COVID-19 Misinformation in Social Media: A Scoping Review

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Abstract

Background: Social media allows for easy access and sharing of information in real-time. Since the beginning of the COVID-19 pandemic, social media has been used as a tool for public health officials to spread valuable information. However, many Internet users have also used it to spread misinformation, commonly referred to as "fake news." The spread of misinformation can lead to detrimental effects on the infrastructure of healthcare and society.

Objective: The purpose of this study was to identify sources and impacts of COVID-19 misinformation on social media and examine potential strategies for limiting the spread of misinformation.

Methods: A computerized search was conducted via three databases (PubMed, Embase, and Web of Science) with search terms related to the COVID-19 pandemic, social media, and misinformation. Using both inclusion and exclusion criteria, results from the initial literature search were screened by independent reviewers. Ultimately, 21 articles were included in this scoping review.

Results: Three themes emerged: sources of misinformation, impact of misinformation, and strategies to limit misinformation of COVID-19 on social media. Misinformation is commonly shared on social media platforms such as Twitter, YouTube, Facebook, messaging applications, and even personal websites. The COVID-19 misinfodemic has hindered public health efforts, like mask wearing and vaccinations, affected the mental health of individuals, and created harmful stigmas. However, utilization of social media for dissemination of evidence-based information was shown to be beneficial in combating misinformation.

Conclusion: Both the individual and social media networks play a role in the spread of COVID-19 misinformation. The ongoing spread of such misinformation has potentially exacerbated the severity of the pandemic, created doubt surrounding public health experts, and negatively impacted physical and mental health. Efforts to limit and prevent misinformation require both an interdisciplinary and multilevel approach involving government and public health agencies, social media corporations, and individuals.