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Original Article

The impact of social media on dental practice promotion and professionalism amongst general dental practitioners and specialists in KSA

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المخلص

أهداف البحث: تقييم هذه الدراسة في المقام الأول أنماط استخدام وسائل التواصل الاجتماعي بين ممارسو طب الأسنان العامون والمتخصصون في المملكة العربية السعودية. والهدف الثاني من هذه الدراسة هو تقييم تفضيلات وسائل التواصل الاجتماعي من المجموعة المختارة للترويج لممارساتهم ومدى الإحتراف المهني لديهم أثناء استخدام وسائل التواصل الاجتماعي.

طرق البحث: تم تطوير استبانة إلكترونية وتوزيعها على أطباء الأسنان والمتخصصين المسجلين في المملكة العربية السعودية من خلال منصة الجمعية السعودية لطب الأسنان. وتتألف الاستبانة من أسئلة مغلقة مع اختيار إجابات محددة مسبقاً وتشمل التركيبة السكانية، وأعراض استخدام شبكات التواصل الاجتماعي، والطرق التي قد تؤثر بها شبكات التواصل الاجتماعي على الاحتراف المهني.

النتائج: استجاب 238 من ممارسي طب الأسنان العامين واختصاصي طب الأسنان من مختلف الأعمار. وأظهرت البيانات أن 41% من المستجيبين يستخدمون وسائل التواصل الاجتماعي بالتساوي للأغراض الشخصية، والمهنية، والأعمال. وكان برنامج الإنستجرام هو الأكثر استخداماً على منصة وسائل التواصل الاجتماعي للإعلان حيث يعتبر من أقوى وسائل الإعلام بين المستجيبين. نادراً ما نشر 43% من المشاركين الحالات المرضية على وسائل التواصل الاجتماعي. ومع ذلك، لوحظ تباين كبير بين التخصصات.

الاستنتاجات: الاستخدام غير الملائم لوسائل التواصل الاجتماعي يمكن أن يؤدي إلى قضايا أخلاقية تتعلق بخصوصية المرضى وحماية البيانات التي قد تؤثر سلباً

على مهنة طب الأسنان. لذلك، يجب وضع إرشادات وسياسات يمكن أن تنظم استخدام وسائل التواصل الاجتماعي لتبادل البيانات السريرية من قبل المتخصصين في طب الأسنان.

الكلمات المفتاحية: ممارسو طب الأسنان؛ التسويق؛ المهنية؛ وسائل التواصل الاجتماعي؛ المتخصصين

Abstract

Objective: This study primarily assesses the social media use patterns of general dental practitioners and specialists in KSA. To fulfil its secondary objective, the study evaluates the social media preferences of the selected cohort for promoting their practice, and their extent of professionalism while using social media.

Method: An electronic questionnaire was developed and administered to all registered dentists and specialists in KSA through the Saudi Dental Association platform. The questionnaire comprised closed-ended items with a choice of predefined answers that covered demographics, reasons for using social media, and the ways in which social networking might affect professionalism.

Results: A total of 238 general dental practitioners and specialists from various age groups answered the questionnaire. The data revealed that 41% of the respondents used social media equally for personal, professional, and business purposes. Instagram was the most commonly used social media platform for dental practice promotion, and also regarded as the most powerful platform by all respondents ($p = 0.0009$). Thirty-four percent of the respondents rarely posted their own clinical cases on social media. However, a significant difference was observed amongst the specialities ($p = 0.01$).

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Conclusion: Inappropriate use of social media can cause ethical issues regarding patient confidentiality and data protection that may lead to negative perceptions of dental professionalism. Therefore, guidelines and policies should be established to regulate dental practitioners' use of social media for sharing clinical data.

Keywords: Dental practitioners; Marketing; Professionalism; Social media; Specialists

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Introduction

Social media has become an integral part of modern life. It is defined as a form of electronic communication that disperses users' content throughout networking sites. Various technologies and gadgets such as cell phones, tablets, and computers are used to electronically promote engagement, sharing, social interaction, and collaboration within society.¹ Presently, numerous social media platforms are available, including Snapchat, Facebook, Instagram, WhatsApp, Twitter, and YouTube. According to a Hootsuite report, YouTube, WhatsApp, and Facebook have been the most popular and frequently used social media platforms by KSA residents.²

Although social media's original purpose was sharing daily events, it soon attracted the majority of the public to quickly become a useful mode for a wide range of meaningful activities such as education, business, marketing, and advertising. Following its global popularity, there are more than 15 million active social media users in KSA,² and this number continues to rise daily. Therefore, the importance of social media and its role in various aspects of life is considerable.

Social media has recently become popular in KSA for not only entertainment and communication but also professional education and marketing. For example, dental practitioners find it convenient to upload educational videos and presentations explaining various dental procedures for the benefit of their peers as well as dental students. Moreover, students have the opportunity to discuss key learning outcomes, diagnoses, and patient treatment planning with their mentors through virtually interactive sessions. Such approaches are highly likely to develop communication skills and critical thinking amongst students, and improve the education system.

Dental practitioners also use social media to advertise their clinics, and for marketing professional activities such as workshops and conferences. A recent study by Radu et al.³ investigated patients who had never received treatment in a particular clinic and had been influenced by the Internet to receive dental services—it highlighted the importance of social media platforms in promoting dental services and attracting new patients.

There is a rising global trend of social media utilization for marketing; a survey reported that approximately 52% of dental practitioners in the US confirmed the use of social

media mainly for marketing.¹ Several international studies have recommended the establishment of guidelines and policies to shed light on the interprofessional challenges of social media in healthcare.⁴ In certain countries, such as the US and UK, guidelines and policies for the appropriate use of social media by dental practitioners have been formed by institutions, medical organizations, and universities.⁴ In KSA, however, the power of social media platforms for the promotion of dentistry and dental practice marketing is not well recognized. Consequently, the effects of social media utilization by general dental practitioners and specialists on dental professionalism are poorly understood, and thus, misuse is a rising concern.⁵ Professionalism can be defined as “the conduct and/or behaviour of the individual in upholding the social contract between society and the profession.”⁶ Being a healthcare worker, and to fulfil the ethical requirements, dentists are required to practise a high level of professionalism.⁷ Careless use of social media elements, in the form of unethical comments, breaching a patient's confidentiality, or sharing unauthorized information, may lead to professional pitfalls—this has already generated huge interest for exploring the negative effects of social media on dental professionalism.⁸ For example, unprofessional online activities have resulted in disciplinary actions, including employment termination and being refused admission to further education programmes.⁹ Considering these consequences, the General Dental Council (GDC), UK, has published guidelines on social media use.¹⁰ Furthermore, it should be noted that the ongoing COVID-19 pandemic, which has affected most countries, has increased social media use as well as its value; in particular, there is greater fear and anxiety amongst dental care workers regarding potential infection risk due to physical contact with patients.^{11,12}

The present study aimed to assess the perception of social media use for dental practice promotion, and associated professionalism amongst general dental practitioners and specialists working in KSA through an electronic questionnaire. The primary objective was to assess these practitioners' and specialists' social media use patterns, and the secondary objective was to evaluate their social media preferences for promoting their practice, and their level of social media professionalism.

Materials and Methods

A convenient sampling technique was used, and the statistically relevant sample size was calculated using the Rao-soft sample-size calculator (Raosoft Inc., Seattle, WA, USA), considering that the number of dentists currently practising in KSA is approximately 16,887.

A questionnaire comprising 23 items on social media use was constructed and reviewed by an expert colleague for face validity. Postgraduate dental students ($n = 15$) piloted the questionnaire, and as a result, minor changes were made by rephrasing three items for better understanding. All items were closed-ended with pre-formulated answer choices, and covered the following: demographics, reasons for using social media, and social networking and professionalism. The questionnaire included an opening statement on the study

objective in clear and understandable language. It was distributed electronically via e-mail or social media platforms to general dental practitioners and specialists in KSA, and was designed to allow respondents to submit their responses only once. Responses were coded, entered, and statistically analysed with JMP Pro 12 for Macintosh, version 12 (SAS Institute Inc., Cary, NC, USA).

Results

Based on the estimated sample size calculation, 370 general dental practitioners and specialists in KSA were invited to participate. Of these, 238 agreed and answered the questionnaire, giving a response rate of 64% (Figure 1A). There was no significant difference between the proportion of general dental practitioners (49%) and specialists (51%). Thirty-seven percent were male and 63% were female. The most frequently used social media platforms amongst them were YouTube and Instagram (75%), followed by Snapchat (70%) (Figure 1B). Of all the respondents, 41% used social media equally for personal, professional, and business purposes.

Only under half of the respondents were aged between 25 and 30. Approximately 23% had practised dentistry for one

to three years since graduation, while about 3% stated that they had more than 15 years' experience and used social media platforms mainly to promote their practice. There was a wide range of respondent age groups. Instagram, the most common social media platform for dental practice promotion, was considered the most powerful tool by the respondents ($p = 0.0009$).

Most of the respondents (99%) expected social media use for business to increase over the next two years. Thirty percent of the general dental practitioners agreed that dentists who use social media to interact with prospective patients are likely to gain a significant advantage over those who do not use social media. However, 43% of the respondents preferred not to answer when asked if they were using social media for professional or business promotion purposes.

Regarding educational purposes, 42% of the respondents frequently used social media platforms to obtain information on dentistry subjects or procedures, while approximately 34% stated that they often post general information that is useful to patients (Figure 2). Though 36% stated that they rarely post about their own cases, there were significant differences regarding the posting of information relating to the respondents' own cases amongst the specialities ($p = 0.03$).

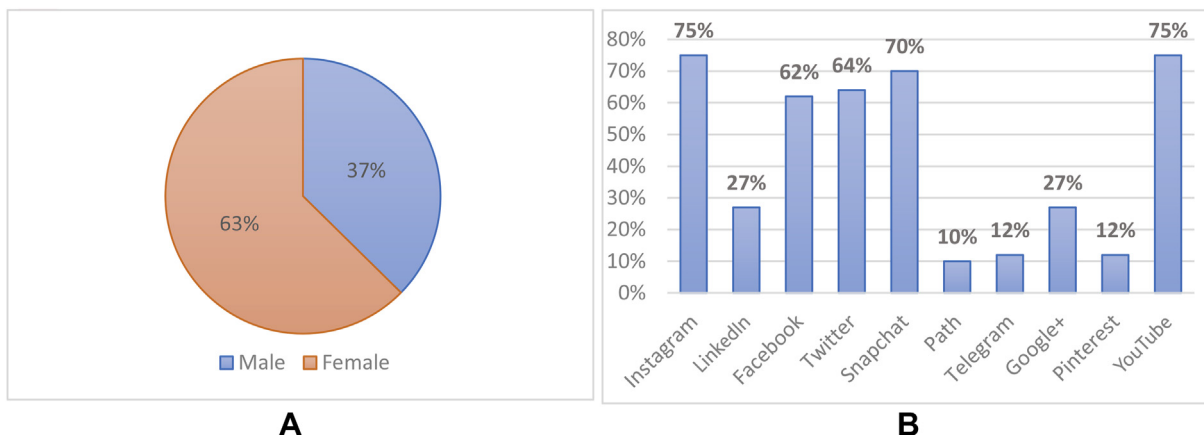


Figure 1: (A) Percentage of male and female respondents. (B) The most commonly used social media platforms amongst the respondents.

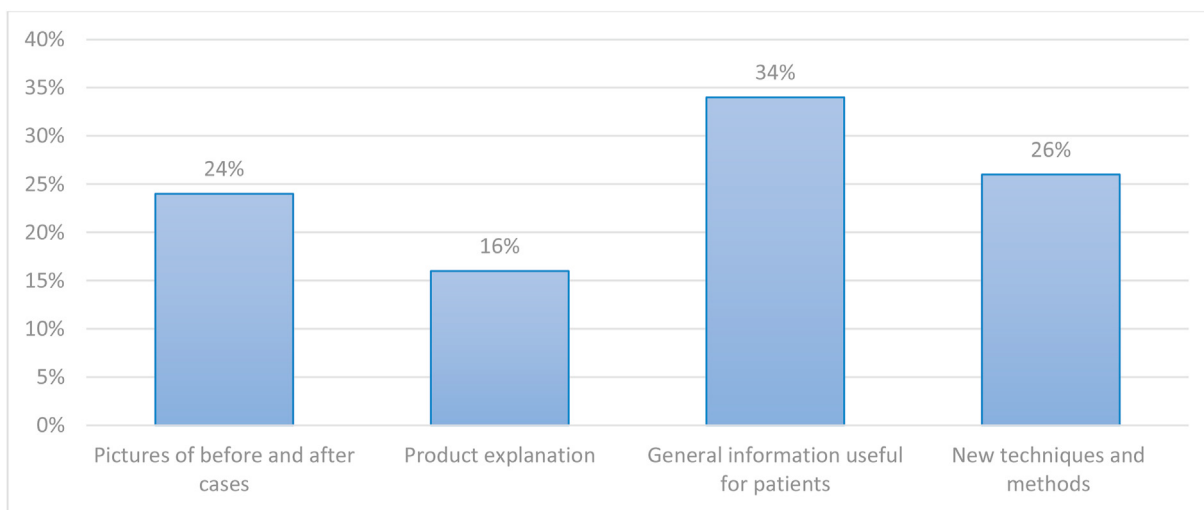


Figure 2: The most common types of dental content posted on social media platforms by the respondents.

Furthermore, more than 86% of the respondents who posted details of their cases using patients' photographs did so without the patients' verbal or written informed consent, with 65% of them assuming that the patients would not recognize themselves in the photographs. A significant discrepancy was detected ($p = 0.005$) between the respondents' actual professional levels and the reader's judgment of the same based on their social media profiles.

Discussion

Social media has become an essential element in today's world, including for dentistry. A recent article by Vasaikar et al. discusses professionalism and its importance for dental students¹³—the GDC has established a gold standard of professionalism that all dental students and team members must adhere to at all times; the article emphasizes the importance of social media presence, and more importantly, how dental students can utilize the platforms appropriately. To the best of our knowledge, the present study is the first to consider the impact of social media on dental practice promotion and professionalism amongst general dental practitioners and specialists in KSA. The results show that YouTube was the most visited platform amongst the respondents, which is in agreement with the findings reported in *Social Media in the Middle East: 2019 in Review*²—according to the study by Knösel et al., this report reveals the availability of a wide range of information on YouTube for dental practitioners; while the purpose of the videos has been observed to fluctuate between advertising and educational, the study confirmed that YouTube plays a major role in dental education, and dentists and dental educators should appreciate the role of these platforms in their profession and how they impact public opinion.²

Considering the wide reach of social media and the fact that it is not used solely for personal purposes, dental practitioners are expected to become more involved in it and use it effectively for various purposes, including marketing, communication, and connecting with patients.⁸ This was confirmed by the present study's finding of 41% of the respondents utilizing social media equally for personal, professional, and business purposes. Moreover, 99% of the respondents expect social media use for business to increase over the next two years. This highlights the considerable impact social media may have on the future of marketing and promotion in dentistry.

Twenty-one percent of the respondents reported that social media platforms are significantly beneficial for their business. Additionally, 30% of the general dental practitioners believed that dentists who use social media to interact with prospective patients are likely to gain a significant advantage over those who do not regularly use social media. On the other hand, establishing effective direct relationships with patients is dentists' main priority because such relationships will encourage patients to return for further services.⁹ The results of the respondents with more than 15 years of experience in the field support this, as only 3% of them stated that they use social media to promote their practice; this low proportion could be because expert dental practitioners have developed strong relationships with

patients, and consequently, do not need to promote their work through social media.

Earlier, media outlets such as newspapers, magazines, radio, and TV were the main advertising channels. Now, however, the importance of online advertising is increasing, especially social media, which allows patients to interact with dental practitioners in a way that was not possible previously. This was confirmed by Kristin et al., in 2015 who found that compared with traditional advertising methods, social media marketing is superior when it comes to cost and efficiency of promoting services and products.¹⁴

Forty-nine percent of the respondents in the present study reported Instagram as the most powerful platform for advertising. However, an online survey conducted by the Levin Group Data Center between July and November 2015 showed that Facebook was the most common platform amongst dentists, and approximately 88.8% of them used it to promote their services.¹⁵ This information could assist dental practitioners in determining which platform has the greatest impact in their region and is, thus, the most suitable for their purposes.

Forty-two percent of the respondents frequently used social media platforms to obtain information on dental subjects or procedures—this finding is similar to that of Henry et al. who, in 2012, found that 37% of adults in the US use social media to source information about dental and general healthcare.¹ However, there were significant differences when it came to posting of information about respondents' own cases amongst the specialties ($p = 0.03$). This supports the study by Jorgensen et al., which revealed the importance and benefits of social media use for communicating and attracting new patients to an orthodontic practice.¹⁶

A study by Holden in 2017 showed that healthcare social media can have a positive effect on the relationship between physicians and their patients. However, health professionals are still deliberating over the appropriate relationship between social media and health.¹⁷ The present study found that 34% of the respondents often post general information useful to patients on their social media accounts; however, 34% of the respondents rarely post about their own cases.

Professionalism, mainly regarding patient confidentiality and communication skills, is difficult to measure and teach.¹⁸ Inappropriate use of social media may expose unprofessionalism amongst dental practitioners. This is indicated by the result of the present study that shows 86% of the respondents who had posted patient photographs doing so without the patients' verbal or written informed consent, with 65% assuming that the patients would not recognize themselves in the photographs. Furthermore, a significant discrepancy was observed ($p = 0.005$) between the respondents' professional levels and the reader's judgment of the same based on their social media profiles. This supports the study of Edwards et al. that highlighted social media as an important and powerful tool for reputation management.¹⁹ The 2017 study by Holden has suggested a protocol that dental practitioners must consider to decide whether or not a particular social media post will be suitable.¹⁷ The present study has a few limitations. First, social media statistics are dynamic and

can change over time. Second, the popularity of social media platforms may differ between different countries, making the comparison of data more challenging.

Conclusion

This study highlights the power of social media platforms in dentistry and dental practice promotion, because almost all of the respondents expect social media to promote business growth over the next two years. There is room for growth regarding the use of these platforms amongst dentists, since a third of the respondents stated that they rarely post about their own clinical cases. Furthermore, the discrepancy between the respondents' professional levels and the reader's judgment of the same based on their social media profiles could negatively impact the perception regarding dentists' professionalism.

Recommendations

Dental practitioners should use social media platforms responsibly and not breach the code of professional ethics. Guidelines and policies for the ethical use of social media by dentists should be established by the regulatory bodies, including the Saudi Commission for Health Specialties and Ministry of Health in collaboration with the Communications and Information Technology Commission in KSA.

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Conflict of interest

The authors have no conflicts of interest to declare.

Ethical approval

This protocol was approved by Taibah University, College of Dentistry Research Ethics Committee (TUCDREC) with reference TUCDREC2017022Zaidan dated 26th February 2017.

Authors contributions

AZ developed the theoretical formalism and collected the data. RB performed the analytical calculations and numerical simulations. AZ wrote the manuscript's initial draft, while RB modified the final draft and supervised the project. All authors critically reviewed and approved the final draft, and are responsible for the content and similarity index of the manuscript.

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