

The spread of misinformation on TikTok during the Covid-19 Pandemic: Exploring it's impact on public response.

By Charlize Rebelo

21/04/2024

Abstract:

TikTok, a very popular platform for sharing content, has developed into a breeding ground for the spread of misinformation on Covid-19. Misinformation on TikTok has severely impacted actions taken by society to deal with and combat Covid-19. As society struggles to discern what is real and fake regarding Covid-19, this has a serious influence on the wellbeing of society, increasing anxiety and stress levels as well as provoking suicidal thoughts (Baghdadi et al., 2023).. The platform's algorithm contributes significantly to the spread of misleading content, which in turn sparks public mistrust of scientific information and vaccine hesitancy (Little et al., 2021). Despite TikTok's ongoing efforts to combat misinformation, this issue will continue to affect society hindering the way they acknowledge and respond to Covid-19 misinformation.

Introduction:

TikTok is one of the most predominant online platforms that disseminate harmful and misleading content, creating confusion between what is real and fake and leading viewers to react in uncalled-for ways. TikTok, a video-sharing app, enables users to create and share short videos on topics of interest (Geyser, 2024). According to Baghdadi et al. (2023), misinformation refers to inaccurate information that contradicts scientific explanations, often sparking controversy among individuals. TikTok stood out as a known catalyst for disseminating fake news, particularly science-related data regarding misinformation regarding the Covid-19 pandemic that first surfaced in 2020 (Cuello-Garcia et al., 2020). This ultimately caused disagreements and sparked fears among individuals (Cuello-Garcia et al., 2020). During the pandemic, TikTok experienced a spike in popularity due to reduced in-person communication because of Covid-related isolation (Baghdadi et al., 2023). Consequently, this leads to inaccurate information about coronavirus spread across the app (Baghdadi et al., 2023). Furthermore, considering the high level of engagement around this societal issue, the false information only continued

to amplify as others voiced their opinions online (Baghdadi et al., 2023). Many thought using TikTok was an entertaining and engaging approach to inform and keep others updated on current global pandemic news (Baghdadi et al., 2023). What users failed to recognise is the impact these Covid-related posts are having on individual attitudes towards health, their struggle to discern what is real and what is fake, and the numerous adverse consequences this has on the well-being of society (Baghdadi et al., 2023).

Attitudes towards health:

TikTok can influence one's attitude towards health protocols and regulations related to Covid-19. It has altered people's beliefs, particularly around vaccine hesitancy, creating a disconnect between genuine scientific data and fabricated information disseminated on the platform. When the Covid-19 outbreak first attracted attention, most people saw it as a worldwide health emergency, with the World Health Organisation classifying it as such (Little et al., 2021). TikTok regularly emphasises its relationship with the World Health Organisation and its commitment to work with them in combating misinformation, as indicated by their pledge to invest \$25 million in trusted sources and organisation ads to ensure the dissemination of reliable Covid (Little et al., 2021). However, when studying the spread of misinformation regarding Covid-19 and vaccination, TikTok ignores the significance of its own For You Page (FYP) algorithm in driving vaccine fears (Little et al., 2021). TikTok's calculated algorithm contradicts the platform's claim to promote trustworthy health information by purposefully displaying dangerous misinformation about Covid-19 vaccinations (Little et al., 2021). Some say this misleading information is more appealing and intriguing for viewers, which continues to benefit TikTok's overall engagement analytics (Little et al., 2021). Little et al. (2021) has discovered that at the Covid-19 pandemic peak, the TikTok algorithm heavily promoted and engaged users with videos containing the keyword 'anti-vaccination'. Additionally, TikTok has utilised this keyword to hyper-personalise videos to users' feeds (Little et al., 2021). As viewers show further interest in content related to 'anti-vaccination' whether this be engaging with hashtags or searching for the keyword, the platform will pick up on this interaction, generating more videos related to the issue to target users' feeds, which, in turn, contributes to the ongoing catastrophe of misinformation surrounding Covid-19 (Little et al., 2021).

A study was initiated to investigate the claim that the TikTok algorithm saturates our feeds with content associated with users' previous searches (Little et al., 2021). The research involved a small group of

users engaging with a single fabricated anti-vaccination video; following this interaction, the users' feeds were saturated with videos promoting misinformation on vaccines for several hours (Little et al., 2021). These videos included claims that vaccines are a way for the government to track individuals by implanting microchips and assumptions that vaccines will allow one to glow under ultraviolet illumination (Little et al., 2021). Furthermore, another video stated that children and the elderly who refuse to get their vaccines will be permanently removed from their homes (Little et al., 2021). This study examined 18 videos, representing only a small portion of the content found on users' FYP feeds (Little et al., 2021). Despite the small sample size, these 18 videos had over 57 million views (Little et al., 2021). Such broad engagement shows the significant effect that spreading disinformation can have and the ability to alter people's opinions regarding Covid-related standards and rules (Little et al., 2021).

What's real and what's fake?

Throughout the Covid-19 pandemic, TikTok users had difficulty distinguishing between videos intended to provide helpful content versus those classified as Covid 'humour/parody' (Southwick et al., 2021). This uncertainty sparked controversy, acting as a primary factor impeding viewers' ability to obtain a greater understanding of Covid-19 norms and guidelines and stay up to date on relevant information through social media platforms (Southwick et al., 2021). In 2020, the World Health Organization introduced the term "infodemic," which they characterised as an overload of both accurate and fake information provided to humans, making it difficult for them to determine whether they receive trustworthy information when needed (Southwick et al., 2021). Studies suggest that younger people, particularly those between the ages of 13 and 17, are more vulnerable to an infodemic due to the perception that they are more gullible and naiver (Southwick et al., 2021). According to a survey taken place in the United States, results showed that 28% of people under the age of 25 think that Covid-19 came along from individuals consuming bats in the past, which serves to confirm the statement that the younger generation is naive (Southwick et al., 2021).

Additionally, a research investigation examined a handful of TikTok videos posted between January and March 2020 with #coronavirus (Southwick et al., 2021). This investigation observed the engagement with TikTok content that addressed various subjects, including health advice, humorous stunts, fears, misinformation and public sentiment (Southwick et al., 2021). The research focused on users' ability to depict the difference between genuine and false content posted related to Covid-19 (Southwick et al.,

2021). When first comparing videos classified as humour/parody, the investigation found that 40% of videos between January and February fell into this category. However, in March 2020, with the heightened discussion surrounding Covid-19, there was a significant spike to 68% (Southwick et al., 2021). This evidence proves that most content concerning Covid-19 was humorous and frequently featured false information about the virus (Southwick et al., 2021). This overshadowed educational TikTok's that offered accurate information from medical professionals (Southwick et al., 2021). An American man that goes by the username alpha_k9 made one well-known comical video that went viral on TikTok. With 28,000 followers, he made a video criticising the Covid-19 vaccine and explaining his refusal to get vaccinated (Zadrozny, 2021). He expressed his confusion and concerns in the video about why experts have yet to develop a vaccine to treat HIV or cancer but suddenly have produced one to cure Covid-19. He ends the video by saying, "You want me to take that ... no thanks" (Zadrozny, 2021). This misleading topic, paired with the man's passion and unique persona in the video, immediately prompted his video to go viral, receiving up to 16 million views, with almost 4500 users using the man's audio (Zadrozny, 2021). As a result, it reinforced many people's decision not to get vaccinated and created a feedback loop of narratives that criticised the Covid-19 vaccine (Zadrozny, 2021). This is only one TikTok among many that disseminated false information and greatly impacted many individuals, raising serious doubts about what is genuine and what is not regarding the Coronavirus (Zadrozny, 2021).

Well-being of society:

A significant risk to society's well-being is spreading false information regarding Covid-19 on TikTok (Verma et al., 2022). According to experts, people are experiencing increased anxiety, stress levels, and even suicidal thoughts as a result of this false information (Verma et al., 2022). People are influenced to take potentially fatal actions by spreading such hazardous information on TikTok (Verma et al., 2022). For example, false information claiming that products containing chlorine dioxide can treat Covid-19 has prompted some people to use them, which has had negative health implications (Verma et al., 2022). Furthermore, false information that promotes injecting disinfectants to fight the virus has led to instances of accidental poisoning and potentially life-threatening circumstances (Verma et al., 2022). Moreover, health professionals have discovered that misinformation also contributes to the development of new psychiatric symptoms in individuals who have never experienced mental illnesses before (Verma et al., 2022). Misinformation can also trigger phobias, panic attacks and OCD (obsessive-compulsive

disorder), which can also affect those supporting individuals suffering from these triggers (Verma et al., 2022). Several individuals also claim that disseminating false information about Covid-19 has impacted their daily lives, leading them to stop or alter their routines (Verma et al., 2022).

A study was conducted to examine individual's anxiety levels prior to and post encountering Covid-19 misinformation (Verma et al., 2022). This investigation involved analysing posts from 43,832 users, with 40 million posts made between January 2019 and July 2020 (Verma et al., 2022). When investigating this large user sample, experts identified many instances of Covid-19 misinformation, such as claims suggesting the consumption of vitamins and minerals or gargling warm water can be remedies used to treat the virus (Verma et al., 2022). Evidence suggests that those sharing misinformation about Covid-19 are more likely to experience increased anxiety due to feelings of guilt associated with spreading misinformation (Verma et al., 2022). Studies also found that women and racial minorities tend to experience more anxiety when exposed to misinformation compared to men and white individuals (Verma et al., 2022). Overall, this study has identified a 'vicious cycle' in which individuals experiencing anxiety prior to encountering Covid-19 misinformation are more susceptible to believing and resharing this misinformation, leading to a further burden of anxiety (Verma et al., 2022). This cycle increases vulnerability, affecting how individuals respond to misinformation in the future (Verma et al., 2022). These results emphasise the differences in how various groups of individuals feel the pandemic's indirect effects, as well as the ongoing cycle of anxiety that comes when viewing and sharing misinformation (Verma et al., 2022).

Opposing the claim:

When opposing the claim that TikTok fosters the spread of Covid-19 misinformation, it can be argued that TikTok is an excellent way for family and friends to maintain communication, especially during the isolation period of the pandemic, ultimately reducing boredom, depression and distress (Ferreira Caceres et al., 2022). TikTok aims to track down misinformation, and they have partnered with the Institute for Strategic Dialogue to help in this endeavour (Zadrozny, 2021). This institution aims to identify and filter out TikTok sounds or videos that attract or spread Covid-19 falsehoods (Zadrozny, 2021). Furthermore, TikTok has partnered with the government and health organisations to prevent misinformation (Ferreira Caceres et al., 2022). "Stop the Spread" was an app created to allow individuals to report possible or verified misinformation shared on the platform (Ferreira Caceres et al., 2022). TikTok also launched a

new project in May 2020 called #ShareTheMicNow, in which TikTok influencers handed their accounts over to medical specialists, allowing them to take charge of posts regarding Covid-19, ensuring it is valid and trustworthy information (Ferreira Caceres et al., 2022). For example, a famous Vietnamese TikTok singer, Khac Hun, collaborated with the Vietnamese National Institution to create a song promoting handwashing (Ferreira Caceres et al., 2022). Within minutes of Khac Hun posting a TikTok with this song, it went viral, demonstrating the power of such partnerships (Ferreira Caceres et al., 2022). TikTok's proactive measures taken to diminish the spread of misinformation regarding Covid-19 are evident and go unnoticed, proving their genuine concern and commitment to protecting society from misinformation.

Conclusion:

As TikTok continues to stand as a prominent platform for spreading Covid-19 misinformation, this will continue to hinder society's effort to acknowledge and respond appropriately to the issue.

Misinformation has led to numerous rumours, hoaxes, and conspiracy theories about the virus's origin, transmission, and treatment options (Ferreira Caceres et al., 2022). As a result, how society reacts to the crisis has been influenced, causing doubt about the legitimacy of information and resulting in several adverse repercussions on society's well-being (Baghdadi et al., 2023). Healthcare information is designed to help society, but as it continues to be polarised by social media, it sparks significant debate and adds to increased levels of worry among individuals (Baghdadi et al., 2023). Society can now recognise the importance of reliable sources and avoid taking this information for granted (Ferreira Caceres et al., 2022). Although Covid-19 misinformation is a significant global issue, the government and health organisations are collaborating with social media platforms, most notably TikTok, to tackle this matter.

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