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A Discourse on the Effectivenes of Health Communication on COVID-19 Infodemic and Conspiracy Theory in Nigeria

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ABSTRACT

Communication is a necessity for the survival of society. In the face of so much misinformation or fake news in public domain, threatening public health, it has become even more important and needed. Whereas health communication is important in the fight against diseases especially those that have assumed the pandemic status, effective health communication is needed mostly, if the desired result and set objectives must be realized in record time. One important role communication plays in fighting diseases is that it helps eliminate misinformation as well as disinformation. COVID-19 came with all forms of conspiracy theories and fake news across various social media platforms, breeding some form of danger on public health. Such requires effective health communication. Health belief model is the theoretical framework for this paper. Through the use of summative evaluation design by consulting existing research documents in book chapters, journal article and online materials, the paper established that health communication possesses the required powers to quench all forms of infodemic and conspiracies regarding coronavirus. The paper emphasizes that in the face of infodemic and conspiracy theories regarding COVID-19, effective health communication becomes important and can be relied upon to help in quality communication to vulnerable groups on the risk and dangers associated with misinformation. The paper suggests that best ways government and other stakeholders can sustain efforts at stemming the tide with regards to misinformation in public domain without infringing on personal liberties of citizens is to improve efforts aimed at countering fake news across same platforms where fake news thrives.

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INTRODUCTION

Coronavirus pandemic took the world by surprise. Strategies from varied angles have since been deployed to fighting the disease. On one front, science led efforts – which was to research and find a cure to COVID-19, and on the other, communication has also been deployed to ward-off all forms of manipulative and misleading information in circulation occasioned by the search for relevant information as to preventive and curative measures. Therefore, the fight was from two angles or sides. The two actions against the pandemic were taken by authorities and organizations simultaneously in order to ensure allencompassing efforts to reduce its impact on the world and its people.

Nonetheless, the pandemic presented difficult times as people were forced to adopt new forms of communication following several restrictions put in place to stop the spread of coronavirus. New media platforms especially social media became popular, and a lot of people were exposed to information therein. Social media also became the major source of information owing to their ubiquitous nature – and that equally gave rise to all manner of information being shared and reshared on platforms such as Facebook, YouTube, WhatsApp, and so on. Infodemic and conspiracies found their ways into these platforms and unsuspecting users bought into many of such and acted in manners deemed to have put their health in danger.

During health crisis, the most viable tool for combating tough situations is health communication as it possesses both the informative and persuasive advantages. In a COVID-19 era, where infodemic and conspiracy theories thrive in society, health communication becomes a useful tool. The situation the world founds itself in the middle of coronavirus was not unexpected. Quoting Larson (2018), Mheidly and Fares (2020) talked about the impact a major outbreak will have on society due to the contributions of emotions to be spread through digital means. Here comes COVID-19 infodemic and conspiracies largely distributed through new media platforms. No doubt that advancement in ICTs and digital media played significant roles in magnifying the impact of COVID-19-related fake news, and conspiracies and such is not good news for public health efforts. The spread of misinformation has in several ways undermined public health

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efforts – with respect to issues such as vaccination and health-protective behaviors (van der Linden, 2022). People who are exposed to conspiracy theories and fake news tend to take decisions that may hurt them and public health of the population if not controlled. The foregoing, therefore, underscores the importance of health communication in any society.

During any health crisis, the importance of health communication becomes greater and there is no over flogging the point in research owing to its significance in public health architecture. Health communication has to do with all forms of health-related human communications (Berry, 2007). Health communication is "the study and use of communication strategies to inform and influence individual and community decisions that enhance health" (The Community Guide, n. d., para. 1). It involves the use of strategies and channels to deliver health-related messages to individuals, communities, and groups such as health professionals, decision makers among others in order to help them make informed decisions. It makes use of a variety of tools including digital ones to reach its goal.

Statement of the Problem

As observed above, the coronavirus pandemic era presented difficult times with respect to the spread of misinformation and fake news. In other words, there was overabundance of information – a situation which became confusing as people found it difficult to sift through information. During the outbreak, social media platforms immediately became awash with all manner of information – with some pointing to curative and prevent measures to help the population navigate through the period. This became a problem because of the danger inherent in taking decisions based on the information to which an individual is exposed. It is on this basis that the importance of health communication is emphasized. In a pandemic such as that of the COVID-19 era, health communication becomes useful owing to the proliferation of misinformation across social media platforms.

Several studies such as Benski et al. (2020), Finset et al. (2020), Oxman et al. (2022), and Venkatashiva and Gupta (2020) have all highlighted the importance of health communication. However, the problem occasioned by infodemic and conspiracy theories related to the COVID-19 pandemic is one that requires continuous study and probing. Therefore, this study through summative evaluation in form of a discourse focused on a number of conspiracies and infodemic that trended during the outbreak whilst delving into the impact and efficacy of health communication in helping to deal with the challenge.

Research Objectives

The study objectives are, as follows:

- 1. Find out the effectiveness of health communication in the fight against COVID-19 related infodemic and conspiracies.
- 2. Highlight coronavirus-related infodemic and conspiracies shared in Nigeria in the midst of the outbreak.
- 3. Ascertain the dangers in the spread of COVID-19 infodemic and conspiracies.
- 4. Find out the impact of health communication on coronavirusrelated infodemic and conspiracy theories.

CONCEPTUAL REVIEW

For a better understanding of concepts used in this study, it is important to review or clarify each. Therefore, the concepts of health communication, infodemic, and conspiracy theory are clarified, and meanings provided. In the study, the term health communication is used interchangeably with communication while conspiracy theory, infodemic, and misinformation are also used throughout the paper to explain the deliberate spread of falsehood to sway people – which may lead them to do something or do nothing.

Health Communication

Health communication is a term that describes the use of strategies targeted at an individual or group of individuals of which the primary goal is to help them reach informed decisions regarding their health. According to Rural Health Information Hub (n. d.), "Health communication includes verbal and written strategies to influence and empower individuals, populations, and communities to make healthier choices" (para. 2). Like risk communication, health communication relates to public health emergencies – but both are tailored towards the improvement of health outcomes with the use of specific strategies targeting audiences that are at risk with useful health-related information (Ratzan et al., 2020; Schiavo, 2013).

Health communication has been identified to be useful to virtually all areas of human life and wellbeing (Nichols, 2018). Nichols (2018) further emphasizes that health communication play important roles in three key areas of disease prevention, health promotion and quality of life. In other words, health communication is important to the general wellbeing of an individual and the society at large. Due to its importance in the general wellbeing of people, health communication requires thorough research efforts. Therefore, Nichols (2018) suggests an establishment of a standardized approach to enable developers and evaluators make inputs based on research endeavors as it is the only way to achieve effective health communication. In this study, health communication is used to refer to all forms of health-related communication targeted at the people to elicit positive behavioral change in lifestyle especially during the COVID-19 pandemic in Nigeria.

In modern times, technology is changing the ways health information is delivered to the people. According to Brennan (2020), with the advancement in technology comes more choices and increased sophistication in the means through which health information and biomedical data are delivered just as much as it aids in interrogating the shared information. In other words, through the sophistication in technology, medical information delivery is diversified – and the recipient of such information also have at their disposal several options to interrogate or probe the information to which they are exposed. Health communication and health information technology (IT) have also been described as being central to public health, health care and society's general perception to health (Healthy People, 2022). Put in another way, IT and health communication can be seen as the central nervous system of public health and health care.

Infodemic

Infodemiology is an emerging research area or area of study. It has to do with determinants and distribution of health-related information on the internet with the sole aim of improving public health (Eysenbach, 2011). In the same category of words is the newly coined "infodemic". According to Zarocostas (2020), the word was introduced to underscore the danger of misinformation in managing disease outbreaks especially with the knowledge that such can impact negatively on the fight against the spread. Infodemic can been seen as excessive information disseminated online and offline to advance the agenda of individuals or group of individuals, most time false, deliberately put forward to undermine public health (WHO, 2020). What the United Nations labelled *infodemic* is the rapid spread of misinformation about COVID-19 (Ephraim, 2020).

COVID-19 is one of the most significant health challenges of the 21st century (Rains et al., 2020). While the World Health Organisation (WHO) leads the fight against COVID-19, a more dangerous global epidemic of misinformation is affecting coordinated efforts aimed at combating the disease. It is the epidemic of information spreading through new media platforms especially social media that the WHO Director General Tedros Ghebreyesus called *infodemic*. Undoubtedly, infodemic is posing a serious threat to public health (Galvão, 2020; Zarocostas, 2020). Such threat could manifest and cause serious behavior-related public health crisis that would be difficult for the world to fight – which is why it is considered dangerous to healthcare in general.

Somehow, there is a significant relationship in the meanings of infodemic and pandemics. Whereas pandemics refers to the outbreak of a disease, infodemic has to do with the outbreak of unreliable news/information or false rumors (Tangcharoensathien et al., 2020). In any case, infodemic relates to information without a verifiable origin or source but thrives on heresy – and with the use of social media in modern times, its rapid spread has assumed unimaginable degree and proportion.

Conspiracy Theory

Whenever an event takes place and then it is attributed to a be as a result of a plot or conspiracy which could just be speculative or based on evidence, then conspiracy is said to be at play (Basham, 2003, 2018). It is possible for people to hide under the cover of conspiracy to advance a plot or motive or execute a plan especially in political circles. Health-related areas are also known to have witnessed certain conspiracies. Whenever, health-related conspiracies crop-up, the impact and harm it can cause to public health are sometimes in unimaginable proportions. In relations to this, Bligh et al. (2020) posit that conspiracy might seem entertaining when it starts as fun but could be dangerous. With conspiracy come a high degree of cynicism and the tendency for people to disobey recommendations from authorities (Igoe, 2020).

Conspiracy theory and disinformation are tools used by two or more powerful actors in an attempt to provide explanation to causes of social and political events of significant importance (Douglas et al., as cited in De Coninck et al., 2021). It can also be seen as explanation or narrative provided for historical events in which agents act in secret with a significant causal role (Coady, as cited in Napolitano & Reuter, 2021). According to Axelsen and Emberland (2020) explanations that relate to wicked and secret actions and wicked plots or plans of a group of conspirators are examples of conspiracy theories. In other words, such powerful people often churn out all manner of explanations or provide information and paint them as truth or genuine information.

In a digital age where people can easily have access to information, coupled with unhindered information flow, conspiracy theories easily spread, and people get it from across platforms. In a study by Duffy and Allington (2020), it was found that people easily believe conspiracies. Duffy and Allington (2020) further reveal that while some people got their information from mainstream media such as TV, radio, newspapers, and magazine, most young people relied on social media platforms such as Facebook, YouTube, Twitter, and WhatsApp among others. Duffy and Allington (2020) allude that reliance on social media is becoming a trend amongst young people who referred to themselves as digital citizens.

LITERATURE REVIEW

Health communication has been described as a key aspect of the entire chain process useful during health crisis (Benski et al., 2020). Further, Benski et al. (2020) explained that it is therefore a significant note to ensure the development of appropriate materials to effect behavior change and that becomes a key aspect with respect to COVID-19 pandemic. Taking a cue from the position of Finset et al. (2020) that with the pandemic came an explosion of information on a global scale, the need to ensure that all forms of misinformation from across spectrum is countered became much more glaring. Indeed, whenever communication involves humans, there is always an increase in the production of information noise – including false and misleading information types (Lazer et al., 2018).

The use of ICTs and associated technologies is not so novel with respect to health communication as the practice has been on for a while. Arghittu et al. (2021) lend credence to the foregoing that public health has made use of modern ICTs to reach various group of persons in the society for some time now. Relatedly, the use of social media reportedly had huge impact on previous pandemics such as the H1N1 virus as much as it had on the COVID-19 pandemic as it became a useful tool for health risk communication (Budd et al., 2020; Klemm et al., 2016; Tang et al., 2018). The foregoing speaks to evidence as to the effectiveness of communication and platforms with respect to pandemics as evident from recent ones such as the H1N1 and COVID-19.

However, there are evidences that social media and other digital media are susceptible to the sharing of infodemic and conspiracy which are considered dangerous to public health. According to the WHO (2020), misinformation may be harmful to humans because when people are exposed to it, they could develop some form of resistance capable of making them ignore proper medical advice. The WHO described such situations as enablers for the virus to continue to thrive. The COVID-19 outbreak also generated a wave of low-quality and unreliable information which potentially hurts society's capacity to fight back any form of pandemic (Gallotti et al., 2020). Further, Gallotti et al. (2020) aver that the impact of complex cases of infodemic vary from country to country and unlike the expected outcome, certain G8 countries such as Russia and Germany were more susceptible to infodemic. In other words, when compared to some developing countries, the aforementioned countries stood far more vulnerable to risk of infodemic.

COVID-19-related misinformation, disinformation and conspiracy theory occasioned potentially damaging and far-reaching impacts, effects, or damages (De Coninck et al., 2021). For example, in a study, Saiful et al. (2020) found that several persons were exposed to widespread social media-mediated misinformation where it was suggested that consumption of highly concentrated alcohol could disinfect the body and therefore kill coronavirus – a situation which according to the study also resulted in close to 800 deaths – with over 5,800 hospitalizations across the globe. On the basis of the foregoing, Hepp (2020) argues that COVID-19 pandemic and the health crisis that followed can be seen as one of the first deeply mediatized global pandemics. Another example was that people in Nigeria rejected the coronavirus vaccine as a response to the information to which they were exposed (Wonodi et al., 2022).

However, properly planned, structured, and executed health communication is seen as a potential solution to the issue of misinformation and conspiracy theories in a pandemic era. This is based on the conclusion of a study by Wonodi et al. (2022) that in the face of vaccine hesitancy, there is the need for adaptive strategies and messages. In other words, well-structured health communication messages are needed to spread information on the efficacy and safety of such vaccine.

THEORETICAL FRAMEWORK

Theoretical framework for this paper is health belief model. The quest by public health departments to understand the reason behind people's decision to use or not to use preventive measures in the 1950s, informed the development of Health belief model (Glanz, 2016). HBM was first developed by Godfery Hochbaum, Stephan Kegels, and Irwin Rosenstock (Jahanlou et al., 2013). The theory postulates that what influences people to take action with regards to disease or outbreak is their belief on whether or not they are at risk as well as their perceptions of what they stand to gain from the said action. Put differently, health belief model rests upon the understanding that an individual will take action regarding his health if the persons believe or is convinced that a negative health problem can be avoided through the action, or if the person expects a positive outcome if the recommended action is taken or have confidence that the recommended action can successfully be taken.

The theory's major constructs are perceived susceptibility and perceived severity, perceived benefits and perceived barriers, cues to action and self-efficacy. Perceived susceptibility is the belief that an individual can get a medical condition. In this case, health communication helps enlighten the public on their susceptibility to COVID-19 and since the world is still in the process to defeating the virus, the dangers are clear for everyone to see. In other words, the dangers are visible.

Perceived severity is how serious an infection could be and consequences of exposure. Health communication highlights specific consequences of the risk of COVID-19 and the need to be wary of the disease. Perceived benefits have to do with belief on the efficacy of the risk/impact-reduction actions advised. In line with this, health communication presents the positive effects or impact if the people adhere strictly to advised protocols by government agencies. Perceived barriers are the visible psychological costs of the behavior advised for prevention. Health communication that is effective also take on the possible side effects (if any) of certain precautionary measure – whether psychological or physical. Cues to action are strategies to unveil readiness. In this regard, health communication provides guide on what to do and how to do what. It also promotes awareness as well as provides periodic reminders.

The above was evident in the periodic SMS sent by the Nigeria Center for Disease Control (NCDC) on the measures to take to avoid contracting coronavirus. The last construct of HBM is self-efficacy which was added recently – and it has to do with the confidence an individual has on his ability to take the recommended action to prevent a condition. If a particular individual takes the recommended action, chances are that the chances of severe impact of exposure to a disease is reduced.

According to Glanz (2016), health belief model can be applied to health concerns especially those that have to do with prevention and asymptomatic. This theory provides a base for this study because it helps to put in perspective the importance of health communication in the fight against COVID-19 infodemic and conspiracy theory. In other words, against all forms of conspiracy and infodemic on coronavirus, health belief model (through the use of health communication) presents possible ways to avoid negative health consequences that comes with believing alternative facts about COVID-19.

METHODS

The method adopted for this study is the summative evaluation design in form of a discourse. As a research methodology, evaluation research includes a series of enquiries which seeks to assess or appraise programs, practice, or activity in order to provide useful information as to the success or otherwise (Kellaghan, 2010). For the study, the use of existing documents in books chapters, journals and online materials proved useful in the discourse. The method is considered appropriate because the study is an evaluative discourse on the effectiveness of health communication on COVID-19 infodemic and conspiracy theories in Nigeria. It is only appropriate to discuss health communication adopted during the outbreak in order to ascertain its effectiveness and impact.

DISCUSSIONS

Effective Health Communication in a Pandemic: Analysis of COVID-19 Times in Nigeria

With massive misinformation on coronavirus across social media platforms, health communication became imperative owing to the danger misinformation has on public health. COVID-19 presented difficult times with respect to sifting between truths and outright falsehood just as several seeming legitimate sources of information fell prey to the global epidemic of information. A situation which called for concerted efforts against the hydra-headed problem which has to do with deliberate spread of certain information aimed at manipulating people to think or see certain unreal as real, untruths as truths, outright falsehood as genuine or legitimate information.

For example, information across social media platforms during the outbreak suggests that COVID-19 was manufactured in a laboratory with population control as the motive and that Asians especially the Chinese are to blame. There exists no evidence to back such claims. Other falsehood that permeates platforms borders on preventive and curative measures – include the insinuation that excessive consumption of alcohol can do magic when it comes to prevention, and that COVID-19 can be spread by mosquitos. Such information and abundance of it does not only confuse the people but also mislead.

In the case of Nigeria, information across social media platforms suggests that Nigerians and blacks in general have some form of

immunity against SARS-CoV-2 and that remains the simple explanation why predictions that Africa would be worst hit has not come to pass. Another piece of information that was quickly accepted by a vast majority of the people was the erroneous belief that COVID-19 cannot survive in Nigeria and other parts of Africa due to the climate conditions. Africa is known to be generally hot, and people then bought the idea that coronavirus cannot survive tropical region weather conditions – most parts of the Africa continent fall in the category.

Undoubtedly, the information shared across various social media platforms made the population vulnerable and put people in a dangerous slope and as such complicated the fight against the disease. Here comes health communication. Nigeria set up a committee to lead the fight against COVID-19 - the Presidential Task Force against COVID-19 was inaugurated to serve as advisory organ to the government on possible ways out of the era. In partnership with the NCDC, there was massive health communication through various mediums - mobile phones, billboards, traditional media which include radio, television, newspapers and magazines and social media platforms. Whereas the government-led efforts did a lot to arrest the situation, the Nigerian media did not fold its arm as it showed commitment to fight off the menace (Ifijeh, 2020). For example, Channels TV started a program tagged "COVID-19 Update" to keep people informed about the disease and what efforts are being employed to push back its impact or effects. TVC, AIT, NTA, and other broadcast organizations also developed programs and public service announcements to keep their audience educated and informed about coronavirus. The print media chiefly led by newspaper organizations also constantly kept the people informed on dangers posed by COVID-19 and need for cooperation from all to ensure a successful navigation out of the pandemic era. This aligns with the social responsibility principle of the press.

NCDC periodically sent text messages to Nigerians warning of selfmedication and educating the populace on the need to get tested. When COVID-19 peaked in the third quarter of 2020, the government agency used social media platforms such as WhatsApp and the verified Twitter handle @NCDCgov to educate and enlighten the population on the symptoms to watch out for as red flags. This is in line with health belief model that when people are exposed to messages on the severity of a disease, they tend to take information serious and not easily swayed by acts of misinformation. For example, the SMS circulated by NCDC on some of the symptoms, at a point, was sent on a daily basis to ensure people know the danger they may be exposed to and therefore the need to take action. The agency in conjunction with PTF also championed health promotion programs across various media platforms. Therefore, NCDC embarked on effective health communication to ensure the people can choose between fact and fiction, falsehood, and truth.

Highlights of COVID-19 Infodemic and Conspiracies

Several conspiracies emerged following the COVID-19 outbreak. Let us consider a few, as follows:

 Coronavirus is a creation of a laboratory in China to reduce population or to disorganize other countries so the Asian country can be better positioned to become the biggest economy of the world. Though the conspiracy theory as promoted aligns with the turn of events, there is no evidence to support the claim – at least for now.

- 2. 5G launch is somewhat related to COVID-19 and the radiation from the technology can kill birds and are signs of the end time. Videos circulated online to back this claim. Though it has been refuted, the damages on people's psyche are enormous. In Nigeria, the information that the escalation of COVID-19 infections elsewhere especially Europe and America can be attributed to 5G was floated by Christ Oyakilomhe the President of Believers Loveworld AKA Christ Embassy. According to Ephraim (2020), this led to UK government sanctioning Loveworld News; a religious channel owned by the church with bases in UK and Nigeria.
- 3. Bill Gates is investing heavily on COVID-19 vaccine to advance his satanic agenda which will be implemented by ensuring that anyone that refuses to be vaccinated will not have access to several things which include, but not limited to travel abroad, financial inclusion among other deprivations.
- 4. The Nigerian government imposed the idea of the index case on the world to be able to siphon monies that will be allocated to the fight against COVID-19.
- 5. Hydroxyl chloroquine is the answer to COVID-19. Authorities are hiding the efficacy of the common drug to adhere strictly to instructions from those who implement the agenda of the new world order. Those who control the world also have shares in large pharmaceutical companies and want to make money through massive vaccine sales.
- 6. Melanin in the skin of Africans and black people world over is a good thing and prevents coronavirus. This erroneous belief stems from the scientific research that dark people possess more melanin than those with light skin. However, there is no scientific discovery thus far that proves this with regards to COVID-19.
- 7. The use of hot tea and a mixture of garlic and ginger help cure COVID-19.
- 8. COVID-19 will soon fizzle out especially during hot period as it cannot survive under harsh weather conditions.

Dangers in COVID-19 Related Infodemic and Conspiracy Theory: The Nigeria Scenario

Dangers, no doubt, abound when there is high consumption of misinformation especially across social media platforms. People tend to make health-related decisions based on information available to them. Pandemic or epidemic outbreaks are usually critical times for public health, and viral false information just like viral contagion usually comes with devastating effects. For example, in the wake of ebola outbreak in 2014, WhatsApp messages circulated online with one suggesting that a mixture of warm water and salt either for bathing or drinking is a preventive measure for the disease. At least two persons were reported dead after consuming the substance (WHO, 2014).

During COVID-19 outbreak, conspiracy theory and infodemic posed both public health concerns and security challenges to the Nigerian government. Information shared across various social media suggested that COVID-19 might just be a ruse and that government invented the idea just to make money from international organizations and donors. Those who believe such information and ignored warnings from government agencies appeared to be more vulnerable when compared to those who believed the disease exist and adhere strictly to safety protocols advised by the government agency saddled with fighting the disease in Nigeria – the NCDC. Conspiracy theory on the origin of the virus also led to tensions in certain parts of Africa and Nigeria towards Chinese. This resulted in security concerns as government beefed up security around Chinese investments in Nigeria to forestall any form of attacks or vandalism. Companies in Lagos, Ogun and FCT were surveilled to ensure no xenophobic attack on Chinese interests in the country.

A dreaded danger posed by infodemic on COVID-19 is religious misinformation belief. It is common in Africa and elsewhere for religious people to promote the idea their faith can save them from diseases. It is same with COVID-19; people believe that their faith in religion is capable of saving them from COVID-19 (Barua et al., 2020). Barua et al. (2020) further explains that in Bangladesh and Brazil, religious leaders either organized special COVID-19 program or admonished people to visit worship centers – a move many believe can trigger an increase in infections since social distancing is recommended as one of the preventive measures. In Nigeria, certain religious organizations insisted on organizing programs (Okoye & Obulor, 2020) – a move that was seriously opposed by government. However, it is worthy of mention that religious leaders later worked with government in ensuring safe re-opening of churches and mosques with strict observance of COVID-19 safety protocols of guidelines.

Impact of Health Communication on COVID-19 Infodemic and Conspiracy Theories

Health communication has numerous impacts on the fight against COVID-19. We consider the following impact on COVID-19 infodemic and conspiracies:

- Improves public health information. By presenting accurate information, health communication opens a window for further communication that can help people reach informed decisions about their health. Once people are well informed about their health, public health is improved.
- 2. Discourages alternative facts. Health communication provides the opportunity for people to sift alternation facts from real facts, truth from fiction, imaginations from realities. This leads to informed decision also capable of improving the health conditions of the populace. When the population is armed with the right kind of information, chances of taking wrong decisions about their health are unlikely – and this can also help improve the general wellbeing of the people over time. In other words, public health, in the long run, is improved through health communication.
- 3. Conspiracy theory and COVID-19 infodemic can lead to distrust between the government and the governed. Health communication provides a platform for a dialogue. Through effective health communication, government can present information to the citizens with the expectation that the people will believe and act when necessary. This way, it becomes a win-win situation.
- 4. Health communication to a large extent contributes to positive behaviors. As more and more people imbibe the recommended behaviors for the prevention of COVID-19 infection in Nigeria, they improve on their behavioral patterns which in turn have positive impact on fighting other diseases such as HIV/AIDS among others. This also aligns with the HBM

construct of perceived benefits as behavioral changes may have far-reaching impact on public health architecture in the future.

CONCLUSION

Health communication is indeed effective on COVID-19 conspiracies and infodemic. Rumors, fake news, and conspiracy theories pose great threat to public health and the best way to fight back is to implement a carefully planned and executed health communication. This paper has discussed the impact, dangers of COVID-19 infodemic and conspiracy theories. The paper also highlighted conspiracies and infodemic that went viral as the world struggle to fight Coronavirus pandemic. The paper revealed several conspiracy theories that trended during the period, with the most significant having to do with the origin of the virus – being that it was produced in a lab to depopulate certain countries to the advantage of China – the Asian country where the first case was recorded.

The paper also concludes that there are certain dangers associated with the spread of conspiracy theories and misinformation. One of the most significant is that through such information, certain persons in the society can be led to take unwise decisions with respect to their health. When they are exposed to information on curative or preventive measures, decisions can be taken that may harm individual members of the society – a situation that will further jeopardize public health response. On the impact of communication, the paper concludes that with carefully designed health communication, the quest to counter all forms of infodemic and conspiracies will be relinquished.

Recommendations

On the basis of the findings of this study and the discussions as presented above, the following recommendations are made.

- Members of the public must learn to take information from constituted authority and avoid rumor mills spreading fake news and conspiracies across social media platforms such as Facebook, Twitter, WhatsApp among others. In order to achieve this, individuals must learn how to differentiate between genuine sources of information and others often considered as fake.
- 2. The government must engage all stakeholders in the fight against fake news. Government must avoid the weaponization of the term against perceived political enemies or dissenting voices. Therefore, setting up a special unit in National Orientation Agency (NOA) and other government agencies to also counter fake news constructively by providing accurate information on matters will be the reasonable way forward.
- 3. Concerned agencies and NGOs should partner to develop programs to enable fact-check and a public campaign carried out to educate the people on the dangers fakes news pose to them as individual and public health in general. Such concerned agencies of government to champion this cause should be led by the NOA and NITDA in a bid to build a synergy that would work.
- 4. Government must ensure that a strong presence on social media platforms is sustained to monitor engagement across platforms and refute dangerous information when the need arises and must also resist the temptation of a policing of the virtual spaces in ways that infringes on personal liberties of

members of the public. This is because when policies are made to overregulate social media, individual members of the public may not be encouraged to follow government handles or pages – a situation that may lead to missing vital information that could be shared across such platforms.

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