JMIR Infodemiology | COVID-19 and Vitamin D Misinformation on YouTube: Content Analysis

On August 1, 2022

Tagged content analysis, COVID-19, health information, immune system, immunity, infodemic, misinformation, natural medicine, prevention, risk, social media, supplements, video, vitamin D, YouTube **Edit This**



Infodemiology, which reported that although social media platforms, such as YouTube, can be an inexpensive and effective method of sharing accurate health information, inaccurate and misleading information shared on YouTube can be dangerous for viewers.

JMIR Publications recently published "COVID-19 and Vitamin D Misinformation on YouTube: Content Analysis" in JMIR

The confusing nature of data and claims surrounding the benefits of vitamin D, particularly in the prevention or cure of COVID-19, influences both viewers and the general "immune boosting" commercial interest. The aim of this study was to ascertain how information on vitamin D and COVID-19 was presented on YouTube in 2020. YouTube video results for the search terms "COVID," "coronavirus," and "vitamin D" were collected and analyzed for content themes and deemed useful or misleading based on the accuracy or inaccuracy of the content.

Qualitative content analysis and simple statistical analysis were used to determine the prevalence and frequency of concerning content, such as confusing correlation with causation regarding vitamin D benefits.

In total, 77 videos with a combined 10,225,763 views were included in the analysis, with over three-guarters of them containing misleading content about COVID-19 and vitamin D. In addition, 45 of the 77 videos confused the relationship between vitamin D and COVID-19, with 46 of 54 videos stating that vitamin D has preventive or curative abilities.

The spread of misinformation is particularly alarming when spread by medical professionals, and existing data suggesting vitamin D has immune-boosting abilities can add to viewer confusion or mistrust in health information.

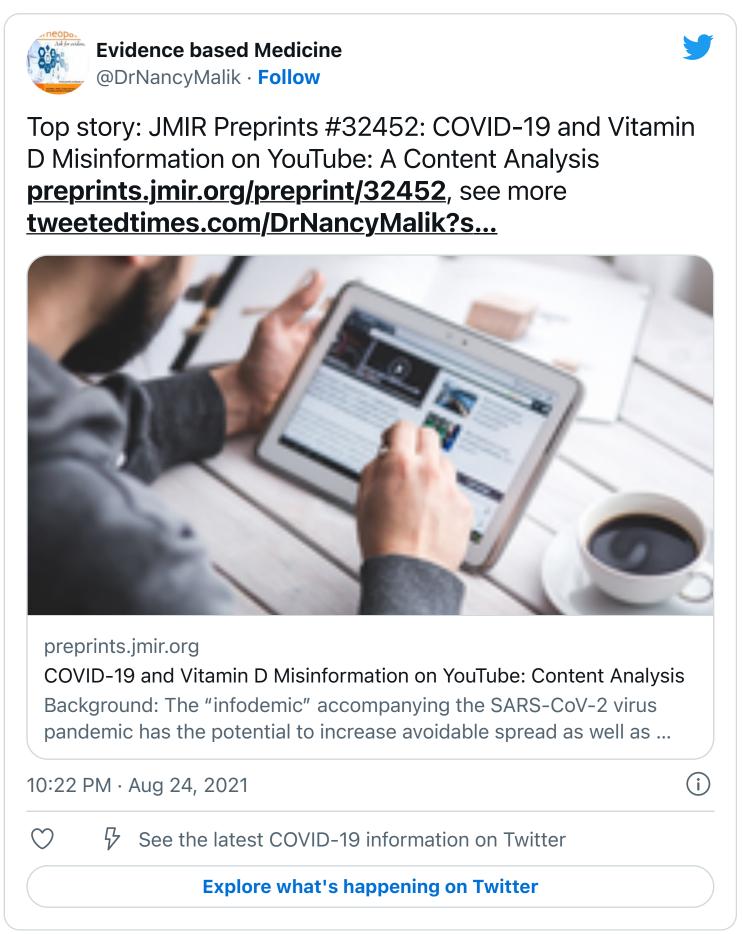
misinformation and disinformation."

Dr. Cheryl E. Peters said, "The SARS-CoV-2 virus outbreak is a serious global threat, accompanied by an 'infodemic' of health

Although social media can be a valuable tool to share health messaging for free, where it is widely available worldwide, the overabundance of both accurate and inaccurate health information available to the general public through mainstream and social media can lead to risky health behaviors and, in some cases, even death.

For example, a recent work by Schereet al showed that people who are susceptible to misinformation on 1 topic are

more likely to be influenced by a variety of misinformation and that those with less education and health literacy, less trust in the health care system, and more positive views toward alternative medicine are also more susceptible to belief in misinformation.



alternative treatments, to research information provided by health care professionals, to research personal as well as public health concerns and topics, to engage with others who have similar health conditions or concerns, and to research and rank health care providers. Evidence suggests that people use social media to access health information because it can supplement information

Research has shown that people go online to investigate and diagnose symptoms, to look up treatments and

provided by their health care providers and provide social support. Inaccurate or inappropriate messaging regarding vitamin D and COVID-19 may be problematic for a host of reasons,

including causing people to take supplements to feel that they are safe from a highly infectious disease that requires vigilant public health behaviors and vaccination. The Peters Research Team concluded in their JMIR Publications Research Output that the results of their study

is prevalent on social media and is dominating the online narrative. Concerns surrounding the type of individuals spreading this type of health misinformation are unique in the unprecedented times of a global pandemic, where the public may be anxiously seeking advice about how to remain

suggest that confusing messaging about vitamin D as having preventative or curative abilities against/for COVID-19

Easily accessible online platforms hold the potential to decrease the spread of SARS-CoV-2; however, if misinformation is shared publicly, it can lead to increased viral spread or the increased presence of other poor health

This study is an important contribution for public health, as it demonstrated that health professionals are a significant source of misleading information on the relationship between vitamin D and COVID-19 infection and severity.

prebunking or debunking methods to curb risky "immune boosting" behaviors on social media in order to deter the avoidable negative health consequences of unnecessary supplementation.

The practical next steps to address this challenge include the sharing of anti-misinformation efforts as well as

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Full-text - https://infodemiology.jmir.org/2022/1/e32452

DOI – https://doi.org/10.2196/32452

outcomes either immediately or in the future.

healthy.

Free Altmetric Report – https://jmir.altmetric.com/details/124614927

Keywords – COVID-19, vitamin D, misinformation, YouTube, content analysis, social media, video, infodemic, risk,

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