 or below	77 (20)
Education level	
Bachelor & above	311 (80.78)
Below bachelor	74 (19.22)

Females (n=215, 55.85%) outnumber males (n=170, 44.15%). In terms of income, most participants were earning over 50 thousand rupees per month (80%), with 80.18% having education up to bachelor degree and above, as shown in table 1.

Table 2 represents the awareness and attitudes towards cosmetic dental treatment. About 90.90% of the respondents were aware about cosmetic dental treatment, which shows a good level of awareness amongst the OPD patients. The maximum number of subjects had been through dental treatment involving cosmetic treatment (83.12%). About 37.50% of the subjects had undergone the most common cosmetic treatment crown and bridges (37.50%), followed by bleaching (31.25%) and dental implants (18.75%). The majority of the subjects agreed that their primary motive behind opting for these treatments was to improve their looks (34.38%). Majority of the subjects agreed that their primary source of information was the dentist (37.15%). A majority of the subjects believed that these treatments were safe (83.12%). Most of the subjects agreed that cosmetic dental treatment enhances self-esteem (79.22%).

Table No 2: Awareness and attitudes regarding Cosmetic Dental Procedures.

Variable	Response	Frequency (%)
Do you know about cosmetic dental procedures? (n = 385)	Yes	350 (90.90)
	No	35 (9.10)
Have you ever undergone any cosmetic dental procedure? (n = 385)	Yes	320 (83.12)
	No	65 (16.88)
If yes, type of procedure received (n = 320*)	Teeth whitening/Bleaching	100 (31.25)
	Crowns & bridges	120 (37.50)
	Dental implant	60 (18.75)
	Tooth-colored restorations	10 (3.12)
	Braces/Aligners	30 (9.38)
Reason for undergoing cosmetic dental procedures (n = 320*)	Improve appearance	110 (34.38)
	Correct dental issues	50 (15.62)
	Job/professional reasons	20 (6.25)
	Peer/social pressure	55 (17.18)
	Self-confidence	35 (10.94)
	Health reasons	50 (15.63)
Where do you get most of your information about cosmetic dentistry? (350*)	Dentist	130 (37.15)
	Social media	115 (32.85)
	Friends/family	35 (10)
	Internet websites	50 (14.28)
	Television	20 (5.72)
Do you believe cosmetic dental procedures are:	Safe	320 (83.12)
	Risky	30 (7.79)
	Don't know	35 (9.09)
Cosmetic dentistry improves self-esteem	Yes	305 (79.22)
	No	80 (20.78)

Figure 1 corresponds that a significant majority (54%) agreed & strongly agreed (20%) that cosmetic dental procedures are essential for an aesthetically pleasing appearance.

Figure No 1: Perceptions about the necessity of cosmetic dental procedures for a good appearance.

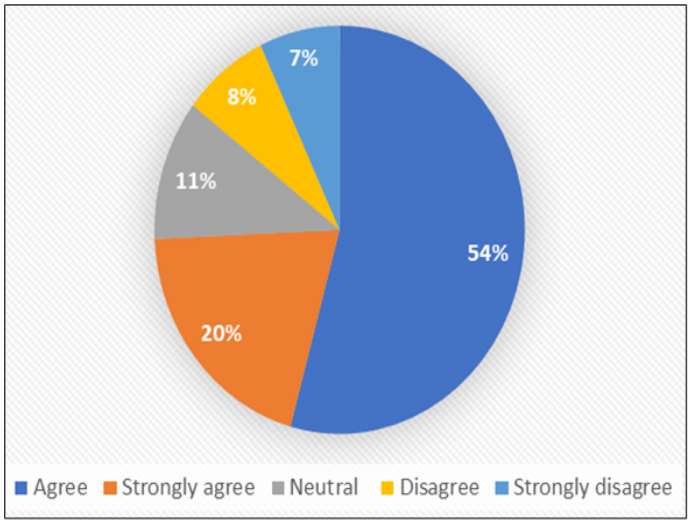


Table 3 shows the relationships between demographic variables and the participants' awareness, willingness, safety perception, and social acceptance towards cosmetic dental treatment. It is observed from the Chi-square results that there was a statistically significant relationship between gender and awareness, where females exhibited higher levels of awareness than men (p = 0.012). Age showed a statistically significant association with willingness to receive cosmetic dental treatment, with the younger age group (18-25) being more willing to have their cosmetic dental treatments than older participants (p = 0.005). There was a statistically significant relationship between education and safety perception, where participants having a bachelor's degree or higher were perceived as having higher safety perceptions of cosmetic dental procedures than participants with lower education (p = 0.002).

Table No 3: Relationships between demographic variables and the participants' awareness, willingness, safety perception, and social acceptance towards cosmetic dental treatment.

Variable	Categories	Yes	No	Total	p-value
Gender vs Awareness	Male	150	20	170	0.012
	Female	200	15	215	
Age vs Willingness	18-20	65	10	75	0.005
	21-25	124	20	145	
	26-30	60	29	89	
	31-40	47	29	76	
Education vs Safety	Bachelor & above	285	26	311	0.002
	Below bachelor	50	24	74	
Income vs Social Acceptance	Above 50000	196	112	308	0.003
	50000 or below	50	27	77	

Finally, there was a statistically significant relationship between monthly income and social acceptance, where participants earning above 50,000 had higher social acceptance beliefs about cosmetic dental procedures than those earning below 50,000 (p = 0.003) see table no 3. Associations Between Demographic Variables and Awareness, Willingness, Safety Perceptions, and Social Acceptance of Cosmetic Dental Procedures.

Discussion:

The procedure can be surgical and non-surgical aimed at enhancing or changing physical features for functional and aesthetic benefits. Procedures carried out as a result of an injury, illness, accident, developmental problems, or congenital anomalies do not fall under the definition of cosmetic surgery.[14] As more individuals seek to achieve perfection through cosmetic surgery, fueled by the quest for a better appearance and social media, the numbers of cosmetic procedures have increased. More and more women are opting for cosmetic procedures, mainly non-invasive procedures that preserve a natural look while taking short time to recover. There are several determinants of preference for or reluctance to undertake cosmetic procedures such as social network, self-image, and other personality aspects.[15] In this paper, it was shown that there was a relatively high degree of awareness of cosmetic procedures in dental patients attending the dental OPD at J.M.D.C, Karachi. It was demonstrated that almost all participants (90.90%, Table 1), heard about cosmetic dental treatment. This conclusion coincides with the global trend towards increasing the level of esthetic awareness. This is supported by the study of Abbasi et al.,[13] according to whom more than 90% of dentists in Pakistan observe an increase in the demand for aesthetic procedures, which are largely facilitated by social networks. The variable of gender has a significant influence on the awareness of the procedures related to cosmetic dentistry (p-value = 0.003). It means that there are differences in cosmetic knowledge depending on gender. Namely, females have more knowledge in comparison to men. There was another observation, made in 2019, which showed that Saudi Arabia was included among the countries that carry out the largest number of cosmetic procedures in the world.[16] Another observation in Riyadh shows that 60.9% of patients perceive cosmetic dentistry as an excellent procedure and one that could increase their self-confidence.[17]

There is another interesting observation, which proves that there is a link between the age of people and their willingness to do cosmetic surgery and its affordability. People aged 18 - 25 have more chances to undergo such surgical procedures. In addition, it is less expensive than in other age categories as it is shown in Table 3. The findings coincide with the results of the study conducted by Alsurayyi et al.,[12] in which they found a high level of enlightenment among young Saudi Arabians regarding the need for dental aesthetics, including having the Hollywood smile. One possible explanation of why young people are more willing to undergo such surgeries is their high-level awareness of social media and the importance of self-image.

The gender of the patient was also a determining factor, as women were more willing to have such cosmetic procedures. The finding is justified by the research carried out by Alnasser MA[11] according to which females consider cosmetic procedures essential and important. Such a tendency of increased valuation might be attributed to society and cultural norms.

Education also proved to be an influential factor when it comes to the perception of cosmetic surgery. Higher-educated persons believe that cosmetic dental surgery is very important in improving appearance. This is consistent with the findings in Romania and Nepal[18,19] in which the highest levels of awareness and positivity about dental aesthetics were observed. In addition, it may be due to the greater availability of knowledge in the field.

Income level also influenced the opinions of people on whether people who underwent dental procedures would be socially accepted or not. The image provided above proves that cosmetic dental improvement is associated with social status in addition to current lifestyle trends. The same conclusion was reached in other studies on this topic,[20,21] and inferred that patients in Southeastern Europe associate dental esthetics with self-image and social acceptability despite a relatively low number of procedures in this region.

One of the most important determinants of the development of awareness and attitude towards cosmetic procedures was social media. The finding is consistent with the results of studies by Monsef E et al and Lambat AR,[9,10] which showed that dental appearance was very important for individuals. In this particular study, dentists and social media were identified as main sources of information about cosmetic dentistry procedures. Therefore, the influence of professional consultations along with information from the internet on such decisions is evident.

Despite the high levels of awareness and attitude towards cosmetic procedures, costs turned out to be the greatest impediments in the realization of people's intentions. Such findings are interesting in terms of the contradiction between awareness and affordability. Similar results were obtained during research in Nepal where patients were aware of orthodontic treatment. However, costs and duration of treatment were regarded as important barriers.

Summing up, it should be emphasized that the results obtained are consistent with the available scientific data both regionally and internationally. As can be seen, cosmetic dentistry becomes an important tool for self-improvement. Significant demographic factors such as gender, age, education, and income levels play an important role in the implementation of future educational programs. The findings could be useful in developing policy guidelines for making procedures more affordable and available.

Conclusion:

In conclusion, this research study has revealed a great influence of cosmetic dentistry on patients' self-esteem and attitude towards their appearance. This study has highlighted the potential of dental procedures in improving oral health and boosting patients' confidence. To conclude, it has been revealed that patients in the dental OPD have a high level of awareness and overall positive attitude towards cosmetic dental procedures. Tooth whitening and crowns/bridges were the two common procedures. Significant relationships were observed between demographic variables such as gender, age, education and income.

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Arsalan Khalid	Conceptualizing
Salwa Siddiqui	Manuscript writing
Alishah Wasan	Critical review, discussion