

Assessment of Impact of Social Media on Esthetic Dental Treatment Choices in General Population in Pune City

Renuka Nagarale¹, Mandar Todkar², Maitreyee Kane³, Afreen Rokadia³, Aslam Khan³, Anjum Ara³

¹Associate Professor, Department of Public Health Dentistry, M. A. Rangoonwala College of Dental Sciences and Research Centre, Pune, Maharashtra, India, ²Assistant Professor, Department of Public Health Dentistry, M. A. Rangoonwala College of Dental Sciences and Research Centre, Pune, Maharashtra, India, ³Undergraduate, Department of Public Health Dentistry, M. A. Rangoonwala College of Dental Sciences and Research Centre, Pune, Maharashtra, India

ABSTRACT

Introduction: Worldwide, the use of social media has become extremely common. People of all age groups utilize the popular social media platforms, for example, WhatsApp, Facebook, and Instagram. The aim of this study is to assess the impact of social media on esthetic dental treatment choices in the general population in Pune city (India).

Materials and Methods: A survey was conducted among the general population in the region of Pune city (India). The survey was posted to random population, requesting sociodemographic details and information about the use of social media platforms, the information circulated on social media with respect to esthetic dentistry, the patient's perception, and the demand for esthetic dental treatment through social media platforms.

Results: A total of 152 responses were collected from the general population in the region of Pune city (India). About 96.1% of the participants use social media and 77.6% of them have come across any sort of advertisement related to esthetic dentistry on social media. About 65.8% of the participants follow dentists/dental awareness-related pages on social media and 65.1% of them find relevant information about esthetic dental treatments on social media.

Conclusion: The study concluded that the majority of the participants use social media and their approach toward esthetic dental procedures that are affected by the activity of the dentist on social media.

Key words: Esthetic dentistry, Awareness, Dental treatments, Impact, Social media

INTRODUCTION

Health is the basic need for all human beings. Without oral health, general health cannot be achieved. The oral cavity is the gateway to good health and is regarded as the mirror of the body. Nowadays, the individuals have become more conscious about their oral health by various programs conducted in the country. Oral health awareness in India is less as compared to the Western nations. In Western countries, people pay regular visits to the dentists as it is either encouraged by the dentist himself or their parents. This is uncommon in Indian culture.^[1] Nowadays, most people have the desire to look their best, since physical appearance plays an important role in an individual's self-esteem and success.^[1] Dentistry aims to restore the esthetics and functions to make the patient or the receiver feel satisfied with their smile, without the fear of hiding their teeth. Esthetic/cosmetic dentistry is often viewed, by the patients and dentists

alike, as a lucrative field that provides elective dental care.^[2] Dentistry majorly focuses on restoration of esthetics, along with establishment of tooth function, so as to enable the patient to smile without the fear of hiding their teeth. In most cases, people seek dental treatment for enhancing the appearance of their teeth. Dental appearance is affected by multiple factors including patient's facial appearance, attractiveness, and personal characteristics and other's opinions. Both the patient and the dentist are involved in the esthetic treatment. As we all know that all over the world, the use of social media networks has become extremely common. People of all age groups utilize the popular social media platforms. These include social networking sites and various blogging platforms, such as, Facebook, Snap chat, YouTube, Twitter, and Instagram. According to Burns, "social media refers to interactive technologies that enable humans to interact, collaborate, and connect."^[3,5] Hence, the power of social

CORRESPONDING AUTHOR:

Maitreyee Kane, Department of Public Health Dentistry, M. A. Rangoonwala College of Dental Sciences and Research Centre, Pune, Maharashtra, India.
E-mail: kanemaitreyee27@gmail.com

Submission: 01-2022; Peer Review: 02-2022; Acceptance: 03-2022; Publication: 04-2022

media and its effect on the esthetic dental treatment choices should not be underestimated. Many dentists neglect the use of social media in their clinics. They may neglect the thought of using social media to add a vale to their dental marketing or it has an effect on the patient's feedback, after the esthetic dental treatment.^[4] However, the overgrowth of social media over the past few years showed that the domain should be used with the increased demand for esthetic dentistry. The popular media has an impact on the demand for various esthetic dental procedures affecting mainly tooth whitening and veneers. Good dental appearances are thought to be requirement of prestigious occupation among some professional groups. The dentist is the main health educator regarding oral health awareness. In the community, usually, the dentist counsels their patients, mainly by print media and articles. Nowadays, digital media is the preferred source for creating awareness. Through digital media, the dentist should upload care series, oral health-related education material, survey findings, symptoms, treatment plan, etc. Therefore, this study aimed to assess the impact of social media on esthetic dental treatment choices in general population in Pune city.

MATERIALS AND METHODS

A questionnaire study was conducted among general population to assess the impact of social media on esthetic dental treatment choices. The objective of this study was to evaluate the effect on social media esthetic dental treatment choices among the general population in Pune city (India). The study duration was 3 months. The input parameter for sample size calculation used as follows: 90% power of the study, alpha error 0.05, effect size 0.3 (small), and degree of freedom as 5. The calculated sample size was 183 using G* Power software version 3.1.9.2 (Henrich Heine University, Dusseldorf). The final considered sample size for the study was around 152 participants. The convenient sampling technique was used in the study. A structured, self-administered, and closed ended questionnaire was designed to collect data which considered of two parts and comprised 24 questions related to use of social media. The first part consisted of demographic data such as gender and age and second part consisted of knowledge-, attitude-, and practice-related questions. The questionnaire was prepared using Google Forms (Google LLC, Mountain View, California, United States) and link was distributed to the selected participants through Email, WhatsApp, and other social media platforms. The reliability statistics were calculated and Cronbach alpha value was 0.685. A brief introduction about the study was given and informed consent was also taken from all the participants. Data collected were entered in a spreadsheet (Microsoft Excel, 2016). Statistical analysis was done using descriptive statistics (number and percentage) Statistical Package for the Social Science 23.0 version software (IBM Chicago, Illinois, United States). P-value was set at 0.05 or 5%.

RESULTS

In Table 1, there were a total of 152 participants between 18 and 58 years of age. Out of 152 participants, there were 89 males and 63 females. In Table 2, out of 152 responses, 96.1% use social media and 3.9% does not use social media. About 49.3% use all the above given social media apps and 38.8% use social media 1–3 h/day, and 28.3% use <1 h/day.

Table 1: Demographic details of the study participants

SrNo	Demographic details	Response	Number(n)	Percentage	Total n (%)
1	Age	18–58 years	151	100	151 (100)
2	Gender	Male	89	58.6	152 (100)
		Female	63	41.4	

Around 83.6% of participants have come across advertisement regarding dental treatments on social media. About 65.8% of participants follow dentist/dental awareness-related page on social media and 34.2 people do not follow any such page. About 65.1% of people find relevant information about esthetic dental treatment on social media. The majority of participants supported that dentists should spread awareness regarding oral health through social media (60.5%) and only a few participants (2%) were not in favor for this. About 80.3% of participants choose a dentist/dental clinic based on reviews and 19.7% of people do not choose a dentist based on reviews. About 40.7% of people visit dentist every 3 months a year and almost 13.3% of people never visit a dentist. About 80.3% of people get affected by the activity of dentist on social media, although 19.7% of participants do not get affected by the activity of dentists on social media.

DISCUSSION

Web 2.0 technologies, known as social media or social technologies, have emerged into the mainstream of media. The use of social media is increasing among health-care providers and patients as well. The most of the participants in the study have at least one account on the social media which might give an indication that social media has a strong effect on different aspects of their lives.^[4] The highest age group that responded to the survey was 18–45 years. More than half of the subjects' (65.8%) were following a dentist or a dental clinic on social media and they significantly agree that dentist should communicate with people through social media rather than conventional media (34.2%). The majority of the participants would get affected by written experiences and criticism about dental care on social media, proving strong impact of social media. About 96.1% of total participants use social media and 49.3% of them use all of the social media platforms mentioned in the survey. Out of 96.1% of participants, 83.6% came across advertisement regarding dental treatments. About 65.8% of the respondents reported that they receive or find relevant information about esthetic dental treatment on social media.^[6] People most probably search the web to find the best dentists for their treatments and make their decisions. About 73.75% of respondents find before and after the treatment photos fascinating on social media. Hence, this shows that their decision regarding their treatments also get affected by before and after photos of treated cases.^[6] About 65.8% of the participants follow any dentists or dental awareness-related page on social media which is in contrast to a study conducted by Parmar *et al.*, where a total of 64% (296/460) never searched their medical doctors and dentists on social media.^[6] This result has enlightened the need to encourage dental professionals to invest more time and efforts in making their social media accounts more attractive and interactive.^[6] About 34.9% of the respondents of our study do not follow any dentist or dental

Table 2: Knowledge-, attitude-, and practice-related questions of the study participants

Sr. No.	Questions	Responses	Number (n)	Percentage	Total n (%)
1	Do you use social media	Yes	146	96.1	152(100)
		No	6	3.9	
2	What platforms do you use	Facebook	17	10.5	152(100)
		Instagram	32	21.7	
		WhatsApp	22	14.5	
		All of the above	75	49.3	
		Any other	6	9.1	
3	How often do you use social media	<1 h/day	43	28.3	152(100)
		1–3 h/day	59	38.8	
		3–6 h/day	39	25.7	
		>6 h/day	10	7.2	
4	Have you come across any advertisement regarding dental treatment on social media	Yes	127	83.6	152(100)
		No	25	16.4	
5	Have you come across any esthetic enhancement dental procedure on social media	Yes	118	77.6	152(100)
		No	34	22.4	
6	Do you follow any dentist/dental awareness-related page on social media	Yes	100	65.8	152(100)
		No	52	34.2	
7	Do you find relevant information about esthetic dental treatment on social media	Yes	99	65.1	152(100)
		No	53	34.9	
8	Do you know about veneers/ laminates used for smile designing	Yes	97	63.8	152(100)
		No	55	36.2	
9	Have you heard about bleaching procedures for whitening teeth	Yes	105	68.9	152(100)
		No	47	31.1	
10	Do you think that dentist should spread awareness and communicate regarding oral health through social media	Strongly agree	92	60.5	152(100)
		Agree	36	23.7	
		Neutral	17	11.2	
		Disagree	4	2.6	
		Strongly Disagree	3	2	
11	Do you think that good appearance plays an important role for an individual in the society	Strongly agree	95	62.5	152(100)
		Agree	38	25	
		Neutral	11	7.2	
		Disagree	5	3.2	
		Strongly Disagree	3	2.1	
12	Do you wish to have teeth like celebrities	Yes	113	74.3	152(100)
		No	39	25.7	
13	Does repeated exposure of dentistry-related posts on social media affect your approach regarding oral health	Yes	102	67.1	152(100)
		No	50	32.9	
14	Would you choose a dental clinic/dentist based on advertisement by a celebrity on social media?	Yes	93	60.9	151(100)
		No	59	39.1	
15	Do you find before and after treatment photos fascinating on social media	Yes	112	73.7	152(100)
		No	40	26.3	
16	Do you think that reviews have any impact on your treatment/clinic choices	Yes	122	80.3	152(100)
		No	30	19.7	
17	Does your decision get affected by activity of a dentist on social media	Yes	120	80.3	151(100)
		No	30	19.7	
18	Do you ask your friend or family members about dental clinic where they were treated in	Yes	125	82.8	151(100)
		No	26	17.2	

(Contd...)

Table 2: (Continued)

Sr. No.	Questions	Responses	Number (n)	Percentage	Total n (%)
19	How often do you visit dentist	Every 3 months	61	40.7	150(100)
		Every 6 months	43	28.7	
		Every year	27	17.3	
		Never	20	13.3	
20	Are you satisfied with your smile	Yes	120	79.5	151(100)
		No	31	20.5	
21	Which type of filling do you prefer in your teeth	Tooth colored	118	77.6	152(100)
		Silver (amalgam)	20	13.2	
		Gold colored	3	2	
		Other	11	7.2	
22	How often do you professionally clean your teeth	Every 3 months	73	48.3	151(100)
		Every 6 months	33	21.9	
		Yearly	16	10.6	
		Never	29	19.2	

page, so people do not depend solely on social media as a source of information.^[6] About 62.5% of the respondents strongly agreed that good appearance plays an important role for an individual in the society.^[6] Significant number of participants believe that dentist should communicate with the people through social media which was in accordance to the study conducted by Thackeray *et al.*, where the participants appreciated the social media communication of health-care providers.^[6] In our study, the majority (82.3%) of the participants were affected by their family or friends dental treatments. This was in accordance with a study conducted by Fox *et al.*, where 68% of all adults request health information from a friend or family member.^[6] The majority of the participants (65.8%) were affected by the criticism of dentist on social media which is similar to the study conducted by Amdahl *et al.*⁴. About 67.1% of the respondents get affected by the advertisements seen on social media regarding their oral health. The limitation of the study was a small sample size. The study could have been conducted on a large sample size.

RECOMMENDATIONS

1. Dentists should educate and spread awareness regarding oral health through social media.
2. Population should be able to evaluate the authenticity of the content viewed on social media.

CONCLUSION

Even though social media is a great source for both educating and connecting, it is not uncommon nowadays for patients to find a dentist based on the opinions of a social media influencer. This can cause a great challenge to the practitioners particularly when trying to achieve unattainable goals. Patients should

know that procedures are not cheap. It is our responsibility to give patients honest advice. In my opinion, it is ultimately the patient's idea about what their desired dental appearance should look like. However, the path to achieving this is often filled with various difficulties including interpretive, psychological, ethical, artistic, mental, and legal problems.

REFERENCES

1. Grewal N, Kaur M. Status of oral health awareness in Indian children as compared to Western children: A thought provoking situation (A pilot study). *J Indian Soc Pedod Prev Dent* 2007;25:15-9.
2. AlJehani Y, Baskaradoss J, Geevarghese A, Alshehry M. Current trends in aesthetic dentistry. *Health* 2014;6:1941-9.
3. Binalrimal S. The effect of social media on the perception and demand of aesthetic dentistry. *IOSR J Dent Med Sci* 2019;18:69-73.
4. Al Awdah AS, Ali BB, Al Twaim S, Al Habdan AA. The power of social media on esthetic dental treatment choices in Arabian Gulf region. *Int J Dent Oral Health* 2019;4:1-5.
5. Ventola CL. Social media and health care professionals: Benefits, risks, and best practices. *P T* 2014;39:491-20.
6. Almozainy M. Assessing the use of social media as a source of information related to dentistry in Saudi Arabia. *J Dent Health Oral Disord Ther* 2017;8:663-8.
7. Afroz S, Rathi S, Rajput G, Rahman SA. Dental esthetics and its impact on psycho-social well-being and dental self-confidence: A campus based survey of north Indian university students. *J Indian Prosthodont Soc* 2013;13:455-60.
8. Mir H, Shivalingesh KK, Gupta A, Srivastava D, Saleem A, Ashraf W. The impact of using social media on dental treatment: An online survey. *Int Health Res J* 2020;3:358-62.

HOW TO CITE THIS ARTICLE:

Nagarale R, Todkar M, Kane M, Rokadia A, Khan A, Ara A. Assessment of Impact of Social Media on Esthetic Dental Treatment Choices in General Population in Pune City. *Int J Prevent Public Health Sci* 2022;8(1):7-10.