

EDITORIAL

Medical doctor on social media: skill knowledge and ethical issue

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ABSTRACT

Background: The increasing utilization of social media (SM) platforms has transformed them into valuable tools for professional health communication. Medical doctors in SM are regarded as "influencer doctors". By conveying health information in accessible language, they contribute to the delivery of healthcare services and help address various public health issues through effective messaging and guidance. However, the health advice disseminated through these media platforms remains a subject of ongoing debate, as it often lacks a solid foundation in evidence-based practice. **Objectives:** In light of the growing influence of social media and the evolving role of medical doctors within these platforms, this editorial aims to highlight the potential hidden risks associated with SM use and examine its implications for public health. **Medical doctor's content and health education:** social media facilitates a more accessible interactions and promoting health literacy such as patients-doctors communication, patient exchanges, and health education provided by medical doctor by posting the high-quality photographs or clinical video clips reinforce the information and signal professional rigor. "Influencers-doctor" now enjoy quasi-celebrity status, frequently swapping medical advice for sponsorship deals and promotional appearances. The widespread use of social media presents significant challenges such as false or misleading health information shared by non-health professionals with large followers. **Conclusion:** In the era of social media, medical doctors face significant challenges as they increasingly take on the role of "influencer doctors." They are expected to combat health-related myths, stigmas, and misconceptions by providing accurate, evidence-based information grounded in their professional expertise.



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Highlight

1. The number of medical professionals identified as "influencer doctors" has grown significantly in recent years, with many offering professional advice in the field of health through social media platforms.
2. The reliability of content shared by "influencer doctors" has sparked both support and criticism, particularly within the field of medical science.



BACKGROUND

Today, medical doctors are expected to maintain a presence not only in the physical clinical setting but also in the digital sphere, particularly on SM. Their responsibilities extend beyond individual patient care to include public communication and the dissemination of accurate information on public health issues (Anjelia et al., 2024). Therefore, the wellness content shared by medical professionals on platforms such as Instagram plays a critical role. SM has transformed human interaction on a global scale through rapid engagement, and within the healthcare sector, this represents a swift and significant social revolution (Christodoulou, 2011). The rapid growth of SM platforms has positioned them as valuable tools for professional health communication (Campbell et al., 2016), such as Dr. Oz Show, which is well-known in US, giving the new health communication paradigm to change the society behaviour toward health behaviour (Crouch et al., 2016). Dr. Oz was a cardiothoracic surgeon named as Dr. Mehmet Oz, has been a well-known media figure to promote alternative medicine and health practices (Stecula et al., 2022) through health behaviour modification in the field of weight loss (Crouch et al., 2016). The use of SM by health professionals is intended to enhance patient health outcomes, strengthen professional networks, and identify factors that influence public health (George et al., 2013).

Medical doctors are widely regarded as a credible and reputable profession, and their presence on social media—particularly when sharing content within their areas of expertise—often leads to their designation as “influencer doctors,” largely due to the size of their follower base and the number of views they garner (Zengin, 2023) along with their credible figures in healthcare (Anjelia et al., 2024). Therefore, the role of medical professionals as “influencer doctors” on SM is crucial in enhancing patient engagement and communication, ensuring effective healthcare delivery, and addressing various health challenges by conveying health messages and advice in clear, accessible language (Bruce et al., 2024). However the advice given by this doctors on social media are still debating as it lacks of rationale evidence, and this problematic “site” should be resolved, as SM has been part of nowadays life, it grew exponentially per year (Campbell et al., 2016), and it means opportunities and threats on public health issues (Loh et al., 2011). SM users encompass a wide range of individuals, from laypersons to professionals, resulting in both positive and negative impacts on public health. Several concerns—including patient privacy and dignity, conflicts of interest, information accuracy, and misuse—pose significant risks to users (Denecke et al., 2015; Lee Ventola, 2014).

OBJECTIVES

Recognizing the rapid development of SM and the evolving role of medical doctors within these platforms, this editorial aims to highlight the potential hidden dangers of social media use and their implications for public health.

SOCIAL MEDIA: THE CONTENT AND THE SOCIETY HEALTH EDUCATION

Social media (SM) refers to internet-based applications classified within the Web 2.0 paradigm, which enable users to create, share, and exchange content through virtual communities, such as LinkedIn, MySpace, Facebook, YouTube, and Twitter (Gong and Yang, 2020). Meanwhile, the Oxford Dictionary defines social media as websites and applications that allow users to create and share content or engage in social networking activities (Campbell et al., 2016). This implies that social media encompasses a diverse range of user-generated platforms designed for contributing, accessing, and exploring content among users (Bruce et al., 2024). Undebatable, SM changes individual communication, with many advantages even for users, such as easy to use and low-cost (Zengin, 2023). SM platforms can be categorized into several types, including microblogging sites (e.g., Twitter, Sina Weibo); social networking sites (e.g., Facebook, Foursquare, LinkedIn, MySpace, VK); content-sharing platforms (e.g., Flickr, Instagram, Pinterest, YouTube, Tumblr, TikTok); product and service review sites (e.g., Yelp, TripAdvisor); collaborative knowledge-sharing sites (e.g., Wikimapia, OpenStreetMap); among others (Gong and Yang, 2020). However, the most widely used platforms include Twitter, Facebook, YouTube, WeChat, Instagram, LinkedIn, and blogs, all of which enable users to share information and exchange ideas (Bruce et al., 2024). Meanwhile, the key SM platforms of concern in healthcare and among health professionals, including blogs, collaborative projects, online communities, and social networking sites (Loh et al., 2011).

Individuals identified as influencers are often regarded as mass communicators, characterized by their ability to reach millions of followers. Their persuasive power lies in the high level of engagement and loyalty—often referred to as "stickiness"—demonstrated by their audience (Hu et al., 2020). So, many influencers were used to boost a product marketing (Kikumori et al., 2025), or as “advertisement” with providing product/service information (Tamsir et al., 2023). In today’s digital landscape, anyone—including medical professionals—can become an influencer. Many doctors leverage SM not only as a platform for health education but also for product promotion, often through endorsements (Amandha and Sugiyono, 2024). To establish credibility and successfully develop their personal brand, medical professionals must cultivate both trust and perceived expertise among their followers (Zengin, 2023). Thus, the behavior of medical doctors on SM plays a pivotal role in shaping patients’ perceptions and responses toward them. The content shared by these professionals can significantly influence patients’ health-related decisions and the level of trust they place in the doctors they follow online (Chauhan et al., 2012), especially when they had a homepage (Korn et al., 2022).

The use of social media for medical doctor and society

With the development of SM, many health services moving online (Ramadani and Sarmigi, 2024), including online consultation and providing personal SM for patients to access their postings (Samarkandy et al., 2023). Patients turn to SM to search for health information, influenced by its ease of use and low cost. SM platforms enable users to create, share, comment on, and receive multimedia content that is widely distributed among diverse user networks (Campbell et al., 2016). In Indonesia, SM users approximately 70% of the population (Ramadani and Sarmigi, 2024). The advancement of information technology, coupled with societal shifts toward increased SM engagement, has prompted medical doctors to utilize these platforms for patient interaction, particularly during the COVID-19 pandemic (Bruce et al., 2024) and among healthcare community (Chauhan et al., 2012). Approximately 90% of 4,000 surveyed physicians reported using SM for personal activities, while around 65% utilized these platforms for professional purposes, including professional networking, continuing education, organizational promotion, patient care, and public health initiatives (Lee Ventola, 2014), scientific collaboration and advocacy (Connell et al., 2022). A study conducted in Australia examining doctor–patient interactions via social media found that only 33.9% of physicians reported engaging in online communication with their patients (Brown et al., 2024).

As both individuals and professionals, medical doctors have the autonomy to use SM to create content for advertising, personal branding, or sharing their professional activities such as connecting with colleagues, expanding professional networks, sharing medical knowledge, participating in continuing medical education, benchmarking practices, and building a personal or institutional brand (Chauhan et al., 2012). Meanwhile, patients utilize SM for information seeking, gaining esteem, accessing network support, engaging in social comparison, and expressing emotions. These activities have a significant impact on their overall well-being, contributing to improved self-management, psychological health, and physical well-being (Decamp, 2012). SM offers numerous benefits for enhancing communication between medical professionals and patients, particularly by facilitating more accessible interactions and promoting health literacy. Additionally, by connecting doctors from around the world in virtual spaces. SM can support more accurate diagnoses and aid in the recognition of rare diseases through collaborative knowledge sharing (Zengin, 2023). SM allowed two-side communication (Amandha and Sugiyono, 2024) with equal degree between patient and doctor, creating a harmonious relationships (Decamp, 2012), and ultimately affect patient health outcomes (Sun et al., 2024). It has also been found that over 50% of medical doctors utilize SM for educational purposes by sharing patient images for use in seminars, conferences, academic papers, poster presentations, lectures, textbooks, and even medical journal publications (Mahajan, 2023).

Characteristics of medical doctor activity in social media

A sizable number of health professionals now turn to SM by posting tips, updates, and informal guidance that patients can read on the go. Still, a striking 78% of those same patients warn that such platforms feel ill-suited-and even risky-when the conversation edges toward formal diagnosis or treatment (Samarkandy et al., 2023). For people juggling long-term health conditions, the immediacy of a tweet or a short video clip can feel less daunting than the clinical hush of an examination room.

Physicians now phrase advice in real time, running drop-in Q&A sessions on Instagram Live or posting quick explainer videos to YouTube, and that shift subtly nudges expert guidance closer to everyday language. Away from patient exchanges, the same networks double as digital portfolios; a neat Google Scholar profile or an updated Publons page can turn a citation count into instant scholarly currency (Sultan et al., 2019). A growing number of surgeons turn to Twitter as an informal surgical seminar, posting clinical hunches, warning notes, and quick-fire debates signaled by genre-following hashtags. They pepper these exchanges with visual abstracts, tweetorials, and scheduled tweetchats, creating an unconventional but lively corridor for journal summaries and wider academic back-and-forth (Grossman et al., 2021).

Chinese researchers recently tracked how ordinary internet users interact with physicians who maintain public social-media profiles. People followed, posted, clicked-shared and even fanned-out to friends, and, surprisingly, those habitual nudges correlate almost perfectly with each individuals grip on e-health literacy. The same pattern turned up in reports of subsequent health behavior, hinting that digital trust may shape both clicks and clinics (Wu et al., 2020). SM posts authored by clinicians should rest on a foundation of solid evidence and peer-reviewed literature. When feasible, high-quality photographs or clinical video clips reinforce the information and signal professional rigor. Research from Indonesia highlights a striking trend: a growing cohort of “influencers-doctor” now enjoy quasi-celebrity status, frequently swapping medical advice for sponsorship deals and promotional appearances (Ramadani and Sarmigi, 2024), and several studies highlighted the skincare products were promoted by medical doctors (Agustin et al., 2024; Amandha and Sugiyono, 2024; Frasier, 2024). Health education has increasingly spotlighted the youngest citizens. Focused campaigns for children and adolescents attempt to elevate clinical metrics while instilling lifelong habits of wellness (Vizcaíno et al., 2024).

The validity of SM contents

A growing number of physicians, nurses, and public-health experts now turn to SM feeds to share research summaries, self-care tips, and emergency alerts, yet surveys show roughly 78% of patients still regard those same channels as too unreliable for formal diagnoses or treatment decisions (Panahi et al., 2016). Of what circulates, the content on SM provided by medical doctors remains scientifically unvetted, a shortcoming that not only curtails across Indonesia, health personnel-physicians, hospital networks, public clinics-push out bulletins and digital posts almost daily, trumpeting the latest news on wellness and illness prevention. Yet the majority material's authority but also unexpectedly launches fresh misunderstandings and minor public-health puzzles (Fadhilah, 2024). Physicians who communicate online remain bound by the core ethical codes established by their professional bodies. Each tweet, blog entry, and video update must meet the same standards as a clinic note. Even an offhand remark can breach a duty of confidentiality, so the presence of a personal name, an image, or a distinctive date is perilous. Protecting that slender boundary is not merely technical courtesy; it affirms, in concrete form, a patients dignity and autonomy (Keller et al., 2022). Practicing physicians ought to disclose any commercial ties that might color the material they circulate for promotional ends. Candor of this sort fortifies professional ethics and safeguards the faith that patients place in the medical field.

SM presents significant challenges for medical doctors, as false or misleading health information is frequently shared by non-health professionals with large followers (Rashid et al., 2021). This contributes to public misperceptions and may have harmful effects on a broad scale, as followers are likely to adopt and further disseminate such content—potentially influencing the beliefs and behaviors of their close contacts, including friends, through reposting. This phenomenon has facilitated the rapid spread of false medical information, leading many individuals to accept it as truth without verifying its accuracy (Aarseth, 2019). For instance, during the COVID-19 pandemic, the health-related YouTube videos had 27.5% non-factual information, yet these videos collectively garnered over 62 million views out of a total of approximately 257.8 million views (Li et al., 2020). For that reason, any health message that circulates on a SM platform ought to be dependable and anchored in established science. Such information must pass a strict quality test-completeness of subject matter, user-friendly layout, lucid disclosure of author qualifications, straightforward language, polished visual design, and precise citation of authoritative scholarly sources (Dalmer, 2017). When followers place trust in misinformation, it can lead to misguided decisions that may have serious consequences for both individual and public health (Pee, 2012). Content posted by physicians can still be misread by observers,

because the same image or statement, though empirically sound, offers no direct safeguard against selective memory or confirmation bias. Messages drift once they go public, and individual expectations fill the gaps between what the expert meant and what the audience believes it heard (Aarseth, 2019). Health professionals ought to embrace communication tactics that strip medical jargon from their explanations, thereby making clinical ideas intelligible to patients with widely differing education levels and life experiences.

Limitations

This paper highlights several gaps in the current literature, particularly the lack of empirical evidence regarding the reliability of content shared by “influencer doctors,” as well as the scarcity of descriptive studies exploring this emerging field.

CONCLUSION

In the era of social media, medical doctors face significant challenges as they increasingly take on the role of “influencer doctors.” They are expected to combat health-related myths, stigmas, and misconceptions by providing accurate, evidence-based information grounded in their professional expertise. When educating the public, it is essential that their content remains credible and ethically responsible. Moreover, when sharing clinical cases or patient experiences online, physicians must adhere to strict ethical standards to safeguard patient privacy and confidentiality.

Conflict of Interest

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Author Contribution

PH: responsible for collecting the evidence, drafting, editing, proof-read and submitting.

REFERENCES

- Aarseth, S., 2019. Doctors and social media. *Tidsskr. Den Nor. legeförening* 139, 1–4.
- Agustin, M., Pangestu, R., Franadewi, W., Limbong, H.E., Agustin, M., Pangestu, R., Franadewi, W., Limbong, H.E., 2024. Medikalisisasi Kecantikan melalui Akun Tiktok Dokter Pages 236-258 Beauty Medicalisation through Doctor ' s Tiktok Account Pengakuan 6, 236–258.
- Amandha, R.K., Sugiyono, H., 2024. The Responsibilities of Influencer Doctors Promoting Skincare Products on Social Media. *J. Daulat Huk.* 7, 119–133.
- Anjelia, L.O., Mulyana, D., Suminar, J.R., 2024. The Role of Indonesian Doctors as Content Creators in Fighting Health Hoaxes , Myths , and Stigma on Social Media. *J. Komun. Indones.* 13, 315–336.
- Brown, J., Ryan, C., Elias, S., Talbot, D., Harris, A., 2024. Factors affecting how Australian doctors view and use social media: a follow-up national survey. *Procedia Comput. Sci.* 248, 38–45.
- Bruce, E., Shurong, Z., Amoah, J., Egala, S.B., Sobre Frimpong, F.K., 2024. Reassessing the impact of social media on healthcare delivery: insights from a less digitalized economy. *Cogent Public Heal.* 11.
- Campbell, L., Evans, Y., Pumper, M., Moreno, M.A., 2016. Social media use by physicians: A qualitative study of the new frontier of medicine. *BMC Med. Inform. Decis. Mak.* 16, 1–11.
- Chauhan, B., George, R., Coffin, J., 2012. Social media and you: What every physician needs to know. *J. Med. Pract. Manag.* 28, 206–209.
- Christodoulou, M., 2011. Networking: The new social revolution in health care. *Lancet Oncol.* 12, 125.
- Connell, N.T., Weyand, A.C., Barnes, G.D., 2022. Use of Social Media in the Practice of Medicine. *Am. J. Med.* 135, 138–140.
- Crouch, E., Dickes, L.A., Davis, A., Zarandy, J., 2016. The Effects of Dr. Oz on Health Behaviors and Attitudes. *Am. J. Heal. Educ.* 47, 373–378.
- Dalmer, N.K., 2017. Questioning reliability assessments of health information on social media. *J. Med. Libr. Assoc.* 105, 61–68.
- Decamp, M., 2012. Physicians, social media, and conflict of interest. *J. Gen. Intern. Med.* 28, 299–303.
- Denecke, K., Bamidis, P., Bond, C., Gabarron, E., Househ, M., Lau, A.Y.S., Mayer, M.A., Merolli, M., Hansen, M., 2015. Ethical Issues of Social Media Usage in Healthcare. *Yearb. Med. Inform.* 10, 137–147.
- Fadhilah, N., 2024. The Role of Social Media in Health Promotion Efforts. *Oshada* 1, 21–29.



- Frasier, K., 2024. Social media and skincare: dermatologists as “skinfluencers” or “expert influencers.” *J. Am. Acad. Dermatol.* 91, AB315.
- George, D.R., Rovniak, L.S., Kraschnewski, J.L., 2013. Dangers and opportunities for social media in medicine. *Clin Obs. Gynecol* 56.
- Gong, X., Yang, X., 2020. Social Media Platforms. *Geogr. Inf. Sci. Technol. Body Knowl.* 2020.
- Grossman, R., Sgarbura, O., Hallet, J., Søreide, K., 2021. Social media in surgery: evolving role in research communication and beyond. *Langenbeck’s Arch. Surg.* 406, 505–520.
- Hu, L., Min, Q., Han, S., Liu, Z., 2020. Understanding followers’ stickiness to digital influencers: The effect of psychological responses. *Int. J. Inf. Manage.* 54.
- Keller, E.J., Mlambo, V.C., Resnick, S.A., Vogelzang, R.L., 2022. #PauseBeforeYouPost: Ethical and Legal Issues Involving Medical Social Media. *Semin. Intervent. Radiol.* 39, 203–206.
- Kikumori, M., Maruyama, Y., Ishii, R., 2025. Influencers’ Follower Numbers, Consumers’ Cultural Value Orientation, and Purchase Intention: Evidence from Japan, the United Kingdom, and Singapore. *J. Int. Consum. Mark.* 0, 1–12.
- Korn, G.P., Moraes, V.R., Prado, V., 2022. Medical advertising on social media. *Braz. J. Otorhinolaryngol.* 88, 649–650.
- Lee Ventola, C., 2014. Social media and health care professionals: Benefits, risks, and best practices. *P T* 39, 491–500.
- Li, H.O.Y., Bailey, A., Huynh, D., Chan, J., 2020. YouTube as a source of information on COVID-19: A pandemic of misinformation? *BMJ Glob. Heal.* 5.
- Loh, L., Bourque, J.-M., Lee, D., Morrison, S., Walker, X., Chb, M.B., 2011. Social Media and Medicine.
- Mahajan, R., 2023. Posting clinical data and images on social media: Ethical and legal considerations. *Adesh Univ. J. Med. Sci. Res.* 5, 1–4.
- Panahi, S., Watson, J., Partridge, H., 2016. Social media and physicians: Exploring the benefits and challenges. *Health Informatics J.* 22, 99–112.
- Pee, L.G., 2012. Trust of Information on Social Media: An Elaboration Likelihood Model. In: *CONF-IRM 2012 Proceedings.* pp. 1–9.
- Ramadani, D.F., Sarmigi, E., 2024. Improving Brand Image by Maximizing Product Quality, Promotion on Social Media, and E-Wom and is Implications on Interest In Buying Bening’s Skincare Products 10, 2549–9270.
- Rashid, A.A., Kamarulzaman, A., Sulong, S., Abdullah, S., 2021. The role of social media in primary care. *Malaysian Fam. Physician* 16, 14–18.
- Samarkandy, S.J., Samargandy, S., Abbas, R.A., Alshareef, A., Nassar, N., Alharbi, A., 2023. Physicians’ Attitude and Perception Towards Social Media Medical Consultation. *Cureus* 15, 1–8.
- Stecula, D.A., Motta, M., Kuru, O., Jamieson, K.H., 2022. The Great and Powerful Dr. Oz? Alternative Health Media Consumption and Vaccine Views in the United States. *J. Commun.* 72, 374–400.
- Sultan, M., Brown, E.M., Thomas, R.H., 2019. Epilepsy & Behavior Clinicians embracing social media : Potential and pitfalls. *Epilepsy Behav.* 106462.
- Sun, Q., Tang, G., Xu, W., Zhang, S., 2024. Social media stethoscope: unraveling how doctors’ social media behavior affects patient adherence and treatment outcome. *Front. public Heal.* 12, 1459536.
- Tamsir, F., Md Zain, N.N., Poniran, H., Abu Basar, S., Abdul Rahman, A.R., Mohamed Mohan, N.M., Ibrahim, N.A., 2023. Social Media Influencers’ Attributes on Followers’ Purchase Intention in Malaysia. *Quantum J. Soc. Sci. Humanit.* 4, 1–14.
- Vizcaíno, F.B., López, M.P., González, P.B., 2024. Pediatric Influencers on Instagram : Health Communication and Promotion of Child Health Influencers. *Vivat Acad. Rev. Comun.* 1–27.
- Wu, T., He, Z., Zhang, D., 2020. Impact of Communicating With Doctors Via Social Media on Consumers’ E-Health Literacy and Healthy Behaviors in China. *Inq. (United States)* 57.
- Zengin, G., 2023. How Influencer Doctors Use Social Media? A Content Analysis on Marketing Communications, Patient Privacy and Ethics. *Selçuk Üniversitesi Sos. Bilim. Enstitüsü Derg.* 273–286.