

Using Digital Media to Manage the COVID-19 Crisis in the UAE

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Abstract

The study aims to examine the use of digital media in crisis management during the COVID-19 pandemic in the UAE. In the UAE and the world, the pandemic posed an adverse crisis with risks and vulnerabilities to life and well-being. As a result, different containment measures, such as lockdowns, stay-at-home, quarantine, work-at-home, and cessation of the movement, were utilized to reduce the spread of the virus. Closer home, authorities in the UAE utilized diverse approaches to share and disseminate correct information to unify the communities while containing the spread of the virus. One approach that authorities such as The National Emergency Crisis and Disaster Management Authority (NCEMA) employed involved digital technology platforms. As such, the purpose of this thesis paper was to explore the impact and use of digital media in COVID-19 crisis management in the UAE.

The study relied on a qualitative research methodology through semi-structured interviews with members of NCEMA to understand how they use digital media to manage the COVID-19 crisis. The study also incorporated quantitative data collected from a sample of social media platforms in the UAE.

The results of the study show that digital media works mainly to disseminate information and insights to enhance the containment of COVID-19. The sharing of information on social media reached large numbers, hence lowering the risks and vulnerability to the virus. By controlling the spread of the virus, NCEMA and other frontline authorities managed to create awareness, save a life, and reduce the risk-magnitude of the virus.

Key words: COVID-19 – UAE – Digital media – Crisis management.

Introduction

The coronavirus (COVID-19) pandemic has affected nearly all nations across the world. The virus has spread through human interaction, touch, interception of sneezing and others (Shorey & Chan, 2020). Consequently, local and regional governments have taken a leading role as first responders to the pandemic. They have played a critical role in assuring human rights and well-being protection through local public service provision avenues. At the grassroots level, COVID-19 has affected all aspects of social life, markets, the economy, businesses, and even educational institutions. As a result, different governmental departments have developed plans and approaches to contain the spread of the crisis. However, due to variance in resources, decision-making, policies, and infrastructure, different countries have adopted and executed differing COVID-19 containment models. For example, while some adopted cessation of movement, others went for partial and complete lockdowns to control the spread of the virus.

Irrespective of the adopted model, the COVID-19 pandemic overstretched the skills and resources of almost all sectors. According to Hayakawa and Mukunoki (2021) while many nations have crisis and disaster communication plans to deal with emergencies, the COVID-19 pandemic has stretched the plans and structures to the limit. The experience forced local governments to innovate and develop creative strategies for engaging containment efforts. For instance, in line with the steps to contain the spread of the new coronavirus, the UAE executed all possible precautions to prevent the spread of the virus as a severe crisis. The National Emergency Crisis and Disaster Management Authority (NCEMA) took a frontline role in guarding, guarding, and supporting the nation towards amicable crisis control. NCEMA took many precautions and procedures to ensure that the virus was contained. Some of the procedures included closing all public and private schools and higher education institutions across the UAE until further notice, implementing distance learning, starting remote working, suspending prayers in all places of worship, suspending the distribution of print publications, postponing sports events, closing entertainment destinations, and suspending all flights and visas. The containment measures aimed at ensuring that virus spread was reduced by minimizing human contact and interaction.

Literature Review

Diverse literature and scholarly works have identified digital media as an important enabler and supporter of broader strategies used to combat pandemics and crises. For instance, (Zeballos Rivas et al., 2021) identified social media as an important digital technology that has allowed social and physical distancing as a strategy for curbing the COVID-19 virus. Equally, digital technologies have permitted social proximity while serving as an important tool and platform for social cohesion. As such, the section will explore and analyze diverse literature works to understand the use of digital media in crisis management.

Social Media and Crisis Management:

The term crisis means an event, incident, or group of circumstances that may threaten a particular individual or organization's reputation, safety, or survival (Sapriel, 2003). At the moment of the crisis, lives may be at risk from the state of any organization, which may affect its reputation as well (Husain et al., 2014).

Digital media tools have been developed rapidly and have begun to influence community behaviors and attitudes, especially in recent years. This influence has forced businesses, institutions, and organizations to revolutionize their inherent communication models with the external environment. The fact that Web 2.0 influences consumer behavior, choice, and decision making makes consumers stronger and authoritative requires faster, flexible, sensitive and customer-centric communication processes in businesses. During a crisis, targeted customer engagement remains an important strategic and competitive strategy, as it lowers the potential of competitors acquiring the stranded clientele. For this reason, the manner in which crisis communication is managed through social media is vital for businesses (Civelek, Çemberci, & Eralp, 2016).

In addition to flexibility and transparency in the corporate formation, public policies for these issues related to the crisis and interest in disseminating data and information through the familiar network are developed. Check the flow of information and the method of disseminating it. It is worth noting that choosing the appropriate time to publish this information or new announcements related to the crisis. Finally, the results and reports were broadcast throughout the crisis (Civelek et al., 2016).

Many users around the world use digital media technologies to obtain information and communicate with others. Studies argue that digital media lead to the evolution of community journalism, in which the receiver became the sender. Users become unofficial correspondents who monitor events and write news and comments on their own platforms, such as Facebook, Twitter and Instagram (Garcia-Ruano, Pacheco, & Suazo, 2013).

The advent of social media platforms has transformed the crisis communication landscape because it permits more interactivity, leading to the creation, sharing and exchange of information, ideas, and pictures/videos in split seconds. Practitioners of public relations and organizations are recommended to follow social media activity and act on it because if utilized accordingly, it could act as a negotiation platform during crises.

Blogs are an effective medium for connecting organizations and the public when a crisis occurs. However, the type of messages to be used on the blog during an emergency requires additional clarifications by future investigators. Organizations could also benefit from Instagram by creating a new group or company webpage. Studies have argued that organizations must utilize their social media accounts during crises. They have to monitor the number of followers, review all comments and users, and share posts and video (Apuke & Tunca, 2018).

Digital media has many advantages: easy accessibility, such as the swift interaction between the sender and the receiver, which is not available in traditional media. Additionally, digital media has proven that all users are producers and consumers at all communication phases. Digital media platforms are common where individuals have easy access to information that they are looking for it. Moreover, users can customize and delete the message in a short period, as the nature of users' participation is not necessarily assigned to be in a specific place or time (Searson et al., 2015).

Through the use of these platforms, governments communicate directly with members of society by informing them of all the information related to the crisis and the procedures followed to escape this crisis and how the general public can communicate in an emergency (Wybo et al., 2015). Researchers argue that digital media describes the variety of communications technologies, such as visual, audio and written. However, it differs from traditional media through the process of publishing or writing and the methods that relate to the image or sound. Therefore, digital media has become an important part of the social life of any society, as it formed an important platform for users to reach their goals through the services provided by this platform through communication and connection (Gil de Zúñiga & Chen, 2019).

Several studies on crisis management relied on crisis communication approaches, such as attribution theory, situational crisis communication theory, image repair theory, contingency theory, and best practices in crisis communication (Elsammi, 2018). Other researchers connect crisis management to the reputation of the organization. They argue that crisis communication is considered a vital part of crisis management because the crisis may negatively contribute to the organization's reputation and endanger it (Zamoum & Gorpe, 2018).

Many users around the world use digital media technologies to obtain information and communicate with others. Studies argue that digital media lead to the evolution of community journalism, in which the receiver became the sender. Users become unofficial correspondents who monitor events and write news and comments on their own platforms, such as Facebook, Twitter and Instagram (Garcia-Ruano et al., 2013).

Some studies have focused on using digital media to target users and collect demographic information about them. For example, Instagram and other social media platforms have the unique advantage of gathering specific demographic and behavioral information that users voluntarily offer. Combined with web traffic data, the approach makes it easy to reach highly accurate target audiences. Moreover, it is vital to highlight that its area still requires research and innovation to improve. In fact, during this effort, Google launched new targeting capabilities, which allowed advertisers to target directly to parents. Overall, this rather advanced targeting helps to reduce costs and improve the performance of the advertisement channels by ensuring that only relevant audience members are reached. (Burke-Garcia & Mathew, 2017).

While studying the Indonesian early warning system during the Tsunami, despite the government's rapid response and alert, it has reached the areas expected to be affected by this hurricane. However, through the digital media platform Twitter, these warnings and alerts were published and reached the residents of these regions; however, if they did not get information through this platform, it may risk them. It is a simple example of how the government used Twitter to notify people of alerts and safety-related matters (Chatfield & Brajawidagda, 2013). Organizations could play a positive role in controlling and managing crises if they formed a specialized committee to manage the crisis, which can use digital media platforms in the right way to deal with audiences (Ghassabi & Zare-Farashbandi, 2015; Nabity-Grover, Cheung, & Thatcher, 2020).

Social media and COVID-19:

In reducing the spread of the virus, technology reflected through digital media has proven to be an important tool in ensuring that regional and local authorities on the frontline share essential information to the public regarding the COVID-19 virus. For instance, in the UAE, NCEMA relied on and used all communication means to raise awareness regarding COVID-19. For example, it used its social media platforms to educate people on keeping safe at home. In entirety, social media has acted as an important gateway for communicating life-saving information, maintaining essential services updates, and fostering an environment for socioeconomic interactions during the pandemic. On its Instagram and Twitter social media platforms, NCEMA has taken a leading role in disseminating information covering all aspects of the crisis, such as public health, education, transport, and safety. Most tips shared appear on social media focused on educating people on how to stay safe. In addition, the social media platforms have worked as consultation platforms where anxious citizens get information and direction on steps to take in case they suspect having come into contact with an infected person.

Although social media innovation has been around for decades, understanding the difference between online engagement tools and social media has remained the most significant problem in achieving containment measures via digital media. Instagram and Twitter are studied as social media platforms, while Zoom is explored as a social engagement tool. Researchers argue that digital media is vital in managing crises. Social media tools such as Facebook, YouTube, and Twitter have worked as important avenues for rapidly disseminating information and ideas during crises. They provide a platform for the strategic dissemination of information to the target population. However, issues linked to misinformation and misinterpretation of information could result in more harm than good. Several studies related to crisis and disaster management have indicated how digital media has been used in emergencies such as Hurricane Sandy and European floods. It is not limited to trading crises only but also creates the impression of trust and acceptance among users. For example, during

Hurricane Harvey, officials from governments relied on social media to provide alerts to the problem in specific areas where help is located. Additionally, videos and photos uploaded on social media worked in documenting the damage, tracking the survivors, and guiding rescuers on the areas to focus (King, 2018).

Although COVID-19 is an equal measure of a global crisis and pandemic, dealing with its effects represents a challenge for all governments and authorities in the world. The seriousness of the crisis is because of its effects on economic or social aspects in a given country and the psychological and cultural stability of people in that country. Digital media could work as an excellent approach to reaching people (Almuzaini et al., 2021). However, the lack of policies and frameworks to coordinate communication makes it challenging for the government to achieve containment goals. Stakeholders and frontline workers face the challenge of consciousness, information and persuasion while disseminating information on digital platforms. Other challenges are connected to the relationship between security and privacy, accessibility, and the digital divide. While considering the challenges, the study will explore how digital media could be used as a sustainable approach towards managing the COVID-19 pandemic in the UAE.

During the COVID-19 pandemic, digital media exposure served as an avenue through which people received COVID-19-related information. The information effectively influenced their adoption and adherence to preventive behaviors and attitudes that reduced their exposure to the virus. Zeballos Rivas et al. (2021) revealed that social media played an essential role in shaping peoples' risk perception of the COVID-19 pandemic. By understanding the influence of digital media, world governments focused their efforts on containment and lessening COVID-19 by applying early surveillance, tracking infected cases, number of testing, lockdown, and strict quarantine. The successful use of digital infrastructure, social media technologies, and their smooth integration into health efforts affirmed the significance of digital media in crisis management (Whitelaw et al., 2020).

Analytically, the active role of social media during the pandemic revealed how well authorities and policymakers could develop their communication around digital media to effectively target and influence the adoption of appropriate behaviors and attitudes among the people. Schwarz et al. (2020) explored digital technology adoption as new communication tools have been utilized in academia to go digital. It is precisely what COVID-19 revealed that academics are willing to and ready to use the tools in systematic collaboration.

As initially highlighted, exposure to COVID-19 led people to transition from their traditional one-to-one interaction to depend solely on digital technologies for communication and interaction. According to a study by (Nabity-Grover et al., 2020), the world lockdown and social distance saw people change how they react and interact. For example, it saw an increase of 61% on the digital media usage of platforms to stay connected with their family, friends, and collaborators. The transition reveals the opportunities that policymakers could use to rapidly disseminate critical information for controlling and reducing the COVID-19 virus transition.

In a study on the role of social media in achieving interactive communication with the public during the COVID-19 crisis, (Azer, Blasco-Arcas, & Harrigan, 2021) explained that social media played a prominent role during global crises. In addition, these media were able to create motivation among individuals to participate in containing the COVID-19 crisis. Yao and Ngai (2021) also analyzed the content of digital applications and social media that the

Chinese government used to achieve interaction with the public during the COVID-19 crisis, and they concluded that messages addressing attitudes and feelings were the most common messages the public interacted with during the crisis.

Research Questions:

The COVID-19 pandemic posed an adverse crisis with risks and vulnerabilities to life and well-being. As a result, different containment measures, such as lockdowns, stay-at-home, quarantine, work-at-home, and cessation of the movement, were utilized to reduce the spread of the virus. Closer home, authorities in the UAE utilized diverse approaches to share and disseminate correct information to unify the communities while containing the spread of the virus. During this pandemic, digital platforms are considered effective media to deal with such crises. Through these media, government entities can share information about the pandemic with the public, raise their awareness and enhance interactive communication, especially in situations of fear, anxiety and uncertainty (Khatri et al., 2021). As the study aims to examine the use of digital media in crisis management during the COVID-19 pandemic in the UAE, it answers the following questions:

- How does the National Authorities (NA) manage the COVID-19 crisis in the UAE?
- To what extent does NA utilize digital media to deal with the COVID-19 crisis?
- In dealing with COVID-19, to what extent were digital media used to engage the public in the communication process?

Methodology:

The methodology is best suited for the study, as it bridges the limits in qualitative and quantitative studies, hence offering a holistic model to integrate statistics and participants. According to, a quantitative research approach works when research seeks to understand the particular relationship in variables. On the other hand, qualitative research entails collecting, analyzing, and interpreting non-numerical data. Many researchers argue that the qualitative approach is useful for investigating complex, new or relatively unexplored areas (Jack & Clarke, 1998).

The study applied both quantitative and qualitative methods. Interviews with three of the main members of the crisis committee in the UAE were carried out to understand how they manage the COVID-19 crisis and how they consider digital media to be important to support their efforts to handle such crises. Participants were recruited through the National Emergency Crisis and Disaster Management Authority (NCEMA) and Dubai Health Authority (DHA). Each interview took approximately 25 to 35 minutes while adhering to the COVID-19 regulations. All interviews were recorded upon participant's permission.

For content analysis, the study analyzed the social media platforms of official health and police authorities in the UAE from 29 January 2020 until 10 November 2020. These platforms are Instagram and Twitter of NCEMA, Ministry of Health & Prevention (MOHAP), Dubai Health Authority (DHA), Dubai Police (DP) and Dubai Media Office (DMO).

Study Findings and Discussion

Using digital platforms during the COVID-19 Crisis:

Analysis of the digital platforms of the studied entities included the number of posts as a whole, the number of posts related to COVID-19, the number of followers, and followers' reactions in terms of likes and comments. The following section analyzes the use of digital platforms during the COVID-19 crisis in the UAE.

Instagram Platform

Table 1 shows how the main health entities and authorities in the UAE used the Instagram platform to deal with the COVID-19 pandemic.

Table 1, Using Instagram platform During COVID-19 pandemic.

In terms of the number of posts on Instagram as a whole, the figures in table 1 show that the three health authorities in the UAE were very active on the Instagram platform: The Ministry of Health & Prevention, Dubai Health Authority (DHA) and Dubai Media Office (DMO). NCEMA comes first with more than 30.0% (2,376). DHA and DMO come in the second position with nearly the same percent, 26.0%.

On the other hand, it seems that the National Emergency Crisis and Disaster Management Authority (NCEMA) and Dubai Police (DP) were not active on Instagram regarding the COVID-19 pandemic. Analytically, the behavior and approach of the authorities in the above stated period could reflect a situation of preparedness where they were preparing to offer crucial information to protect and caution the population the spread of the virus.

In terms of interaction between the authorities and the target population. For instance, followers in the Dhahi Media office and Dubai Police were so active on posts. NCEMA was less on followers, as in posts. It was related to inactive content shared, which only included 720 posts from January to November. It is evident that the level of activeness of authorities is directly correlated with the engagement they witnessed with their followers. As such, the level of engagement reflects the awareness that the authorities are creating in regard to the specific issue of concern.

On the other hand, Table 1 also showcases the number of comments on different accounts. For instance, the Dubai Media Office received a higher number of comments during the research time period. It gained 18,319 comments. However, the NCEMA was the lowest, with only 860.

While considering the comments and engagements on the social media platforms between the authorities and target population, it is crucial to examine the usage of critical keywords linked to COVID-19. As evident in the data, the content of accounts in Instagram, posts shared contains much information regarding COVID-19, and others were general information. The researcher chose the word "COVID-19" as the code for any information related to the COVID-19 pandemic. As Table 4 shows, MOHAP shared COVID-19 information by 81.23% of the total posts shared. Nevertheless, NCEMA did not share as much COVID-19, which was 6.81% of the total posts shared.

Analytically, the results were due to several reasons. First, NCEMA's activity was weak on its Instagram account because it was the superlative authority to develop plans and strategies to deal with the coronavirus crisis, which showed the efficiency of all sectors in dealing with the crisis through its Instagram account. It spent a lot of time creating a framework that ensured that it developed a strong foundation for other authorities to achieve their containment measures. Furthermore, NCEMA was the official body organizing the media briefing, which was broadcast through traditional and digital official channels. NCEMA was able to activate its account and obtain the most significant percentage of followers. Nevertheless, care was taken to spread the media briefings on several media channels and social media to reach the largest possible segment in the country of different groups and ages. As such, the use of one or two platforms might be a bad idea to achieve the NCEMA goal.

Twitter Platform

Most social media platforms have strict data access policies that could limit the accessibility of critical research information. An excellent example of such a platform is Twitter. As a result, the researcher relied on data content available between January and November 2020. As Twitter privacy shares the content, the limit of sorting the data is no more than 3200 Tweets during the date required. Consequently, the research obliged the policy and only relied on the available data to carry out the study.

Table 1 shows how the main health entities and authorities in the UAE used the Twitter platform to deal with the COVID-19 pandemic.

Table 2, Using Twitter platform During COVID-19 pandemic.

The analysis provides the trends and patterns evident in the social media platforms used by authorities within the study period. As a Twitter rule, the maximum number of posts that a researcher can obtain is 3200 tweets. The maximum content of each account was sorted in the study period.

As shown in Table 2, the Dubai Media Office (DMO) has the largest followers on Twitter at 47.0%. The Dubai Ploice account is second with 38.4%. On the other hand, NCEMA has the lowest followers on Twitter by only 2.1%. As the table, all chosen accounts are similar to others except the Dubai media office and Dubai police. The higher the number of followers, the higher the potential that the specific authority shares information that is crucial to the community.

In terms of favorites, Table 2 shows that the Dubai Media Office (DMO) followers respond of favorites to its tweets. The number of likes reached 106,838 (47.1%). NCEMA comes second with 63,100 likes (25.4%), followed by DP with 39,599 (16.0%). On the other hand, DHA accounted for the lowest number of likes (6.2%). One precise observation by the researcher is that DHA does not use Twitter well in the COVID-19 pandemic, or the content is not new or exclusive.

In terms of retweets, NCEMA's Twitter posts were the most frequently retweeted by followers. Approximately 46.0% of its tweets were retweeted. DMO comes second with more than 30.0%. On the other hand, Twitter accounts of DHA and DP received the lowest retweeted number.

Figures of Table 3 also show that MOHAP uses 37.3% of hashtags in its tweets. It shows how MOHAP uses the benefits of hashtags in Twitter, which lets followers easily access the sheering hashtags. Hashtags help followers follow the data that are very debauched. DP was second with 22.6%, followed by NCEMA and DHA with 17.0% and 15.7%, respectively. Meanwhile, DMO used fewer hashtags in its tweets by 7.8% of the chosen research accounts.

Using photos in tweets helped to convey a richer message in the space of 140 characters. The sharing images on Twitter cab are far-spreading than other platforms because of retweet particularity. Table 2 shows that almost all studied accounts were active in sharing photos on Twitter. Accounts of MOHAP and DMO were the most common Twitter accounts sharing photos, with nearly the same percentage of 27.4%. The other authority shares photos on their Twitter accounts with approximately 15.0%.

Regarding sharing video, DHA was the first health authority to share video of the COVID-19 pandemic on its Twitter account, with 35.1%. It seems that DHA uses the video more than other formats because people may have the opportunity to watch video anytime. Sharing videos have a feature that shows the number of views, which may attract other followers to watch it. DMO came in the second position to share video on its Twitter account with nearly 25.0%. DP and MOHAP came in the third and fourth positions with percentages of 16.3% and 15.3%, respectively. However, NCEMA did not mainly share videos on its Twitter account, as its percentage was only 8.5%.

Findings from the interview

The section provides an analysis and discussion of findings collected from members of the National Emergency Crisis and Disaster Management Authority (NCEMA) and Dubai Health Authority (DHA). It is crucial to reinstate that all ethical considerations of confidentiality, informed consent, privacy, and anonymity were adhered to while conducting the interviews. The results of the interviews were classified into four dimensions as follows:

Strategies applied to manage the COVID-19 crisis

The respondents stated that the responsible health authorities and governmental agencies adopted and relied on a deliberate strategy to contain the COVID-19 pandemic. For instance, they were actively involved in extensive cleaning and sterilization campaigns. Health and social awareness initiatives accompanied the campaigns. Additionally, the campaigns were supported by volunteers City volunteers who were invited through the volunteering in Dubai launched by His Highness Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of the Executive Council, which the Watani Al Emarat Foundation supervises. The model worked as an extensive effort to support various government institutions and departments in the face of the spread of the virus.

Analytically, the new COVID-19 pandemic and the mobilization of medical personnel and their dedication to their work greatly impacted the epidemic. Additionally, it is vital to recognize the great capabilities that the state had allocated to meet all the necessary market needs of food, medicine and treatment requirements. State agencies' approach, collaboration, and dedication are a great example of emulating national responsibility and commitment in disaster management. The coordination revealed the importance of states utilizing state-of-the-art technologies, scientifically backed models, and medical education and training to create awareness. Digital media platforms have proven the significance of digital technology in facilitating remote work. They provided an avenue for authorities to educate and create

awareness of diverse COVID-19 preventive measures. Critically, despite the existence of the crisis and its adverse effects on peoples' way of life, the period offered important lessons to the UAE and the world at large regarding digital technology and its unutilized opportunities.

On the other hand, during the COVID-19 crisis, a flexible media strategy was required at DHA to accommodate all variables and updates, whether related to the development of the crisis globally or to precautionary and preventive measures taken at the national levels. Accordingly, the media strategy required direct communication with relevant stakeholders to keep pace with the crisis, as it should be, at the required level, most notably, the National Disaster and Crisis Authority, Dubai High Crisis and Disaster Management Committee, Dubai Government Information Office, Executive Council and Control Centre. At the same time, the Authority was keen to adopt the media strategy and operational plan from the Information Office of the Government of Dubai after discussing the strategy in a joint meeting that included officials in the Communications Department and its specialists and officials and stakeholders in the media office.

Officials and specialists from the Public Health Department of the Authority, who represented the scientific and medical reference, for all the media content resulting from. In the same context, the roles, responsibilities and tasks of the operational plan were distributed to members of the media team in the health media department, including (traditional, digital media) and the visual content industry (photos and videos).

Proper implementation of the strategy requires a scientific and medical reference to media content. There were therefore a number of officials and specialists in the Department of Public Health, along with the Authority's media team, as well as the higher scientific and official reviews, which ensured the implementation of the strategy and the systematic and reliable dissemination of the media content. Tools and means have also been developed to assess the work in a phased manner, measure the actual returns of the information strategy and operational plan, and make the necessary adjustments to the workflow, in accordance with the variables and developments related to COVID-19 and formal preventive measures.

Using Digital Media to Manage COVID-19

First, it is crucial to highlight that the presence of social media has significantly contributed to enhancing the process of communication between the public and responsible government agencies. During COVID-19, the platforms formed good awareness avenues that played a prominent role in spreading awareness among people and drawing information and instructions issued by the responsible health authorities. The foundation and activeness of social platform use were made possible by the increased spread of the Internet, accessibility of smartphones, and personal community. Equally, since most people were at home, it became easy to spend much time on social media. As a result, social media helped connect the dots and achieve the goals of awareness creation.

In the UAE, the presence of strong social media infrastructure and access to prominent digital media sites such as Facebook, Twitter, and Instagram made it easy for authorities and the Watani Al Emarat Foundation to target and reach their target population with ease. The use of social media to educate the population during the crisis reached more than a million and 600 thousand. Moreover, the interaction over the digital platforms amplified the number of individuals reached only in less than two weeks of their launch. The interaction offered a good understanding of different institution orientations and understanding of different governmental and department engagement in achieving the containment goals.

Moreover, the implementation of the media strategy was required to reach the largest segment of the community through the diversification of digital communication means to ensure that the right information and media message reach its diverse content for all. The official DHA website has been used, and Facebook, Instagram and Twitter have been directly partnered to promote digital media work, along with Snapchat, TechTalk, WhatsApp, as well as online platforms for Al Bayan and Emirates Today, satellite channels and radio stations in the country, and global media network platforms, including CNN, Reuters, etc.

Having understood the massive adoption of digital technology in the UAE during COVID-19, the research asked, "How are these digital methods used and utilized?" The respondents revealed that the UAE has been able to utilize digital technology as the principal means of communication. The decision to take social media as a principal channel for creating awareness in Emirates and the world as a whole offers a greater opportunity for success. The use of all previous means has undoubtedly contributed to the diversification of media content and messages and to expanding the target range of media messages, where media content consistent with every media used has been created in various languages (Arabic, English, Ardo, Chinese, etc.).

DHA has been keen to provide all the information needed by the community. It provides information about the smart services and the best ways to benefit from them. It also obtains direct and rapid feedback through official platforms about these services as well as on the health situation and awareness in the UAE to ensure that the community maintains its health and lifestyle, as well as awareness-raising for infected people and contacts through leaflets and the provision of e-books awareness, highlighting the efforts of health institutions to address COVID-19.

Main challenges of managing COVID-19

As expected, the participants from NCEMA revealed that in their experience in disaster response, any sudden action and effort that comes in response to an emergency crisis faces obstacles or challenges. In the context of the COVID-19 crisis, the challenges revolved around how well to educate people to avoid rumours and pay attention only to the responsible health authorities' issues in the state. The problem of taking the lead in publishing news from the public and exclusive news as they expect is a big problem that may be a great challenge in circumstances of crisis. As such, the volume of awareness that characterizes the Emirati people and those residing in the Emirates has had a great role in facing the crisis. Irrespective of the challenges, it is important to mention that community members utilized digital media to share awareness and sensitive information that improved the level of caution.

The most important obstacles and media challenges that have been faced are the same as those faced by all the countries of the world, the most important of which are misinformation, rumors and informal statements, anonymous media sites, all of which we have had to address, and overcome its negative impact on society, which has already been done through the diversification of the media, the intensification of the dissemination of media content in various languages, and the reliance on reliable, simple, meaningful and influential media messages.

Engagement of public through digital media dealing

The participants revealed that many citizens and residents in the country have positively contributed to the confrontation with the COVID-19 epidemic. Their contribution

is a result of the spirit of responsibility and love of the Emirati people for their homeland as well as the respect of citizens residing on the land of the state for the country, which has not been stingy in providing everything necessary to preserve mankind and secure decent livelihoods.

This was done by posting reliable, clear and meaningful media messages on social media, with citizens and residents interacting with them by reposting them in their accounts, and this had an important positive impact on DHA.

Having unearthed the benefit of digital technology regarding the dissemination of awareness information, training, and education of the public on containment measures, the researcher understands the respondents' perspective. The question, "Has there been any benefit from the interaction of the public through social media in dealing with the crisis?" was posed. The respondents agreed to the benefit of social media. Social media has been a game changer in the containment measures. In addition to direct communication to the public, it has offered an opportunity to collaborate with teams working in the field. It has made it possible to create awareness and understand the needs and desires in the working environment. The determination by authorities and the utilization of social platforms have worked in developing a strong structure for eliminating the pandemic and its effects on the UAE people.

Public interaction plays a key role in shaping media content, as the media is there to communicate the message to the community and the public, so there has been careful monitoring and follow-up as well as an assessment and measurement of public interaction, reaction and perspective.

In summary, the analysis has shown that digital media platforms provided critical relief during the global COVID-19 crisis. In the UAE, digital platforms such as Facebook, Instagram, and Twitter have worked as essential venues for accessing health information. The information shared by frontline workers and authorities such as the National Authorities worked effectively in providing preventive measures, reducing risks, and lowering the vulnerability of the UAE people to the COVID-19 crisis. In its entirety, it is clear that digital media provided the avenue for frontline workers to connect and create awareness of the COVID-19 virus, hence lowering the magnitude of risk and vulnerability to the UAE people. In so doing, low levels of infection, morbidity, and mortality were witnessed.

Discussion and Conclusion

This paper focused on exploring the use of digital media in the management of the COVID-19 crisis in the UAE. The COVID-19 crisis has led to over 219 million cases and 4.55 million deaths. The analysis has shown that authorities such as the National Authorities used social media platforms and associated digital technologies to provide correct and verifiable information during the COVID-19 health crisis. The information revolved around signs and symptoms, containment measures, and individual responsibility during the pandemic. The findings from the literature materials and data offered by National Authorities members offer generalizable insights into how digital technology can be used in crisis management. Analytically, the results of the study provide a foundation for future empirical studies linked to digital and tele-education during global pandemics.

During the study, numerous limitations were witnessed. Key among them involved meeting with National Authorities personnel. The personnel are busy as they concentrate their efforts around the clock to face the spread of COVID-19. Additionally, determining the appropriate time to conduct interviews was one of the difficulties that the researcher encountered. In addition, the lack of previous studies in the UAE that were related to my subject created a major challenge in finding reliable data to use in the study.

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