

# The Role of Social Media in Covid-19

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## Abstract

The current narrative review aimed to evaluate the effects and role of social media in the covid-19 pandemic. The examinations show that web-based media have been utilized to share perspectives, medical care, and social distancing during the Covid-19 emergency. However, social media networks have also been used in spreading bogus information to the general public during the Covid-19 pandemic. Along these lines, utilizing web-based media can be an important method for experts and governments to forestall the spread of this virus.

The paper contributes in many ways like offering opportunity and remediation on the negative effects of social media during covid-19 such as the spread of misinformation to the general public. In addition, the paper explores the enhancement of public health practitioners' reliance on social media as a tool for appropriate information dissemination, as well as assisting media personnel in understanding the gravity of the situation and the barriers to effective communication of public health messages. **Key Words:** Covid-19, public health education, misinformation, public awareness, misperceptions.

## Introduction

The current Covid-19 pandemic is not only a health crisis but also an infodemic. Here, the term infodemic refers to a crisis in the distribution of information in an environment that is rife with misconceptions about the illness (Daniel, 2020). An evaluation of the pandemic

shows that social media were a critical tool and mediator of information. It allowed for the rapid distribution of information from the onset of the crisis in Wuhan, China. The popularity of social media sites including Facebook, Instagram, WhatsApp, and Twitter proved to be both an advantage and a drawback to combating the illness. The positive aspects of social media were its ability to disseminate information faster than conventional media sources. It was also an effective tool in documenting and broadcasting the pandemic in various nations across the world. Consequently, it acted as a uniting force that allowed sharing through the difficult period through entertainment, education, and communication. However, this popularity was a double-edged sword that also led to a rise in misinformation of scientific information and prevention strategies (Apuke & Omar, 2021). Understanding the role of social media in the pandemic will be essential in enhancing its educational qualities while minimizing misinformation.

## Covid-19

Covid-19 is a new infectious respiratory illness that presents flu-like symptoms. The illness first emerged in Wuhan, China, from animal-to-human contact in a wet market. This discovery was made in December 2019. The illness quickly spread across the world, reaching 24 countries by February 2020 (Hussain, 2020). People infected with the illness developed flu-like symptoms such as coughing, difficulty breathing, and loss of taste and smell, among others. The illness disproportionately affected the elderly and those with chronic illnesses or compromised immune symptoms. The virus's primary mode of spread is through droplets from those who are already infected. This mode of transmission was highly effective in facilitating the spread of the virus. Gatherings in large crowds or tight spaces and travel posed the most significant risk. The massive

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implications of the illness, including its rapid spread and adverse patient outcomes, led to international efforts to minimize the illness (Velavan & Meyer, 2020). WHO was an essential entity in collecting and disseminating information to member states to enhance their responses. Public education was the most valuable strategy to create awareness and equip people with the knowledge necessary to restrain the spread of the disease (Lundgren et al., 2020).

Social media was a vital aspect of this effort. Every major social media site offered a section dedicated to covid-19 data and information. It was a vital source of public education that created awareness and promoted public health responses to the illness (Cuello-Garcia, Pérez-Gaxiola & van Amelsvoort, 2020). For example, the search page on Twitter has a prominent section that directs the user to the latest data and information on the illness. Social media presented an excellent opportunity for authorities to interact with their subjects. For example, the relevant government agencies all managed social media pages that provided daily updates on Covid-19 statistics. Overall, social media is an effective tool for disseminating information concerning Covid-19, making it a critical success factor behind the war against the pandemic. However, social media also presented an opportunity for misinformation. Misinformation refers to the distribution of fictitious information concerning the illness and its interventions, such as vaccination. Misinformation spread rapidly and countered accurate information on the issue leading to false perceptions of the illness (Pennycook et al., 2020). In some cases, certain groups on social media were openly defiant of precautions posting videos and images of reckless behavior. This helped mobilize like-minded defiant perspectives and misinformation, which undermined the spread of accurate information and effective prevention strategies.

### **Research aim and Questions**

The aim of this review is to identify the effects and role of social media in the Covid-19 pandemic by answering two questions:

1. What was the role of social media in public health education during the Covid-19 pandemic?

2. What was the role of social media in spreading misinformation on Covid-19?

The results from the review highlight certain consistencies in the outcomes associated with social media during Covid-19. The outcomes include public health education, which highlights social media as a beneficial tool for information dissemination. Misinformation was also a common outcome associated with social media use during the pandemic.

### **Public Health Education**

Social media was a vital tool in the dissemination of information during the pandemic. Research from Li et al. (2020) highlights the value of social media as a surveillance tool. An assessment of the events that took place and their mention online shows that social media helped document vital moments of the disease's spread starting in Wuhan and its exponential spread across the rest of the world. This research used a retrospective quantitative approach to prove that internet data surveillance was an accurate predictor of the illness's progress. Goel and Gupta (2020) evaluated the role of social media in the pandemic, highlighting certain key aspects, including the dissemination of public health information. The research helps point out the value of social media to healthcare practitioners and academics, who collaborated to enhance the dissemination of factual information. The authors suggest that this was an appropriate approach to counter the rise of misinformation on these social media platforms. This research lacks a quantitative element, which may increase the complexity of synthesizing the evidence.

The dissemination of information at a faster rate concerning containment measures has a lot of implications. Recently, research by Basch [et.al](#) (2020) evaluated a total of 100 videos on YouTube with the term "Coronavirus" that were most viewed. As of March 5th, 2020, the videos with the term "Coronavirus" had views of more than 165 million persons. It was discovered that 85% of the views belonged to news channels and not even 1/3 of the videos referenced the suggested preventive measures. Besides, the study also discovered that not even 1/2 of the videos referenced the most regular symptoms, nonetheless, about 90% of the videos commented on quarantines, anxiety, and deaths (Basch et.al,

2020). This examination leaves behind a significant reflection on the botched chances for distribution of information of quality on the anticipation of infection and recurrent side effects of Covid-19 on social media networks like YouTube, which are progressively being called upon as a source of information.

According to a recent online survey study conducted by Wang et.al (2020) in China, 53.8% of 1,210 respondents surveyed considered the pandemic's psychological effects as severe or moderate; even an examination group created and consented to a scale known as "Fear of Covid-19 Scale" with the aim to evaluate the degree of tension and stress in the populace and to build up fitting measures to forestall related spin-offs, for example, post-traumatic stress disorder (Wang et.al, 2020). This examination showed how the use of social media is of great benefit to the dissemination of Covid-19 related information. The author used an online survey strategy to conduct this study on various social media platforms with the aim of gathering the needed information from the targeted population.

Chan et al. (2020) used their qualitative article to evaluate the role of social media in disseminating Covid-19 information on the practitioner and patient safety. The researchers developed an infographic as an intervention aimed at enhancing safety and preventing infection among healthcare workers and patients. The infographic received significant attention and was successful at educating the public on prevention strategies to stay safe from the pandemic. The research utilizes a rudimentary experimental approach, which does not offer quantitative insights or offer reliability in the replication of the study. Nevertheless, the research offers an excellent perspective to the research showing the value of social media in the rapid dissemination of information to professionals combating the illness. The author further offers an alternative perspective showing the possibility of non-peer-reviewed information undermining evidence-based practice. Zhao et al. (2020) further reemphasized the importance of social media in raising public awareness among the general public. The research was developed in China less than two months after the first case in Wuhan. It evaluated the people's engagement with Covid-19 topics online, their emotions, and behavior. The research highlighted

increased engagement online with content concerning Covid-19. This understanding proved that social media were a popular source of information. These findings suggest that social media were a vital purveyor of educational information, which improved the users' mood. It also showed higher self-efficacy in the general public, where people adjusted their behaviors to enhance prevention against the illness. The main strengths of the research included reliance on accurate data from the National Health Committee of the People's Republic of China. However, its limitations included a reliance on only one social media site. It was also conducted 52 days after the first case. Information evaluated may have been insufficient.

### **Misinformation**

The pandemic has been the subject of discussions across various social media platforms. The biggest problem however has been the issue of misinformation and the peddling of untrue information across these social media platforms. For example, Radwan et.al (2020) in their study found out that social media played a significant role in spreading panic among students about Covid 19. The panic had a potential negative impact on the students' mental and psychological well-being.

Public health misinformation is considered one of the most significant challenges facing the Covid-19 pandemic. The dissemination of false or unverified information poses a risk of misguiding people's health behaviors. Kouzy et al. (2020) conducted a retrospective quantitative assessment of Twitter posts on the issue. The authors evaluated the data to determine the frequency and access to false information compared to accurate information. The research draws its credibility from the quantitative nature of the research. The findings are also analyzed based on their statistical significance. The findings suggested that unverified and informal individual accounts were more likely to spread misinformation while authenticated one's provided factual information. 24.8% and 17.4% of tweets analyzed indicated misinformation and unverifiable information, respectively.

Amazingly, the characteristics of online media such as its broad penetrance and speed of data transmission have prompted the fast

expansion of phony news. According to a recent report, 27.5% of the most-viewed YouTube recordings about COVID-19 comprised of misinformation attained views of about 62 million globally (Li et al., 2020). Such deception induces far and wide open tension, perilous self-medication, and rebelliousness to COVID-19 preventive measures (Li et al., 2020). The impact of web-based media thus is solid to the point that the World Health Organization has set up an Information Network for Epidemics that points towards handling the "infodemic" by modifying and monitoring the spread of bogus data. The most significant measures incorporate teaching the general population on the aimless scattering of fake news just as guaranteeing the accessibility of official reliable data to permit confirmation of online substance/material (Li et al., 2020).

Bridgman et al. (2020) conducted their research in Canada with clearly formulated research questions. These questions sought to establish the prevalence of misinformation, the influence of media on belief systems, and whether a link existed between the media and compliance to preventive behaviors. The research compared Twitter to conventional news sites showing that the former had more misinformation compared to traditional media sources. Further assessment showed a greater relationship between social media and misinformation compared to traditional media. It also predicted reduced compliance to preventive measures due to misperceptions. It showed the existence of a problematic risk perception leading to poor adherence. The research is credible in its utilization of a representative sample, thereby eliminating problems in generalizing the findings. The main limitations of the research include information collected only from one social media site (Twitter), thereby ignoring any variations evident in other social media platforms. The use of English may have also limited the number of tweets assessed in the study. Finally, the study was not able to link participants to their responses, which may have undermined the causal relationship between social media and misinformation.

The overarching understanding from the research articles evaluated in this review is that social media is an effective tool for information disbursement. It is popular across the world, which

enhances the speed of information spread. The research details situations where governments, healthcare practitioners, and academics leveraged this popularity to increase awareness of Covid-19 and its prevention measures. However, the research also proves a relationship between social media use and misinformation concerning the pandemic. This misinformation and unverified information were made readily accessible through social media, spreading fast and undermining accurate reporting.

### **Conclusion**

What comes out of this current pandemic is the increasing speed of digital information technology advancement across all platforms globally. The significance of social media in medical care is no longer a factor that can be swept under the rug. Social media platforms additionally have a high influence in incrementing education, awareness, and medical care during the pandemic. It is additionally helpful in keeping social distancing and urging individuals to remain at home and avoid superfluous movements.

Moreover, it can be concluded that studies on the effects and role of social media on covid-19 allow a significant reflection on the missed chances for distribution of information that is of quality on the anticipation of infection and recurrent side effects of Covid-19 on social media networks like YouTube, which are progressively being called upon as a source of information. It is also reasoned that the reliance on the media continues to be important in a situation of health emergency, even though we now live in an informational abundant ecosystem comprised of hybrid social media networks.

Notwithstanding the utilization of social platforms, it is presumed that users keep on maintaining trust in traditional data media in regards to quality of the data. Accordingly, the maximum usage of data from all the media, which this investigation distinguished, reaffirms the importance of the hypothesis of media reliance, as a method of acquiring data in the contemporary social order characterized by remarkable degrees of media inclusion.

Albeit the utilization of web-based media by clients and everybody is useful, the dangers and difficulties that may emerge at the local level ought not to be ignored. Along these lines, important associations and specialists should show



and convince individuals how to utilize web-based media accurately. Besides, affirmed and perceived medical services associations and experts ought to likewise be more active in these platforms during the emergency time frame to give the fundamental info to users while keeping an eye on social media. Moreover, government bodies and specialists can likewise utilize web-based media to forestall the episodes like the Coronavirus one and other comparable future emergencies.

More elaborately, social media can give a feeling of solidarity by contacting a large number of users/audience. Social media may likewise become grounds for discrimination and misinformation. Individuals can use the pervasiveness and flexibility of web-based media technologies to enlarge the public's devotion to the positive measures recommended by global health associations to battle the spread of Coronavirus. Different media channels and industries for mass communication can eventually foster good reactions to encourage positive attitudes and cohesion to containment measures.

Online media play a positive role during the COVID-19 pandemic by assisting people in better managing physical and social distancing and decreasing bias, stigma, segregation, and disparities. For example, social media can likewise offer help for frontline health care workers who face critical mental stress because of the increased amount of work, social isolation, and stigmatization as well as the worry of being potential carriers and spreaders of the virus to friends and even relatives.

Moreover, social media is of great importance in the field of epidemiology. Messages on Twitter, especially when infection foci are identified, can give info on infection pervasiveness immediately before the official warnings are released. The messages that are trending can reflect public concerns, giving specialists/authorities a feeling of what the public opinion is. For instance, by mining information from Sino Weibo, public authorities in Wuhan, China, were ready to distinguish the elderly as a vulnerable group and thus coordinate the proper help.

### **Contributions of the Review**

The major contribution of this review is that it has enhanced the understanding of the

general public on the various effects and role of social media in the Covid-19 pandemic. The public can be able to consume and appraise information from various authoritative sources. The paper has also contributed to offer remediation on the negative effects of social media in covid-19 such as the spread of misinformation to the general public. Due to this, the paper has contributed to helping the general public adjust information consumption behaviour to credible sources. This review paper has also contributed to the enhancement of public health practitioners' reliance on social media as a tool for appropriate information dissemination. Furthermore, this review paper assists media personnel in understanding the gravity of the situation and the barriers to effective communication of public health messages. Moreover, stressing the effects and role of social media in covid-19, content curators can receive alerts from this review on the influence they hold concerning various global health crises such as Coronavirus.

### **Limitations and Future Research**

This paper is concerned with the effects and role of social media in Covid-19. While conducting the study, there were a few research limitations that were realized. Gathering more representative data was a constraint. Lack of time and financial constraints were also a challenge for the study. Hence, the results could be limited due to the effects of Covid-19 on the social and economic sectors. Therefore, further research could examine the various effects of the New Covid-19 pandemic on the social and economic sector or any additional research that will have a more comprehensive understanding of social media and its implications on the Covid-19 Pandemic.

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