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## THE ANALYSIS ON THE USE OF SOCIAL MEDIA IN MANAGING THE COVID-19 PANDEMIC INFORMATION FLOW

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### Abstract

*There is a relationship between social media platforms and emerging infectious diseases (EIDs) such as the COVID-19 pandemic. Social media platforms are used to manage information flow in every EID. Individuals use the platforms to source information, while health workers, organisations, and other stakeholders use the platforms to provide and manage information flow. This study employed a narrative literature review (NLR) to understand the role of social media platforms in managing the COVID-19 pandemic information flow. The paper deployed three research questions as seen in the research methodology. The paper found a clear relationship between social media and EIDs and the COVID-19 pandemic. The article further provides the ways to use platforms to manage information during the COVID-19 pandemic.*

*Keywords: COVID-19 pandemic, Social media, Emerging infectious diseases (EIDs), Information flow, Healthcare*

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### 1. Introduction

Healthcare organisations and workers continue to realise the benefits of using social media platforms in addressing healthcare information and situations. This paper aimed to address the use of social media platforms in managing the COVID-19 pandemic information flow. The study deployed NLR in searching empirical literature to address the topic using three vital research topics. The study is organised by looking at the social media in healthcare organisations, research methodology, social media and emerging infectious diseases (EIDs) outbreak, social media and the COVID-19 pandemic, and information management. It further looks into the implications of the study, conclusion, and references.

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## **2. Social media in healthcare organisation**

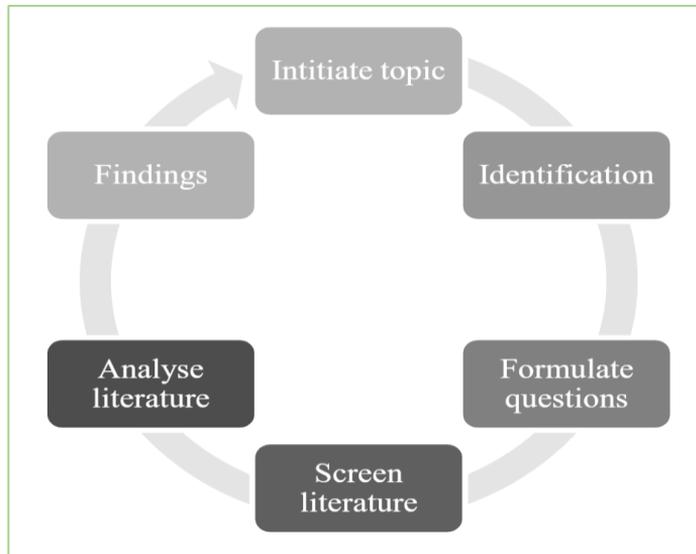
Social media is becoming the platform of choice for healthcare organisations to push out information to the public. Social media is different from other traditional media because of its ability to reach a wider audience, real-time content generation, and publishing. Healthcare organisations are adopting social media to perform a quicker reach of audience. According to Pentescu, Cetina and Orzan (2015), information from healthcare institutions or organisations is trusted, independent, complete and reliable, and the public looks to social media to receive healthcare information from these platforms. The health information on social media is used in building a strong relationship between healthcare organisations and stakeholders. Healthcare organisations keep using social media platforms to gather public views, attitudes, patient behaviours, actions, emotions, desires, and concerns (Pentescu et al., 2015). In providing healthcare services, social media aid patients' views, concerns, and healthcare needs. To this effect, Smailhodzic, Hooijsma, Boonstra and Langley (2016) state that social media has an effect on health workers and patients because it allows them to share healthcare information, support, patient empowerment, access to advice on different healthcare conditions, and enhance reliable communication. In the past, misinformation (infodemic) was corrected through social media, and currently, COVID-19 pandemic misinformation is managed using these platforms. According to Chen and Wang (2021), in the COVID-19 pandemic era, social media platforms are widely used to spread healthcare-related information and content. The social media platform is a channel for healthcare-related information sharing and managing infodemic.

## **3. Research methodology**

This study employed narrative literature review (NLR) because of its ability to collect existing literature papers on the research topic under review. According to Baumeister and Leary (1997), NLR is good for writing articles, theses, empirical articles, grant proposals, and book chapters. NLR can be used when there is no wider scholarly understanding or knowledge of the research topic under review (Ferrari, 2015). It allows the researcher to gather empirical facts on a given topic under the analysis of the use of social media platforms in managing the COVID-19 pandemic information flow. Chukwuere and Chukwuere (2021) provided the procedures that guide conducting NLR in this study, as shown in Figure 1.

It allows the researcher to conceptualise a research topic, identify relevant research papers (articles), formulate research questions, screen the literature, analyse the literature, and draw findings from the existing literature. Then, the aim is to understand the use of social media platforms in managing the COVID-19 pandemic information flow.

Figure 1: Narrative literature review (NLR) procedures (adopted from Chukwuere & Chukwuere, 2021)



**Source:** Chukwuere and Chukwuere (2021)

The researcher formulated research questions to achieve the research aim. The research questions are:

1. What is the relationship between social media and emerging infectious diseases (EIDs)?
2. What is the role of social media in managing COVID-19 pandemic information flow?
3. How can information management be achieved in the COVID-19 pandemic?

#### 4. Discussions of the research questions

##### 4.1. *Social media and emerging infectious diseases (EIDs) outbreak*

Microbe diseases are evolving with new pathogens throughout the world, and the rise of superbugs keeps threatening the world population (Tang et al., 2018). Social demographics of human and social lifestyles and other factors contribute to new and emerging infectious diseases (EIDs). The EIDs refer to new infectious diseases that have kept affecting the human race for over two to three decades now. The term was first used in a publication titled "Emerging infections: microbial threats to health in the United States" (Tang, Bie, Park & Zhi, 2018; Oaks Jr, Shope & Lederberg, 1992). From the inception of the term EIDs, it has been associated with different infectious diseases in the last decade and beyond; for example, the 2009 H1NI, Chikungunya, Ebola 2014, and many others (Gesser-Edelsburg, Stolerio, Mordini, Billingsley, James & Green, 2015; Tang et al., 2018). EIDs are new species of pathogens such as severe acute respiratory syndrome (SARS), Ebola, measles, COVID-19, drug-resistant tuberculosis, H1N1, and

others (Tang et al., 2018). These diseases infect large populations. They count on social media to source health information and solutions that guide them during any EIDs outbreaks.

The relationship between EIDs and social media is interwoven in their interactions in the current digital age. Currently, EIDs' information and its related issues spread faster on social media because of the platform's penetration into society. The general public gets updated as soon as a new infection is announced in any part of the world; for example, the COVID-19 pandemic information has been flooded over social media platforms. According to González-Padilla and Tortolero-Blanco (2020), social media provides positive and negative roles in disseminating COVID-19 pandemic information and breaking national boundaries.

In today's world, social media has become the central point for information outsourcing for millions and billions of users worldwide, especially on health-related issues. As access points to health-related information, the past and present EIDs are widely broadcast and discussed on different social media platforms. The awareness, surveillance, monitoring, and much other information on EIDs are distributed on the social media platform, making them the enabler of information-sharing platforms. However, social media itself can be referred to as a pandemic and infodemic on the basis that it travels faster than EIDs outbreaks, especially the COVID-19 pandemic (Kadam & Atre, 2020). This research question provided a deeper insight into whether social media platforms have a good relationship with EIDs because the platforms have become channels through which EIDs' information and contents are shared. It is known that different stakeholders use social media platforms to generate content for sharing and many more.

#### **4.2. *Social media and the COVID-19 pandemic***

The public depends on information from social media platforms during the period of emerging infectious disease (EIDs) outbreaks (Zhang, Bie & Billings, 2017), such as the COVID-19 pandemic's educational information (González-Padilla & Tortolero-Blanco, 2020). Gralinski and Menachery (2020) and Kadam and Atre (2020) suggest that the outbreak of COVID-19 gained widespread attention through social media platforms. Information and knowledge can be shared using different media, such as face-to-face, word-of-mouth (WOM), traditional media like radio, television, printed newspapers, and many others. We live in a digital age where things are done differently. The application of online channels through the power of the internet, social media, and other online platforms quickly amplifies access to information. The digital age makes information and knowledge essential for our society. Social media aims to provide access to information and content to individuals, organisations, and many others. Social media offers real-time information and content/posts for the public, and they are dependent on it for knowledge and information sharing. Social media can be seen as an information gateway in the digital era. According to Hossain, Kam, Kong, Wigand and Bossomaier (2016), social media can be used as an intermediate information management center

during an emergency for knowledge sharing between health organisations, health workers, and the public.

The social dependence on social media is visible during periods of crisis, like the COVID-19 outbreak, a natural disaster such as an earthquake, and many more. During the Haiti earthquake, social media was used to circulate news and information (Hossain et al., 2016). Social media news and information (posted comments, pictures, or videos) assist in decision-making. However, there is a need for the content/information to be evaluated, analysed, verified, and reliable by an authorised organisation or public representative/s during new pathogens such as the COVID-19 pandemic.

The COVID-19 pandemic spread to the entire globe due to globalisation, human movement, and social media platforms (Ippolito, Hui, Ntoumi, Maeurer & Zumla, 2020; Sharma, Seo, Meng, Rambhatla, Dua & Liu, 2020). To manage the spread of COVID-19 and the infection, WHO and other national and local health bodies used social media platforms in disseminating information for public use. Furthermore, WHO was active on WhatsApp, Facebook, Twitter, Instagram, YouTube, and other social media platforms in distributing information about the COVID-19 pandemic. Millions of followers are active in getting updates and news to manage and mitigate the spread through these platforms. The research question shows that social media platforms are the bedrock for information sharing on the COVID-19 pandemic during and post-event.

#### **4.3. Information management**

Research found in 2016 that six out of 10 people in the US got their news on social media platforms (Tumpey, Daigle & Nowak, n.d.). The same statistics are observed across other countries globally, where many are dependent on social media for access to breaking news and the COVID-19 pandemic. Social media platforms are 24/7 news and information channels that provide public sources and access to instant posts and information. Social media became the main source of information on the COVID-19 pandemic (Li, Zhang, Wang, Zhang, Wang, Gao & Wang, 2020). As soon as the public learned of the outbreak, they turned to social media to understand what is happening, who is affected, and the risks involved. Any emerging outbreak generates panic in society and gives way to limited information for public consumption (Nayar, Sadasivan, Shaffi, Vijayan & Rao, 2020). Public health practitioners are expected to immediately feed the public on the outbreak, using social media as a timely avenue to disburse accurate and reliable information (Tumpey et al., n.d.). Public health information is readily and widely available on social media platforms, as in the COVID-19 pandemic.

COVID-19 pandemic information must be managed appropriately for the public to be informed of the right news. According to Bode and Vraga (2018), social media serves as a corrective measure in correcting false information and reducing the risk of infodemic (misinformation). The management of the COVID-19 pandemic infodemic depends on:

1. Timely updating and debugging of misleading posts and information from the public by international, national, and local health authorities.

2. Providing continuous online media briefings as a way to carry the people along.
3. Providing live chats, also question-and-answer sessions using social media platforms.
4. Keeping the public engaged with the facts and pointing out the fake news that has been circulated, to reduce the consumption of misleading information.
5. Providing medical support guides to the public.

Primarily, healthcare organisations use social media to distribute information, and aim to plan and communicate vital information, and respond appropriately (Garfin et al., 2020). However, managing and transferring information and knowledge effectively at the time of the COVID-19 pandemic are challenging (Chan, Nickson, Rudolph & Joynt, 2020).

Humans continuously depend on social media platforms for access to information in times of crisis. Academic scholars are starting to research the link between COVID-19 and social media (Chan et al., 2020; Tasnim et al., 2020). This study aims to understand and determine the role of social media in the COVID-19 pandemic. For more insight, this study seeks to understand (1) how social media is used among the public and health organisations during the COVID-19 pandemic; (2) what are the positive and negative roles of social media use were caused during the COVID-19 pandemic; and (3) how social media facilitates the public and health organisations to manage information during the COVID-19 pandemic. The research question provided an understanding of how information management on the COVID-19 pandemic is achieved and managed.

## **5. Implications**

Social media platforms are penetrating every sector of society, including the healthcare sector. The emergence of the COVID-19 pandemic made the penetration more increased and needed than before. This study provides insights for health organisations to understand the relationship between EIDs, the COVID-19 pandemic, and social media to provide clearer and wider information to the public. Furthermore, healthcare organisations can use the platform to generate content and manage and direct the flow at any given time and pace. Individuals have the opportunity to use social media platforms to understand more about the COVID-19 pandemic and other EDIs. In the future, different healthcare stakeholders in society and individuals should use social media effectively in generating content and sharing and managing the information flow.

## **6. Conclusions**

Social media platforms provide the highway for information sharing on COVID-19. This study provides a literature review analysis on the application of social media in managing the COVID-19 pandemic information flow. The study was only limited to a comprehensive systematic literature review without primary data collection. However,

further studies could be conducted using qualitative, quantitative, or mixed research methods to look into the role of social media platforms in the COVID-19 pandemic to gain participants' viewpoints. The study can involve health organisations, practitioners, and the public.

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