Original Article

Assessment of Social Media Influence in Dental Esthetics among Dental Professionals' in Udaipur, India: A Descriptive Cross-Sectional Survey

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ABSTRACT

Background: Many patients choose health professionals using the Internet, whether through websites or social media. This study was designed to investigate the manner in which popular social media have affected dental esthetics among dental practitioners and students. **Materials and Methods:** This was a cross-sectional study performed using a digital self-administered questionnaire based on non-probability convenience sampling and the study was undertaken involving an Indian population that consisted of dental professionals through a questionnaire comprised 21 pre-defined responses including social media, esthetic dentistry, and the relation between social media and esthetic dentistry related questions. The pilot study was conducted on 20 patients to validate the questionnaire. **Results:** This study employed a large-scale online survey in which 388 responses were recorded. More over half of the responders were women (55.9%). The majority of people use social media for communication and entertainment purposes. It was also found that the most used platform was Instagram (71.4%). Moreover, most people preferred "Tooth Whitening" and "Orthodontic Treatment" as methods to improve their smile. **Conclusion:** The influence of social media has led to a fast increase in demand for "dental esthetics." Social media is the key driving force behind the mindset of the general people in pursuing dental cosmetic treatments by direct access to the profiles of "celebrities" and social media "influencers" that appear to have a "beautiful smile."

Key words: Social media, Esthetics, Internet, WhatsApp, Smile, Dentist

INTRODUCTION

Social media is a powerful tool that affects not only communication but also relationships among people. Social media provides information and affects the provider-patient interaction. Social media has begun to spread across the medical field, and nowadays, dental professionals, students, and patients take it as a source of information. It is considered a useful tool for the dentist and the students.[1] Social media marketing is a more useful marketing technique compared to traditional marketing. Many studies reported that Twitter is the most commonly used platform nowadays, where some said that they use social media for educational purposes. Many used social media to promote their dental practice and broadcast treatment outcomes, respectively.[1] Smile esthetics can help predict post-treatment satisfaction and the patient's treatment goals.[1] Social media provides background information on dental treatments and their indications, particularly from an esthetic standpoint. The Internet provides oral health care information in different formats for public consumption. Documentaries and articles published on the Internet are two examples of media that present oral health care information, often with eye-catching titles.[2] In the dentistry industry, social media postings appear to be effective for building and keeping the loyalty of present patients and for assisting new patients in learning about experts' clinical procedures.[3]

Dentistry is a science-based, highly structured healthcare profession that treats increasingly demanding patients.[4] The motive for seeking dental care was mainly for conventional procedures, and patients only visited the dentist when there was a clear necessity. Now, with the world changing, it cannot be denied that science and technology have evolved, which has significantly assisted the healthcare system. Dentistry has come a long way.[4] Today, dentistry is more than just procedures to fix ill-fated teeth; elective cosmetic procedures are also performed.[4] Social media can help improve awareness of dental care and treatments, as well as influence some patients' decisions to seek cosmetic dental

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treatment, thus dental offices and dentists should consider the growing role of social media in their everyday practices. Many participants stated that social media influenced their decision to undergo their final esthetic dental treatment. Thus, the purpose of this study is to investigate the impact of social media on dental professionals seeking dental treatment.

Social media are becoming increasingly important for dentistry, with many dentists, particularly younger ones, making use of them. One use is related to health promotion. For example, paediatric dentists use these media in patient education programs and to discuss anonymized cases. They can also be used in career development by allowing contact between practitioners otherwise unlikely to meet.[5] Dental websites sometimes contain posts with promotional content, often accompanied by before and after photograph. These photographs have been found to be effective in encouraging some people to seek treatment.[6]

Social media can help raise awareness of dental care and treatments and influence some patient decision to undergo aesthetic dental treatment, thus dental practices and dentist should consider the increasing importance of social media in their daily practice. Many participants said that social media influenced their decision to have their last aesthetic dental treatment. Thus, this study aims to check the impact of social media on dental professionals seeking dental treatment.

MATERIALS AND METHODS

Study setting and ethical approval

- Study name - A descriptive cross-sectional study
- Study setting - Department of Public Health Dentistry, Darshan Dental College and Hospital, Loyara, Udaipur
- Study duration - 4 October 2024–8 October 2024
- Study population - All the dental practitioners of Rajasthan, India
- Approved by - Darshan Dental Ethical Committee.

Study protocol

The study was done by using convenience sampling (non-probability sampling). The confidence interval was 85% and the margin of error was 05%. The estimated sample size for this study was 285 participants. General practitioners, dental staff, and dental students are included in this study.

Inclusion criteria

All the participants who filled the Google Forms and replied within the study duration.

Exclusion criteria

All those who didn't replied to the questionnaire.

Study questionnaire

Data were gathered utilizing a well-structured questionnaire. A pilot research with 20 participants was done to validate the questionnaire. Data were collected using a well-structured questionnaire. We obtained a list of dental practitioners from the dental association in Udaipur, Rajasthan, and then sent them the survey by email and WhatsApp. The questionnaire included a consent statement for voluntary participation, as well as a declaration of anonymity and confidentiality, for all subjects to understand before agreeing. The questionnaire included 21 pre-defined responses to topics about social media, esthetic dentistry, and the relationship between the two. The questionnaire was then uploaded at www.googleforms.com. The online survey link was circulated through social media (Whatsapp).

RESULTS

The questionnaire was seen by 388 potential respondents through Google Forms. 79.9% were BDS students in which 55.9% were female and 73.7% of them were living in urban areas. The most

Table 1: Demographic features of participants

Characteristics	Variables	*n* (%)
Education	BDS	310 (79.9)
	MDS	77 (19.6)
Gender	Male	170 (44.1)
	Female	217 (55.9)
Address	Urban	287 (73.7)
	Peri-urban	46 (11.6)
	Rural	58 (14.7)
Age group	17–20	93 (24)
	21–23	135 (34.8)
	24–25	78 (19.3)
	Above 25	85 (21.9)

Table 2: Smile related results

Questions	Yes (%)	No (%)
Are they familiar about the term 'dental esthetics'?	318 (82.5)	70 (17.5)
Does social media makes you feel self-conscious about smile?	214 (55.9)	174 (44.1)
Do you research about dental esthetic treatments on social media?	194 (50.8)	194 (49.2)
Ever wanted a similar smile as of a celebrity's?	248 (64.4)	140 (35.6)
Have you consulted with a dentist, based on social media research?	124 (31.7)	264 (68.3)
Would you prefer dental professionals to share their work on social media?	338 (86.9)	50 (13.1)
Does social media comparison affect your smile satisfaction?	159 (41.5)	229 (58.5)
Would a more attractive smile improve your overall confidence?	361 (92.5)	27 (7.5)

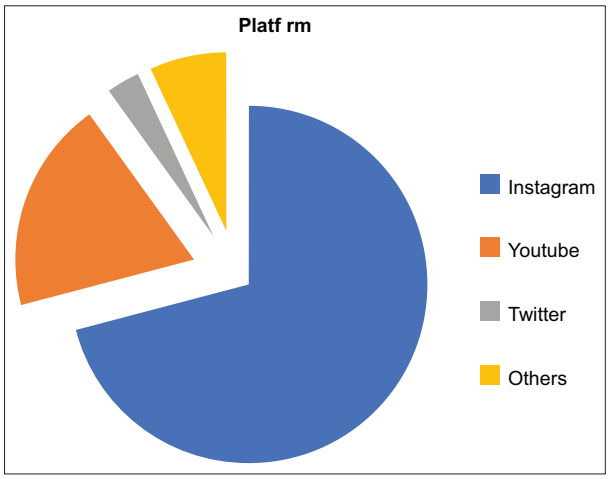

Figure 1: Social media platforms most commonly used by the participants

Table 3: Social media and dental relationship

Questions	Variables	*n* (%)
How often do you look at smile-related content on social media?	Daily	160 (41.5)
	Weekly	112 (28.4)
Do you see advertisements about dental treatment on social media?	Sometimes	198 (51.3)
	Mostly	108 (27.8)
What types of dental esthetic content engage you most on social media?	Before and after photos	163 (41.8)
	Educational videos	124 (31.7)
	Others	46 (11.6)
Has social media increased or decreased your smile confidence?	Increased	128 (33)
	Decreased	46 (12.4)
	No impact	213 (54.6)
How trustworthy do you find social media information on dental esthetics?	Not trustworthy	62 (15.7)
	Sometimes trustworthy	314 (80.7)
	Very trustworthy	12 (3.6)
Which dental esthetic treatments have you considered due to social media?	Teeth whitening	124 (31.7)
	Orthodontic treatment	74 (19.3)
	Others	120 (30.7)
Do you prefer seeing realistic or idealized smile outcomes on social media?	Realistic	326 (84.5)
	Idealized	58 (15.5)
How often do you compare your smile with friends/ celebrities on social media?	Rarely	120 (31.4)
	Never	101 (25.8)

commonly observed age group is between 21 and 23 years which comprises of 34.8%.

Table 1 comprises of demographic features which include education, age factor, locality, and gender of the sample population. According to research conducted among dental students, Females were more concerned and critical about dental esthetics and most of them belonged to urban area. It was found that age group from 21 to 23 years had a significant relationship with the responses of the participants.

Table 2 focuses on the appraisal and demand for esthetic operations driven by social media in a dental office, as well as how dentists are making the most of social media platforms to sell their talents and promote esthetic trends.

In Figure 1 it is seen that Instagram is the most used platform by people in 2024 and it comprises 71.4% of population sample. It is seen that 55.9% of people spend 30 min a day seeing smile related content.

Table 3 shows the association between social media and dentistry in the population. It demonstrates how social media has impacted people's daily lives. When asked whether dental content on social media is accurate, persons with bachelor's and post-graduate degrees are more likely to agree than others. When participants were asked if images of dental treatment outcomes (before/after) motivate individuals to seek treatment, the majority agreed.

DISCUSSION

Social media has become a powerful instrument that influences our communication and interpersonal connections, and it, like all other tools, has advantages and disadvantages. Nowadays, social media is referred to as a "social cultural agent of change," as it leverages data to modify the provider-patient connection. The use of social media in the medical industry has risen dramatically, and it is now one of the primary sources of information for patients. In fact, it is regarded as a valuable tool for both the dentist and the patient 1. The recent study reveals that social media marketing is more effective for dentists than traditional marketing approaches.

According to a study done by Baik *et al.* in 2022 in Saudi Arabia, it was seen that Snapchat was the most commonly used platform[1] but in our study findings, it was seen that Instagram will be the most used platform by people in 2024 and it comprises 71.4% of the population sample. In our study, younger age groups were more frequent users of social media, and the majority was females since it influenced their decisions, notably in the cosmetic field and different types of treatments. Our study was in strong agreement with results from a recent study by Ruiz *et al.* in 2022 who showed that limited access to care, anxiety, and cost of oral health care were factors that prompted clients to search the Internet for dental esthetics related information.[2] According to this survey, it was seen that most of the treatment opted by people in 2024 by the influence of social media are teeth whitening (31.7%), orthodontic treatment (19.3%). The above results demonstrate that those with dental experience have a better comprehension of the technical components of treatments and can better relate them to the image of a professional with probable abilities and competence. "Before and after treatment" were the categories most associated with all groups' perceptions of increased credibility. Dental surgeons can use social media to promote their professional paths, fields of work, and treatment procedures and techniques, focusing on information

that educates the general public in a way that does not imply modification, unfair competition, or devaluation of the dental profession. Ethical considerations are critical when considering e-professionalism. Of the 388 responses, it was discovered that around 198 (51.3%) are influenced by advertisements displayed on the Internet. This study has the constraint that it was conducted in only one state, and the use of the Internet and/or social media changes from state to state and country to country, therefore the results may be affected if it is done on a large scale. The group of people over the age of 25 had less respondents than the other groups, which could be attributed to older people's lower Internet use. Furthermore, it's possible that a single person completed the survey many times. When utilizing Google Forms, this is tough to avoid. Future research could analyze patients' usage of social media as an instructional tool, for arranging visits, or for engaging with dental professionals.

CONCLUSION

According to the findings of this study, social media has had a significant impact on individuals' confidence in their smile. People occasionally trust social media content about dental esthetics and smiles. This survey demonstrates that social media has become a crucial tool for the majority of our everyday requirements, including communication, education, entertainment, and healthcare.

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