



The Negative Role of Social Media During the COVID-19 Outbreak

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<https://doi.org/10.18280/ijstdp.160202>

ABSTRACT

Received: 5 January 2021

Accepted: 23 March 2021

Keywords:

social media, COVID-19, sustainable development, society, SARS-CoV-2, spreading misinformation, fear

The outbreak of the COVID-19 pandemic has exposed the power of social media in the dissemination of information. The current pandemic has hurt not only social media users but also on state's sustainable development. As a result, the present study seeks to understand the reasons for using social media during the COVID 19 pandemic by screening various topics and assessing the impact of misinformation on social media, primarily psychological and mental effects. The study utilized a quantitative research design. Participants were individuals between the age of twenty and fifty. Data was collected using a questionnaire shared online to the 360 participants. The studies' responses were analyzed using descriptive statistics and the arithmetic percentage method using graphs and figures. The study results revealed that many respondents use social media as a source of information, news, and psychological nourishment. Besides, the results indicated that participants below 50 years of age used social media frequently. Whatsapp, Twitter, and Youtube were the most used social media sites among the participants. The findings indicated that most participants used social media as a source of vital information during the COVID-19 pandemic. The current study recommends that governments and health institutions focus on developing abilities to respond simultaneously to misinformation cases. This study has facilitated more knowledge into the uses of social media in times of health crises. The study acts as a blueprint to prepare the world for managing social media information sharing in the future.

1. INTRODUCTION

Social media have experienced exponential growth in the past decade and a half, thus becoming one of the most used sources of information globally. Abd-Alrazaq et al. [1] report that social media is being treated as a positive driver of economic growth linked to disseminating various innovations, digitalization, and IT development. However, this social media growth has exacerbated the spread of fake and vague news during current difficult times experienced by world countries due to global pandemic. It is necessary to stress that social media are rarely subjected to the same scrutiny and censorship that conventional media go through. Lack of scrutiny and censorship gives social media platforms the ultimate freedom to freely publish information, leading to fake news [2, 3]. According to study [4], the pandemic period has triggered a change in social media's role.

According to research [5], social media's role in preventing the spread of the coronavirus disease of COVID-19 is evident. Social media have been instrumental in lessening the pandemic's initial effects by offering information and enabling communication with friends and family [5]. Social media have also been instrumental in mitigating the virus's psychological

effects because they offer communication networks. During this period, physical movement and communication have become challenging, meaning that families and friends have become isolated from each other. According to previous research [6] report that social media have become a primary source of information for most individuals worldwide. People turn to social media for expert opinions, virtual conversations, and information around the COVID-19 ailment. Individuals have used social media to share experiences and success stories with the disease and as a source of entertainment. The quantitative study a smaller sample compared to the most effective standards of quantitative research. Even though the results offer essential information on the importance of social media in disseminating information, its results are inadequate for statistical generalization.

1.1 Aim of the study

The current study aims to assess the impact of social media misinformation during the COVID-19 pandemic. Social media's benefits have led to a continuous increase in social media use during the pandemic period. This was accompanied by challenges such as misinformation, rumors, and

misconceptions about the disease. These factors can have psychological impacts on social media users, especially those with pre-existing mental and anxiety disorders. It also affects the quality of knowledge shared, affecting intellectual capital that may arise from proper use of those sites. As a result, the current study aims to discuss the prevalence of social media misinformation and psychological impacts on users during the COVID-19.

1.2 Purpose and objectives of the study

Since this is a rapidly evolving situation catalyzed by social media, it is vital to scientifically study the phenomena to understand better the correlation between social media and the spread of misinformation and how it has affected members' psychological well-being the public. This paper will facilitate decision-making by key government agencies and corporations to enable better management of information dissemination to combat false news spread.

The main objectives of the study are:

1. To identify the reasons for using social media during COVID-19 disease.
2. To specify the topics covered by social media.
3. To visualize the contribution of social media in spreading rumors about the virus.
4. To outline the impact of COVID-19 rumors on society's social and psychological situation that threaten countries' sustainable development.

2. LITERATURE REVIEW

2.1 Outbreak of COVID-19

Given that COVID 19 is a new disease, a few studies assess the role of misinformation and its psychological impact on users. However, the available research shows that social media was a significant source of misinformation about the pandemic and the disease's path physiology [7]. According to previous research [8], argues that even that "contrary to the popular belief, COVID-19 is not the first "digital infodemic." In the recent past, the outbreaks of Zika in Brazil, Ebola in Africa, influenza in Europe, and Nipah in India had similar bidirectional relationships with media. Human history has accounts of pandemics of biblical proportions that caused the devastation of large groups of people." The H1N1 influenza A virus caused one such outbreak in 1918 that came to be called the Spanish flu [9]. This influenza virus inflicted an approximated 500 million people at the time, which made up a third of the global population. When the pandemic was finally controlled, it had claimed anything between 25 and 50 million lives [10].

According to previous research [11], the breakout of the coronavirus pandemic of 2019 began in Wuhan's region in Hubei province, China. It came to the authorities' attention that a new virus was causing a severe form of pneumonia, especially among people with a history of contact with Wuhan's seafood market. Since the initial identification of the virus, it has spread to more than 190 other countries. China was quick to respond to the country's virus cases after the authorities were aware of it. Measures that the government used to contain the virus include travel cessation and total lockdown of the affected areas [12]. According to research [13], the outbreak in China peaked in February, and it was

entirely under control by the end of March. However, as the virus was controlled in China, it went out of control in territories out of China. In January and February of 2020, the virus spread to regions in Europe and the United States [14]. By mid-March, Italy had become a new hotspot in Europe with a rapidly growing number of infections and fatalities. Spain, Germany, and the United Kingdom also reported high numbers of infections in March and April [15]. However, conditions reached their peak in the United States, which is currently being hardest hit by the pandemic.

According to research [16] report that the virus, which was initially called Novel Coronavirus 2019 now and later SARSCoV-2, causes flu-like symptoms in many patients, developing into pneumonia. More information about the virus is yet to be found out. However, specialists indicate that it spreads faster than the common cold and the flu [17]. The mortality rate of SARS-CoV-2 is higher than that recorded for influenza and other respiratory diseases because human beings have not had prior contact with the virus to develop immunity. According to the presently available information, the disease's mortality rate is between 5 and 3 percent. The rapid spread of the SARS-CoV-2 virus, which causes the COVID-19 illness, has brought about panic and hysteria in the world [18]. Governments have moved to protect their citizens from the disease's rapid speed by initiating policies to limit human contact. Many governments issued directives to close schools as an initial measure to determine the virus's spread [17]. All non-essential service providers were also incentivized to work from home, with some countries and regions having to lock down entire populations at their homes [19].

According to research [7, 20], there have been three human infections with animal origin coronaviruses. The first was disconcerted in November of 2002 in Guangdong Province, China. However, this disease was not given global recognition until March 15, 2003, when reported in Guangdong, Hongkong, and Hanoi. The World Health Organization issued a global alert on the disease, and it was named Severe Acute Respiratory Syndrome [21]. The pathogen that caused this disease was found to originate from bats with an intermediary host called a Palm Civet. According to study [21] reports that the second recorded incident of the spread of a coronavirus was identified in the Middle East in 2012. This new virus came to be called the Middle East Respiratory Syndrome. MERS CoV was first identified in Saudi Arabia, and it came to spread to South Korea, France, the United States, and England, among other states [22]. However, the spread rate was not high, and as of 2019, 2468 individuals had been reported to have gotten infected by the virus. This strain of coronavirus was transmitted to humans from bats through camels as an intermediary host.

2.2 Impacts of COVID-19 pandemic

According to research [23], the novel coronavirus spread of 2019 has caused panic in the world like never experienced before. This is due to the rapid spread of information through social media [24]. Firstly, SARS-CoV-2 is much more infectious than the previous strains of coronaviruses that the world has contacted. This means that many governments were lax in passing decisive policies to help limit the spread. This caused a massive space in European and American communities [25].

A study [26] indicates that the role played by social media during such a time is highly integrated and complex. A sample

of 673 tweets found that individuals and groups posted 66 percent of Twitter traffic, and verified Twitter accounts dispatched 19.2 percent. The contents of the tweets indicated that 91.2 percent of the traffic contained severe content. Around 81.4 percent of tweets had information about COVID-19, with approximately 70 percent tackling medical, public health, social, political, and financial information. In total, 24.8 percent (n=153) of tweets contained some form of misinformation, while 17.4 percent (n=107) had knowledge about COVID-19 that is unverifiable at the moment. The misinformation rate was higher among individual or group accounts at a rate of 33.8 percent ($p < 0.001$). The level of misinformation was higher in unverified reports as compared to verified accounts. There was 31 percent misinformation for unverified accounts and 12.6 percent misinformation for verified accounts ($p < 0.001$). Tweets from public health accounts and healthcare accounts had the lowest rate of posting unverified information at 12.3 percent ($p = 0.04$). The number of likes or retweets that a tweet had did not relate to the authenticity of the tweet's contents. This means that even tweets with misinformation and unverified information could get many retweets and likes. This facilitated the spread of false information through social media [26].

According to previous research [27], misinformation on social media channels about COVID-19 has been detrimental to individuals with pre-existing mental illnesses. The authors add that the stream of rumors such as disheartening COVID-19 news provides an avenue for increased distress and worries, which can adversely affect individuals with pre-existing anxiety disorders. According to study [28], cross-sectional studies in Countries such as the United States, Canada, and Europe have recorded an increase in the number of cases associated with depression and anxiety disorder.

According to the research [29] the highest rate of misinformation and unverified information was discovered to be accompanied by using the keywords '#2019-ncov' and '#corona.' The keyword '#COVID-19' had the lowest rate of unverified information and misinformation in a cross-sectional study. The peak of social media searches of coronavirus increased in 2019, about 10 to 14 days before the daily incidences became high in China [29]. There is a high prevalence of correlation between daily incidences and internet searches and social media searches with the maximum $r > 0.89$ in all correlations [30].

Evidence from research [31] also shows that news of COVID-19 came to wider attention through the use of social media. There have been websites such as Flutrackers and ProMED to collect information worldwide [31]. These websites also allow for the timely access of medical information by interested parties. In 2012, the outbreak MERS CoV disease outbreak was made possible through the ProMED mail system and subsequent Twitter discussions. According to report [32] that It is such a system that eight years later was able to intercept dissected messages in correspondence with the Wuhan Municipal Health Commission.

According to study [33] argue that, during an outbreak, it is often difficult to distinguish between rumors and truth. However, the system used to intercept essential keywords such as "influenza" while excluding other coronaviruses' strains. It was anticipated that the Chinese government would silence the paramedics and healthcare system about the outbreak novel coronavirus outbreak in 2019. According to research [34] report that one of the first doctors to raise the alarm about this disease was subjected to disciplinary action by Wuhan's

authorities for bringing attention to this disease before he tragically died from the same virus. Social media platforms such as YouTube and Twitter can profoundly facilitate the spread of untrue information due to the fundamental makeup of the algorithm [35]. Individuals are shown messages that conform to the users' tastes and preferences rather than the message's validity.

2.3 Knowledge and information sharing as sustainable development elements

A previous research [36] report that the current information world has been facing a rapid revolution in the last decade. The outbreak of the COVID-19 pandemic had minimal chances of surviving without being shared in social media, through either rumors or factual information. Sharing of knowledge and communication forms the fundamental basis of creating sustainable development. According to Pan and Zhang (2020), knowledge and information sharing are integrated elements that entail capacity building, technology, and science as critical pillars in attaining sustainable developments.

A previous research [26] report that knowledge sharing can be a critical catalyst for sustainable development in countries as it makes communities inclusive, safe, resilient, and sustainable. Besides, study [37] argues that knowledge is a fundamental aspect of intellectual capital as it enhances innovation and creativity when guided with intellectual property rights. Social media information is never proven to be credible; it lacks ownership and credible authorship. Some authors might even lack knowledge on the areas they share data [38]. This triggers the spread of rumors, increasing anxiety, and fear. If institutions and governments were to control the spread of misinformation, social media can be an essential professional and peer channel through which knowledge and information can be shared [39].

3. RESEARCH DESIGN AND METHODOLOGY

The study was conducted using a questionnaire that sampled questions about the COVID-19 Diseases' information of the respondents and their reactions to the disease utilizing social media. The study sample included 360 replies from less than 20 years old to over 50 years old. The survey was carried out through the use of questionnaires which were open for all to fill. The questionnaires were administered to respondents through online delivery. The survey target audience was chosen based on voluntary participation. The questionnaire was designed to capture social media use behaviors before and after the onset of COVID-19 by asking questions about frequency before and after the disease's breakout. Questions were also asked to establish users' behavior with and around other people and the favorite items that individuals like to access on social media. The reasons for using social media during the outbreak of COVID-19 and the social media topics of discussion around the virus have been investigated. The respondents' sentiments about the spread of rumors and social media were also explored through a like-art scale.

The methodology of research chosen for this study is quantitative. This means that investigations seek numerical data on behaviors rather than opinions and views. It is optimal to use a quantitative survey in this research because the issue under study is highly integrated into social phenomena in a widespread manner.

4. RESULTS AND DISCUSSION

In this section, the analysis of individual responses concerning social media contribution in spreading COVID-19 fear was evaluated. Individuals' social media presence was investigated. Their view on socialization platforms being contributors to spreading the fear of the pandemic was analyzed. This section aimed to collect data on social media influence during the COVID-19 pandemic. With individuals staying at home, they use these platforms extensively, making them influential in viewing the pandemic. The sample also included 53.3 percent male respondents and 46.7 percent female respondents (see Figure 1). This ratio indicates a balanced model. These individuals were composed of diverse ages, ethnicity, cultural backgrounds, and religious beliefs. The analysis hence was able to collect unbiased findings.

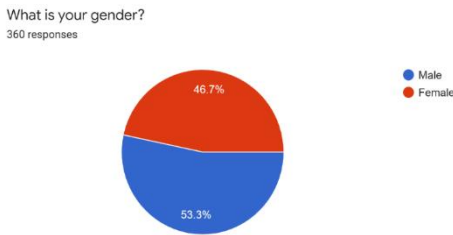


Figure 1. Population size aware of COVID-19

The largest number of respondents came from the Asian Pacific at 66.7 percent, followed by the Middle East at 16.9 percent. Those from North America were 5.3%, European respondents were 4.5%, and Africans were 2.1%, while Latina Americans were 4.5% (see Figure 2). This means that the sample does not represent global warming respectively but instead results from Asia predominantly.

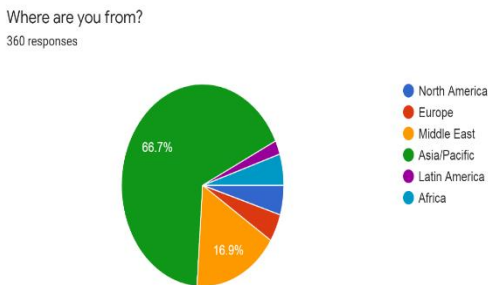


Figure 2. Worldwide population size aware of COVID-19

The study respondents were made up of 24.4 percent of individuals under the age of 20, 22.5 percent of respondents were between 21 and 30, 43.1 percent being between 31 and 50, and 10 percent were above 50 years old (Figure 3). According to these results, it was clear that those below fifty years are the ones who rely on social media to get relevant news on the pandemic. These individuals are young and productive, so that they would like to access information about what happens globally. Those from 31 to 50 years are the ones who responded more. This shows that the sample is made up of predominantly young adults and middle-aged adults.

The study sample was made up of 46.7 percent females and 53.3 percent male respondents. Almost half (49.4 %) of the respondents were students, and public servants at 18.2 percent followed it, and then the private sector workers at 15.6 percent (Figure 4).

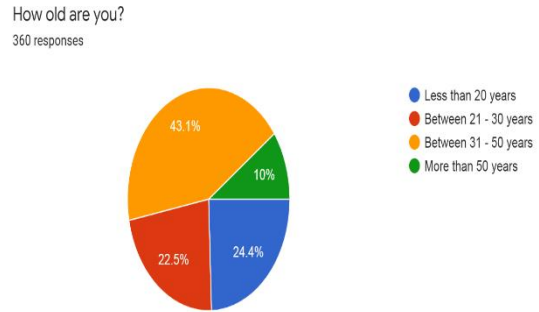


Figure 3. Participant's reliance on social media for information by age

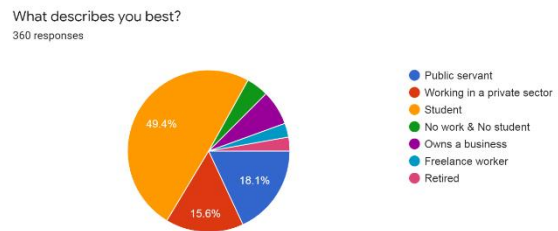


Figure 4. Occupation of respondents

From the 360 individuals who responded to the questionnaire, 31.1 percent recorded having used social media consistently for 2 to 4 hours daily, while 25.6 percent used it for 1 to 2 hours daily. The number of users who utilized social media for 4 to 6 hours daily was 23.1 percent, with smaller groups using it for less than an hour and more than 8 hours (Figure 5).

After the onset of the spread of the SARS-CoV-2, the largest number of respondents, 25 percent, recorded using social media for more than eight hours daily every day. The second largest group reported using social media for 4 to 6 hours with a percentage of 22.2 of the total sample. Of all the respondents, 20 percent were recorded to use social media for 6 to 8 hours and 2 to 4 hours. The smallest group of the sample size, 12.8 percent, used social media for 1 to 2 hours daily.

Comparing the results for the number of hours used in social media before and after COVID-19, we realize that after the pandemic broke out, people committed most of their time to social media to get news about the deadly disease called Covid-19 [40]. Before COVID-19, only 8.9% used social media for more than 8 hours; with the pandemic, this figure increased almost thrice to a tune of 25% (Figure 6). This indicates that social media users increased with the onset of the coronavirus pandemic.

The most commonly used social media platform among the population was WhatsApp, with 26.7 percent of the respondents, followed by Facebook at 23.6 percent. Twitter was the third most impactful social media platform with 17.2 percent of respondents. Instagram and YouTube have the fourth and fifth most impact, with 15.6 and 14.7 percent of the respondents attesting to this, respectively. Results indicate that many social media users (43.5 percent) prefer to use it for their private use, and 32.3 percent when alone and not with friends. Other users chose to use social media while with friends and together with friends at 10.6 percent and 8.9 percent (Figure 7). The smallest group used social media with their parents.

How many hours did you approximately spend DAILY on social media BEFORE the onset of Covid-19?
360 responses

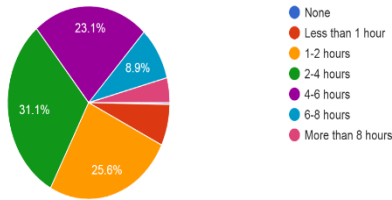


Figure 5. Number of hours of social media use before the global spread of SARS-CoV-2

How many hours do you spend on social media DAILY AFTER the Covid-19 issue started around the world?
360 responses

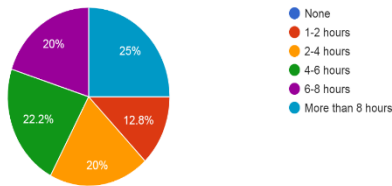


Figure 6. Number of hours of social media use after the global spread of SARS-CoV-2

Figure 8 below shows when and how the respondents use social media. Three fourth of the respondents (75.8%) have mentioned that they use them individually. Approximately one-fifth (19.5%) of the participants use it when they are with friends, and only a meager amount (4.7%) of respondents have revealed that they use social media when they are with the family.

Which of these social media has the most impact on you?
360 responses

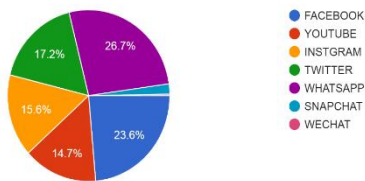


Figure 7. Most impactful social media sites

The results from the questionnaires' analysis indicate that news and reports were the most preferred item to consume on

social media, with 39.4 percent of respondents citing so. Videos and movies were cited as the second most preferred item, followed by studies and research at 36.1 percent and 14.7 percent, respectively (Figure 9).

How do you use social media?
359 responses

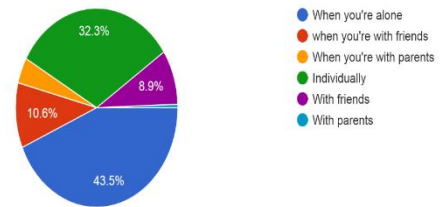


Figure 8. Social media use behavior

What are your favourite items on social media after the issue of Covid 19 started? (Choose the most relevant answer to you).
360 responses

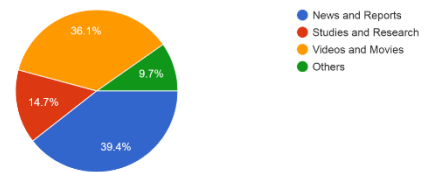


Figure 9. Most popular items to view on social media

The next question was based on identifying reasons behind social media use among the respondents. Figure 10 below shows that the participants were asked to indicate to what extent they agree or disagree with six different reasons listed, and the results were as follows:

The largest group of respondents (n=110) agreed that social media were the only source of information from which they got to know about the coronavirus. A large group (n=130) also agreed that social media provided them with accurate information regarding the virus's news and reports. The largest group recorded (n=160) decided to use social media because it helped them feel more psychologically comfortable. The highest number (n=170) agreed to the statement that they were curious to know more about the virus, and it was their reason for using social media. Those who wanted to escape from reality through social media had a lower agreeing rate (n=90) compared to the agreements for other statements, yet agreeing to the escape from reality is the most selected response. Most participants (n=125) decided that they used more social media because they had more time available.

My reasons for using social media during Covid-19

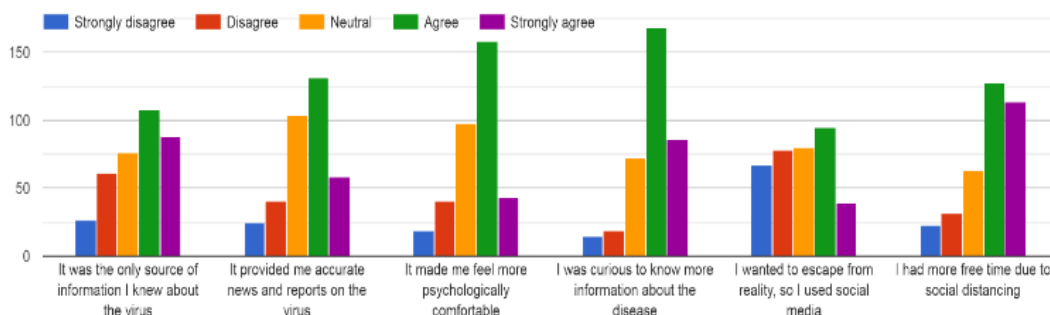


Figure 10. Summary of reasons for using social media

Figure 11 below illustrates the respondents' perception and understanding of five different statements.

When considering the topics about COVID-19, the largest group (n=175) agreed that social media was instrumental in dealing with the virus in terms of symptoms and prevention. A large group of the respondents (n=160) also decided that social media are a good source of reliable scientific information from reliable sources. The largest group of respondents (n=150) was neutral because it is not based on medical citations. Equal numbers agree and remain neutral that videos are better than news reports as they can follow events live and (n=125) are neutral because the information from social media makes them feel more scared.

The next question was on the role or contribution of social media in spreading rumors about the virus. A large number (n=140) agreed that social media contribute to the spread of stories about the virus. A similar number of the participants also agreed that the rumors about the virus spread very quickly.

Another 130 of them strongly believe in the latter statement. The largest group of the respondents (n=155) agreed that the spread of rumors makes the virus's severity appear worse. A considerable amount of respondents (n=145) agree that the spread of rumors increases fear and terror among people (Figure 12). However, many people also recognize that these rumors help create a medical education culture, and people take precautions.

The psychological effects of rumors have affected the respondents who agreed (n=130) that rumors have raised fear and panic. The largest group disagreed that rumors make them feel isolated from their families or cause family members' problems. Many of the respondents agreed (n=130) that rumors make them more eager to pick and watch the news. However, a few of them feel dislike towards living, and most of them (n=170) do not associate social media with the negative feeling of living (Figure 13).

Social media topics about the virus

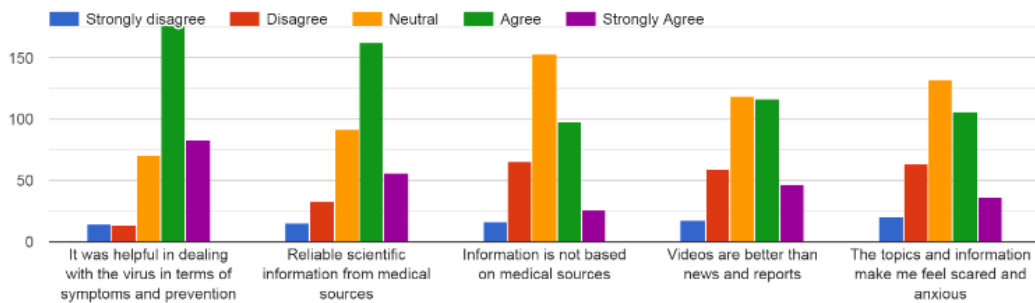


Figure 11. Social media topics about the virus

The contribution of social media to spreading rumours about the virus

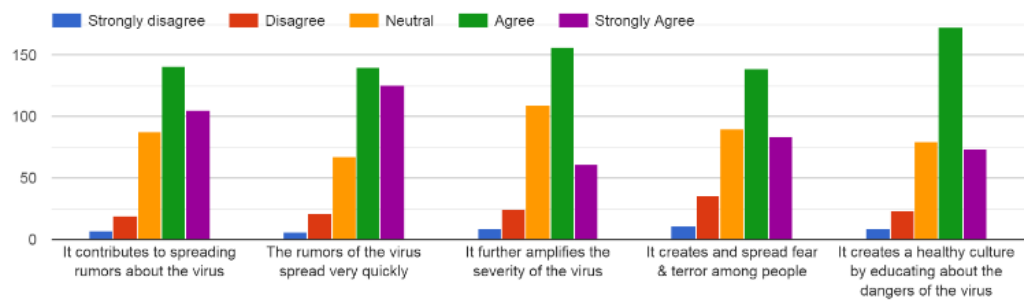


Figure 12. Social media and the spread of rumors about COVID-19

The effect of Covid-19 rumours on social and psychological aspects of the respondents

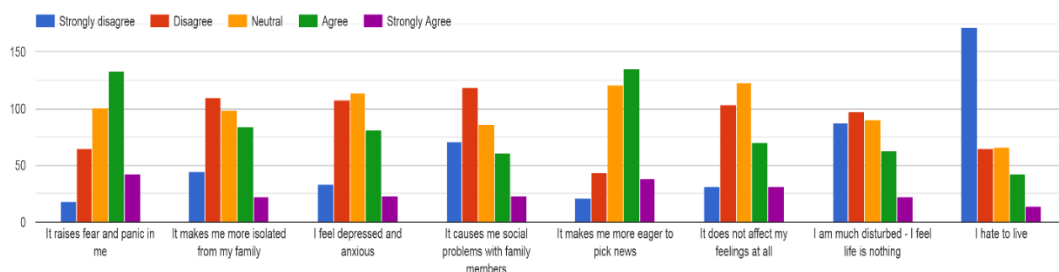


Figure 13. The effect of COVID-19 rumors on social and psychological aspects of the respondents

4.1 Discussion

The current study sought to identify the reasons for using social media during the COVID 19 pandemic by screening various topics to understand its impact in creating rumors; and its psychological effects. The study's findings depict that social media's use during the breakout of COVID-19 increased significantly compared to periods before. These findings concur with the findings of study [40], which revealed that the use of social media increased significantly in the healthcare sector as they needed to avail information and facts to the public fast and effectively. Even though the study focused more on social media use in the healthcare sector, it agrees with the current study that social media use increased significantly over the years.

According to the findings of the current study, many of the respondents recognized that they turned to social media as a source of information during this period to know how to prevent themselves from disease and find details about the disease. These were the most strongly supported uses of social media. The public has a high level of trust in social media platforms since the largest number of respondents cited that social media were the only source of information they had regarding the virus. This platform provided them with accurate information about the virus. These findings disagree with the study [41] findings that argued that people never used social media as a source of information more often and at a higher trust level. The authors reported that the significant question surrounding social media use as an information source is how people assess the information's source credibility [41]. As a result, social media had remained a common trusted source of professional and research information before the pandemic.

Psychologically, many turned to social media to help them feel more comfortable during this time of crisis. Social media has helped to inform the public about the symptoms and prevention measures that can be used against COVID-19. There is also reliable scientific and medical information available on social media. These findings agree with study [42], who argued that social media had an impactful effect during the COVID 19 epidemic, especially as psychological nourishment among the users in Wuhan, China. However, many studies have highlighted that social media has been employed to create fear and panic among its many users [43]. The respondents identified that information about the COVID-19 disease brings a neutral level of fear and panic. This further exacerbates the seriousness of the outbreak. The spread of rumors has also created an atmosphere of uncertainty where many people welcome the idea of death. It has also caused more anxiety to pick apart news items. These findings agreed with study [44] that rumors have a negative effect since they can mask themselves as credible infection prevention and control strategies and have potentially severe implications if prioritized over evidence-based guidelines, hence causing panic and fear [44].

Therefore, we can state confidently that social media has played a significant role in spreading inaccurate information to the general public. People also put into practice what they learn from social media as they purport it to be correct. All the objectives of this study have been answered, and our hypothesis has been established and proved to be right. It is, therefore, evident that rumors can cause the escalation of a crisis like the breakout of COVID-19 due to how the information affects the psychology of social media users [45]. However, most of them still use social media as a primary

source of information, meaning that a large section of the world's population remains vulnerable to misinformation through social media and the psychological effects that accompany these rumors.

The findings of the current study reveal that information sharing grew substantially, with a large percentage of participants reporting to share COVID-19 related knowledge and information. This was although there were large amounts of rumors and misinformation regarding the pandemic. According to previous research [20], knowledge and information sharing are integrated elements that entail capacity building, technology, and science as critical pillars in attaining sustainable developments. Social media's emergency as an essential information dissemination tool during the COVID 19 pandemic can efficiently serve as a blueprint for creating linked and sustainable economic development in countries [46]. If governments and health institutions could adopt better ways to counter misinformation simultaneously, social media could become a sustainable knowledge-sharing channel in the current world. According to research [47], knowledge sharing can be a critical catalyst for sustainable development in countries as it makes communities inclusive, safe, resilient, and sustainable. Knowledge is a fundamental aspect of intellectual capital as it enhances innovation and creativity when guided with intellectual property rights. Social media information is never proven to be credible; it lacks ownership and credible authorship. Some authors might even lack knowledge on the areas they share information [37]. This triggers the spread of rumors, increasing anxiety, and fear. If institutions and governments were to control the spread of misinformation, social media can be an essential professional and peer channel through which knowledge and information can be shared.

4.2 Limitations and recommendations

One of the significant limitations of this study is that the sample size used was smaller to allow for statistical generalization. A quantitative study would have used more participants than the number used in the current study. Precisely, quantitative studies require the use of large study samples, which will enable the identification of more diverse opinions and results that can be statistically generalized with the entire population [48]. The sample used for the study is relatively small, which means that it will be difficult to extrapolate the findings to other populations and deduce accurate findings.

Additionally, the participants only came from one region, the Asian Pacific and the Middle East; it would have included other regions to ensure the equal presentation of both developed, middle and low-class economies. However, the sample effectively showed phenomena occurring in the Asian Pacific and the Middle East since the individuals who responded to the questionnaire came predominantly from these regions. This means that it may be harder to generalize the findings to other groups with different cultural and social organizations like western communities [49]. However, the research remains instrumental for further investigating how social media can be misused to cause a shift in the public's psychology.

4.3 Policy implications and future studies

The findings of the current study provide essential

information to healthcare institutions and the public, government, and organizations on utilizing social media as an effective and trusted channel of sharing information. The study provides insight into healthcare institutions to change their information policy and focus on utilizing social media as a communicating tool. It also informs governments how to assess rumors and negative information on social media to develop the necessary risk communication. Even though the current study focused on misinformation and its psychological impact during COVID 19 pandemic, Future studies should compare misinformation and other variables such as age since social media use is positively affected by age. Additionally, It is essential to carry out further research while using a predominantly western sample size. This will help to identify any trends that differ based on the underlying culture of the respondents. More research should also be carried out to determine how the spread of rumors affected the public's decisions and how this contributed to the spread of the COVID-19 disease and even its aftermath. From the above findings, it is evident that rumors and misinformation did affect the psychology of individuals. Thus, this information must have affected the behavior of people. Further qualitative analysis from healthcare practitioners and respondents can give more insight into how individuals have mitigated the psychological stress during this period.

5. CONCLUSION

The COVID -19 pandemic led to an increased sharing of misinformation about the virus, with much of it disseminated through social media. Misleading news and information on various facets of the pandemic could threaten public safety, aggravating crisis management. Even though social media can be an essential component of sharing professional information to the public, its wild unsecured nature exposes users to misinformation. The current study recommends that health and government institutions should develop measures to correct misinformation and rumors in social media simultaneously.

The current study and others in the literature have supported the efficacy of providing and disseminating important truthful and trusted information by health experts. The study also suggests various methods for correcting misconceptions about health through social media, including timely expert advice, regular public health awareness, and correction programs with periodic communication among general people and media algorithms. With the current proposed recommendations, one should always address the audiences' intellectual and emotional dimensions during this phase of fear and anxiety. The many lessons learned during the current COVID-19 pandemic will serve as a blueprint for managing and coping with future pandemics.

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