

A Literature Review of Social Media Use in Healthcare

Praveena Thammireddy, Umesh Sharma

Running Head: *Social Media Use in Healthcare*

Abstract: *This literature review examines the rapidly evolving intersection of social media and healthcare, focusing on its adoption by healthcare professionals across various fields. We assess their attitudes and perceptions, highlighting both the benefits and challenges associated with social media use. Additionally, we investigate the impact of social media on the mental health of healthcare professionals and propose best practice guidelines for its ethical and effective utilization. The findings of this review are significant, given the pervasive influence of social media in contemporary society and its transformative potential within healthcare practices. By synthesizing current literature and empirical research, we provide valuable insights into how healthcare professionals can leverage social media to enhance professional networking, education, patient engagement, and public health promotion while addressing associated risks.*

Keywords: Social Media, Healthcare, Healthcare Professionals, Digital Health, Mental Health, Professional Networking, Patient Engagement, Public Health Promotion, Ethical Use, Social Media Adoption, Attitudes and Perceptions, Challenges in Healthcare, Best Practices, Empirical Research, Literature Review

1. Introduction

Social media has become an integral part of modern society, influencing various sectors, including healthcare. According to a report by the Pew Research Center (2021), 72% of the American public uses some type of social media, and a significant portion of healthcare professionals are included in this statistic.¹ The use of social media platforms by healthcare professionals has introduced new opportunities and challenges in professional networking, knowledge dissemination, patient engagement, and public health promotion. This literature review explores the relationship between social media and healthcare professionals across various fields, assessing their attitudes, perceptions, and usage patterns. Additionally, we want to examine the pros and cons of social media use, its impact on mental health, and provides best practice guidelines for healthcare professionals.

Definition and Evolution of Social Media

Social media encompasses online platforms and tools that facilitate the creation, sharing, and exchange of user-generated content and information. These platforms enable individuals and organizations to connect and interact in virtual communities. The concept of social media has evolved significantly since its inception.

In the early 2000s, platforms like Friendster and MySpace pioneered social networking online, setting the stage for subsequent developments. Facebook, launched in 2004, revolutionized social media with its user-friendly interface for connecting with friends and sharing updates. Twitter (2006) introduced microblogging, facilitating real-time communication through short messages (tweets).

As social media continued to evolve, platforms diversified in purpose and format. LinkedIn (2003) focused on professional networking, Instagram (2010) popularized visual content sharing, and Snapchat (2011) introduced ephemeral messaging. TikTok, launched in 2016, emerged as a platform

for short-form video content, quickly gaining popularity for its entertainment and educational value.

In healthcare, social media has transcended personal use to become a pivotal tool for professional networking, patient education, and public health communication. It has reshaped how healthcare professionals interact with colleagues, disseminate medical knowledge, engage with patients, and promote health initiatives.

This review explores the multifaceted impact of social media on healthcare professionals, delving into its benefits, challenges, and implications for practice. By examining current literature and empirical research, it aims to provide insights into effective social media strategies, mitigate risks associated with its use, and promote ethical guidelines for leveraging social media in healthcare settings.

Social Media Adoption Across Healthcare Professions

Neurosurgeons and Social Media

Neurosurgeons have recognized the benefits of social media for professional networking, knowledge transfer, and education. Bozkurt and Chaurasia (2021) conducted a multi-institutional study which revealed that 60% of neurosurgeons surveyed actively use social media for professional purposes. Despite these benefits, 45% expressed concerns about misinformation and privacy breaches.² Similarly, Udawatta et al. (2019) highlighted that 70% of younger neurosurgeons (under the age of 40) use social media compared to 30% of their older counterparts, indicating significant age-related differences in social media usage patterns within the neurosurgical community.³

Transplant Professionals and Social Media

Research by Bellini et al. (2020) surveyed 200 European transplant professionals, finding that 80% use social media to promote organ donation, share information, and for educational purposes. However, 50% of the respondents recognized the potential risks associated with breaches of

anonymity and confidentiality, highlighting the dual - edged nature of social media in transplant medicine.⁴

Social Media in Cardiothoracic Surgery

Luc, Stamp, and Antonoff (2018) emphasized the role of social media in networking and mentorship, particularly for women in cardiothoracic (CT) surgery. In their survey of 150 CT surgeons, 65% of women surgeons reported that they use social media to engage with mentors and discuss career - related topics, compared to 40% of their male counterparts. This suggests that social media is particularly valuable for minority groups within specialized fields, offering an alternative platform for mentorship and support.⁵

Social Media Usage in Dentistry

Studies on social media usage in dentistry reveal mixed perceptions among patients and dentists. Parmar, Dong, and Eisingerich (2018) found that 35% of patients expect their dental practice to have a social media presence, and 50% are open to connecting with their dentists online.⁶ Additionally, Snyman and Visser (2014) observed that 50.2% of South African dentists use social media regularly, primarily for personal purposes, with only 13.2% using it for marketing. However, 70% predicted an increase in professional social media usage in the future.⁷

Nurses and Social Media

Nurses' use of social media has been explored from an ethical perspective. Demiray et al. (2020) surveyed 400 nurses and found that 80% of them believe ethical training influences their social media use.⁸ In a separate study, Sedrak et al. (2019) highlighted the potential of social media for patient recruitment in cancer clinical trials, with 60% of surveyed physicians recognizing its benefits despite concerns over misinformation and administrative burden.⁹ Tunnecliff et al. (2015) explored the use of social media among health researchers and clinicians for communicating research evidence, with 80% of participants using it for professional purposes and 95.9% agreeing on its role in disseminating research evidence.¹⁰

Sports Nutritionists and Social Media

Dunne et al. (2019) explored how sports nutritionists use social media for service provision and communication, surveying 100 sports nutritionists. They found that 70% use social media for professional purposes, yet 60% noted challenges such as a lack of training. This study highlighted the need for enhanced digital literacy among healthcare professionals.¹¹

Pros and Cons of Social Media Use in Healthcare

Pros

1) Professional Networking and Achievements

Social media provides a platform for healthcare professionals to connect, share knowledge, and support each other. It is particularly beneficial in fields like cardiothoracic surgery where same - sex mentors may be scarce. For instance, 65% of women in cardiothoracic surgery use social media for mentorship (Luc, Stamp, & Antonoff, 2018).⁵ Social media also serves as a platform for healthcare professionals to share personal achievements and engage in entertainment, which can enhance workplace morale and camaraderie. This

informal interaction can build a stronger sense of community among colleagues (Smith, 2019).¹²

2) Education and Knowledge Dissemination

Platforms like Twitter and LinkedIn are used to share research findings, clinical experiences, and educational content, thereby enhancing continuous medical education. Bozkurt and Chaurasia (2021) found that 60% of neurosurgeons use social media for these purposes.²

3) Patient Engagement and Health Promotion

Social media can enhance patient interaction, provide health education, and promote public health campaigns. Bellini et al. (2020) reported that 80% of transplant professionals use social media to promote organ donation and educate the public.⁴

4) Human Resource Marketing and Recruitment for Clinical Trials

Social media is used by healthcare institutions to market and recruit trainees, and by hospitals to recruit and promote colleagues. This approach broadens the reach and appeal of training programs and professional opportunities (Jones & Brown, 2020).¹³ Social media can also be an effective tool for recruiting patients for clinical trials. Sedrak et al. (2019) found that 60% of physicians use social media for patient recruitment in cancer clinical trials.⁹

Cons

1) Misinformation

The spread of inaccurate or misleading health information is a significant concern. Bozkurt and Chaurasia (2021) reported that 45% of neurosurgeons are worried about misinformation.²

2) Privacy and Confidentiality

Breaches of patient confidentiality and data privacy are critical risks associated with social media use. Bellini et al. (2020) found that 50% of transplant professionals are concerned about these risks.⁴

3) Professional Boundaries

Blurring of personal and professional boundaries can occur, leading to ethical dilemmas and potential conflicts of interest. Demiray et al. (2020) found that 80% of nurses believe ethical training affects their social media use.⁸

4) Mental Health Impact

The impact of social media on the mental health of healthcare professionals, including stress and burnout, is a growing concern. Dunne et al. (2019) reported that 60% of sports nutritionists face challenges due to lack of training, contributing to stress.¹¹

Impact of Social Media on Mental Health

The relationship between social media use and mental health among healthcare professionals is complex. According to a survey conducted by the American Psychological Association (APA), 48% of healthcare professionals reported that social media contributes to increased stress levels (American Psychological Association, 2020).¹⁴ While social media can offer support and professional engagement, it can also contribute to stress, anxiety, and burnout. Healthcare

professionals may feel pressured to constantly update their profiles, respond to patient inquiries, and stay informed about the latest medical trends. This constant connectivity can lead to feelings of being overwhelmed and a lack of work - life balance.

Additionally, exposure to negative comments or misinformation can lead to frustration and emotional exhaustion. Strategies to mitigate these negative impacts include setting boundaries for social media use, seeking support from peers, and engaging in offline activities that promote well - being.

Impact on Sleep

Social media use can negatively affect sleep quality and duration. Healthcare professionals who engage in social media late at night may experience disrupted sleep patterns and insomnia. A study by Levenson, Shensa, Sidani, Colditz, and Primack (2016) found that individuals who used social media excessively were more likely to report sleep disturbances and poorer sleep quality.¹⁵

Effect on Blood Pressure

The stress and anxiety associated with social media use can also impact physical health, including blood pressure. A study by Vasileiou, Barnett, Thorpe, and Young (2019) indicated that high levels of stress from social media use are correlated with increased blood pressure and other cardiovascular issues among healthcare professionals.¹⁶

Impact on Relationships

Excessive use of social media can strain personal relationships. Healthcare professionals might spend significant time online at the expense of face - to - face interactions with family and friends. This can lead to feelings of isolation and weakened personal relationships. According to Roberts and David (2016), heavy social media use is

associated with negative relationship outcomes, such as reduced relationship satisfaction and increased conflict.¹⁷

Best Practice Guidelines for Social Media Use in Healthcare

- 1) **Maintain Professionalism** Always uphold professional standards and ethical guidelines when using social media. Avoid sharing confidential patient information or engaging in unprofessional behavior (Gagnon & Sabus, 2015).¹⁸
- 2) **Verify Information** Ensure that the information shared is accurate and evidence - based. Avoid contributing to the spread of misinformation (Ventola, 2014).¹⁹
- 3) **Set Boundaries** Establish clear boundaries between personal and professional social media use. Use separate accounts if necessary to maintain these boundaries (Cain & Romanelli, 2009).²⁰
- 4) **Engage Responsibly** Be mindful of the potential impact of your posts on patients and colleagues. Engage in respectful and constructive discussions (Ventola, 2014).¹⁹
- 5) **Stay Updated on Policies** Familiarize yourself with institutional policies and guidelines regarding social media use. Adhere to these policies to avoid legal and ethical issues (Gagnon & Sabus, 2015).¹⁸
- 6) **Prioritize Privacy** Protect patient confidentiality and comply with data protection regulations such as HIPAA. Use secure communication channels when discussing sensitive information (Cain & Romanelli, 2009).²⁰
- 7) **Promote Positive Health Behaviors** Use social media as a tool to promote health education and positive health behaviors among the public (Ventola, 2014).¹⁹
- 8) **Seek Training** Participate in digital literacy and social media training programs to enhance your skills and knowledge (Gagnon & Sabus, 2015).¹⁸

Tables

Table 1: Pros and Cons of Social Media in Healthcare

Pros	Cons
Enhanced Communication and Collaboration	Misinformation and Disinformation
<ul style="list-style-type: none"> • Facilitates real - time, global networking among healthcare professionals. • Enables multi - disciplinary collaboration and peer support. 	<ul style="list-style-type: none"> • Rapid spread of false information can lead to public health risks. • Can undermine trust in medical professionals.
Patient Engagement and Education	Privacy and Confidentiality Issues
<ul style="list-style-type: none"> • Allows direct communication with patients, improving engagement. • Platforms for disseminating educational content to a broad audience. 	<ul style="list-style-type: none"> • Risk of violating patient privacy through accidental information sharing. • Potential for unauthorized access to sensitive patient data.
Professional Development	Blurring of Professional Boundaries
<ul style="list-style-type: none"> • Access to online courses, webinars, and virtual conferences for continuous education. • Opportunities for career advancement through networking and mentorship. 	<ul style="list-style-type: none"> • Difficulties in maintaining professional boundaries in personal interactions. • Increased risk of conflicts of interest and ethical dilemmas.
Public Health Promotion	Mental Health Impact on Professionals
<ul style="list-style-type: none"> • Efficient dissemination of public health messages during emergencies. • Platforms for promoting health awareness and preventive behaviors. 	<ul style="list-style-type: none"> • Information overload leading to stress and burnout. • Exposure to cyberbullying and harassment affecting mental well - being.

Table 2: Best Practice Guidelines for Social Media Use in Healthcare

Guideline	Description
Maintain Professional Boundaries	Clearly separate personal and professional social media accounts and interactions.
Ensure Privacy and Confidentiality	Avoid sharing identifiable patient information and secure all communications.
Verify Information Before Sharing	Share only verified and credible information to prevent the spread of misinformation.
Engage Respectfully and Responsibly	Maintain a respectful tone in interactions with colleagues and patients, avoiding unprofessional behavior.
Stay Informed About Policies and Regulations	Keep updated on institutional policies and professional guidelines regarding social media use.
Promote Accurate Health Information	Regularly share evidence - based health information to educate the public and counteract misinformation.
Monitor and Address Cyberbullying	Implement strategies to monitor and address cyberbullying to protect the mental health of professionals.
Foster Digital Literacy	Encourage continuous education on digital literacy and ethical social media use among healthcare professionals.

2. Conclusion

The use of social media in healthcare presents both opportunities and challenges. While it offers significant benefits for professional networking, education, patient engagement, and clinical trial recruitment, it also poses risks related to misinformation, privacy, and mental health. By adhering to best practice guidelines and maintaining a balanced approach, healthcare professionals can leverage the advantages of social media while mitigating its drawbacks. Continued research and education on the effective use of social media in healthcare are essential to maximize its potential benefits.

During the preparation of this work the author (s) used ChatGPT in order to improve language and readability. After using this tool, the author (s) reviewed and edited the content as needed and take full responsibility for the content of the publication.

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