

**Republic Of Iraq Ministry of Higher
Education And Scientific Research
AL Mustaqbal University Faculty of Dentistry**



The Role of Social Media on Oral Health

This research is submitted as part of the requirements for the degree of Bachelor of Dental Surgery (BDS), College of Dentistry, AL Mustaqbal University

by:

Maab Alaa Mohsin

Fatima Daaa Abdul Ameer

Aya Alaa Khudhair

Al-Huda Ahmed Rawdhan

Zahraa Ayad Faisal

Ranya Ehssan shaker

Supervised by:

Lect.Dr. Ammar Hadi Shaalan

(Graduation year 2025-2026)

Quotation

بِسْمِ الرَّحْمَنِ الرَّحِيمِ
(يَرْفَعِ اللَّهُ الَّذِينَ آمَنُوا مِنْكُمْ وَالَّذِينَ أُوتُوا الْعِلْمَ دَرَجَاتٍ)
صدق الله العلي العظيم

I certify that this project entitled " The Role of social media on Oral Health "was prepared by:

Maab Alaa Mohsin

Fatima Diaa Abdul Ameer

Aya Alaa Khudhair

Al-Huda Ahmed Rawdhan

Zahraa Ayad Faisal

Ranya Ehssan shaker

under my supervision at the College of Dentistry/ AL Mustaqbal University in partial fulfillment of the graduation requirements for the Bachelor Degree in Dentistry.

Supervised by:

Lect.Dr. Ammar Hadi Shaalan

Dedication

This research is dedicated to my family, friends, and teachers for their continuous support and encouragement throughout my academic journey.

Acknowledgement

I would like to express my sincere gratitude to my supervisor Dr....., lecturers, and all staff members who guided and supported me throughout this research. Special thanks to my family and friends for their encouragement and understanding during the course of my studies.

abstract

Background:

Oral health is a fundamental component of overall health and well-being. With the rapid expansion of digital communication, social media has become a widely used platform for accessing health-related information. It plays an important role in raising awareness, shaping perceptions, and potentially influencing oral health behaviors among the population, particularly young adults.

Materials and Methods:

A descriptive cross-sectional study was conducted using a structured online questionnaire distributed through various social media platforms. A total of 457 participants from different demographic backgrounds were included. The questionnaire assessed demographic data, social media usage patterns, oral health knowledge and practices, and the perceived influence of social media on oral health behaviors. Data were analyzed using descriptive statistical methods, including frequencies and percentages.

Results:

The findings showed that the majority of participants were young adults and predominantly female. Most participants reported brushing their teeth twice daily, while dental floss use was relatively low. Instagram was the most commonly used social media platform. A considerable proportion of participants reported being influenced by visual content, particularly before-and-after dental images. Although social media contributed to increased awareness, its influence on behaviors such as dental visits was moderate. Trust in information obtained from social media varied among participants.

Discussion:

The study demonstrates that social media is an effective tool for increasing oral health awareness and influencing perceptions. However, its ability to produce consistent behavioral change remains limited. The variability in trust and preventive practices highlights the need for more reliable, evidence-based content. Greater involvement of dental professionals in delivering accurate information through social media is essential to enhance its effectiveness in promoting oral health.

List of content

Contents

Dedication	I
Acknowledgement	II
abstract	III
List of content	IV
List of tables.....	V
Introduction.....	1
Aims of the Study	4
Objectives	4
Hypotheses	5
literature review	6
1.1 Oral Health and Its Importance	6
1.2 Social Media as a Health Promotion Tool	6
1.3 Social Media and Oral Health Awareness.....	6
1.4 Gaps in the Literature.....	6
Materials and Methods.....	7
2.1 Research Design.....	7
2.2 Population and Sample.....	7
2.3 Data Collection Tool	7
2.4 Data Analysis	8
2.5 Ethical Considerations.....	8
Result	9
Impact of Social Media on Oral Health Among Individuals	17
Advantages of Social Media	17
Disadvantages of Social Media.....	18
Discussion.....	19
Conclusion	21
References.....	22

List of tables

Title	Page number
Table 1	9
Table 2	9
Table 3	10
Table 4	10
Table 5	11
Table 6	11
Table 7	12
Table 8	12
Table 9	13
Table 10	13
Table 11	14
Table 12	14
Table 13	15
Table 14	15
Table 15	16

Introduction

Oral health is a fundamental component of general health and well-being, encompassing a range of conditions such as dental caries, periodontal diseases, tooth loss, oral mucosal lesions, and oropharyngeal cancers. Globally, oral diseases remain among the most prevalent health problems, with dental caries and periodontal disease representing the greatest burden historically (Petersen et al., 2005). These conditions not only affect physical health but also have significant psychological and social consequences, particularly among children. For instance, early childhood caries (ECC) can negatively influence a child's quality of life, leading to pain, difficulty in eating, sleep disturbances, and reduced academic performance (Filstrup et al., 2003; Acs et al., 1999). Therefore, prevention through effective oral health education is essential. In recent years, the rapid evolution of digital technologies has transformed how health information is disseminated and accessed. Social media, defined as a group of internet-based applications built on Web 2.0 technology that allow users to create and exchange content, has become a dominant communication platform worldwide (Kaplan & Haenlein, 2010). Platforms such as Facebook, Twitter, Instagram, and YouTube enable individuals to connect easily, share experiences, and access information across geographical boundaries (Arnett et al., 2013). Consequently, social media has emerged as an influential tool not only for social interaction but also for health communication and education. The use of social media for health-related purposes has increased substantially over the past decade. Studies have shown that a significant proportion of individuals seek health information online, with many utilizing social media platforms to follow others' health experiences, share personal insights, and participate in health-related discussions (Fox & Jones, 2009). Additionally, platforms like Twitter have been used for health-related question-and-answer

interactions, highlighting their role as informal yet accessible sources of medical information (Fox, 2014). Public health organizations, including the Centers for Disease Control and Prevention (CDC), actively use social media to disseminate health information and engage with the public (Thackeray et al., 2012). Several motivations drive the use of social media in healthcare. One of the primary motives is health information seeking, where individuals search for information regarding diseases, treatments, and medications. Another important factor is improving healthcare efficiency, as social media enables users to compare healthcare providers, access services, and make informed decisions (Antheunis et al., 2013). In dentistry, these motivations extend to enhancing patient awareness, promoting preventive practices, and improving communication between patients and healthcare providers. In the field of dental education and practice, social media plays a multifaceted role. It serves as a platform for teaching and learning, allowing educators to share educational content and students to engage in collaborative learning beyond the classroom environment (McAndrew & Johnston, 2012; Kind et al., 2013). Research indicates that a high percentage of both educators and students actively use social media, with platforms such as Facebook, LinkedIn, and YouTube being commonly utilized for academic purposes (El Bialy & Jalali, 2015). This integration of social media into education has facilitated peer-to-peer learning, improved accessibility to educational resources, and enhanced student motivation (de Peralta et al., 2019). Moreover, social media has become an important tool in dental practice, particularly in marketing and patient engagement. Dental professionals use these platforms to showcase clinical work, promote services, and attract potential patients. This approach is considered cost-effective and allows practitioners to better understand patient needs and preferences (Ajwa et al., 2018; Ventola, 2014). However, despite these advantages, the use of social media in dentistry raises significant ethical and legal concerns. Issues such as

patient confidentiality, informed consent, and the potential misuse of clinical images must be carefully addressed to prevent harm and maintain professional integrity (Lockhat, 2021; Pathiraja & Little, 2015). Another important aspect of social media is its role in oral health promotion. Internet-based interventions, including social media platforms, have shown promising results in improving oral health knowledge, reducing dental anxiety, and enhancing compliance with treatment, particularly in orthodontic patients (Scheerman et al., 2020; Li et al., 2016). Additionally, these platforms can be used to educate parents about preventive measures, such as reducing the transmission of cariogenic bacteria to children, thereby contributing to better oral health outcomes (Albert et al., 2014)

Aims of the Study

to evaluate the role of social media in promoting oral health awareness among the population. It seeks to assess the prevalence of using social media as a source of oral health information. Additionally, the study aims to examine the impact of social media on oral health behaviors. Finally, it intends to identify the barriers that influence the effective use of social media for oral health education.

Objectives

1. To assess the prevalence of social media use as a source of oral health information.
2. To evaluate the level of oral health knowledge and practices among participants.
3. To examine the influence of social media on oral health behaviors.
4. To identify the most commonly used social media platforms for dental information.
5. To determine the level of trust in oral health information obtained from social media.

Hypotheses

H1: Social media use is significantly associated with increased oral health awareness.

H2: Social media exposure positively influences oral health behaviors.

H3: Visual content on social media significantly affects individuals' perceptions of dental care.

H4: There is a significant relationship between social media use and dental visit behavior.

H0 (Null Hypothesis): social media has no significant effect on oral health knowledge or behaviors.

literature review

1.1 Oral Health and Its Importance

Oral health includes the health of teeth, gums, and the entire oral cavity. According to the World Health Organization (WHO, 2022), oral diseases affect nearly 3.5 billion people worldwide. Preventive care, such as regular brushing, flossing, and dental visits, is essential for maintaining good oral health.

1.2 Social Media as a Health Promotion Tool

Social media has emerged as an influential tool for health promotion due to its accessibility, interactivity, and wide reach. Studies have shown that health campaigns on social media can influence knowledge, attitudes, and behaviors (Ventola, 2014). For younger populations, these platforms serve as a primary source of information.

1.3 Social Media and Oral Health Awareness

Several studies highlight the potential of social media in dentistry. (Kumar et al. 2019) found that Instagram and YouTube are popular platforms for dental awareness campaigns. However, other research indicates that misinformation is prevalent. For instance, (Alalawi et al. 2019) noted that many videos related to oral health on YouTube lack scientific accuracy.

1.4 Gaps in the Literature

Although much has been studied about social media and health promotion, limited research focuses specifically on oral health among university students. This gap provides the basis for the present study

Materials and Methods

2.1 Research Design

This study adopts a descriptive survey design. A structured online questionnaire will be distributed to university students to gather quantitative data on their social media use and oral health practices.

2.2 Population and Sample

A total of 457 participants were included in this study. The sample was obtained using a convenience sampling technique, as the questionnaire was distributed online through various social media platforms, including Instagram, Facebook, and TikTok. The participants consisted of individuals from different age groups, occupations, and educational backgrounds, with a predominance of university students. The inclusion criteria involved individuals who were active users of social media and willing to participate voluntarily in the study. Data were collected over a specified period using a structured self-administered online questionnaire, designed to assess oral health practices, dental visits, and the influence of social media on oral health-related behaviors

2.3 Data Collection Tool

A questionnaire divided into four sections:

1. Demographics (age, gender, academic year).
2. Social media usage (platforms used, time spent, sources followed).
3. Knowledge about oral health (brushing, flossing, dental visits, diet).
4. Influence of social media (positive or negative changes in practices).

2.4 Data Analysis

Data will be analyzed using descriptive statistics (percentages, frequency distributions, graphs). Chi-square tests may be applied to examine associations between variables.

2.5 Ethical Considerations

Participation will be voluntary, and anonymity will be assured. Data will be used only for academic purposes.

Result

Table 1 shows the distribution of participants according to gender. Out of a total of 457 participants, females represented the majority (65.0%), while males accounted for 35.0%. This indicates a higher participation rate among females in the present study.

Table 1 Gender Distribution

Gender	Frequency (N)	Percentage (%)
Male	160	35.0%
Female	297	65.0%
total	457	100%

Table 2 presents the distribution of participants according to age group. The majority of participants were aged between 19–27 years (55.1%), followed by the 23–26 age group (19.9%). Participants younger than 18 and those aged 27 years or older represented smaller proportions (12.0% and 13.0%, respectively).

Table 2 Age Distribution

Age group	Frequency(N)	Percentage (%)
18>	55	12.0%
19-22	252	55.1%
23-26	91	19.9%
27≤	59	13.0%
total	457	100%

Table 3 presents the occupational status of the study participants. A substantial proportion of the sample consisted of students (70.0%), compared to a smaller percentage of employed individuals and Teacher and housewife (12.0%-7.7%-5.9%) and others (4.4%).

Table 3 Occupation

occupation	Frequency(N)	Percentage (%)
students	320	70.0%
Employed	55	12.0%
Teacher/ academic	35	7.7%
housewife	27	5.9%
others	20	4.4%
total	457	100%

Table 4 demonstrates the frequency of tooth brushing among the participants. The majority reported brushing their teeth twice daily (55.0%), followed by those brushing more than once daily and once daily (22.5%).

Table 4 Tooth Brushing Frequency

frequency	frequency	Percentage (%)
Once daily	103	22.5%
Twice daily	251	55.0%
> one time	103	22.5%
total	457	100%

Table 5 illustrates the distribution of participants according to dental floss usage. The results show that the majority of participants did not use dental floss (67.4%), whereas only 32.6 % reported using it.

Table 5 Dental Floss Use

Response	frequency	Percentage (%)
Yes	149	32.6%
No	308	67.4%
total	457	100%

Table 6 presents the distribution of participants according to the most frequently used social media platforms. The findings indicate that Instagram was the most commonly used platform (65.0%), followed by Facebook (17.5%) and TikTok (12.5%), while other platforms accounted for a minimal proportion (5%).

Table 6 Most used social media

platform	frequency	Percentage (%)
Instagram	297	65.0%
TikTok	57	12.5%
Facebook	80	17.5%
others	23	5.0%
total	457	100%

Table 7 presents the distribution of participants according to their smoking status. Out of the total sample of 457 individuals, 80 participants (17.5%) reported being smokers, whereas the majority, 377 participants (82.5%), reported that they do not smoke.

Table 7 smoking status

smoking	Frequency (n)	Percentage (%)
Yes	80	17.5%
No	377	82.5%
total	457	100%

Table 8 demonstrates the prevalence of mouthwash use among the study participants. Of the total sample (n = 200), 194 individuals (42.5%) reported using mouthwash, whereas 263 individuals (57.5%) indicated that they do not use it.

Table 8 Mouthwash Use

Mouthwash	Frequency (n)	Percentage (%)
Yes	194	42.5%
No	263	57.5%
total	457	100%

Table 9 presents the distribution of participants according to dental visits. The majority of participants, 400 (87.5%), reported having visited a dentist, while only 57 (12.5%) had not. This indicates a high level of dental service utilization among the study population.

Table 9 Dental visit

Visited dentist	Frequency (n)	Percentage (%)
Yes	400	87.5%
No	57	12.5%
total	457	100%

Table 10 summarizes the last dental procedures undergone by the participants. Dental fillings were the most commonly reported procedure (40%), followed by tooth extraction (22.5%) and dental cleaning (19.1%). Routine check-ups accounted for 12.5% of cases, while other procedures were least frequent (5.1%).

Table 10 last dental procedures

procedure	Frequency (n)	Percentage (%)
Filling	183	40.0%
Extraction	103	22.5%
cleaning	91	19.1%
Check up	57	12.5%
other	23	5.1%
total	457	100%

Table 11 illustrates the influence of social media on visiting the dentist among the participants. A total of 206 participants (45.1%) reported that social media influenced their decision to visit a dentist, whereas a slightly higher proportion, 251 participants (54.9%), indicated no such influence.

Table 11 Visiting Dentist due to social media

Response	Frequency (n)	Percentage (%)
Yes	206	45.1%
No	251	54.9%
total	457	100%

Table 12 presents the impact of before-and-after images on participants' perceptions. The majority of respondents, 274 (60%), reported being influenced by such images, while 183 participants (40%) were not affected.

Table 12 Before and after Images Influence

Response	Frequency (n)	Percentage (%)
Yes	274	60%
No	183	40%
total	457	100%

Table 13 presents the participants' exposure to dental visit advertisements on social media. The majority of participants, 320 (70%), reported being exposed to such advertisements, while 137 (30%) indicated no exposure.

Table 13 Exposure to Dental Visit Ads

Response	Frequency (n)	Percentage (%)
Yes	320	70.0%
No	137	30.0%
total	457	100%

Table 14 illustrates the level of trust in medical advice obtained from social media. A total of 183 participants (40%) reported trusting such advice, while 194 (42.5%) indicated that they trust it only sometimes, and 80 (17.5%) reported no trust.

Table 14 trust in social media Medical Advice

Response	Frequency (n)	Percentage (%)
Yes	183	40%
sometimes	194	42.5%
No	80	17.5%
total	457	100%

Table 15 presents the time taken by participants to complete the questionnaire. Nearly half of the participants (46.0%) completed the questionnaire in less than 5 minutes, while 37.2% required between 5–10 minutes. A smaller proportion (16.8%) took more than 10 minutes.

Table 15 time taken to complete the Questionnaire

Time taken	Frequency (n)	Percentage (%)
Less than 5 minutes	210	46.0%
5-10 minutes	170	37.2%
More than 10 minutes	77	16.8%
total	457	100%

Impact of Social Media on Oral Health Among Individuals

Advantages of Social Media

- Social media plays an important role in increasing awareness and improving knowledge regarding oral health among individuals.
- A large proportion of participants rely on social media, particularly Instagram (65%), as a primary source of information, facilitating easy access to educational and preventive content.
- This is reflected in acceptable oral hygiene practices, as more than half of the participants reported brushing their teeth twice daily.
- Social media significantly influences individuals' perceptions and motivation toward dental care.
- Visual content, especially before-and-after dental images, influenced approximately 60% of participants, highlighting its strong persuasive effect.
- Around 45.1% of participants reported that social media influenced their decision to visit a dentist, indicating its role in promoting health-seeking behavior.
- Social media enhances accessibility and communication by enabling rapid dissemination of information.
- Approximately 70% of participants were exposed to dental advertisements, increasing awareness of available treatments and services.

Disadvantages of Social Media

- Despite its benefits, social media presents several drawbacks that may negatively affect individuals.
- The reliability of information remains a major concern.
- Only 40% of participants fully trust medical information obtained from social media, while others reported partial or no trust, indicating the presence of misinformation.
- Increased awareness does not always lead to proper behavioral change.
- Although tooth brushing rates were relatively good, the use of dental floss was low (32.6%), reflecting incomplete adoption of preventive practices.
- Social media is more effective in raising awareness than in ensuring consistent behavioral improvement.
- Exposure to idealized dental images may create unrealistic expectations and psychological pressure.
- This may increase the demand for aesthetic procedures rather than preventive care.
- Most dental visits were treatment-oriented (e.g., fillings) rather than routine check-ups, indicating a lack of preventive focus.

Discussion

This study aimed to evaluate the role of social media in promoting oral health awareness and influencing oral health behaviors among a diverse sample of participants (n = 457). The findings indicate that social media has become a widely used source of oral health information, with a noticeable impact on participants' knowledge, perceptions, and, to a certain extent, their behaviors. The demographic characteristics of the participants revealed a predominance of females and individuals within the younger age group (19–27 years), suggesting that young adults are the most active users of social media for health-related purposes. Additionally, the majority of participants were students, which reflects the strong integration of digital platforms into the daily lives of academically active individuals. This may explain the high reliance on social media as a primary source of information. In terms of oral health practices, most participants reported brushing their teeth twice daily, indicating an acceptable level of awareness regarding basic oral hygiene. However, the relatively low percentage of dental floss use highlights a gap in comprehensive oral care practices. This discrepancy suggests that while general knowledge may be present, certain preventive behaviors are still lacking, possibly due to insufficient or unclear information available through social media platforms. The results also showed that Instagram was the most commonly used social media platform among participants, followed by Facebook and TikTok. This emphasizes the importance of visual-based platforms in disseminating health information. Notably, visual content such as before-and-after dental images had a significant influence on participants, with a considerable proportion reporting that such images affected their perceptions. This finding highlights the persuasive power of visual media in shaping attitudes toward dental care. Despite the widespread use of social media, its influence on actual

behavioral change appears to be moderate. Although a substantial proportion of participants reported that social media influenced their decision to visit a dentist, a slightly higher percentage indicated no such influence. This suggests that while social media is effective in raising awareness, it may not be sufficient on its own to drive consistent behavioral changes. Furthermore, the high exposure to dental advertisements on social media reflects the growing role of digital marketing in the field of dentistry. However, participants' trust in medical information obtained from social media was variable, with many indicating only partial trust. This highlights concerns regarding the reliability and accuracy of online content and suggests the presence of misinformation or non-evidence-based advice. The findings also revealed a high rate of dental visits among participants. However, most visits were related to treatment procedures rather than preventive care. This indicates that dental service utilization is still largely problem-oriented, emphasizing the need for stronger preventive strategies and awareness campaigns.

Conclusion

This study highlights the significant role of social media as a modern tool for disseminating oral health information and raising awareness among the general population. The findings demonstrate that social media platforms, particularly visual-based applications such as Instagram, are widely used and have a noticeable influence on individuals' perceptions and understanding of oral health. The high engagement of young adults and students reflects the growing dependence on digital platforms as primary sources of health-related information. Although the level of basic oral hygiene awareness among participants appears satisfactory, gaps remain in certain preventive practices, such as dental floss use. This indicates that while social media can effectively increase general awareness, it may not always lead to the adoption of comprehensive oral health behaviors. Additionally, the influence of visual content, such as before-and-after dental images, underscores the persuasive nature of social media in shaping attitudes toward dental care. Despite these positive aspects, the impact of social media on actual behavioral change was found to be moderate. Many participants reported limited influence on their decision to seek dental care, suggesting that awareness alone is insufficient to drive consistent health-related actions. Furthermore, varying levels of trust in online medical information highlight concerns regarding the credibility and accuracy of content shared on these platforms.

References

1. Kaplan, A.M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, 53(1), 59–68.
2. Arnett, M.R., Loewen, J.M., & Romito, L.M. (2013). Use of social media by dental educators. *Journal of Dental Education*, 77(11), 1402–1412.
3. Fox, S., & Jones, S. (2009). The social life of health information.
4. Fox, S. (2014). The social life of health information. *Pew Research Center*.
5. Thackeray, R., Neiger, B.L., Smith, A.K., & Van Wagenen, S.B. (2012). Adoption and use of social media among public health departments. *BMC Public Health*, 12(1), 242.
6. Antheunis, M.L., Tates, K., & Nieboer, T.E. (2013). Patients' and health professionals' use of social media in healthcare. *Patient Education and Counseling*, 92(3), 426–431.
7. Oakley, M., & Spallek, H. (2012). Social media in dental education. *Journal of Dental Education*, 76(3), 279–287.
8. McAndrew, M., & Johnston, A.E. (2012). The role of social media in dental education. *Journal of Dental Education*, 76(11), 1474–1481.
9. Kind, T., Patel, P.D., Lie, D., & Chretien, K.C. (2013). Twelve tips for using social media as a medical educator. *Medical Teacher*.
10. de Peralta, T., Fariior, O., Flake, N., et al. (2019). Social media use by dental students. *Journal of Dental Education*, 83(6), 663–668.
11. El Bialy, S., & Jalali, A. (2015). Social networking use in medical education. *JMIR Medical Education*, 1(2), e7.

12. Ajwa, N., Al Mohsen, S., Kuwail, A., & Al Osaif, E. (2018). Impact of social media on dental marketing. *Journal of Oral Health and Dental Science*, 2(3), 1–9.
13. Ventola, C.L. (2014). Social media and healthcare professionals. *Pharmacy and Therapeutics*, 39(7), 491.
14. Lockhat, R. (2021). Social media and protection of personal information. *Southern African Journal of Anaesthesia and Analgesia*, 27, 69–72.
15. Pathiraja, F., & Little, D. (2015). Social media in healthcare. *Clinical Radiology*, 70(6), 585–587.
16. Petersen, P.E., Bourgeois, D., Ogawa, H., et al. (2005). The global burden of oral diseases. *Bulletin of the World Health Organization*, 83, 661–669.
17. Filstrup, S.L., Briskie, D., da Fonseca, M., et al. (2003). Early childhood caries and quality of life. *Pediatric Dentistry*, 25, 431–440.
18. Acs, G., Shulman, R., Ng, M.W., & Chussid, S. (1999). Dental rehabilitation and body weight. *Pediatric Dentistry*, 21, 109–113.
19. Aydin, U., Ozturk, M., & Kirbiyik, S. (2004). Internet usage for health information. *Telemedicine Journal and e-Health*, 10, 444–448.
20. Scheerman, J.F.M., Hamilton, K., Sharif, M.O., et al. (2020). Social media intervention for oral health. *Psychology & Health*, 35(4), 449–466.
21. Albert, D., Barracks, S.Z., Bruzelius, E., et al. (2014). Web-based oral health intervention. *Maternal and Child Health Journal*, 18(7), 1765–1771.
22. Li, X., Xu, Z.R., Tang, N., et al. (2016). Messaging apps in orthodontics. *Clinical Oral Investigations*, 20(8), 1849–1859.
23. Alalawi, A., Aljuaid, H., & Natto, Z. S. (2019). The effect of social media on the oral health knowledge and behavior of patients in Saudi Arabia. *Journal of Dental Sciences*, 14(3), 191–196.

24. Kumar, S., Tadakamadla, J., Areeshi, A., & Sinha, R. (2019). Knowledge and attitudes towards oral health among dental patients: Role of social media. *International Journal of Dentistry*, 2019, 1–7.
25. Ventola, C. L. (2014). Social media and health care professionals: Benefits, risks, and best practices. *Pharmacy and Therapeutics*, 39(7), 491–520.
26. World Health Organization (2022). Oral health. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/oral-health>