FROM SCRUBS TO SCROLLING: HEALTHCARE PROFESSIONALS ON DOUYIN

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Introduction

The engaging, concise, and viral trends of short video platforms has transformed digital communication, offering new avenues for public health communication (Southerton, 2021). In China, Douyin has become a critical site for health communication, particularly during the COVID-19 pandemic, as healthcare professionals use the platform to simplify complex medical information and engage broader audiences (Zhu et al., 2020). Despite its influence, Douyin's role in health communication remains underexplored, often overshadowed by discussions of its international version TikTok. Yet, many functions and services were pioneered on Douyin before being introduced on TikTok.

Unlike its Western counterparts, Douyin exists in a controlled media environment where the Chinese government actively integrates digital media into public health initiatives, such as the *Healthy China 2030* (National Health Commission, 2022), encouraging medical institutions to integrate health education into everyday digital experiences. In response, Douyin has implemented stringent control on medical content and actively recruits healthcare professionals to the platform. By prioritizing expert voices and regulating health-related discourse, both the platform and the government have reinforced the role of Douyin as a key player in China's public health communication and education. The evolving role of Douyin in health communication raises questions of how healthcare professionals adapt to Douyin's platform logic and present their expertise within a digital space governed by both entertainment-driven engagement metrics and regulatory constraints.

Drawing on the concept of platform affordances and edutainment, this study examines how Douyin's technological and regulatory features shape healthcare professionals' online presence and participation in health communication. This study is guided by three key research questions: (1) What are the characteristics of the healthcare professionals engaged in health communication on Douyin? (2) How do they present themselves on the platform? (3) What strategies do they use to balance the platform's entertaining nature and the rigor of health knowledge?

Method

This study employs content analysis of videos published by verified healthcare professionals on Douyin, along with an analysis of their homepages. The dataset includes 130 videos identified using 16 COVID-19-related keywords and the homepages of the 58 professionals who published these videos. COVID-19 was chosen because it spans multiple medical specializations, allowing for a broad examination of health professionals' engagement on Douyin while minimizing biases that could arise from focusing on a single health issue.

Due to Douyin's dynamic search results – where search results of the same keyword yielded differently within minutes, even when ranked by the same criteria (number of likes) – manual data collection was conducted instead of automated scraping. Data was collected between February and April 2023, with only videos published by verified healthcare professionals (indicated by a yellow verification badge) and receiving over 100,000 likes included in the sample. This selection ensured that the sample reflected highly visible and engaged content by healthcare professionals.

The content analysis codebook for videos was developed based on prior research (Vizcaíno-Verdú & Abidin, 2022; Zhu et al., 2020) and inductive observations, covering four dimensions: video theme, presentation type, tone, and storytelling strategies. The coding categories for homepage analysis were adapted from Douyin's platform infrastructure, examining how professionals present their content and structure their profiles.

Results

The analysis of 58 healthcare professionals' homepages reveals a significant gender disparity, with male professionals (46 out of 58) dominating the most-liked health content. Most health communicators are in their 30s and 40s, reflecting the career trajectory of Chinese healthcare professionals, where attending physician – the minimum level required to publish medical content on Douyin – is typically reached in this age bracket. Professionals at this stage are likely motivated to build their reputations. Additionally, as Douyin is particularly popular among younger audiences, these professionals may be more attuned to platform trends, enhancing their content's engagement.

Geographically, the majority of healthcare professionals active on Douyin are located in China's eastern coastal provinces and central areas surrounding the capital. Beijing alone accounts for 17 individuals, nearly 30% of the sample, making it the most represented region. Other highly represented provinces include Guangdong, Shandong, and Jiangsu. In contrast, healthcare professionals from inland and less-developed regions appear far less frequently in the sample. This distribution suggests that healthcare professionals from economically developed areas with more advanced medical resources are more likely to gain visibility on Douyin, which amplifies already prominent voices and reinforce existing healthcare resource disparities across regions.

As for the specializations of these healthcare professionals, most common specialties are surgery (16 out of 58), internal medicine (14), and traditional Chinese medicine (TCM, 11). The strong presence of TCM practitioners reflects the Chinese government's active promotion of TCM since 2019 as part of its national health strategy, positioning it as a vital component of cultural heritage and a key public health resource (State Council, 2019). Douyin's content governance appears to align with these policy priorities, amplifying the visibility of TCM practitioners on the platform.

The self-presentation strategies of these professionals tend to emphasize credibility. Nearly all of them include a professional self-introduction in their bios, use their real names, and upload real photos as profile avatar. Most (55) disclose their affiliated hospitals, and a smaller number (11) provide their clinic hours, reinforcing their professional legitimacy. Many professionals also leverage Douyin's platform features to manage and optimize content. For example, using the pinned video function to highlight key content, organizing their videos by health topics using playlists, even enabling online consultations using Douyin's integrated healthcare app Xiaohe and half of them creating AI-powered digital twins for 24/7 chat services. However, only a small number of the professionals (14) use livestreaming.

The majority of their videos rely on direct oral speech (79.2%), speaking to the camera to explain medical concepts. Visual aids such as medical models (9.2%) and infographics (7.7%) are occasionally used to enhance comprehension. Most videos adopt a neutral and objective tone, reinforcing the credibility and aligning with the educational nature of their content.

Video themes further confirm the educational focus of health professionals on Douyin. Most of their videos provide general medical knowledge or treatment advice, together accounting for nearly 80% of the sample. In contrast, non-medical content, such as personal lives is rare, indicating a strong emphasis on delivering informative health communication.

Healthcare professionals on Douyin employed various storytelling strategies to balance education and entertainment, engaging audiences while maintaining credibility. For authority reinforcement, 73.1% of the videos are filmed in professional settings, such as hospitals or wearing scrubs. Additionally, 67.7% include a warning flag, reminding viewers to consult their doctors for personalized advice. This also reflects Douyin's serious regulatory environment of medical content. For entertainment, 31.5% of videos incorporate personal experiences and 47.7% have interaction with audiences to make health information relatable and foster emotional connections with viewers. Memes appear in 21.5% of videos, making serious medical topics more engaging. Visual effects (8.5%), transitions (8.5%), emphasized text (34.6%), background music (14.6%), and sound effect (21.5%) further enhance aesthetic appeal, aligning with Douyin's fast-paced, audiovisually immersive trend.

Discussion

Douyin's governance of health communication is closely aligned with the national health policies. The governmental directives not only dictate how health information is managed but also shape who gain prominence on the platform. For example, Douyin's verification and recommendation mechanisms prioritize licensed doctors from top-tier hospitals and reinforce the state agenda of promoting TCM. This alignment reflects a broader logic in China's digital governance, where platforms are expected to serve public welfare goals alongside commercial ones and be a communication partner of the state in national projects.

Healthcare professionals on Douyin employ rigorous self-presentation strategies to establish authority. Neutral tones and warning flags reinforce the educational nature of their content, while entertainment-driven adaptations help make the medical knowledge more appealing to suit to Douyin's platform culture. However, professionals' goal is to educate first, and to entertain just enough to draw attention. This is because their visibility does not depend on the virality of their videos, but sustained by platform endorsement and state legitimacy. This creates a communication style that combines credibility with accessibility under state guidance and platform moderation.

Finally, the uneven geographic distribution of health professionals on Douyin mirrors broader healthcare disparities in China, with professionals from economically developed areas dominating the platform. This reminds us that digital health inequalities still reflect offline disparities. While this imbalance persists, Douyin's integration with digital health services also opens up new possibilities to narrow these gaps. Through functions such as online consultations and AI chatbots, users in less-developed or remote areas can now access professional advice that otherwise be unavailable offline. In that sense, Douyin is not only a communication platform but also part of a growing healthcare infrastructure, redistributing medical expertise through digital means. Of course, whether this redistribution can truly address structural inequities still requires further research.

References

National Health Commission. (2022, May 31). *关于建立健全全媒体健康科普知识发布和传播机制的指导意见[Guidance on establishing and improving an integrated media mechanism for health communication and education]*. Gov.Cn. http://www.nhc.gov.cn/xcs/s3581/202205/1c67c12c86b44fd2afb8e424a2477091.shtml

Southerton, C. (2021). Lip-Syncing and Saving Lives: Healthcare Workers on TikTok. *International Journal of Communication*, *15*, 3248–3268. http://ijoc.org.

State Council. (2019, October 26). *中共中央 国务院关于促进中医药传承创新发展的意见 [Opinions of State Council of the People's Republic of China on Promoting Traditional Chinese Medicine]*. Www.Gov.Cn. https://www.gov.cn/zhengce/2019-10/26/content_5445336.htm

Vizcaíno-Verdú, A., & Abidin, C. (2022). Music Challenge Memes on TikTok: Understanding In-Group Storytelling Videos. *International Journal of Communication*, *16*, 883–908. http://ijoc.org.

Zhu, C., Xu, X., Zhang, W., Chen, J., & Evans, R. (2020). How health communication via tik tok makes a difference: A content analysis of tik tok accounts run by Chinese provincial health committees. *International Journal of Environmental Research and Public Health*, *17*(1). https://doi.org/10.3390/ijerph17010192