



Review Article

Impact of Online Media in Management of Burden and Psychological Trauma Associated with Covid-19 Pandemic and Spread of False News

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Abstract

The nature and spread of the COVID-19 pandemic as well as its mitigation measures have unleashed enormous power on communication. The report shows that 76% of the populace in developed countries owns a smartphone and out of this, 67% attest to using social media, thus providing for easy spread of both varied and unverified news to the teeming audiences. The open nature of most social media platforms allows for the seamless spread of falsified (fake) news making communication of risk mitigation to the public an enormous task. This paper looks at the impact of online media on the burden and psychological trauma associated with managing the COVID-19 pandemic and the spread of fake news. A holistic and all-encompassing approach targeted at building trust among all stakeholders is recommended in this paper as a crucial tool against false news to minimize the physiological trauma associated with the COVID-19 pandemic.

Key words: COVID-19, pandemic burden, psychological trauma, social media

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INTRODUCTION

Over the years, various bodies like the European Parliament, World Health Organization and Nuclear Threat Initiative have warned that emerging infectious diseases pose a serious threat to global health security, particularly those with pandemic potential¹. The interconnectivity and mobility of our world are constantly evolving, making risk reduction and governance a daunting challenge particularly those that are based on harmonized bio risk mitigation measures. This is because “everyone is now a newscaster” and can proffer medical advice whether certified or not. Thanks to the connectivity of our today’s world where anyone can wake up in the morning pop open his social media account and begin spreading news irrespective of his/her motive. Verification of news and information before broadcasting in online media requires comprehensive research. Research is essentially the search for absolute facts in the furtherance of Knowledge². A contributing factor to the menace regarding the spread of unverified information is the failure of the federal government to support researchers in the conduct of qualitative research to explore new facts that would enable them to validate their research findings and source of information before publicizing them in online media for public consumption³.

The coronavirus disease 2019 (COVID-19) pandemic is no longer news in today’s world, as it has left millions of victims in its trail both as infected and as casualties^{4,5}. The pandemic has changed the world norms as notable variations now exist in the global economy, medicine and the international relationships with one another. It has also awoken everyone to virtual communication platforms such as Facebook, Twitter, Instagram, WhatsApp, Telegram and Zoom which has witnessed an unprecedented increase in recent time⁶. After the previous episodes of the virus as SARS-CoV from 2002-2003 and MERS-CoV in 2012, the virus once again appeared in 2019 in a more virulent form migrating from its premier hosts to secondary hosts in the human system birthing yet another respiratory syndrome and heralding the third time reign of the virus in the 21st century. From 2019-n CoV to SARS-CoV-2, the name of this virus which was first coined in China, in January, 2020 has gone through changes^{7,8}. It is presumed that the intermediate animal hosts of this virus were sold in a wholesale market dealing with seafood in Huanan⁹. The virus has since spread to the rest of the world making it a health emergency of global proportion^{10,11}.

Though there have been regulatory efforts aimed at minimizing public exposure to health risks all over the world, this present pandemic portrays defencelessness to natural and

man-made hazards¹². On January, 30, 2020, World Health Organization (WHO) declared the plague of the virus causing the Coronavirus disease 2019 (COVID-19), a Public Health Emergency of International Concern (PHEIC). Two months after, the outbreak was upscaled to a pandemic status¹³. COVID-19 is the first pandemic to occur in this era of mega connectivity, where over 70% of people in developed countries own a Smartphone and out of this, more than 60% attest to using social media^{14,15}.

COVID-19 and its associated pandemic have affected different groups and communities psychologically and disproportionately right from the first callers to racial minorities, immigrant groups, the elderly, women and those with underlying health conditions^{16,17}. Hence, the need for a communication strategy that cuts across a wide range of exposed audiences becomes inevitably imperative. Though the awareness of the new virus was quite low in 2019, as of mid-2021 it has already infected 204, 644, 849 persons with a total of 4,323, 139 deaths¹⁸. The number of confirmed cases keeps rising around the world, with the Brazil and Argentina emerging as the new COVID-19 global hotspots and South Africa leading on the African continent¹⁹. Subsequently, several health institutions switched to providing online psychotherapy to patients through platforms that do not require physical contact like Zoom, to reduce likely transmission of the virus from direct therapy²⁰. Even after being declared a PHEIC, there were no tangible changes in general public behaviour and opinion. The lackadaisical attitude of the public was probably due to the approach in which the information on the pandemic was communicated and consequently perceived as low risks.

This however changed in Europe when two regions in Italy witness a sudden increase in the number of infections, compelling the Italian authorities to impose lockdown in the entire region, afterwards, the whole Northern part of the country and finally the entire country¹². While in Asia, the Huanan seafood wholesale market was shut down in early 2020 as a local risk mitigation measure. Notwithstanding, businesses outside Asia were still normal because people were not unperturbed as the risk of the pandemic was considered minimal until mid-January, 2020 when an index case was announced outside China: A patient in Thailand was alleged to have patronized the wholesale market¹². Prompt response in Malaysia by the government was the enactment of an order to control people’s movement all over the country²¹.

The use of ubiquitous messages hinders effective communication of risk mitigation measures and can jeopardize desired responses. According to Zalat *et al.*²², doubts and apprehension on the part of the citizens regarding

the trustworthiness of information released in Malaysia were not un-related to the greater emphasis being placed on the Movement Control Order rather than the spread of COVID-19 which it was meant to handle in the first place²³. Information released by appropriate authorities need to be straightforward and purpose-specific to reduce chances of doubt which allows for the acceptance of alternate and inaccurate news. In some African countries like Nigeria, people retreat to prayers, use of anointing oils and other rituals deemed “sufficiently potent” in protecting them from infection no thanks to prevailing superstitions beliefs and ignorance of the science behind the infection²⁴. A vivid example was seen during the Ebola pandemic of 2014, where the mundane health prescription on the use of saltwater for prevention and treatment went viral in Nigeria and even led to adverse consequences for people who complied²⁵. The Vanguard reported a casualty figure of two and not less than twenty hospitalized²⁶. Some even see the virus as a biological weapon demonstrating China’s military might, a consequence of different sources of information available to Nigerians on the subject matter²⁷. There is currently no unanimity on the origin of the virus in Nigeria, a country where the health care system is far from sufficiently able to manage such outbreaks primarily due to poor investment in the health sector²⁸.

In an era where social distancing is the watchword, social networks serve to connect separated people. Social networks allow for the spread of both harmful and recommended human behaviours to an endless list of friends and related personalities during health disasters²⁹. Accurate information regarding the practice by the majority of people can be helpful when such practices are prescribed by health institutions. Bridging the gap created by social distancing makes people use Facebook, WhatsApp and Instagram more than ever to receive and share information. The open nature and ease of access to most social media platforms were contributing factors for the actualization of reality.

Certain individuals however resorted to spreading fear, false (fake) news and unsubstantiated convictions as to the source of the virus, thereby propagating bias against China and other countries of Asian descent undermining medical recommendations directly or indirectly²⁷. Some even opine that available health procedures and solutions to this pandemic are un-African like lockdown, self-isolation and social distancing²⁴. It is on these notes and others that the authors of this paper attempt to explore the role of online media in the management of psychological trauma associated with the COVID-19 pandemic and the spread of false news.

Psychological resilience among different socioeconomic age groups through effective health communication:

Just like diabetes and hypertension that has affected persons of all age group not minding the ethnicity, gender or race^{30,31}, the emergence of the COVID-19 pandemic has besought different reactions from the various countries of the world particularly in terms of recommendations heralding prevention and readiness for eventualities. Most countries focused on investments in suitable protective equipment and healthcare amenities and neglected first aid administration³². The last decade has ushered in an increasingly connected world where the spread of excess misinformation leads to profiling and the politicization of knowledge³³⁻³⁵ as well as the institutionalization of illiteracy^{36,37}. When illiteracy is glorified above knowledge, the goal of dispersing information that can help in risk management and mitigation measures is compromised because the fragile link between policy, science and practice is distorted³⁸. Propagating information on best practices during this pandemic is a herculean task that hinges on meticulous evaluation, planning, implementation and consistency in risk mitigation measures, where roles regarding responsibility and communication flow path are allocated³⁹⁻⁴¹. Communication is the most essential aspect in risk mitigation because it propels belief, reception and adherence among the populace. This is particularly true for countries that have not experienced any large-scale disaster for decades. For most countries, World War II represents the most recent national emergency they have had to deal with. As a result, it is difficult to relay mitigation measures regarding disaster management to such groups where individual freedom above collective interest has become the norm. In such instances, there is usually doubt and mistrust of the motives of authorities. Hence, communication of risk mitigation measures to such clusters poses noteworthy challenges during crisis situations¹².

According to Wang *et al.*⁴², if people who have access to sufficient information learn to trust the government and health authority’s ability to manage the COVID-19 pandemic, there will be a reduction in overall anxiety and perceived vulnerability to the virus. Tompkins *et al.*⁴³ pinned that acceptance and assurance of government actions by the populace manifest in better adherence to precautionary measures, thereby encouraging societal approach in fighting outbreaks and pandemics. Information sharing promotes independent learning across governments and sectors, among varied stakeholders at different levels of society⁴⁴. This can be achieved through the identification of national participants, encouraging inter-agency communication and sharing responsibilities.

One of the most vivid consequences of the sudden lockdown in civilian life is the migration of regular activities to online platforms which enables virtual connectivity⁴⁵. Communication from diverse sources during a pandemic may not be clearly understood because available information is hardly ever free from malicious feeds, unsolicited and unscientific data that preys manipulate public attitudes towards prescribed risk mitigation measures. Such feed preys on people's desire for quick reassurance like, the news of a solution equivalent to the magnitude of the problem, no matter how illogical it is.

After the enactment of the Movement Control Order in Malaysia, social media channels became overwhelmed with false indices on the infection sequence, transmission pattern and remedial procedures raising fear and false hope²². Conspiracy theories affecting science, medication and health-related themes were common⁴⁶. These theories can derail societal behaviours by making the populace eschew recommended health allied conducts⁴⁷. Conspiracy thinking and misinformation go hand in hand and is the main reason for the apparent underperformance of corrective schemes in many matters relating to health⁴⁸. Effective risk communication helps prevent "infodemics" which is occasioned by excess information among concerned populations which can induce public uneasiness¹³.

Separating scientific facts from counterfeit is a daunting task especially as the populace is exposed to multiple sources of information about the pandemic. A study among 400 youths in Nigeria revealed that 95% had at least one social media account and only 7.3% of them took time out to verify the authenticity of information they got on social media, before clicking on the "share" button²⁵. The WHO came to salvage the situation by hosting their website and floating online courses on COVID-19 which is easily accessible, the bottleneck however is that not all countries plagued by this virus speak English as their official language. This implies that intended information may not be understood by all who have access to the website, a gap is left to be filled by the local health department by ensuring the availability of such information in native languages. Other communication strategies like using layman terms, info-graphics and comparisons could also be employed in explaining health languages and recent scientific break-through even to the layman. This is integral in reassuring the general public of steps being taken to curtail COVID-19⁴⁹.

A close partnership among the various players in the public domain like journalists and influencers is essential in bridging the gap between health experts and the community since these players enjoy greater public attention. Effectively

countering fake news on COVID-19 the world over will involve collaborations between governments and social media firms in developing processes that succinctly reduces people's belief in and adherence to misinformation while not undermining the predisposition of the public to believe inaccurate information⁵⁰. Regular and up to date country-specific and global health information on COVID-19 on issues like, the number of infected and recovered cases, pandemic management as well as the mode of transmission plays key roles in lowering stress and anxiety levels²⁰.

It has thus become increasingly important to understand the nuances of how social network functions like the diffusion chains and characteristics of a various online platform to curb the spread of misinformation. This is also necessary because a wide variety of players are equally capable of initiating global fracas with no quick way of identifying initiators. This means that any information regardless of its validity or source might trigger a global panic⁵¹. Apart from the frustrating attempt for containment of fake news, this disrupts social settings by causing stigma and generalized mistrust, whose consequences have been found to remain even after the consequences of the current pandemic are long gone.

Communication strategies for dealing with social and physical distancing:

Risk mitigation is a decision-making process that cuts across many disciplines, it is arrived at after processing information about exposure to risks⁵². Moderating risks entails the consideration of political, socio-economic, epidemiological, health and engineering statistics to generate regulatory alternatives and select the most suitable regulatory and collective response. In an attempt to understand the rudiments of social and physical distancing, the authors considered the different societal structures existing in Northern countries of the globe like Europe and the United States of America dubbed "The Northern Structure" in comparison to those of Southern European, Asian Latin and most Middle Eastern countries otherwise termed "The Southern Structure". The setting of the first structure is based on clustering elderly people in retirement homes while the Southern structure engages extended families living together irrespective of age under the same roof and across many generations¹².

In countries operating under the Northern structure, it is largely believed that the disease can rapidly spread inside retirement homes once there is an index case of the virus. Perceived risk exposure and high mortality among the elderly, retirement homes were locked down. Though one can assume that clustering the elderly in retirement homes may increase their chances of survival in this pandemic because reduced

contact and exposure to outsiders lowers the possibility of contracting the disease through clustering violates the social distancing principle. While the individualistic nature of countries in the Southern structure serves to provide for the adherence to social distancing thus breaking the transmission chain also¹².

Social distancing aims to keep new COVID-19 infections at a minimal level by preventing physical interaction between people. Adherence to this has controlled crowds at venues where they would otherwise have been in excess like in sporting events, conferences, schools and colleges, businesses that were based on physical contacts now have to contend with either closing up or finding new ways of operating like working from home. Such mobility restrictions have reduced the number of people exposed to infection from people with COVID-19 related symptoms and those that are asymptomatic^{53,54}. Pre-emptive measures employed by the government at various levels have altered the daily schedules of millions of persons in various countries of the world¹².

Two conflicting terms in movement restrictions are social distancing and physical distancing, both are being used interchangeably taken to chiefly imply social distancing. An appropriate term employed to avoid social segregation of fragile groups like the elderly is physical distancing because even with a distance of 1.5 to 2 m people can still interact among themselves. Physical distancing also considers communication across virtual platforms¹².

Reduction of stigma, prejudice, discrimination and inequalities: The Coronavirus Pandemic has now become a major highlight in global news focus. There are many facets between the origin and impact of the news. This present age of online social media connectivity empowers everyone to have a voice but this is not necessarily a good thing. Various news sources have shown some world leaders publicly implying that the coronavirus is a "Chinese Virus," which has expectedly led to the precarious escalation of racist attacks against certain nationalities. A recent report highlighted an increase in hate speech against Chinese people and China by 900%, a 200% increase in hate speech against people of Asian ethnicity in general and a 70% increase of hate in online chats⁵⁵. Hate speech increases stress levels and anxiety in people against whom it is directed, as well as others both within and outside their social circles because individual comments can serve as catalysts for mental stress and anxiety among millions of people. 36% of Americans feel that their mental health has been jeopardized by the coronavirus outbreak⁵⁶.

The fact that discrimination and violence have been mundanely resorted to during pandemic episodes is no news. The Bubonic plague of the 13th century for instance witnessed large scale organized violence in Europe, which claimed the lives of Catalans, clerics and drifters in Sicily and certain locations, accompanied with extermination movements against Jews during which hundreds of communities were wiped out⁵⁷. Although not all pandemic births violence, the threat of disease outbreak can nevertheless give rise to prejudicial treatment and violence against marginalized individuals⁵⁸. However, on the brighter side, global pandemics have the innate ability to create opportunities where religious and ethnic prejudice is reduced. Highlighting such instances can improve the attitudes of others and nurture more international collaborations⁵⁹.

Irrational and uncivilized behaviours emanating from people during infectious outbreaks are quite understandable occurrences because everyone irrespective of gender or socio-demographic is equally at risk so people tend to act in their based interest which might infringe the interest of others. The current COVID-19 pandemic is no exception, observed behaviours are mainly due to the presumed manner and speed of infection but these conducts have not reduced rather, the infection rates of new infection figures are on the rise²⁰. Detailed media coverage of the ongoing pandemic is expected to serve as a pivotal tool in encouraging precautionary measures but it can also influence perception and response to an infectious disease threat, which may amplify uneasiness^{60,61}.

Apprehension birthed by the COVID-19 pandemic manifests in various forms and at various levels of society. Individuals who have had reasons to be quarantined may experience feelings of shame, inferiority complex and stigma. At the community level, there may be distrust towards other individuals in terms of disease spread and the availability of government healthcare services. Lockdown of community services and the sudden collapse of blooming industries negatively impacts the national economy as many incur financial losses and now have to grapple with the nightmare of unemployment, further fueling the buildup of negative emotions in individuals⁶².

Internationally, stigma and blame are frequently meted out on index countries and communities affected by the outbreak by other countries and this affects the usual cross-national trade, thereby aggravating already existing unrest even further. When all these negative emotions are acted upon by pre-existing depressive tendencies and anxiety fallouts, they increase the perceived possibility of contracting

the disease which can profoundly modify people's behaviour and social interaction with others²⁰.

The need for global leaders to maintain the racial harmony that is integral in preventing the discrimination and stigma that accompanies an outbreak has never been more expedient⁶³. Stigmatization is usually unidirectional and in the case of the current pandemic it has been directed at the people of Asian descent, instances ranging from refusals to sit next to them on buses, refutation of entry rights into restaurants and other social centres, dehumanizing them on social media, to even physical assaults on them have been reported. The WHO and the Centers for Disease Control (CDC) have aggressively campaigned against stigmatization through leaflets and press conferences to combat the stigma against Asians. Stigmatization adds extra burdens to those dealing with realities related to the scourge of infection. Thus, frequent public education about COVID-19 is cardinal in reducing fear of the unknown and reminding the populace that no one is immune to this infection as viruses are no respecters of persons, race and borders^{17,20}.

In stratified communities, inequalities limit access to resources which affects a spectrum of people from those at greatest risk of infection to those who are eventually willing and able to adopt necessary precautions during pandemics. For instance, it is difficult for the homeless to shelter their relatives in houses with insufficient water supply where they can frequently clean-up, inmates in state prisons, camps and immigrant detention centres may starve of the needed privacy to carry out physical distancing, while those without medical insurance may experience hardship in getting medical attention⁶⁴. More still, those who do not own vehicles have to patronize public transport where there are crowds that cannot be avoided⁶⁵.

Health is wealth, but economic wellbeing is needed to ensure sound health. Economically disadvantaged members of the community are exposed to pre-existing conditions which increase the mortality rates of those infected. Such conditions could compromise the immune systems and chronic lung conditions of affected persons⁶⁶. Expectedly, those who are not better off economically are the most vulnerable and very prone to the negative consequences of infections^{67,68}. Matters of economic handicap are intertwined with issues of race and culture. Minority communities are unduly found among the homeless and low-benefit occupations⁶⁶ and those with past health issues that make them more susceptible to disease conditions^{69,70}.

Since community social networks tend to be structured on a racial basis, members of minority communities who have been infected with the disease may become transmission

agents to members of their immediate racial and ethnic cycles^{71,72}. These community members may express concern and compassion about the public health information in their locality but may not be willing to imbibe prescribed safety procedures thereby increasing their susceptibility to the fangs of fake news.

It is easier to manage threats when there is a strong band delineating social identity⁷³ by fostering commitment and adherence to standards within the group⁷⁴. This is possible when leaders become the source of 'moral reward by exemplifying selfless pro-social attributes that stimulate similar gestures of kindness and generosity from observers⁷⁵. The COVID-19 pandemic has made a foray into our existing systems and policies with a call for revision and improvement in preparation for any future occurrence^{73,75}. This has been exemplified by countries like China which were better prepared for this pandemic thanks to their past experiences with similar viral disasters.

CONCLUSION

This study explored the vital role of communication media as a tool in bridging the gap created by the current pandemic. This study shows that researchers and persons across the globe can conduct research and verified sources of information regarding the origin, spread, treatment and management of COVID-19 infection at the comfort of their home zone through online media. This approach would help to minimize the burden on healthcare givers and the psychological trauma on the populace.

SIGNIFICANCE STATEMENT

This study unravelled the impact and role of online media in mitigating the physiological trauma and burden associated with the COVID-19 pandemic. This study will help future researchers to uncover the critical areas of healthcare among victims of the COVID-19 pandemic. Those induced symptoms due to psychological trauma that were previously ignored by many researchers like COVID-19 infection could be explored, hence a new treatment and better management regime could be developed.

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