

Study the Impact of Social Media on the Outbreak of COVID-19 Pandemic.

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ABSTRACT

There are lots of social media tools that are accessible for medical or healthcare professionals, which include different social networking blogs, microblogs, media-sharing sites, wikis, virtual reality. All these different media tools can be utilized to develop or improve specialized networking and organizational promotion, education, patient education, patient care, and different public health agendas. But they also can perpetuate the risks to patients and healthcare professionals regarding the circulation of low-quality information, violate the patient privacy, and also have legal issues. To prevent all these risks, professional organizations and healthcare institutions have introduced a few guidelines. These guidelines were established to deliver emergency medicine residency programs control with leadership and best perform in the suitable practice and guidelines of social media but are valid to all residency programs that desire to create a social media presence. In this chapter, the authors describe how socialmedia made their impact on this pandemic COVID-19 situation.

INTRODUCTION

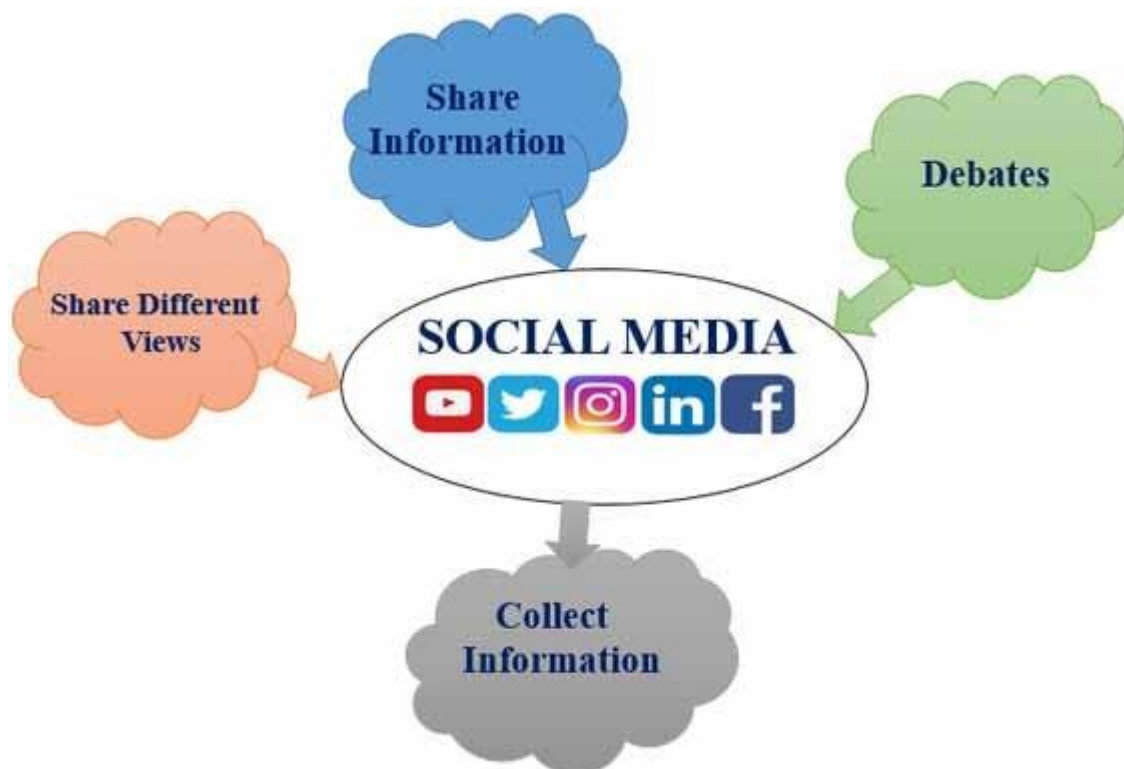
The novel coronavirus (COVID-19) was found in Wuhan, China, in December 2019 (Lu H et al, 2020).Immediately the virus was spread all over the world, which results in this pandemic situation. Internationally, the governments imposed social distancing and home quarantine and other methods to stop the infectious disease (Gorbalenya, 2020). Social networking sites and mass media played an important role in giving facts regarding the novel coronavirus (COVID-19). Though less information is identified about novel coronavirus (COVID-19), several rumors and fake information distributed all over world via social media that freaked public to take decision in anxiety (Machado et al, 2020). The quick distribution of wrong information and news through social networking sites like Facebook, Twitter, and Instagram became an important worry of the public and government health agencies (Abd-Alrazaq et al, 2020). Wrong information and unauthentic activities about healthcare of pandemic COVID-19 situation are distributed in social media at an extraordinary step (Machado et al, 2020). Modifying the arrival of fake news and wrong information during the pandemic COVID-19

situation is vital, as misrepresentation and rumors generates panic, anxiety and fear between societies, prompting them to numerous mental health circumstances (Chen et al, 2020). Despite of taking social network for granted as a secondary medium, it must be used to transfer vital info. Numerous governments in worldwide have taken activities against the rumors about this pandemic time, thus methods are needed to avoid such interaction difficulties. Generally, a pandemic outbreak of communicable disease can't be forecasted in a specific area, province or phase (Chan et al, 2020). The misrepresentation, misinterpretation, or fake news can suggestively ruin the interactive reaction and increase anxiety within the public. However, the data rises quickly via social networking platform, it is essential to observe media and handle the wrong information (Machado et al, 2020). Social networking platform act as the prime source of flourishing with information about the novel corona virus (Li et al, 2020). The main disadvantage of social media amongst a difficult condition as the pandemic COVID-19 situation is that social networking platform has been expediently applied as a method to transfer wrong information and fake or misinterpretation (Emanuel et al, 2020). Later the arrival of social networking sites like as Facebook, Twitter, YouTube, and Instagram etc the material communication in disaster situations has augmented internationally at several stages. Fig.1 shows the main function of social media. Social networking platform gives a place for manifesting individuals' opinion and views, which can be unpredictable and delicate during a serious condition like as pandemic COVID-19 situation (Basch et al, 2020) . Wrong information on this COVID-19 pandemic time is spreading quickly via social media and the internet, thus altering public behavior during the epidemic. This fake information requires consideration for improving emotional awareness, improvising the emergency reactions and associate judgment making (Basch et al, 2020).

Social Media Activity in the Pandemic Situation. In recent times, social media plays an important role as a source of information. Twitter is a social media platform where immediate response comes to any queries or a platform of discussion (Abd-Alrazaq et al, 2020). In this pandemic situation social media acted as boon, it gave information about 'DOs' or 'DON'Ts' and spread awareness about the COVID-19 disease (Machado et al, 2020). During the outbreak of H1N1 flu, social media was the first to inform the people (Abd-Alrazaq et al, 2020). The government organization named CDC (Centers for Disease Control and Prevention), took the help of social media to inform the people about the outbreak of Ebola and Zika disease (Wang et al, 2020). The craze for social media made it a key platform of information during the pandemic time. During this pandemic emergencies both healthcare department and people took the help of social media to interact and deliver information (Hua yet al, 2020). Fig.2 shows the advantages and disadvantages of social media during COVID-19 pandemic time. The most engaging social media platforms like Facebook, Instagram, YouTube and Twitter spreads awareness to everyone about the unauthentic information about COVID-19.

Though their role is controversial (Machado et al, 2020), but it helped the people to reduce the mental stress and anxiety in this worldwide pandemic situation (Hua yet al, 2020). Though, social media must be used for good purpose, as some times it can give wrong information which can mislead people as well as it can come as a blessing.

Figure 1. Basic function of social media



Impact of Social Media in Public Emotion

Basically in any kind of pandemic situation, there is a threat to public health, so it is important to aware people not to let it be a community spread disease (Machado et al, 2020). In this pandemic time people are emotionally influence. The wrong information lead to the panic situation which let people do un- necessary activities which can be harmful for both mental and physical health for an individual (Brooks et al, 2020). In the present time people are mostly dependent on social media, they try to collect the information from different types of social media like Google, Facebook etc about their work whether it'surgent or not, they always give priorities to it (Allen et al, 2013). It is seen in this COVID-19 pandemicsituation, the most searched topic in social media are virus, infection, diseases and its remedies (Machado et al, 2020). According to WHO, the people blindly following social media information about the virussuffers from anxiety, fear or mental irritation. Many news have displayed that subsidiary media cover- age to corpus trauma may strengthen the preliminary signs of PTSD (Post-Traumatic Stress Disorder) (Brooks et al, 2020). In this pandemic situation, wrong evidence, and confusing news about the pandemic of COVID-19 invaded the social media and worked groundless anxiety among many people which can make misperception and ruin mental comfort of people (Ahorsu et al, 2020).

Figure 2. Boon and bane of social media during pandemic COVID-19



Disinformation and Its Implications in Pandemic

Wrong information produces panic and mistake (Brooks et al, 2020). Incorrect info became a major problem throughout the social media platforms in the pandemic situation of COVID-19. Currently Facebook have launched a new apprise, basically which will notify the Facebook users whether they are involved with wrong information (Abd-Alrazaq et al, 2020). Several news informed that verified healthcare and Twitter accounts had minimum fake information rather than other social media sites (Ahorsu et al, 2020). Certain features or tweets of Twitter social media platform were noticed to tend to deliver incorrect and unverifiable judgment. Many researchers confirmed that the ‘silliness effect’, where the people joins the chat to mimicry the conspiracy theory inadvertently pulls more attention, posturing as a threat for wrong information (Thakur et al, 2020). Though wrong information is distributing nonstop on various sites, consciousness and suitable precautionary actions are of absolute importance for user safety (Machado et al, 2020). It was noticed that wrong information on social media sites about probable medicines, containing Hydroxy-Chloroquine to treat the novel corona virus infection (COVID-19), moved many

people to purchase such drugs without any medical authorization, resulting in the insufficiency of these medicines for real patients (Depoux et al, 2020). There must be cautiousness for using the social sites to stop the spread of rumors and wrong information (Tasnim et al, 2020). Distributing fast, correct news that introduces critical problems of control the infection is important (Dolan et al, 2020)(Bhambulkar, A. ,2011). Infodemiology is a prosperous area of research directed at teaching public health activities and planning public health policies to estimate electronically generated and stored the public health records (Mossberger et al, 2013). The advantage of Infodemiology is its capability to gather public health data in simultaneous from written, unstructured, image or user-made evidence which is shared via social media like blogs, websites and different network sites (Voorveld et al, 2018). Though, the dependability of user-created information is unsure (Paine et al, 2011). Frequently on social site, user-made and posted health related information about the pandemic COVID-19 disease can performance as an actual technique for public health investigation (Tasnim et al, 2020). Different social search engines and internet site designers must be needed to take steps to confirm handlers as clear and clear information as probable to stop the contrary things of information excessive, while also collaborating the importance of the pandemic and recommended the public health measures (Mossberger et al, 2013). Teaching people on the accountable and safe application of social site may, then, help to moderate the undesirable impacts detected (Depoux et al, 2020).

Effect of Social Media During Covid-19

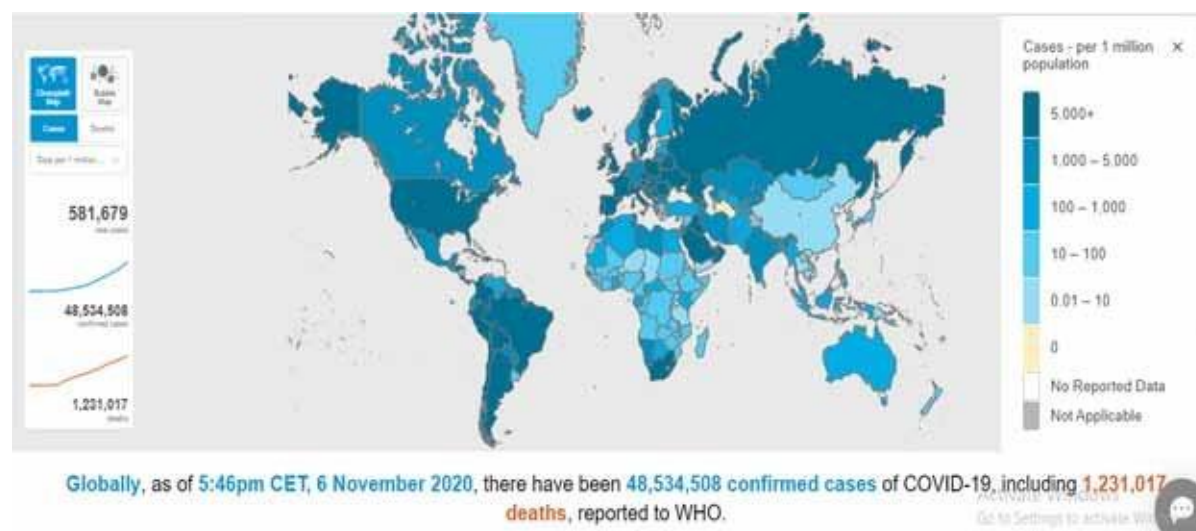
Media reporting and public outlook can have an important outcome on both the private and public sectors in determining with respects to interrupting agendas, compared to the real requirement for public health (Brooks et al, 2020). However, people are recognized as a coincidental that deals the threat notices and take the risk problems about the pandemic situation (Depoux et al, 2020). The data concerning the risk is offered in a way that effects the people's observation of threat, particularly dramatic media commentary of a pandemic emergency (Ahorsu et al, 2020). In specific, it is thought that anger and anxiety arbitrate the influence of media publicity on the sensitivity of individual-stage danger and hence rise advantageous precautionary performances. The COVID-19 pandemic outbreak is a negative incident, causing in an erratically high number of infections and deaths, prompting negative feelings from the community (Brooks et al, 2020). People generally express their anxieties about the COVID-19 pandemic outburst through different social media platform (Thakur et al, 2020). In some examples, though, the social media are incapable to detention the prevalent on time, and therefore fail to develop the major indicator (Depoux et al, 2020). Though social media news fall behind actual COVID-19 times, it does not performance a beneficial precautioning role in interactive and informing about the concern of public health (Brooks et al, 2020). Though, in this case the virus is novel and there have no sufficient information on it, misrepresentation may have been conveyed by the social site impact to different psychological outcomes like sadness, anxiety etc.

COVID-19: How Anxiety Extend via Social Media Social media has the power to bring people closer but it is also facing few challenges like ill-using of public outlook, misbehaving in open forum and other types of cybercrime (Machado et al, 2020). Fig.3 represent the COVID-19 update till 6th November, 2020 recommended by WHO; 48,534,508 confirmed cases including 1,231,017 deaths. COVID-19 pandemic has an impact on global health structure and became now became international health emergency or PHEIC (Public Health Emergency of International Concern) as recommended by WHO which is known as an unexpected incident that is defined below:

To establish a health threat of a community in comparison to other regions over the international outburst of disease.

A possible necessities of a synchronized international reaction. This explanation suggests a state that: is severe, uncommon or unpredicted; carries consequences for community health outside the affected region's national limit; and may need instant worldwide action (Depoux et al, 2020).

Figure 3. Globally COVID-19 update (6th Nov, 2020; 5:46 pm CET, reported by WHO)



However, the social network act as an actual foundation of gaining health data, it is also a source for broadcasting fake news (Wang et al, 2020). Furthermore to solve the immediate requirement to increase the public health involvements for handling the disease, the panic outbreak due to the pandemic situation in social media must be restricted (Depoux et al, 2020). The outbreak of anxiety and fake information about the pandemic situation due to COVID-19 is also known as “Misinfodemics”.

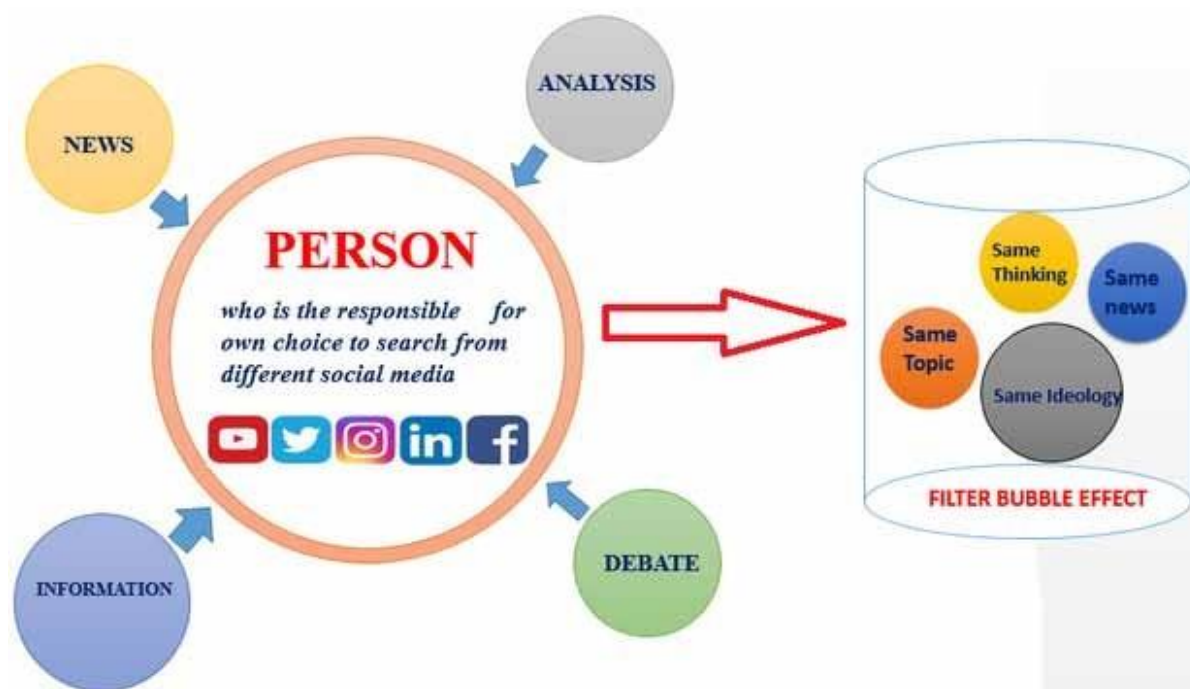
Supply and distribution of clear information, particularly when the broadcast is harsh and the forecasting improbability is mainly an essential part of handling health emergencies and epidemics in wide-scale (Machado et al, 2020). During this pandemic situation, the time is very crucial, there should be a communication between government authorities and the community to grow faith. Now a days, the population is increasing rapidly in the world wide, which is creating problem in this public health threat in this pandemic situation COVID-19. During the time of Ebola outbreak in Western Africa shows how social media has a power to effect the public reaction. Few research shows that the social media has a vital role in spreading wrong information about Ebola outbreak (Depoux et al, 2020). A research exposed that wrong information and fake tweets are spreading more rapidly as compare to authentic news (Wang et al, 2020). The content review of Twitter from 2014 to 2016 declared that the human emotions like anger, anxiety looks for information about Ebola related matter in worldwide (Machado et al, 2020).

Similarly, social media contributed in spreading gibberish accusations or conspiracy theories, and few gave them fake information about healthcare and treatments; as like as, rumored WhatsApp messages and SMS also acted as a source of fake news (Depoux et al, 2020).

Influences of Social Media

In today's world social media is the most commonly used platform. It is the source of information and knowledge. As the access to internet is trouble-free and reasonable, people makes the most out of it. Most of the users (registered) utilize this platform to spread information and news, as it is the most potential way to reach out to the individuals. One of the example is that recently during the time of COVID-19 incident, the most searched content in internet and social media is about the virus, named Corona virus (Abd-Alrazaq et al, 2020) (Tripathi, A.,2014) (Li et al, 2020). It is a platform where one can take help from as well as give help. It's almost like a factory of information. The easier access to the internet helps us to connect to social media. This social media helps to connect with the people from all over the world. It is the most commonly used medium for communication. It kept people out of stress. This platform was a way to connect with family and friends which kept one out stress and anxiety; and helped to fight against monotony and loneliness. Therefore social media became the most recommended medium to reduce the mental stress due to the COVID-19 pandemic (Brooks et al, 2020). Social media have immense benefit of quick mass spreading of learning substance in the COVID-19 pandemic phase. For example, Chan et al. made a visual representation (infographic) about the supervision of confirmed or assumed COVID-19 patients by the airway administration (Chan et al, 2020). Firstly it was posted through Twitter and WeChat, and within few days it became so viral that request were coming to translate it in more than ten languages. Besides the spreading, it also helped in modification of visual representation (infographic) of any specific thing of medical organization. Rapid spread of information about precautionary methods of COVID-19 has a great impact on the mass. A latest research by Basch et al. searched with the word coronavirus in YouTube and calculated the 100 most watched videos. The research says, within March 5, 2020, the videos had more than 165 million views altogether, and among which 85% of them were by new channels. It was seen that less than $\frac{1}{3}$ of the videos, suggested about the precautionary methods of COVID-19 and less than half talked about the most common symptoms of Coronavirus. And mostly 90% of them commented on the emotional outburst like stress, anger, anxiety, loneliness and the isolated phase. This research shows the misuse of an informative platform like YouTube (recommended as a source of info), where one should share quality information rather than the quantity, only just to increase its views. In this COVID-19 pandemic phase, social media brought people together. One of the benefit of this platform during this pandemic situation is that it gave the opportunity to mutually involve in a research work (surveys, projects) (Machado et al, 2020). One of the most important fact about social media platform is that it supports online medical studies via recorded webinars, live or conferences through the social platforms (Skype, Zoom, Google Meet, and YouTube). A problem for social networking site and the distribution of data are the "Filter Bubble" (Fig.4), a term introduced by Eli Pariser in 2011.

Figure 4. Filter Bubble and its influence on human minds



It is a condition of logical separation which is supposedly a consequence of personalized searches. It is basically an online atmosphere in which individuals are opened only to the beliefs and facts that matches to their existing viewpoint (Holone et al; 2016). It limits the information an individual sees on internet, and this happens due to the weighted algorithms which the search machines, social network- ing sites and marketers utilize to personalize user experience. It prevents the user from viewing other various sources of distinct facts. In China, a research by Wang et al, 2020; conducting an online survey states that out of 1,210 responses, 53.8% of the respondents believed that the psychological impact of the COVID-19 pandemic as medium or extreme. Even a research group made and legalized a scale known as “Fear of COVID-19 scale”. This scale evaluate the stress and anxiety level of the individuals (Tripathi, A.2014) and it also helps to take preventive measures against PTSD (Post-Traumatic Stress Disorder) which was the most common and obvious psychological consequence after SARS (Severe Acute Respiratory Syndrome) pandemic in Asia in 2003. The survey also states that some other serious diseases or activity like suicide have been accounted in some parts of the world like Germany, Italy, India and Britain (Thakur et al, 2020).

Social Media as a Defender

As the pandemic outbreak of COVID-19 was announced, the media was over-flowed with information about it. Certain information is focused to inform individuals about the novel virus. On the conflict- ing, wrong information concerning the pandemic situation and it remedies are relieving fear, panic and anxiety between publics. Social media should be used as a medium to promote the awareness regarding this pandemic COVID-19 situation to reduce anxiety among individuals by the public health care bodies and the government agencies (Wang et al, 2020). The government of several countries’ utilized social media to inform the people about the future threat. The social network platform should also be appreci- ated for verifying truthful information. Social networking should be applied to support the community health reaction (Machado et al, 2020). Social media like news channels, radio stations and

different daily newspapers aware people to fight against rumors and fake information by announcing it time to time (Tasnim et al, 2020). Social network analyzer must support government agencies to discuss and mention on actual news on current infectious virus disease concerns. To exchange the information different social networking sources are used (Depoux et al, 2020). As people don't search or study a website neutral-izing news, a vital step should be taken to fight against the fake information. Although, people will still follow the wrong news on social networking site (Wang et al, 2020). Social media can play an important role in circulating upgraded notices and guidelines from experts to individuals, effective public health involvements are required to avoid the downfall of the healthcare structure (Depoux et al, 2020). The vital mechanisms of effective pandemic reactions comes from the fruitful interaction between government, public healthcare system and individuals. In this existing pandemic situation of COVID-19, the improvement of an actual-period facts distribution method is must, which studies the information from different types of social networking sites in numerous languages internationally (Machado et al, 2020).

FUTURE RESEARCH AND DIRECTIONS

Nowadays, social networking sites gives chance to new ways of working. Mostly, people are more communicative through online networking sites rather than meeting physically. Social media is a open way of communication, searching, creating, networking and sharing information, and moreover, for ex-ample, taking virtual care of a patients/individuals through Facebook care, tweeting care, blogging care, gamification-care, infotainment care. As per ongoing situation, in future, the pandemic COVID-19 is going to take more months, however, medical involvements will increase which will lead to quarantine, social distancing and improvements in daily hygiene. These involvements will have its impact in the delay of the community spread (Salathe et al; 2020). Examining, identification of the contact, quarantine of the infected person and protective self-quarantine of associates is serious in decreasing the number of upcoming cases (Yuen et al; 2020). Specially a high degree of interaction in the mass and approval of these procedures is also severe (Mukherjee et al; 2020). These involvements have to be composed with receiving back to usual life and daily events to the best amount potential till a backing the path of the pandemic is identified (Yuen et al; 2020). Social networking sites have permitted medical practitioner, patients, scientist and researchers to cooperate in a promising survey to comprehend the effect of the pandemic COVID-19 situation. Though we are all facing this pandemic situation, we are bound to work through social networking platform and networking sites for healthcare purpose.

CONCLUSION

An important amount of possibly precarious wrong information has been created about the COVID-19 pandemic outbreak, and many of it has been distributed via different social media platforms. This confusing news contains of different sides of the pandemic, which is accomplished of frightening the public health security, which again exacerbates the emergency management. This fake news and rumor about the pandemic outbreak of COVID-19 is distributed quicker than the virus. The main method recommended in this chapter was also to accurate misunderstandings by health organizations authorities. While some reports said that the accurate information can be ineffective during any pandemic time or any crisis moment; though, at the similar time several researches established the efficiency of conveying and providing the ingenuous truths by medial experts. It is also suggested that several approaches for modifying misunderstandings about wellbeing via social network media, which

contains timely proficient instruction, even public health attentiveness, and rectification program with interrupted statement among common publics and on media systems. In this study, here it is also mentioned the consideration to an improvement platform which will be effective if it is useful rapidly and noticeably, along with significant document, at the similar time confirmation should also be delivered and revealed to the people. Though the novel corona virus spread rapidly, so it will better to deliver correct information regarding the situation or etiology or precaution for this virus infection. There are many experiences learned during the pandemic, which will help as an outline for managing with upcoming pandemics.

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