

Prevalence of Social Media Use for Dental Information Among Dental Professionals

Sachin Naik^{1,2*}, Darshan Devang Divakar¹, Chitra Jhugroo¹

¹Department of Dental Health, College of Applied Medical Sciences, King Saud University, Riyadh, 11433, Saudi Arabia

²Public Health, Texila American University, South America, Guyana

Abstract

Social media is a powerful tool most used among dental professionals. The present study assessed the prevalence of SM usage for dental information among dental professionals. A descriptive cross-sectional study was conducted among dental professionals Riyadh, Saudi Arabia. The questionnaire consisted of demographic data of study participants and questions to assess the prevalence and type of SM use. Study results showed Twitter (24%), Instagram (19%), and YouTube (18%) are the three most popular SM platforms utilized by dental professionals, respectively. Prevalence of SM use among dental professionals for dental information.

Keywords: *Dentists, Dental professionals, Descriptive study, Social media, Twitter, YouTube.*

Introduction

In a time when smartphones and the internet are widely used and have a big impact on individuals, businesses, and society worldwide, social media (SM) has emerged as a transformative power. This extensive use highlights the need for a more detailed study of its impacts, especially on sensitive target populations [1].

The use of SM by dental professionals is expanding daily, becoming a tool that enables them to interact, learn, become involved professionally, and aid in dental treatment [2]. Web 2.0 and SM were initially developed solely for social purposes. WhatsApp, Snapchat, Facebook, Instagram, Twitter, YouTube, and other services are examples of Web 2.0 [3]. From SM, individuals can read papers, listen to lectures from experts, look up medical breakthroughs, and consult with peers about patient-related problems. SM offer a platform for sharing experiences and ideas, debating practical concerns, referring patients,

publicizing their research, marketing their practices, and advancing health [4].

Dental practitioners often discuss dental health on these SM sites. SM networks can quickly share knowledge, dentistry marketing, case reports, research, and news, as well as misinformation through photos, videos, and blogs. There has been an increase in the use of SM in Europe for health communication, with about 22% of Norwegian hospitals adopting Facebook as an SM platform for health-related communication. Better brand awareness and patient contacts that leave a favourable impression practically cut costs while improving business sustainability [5].

Some of the previous studies investigated dental practitioners and their SM use [6-8]. A Saudi Arabian survey revealed that SM improves clinical abilities and knowledge [9]. Even though reputable sources are rare, YouTube's clinical skill-improving videos help dentists do some tasks [10].

SM has been used in dental advertising recently. To compete in the modern industry,

Received: 11.10.2023

Accepted: 16.10.2023

Published on: 29.12.2023

*Corresponding Author: sachinnaiksln@gmail.com

dentists must use these technologies to build strong patient relationships [11, 12]. A survey of Saudi dentists found that one-third use SM for marketing and practice management. Another study found that 80% of individuals said SM influences dental selection [13].

Therefore, the present study aimed to assess the prevalence of SM usage for dental information among dental professionals.

Materials and Methods

Study Area and Period

A descriptive cross-sectional study was used for the current study. Participants in the study were dental professionals from Riyadh, Saudi Arabia.

Study Population

Dental professionals from Riyadh City, Saudi Arabia.

Eligibility

Inclusion Criteria

Dental professionals who were willing to participate in the study and provided informed consent (>18 years of age)

Exclusion Criteria

Dental professionals who have retired or are not practicing during data collection.

Sample Size and Sampling Technique

Data on dentists was gathered from the Saudi Commission for Health Specialties (SCHS), and the number of registered dentists was derived from previously published studies[14]. In Riyadh, licenses to practice dentistry have been issued to 5,211 dentists.

Sample Size Calculation

The sample size was calculated using the

formula:

Sample size derived at 95% confidence interval through the equation.

$$\text{Sample Size } (n) = \frac{Z^2 \frac{\alpha}{2} P (1 - P) D}{E^2}$$

Z=1.96.

P= 50% (if 50% of participants use SM)D (Design effect) = 2.5.

E (Margin of error) = 12%.

Considering the correction factor (response rate of 60%), the sample size derived was 1100.

The minimum required sample size was 1100, but we collected 1192 to boost the credibility of the results.

Data Collection Tool and Procedure

The questionnaire was comprised of two sections. Section one consisted of demographic data of study participants. The second section consisted of questions to assess the prevalence and type of SM use. The questionnaire response was made through email.

Data Analysis

Descriptive statistics were used for all sample inferences and questionnaire questions to obtain the means and frequencies.

Results

A total of 1192 responded to the questionnaire. Our findings showed that there were more dentists between the ages of 21 and 30 (45%) (Figure 1), and that there were more men (68%) than women (32%) dentists (Figure 2). More dentists (Table 1) have one to five years of experience (51%). Our findings show that younger dentists utilize SM more frequently than older dentists, consistent with a prior Saudi Arabian study.

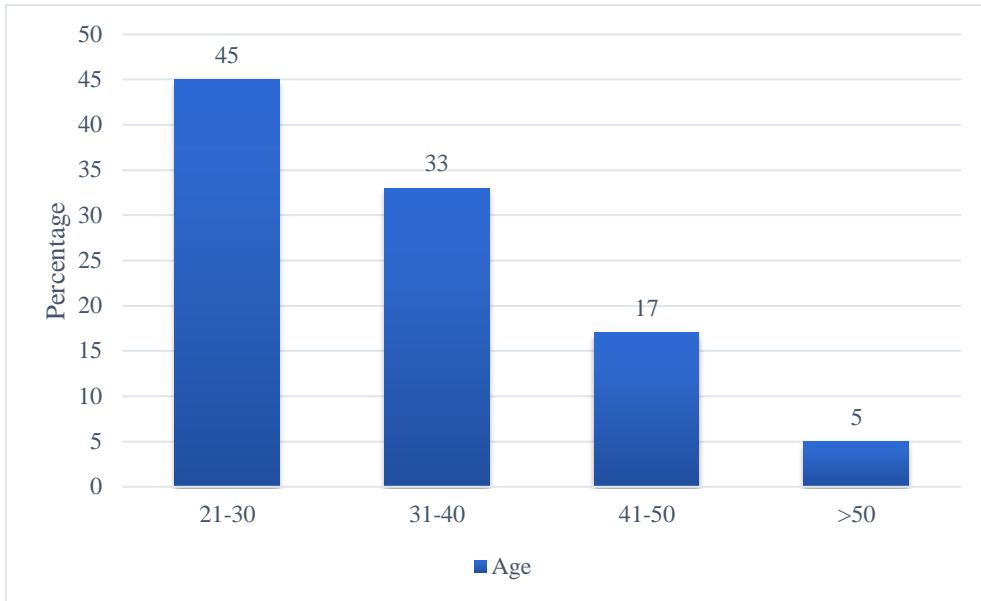


Figure 1. Age Distribution of Study Participants

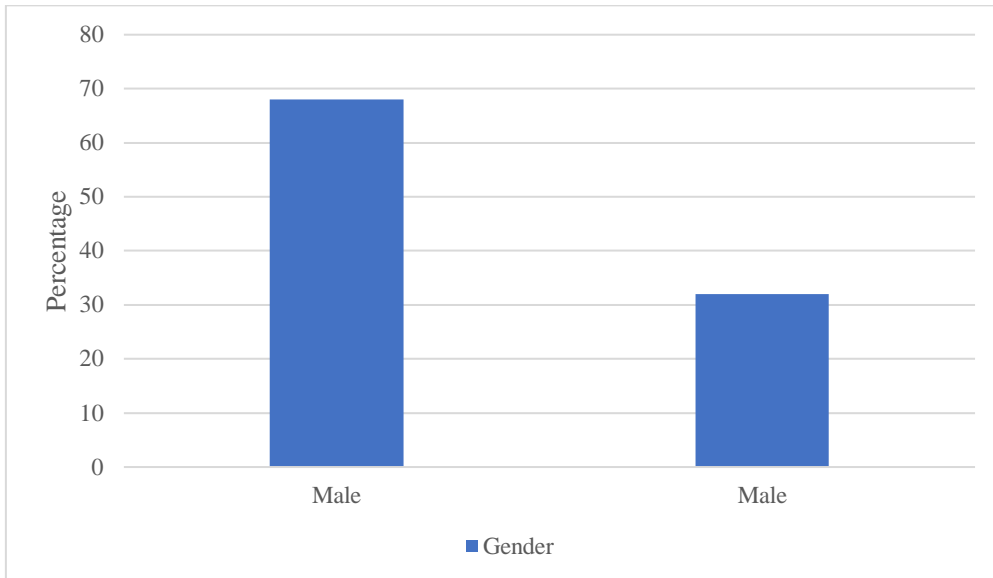


Figure 2. Gender of the Study Participants

Table 1. Demographic Details of Participants

Characteristic		Number(N)	(%)
Gender	Female	379	32
	Male	813	68
Speciality	General Dentist	430	36
	Specialist	762	64
Sector	Private	764	64
	Government	428	36
Experience (Year)	1-5	612	51
	6-10	348	29
	>11	232	20

Twitter (24%) and Instagram (19%), and YouTube (18%) are the three most popular SM platforms utilized by dental professionals,

respectively, according to our report's results (Figure 3).

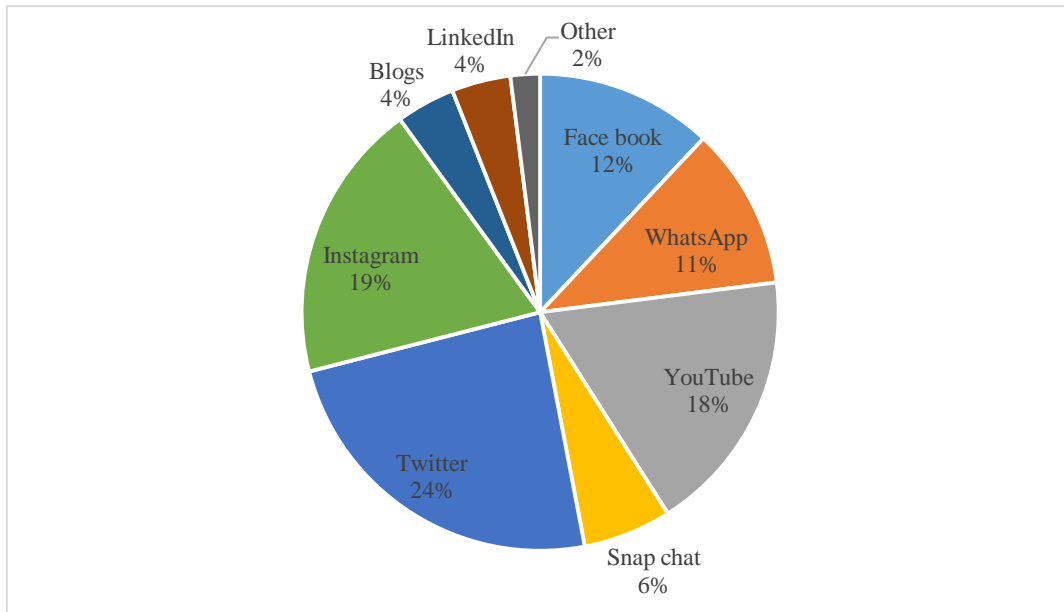


Figure 3. Social Media Application Commonly Visited by Dentists to Attain Information for Dental Professional

Discussion

Our study shows there is a high prevalence of SM using dental professionals for dental information. A study was carried out to examine the SM usage of US dentists' practices. SM was used by 52% of dental offices, with Facebook being the most often used network. 91% of the time, marketing was done mostly through SM. Dentists under the age of 45 were more likely than dentists over the age of 45 to use SM professionally [15].

According to a prior study from Saudi Arabia, SM is frequently utilized in practice and serves as a marker of a successful dental practice [16]. In a significant study conducted in California with 42,087 participants, the internet was used to obtain health-related information by more than half of the participants. The participants were mostly young ladies from higher socioeconomic groups [17]. Due to the growing popularity and accessibility of mobile devices, SM usage is increasing [17, 18]. A study investigated Saudi dentists' views on SM in their daily practices and its potential downsides. Most respondents (80%)

believe SM actively influences patients' healthcare provider choices [19]. A previous study reported that 67% of people used internet SM for any use and 26% were for health information [26, 27].

Our study found that twitter was used more compared to other SM. Since they are only 10 and 14 years old, younger dentists may use Twitter, Instagram, and Snapchat more frequently. As a result, SM groups may have a greater impact on their generations [19]. Our study showed that, despite its popularity, Facebook is underutilized. Facebook chats, in contrast to Twitter, are frequently private. YouTube is utilized more frequently than Facebook, maybe due to its popularity in showcasing treatments and Facebook will not publish breaking news or popular ideas [20, 21]. A study conducted showed dentists use SM more for work. About 70% of US healthcare companies use SM, with Facebook, Twitter, and YouTube being the most popular [3]. According to Khalid A et al, WhatsApp (m = 6.13 days), Snapchat (m = 5.33) and Instagram (m = 4.63) are the SM networks that are utilized the most

regularly on a weekly basis among dental students and dentists in Saudi Arabia [22].

An earlier study examined the attitudes, professionalism, and SM usage among Saudi Arabian dental students and dentists. The most often cited professional uses were observing clinical activities (80.49%), discovering new information (79.59%), learning from peers (61.1%), and talking with patients (5.76%) [22]. A study was conducted in India to investigate how SM use impacts clinical practice among dental college faculty members. Of the participants, 64.8% claimed to utilize SM for work-related purposes. More than 62.5% of people utilized SM to share stories and opinions with colleagues. 39.8% of participants said it may improve patients' medical care level [23].

An earlier study in Saudi Arabia revealed the demographic and sociological elements that influence dentists' use of SM, as well as the implications of this use on dental practice. 52% of the 338 dentists who participated in the study used SM for business purposes. Twitter was used the most (35%) of any platform. The most common reason for using SM was for education (43%), and fun (8%) [16].

Muhammad WJ et al. conducted research in Pakistan to examine how postgraduate students in the Bachelor of Dental Surgery (BDS) programs use SM. According to the findings, most respondents use Facebook and YouTube more frequently than other social networking sites. 87% of the respondents were users of different SM networks or organizations. Most respondents claimed that they used SM to communicate with friends and gain new

References

[1] Patil P, Pawar AM, Wahjuningrum DA, Luke AM, Reda R, Testarelli L. Connectivity, and Integration of Instagram® Use in the Lives of Dental Students and Professionals: A Country-Wide Cross-Sectional Study Using the InstaAA® Questionnaire. *J Multidiscip Healthc* 2023; Volume 16:2963–76. <https://doi.org/10.2147/JMDH.S430973>.

knowledge. 88.3% of respondents to the poll said they used SM every week for 1 to 5 hours. Most respondents said that SM had a beneficial influence on academic achievement and advised using it to discuss topics about health, patient care, and therapy [24].

A study was done to see how dental students in their third and fourth years used YouTube to learn about clinical procedures. 89% of respondents said that their dental school should post lectures on YouTube and other SM, and 95% indicated that YouTube recordings of clinical procedures were helpful learning resources. Even though YouTube is commonly utilized as a learning tool for medical operations, 36% of students doubt the scientific validity of the videos [25].

Conclusion

To conclude, the prevalence of SM use among dental professionals for dental information is high. We need an extensive research approach to examine usage patterns and decide how to meet our patients' implicit social contract professional requirements. Actions should address requirements, reduce risks that exist, and maximize opportunities as highlighted by the dental profession.

Acknowledgment

Public Health Department, Texila American University, South America, Guyana.

Conflict of Interest Statement

The authors declare that they have no conflict of interest.

[2] Alanzi T, Al-Yami S. Physicians' attitude towards the use of social media for professional purposes in Saudi Arabia. *Int J Telemed Appl* 2019;2019. <https://doi.org/10.1155/2019/6323962>.

[3] Lee Ventola C. social media and Health Care Professionals: Benefits, Risks, and Best Practices. *Pharm Ther* 2014; 39:491.

[4] Makkar N, Lawrence D, Veeresh D, Banik A,

- Kumar A, Mehar AS. Assessment of social media usage and its influence among dental faculty members in Davangere city – A cross sectional survey. *J Indian Assoc Public Heal Dent* 2021; 16:246. https://doi.org/10.4103/JIAPHD.JIAPHD_143_17.
- [5] Moorhead SA, Hazlett DE, Harrison L, Carroll JK, Irwin A, Hoving C. a New Dimension of Health Care: Systematic Review of the Uses, Benefits, and Limitations of social media for Health Communication. *J Med Internet Res* 2013;15(4)E85 <https://www.jmir.org/2013/4/E85> <https://doi.org/10.2196/JMIR.1933>.
- [6] Henry RK, Molnar A, Henry JC. A survey of US dental practices' use of social media. *J Contemp Dent Pract* 2012; 13:137–41. <https://doi.org/10.5005/JP-Journals-10024-1109>.
- [7] Bahabri RH, Zaidan AB. The impact of social media on dental practice promotion and professionalism amongst general dental practitioners and specialists in KSA. *J Taibah Univ Med Sci* 2021; 16:456–60. <https://doi.org/10.1016/J.JTUMED.2020.12.017>.
- [8] Snyman L, Visser JH. The adoption of social media and social media marketing by dentists in South Africa. *SADJ* 2014; 69:262–4.
- [9] Al-Khalifa KS, Al-Swuaiem AS, AlSheikh R, Muazen YY, Al-Khunein YA, Halawany H, et al. The use of social media for professional purposes among dentists in Saudi Arabia. *BMC Oral Health* 2021; 21:1–8. <https://doi.org/10.1186/s12903-021-01390-w>.
- [10] Ustidal G, Guney AU. YouTube as a source of information about orthodontic clear aligners. *Angle Orthod* 2020; 90:419–24. <https://doi.org/10.2319/072419-491.1>.
- [11] Affendi NHK, Hamid NFA, Razak MSA, Nudin III. The Pattern of Social Media Marketing by Dentist in Malaysia. *Malays Dent J* 2020; 1:24–42.
- [12] Simplício AH de M. social media and Dentistry: ethical and legal aspects. *Dental Press J Orthod* 2019; 24:80. <https://doi.org/10.1590/2177-6709.24.6.080-089.SAR>.
- [13] Ajwa N, Mohsen S Al, Kuwail A, Osaif E Al. The Impact of Using Social Media Networks on Dental Treatment Marketing in Saudi Arabia: The Practitioners and Patient 's Perspectives The Impact of Using Social Media Networks on Dental Treatment Marketing in Saudi Arabia: *The Practitioners and Pati. J Oral Heal Dent Sci* 2018; 2:1–10.
- [14] AlBaker AA, Al-Ruthia YSH, AlShehri M, Alshuwairikh S. The characteristics and distribution of dentist workforce in Saudi Arabia: A descriptive cross-sectional study. *Saudi Pharm J* 2017; 25:1208–16. <https://doi.org/10.1016/j.jsps.2017.09.005>.
- [15] Henry R, Molnar A, Henry J. A survey of US dental practices' use of social media. *J Contemp Dent Pract* 2012; 13:137–41. <https://doi.org/10.5005/JP-JOURNALS-10024-1109>.
- [16] Hamasha AA-H, Alghofaili N, Obaid A, Alhamdan M, Alotaibi A, Aleissa M, et al. Social Media Utilization among Dental Practitioner in Riyadh, Saudi Arabia. *Open Dent J* 2019; 13:101–6. <https://doi.org/10.2174/1874210601913010101>.
- [17] Din H, McDaniels-Davidson C, Nodora J, Madanat H. Profiles of a Health Information-Seeking Population, and the Current Digital Divide: Cross-Sectional Analysis of the 2015-2016 California Health Interview Survey. *J Med Internet Res* 2019;21: e11931. <https://doi.org/10.2196/11931>.
- [18] Number of social media users 2025 | Statista n.d. <https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/> (accessed November 10, 2021).
- [19] Al-Khalifa KS, Al-Swuaiem AS, AlSheikh R, Muazen YY, Al-Khunein YA, Halawany H, et al. The use of social media for professional purposes among dentists in Saudi Arabia. *BMC Oral Health* 2021; 21:1–8. <https://doi.org/10.1186/S12903-021-01390-W/TABLES/3>.
- [20] Cain J, Policastri A. Using Facebook as an Informal Learning Environment. *Am J Pharm Educ* 2011; 75:1–8. <https://doi.org/10.5688/AJPE7510207>.
- [21] Sevil JSA, Navarro JL, Bernal-Agustín JL. Youtube & Facebook as educational tools in the teaching-learning process. experience in higher education. *ICERI2014 Proc* 2014:940–9.
- [22] Aboalshamat K, Alkiyadi S, Alsaleh S, Reda R, Alkhaldi S, Badeeb A, et al. Attitudes toward social media among Practicing Dentists and Dental Students in Clinical Years in Saudi Arabia. *Open Dent J* 2019;

13:143–9.

<https://doi.org/10.2174/1874210601913010143>.

[23]Makkar, Lawrence D, Veeresh D, Banik A, Kumar A, Mehar AS. Assessment of social media usage and its influence among dental faculty members in Davangere city – A cross sectional survey. *J Indian Assoc Public Heal Dent* 2021; 16:246.

https://doi.org/10.4103/JIAPHD.JIAPHD_143_17.

[24]Javed MW, Bhatti R. Usage of social media by Medical and Dental Students at Nishtar Medical College, Multan, *Pakistan. J Hosp Librariansh* 2015; 15:53–64.

<https://doi.org/10.1080/15323269.2015.982031>.

[25]Burns LE, Abbassi E, Qian X, Mecham A, Simeteys P, Mays KA. YouTube used among dental students for learning clinical procedures: A multi-institutional study. *J Dent Educ* 2020; 84:1151–8. <https://doi.org/10.1002/JDD.12240>.

[26]Fox S, Duggan M. *Health Online* 2013. vol. 15. 2013.

[27]Almozainy M. Assessing the Use of social media as a Source of Information Related to Dentistry in Saudi Arabia. *J Dent Heal Oral Disord Ther* 2017;8. <https://doi.org/10.15406/jdhodt.2017.08.00312>.