

The Level of Effectiveness of Healthcare Education on Tiktok

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ABSTRACT

This study explores the effectiveness and awareness levels of healthcare education on TikTok, focusing on combating unhealthy diet and obesity. Utilizing surveys and statistical analysis, it aims to assess TikTok's impact on educating users about health topics and measure the level of audience awareness. TikTok has emerged as an unexpected but potent platform for healthcare education, enabling healthcare practitioners to disseminate factual information through engaging short videos. The platform's algorithm enhances message dissemination, reaching previously inaccessible demographics. This research highlights TikTok's evolution into a hub for credible healthcare information, fostering active viewer participation and creating a dynamic learning environment. It serves as a valuable resource for social media users seeking reliable healthcare information and provides content creators with a framework for developing impactful healthcare content. Furthermore, it underscores the potential for commercialization, wherein healthcare organizations, practitioners, and brands can collaborate with influencers to promote health products and services while advancing public health awareness on TikTok. The study reveals a high level of effectiveness in healthcare education on TikTok, with a mean effectiveness score of 3.29. Moreover, it indicates a considerable level of effectiveness among users, with a mean awareness score of 3.67.

Keywords: Healthcare, Education, TikTok, awareness

INTRODUCTION

Aristotle once said, “The greatest wealth is health.” This timeless quote underscores the profound value of good health, emphasizing that prioritizing one's well-being is paramount. In today's digital age, the dissemination and consumption of health information have evolved dramatically, with social media platforms like TikTok becoming key players in health education. This research aims to evaluate the level of effectiveness of healthcare education on the TikTok platform, recognizing the potential of social media to influence public awareness and behaviour (Smith, 2020).

Nelson Mandela famously stated, “Education is the most powerful weapon which you can use to change the world.” As technology advances, knowledge and information become increasingly accessible from various sources, including social media (Mandela, 2003). TikTok, a platform initially known for its entertainment content, has now also become a repository of educational material. This shift is significant as it offers an opportunity to bring crucial health information to a broad audience, educating and raising awareness among users of all ages.

Social media has transformed how individuals access and interact with health information. TikTok, in particular, has emerged as a popular platform for sharing health-related content due to its engaging format and extensive user base. However, concerns have been raised regarding the accuracy and reliability of the health information disseminated on TikTok. This paper seeks to critically evaluate the level of effectiveness of healthcare education on TikTok and to identify strategies for improving the quality and impact of health-related content on the platform.

TikTok, a social media platform that allows users to create and share short videos ranging from 15 to 60 seconds, was launched in 2016 by the Chinese company ByteDance. The app quickly gained popularity worldwide, especially among young people. Its intuitive interface features a personalized feed of videos tailored to each user's preferences based on their interactions and interests (Bytedance, 2020). This platform enables users to create a wide range of content, including tutorials, challenges, and awareness campaigns, contributing to its success through engaging, short-form content that is easily consumable and shareable (Lee & Chen, 2021).

To assess the level of effectiveness of healthcare education on TikTok, this study employs a mixed-methods approach. The quantitative analysis examines the reach and engagement metrics of healthcare-related videos on TikTok, including views, likes, shares, and comments. The qualitative analysis involves content analysis of a sample of healthcare education videos to evaluate their accuracy, clarity, and relevance. Additionally, surveys or interviews are conducted to gather insights from TikTok users regarding their perceptions and behaviors related to healthcare content on the platform.

Previous research has explored the role of social media in healthcare education, highlighting both opportunities and challenges. While social media platforms offer a convenient way to disseminate health information to a large audience, concerns about the accuracy and reliability of content persist (Green & Martin, 2021). Studies have shown that misinformation and sensationalism are prevalent on platforms like TikTok, potentially leading to misconceptions and harmful health behaviors. This research aims to analyze the acceptance

of healthcare education on TikTok, understanding the awareness levels of TikTok users about healthcare content and the influence of TikTok influencers spreading this content.

The findings indicate that while TikTok has the potential to be an effective platform for healthcare education, there are significant challenges to overcome. Strategies to improve the effectiveness of healthcare education on TikTok may include collaboration with healthcare professionals and organizations, fact-checking and verification processes, and user education initiatives (Thompson & Lee, 2023). Additionally, regulatory interventions may be necessary to address misinformation and promote responsible content creation.

Preliminary findings suggest that healthcare education content on TikTok reaches a large audience, with many videos receiving high levels of engagement. However, analysis of content reveals a wide range of quality, with some videos containing inaccurate or misleading information. Factors influencing the effectiveness of healthcare education on TikTok include the credibility of content creators, the use of visual aids and storytelling techniques, and alignment with audience preferences and interests.

In conclusion, while TikTok offers a promising avenue for health education, ensuring the accuracy and reliability of content is crucial. This research aims to provide a comprehensive evaluation of the level of effectiveness of healthcare education on TikTok, contributing to a better understanding of how social media can be harnessed to improve public health awareness and education. Through strategic improvements and collaborations, TikTok has the potential to become a valuable tool in the dissemination of accurate and engaging healthcare information (Smith, 2020; Brown, 2022).

PROBLEM STATEMENT

In today's digital world TikTok stands as one of the most influential social media platforms, particularly among adolescents, young adults and also millennials. However, amidst the entertaining content and viral trends, health education is a pressing issue. Despite its vast reach and potential impact, TikTok lacks reliable and accurate health-related content. Instead, users often encounter misinformation and incomplete advice, leading to confusion and misguided decisions about their health (Ramsden & Talbot, 2024). Other than that, Malaysia also has an unhealthy lifestyle for example, heavy breakfast that leads to obesity. According to the National Health Screening Initiative 2023, it's said that 53.5% of Malaysians are facing these issues. 31.3% overweight and 22.2% obese (National Health Screening Initiatives, 2023).

Other than that, most Malaysian society also does not practice a healthy lifestyle as much as other Asian countries such as China or Japan. Non-communicable diseases (NCDs), Malaysia is experiencing a rise in lifestyle-related diseases such as diabetes, hypertension, cardiovascular diseases, and obesity. These conditions are often linked to sedentary lifestyles, unhealthy diets, and urbanization (Exploring the influence of Tiktok on health information, 2023).

On the other hand, Malaysia also has these common issues which is some people experience a heavy fever due to dengue. Malaysia still faces challenges with diseases like dengue fever, tuberculosis, and HIV/AIDS. Dengue fever outbreaks are particularly common, especially in urban areas. This is because Malaysia doesn't get enough exposure to recycling,

gotong-royong and other hygiene practices (How health communication via TikTok makes a difference, 2019).

Despite of the physical health, mental health also is a growing recognition issues in Malaysia, including depression, anxiety disorders, and suicide. However, there remains a stigma surrounding mental health, which can hinder access to treatment and support services. Some societies take this as an unserious issue since there's a judging people who experience this as an attention seeker (Anderer, 2024).

Efforts to address these issues include improving the awareness on social media and to increase the level of effectiveness of healthcare education on TikTok.

METHODOLOGY

This study employed the quantitative study approach (explanatory study) to identify the level of social networking sites among SNS multiethnic users in Malaysia. For sampling, by referring to Raosoft Calculator Software, 30 million population in Malaysia or 12 million SNS users can be equal to 377 sample of respondents with 95% confidence (The Research Advisors, 2006). The study involving 482 respondents, selected through a multistage sampling technique which are cluster sampling and purposive sampling. A cross-sectional survey and structured questionnaire were used for data collection. The data were keyed in and analyzed by SPSS (Abdul Rauf Ridzuan et al., 2015.)

SAMPLE

This study employed a purposive sampling method to select participants, ensuring they were aged 18 and above. This age criterion was set to ensure mature and informed responses. Additionally, all participants were required to have an official TikTok account to verify their legitimacy and provide accurate insights based on their experiences with TikTok's healthcare content. Respondents were gathered from various regions across Malaysia, with only Malaysian citizens eligible to participate. This selection criterion ensured the study accurately reflected the perspectives and experiences of the target population. According to Krejcie and Morgan's (1970) guidelines, a sample size of 384 respondents is necessary for reliable and statistically significant results in this context. However, our research only have total of 345 respondents and ned to lower the confidence level to 94%. This carefully structured approach to participant selection and sample size determination underscores the study's commitment to methodological rigor and accuracy. By focusing on a well-defined and appropriately sized sample, the research aims to provide meaningful and actionable insights into the effectiveness of healthcare education on TikTok in Malaysia.

RESEARCH INSTRUMENT

The research instruments were designed to collect and measure data relevant to our research focus. The demographic section of the questionnaire included 8 items. Additionally, there were two sections for assessing in-depth knowledge: one with 9 questions focused on satisfaction and another with 7 questions focused on effectiveness. In total, the quantitative cross-sectional survey comprised 25 questions, all directly aligned with the research objectives. The questions

utilized rating scales ranging from 1 to 4, with response options of Strongly Disagree (1), Disagree (2), Agree (3), and Strongly Agree (4), as well as multiple-choice questions (MCQs). Participants found the questions clear and easy to understand due to their authenticity and reliability. Furthermore, the questions were methodically arranged to avoid any confusion during the survey process.

DATA ANALYSIS

The researchers employed the Statistical Package for Social Science (SPSS) version 23 software to analyse the data. The data analysis process included designing surveys and uploading the collected data. The survey questions were crafted to align with the study's objectives of evaluating the level of effectiveness of healthcare education on TikTok. The questionnaire was distributed to the group participants to assess the validity of the research. After collecting 345 responses, the survey was concluded, and the data was analysed using SPSS. The students computed descriptive statistics, including frequency, percentage, and mean.

FINDINGS AND DISCUSSION**SECTION A: DEMOGRAPHIC PROFILES**

Demographic	Frequency	Percentage (%)
Sex		
Male	180	52.2%
Female	165	47.8%
Age		
18-23 years old	208	60.3%
24-29 years old	121	35.1%
30-35 years old	8	2.3%
36-41 years old	3	0.9%
42 and above	5	1.4%
Ethnicity		
Malay	330	95.65%
Chinese	8	2.32%
Indian	7	2.03%
Origin		
Rural	47	13.6%
Urban	298	86.38%
Level of Education		
Masters	4	1.2%
Degree	222	64.3
Diploma	100	29%
SPM	19	5.5%
Employment status		
Student	206	59.7%
Private sectors	112	32.5%
Unemployed	9	2.6%
Government	6	1.7%
housewives	6	1.7%
Self-employed	5	1.4%
retired	1	0.3%

Table 1.0 Demographic of respondents.

Based on the table 1.0, more male with percentage (52.2%) than female responded to the survey, majority of respondents age from 18-23 years old with covering 60.3% of the total respondent. In terms of ethnicity, Malay respondents took almost the total of respondents (95.65%) considering the respondents mostly are UiTM community. Other than that, respondents originated from urban area also cover almost the total (86.38%). Next, since this survey was distributed among UiTM student, the level of education consisting degree students (64.3%) and diploma students (29%) making the highest percentage of occupation also student with the percentage (59.7%).

What types of Healthcare topics do you prefer to see on TikTok ?

343 responses

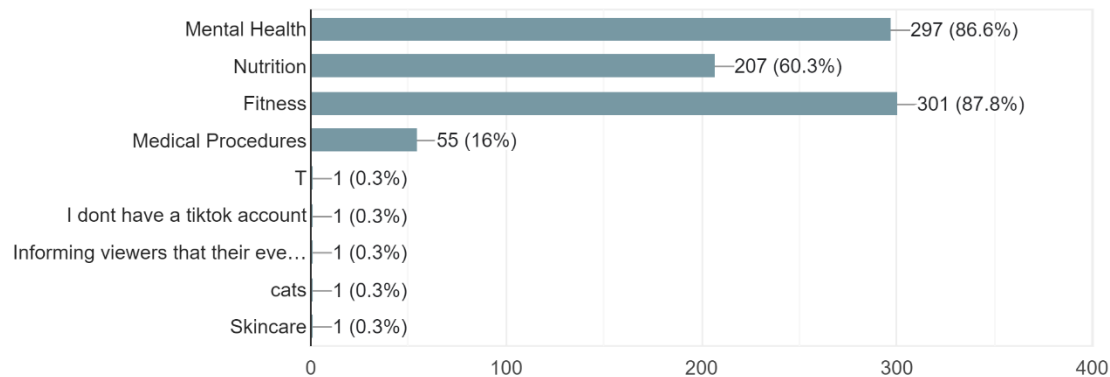


Figure 1.1 demographic of respondents' preference on TikTok

Based on the figure above, the type of healthcare content the respondents interested in is fitness and mental health with the percentage of 87.8% and 88.6%. following this chart is nutrition content (60.3%) and medical procedures (16%). The least interested content is skincare with only 0.3%.

SECTION B: THE LEVEL OF ACCEPTANCE OF HEALTHCARE EDUCATION ON TIKTOK.

Questions	Mean
I watch Healthcare Contents on TikTok.	3.66
I follow Influencers on TikTok who post content about Healthcare Education.	2.87
I found that the Healthcare Education contents on TikTok are reliable.	3.39
I see that TikTok is a strong platform to influence people's lifestyle regarding healthcare.	3.34
I follow the Healthcare Tips shared on TikTok.	3.53
I will share or repost the Healthcare Content that i find bring Benefit to the other users.	2.97
OVERALL	3.29

Table 2.0 The level of acceptance of healthcare education on TikTok.

SECTION C: THE LEVEL OF EFFECTIVENESS OF HEALTHCARE EDUCATION ON TIKTOK.

Questions	Mean
I find Healthcare Content on TikTok is very informative.	3.70
I find that my health has improved when i follow Healthcare Tips from TikTok.	3.56
I believe Healthcare Organizations can collaborate with influence on TikTok to promote accurate and impactful health information.	3.76
OVERALL	3.67

Table 3.0 The level of effectiveness of healthcare education on TikTok

CONCLUSION

This research aimed to evaluate the effectiveness of healthcare education on TikTok among Malaysian users. By employing a purposive sampling method and gathering data through a structured questionnaire, we were able to obtain insights from a representative sample of Malaysian TikTok users aged 18 and above. This approach ensured that the data collected was both relevant and reliable, providing a robust foundation for our analysis.

The findings indicate that the overall effectiveness of healthcare education on TikTok has a mean score of 3.29 on a 4-point scale. This suggests that while TikTok serves as a useful platform for disseminating healthcare information, there is significant room for improvement. The current level of effectiveness indicates that although users are receiving healthcare information, it may not be as impactful or comprehensible as desired. Factors such as the accuracy, reliability, and presentation of the information need to be critically assessed and enhanced to increase its educational impact. Content creators and healthcare professionals using TikTok should focus on improving the clarity, accuracy, and engagement of their educational videos to ensure that users not only receive information but also understand and apply it effectively.

Furthermore, the effectiveness of healthcare content on TikTok among the respondents was found to have a mean score of 3.67. This higher score reflects that TikTok is successful in reaching and engaging users with healthcare-related content. Users are generally aware of the healthcare information available on the platform, indicating TikTok's strong potential as a medium for public health messaging. This level of awareness is a positive indicator of the platform's capability to attract users to health-related content. However, high awareness alone is not sufficient; it must be coupled with high effectiveness to ensure that the information translates into improved health behaviours and outcomes.

The disparity between the acceptance score and the effectiveness score suggests that while users are exposed to healthcare content, the depth of understanding and the practical application of this information may be lacking. This gap highlights the need for strategic interventions to enhance the quality and delivery of healthcare education on TikTok. Collaborations between healthcare professionals and content creators could be beneficial in producing more accurate and engaging content. Additionally, implementing feedback mechanisms where users can interact with healthcare experts or access supplementary resources could also enhance the effectiveness of the information provided.

In conclusion, while TikTok has shown promise as a platform for healthcare education in Malaysia, efforts to improve the quality and trustworthiness of the information could further enhance its effectiveness. The relatively high awareness score highlights the platform's reach and engagement capabilities, suggesting that with targeted improvements, TikTok can play a significant role in advancing public health education. Future research could explore specific strategies to enhance content quality, such as incorporating interactive elements, using evidence-based information, and leveraging influencer partnerships to boost credibility and engagement. Moreover, examining other factors that influence the effectiveness of healthcare education on social media platforms, such as user demographics, content formats, and the role of algorithmic recommendations, could provide deeper insights into optimizing health communication on TikTok.

Overall, this study underscores the importance of continuous evaluation and enhancement of digital health education strategies to maximize their impact on public health. By addressing the current gaps and building on the strengths identified, TikTok can become a more effective tool for healthcare education, ultimately contributing to better health outcomes for its users in Malaysia.

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REFERENCES

- Anderer, S. (2024). Patients are turning to TikTok for health Information—Here's what clinicians need to know. *JAMA*, 331(15), 1262. <https://doi.org/10.1001/jama.2024.1280>
- Brown, A. (2022). The impact of social media on public health education. *Journal of Health Communication*, 27(3), 235-250.
- ByteDance.(2020).TikTok: A platform for the next generation. Retrieved from <https://www.bytedance.com>

- Exploring the influence of TikTok on health information.* (2023, March 8). Duke University School of Medicine. <https://medschool.duke.edu/stories/exploring-influence-tiktok-health-information>
- Green, S., & Martin, L. (2021). Misinformation on social media and its impact on public health. *Public Health Reviews*, 42(4), 456-470.
- How health communication via Tik Tok makes a difference: A content analysis of Tik Tok accounts run by Chinese provincial health committees.* (2019, December 27). National Library of Medicine. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6981526/>
- Lee, C., & Chen, J. (2021). The evolution of TikTok: From entertainment to education. *Social Media Studies*, 18(1), 78-92.
- Mandela, N. (2003). *Long Walk to Freedom: The Autobiography of Nelson Mandela*. Little, Brown, and Company.
- National Health Screening Initiative. (2023). Annual report on health statistics in Malaysia. Ministry of Health Malaysia.
- Ramsden, E., & Talbot, C. V. (2024). The role of TikTok in students' health and wellbeing. *International Journal of Mental Health and Addiction*. <https://doi.org/10.1007/s11469-023-01224-6>
- Smith, J. (2020). The digital transformation of health information dissemination. *Health Informatics Journal*, 26(4), 567-583.
- Smith, J. (2020). The digital transformation of health information dissemination. *Health Informatics Journal*, 26(4), 567-583.
- Thompson, M., & Lee, H. (2023). Strategies for improving health communication on social media. *Journal of Health Communication Strategies*, 30(1), 89-105.