Short Communication

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COVID-19 and the effect of its infodemic on people's wellbeing

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ABSTRACT

In this research, it was used to look at social media behaviour during the pandemic and how it might have affected well-being. The WHO-5 Well-Being Index (WHO-5) score was used to do this. COVID-19-related material was sought for and disseminated through social media by those who participated in the study. This research shows how social media might affect people's well-being during this epidemic and other crisis in the future. 73 percent of the 993 participants were women, 91 percent were university graduates, and 50 percent worked in diverse occupations, with 20 percent working in health care. Participants said they got COVID-19-related news mostly via social media and messaging apps, with WhatsApp being the most popular. After authentication, the majority of participants said they shared information. Throughout the coronavirus pandemic, this research offers insight into the usage of Social Media and its influence on well-being. During catastrophes and disasters, social media behaviours may have an influence on public safety. There is also a need for global and local health authorities to better prepare for future challenges by developing policies and actions that address these difficulties. Social media activities may directly affect one's mental health, but more research is required before conclusions can be drawn.

Keywords: COVID-19, Pandemic, Social media, Infodemic

INTRODUCTION

After an outbreak of Severe acute respiratory syndrome coronavirus-2 (SARS-CoV2) in Wuhan, China, in 2019, the coronavirus disease 2019 (COVID-19) pandemic began. In communities and health care settings, this pandemic has been kept from spreading because of laws and actions at the regional and local level, On the internet and on social media around the world, there has been a huge amount of messages and information about the COVID-19 pandemic and its causes, complications, and effects. Even as of the time this text was being written, there is still a great deal of misinformation and misunderstanding, thanks in part to the proliferation of variations. According to some, COVID-19's origin, longterm effects, and impact on diverse populations such as the elderly and children are among the most common sources of false information about the virus.²

It is possible to connect selectively with others and get information from user-generated material through social media platforms, which are housed and accessible over the internet. In recent years, it has become an ideal method for disseminating health and medical information. During the COVID-19 outbreak, social media was at its peak as a source of news and information, having grown in importance over the past two decades. Many people feel that COVID-19 is the first actual social media infodemic as a consequence of the velocity with which information and misinformation are distributed throughout the globe via social media. "Infodemic," according to the WHO, is defined as "an overabundance of information—some accurate, some not—that makes it difficult for people to find trustworthy sources and reliable guidance when they need it, and that involves outbreak response and an influx of information about the disease, its spread, and its prevention." The

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impact of the infodemic on digital literacy, health literacy, and WHO's reaction to COVID-19 were all addressed in a recent WHO alert.³

Literature review

"Infodemic", according to the WHO, is defined as " an overabundance of information- some accurate, some not-that makes it difficult for people to find trustworthy sources and reliable guidance when they need it, and that involves outbreak response and an influx of information about the disease, its spread, and its prevention". Aside from diluting public confidence in official and reliable sources, this flow of information also produces fear and panic among the public owing to unsubstantiated rumours and exaggerated accusations. Racism and xenophobia against some ethnic groups, such as those of Chinese and East Asian heritage, have also been cultivated. As well as the broader population, it has a huge psychological impact on vulnerable groups including teens and young adults.

Recent years have seen an increase in the use of internetbased technologies, especially well-known social media platforms like Twitter, Instagram, and Facebook, in order to better understand human health behaviour patterns and detect diseases and epidemics. Social media platforms like Facebook and Twitter are often used by people looking for information and assistance on a wide range of topics, including health.⁵ "The study of distribution and determinants of information in an electronic medium with the ultimate goal of informing public health and public policy," as defined by the American Society of Clinical Epidemiology, is an area in health informatics known as "information epidemiology." In contrast, the role played by social media in spreading information has shown to be useful for both the general public and authorities in terms of handling the response to the pandemic.⁶ The usage of social media, its frequency, and one's knowledge of eHealth were all shown to be connected with persons engaging in more preventative behaviours. The dissemination of knowledge, health literacy levels, and the alteration of beliefs and attitudes have all been found to improve. People's dependence on their conventional support networks has decreased worldwide as a result of their substitution of digital communication for the purpose of sharing and connecting with others. However, it has been shown that unexpected constraints in our ability to interact with others may lead to increased worry and mental health problems. A large number of research have examined the relationship between social media usage and mental health. Amplification of this association occurred during the epidemic because of the widespread physical and social isolation, fear, and panic, as well as socio-political and economic issues that were exacerbated by the pandemic.

When there is a big public disturbance, people need to get information and make sense of things, and in today's world, mass media is usually the best way to get this information, according to Ball Rokeach's theory of media dependency. In the event of a pandemic, for example, people will turn to social media sites like Facebook and Twitter to get information and air their opinions. In addition, social media was being misused and political objectives were being promoted via it throughout the outbreak.8 To reduce the anxiety generated by the uncertainty that has emerged from a crisis, individuals are more prone to search for information. Furthermore, populations disadvantaged are disproportionately impacted psychologically by the epidemic and are more likely to seek information on social media channels, particularly Facebook. Social media use among teens has been studied from both the positive and negative perspectives, but such studies are even more uncommon nowadays. Another study revealed that although social media use did not affect teens' well-being in general, it did improve their moods in particular. Researchers investigating mental health and well-being may be able to learn a lot from how people use social media platforms to share their thoughts, ideas, and experiences. 6 Students use social media to seek emotional support and to feel more connected to their peers, according to recent studies. During the Covid-19 outbreak, the spread of fake news and the exchange of information reached an all-time high. People's proclivity to spread "false news" about COVID-19 may be influenced by a variety of circumstances, including their reliance on social media and their information-seeking requirements.⁴ During the epidemic, many experts across the globe got interested in figuring out why individuals spread false information online. There have been a lot of studies that show that people react to the COVID-19 epidemic in different ways, and that these reactions can affect how well they sleep and how well they feel overall.

METHODS

The social media platforms and messaging apps were the most widely used throughout the globe and in the area at the time this survey was completed. In contrast to Facebook, which owns Instagram and other social media networks, WhatsApp is a messaging service. Unlike Instagram and Facebook, this site does not depend on human posts but instead relies on an algorithm to give out a content stream. All of these platforms are used to convey information, on the other hand. With these techniques, information may be accepted and propagated without sufficient vetting or monitoring from authorities regardless of the social media platform used.⁹

WhatsApp and Snapchat have been categorised as social media platforms in the past. Since they are social media networks, we opted to include them in our analysis as messaging applications, rather than social media platforms.⁵ The questionnaire was written in English, made sure it was accurate and valid. Twenty-five students and medical experts took part in a pilot study to see if the questionnaire's face and content were accurate. It was also sent to five public health experts, who checked that

the survey was legitimate in terms of content and that the survey questions were appropriate for the study's parts. There were no changes made to the final product after the pilot tests. It's easy to see with Cronbach's alpha scores how social media, how people get information, and how they think and feel about social media all have moderate to high levels of internal consistency.

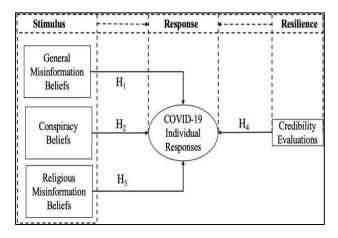


Figure 1: How public opinions are shaped by infodemics.

RESULTS

72.3 per cent of those who took part in the research said they get the bulk of their information from social media. When it comes to information sources on COVID-19, newspapers, radio, and scientific publications were all used less often than television, which was ranked third. According to study, WhatsApp was the most popular social media platform, with users spending between one and three hours every day on it (39.2 per cent). Participants on Snapchat, Twitter, Instagram, and YouTube said they used the apps for an average of 1–5 hours a day each. Reddit and LinkedIn were the least utilised platforms among participants, with 91.2% and 0%, respectively (71.2 per cent do not use). COVID-19 information was accessed by almost half of respondents through the internet. 9

DISCUSSION

In the COVID-19 pandemic, social media usage and its effect on well-being were examined in this research. COVID-19 was also examined as a topic of interest through social media. Non-Emiratis and blue-collar employees had lower well-being ratings than those who were Emirati. Well-being ratings were lower among those who reported using any kind of social media. Being both an Emirati and a health care provider indicated a lower level of well-being. Using Facebook for a long amount of time and specifically for COVID-19 information and updates was associated with decreased well-being. Most participants in this research considered that they had a moral obligation to verify information that was supplied with them, and they did so as a matter of course. Even

though the process of verifying data was accurate, it is still important to do more research into how it was done and what sources were used.

There has been an increase in the use of social media to get news and information, as well as to affect one's behaviour. This survey found that individuals were more likely to utilise social media than other conventional media outlets, such as newspapers, television, and radio. Some social media sites were shown to be adversely related to well-being in this research, whereas others were found to be positively connected with well-being. According to social media posts in the United States, the pandemic was associated with a downward trend in overall well-being and a worsening in mental health. WhatsApp group chats have been used by families to help them deal with social isolation and make sure everyone has a good time. This is one way WhatsApp messaging has been used by families to help them deal with social isolation and make sure everyone has a good time.³ Respondents to our poll were more likely to use WhatsApp than they were to use any other social media platform.

CONCLUSION

Misinformation and disinformation were at their highest in the early phases of the pandemic. As the infodemic impact began, prominent authorities throughout the world and international organisations began to intervene, notably with vaccination uptake and testing and preventative measures. In order to counteract the spread of misleading information, governments and businesses all over the globe have used a range of techniques to address the problem. The social media platforms YouTube and Twitter have recently attempted to impose conditions and guidelines on content that is suspected to include COVID-19 and vaccine misinformation. Social media's harmful influence on knowledge and awareness is already being addressed via programmes and requests for digital health education.

Authoritative intervention and recommendations may be necessary for the regulation of social media usage, which has been shown to have detrimental health and well-being consequences. Public health officials and professionals, as well as information technology and communication specialists, must work together to raise awareness of the dangers of smoking. In order to guarantee that social media is used responsibly and constructively during pandemics, further research on the influence of social media is required. Improving customer well-being necessitates providing real, evidence-based information and making it easily available. Educating the public about the importance of making good lifestyle choices is a priority for public health professionals.

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REFERENCES

- Swire-Thompson B, Lazer D. Public health and online misinformation: challenges and recommendations. Ann Rev Pub Health. 2019;41:433-51.
- 2. Gao J, Zheng P, Jia Y, Chen H, Mao Y, Chen S et al. Mental health problems and social media exposure during COVID-19 outbreak. Plos one. 2020;15(4):e0231924.
- 3. Pool J, Fatehi F, Akhlaghpour S. Infodemic, misinformation and disinformation in pandemics: scientific landscape and the road ahead for public health informatics research. In Public Health and Informatics. 2021;764-8.
- 4. Al-Dmour H, Salman A, Abuhashesh M, Al-Dmour R. Influence of social media platforms on public health protection against the COVID-19 pandemic via the mediating effects of public health awareness and behavioral changes: integrated model. J med Int res. 2020;22(8):e19996.
- 5. Hernández-García I, Giménez-Júlvez T. Assessment of health information about COVID-19 prevention on the internet: infodemiological study. JMIR public health and surveillance. 2020;6(2):e18717.

- Zhong B, Jiang Z, Xie W, Qin X. Association of social media use with mental health conditions of nonpatients during the COVID-19 outbreak: insights from a national survey study. J med Int res. 2020;22(12):e23696.
- 7. Li L, Zhang Q, Wang X, Zhang J, Wang T, Goa TL et al. Characterizing the propagation of situational information in social media during covid-19 epidemic: A case study on weibo. IEEE Transact comput soc syst. 2020;7(2):556-62.
- 8. Arora T, Grey I, Östlundh L, Lam KBH, Omar OM, Arnone D. The prevalence of psychological consequences of COVID-19: A systematic review and meta-analysis of observational studies. J Health Psych. 2020;1359105320966639.
- Li X, Liu Q. Social media use, eHealth literacy, disease knowledge, and preventive behaviors in the COVID-19 pandemic: Cross-sectional study on Chinese netizens. J Med Int Res. 2020;22(10):e19684.

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