Vinsers’ Reviews: A Content Analysis of Selected Tiktok Videos with #Health

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Abstract

In recent years, social media has emerged as a ubiquitous channel that enables individuals to share their viewpoints and experiences on various subjects, including matters related to healthcare. Especially on TikTok, videos tagged with #Health have garnered a significant following, raising questions about how these videos are perceived by their audience. This study aims to provide an in-depth analysis of TikTok videos with the hashtag #Health. Specifically, this research decoded the themes presented in the selected 100 #Health videos, described their content, and checked their factual accuracy. Qualitative approaches such as content analysis, and qualitative observations were used to gather data. The study explored the themes presented in #Health videos, assess how viewers engage with these videos, and determine the accuracy of the information presented. A variety of themes are present in TikTok videos with the #Health. Most of the content has creative, informative, and educational presentations that capture the interest of viewers. However, some misinformation in these videos was encountered. Furthermore, this study recommends that additional focus be allocated to verifying the accuracy of the information provided in these videos.

Keywords - social media, TikTok, #Health, content analysis, factual accuracy, misinformation

I. INTRODUCTION

According to Dixon, the utilization of social media platforms has significantly transformed the way individuals engage in communication with each other, their neighborhood, and the global community. As of 2021, social media has been used by almost six billion people around the world [10].

Moreover, the average daily global usage of social media has been found to be experiencing an upward trend, increasing from 90 minutes daily in 2012 to 145 minutes in 2021[9].

The correlation between social media and healthcare is transpiring in an array of forms. Medical professionals such as physicians, clinicians, physicists, and others are leveraging social media as a platform to expand their outreach and enhance their online presence, all the while adolescents and seniors alike are consuming it for a myriad of different appeals which includes educational intent, all due to its ease of use and practicality. Consequently, social media platforms are being increasingly employed as an alternative medium for disseminating healthcare-related information.

In 2022, TikTok emerged as the fastest-growing media brand across the world, gaining over 711% growth in two years [12]. It is a video-sharing application that is owned by a Chinese corporation, and it allows users to produce videos spanning a range of three seconds up to ten minutes in duration. Due to the ubiquity of smartphones, the device for which TikTok was specifically built and accommodated has resulted in its widespread popularity among juveniles and young adults, the leading demographics of this type of electronic equipment, as shown by the fact that 41% of total users range from the age of 16 up to 24. The application has been installed more than 2 billion times worldwide and reportedly has more than 1 billion active monthly users as of 2021.

While rising in popularity, TikTok has also faced widespread criticism regarding various concerns – the risk of addiction, security, and the nature of its content. Countries like Pakistan, India, Indonesia, and Bangladesh have issued blocks against TikTok. US presidents Donald Trump and Joe Biden have both attempted to pass a ban on the application. Concerns regarding lies and propaganda being spread among users, the majority being
juveniles, are relatively major. Given its global popularity, TikTok has the potential to become a significant channel for healthcare information, however, the likelihood of inaccurate information being spread on the platform can make it a probable threat to health treatment and prevention.

This study aims to provide an in-depth analysis of TikTok videos with the #Health. Specifically, this research decodes the themes present in the selected 125 #Health videos, describes their content, and checks their factual accuracy.

II. REVIEW OF RELATED LITERATURE

TikTok is a trending video-sharing application that allows users to view, record, upload, and share short videos. It has gained a massive user base of over 1 billion and is becoming increasingly popular among young adults. Research on TikTok videos has been conducted to understand their contents, including their impacts on health. This literature review aims to identify TikTok videos with the hashtag #Health, describe the content of the hashtag #Health videos on TikTok through decoding themes, and check if facts given by videos with #Health are true.

A. Themes of the #Health videos on TikTok

A study protocol investigated health-related topics on TikTok and provided a descriptive analysis of the content [32]. The results revealed the prevalence and nature of health-related themes, including healthy eating tips, workout routines, and body positivity, found in TikTok videos. The study aimed to understand the influence of TikTok on promoting health-related information and behaviors. By analyzing the content, the researchers gained insights into the potential impact of TikTok videos on users' health knowledge and behaviors.

Mental health is another key theme influencing healthier lifestyles on TikTok. Videos using this theme typically promote awareness of mental health issues and opportunities for mindfulness exercises. Additionally, videos related to “product reviews” are critical to promoting health-related content. They frequently suggest products that promote healthy living, such as plant-based snacks or supplements.

According to Briguglio and Pucci’s study, health, and body care routines. Healthy eating habits, fitness goals and weight loss tips are the prime themes of health-related videos on TikTok. On the one hand, such videos encourage individuals to adopt healthy lifestyles through fitness and nutrition. On the other hand, they also assist in achieving tangible health goals and measurable improvements in fitness and wellness [4].

Overall, these themes suggest that TikTok has a positive impact on promoting healthy lifestyles through various entertaining and creative videos. Through emerging technology platforms like TikTok, people can access helpful insights and guidance on how to lead healthier lives.

B. Views and Comments of #Health videos on TikTok

The results of the study carried out by Bao, et al. indicate that health-related videos are immensely popular among TikTok users. The sample of 174 videos with the hashtag #Health received an average of 578,193 views per video, which highlights the potential of TikTok as a social media platform for promoting health information [3]. The high number of views confirms that users are interested in consuming health-related content on TikTok, which opens up a meaningful and effective means of disseminating accurate and reliable health information.

The study also revealed that the health-related videos on TikTok received an impressive level of engagement from the user community, with each video receiving an average of more than 6,500 comments. This high level of user interaction indicates that health-related content has the potential to spark conversations and educate users about incorporating a healthier lifestyle. The conversations taking place in response to health-related content on TikTok plays a crucial role in spreading awareness, educating users, and ultimately promoting public health in a more effective manner.
C. #Health videos on TikTok Accuracy

A literature review from Regasa and Ettisa summarized TikTok’s impact on students, highlighting both positive and negative effects on academic performance, mental health, social interactions, and overall well-being. The review emphasized the need for caution regarding content accuracy, as TikTok's user-generated nature increases the risk of encountering inaccurate or misleading information. Users were advised to critically evaluate and fact-check TikTok content for reliability[1].

While TikTok’s algorithm may have certain benefits, allowing users to promote misinformation and false health advice completely undermines the credibility of the platform. There is a pressing need for TikTok to take accountability and enforce measures to manage the dissemination of such information, especially when it comes to matters of health.

Furthermore, a TikTok Newsroom article that discussed the platform's efforts to counter misinformation [38]. According to the article, TikTok implemented measures to address misinformation by promoting authoritative sources, collaborating with fact-checking organizations, and enhancing content moderation. These actions aimed to ensure that TikTok users had access to accurate and verified information, especially regarding health topics. TikTok aimed to protect its users from potentially harmful or misleading content and create a safer and more reliable environment for health-related information by actively countering misinformation.

Very few studies are on a specific health hashtag (#Health) on TikTok, making it necessary for future studies to provide more valuable insights on this topic. Moreover, incorporating the TikTok platform as a source of health information might have positive outcomes; however, research studies should decipher the information given, and the facts presented should be accurate. TikTok can become an instrument to spread awareness about the significance of a healthy lifestyle across various age groups.

Therefore, the primary goal of this study is to explore the following research objectives:

1. Themes of the #Health videos on TikTok
2. #Health videos on TikTok in numbers:
   a. Views
   b. Likes
3. Accuracy of #Health videos on TikTok
4. Verification process

III. METHODOLOGY

The research protocol employed in this study is Qualitative research. The qualitative method focuses on descriptive data collection and analysis that provides insights and understanding about the phenomenon under investigation. In this study, we aim to achieve a deep understanding of TikTok videos with #Health.

A. Design

The design used in this study is Content Study. The content study is when the data is analyzed for the content of communications. In this study, we are analyzing TikTok videos for their content on health issues using qualitative approaches.

B. Approaches and Instruments

The primary approach used in this study is content analysis. This method involves analyzing various forms of communication to identify specific communication characteristics, themes, and patterns embedded in the data. Therefore, TikTok videos that have #Health were analyzed. There was a scrutinization and classification of their content into distinct content categories.

The other approach is qualitative observation where nonpartisan researchers obtain information by observing the phenomenon without interfering. In this study, TikTok videos that have #Health and systematically record information that falls within the predefined category framework were observed.
C. Data Analysis

A systematic protocol was used to collect the videos. The TikTok platform was used to document the links associated with the videos. 125 videos alongside their respective links were collected using the search term “Health” and documented onto a spreadsheet for further examination.

The inclusion criteria for this study were that videos must be involved with health or include medical information. The exclusion criteria included: videos not involving health information. Videos that were duplicated or those that encountered coding-related accessibility issues, such as being deleted or uploaded by a private account, were excluded from the analysis as well.

IV. RESULTS AND DISCUSSION

This section presents the results of the content analysis which (1) identifies the themes of TikTok videos with the #Health, (2) analyzes the engagement of the hashtag #Health videos on TikTok through decoding descriptors, (3) verifies the accuracy of the facts given by videos with #Health.

1. Themes of the #Health videos on TikTok

Table 1: The number of videos in each theme

<table>
<thead>
<tr>
<th>Theme</th>
<th>Number of videos</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifestyle</td>
<td>33</td>
<td>31.13%</td>
</tr>
<tr>
<td>Nutrition</td>
<td>18</td>
<td>16.98%</td>
</tr>
<tr>
<td>Biological</td>
<td>18</td>
<td>16.98%</td>
</tr>
<tr>
<td>Physiology</td>
<td>15</td>
<td>14.15%</td>
</tr>
<tr>
<td>Diseases</td>
<td>7</td>
<td>6.6%</td>
</tr>
<tr>
<td>Fitness</td>
<td>6</td>
<td>5.66%</td>
</tr>
<tr>
<td>Mental</td>
<td>2</td>
<td>1.9%</td>
</tr>
<tr>
<td>Others</td>
<td>7</td>
<td>6.6%</td>
</tr>
</tbody>
</table>

TikTok videos were collected and viewed three times to accurately classify the content of each. Videos were classified on broad content themes: lifestyle, nutrition, biological, fitness, physiology, mental, diseases and others based on qualitative observations.

The theme lifestyle refers to a pattern of behavior and activities that serve as an individual’s way of life. In these TikTok videos, lifestyle is addressed in terms of healthy habits like exercise, stress management, and self-care.

On the other hand, nutrition decoded videos are concerned with the food and its effect on the body. In these #Health TikTok videos, nutrition is addressed in terms of healthy eating habits, balanced diets, and the role of food in improving overall health.

Biological processes refer to the functions and processes that are inherent to living organisms. These processes include metabolism, growth, and reproduction, and other concepts related to life sciences that impact health.
The theme fitness includes the physical and mental preparedness of an individual for daily activities. In the #Health TikTok videos, fitness is addressed through various exercises, workouts, and physical activities that can promote overall fitness.

Physiology decoded videos are functions and essential processes in living organisms. In these TikTok videos, an exploration of the effects of various activities, behaviors, and environmental factors on the body's overall functioning.

In the #Health TikTok videos, mental health is tackled through different approaches like meditation, mindfulness, and employing various strategies for coping and dealing with stress. This refers to the mental and emotional condition of an individual.

Lastly, the theme diseases focus on medical conditions that deviate from normal body functioning. In the #Health TikTok videos, influencers offer insights on various medical conditions, their symptoms, diagnoses, management, and treatments to help viewers learn how to maintain and manage their health.

2. #TikTok health videos in numbers

A. Views

Table 2: The views of #Health TikTok videos

<table>
<thead>
<tr>
<th>Number of Views</th>
<th>Number of Videos</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;10 million</td>
<td>11</td>
<td>(10.38%)</td>
</tr>
<tr>
<td>1-10 million</td>
<td>66</td>
<td>(62.26%)</td>
</tr>
<tr>
<td>100k-1 million</td>
<td>24</td>
<td>(22.65%)</td>
</tr>
<tr>
<td>10k-100k</td>
<td>3</td>
<td>(2.83%)</td>
</tr>
<tr>
<td>&lt;10k</td>
<td>2</td>
<td>(1.88%)</td>
</tr>
</tbody>
</table>

From within the TikTok application, certain general descriptors of the video such as the quantity of likes and the number of views were documented. This data was organized to assist in understanding the range of engagement that said videos achieved.

At the time of the initial data recording process, data pertaining to the number of likes and views, as well as the verification status of the account that uploaded the video, was recorded and is currently presented in Table 2. The descriptors for likes and views were subsequently separated, counted, and expressed as a percentage of the overall total.

Note: Intentional spacing has been included in the text to allow for clear segregation between tables, figures, and discussion.
The distribution of the number of views of the collected videos appears to be skewed to the right with the mean of ~ 3.996 million views and a standard deviation of ~ 4.625 million views.

**B. Likes**

**Table 3: The likes of #Health TikTok videos**

<table>
<thead>
<tr>
<th>Number of Likes</th>
<th>Number of Videos</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;1 million</td>
<td>5</td>
<td>(4.72%)</td>
</tr>
<tr>
<td>100k-1 million</td>
<td>32</td>
<td>(30.19%)</td>
</tr>
<tr>
<td>10k-100k</td>
<td>55</td>
<td>(51.88%)</td>
</tr>
<tr>
<td>1k-10k</td>
<td>12</td>
<td>(11.32%)</td>
</tr>
<tr>
<td>&lt;1k</td>
<td>2</td>
<td>(1.89%)</td>
</tr>
</tbody>
</table>

Table 3 shows the range of number likes from less than 1 thousand to 1 million and more. The number of videos and the percentage of each were also presented.

*Note: Intentional spacing has been included in the text to allow for clear segregation between tables, figures, and discussion.*
The distribution of the number of likes of collected videos appears to be skewed to the right with the mean of ~225 thousands likes and the standard deviation of ~453 thousands likes.

3. Accuracy of #Health videos on TikTok

Table 4: The accuracy of videos separated into categories

<table>
<thead>
<tr>
<th>Level of Accuracy</th>
<th>Number of Videos</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accurate</td>
<td>48/106</td>
<td>(45.28%)</td>
</tr>
<tr>
<td>Inaccurate</td>
<td>9/106</td>
<td>(8.49%)</td>
</tr>
<tr>
<td>Partially Accurate</td>
<td>27/106</td>
<td>(25.47%)</td>
</tr>
<tr>
<td>Unknown</td>
<td>22/106</td>
<td>(20.75%)</td>
</tr>
</tbody>
</table>

The information given by collected #Health videos was fact-checked by multiple authors using sources from a variety of authorized studies and websites. The accuracy of collected videos was separated into 4 categories: accurate, partially accurate, inaccurate and unknown accuracy. 10 videos through the quintessential verification process are thoroughly checked with evidence for sample referencing.
4. Verification Process

Table 5: Verification phases of the #Health TikTok videos

<table>
<thead>
<tr>
<th>Video Title</th>
<th>Views</th>
<th>Likes</th>
<th>Accuracy Level</th>
<th>Verified Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many do you have a day?</td>
<td>10.6M</td>
<td>488.8K</td>
<td>Not accurate</td>
<td>● healthline.com [34] ● livestrong.com [23]</td>
</tr>
<tr>
<td>Kiểmtraxemnãocủabạnnhanhnhư thếnào</td>
<td>2.2M</td>
<td>135.7K</td>
<td>Unrelated</td>
<td>No Data</td>
</tr>
<tr>
<td>6 things you may not know about your gut health</td>
<td>1M</td>
<td>45.4K</td>
<td>Partially accurate</td>
<td>No Data</td>
</tr>
<tr>
<td>After dinner everyday, foot pad for ten minutes. Skinny legs Thin arm</td>
<td>4M</td>
<td>178.1K</td>
<td>Accuracy cannot be determined</td>
<td>No Data</td>
</tr>
<tr>
<td>One Minute Health Check</td>
<td>2.7M</td>
<td>392.4K</td>
<td>Accuracy cannot be determined</td>
<td>No Data</td>
</tr>
</tbody>
</table>

After the initial downloads of 125 #Health TikTok videos, 106 total videos aligned with the inclusion requirements. These videos were analyzed for descriptor information (refers to Table 2 and Table 3) and content (refers to Table 1). Overall, TikTok videos with the #health received greater engagement as shown by their views and likes. 11 #Health TikTok videos had over 10 million views and 66 and more had over 1 million views suggesting that impact/influence is broad for the #Health label.
While engagement and reach of the videos showed some spread, there was a keen interest in examining the content to gain further understanding of the potential to utilize the platform as an educational tool (refer to Table 2). Most videos were uploaded by unverified individuals with only 6 total videos being uploaded by verified accounts. The topics of the videos were analyzed and revealed that content mostly revolves around sharing health tips, such as (1) diet and lifestyle, (2) discussing a medical fact or information, or (3) warning of the detrimental effects of several actions on people's health.

Only 2/106 videos referenced a problem related to mental health and only 13/106 videos covered information on the influence of external factors on health ($diseases = 7; fitness = 6$). Finally, 76/106 videos give accurate information ($accurate = 48; partially accurate = 27$) and the accuracy of 22/106 videos cannot be determined.

V. CONCLUSION

This study has demonstrated that TikTok, aside from its widespread usage as a social media platform for entertainment purposes, is also being utilized as a means to disseminate information pertaining to various aspects of healthcare, encompassing both physical and mental wellness. Thorough examinations of the documented videos reveal that the majority of these videos utilized a playful, light-hearted attitude to approach the subject matter of wellness and physical fitness, most likely for the purpose of relieving the stress that these topics inherently contain. 84 of the videos included in the study were sorted into the “educational” category with 11 of them being viewed over 10 million times. However, only 48 out of the 84 documented “educational” videos contain fully factual claims and are qualified to be deemed as trustworthy “educational” content. Considering the broad engagement of a few highly-watchable educational videos, TikTok presents an opportunity to be harnessed as a channel specifically for disseminating healthcare-related educational material to its youthful demographic.

Moreover, TikTok has the capability to serve as a platform for showcasing informative healthcare material, particularly when collaborating with "influencers" who possess verified accounts, such as physicians or medical professionals. These accounts hold significant importance as they contribute immensely to the dissemination of information among TikTok users due to their substantially large scope of engagement. Additionally, maintaining integrity and credibility is of utmost importance as it significantly influences the ability to capture users' attention. Furthermore, an organization on TikTok could potentially fund healthcare education, thereby motivating popular influencers to integrate healthcare education into their videos, consequently enabling healthcare related information to reach a substantial number of their followers.

VI. RECOMMENDATIONS

This study recommends that healthcare organizations explore utilizing TikTok as a platform for sharing information and educating the younger audience about healthcare-related matters. The study shows that while TikTok is mostly utilized for entertainment purposes, it is already being used as a platform for healthcare-related content. Specifically, healthcare content on TikTok tends to be light-hearted, and factual educational pieces should be encouraged.

Collaboration with verified accounts, such as physicians or medical professionals, would be valuable in providing users with trustworthy and credible healthcare education. Similarly, healthcare organizations could sponsor influencers to include healthcare education information in their videos, providing an incentive for influencers to deliver accurate information to a large audience.

Overall, TikTok has immense potential for healthcare organizations to reach out to a younger demographic and share information about various aspects of health and wellness. As such, organizations should explore this platform as they create new strategies for the dissemination of information.

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LEARNING BEYOND LIMITS! #Vinser #VinschoolOceanPark #TrHOceanPark

VIII. REFERENCES


Eggs and Cholesterol

In this article, we explore the effects of consuming one avocado per day versus habitual diet on heart health. The study was conducted by Li, Z., Sabaté, J., Rajaram, S., & Mastroianni, B. (2018), and it highlights the importance of incorporating healthy fats into one's diet for overall cardiovascular health.

The article also discusses the role of antibiotics in disrupting gut microbiota, a connection that was further explored in the research by Ramirez, J., Guarner, F., Fernandez, L. B., Maruy, A., Sdepanian, V. L., & Cohen, H. (2020).


Moreover, the article touches on the relationship between antibiotics and the gut microbiota, as analyzed in the study by Ramirez, J., Guarner, F., Fernandez, L. B., Maruy, A., Sdepanian, V. L., & Cohen, H. (2020).

The text emphasizes the importance of understanding the role of dietary fats in heart health, as evidenced by the study by Mathes, B. M., Norr, A. M., Allan, N. P., Albanese, B. J., & Schmidt, N. B. (2018). It also underscores the need for further research on the long-term effects of dietary interventions on overall health.

In summary, this article provides a comprehensive overview of the latest findings in the field of dietary fats and heart health, along with insights into the role of gut microbiota and antibiotics in this context.


