



SOCIAL MEDIA AND COVID-19: IMPLICATION FOR PREVENTION AND SPREAD OF INFORMATION IN NIGERIA

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ABSTRACT

The role of the social media in the prevention and spread of information about the COVID-19 pandemic that is ravaging the entire globe has attracted scholarly attention. These avenues for communication in the face of the social distancing protocol had been quite helpful in maintaining the social relationships that existed among individuals in Nigeria. However, the lack of verification of information spread through the platforms on the social media, has led to increased misinformation which has adversely affected the psychological and mental wellbeing of individuals. While several scholarly works on COVID-19 had focussed on the effects of COVID-19 on the activities and development of diverse sectors of the society, very few have looked at the implication of the social media on the prevention and spread of information or misinformation about COVID-19 on the Nigerian citizen. The paper fills this gap by specifically discussing the role of social media in the prevention of COVID-19, its influence on the spread of information and its role in addressing misinformation spread through the social media platforms. It concludes that although social media was instrumental in the prevention of COVID-19 considering the fact that it filled the gap created by social distancing protocol on the relationships of Nigerians, it had adversely affected their health through the information and misinformation spread through various platforms despite their attempt to address it. Creation of avenues for scrutiny of information before they are published on the social media is recommended to avert the challenges.

Keywords: COVID-19, Prevention, Information Spread, Misinformation Social Media

INTRODUCTION

The influence of social media on the prevention and spread of information regarding the global pandemic COVID-19 cannot be de-emphasized and disregarded by scholars. To this end, several scholarly works have been and are still being done and disseminated using the internet and social media platforms. This is against the background that the disease which has no bias for races, gender and class has threatened the overall wellbeing and development of the global economy. Corona Virus Disease was first discovered in China in December 2019, hence the acronym COVID-19. Although, it was formally called severe acute respiratory syndrome corona virus 2 (SARS-CoV-2), the World Health Organization (WHO) recently referred to corona virus disease as COVID-19 and defined it as illness caused by a novel (new) corona virus, which was first witnessed during an outbreak of respiratory illnesses in Wuhan City, Hubei Province, China (Adhikari, Meng, Wu, Mao, Ye Wang, Sun et al. 2020 and Cennimo, 2020).

The information on the outbreak of COVID-19 was officially brought to the knowledge of World Health Organization on the 31st of December, 2019. WHO (2020), defined corona virus disease (COVID-19) as an infectious disease caused by a newly discovered virus from the family of the coronavirus called coronaviridae, a common virus which affects mammals, birds and some reptiles. The COVID-19 virus spreads primarily through droplets of saliva or discharges from the nose and or mouth of an infected person. COVID-19 as it is popularly called has proven to be the most widely spread viral disease over a decade ago. It is safe to assume that this novel corona virus is the most dreaded disease in the recent world history leading to partial and total lockdown of the global systems. This is perhaps because of its mode of transmission – (person-to -person), the lifespan of the virus, the role of social media influence in communicating information about the disease across individuals and societies, the number of reported cases and deaths resultant from the disease, the class of individuals first infected in Nigeria and so on. The nature of health challenge ravaging the entire world led to the declaration of health emergency worldwide by the WHO, thus confirming the pandemic nature of the disease. It is however imperative to note that despite the efforts made to check or control the spread and symptoms of COVID-19, there exist numerous controversies surrounding it symptoms and treatment even within the medical spheres. Most of these

controversies, are widely spread, through the social media, which has been and is still been utilized as a tool by many in their level of knowledge, ignorance and desperation to be popular, to create and spread panic/tension all over the globe.

GLOBALIZATION THEORETICAL THRUST

This paper is hinged on globalization theory, particularly the Manuel Castells' (1996) Network society, to expose the link that exist between the phenomenon of COVID-19 and the social media as agent of spread and maiming. Castells' approach to globalization is a shift from economic and political development that linked globalization to a new 'age of information'. For him the development of a new paradigm in information communication technology (ICT) which uses computer and internet at a faster rate to pass out information in form of idea, audio-visual clips, etcetera, to a vast number of people across the globe at a short period of time is called 'informationalism'. The availability of Information on one hand and the use of power of the newly advanced technologies by the capitalists on the other hand, result in the rise of the network society which constitutes the new economy.

In the network society theory Castells holds that the entire world is linked together with the use of computer and the internet. This makes information sharing faster to limitless number of persons. The information shared to the public on social media obviously undergoes little or no scrutiny. What this implies is that everyone is therefore a publisher of news and idea without any consideration as to the harm occasioned or occasion-able by the said published news. Unfortunately too, these pieces of information spread on the media spaces even before they are verified, thus, causing both intended and unintended harm, tension, panic, fear, etcetera, among over the global populace. More unfortunate is the fact that most negative and harmful information, spread faster than the positives especially when the supposed intention is to warn, create awareness/impression or prevent some form of challenges. More so, many have utilized the social media particularly WhatsApp, Facebooks, twitter, Instagram and so on to spread false and unverified information about COVID-19, leading so many people to disastrous conditions and death.

The social media has become a fast and quick tool for maintaining the world as "a global village". This tool functions devoid of person-to-personal interface. Whereas a lot of global populace have utilised this avenue (social media) to fix socio-psychological, political, economic, emotional, educational, etcetera, concerns, others exploited this tool to inflict harms of different degrees to the global community. This is given its deficient nature of not requiring face-to-face contact which would ordinarily remove the veil of anonymity thereby exposing the personality of the individual in question. To this end, the difficulty in deciphering the authenticity of information in the media often put the public at cross roads. This makes it difficult to decide whether or not to consume or jettison with media information which can either be phony or accurate. The implication of the social media information is far reaching in the society. Nonetheless, many people seem unaware of the implication of spreading fake information on social media and the unsuspecting consumers lack the requisite knowledge, wisdom, skills and abilities to truly process the information from the social media for what it is worth. It is no longer surprising therefore that false news, panicking information and annoying messages about COVID-19 are posted and widely spread through the social media. This concern necessitated the stern warning from National centre for disease control (NCDC) that the Nigerian public should disregard the social media misguidance, as that could have both long- and short-term deleterious effects to the health of citizens.

Someone in Nigeria would ordinarily wonder what concerns Nigerians with the disease that has attack people in faraway China. However, the social relationship that exist on the social media among people who are relatives, friends, business associates, workmates, school/classmates coming in contact with one another from different ends of the earth, has made information sharing regarding COVID-19 become so easy and simple to spread. Furthermore, information about what happens to one nation can reach the other ends of the world within a few seconds. This depends on the availability of data, contacts with others, and willingness of the originator of the idea and news to spread it. Again, the dependency of countries of the world on one another for survival has fostered the quick spread of this virus.

Thus, against the background that no nation of the world is self-reliant and does not need products or raw materials, technologies and services from the other(s) to sustain itself, the wide spread of the disease across the global communities becomes imminent. The implication of the foregoing is that people contract this disease by associating with the carriers (from the originating country) and transfer same to those who are in other countries (destination countries) in a bid to transact and interact with themselves.

EPIDEMIOLOGY/METHODS OF TRANSMISSION OF COVID-19

COVID-19 is transmitted from person to person and incubates for a period of about 14 days before the manifestation of its signs and symptoms on a carrier. Although, the National Health Commission of People's Republic of China (2020) reported that corona virus can be hosted in animals (wild and domestic alike) such as camels, cattle, cats, bats and so on, animal corona viruses were however not confirmed to spread among humans (Centre for Disease Control and prevention CDC, 2019). This is notwithstanding, the initial set of COVID-19 cases were reported to have some traceable links to the Huanan Seafood Market in Wuhan, China which could simply imply that the earliest aetiology of COVID-19 has a direct nexus with animal-to-person transmission. However, just like Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS), COVID-19 mainly spreads through close contact with carriers' respiratory droplets by means of coughing and/or sneezing (Adhikari et al., 2020). Liu, Hu, Kan, Lin, Zhong, Xiao, et al. (2020) and Huang, Wang, Li, Ren, Zhao, Hu, et al. (2020) also stated that the later cases of COVID-19 were found among health workers and others who had no traces of exposure to Huanan seafood market or visiting Wuhan, but had contacts with those infected. This was taken as an indication of human-to-human transmission of the virus. It is worthy of note that information in this era travels farther than diseases, not excluding the COVID-19 pandemic. Little or no wonder, information on the disease got to Nigeria more than three months before the index case of the disease itself. Updates on the happenings in China were received and spread on daily bases through the social media. News about confirmed cases, treated and discharged patient and deaths as well as protective measures to avert the contraction of the virus were handy as a result of the role played by the social media.

SOCIAL MEDIA AND THE PREVENTION OF COVID-19

Although this virus and its concomitant disease and mortality-causing effects are surrounded with lots of concerns regarding its treatment and control in the world today, the Centre for Disease Control and prevention (CDC) has made efficacious recommendation on how to avert the contraction of COVID-19 infection, some of them include the use of nose masks which are currently being improvised as a cloth face covering(masks) not only to prevent infected people and those who probably do not have symptoms (asymptomatic carriers) from spreading COVID-19, but also to prevent the uninfected from getting infected.

This is because at the onset of contraction of this disease, one does not manifest the signs and symptoms immediately until after incubation period of about 7-14 days. The masks which must not necessarily be surgical masks or N-95 respirators for the general public, are however critical in supplies and reserved for healthcare workers and other first responders, as recommended by CDC. Social distancing is expected to be maintained and the face masks not to be taken as a substitute for lack of social distancing but a complimentary action or mode of dressing in this new era. Unfortunately, the increased spread of panic and fear about the deadliness of COVID-19, its pattern of spreading and how it must be prevented by the social media, has made many to bastardize the use of nose masks even to their own detriment. The social distancing recommended is about 6 feet between one person and others. With the advent of the Corona-virus vaccine which is being introduced while countries are moving on and coping with the presence of COVID-19. The question of who gets the corona-virus vaccine, when and how is still a matter of concern all over the globe.

Regular hand washing with soap and running water for at least 20 seconds and sanitizing, bathing and washing of one's clothing as soon as one returns from any place where there were contacts with others, avoidance of rubbing of the face especially the mouth, nose

and eyes areas are other measures that have been put forth as other easy measures that should be adhered to. Also, in a bid to stay safe, CDC advices that self-isolation, avoidance of shaking of hands and hugging and other precautionary measures were germane to be followed as conscious efforts are made to avert the contraction of this dreaded COVID-19. Meanwhile, in order to adhere to the above measures, and still maintain a good level of interaction and relationship, social media tool became imperative.

People engage in online conference meetings via zoom and Skype etcetera, chat on WhatsApp, Facebook and other such social media platforms. These, notwithstanding its usefulness, is confronted with the challenges of the familial way of life, norms, values and sentiments shared by many in the African setting including Nigeria which makes it difficult and odd for an individual to strictly adhere to these measures. Summarily, the social media had been very useful in adhering to the protocols of social distancing as many events, meetings and gathering, have been carried out through zoom meetings, mixlr, free conference calls, WhatsApp meetings, google meet, Facebook, Instagram, telegram etc. A lot of parties have been held through the social media e.g. zoom parties, while others have been publicised and advertised through it. However, with the resumption from the lockdown across cities and towns in Nigeria, the social distancing protocols and other issues that go with the prevention of COVID-19 are gradually being taken for granted. People are now seen publicly choked in social gatherings, meetings and campaign programmes with high level of disregard for social distance as recommended by the Nigerian centre for disease control (NCDC).

Although many who are found in the news are seen using their nose masks, a few others do not utilize the nose masks appropriately (Channels 2020). Unfortunately, the use of nose masks also attracts some level of discomfort not only in crowded areas, but also when people have to communicate or interact continuously for hours. Little wonder people are seen unconsciously pulling down their nose masks below their chin in the bid to take in some fresh air even in crowded areas, while some others do not use it at all perhaps because of the confidence that they are not infected or they are not *infectable*. Although the NCDC had allowed the resumption of individuals from the lock down, it still maintained that the COVID-19 prevention protocols are strictly adhered to. This would have required that many social gatherings that require a large crowd be cut down in population sizes, or split to ensure appropriate social distance. The reverse is however case in so many obvious instances shown even on the television and in the social media.

Social media influence on the spread of information related to COVID-19

Social media—websites and applications designed to enable quick sharing of contents (information, photos and videos), efficiently, and in real-time (Hudson, 2019) has influenced the knowledge and impact of COVID-19. Social media in the contemporary days serves as the commonest news media especially among youths. It was the means through which information and news reports about COVID-19 was rapidly published and shared in the first few months of 2020 (Ahmad and Murah, 2020). Furthermore, due to the convenience particularly with the use of smart phones, it becomes very ease to make news out of everything within one's environment. With the advent of social media, everyone has become a publisher of news items. The interesting thing about the social media is its persuasive capability, given that it uses the medium of imagery (photo and video sharing) to drive its claims home. Oftentimes, the verifiability of the information passed via the social media is most times impossible. This can in part be as a result of the difficulty in tracing the source of such information. The unsuspecting members of the public tend to accept without verification the content of the information got from these media outreach. Hence the increased fear, panic and anxiety caused spread by the social among members of society with the emergence of COVID-19 (Ahmad and Murad, 2020)

The influence of social media on corona virus disease cannot be underemphasized. This is because social media has played critical roles, both negative and positive in an attempt to reach out to people on the scourge of COVID-19 which is ravaging the world today. Social media reportage on COVID-19 was necessary and essential to the entire world in 2020 because as reported in Aljazeera news; there are more than 100,000 deaths and well over 1.6

million confirmed cases of this disease world over (Regencia, Stepansky, and Varshalomidze, 2020). This then called for a quick and still calls for a proper sensitization of the global community on attitudes and life styles predisposing people to the virus and its concomitant disease on one hand and the needed habits to be cultivated in order to avert the contraction of the scourge. One thing eminent is that correct messages on the coronavirus pandemic are needed globally. So many people have got a lifesaving/precautionary information on COVID-19 via the social media recently which may include, the right attitudes and life style to adopt, first aid and call in case of suspected cases of the virus infection.

However, the reliance of most individual on social media for information on prevention, first port of call (action to be taken) in case of suspected case and treatment have led to too many preventable deaths. This is because they lacked knowledge on the possible unverified sources of the information they are consuming. These unsuspecting members of the public with total ignorance of the source of the information which oftentimes originate from unprofessional sources and persons completely naïve of the characteristics of the disease rely on it. This has led to the increase in the death toll related to COVID-19.

In addition, coronavirus as dreaded as it is, could not have dealt too much blow of death on the world as it did without the fears created by this media outreach. So many people due to the amplifying role of social media on the disease saw COVID-19 as a sure death sentence that cannot be survived once one gets down on it. Ahmad and Murah (2020) reported that social media had a significant impact on the spread of fear and panic related to COVID-19 outbreak in Iraq Kurdistan and negatively influence the mental health and psychological wellbeing of participants. They concluded that social media contributed to the spread of panic and anxiety related to COVID-19 among youth aged 18-35 years. Apart from the copious fears it generated, social media peddles too many phony 'solutions' to the challenges already posed by the disease. Such acclaimed solution rather counteracts the conscious and genuine efforts of the qualified health experts in combating COVID-19. Take for instance, on 8th April, 2020, in Iran more than 700 people died after taking an alcohol substance (toxic methanol) which was believed to have COVID-19 curative potentials as circulated in the Iranian social media (Aljazeera, 2020).

Similar incident took place in Nigeria when the social media brought a seemingly genuine report that the Chloroquine tablets can be taken to prevent the attack of the virus (Grady, 2020). Many feeble minds bought and consumed the drugs abusively in order to build the immunity in their system so as to ward off the virus. This however led to the further breakdown on the health of such individuals thereby predisposing them to the virus due to weak immune system. The news about the efficacy of chloroquine or hydroxychlorine over the prevention of corona virus led to the increase in price of the drug. On the treatment of coronavirus, the social media curative centre has prescribed some deadly mixtures for the treatment of the COVID-19. Aside the 'preventive' chloroquine drug as prescribed by social media, such other concoctions as lime, grape, orange, lemon and watermelon etcetera, when cooked together with some quantity of alcoholic substances without pilling the backs was recommended for the treatment of coronavirus. These substances no doubt could be very acidic and has the potentials of weakening the body immune system, predisposing the unsuspecting consumer to any kind of disease in circulation (COVID-19 inclusive).

The fake news peddled in the social media that the taxi driver who drove the Italian with the first confirmed case of COVID-19 in Nigeria from Lagos to Ogun State threatened to infect everyone in the country except the government accepts to pay him the sum of one hundred million naira (₦100,000,000). This information even though it was later debunked in BBC news pidgin published in March, 2020, had created anxiety and fear among the people of Nigeria that, many if not all could have got infected with the disease. Then again, the social media outlets in Nigeria are also culprit of the fake news publications on the resistant nature of the black pigment (dark complexion of the nationals) which is believed to insulate them from contraction of coronavirus. This was one of the arguments raised as to why there are no coronavirus cases in the country. Since the virus attacks the whites, there is no gain locking down the means of livelihood of the blacks who are naturally immune from contracting it. The high death rate of the black Americans in the United States of America as reported by Calma

(2020) shows that COVID-19 does not trade on a line of pigment. Though the blacks were most hit, the whites are also dying in that state.

Role of Social Media in Re-addressing Misinformation about COVID-19

The Social Media through various platforms has no doubts contributed greatly to the information (both right and wrong) spread about COVID-19 all over the globe. However, the adverse effects of misinformation through these media have also created a huge concern among the necessary stake holders of the social media as well as the world health organization. To this end, efforts were made to address the misinformation and in turn the general part created by the social media as a result of the emergence of COVID-19 pandemic. While establishing the fact that the social media plays a significant role in the spread of information about COVID-19 and the global response to it, Ferri (2020) established the fact that social media platforms, are designed in several ways to encourage users to carry out specific action. This is because their interfaces both reflect and reinforce social logics hence the response of social media to the advent of COVID-19, has a great influence on the way users and the general public will understand the pandemic.

In a bid to counter the misinformation created and spread as well as address the adverse effects of such on the general public, officials of different social media platforms have carried out certain actions on the social media. WhatsApp for instance created a health alert system which was designed to provide answers to frequently asked questions about COVID-19 and also give immediate, reliable and official information all over the world for 24 hours non-stop (WHO, 2020). WhatsApp social media platform also reached out to governments to assist with the provision of accurate information to the general public. In a similar vein, Google launched an SOS alert system that made the information from WHO about coronavirus easily accessible when searched on the google platform (Farr and Rodriguez, 2020).

According to Ahmad and Murah (2020), the most used social media networking for spreading panic about COVID-19 in Iraq, was Facebook. However, in response to the wrong information and myths spread about COVID-19 this platform took some actions. A video on Facebook shared by the Brazilian President Jair Bolsonaro claiming that hydroxychloroquine was effective in combating COVID-19 despite the fact that it had not been fully tested and confirmed as such by relevant health authorities, as well as a post in which the president was exhibiting disregard for the social distancing protocol for the prevention of COVID-19, were both removed by the Facebook official (Coustine, 2020). Snap Chat worked with WHO in the creation of filters that displayed facts on how to prevent the spread of COVID-19 through social distancing (Dalvin, 2020). Furthermore, a banner was added by YouTube on their platform to redirect users to the WHO portals on all videos that discussed information related to COVID-19, while results of information searched on Facebook related to COVID-19, will first encourage you verify from the WHO's website for its authenticity and most recent data while also prioritizing WHO websites in users' newsfeeds (Hatmaker, 2020).

A "community help" feature was also launched by Facebook for volunteers to indicate interest to run errands for others or connect them to fund raisers (Yurieff, 2020). Facebook also banned adverts for sales of medical grade face-masks and rather gave unlimited advert space for WHO to post their information on COVID-19. The above actions were taken after the stakeholders of several social media platforms and big tech companies including Amazon, Facebook, Google, YouTube, Twitter had met at Facebook Offices in February to fight the "infodemic" of rumours, myths and misinformation related to COVID-19. While the efforts made by these stakeholders may be appraised, one however wonders if it actually achieved its aim by undoing the harm such as confusion, anxiety, wrong lifestyle and even death already cause by the misinformation. The lack of caution in ensuring that information is first of all verified and confirmed reliable and valid before they are posted on the social media, had resulted to some other problems including death. Unfortunately, the actions taking to address the misinformation cannot bring back those who had died or are victims of panic, anxiety and wrong life style including substance abuse to prevent or treat COVID-19 due to misinformation from social media.



CONCLUSION AND RECOMMENDATION

Social media is one of the fastest means of communicating idea and information in various forms be it visual (video and pictures), audio and in letter forms. It enables information traverse length and breadth of the world. It keeps people abreast with the happenings around the entire global community. However, the lack of control measures to regulate the innumerable online information for public consumption from the social media outlets paved way for bringing authentic and deceptive messages alike to the vast audience. This could have the potency of throwing members of the public into the dilemma of lack of capacity to distinguish between the genuineness and inaccuracy of information published before taking it seriously. Following this fact, the social media has contributed immensely to the creation and spread of information on the current global pandemic of COVID-19 ravaging the world in 2020. In a more discrete term, social media has played both positive and negative roles in propagating the news about the coronavirus disease, hence, the labelling of social media as “infodemic”. Several platforms including, Facebook, WhatsApp, google, Instagram, twitter and others have contributed to the information spread about COVID-19 and the attendant consequences of same. Though some people benefit from the information received through social media, many others have been dangerously affected, some are thrown to the dangers of death given the consumption and utilization of information garnered for staying safe from the ravaging COVID-19 pandemic. Fake information also puts people in state of ignorance as they would be made to hold false information as if they were right, while the issue at hand degenerates.

Given the important roles played by the social media in conveying all kinds of messages to the global populace, it is therefore recommended that avenues for scrutinizing and vetting all social media posts and publications be created. This will ensure that the “right type of medicine is applied” making the consumers of online information to trust the authenticity of every piece accessed therefrom. The possibility of this is achievable by holding every media outlet accountable for every misleading piece of information originating from it. This will in turn build a robust confidence on the media outlets and over all peoples’ wellbeing globally.



REFERENCES

- Adebayo, F. (2020). *Demand for Chloroquine, Hydroxychloroquine Shoots up by 350%*. healthwise.punchng.com/demand-for-chloroquine-hydroxychloroquine-shoots-up-by-350%
- Adhikari, P., Meng, S., Wu, Y., Mao, Y., Ye, R., Wand, Q., & Sun C., et al. (2020). Epidemiology, causes, clinical manifestation and diagnosis, prevention and control of coronavirus disease (COVID-19) during the early outbreak period: a scoping review. *Infectious Diseases of Poverty*, 9(29), 10.1186/s40249-020-00646-x
- Ahmad A., and Murad, H., (2020). The Impact of Social Media on Panic During the Covid Pandemic in Iraq Kurdistan: Online Questionnaire Study. *Journal of Medical International Research*, 22(5).
- Calma, J., (2020). America set up black communities to be harder hit by COVID-19. The Verge. Retrieved from <https://www.theverge.com/2020/4/8/21213974/african-americans-COVID-19-coronavirus-race-disparities>
- CDC. (2019). Novel coronavirus, Wuhan, China. 2020. <https://www.cdc.gov/coronavirus/2019-nCoV/summary.html>. Accessed 1 Feb 2020.
- Cennimo, D., (2020). Coronavirus Disease 2019 (COVID-19). *Medscape*
- Channels (2020, September 6). Edo State Campaign for Governor Obaseki's Second Tenure. *5pm News on Channels News*,
- Coustine, J., (2020). Facebook Deletes Brazil Presidents Coronavirus Misinformation Post. techcrunch.com/2020/03/30/facebook-remove-bolsonaro-video/
- Dalvin, B., (2020). How Snap-Chat, Instagram and Others Are Teaching Kids Genz about Corona Virus usa.today.com/story/tech/2020/04/01/corona-virus-snapchat-instagram-and-others-remind-teens-wash-hands/5101865002
- Davis, J., and Chouinard, J., (2017). Theorizing Affordances: From Request to Refuse" *Bulletin of Science, Technology and Society*. journal.sagepub.com/doi.org/10-1177/0270467617714944
- Farr, C., and Rodriguez, S., (2020). *Facebook, Amazon, Google and More Met With WHO To Figure Out How to Stop Coronavirus Misinformation*. cnbc.com/2020/02/14/facebook-google-google-amazon-met-with-to-talk-coronavirus-misinformation-html.
- Ferri, C., (2020). *Social Media Response to COVID-19 Misinformation*. APC New.apc.org/en/news/social-media-response-to-COVID-19-misinformation
- Grady, D., (2020). *Malaria Drug Helps Virus Patients Improve in Small Study*. nytimes.com/2020/04/01/health/hydroxychloroquine-coronavirus-malaria.html
- Hatmaker T., (2020). *Facebook will Put a New Corona Into Center on Top of the News Feed*. techcrunch.com/2020/03/18/facebook-coronavirus-information-center-zuckerberg/
- Huang, C., Wang, Y., Li, X., Ren, L., Zhao, J., Hu, Y., et al. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *Lancet*, 395:497–506. [https://doi.org/10.1016/S0140-6736\(20\)30183-5](https://doi.org/10.1016/S0140-6736(20)30183-5).
- Hudson, M., (2019). *What Is Social Media?* Retrieved from thebalancesmb.com/what-is-social-media-2890301
- Khara, A., (2020, April 27). *Iran: Over 700 Dead After Drinking Alcohol to Cure Corona virus*. Aljazeera <https://www.aljazeera.com/news/2020/04/iran-700-dead-drinking-alcohol-cure-coronavirus-200427163529629.html>
- Liu, T., Hu, J., Kang, M., Lin, L., Zhong, H., ...Xiao, J., He, G., Song, T., Huang, Q., Rong, Z., Deng, A., Zeng, W., Tan, X., Zeng, S., Zhu, Z., Li, J., Wan, D., Lu, J., Deng, H., He, J., et al. (2020). *Transmission dynamics of 2019 novel coronavirus (2019-nCoV)*. <https://doi.org/10.1101/2020.01.25.919787>.



National Health Commission of People's Republic of China. (2020, February 1). *Prevent guideline of 2019-nCoV*. <http://www.nhc.gov.cn/xcs/yqfkdt/202001/bc661e49b5bc487dba182f5c49ac445b.shtml>. .

NCDC (2020). *Terms of Use for Online and Social Media Platforms*. ncdc.gov.ng/terms

Newman, L., (2020). *Google Bans Infowars Android App Over Coronavirus Claims*" [wired.com/stay/google-bans-infowars-android-app-alex-jones-coronavirus](https://www.wired.com/story/google-bans-infowars-android-app-alex-jones-coronavirus)

Regencia, T., Stepansky, J., & Varshalomidze, T. (2020). *Global coronavirus death toll exceeds 100,000: Live updates*. *Aljazeera*.<https://www.aljazeera.com/news/2020/04/coronavirus-deaths-rise-signs-progress-live-updates-200409231002574.html>

Stanfill, M., (2014). *The Interface as Discourse: The Production of Norms through Web Design* journal.sagepub.com/doi/abs/10.1177/146444814520873?etoc

WHO (2020). *WHO Health Alert Brings COVID-19 Facts to Billion Via WhatsApp*. [who.int/news-room/feature-stories/detail/who-health-alert-brings-covid-19-facts-to-billion-via-whatsapp](https://www.who.int/news-room/feature-stories/detail/who-health-alert-brings-covid-19-facts-to-billion-via-whatsapp)

WHO (2020). *Coronavirus*. https://www.who.int/health-topics/coronavirus#tab=tab_1

Yurieff, K., (2020). *Facebook Feature Lets Neighbour Volunteer to Help Each Other During Pandemic*. [edition.cnn/2020/03/31/tech/facebook-community-help-coronavirus/index.html](https://edition.cnn.com/2020/03/31/tech/facebook-community-help-coronavirus/index.html)