

Innovations

Covid-19 pandemic misinformation and disinformation on social media: a study of Abraka metropolis

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Abstract

The outbreak of Coronavirus disease has birthed a lot of fictitious stories. With the unexpected outbreak of the pandemic in 2019, there followed a tsunami of misinformation and disinformation all over the world including Nigeria. This study is anchored on the hypodermic needle theory and the agenda-setting theory to act as the stimulus in response to misinformation and disinformation that is detrimental to the management of the dreadful pandemic. Focus group interview was conducted that elicited responses from 120 teaching and non-teaching staff of six primary and secondary schools in Abraka and environs. Data analyzed indicates that many believed in the misinformation and disinformation about COVID-19. Findings affirmed that generally, misinformation and disinformation can influence negatively. One of the recommendations of this study encourages the general public to watch against misinformation and disinformation by checking the credibility of any information received to guard against the misleading citizens about issues of health. The public health authorities such as the NCDC, WHO, UN, cooperate bodies, NGOs, should be relentless in initiating proper measures against disastrous information at all times especially during a pandemic.

Keywords: 1.Misinformation, 2.Disinformation, 3.Social Media, 4.COVID-19, 5.Focus group.

1.0 Introduction

Information has its variants as disinformation and misinformation. These two variants are the negative spread of messages for deceit, propaganda, and outright falsehood especially so in the 'new normal. As a construct, new normal' came into use with the unfolding or the outbreak of the COVID – 19 pandemic. The use of social media in the dissemination of the origin, causes, diagnosis, and symptoms of the COVID – 19 pandemic has shown that social media has advantages and disadvantages. Social media platforms are increasingly becoming the most ubiquitous means of sharing information, disinformation, and misinformation. As of 30 September 2010, in Nigeria, there were sixty-three million users of GSM- Global System of Mobile Communications subscribers in Nigeria (iProject, 2020). The knowledge and awareness of the first Coronavirus victim in Nigeria were made possible through various social media platforms and websites. When the news broke online, it went viral because

many Nigerians have access to social media platforms. This is unlike earlier plagues and epidemics. Even the Nigeria Centre for Disease Control (NCDC) was relatively unknown until the outbreak of the coronavirus pandemic. Apart from the spread of factual and accurate information during the pandemic, there was so much mythical information that became the agenda of public discourse via social media. The speed and reach with which the social media disseminated these myths sent fear and panic among the citizenry in Nigeria. One such myth was the now popular conspiracy theory that has it that governments and world leaders want to decimate the population of the world for their selfish ends. This culminated in the misinterpretation of social media messages by several Nigerians across various social media platforms with instances cited to support and buttress these myths which were shared by both the literate and illiterate alike because the social media platforms were the sources from which they got their assertions.

The COVID -19 pandemic is the first global health crisis since the emergence of social media. During the influenza plague, there was limited news on the virus when it came to the country as the British colonial government was only able to curtail it in some parts of Lagos due to the lack of information and information sources. This caused the rapid spread of influenza to other parts of Nigeria (Adebowale, 2020). Presently, according to Obi-Ani, Anikwenze, and Isiani (2020). 'Nigeria is trying to curb the rapid spread of COVID-19 through the immediate lockdown of the major epicenters of Lagos, Ogun states, and Abuja: the commercial and administrative hubs of the country where there has been a spike of coronavirus cases'. Since the 30th of January 2020 when the World Health Organization (WHO) declared the COVID-19 outbreak a pandemic, there have been and there will continue to be numerous examples of how social media have been used to inform and misinform many people in the world including Nigeria.

1.1 Statement of the Problem

According to Savrum and Leon (2015), the 'media provide a freedom of choice and individuals are free to choose which broadcast their interest'. In this study, the problem is do the social media platforms provide credible information in the interest of Nigerians? Which posts do they believe? This is because social media is available to all and sundry, and, as such unverified and unfiltered information is often posted, passed as truth, and disseminated without fear or favour. The problem therefore is: how have Nigerians fared in their use and reliant on Social media concerning the COVID -19 pandemic Misinformation and Disinformation? Misinformation and disinformation, a combined force on social media are detrimental to the effective management of COVID-19. What misinformation and disinformation went viral on social media amid the COVID-19 outbreak? What are the measures put in place to check against a surge of misinformation and disinformation amid a pandemic outbreak in the future? This study seeks to find the answers to these questions.

1.2 Objectives of the Study

The following are the objectives of the study:

1. To examine the relationship between the COVID -19 pandemic Misinformation and Disinformation on Social media and the perception of Abraka residents.
2. To determine the extent to which Social media has contributed to the spread of Misinformation and Disinformation about the COVID-19 pandemic in Nigeria.
3. To find out how Nigerians have reacted to the spread of COVID -19 Misinformation and Disinformation on Social media.
4. To ascertain the acceptance and compliance of Nigerians with the existence and spread of COVID-19 pandemic as a result of Misinformation and Disinformation from Social media.
5. To find out the role of Social media in the dissemination of Misinformation and Disinformation about the COVID-19 pandemic.

1.3 Research Questions

1. What is the relationship between COVID -19 pandemic Misinformation and Disinformation on Social media and the perception of Abraka residents?
2. To what extent has Social media contributed to the spread of Misinformation and Disinformation about the COVID-19 pandemic in Nigeria?

3. How have Nigerians reacted to the spread of COVID-19 Misinformation and Disinformation on Social media?
4. How have Nigerians accepted and complied with the existence and spread of the COVID-19 pandemic as a result of Misinformation and Disinformation from Social media?
5. What is the role of social media in the dissemination of Misinformation and Disinformation about the COVID-19 pandemic in Nigeria?

2.0 Related Literature

Brief History of the Outbreak of the COVID -19 Pandemic

According to Liu, Shih et al (2020), the novel human coronavirus disease COVID-19 has become the fifth documented pandemic since the 1918 Spanish Flu Pandemic. They disclosed that COVID-19 was first reported in Wuhan, China. It subsequently spread globally. The coronavirus was officially named severe acute respiratory syndrome Coronavirus 2 (SARS-Cov-2 by the International Committee on Taxonomy of Viruses based on phylogenetic analysis. The researcher asserts that SARS-Cov-2 is believed to be a spillover of an animal coronavirus and later adapted the ability of human-to-human transmission. Because of its highly contagious nature, the COVID-19 spreads rapidly and has continuously evolved in humans.

The first reported case is traced to 1st December 2019 from a cluster of novel human pneumonia cases in Wuhan city, China. In the beginning, the press called the COVID-19 Wuhan Pneumonia because of the area of origin and identified symptoms of pneumonia. The whole-genome sequencing results showed that the causative agent is a novel coronavirus. It has been proved medically that the COVID-19 virus is the seventh member of the coronavirus family to infect humans. The International Committee on Taxonomy of Viruses officially designated the virus as SARS-CoV-2 based on phylogeny, taxonomy, and established practice. Human-to-human transmission of COVID-19 first occurred in Hong Kong as shown by clinical data. In March 2020, the WHO finally assessed that COVID-19 can be characterized as a pandemic like the 1918 Spanish Flu, (H1N1), 1957 Asian Flu (H3N2), and the 2009 Pandemic Flu (H1N1) which caused an estimated 50 million, 1.5 million, 1 million and 300,000 human deaths respectively (Johnson & Mueller, 2002; Kain & Fowler, 2019).

2.1 COVID-19 Pandemic in Nigeria

On February 27, 2020, the Federal Ministry of Health confirmed the first 19 COVID cases in Ogun State, Nigeria, making it the third country in Africa to recognize 19 imported COVID cases after Egypt and Algeria. The index case was an Italian citizen who flew from Milan, Italy to Lagos, Nigeria on February 24, 2020, and drove to his company's location in Ogun State on the same day in a private car. A total of 216 contacts in Lagos and Ogun, including passengers on the flight on February 24, were identified for a 14-day follow-up, and 40 of these contacts were classified as high-risk contacts. While it was initially seen to be an epidemic in China, the virus spread worldwide within months. Forcing the World Health Organization (WHO) to declare COVID-19 as a pandemic on March 11, 2020 (Kalu, 2020).

At the national level, the President of Nigeria, Major General Muhammadu Buhari established the Presidential Task Force (PTF) on COVID 19 on March 9, 2020, to support national multi-sectoral and intergovernmental efforts to contain the outbreak and mitigate the impact of COVID 19. The national COVID 19 multi-sectored pandemic response plan was adopted by the PTF in March and serves as a blueprint for a government response. The PTF takes a high level of strategic leadership for the country's response based on scientific discoveries. Daily PTF media briefings were held to educate Nigerians about evolving evidence, address trending topics, and provide up-to-date information on government responses.

The public across the world was un-preparedly forced to recognize the severely damaging magnitude of COVID 19 due to fast communication and publication. Unfortunately, the world's first deadliest pandemic COVID-19, and undoubtedly most disastrous in the 21st century has no immunity against the proliferation of misinformation and disinformation. Consequently, Adeyemi (2021) in his research work on Misinformation about COVID-19 among Internet users in Nigeria concluded that the level of misunderstanding that Nigerians have about COVID 19 is a serious issue of concern to government and health care providers. Therefore, to avoid the danger associated with common misconceptions, it is imperative to continue to work on community awareness and education using proven facts about the virus. The researchers on Countering COVID-19 Misinformation in Africa, Nguyen and Cecchini (2021) posit that amid the COVID-19 pandemic, an infodemic has also emerged. They asserted that an infodemic occurs when people are flooded with information - a combination of facts and myths on any given topic causing consumers to struggle to understand what sources they can trust. From an economic viewpoint, Bakare (2020) contributed that the spread of fake news makes it difficult for the Nigerian government and its health sector to manage illness. Like many countries around the world, Nigeria, Africa's most populous country, is tackling the effects of the coronavirus pandemic. The national emergency, which President Muhammadu Buhari declared in April to contain the spread of the virus, was first reported on February 27 and caused "serious economic losses" to the country. By the second quarter of 2020, the economy had shrunk by 6.1% year-on-year, according to the National Bureau of Statistics. The aforementioned researches delineated how misinformation is dangerous during a pandemic because it affects health, the economy, the rationale of people, instigate fear, and lots more.

2.2 Understanding the Concept of Misinformation and Disinformation

Agbanu (2014) describes the time we are in as a time for more expertise and professionalism in public communication but unfortunately, there is an increase in the amount of unverified, un-researched, and unbridled information that is more about sharing ignorance, distortion, gossip, and propaganda. In other words, misinformation and disinformation are prevalent in society today. The words "misinformation" and "disinformation" have often been associated with the concept of fake or false news identified by scholars as "fabricated information."

2.2.1 The Concept of Misinformation

There are lots of statements that are not created with the intent of harming (for example, someone who publishes an article containing out-dated information but does not know it). The term misinformation is information that is inaccurate and is often widely shared with others, regardless of misleading intent. You can identify incorrect information fairly quickly by searching and reviewing the history of that account. If there is a clear pattern of posting the wrong content, or if it was a one-time, innocent mistake. (Gebel, 2021; Kujawski, 2019). Misinformation was first recorded in the late 1500s and is combined with the prefix *mis*, which means wrong or mistakes. Spelling mistakes and misunderstandings are just a few examples of other common words other than misinformation that are misused to mean "wrong." False information is not about intent, it is a term that describes all sorts of false or inaccurate information. False information is very easy to disseminate thanks to technology. Of course, false alarms are related to false alarms of verbs, meaning "provide false or misleading information," and were first recorded around 1350 to 1400. (Frenkel, Alba, and Zhong (2020) and Kouzy, Jaoude, Kraiten, Alam, Karam, and Adib (2020).

Misinformation

Conspiracy theories claim that 5G cellular networks are causing cancer and COVID-19 is widespread on the Internet, but there is no scientific evidence to support them. The main idea behind the false claim is that 5G radio waves are harmful to the brain and cause health problems such as autism and cancer. However, experts have clarified these concerns, stating that 5G radio waves cannot damage intracellular DNA or penetrate the skin, which acts as a protective barrier (Augoye, 2020). This theory is an example of misinformation because it presents information outside the context as facts. If people are anxious and looking for answers, someone will provide those answers. Laze, Baum, Matthew, Benkler, and Yochai (2018) rightly did when they stated that fabricated information that mimics journalism content in form but not in organizational process or intent is misinformation.

2.2.1 Disinformation

Disinformation is not a phenomenon of the 21st century (Southwell, Thorson & Sheble, 2019). It is purposefully disseminated false information. It is often used more broadly to mean "deliberately misleading or biased information; distorted narrative or facts. There are many additional deceptive motives for spreading misleading information. Disinformation is when information is presented to make someone or something look bad or good (Kujawski, 2019). Disinformation is information that is false and deliberately disclosing false statistics about an organization, to harm an individual, social group, organization, or country (for example, a competitor may damage your credibility). Unlike misinformation which is false information created and distributed without the intention of harming or deceiving, disinformation is a type of misinformation deliberately created to be misleading (Gebel, 2021). Both forms can be widely distributed regardless of whether the sharer knows that the information is incorrect. Disinformation thrives when there are anxious people who are in danger due to a lack of correct information. As a recent example, the US State Department has accused the Chinese government of spreading false information about and supporting an online disinformation campaign that blamed the outbreak of COVID-19 on the United States. Disinformation can be dangerous, but journalists (and all writers) are in a difficult position to investigate it. Politicians can say that it is not true, but journalists generally do not directly blame them for being liars or disinformation speakers. This is because they are usually accused of defamation. After all, journalists cannot fully understand the intent behind the misinformation before mistakenly calling someone a liar because there is a possibility (Laze et al, 2018).

2.3 Sources of Disinformation

Disinformation, in comparison to misinformation, is a relatively new term, first appearing between 1965 –70. It is derived from the Russian word *dezinformatsiya*, which is derived from the French *désinformer* (to misinform) Kujawski (2019). The prefix *dis-* can be used in English to signify a reversal or negative occurrence of the following word. Disrespect and disobedience, for example, are the opposites of respect and obedience. The term "disinformation" refers to "reverse information" or "anti-information" that is explicitly designed to confuse and mislead others. (Southwell, Thorson & sheble, 2019)

2.3.1 Difference and Similarity between Misinformation and Disinformation

When distinguishing between misinformation and disinformation, Carlos (2021) posits that misinformation is false information that one spreads because they believe it to be true while disinformation is false information that one spreads even though they know it to be false — they are trying to deceive people, always with one very important word in mind: intent. Wardle and Derakhshan (2017), in their publication on information disorder, note that false information which is being shared not knowing if the knowledge is correct or not and with no purpose to cause harm to anyone is named misinformation; on the opposite side, disinformation is fake and shared consciously to cause harm intentionally. Misinformation and disinformation are two words often linked to the concept of news. Although both words refer to types of wrong or false information, only disinformation is wrong on purpose. This distinction may seem simple enough, but false and disinformation is used interchangeably because they are similar and sometimes related. But one thing is certain: both false and disinformation entails the disclosure of bad or uncovered information for different intents and purposes.

2.4 Social Media

Dollarhide (2021), for Investopedia, defines Social media as computer-based technology that facilitates the sharing of ideas, thoughts, and information through the building of virtual networks and communities. The success or otherwise of the Nigerian government's efforts can be attributed not just to proper health care facilities but also to the impact of social media. Social media is an invaluable means of disseminating information to the citizenry because it is a two-edged sword that allows citizens to be privy to information without impediments (Obi-Ani, Anikwenze & Isiani, 2020). The COVID-19 pandemic has led to the availability of an avalanche of information, disinformation, and misinformation (Topf & Williams, 2021). The duo adds that Social

posts with misleading or dangerous opinions and analyses are often amplified by celebrities and social media influencers. In Nigeria, everyone, every social media user including physicians is culpable. Since the index case of the visiting Italian medical doctor in February 2020, factors such as an increase in population, urbanization, poverty, inadequate health care facilities, and inconsistent government policies have significantly contributed to the dissemination of false information. With over 123 million Internet users in Nigeria, the Covid-19 pandemic has rapidly increased the use of social media. Rapid digitalization and other factors have afforded more Nigerians access to social Media (Alder, 2020). Social media platforms serve as powerful tools for sensitization and knowledge dissemination which has contributed to the discourse on the COVID-19 pandemic. Nigerians got to know about the symptoms, testing and testing kits, and best practices against getting infected. Due to the novel nature of the virus, new updates were and are still being posted in real-time; and, based on the reach, intensity, and speed of social media, Nigerians can ask questions and receive instant answers. This is possible because social media uses creative, collaborative, and interactive communication via infographics, videos, and music to embedded COVID-19 messages. Social media enabled and enhanced citizen mobilization and participation in Nigeria thus contributing to advocacy and policy formulation concerning health issues in Nigeria. A case that easily comes to mind was when Nigerian health workers unveiled the inadequacy of health care facilities in the country and the risks they are exposed to in caring for and treating infected persons as a result of a shortage of and lack of access to testing and personal protective equipment (PPE). Nigerian health workers also drew the attention of the government to the poor allowances accruable to them considering the risks they were exposed to in caring for and treating COVID -19 infected persons. Just like during the EndSars Protests in 2020, social media platforms became pungent tools for public accountability occasioned by collective protests. There were some exposures of lack of conformity and non-compliance with the COVID-19 guidelines- social distancing, and wearing of nose masks- during the lockdown occasioned by the COVID-19 pandemic. Some celebrities and public servants were reprimanded, sanctioned, prosecuted, and sentenced to terms of imprisonment and community service because they were found guilty of breaking the rules, regulations, and laws put in place by the government to reduce community spread of the COVID-19 pandemic. The COVID-19 pandemic brought the solidity and far-reaching impact of social media to bare as most of the revelations of whistleblowers during the lockdown used social media to spread videos and photographs of citizens who broke the safety protocols of the NCDC. Manning (2014) says social media refer to new forms of media that involve interactive participation. He adds that all social media involves some sort of digital platform, whether mobile or stationary. He classified Social media as Emails, Blogs, Texters, Message Boards, Social Networking Sites, Games and Entertainment, and Mobile Applications. These were the platforms many Nigerians used for civic participation and advocacy during the COVID-19 pandemic.

The COVID-19 pandemic brought about the realization that there is a need to devise effective means to regulate the use of the Internet because of the spread of disinformation, misinformation, or fake news received from social media networks. This explicitly reminds one of the efforts of the United Nations on the issue of regulation and self-regulation of social media and news media. The Special Rapporteur on Freedom of Expression and Opinion (2018) had urged the Internet companies to learn from the news media to better align with the UN standards on the right to impart, seek and receive information. This is necessary to curb disinformation and misinformation arising from the weak dissemination of messages linked to poor research or sloppy verification of information.

Okunna (2020) stipulates that new high-tech media enables the creation of public and semi-public profiles within online networks that allow users to connect and exchange ideas and knowledge through the development of virtual networks and communities. Social media is essentially an internet-based mass channel of personal communication that allows users to stream content quickly such as personal data, documents, videos, and photos (Carr & Hayes, 2015). According to Digital Market Statistics (2019) and lyfemarketing.com, users interact with social media through web-based software or applications using computers, tablets, or smartphones. Social media is very common in the United States and Europe, but Asian countries like Indonesia are at the top of the list of social media users. The figures released by Statista (2021) show 33 million users of social media in Nigeria and 2.74 billion users worldwide. However, Okunna (2020) opines that, of the 3.5 billion people worldwide, Nigeria has 27 million active social media users. Noting that initially, social media was borne out of the need to interact with

friends and family but was later adopted by companies that needed the benefits of popular new communication methods to succeed with their 'crooked' customers. The power of social media is to share and re-share information with everyone on the planet at the same time. Chaffey (2021) avers that social media is a constantly changing and evolving field that is used by more than half of the world's population and appears to be joining the ranks of new apps such as TikTok and Clubhouse launched each year.

2.4.1 Social Media amid the outbreak of COVID-19

Fake news and false information are especially common during a pandemic. False and inaccurate news spreads faster on social media and leads to an infodemic of which social media platforms such as Facebook, YouTube, Whatsapp, and Twitter provide direct access to an unprecedented amount of content and may amplify rumours and questionable information (Cinelli, Quattrociochi&Galeazzi 2021). Increased media consumption and affordable new technologies are in all regions of the world showing a great expansion of the use of social media which makes available a flood of overwhelming information for many. This opened the door for misinformation and disinformation to flourish. For instance, former President Donald Trump on Wikipedia (2021) stipulated that Chloroquine can cure the Coronavirus. Consequently, Lagos State health officials reported three cases of people hospitalized following a drug overdose after trusting and acting on the former President's words. It causes fear and exploits weaknesses. Some other Nigerians simply refused to believe in the existence of viruses and illnesses. As part of the misinformation and disinformation on COVID-19, Pennycook, McPhetres, Chang, and Rand (2020) posit that it varies from conspiracy theories suggesting that the virus was planned and generated in the laboratory where it is used as gigabits (GB) to religious fallacies that prayer to the Almighty will help avoid suffering from COVID-19 and many other versions. Religion can play a dual role in a pandemic that can be constructive or harmful. However, researchers have documented that religious fundamentalists tend to rely on incorrect input of information (Bronstein, Penny Cook, Bear, & Cannon 2018). Researchers such as Tan, Lee, and Chae (2015) have found that developing a theory of the effects of misinformation and disinformation on public health can greatly help mitigate the negative effects of false information. In the case of Nigeria, analytic thinking began when all religious arenas and rallies were closed for several weeks by the COVID-19 Presidential Task Force (PTF) in collaboration with the National Centre for Disease Control (NCDC).

Hassan (2020) states how social media activists, influencers, and self-styled warriors are using their social media platforms and fringe websites to broadcast misinformation, propagate conspiracy theories and promote the denial of the COVID-19 virus just to grow their online followership irrespective of the effect of growing misinformation and disinformation landscape. Citing the controversial Nigerian blogger, Kemi Olunloyo who claimed on tweeter that President Buhari was sick and treating a persistent cough in an ICU somewhere unknown. The tweet was liked over 3000 times within a few hours and retweeted about 2,000 times more. Likewise, an audio clip emerged on WhatsApp on March 23rd 2020 of an alleged World Health Organisation (WHO) expert who claimed to possess and taken a singular course on COVID-19? In the audio, he predicted that a minimum of 45 million Nigerians would die during the pandemic. The audio drew so much attention that the NCDC had to respond by issuing a rebuttal on it. Popular Nigerian Pastor, Chris Oyakhilome of the Christ Embassy church was once on television to convince the world that the COVID-19 pandemic is a conspiracy in association with the 5G network providers to introduce the antichrist (Augoye, 2020). Other individuals have proffered cures like regular involvement in sexual activity, sitting under the sun, or that the African blood is resistant to the virus with no scientific evidence. The result of all this misinformation is concluded in the opinions of Brennen, Simon, Howard, and Nieves (2020), which is that misinformation and disinformation about the global health crisis, COVID-19 pandemic creates a severe risk to peoples' health. Likewise, Woolley, Samuel, Howard, and Phillip (2016) believe that the principal effect of misinformation is to elicit fear and suspicion among the populace and social media are the means of transmission. In an attempt to proffer a way to discredit misinformation and disinformation regarding the COVID-19 pandemic on social media platforms, Dr. Mike Ryan, executive of WHO's Health Emergencies Programme posits that a vaccine is required against misinformation, and urges scientists to come forward on this regard.

3.0 Theoretical Framework

Anchoring on the supported literature review with an understanding of the public's behaviours and responses regarding the COVID-19 outbreak, this study proposed the hypodermic needle theory and agenda-setting theory as its theoretical framework and bases for the action and reaction of people towards the Covid-19 pandemic misinformation and disinformation where theory is understood as a means of understanding concepts and trends. In other words, a means by which phenomenon is rationalized and actions are interpreted.

3.1 Hypodermic Needle Theory (HNT)

In a lot of situations, people search for information regarding an issue of concern and ironically, are quick to accept appealing argument hook, line, and sinker because of the source from which it came. This is a literary description of how the Hypodermic Needle Theory (HNT) was birthed. The hypodermic needle theory was promulgated in the 1920s by Harold Lasswell according to Bajracharya (2018) as a propaganda technique used in World War1. Baran and Davis (2012) in their annotation submitted that the rational mind may be a mere façade, incapable of resisting powerful messages. Bajracharya (2018) of businessstopia.net went ahead to outline the following as features of Hypodermic Needle Theory (HNT)

- Humans are perceived to act uniformly to stimulus and instincts.
- Media injects or inserts messages into the people's brains as propaganda and manipulation like that by a bullet or syringe.
- Messages have their intention and are sent to get desired outcomes.
- The effect of messages is supposed to be encompassing, strong, immediate and dangerous.
- Messages are aimed at creating public opinion and changing behaviour of the audiences.
- The public is made to think similarly by the media.
- The audience is always thought to be vulnerable and passive.

As an affirmation, Lamb (2021) expressed the view that the hypodermic needle theory became the dominant way of brooding about media influence during the next decades after the 1920s. The needle theory may be linear communication which suggests that a media message is injected directly into the brain of a passive, homogenous audience.

3.2 Agenda Setting Theory - AST

Be it in the right or wrong direction, humans are always moving with an agenda, a purpose, or a motive to do something. Humans are always known to be full of plans made by them for themselves or made by others for them. Agenda setting theory fits in describing the nature of humans when the movement is suggested by others. Razinah (2014) in her study on agenda-setting explained that agenda-setting theory can be traced to 1922 when Lippmann expressed concern on the vital role that mass media can neutralize in influencing the setting of a certain image on the public's mind. In portraying the influence of mass media, she stated further that Lippmann indicates how mass media can set a specific agenda that may influence the opinions of the general public without ever using the term "agenda-setting theory" in his book, he nonetheless, generated the inspiration for the agenda-setting theory. In the latter years after Lippman, Agenda-setting theory was birthed in 1972 by Max McCombs and Donald Shaw following a study on Chapel Hill and the American presidential election (Asemah, Nwammuo, and Nkwam-Uwaoma 2017) Agenda Setting as defined in "Mass Media, Mass Culture" is that process whereby the mass media determine what we expect and worry about.

As an upshot, social media has brought the effect of hypodermic needle theory and agenda-setting theory clearer according to Nwabueze and Okonkwo (2018) that the role of traditional media has changed dramatically within the age of the internet-driven, 24-hour news cycle and therefore the proliferation of social media. The definition of the traditional mass media (radio, television, newspapers, and magazines) within the digital age has been expanded by two key developments (1) Web-enabled publication of massive user-generated content, and (2) Social media allows one-to-one communication, as against the structure of traditional media involving one-to-many communication. Today's world can best be described as fast-moving and hyper-sensitive to issues. This is a vulnerability that leaves the public so dependent on the media for the endless need to get information. This vulnerability is left for the media to exploit depending on the platform and motivation. To survive, society is described as docile by Herbert Simon in Secchi (2007) because people love to be fed information – HNT, that tells them what to do or what to think about –AST.

Nwabueze&Okonkwo (2018) explained further concerning COVID-19 that, social media is causing the hypodermic needle of misinformation and disinformation to spread faster, deeper and setting the agenda on the line of thought of so many people on how to respond to the pandemic through social interaction channels that functionally involve both sender and receiver. These media involve people across the world using a communication network where a message idea is introduced and therefore the final message content is determined by all after meaningful contributions. The success and recognition of social networking sites show that the thought of online sharing has been successfully taken to the social and private level (Embi and Hassan, 2012). This underscores the very fact that social media emphasize dialogue, where active senders and passive receivers play functional roles in shaping the message content.

COVID -19 Misinformation and Disinformation on Social media

Selected myths, misinformation, and disinformation about COVID-19 and facts compiled by Maragakis and Gabor (2019) include:

1. One misinformation on social media has it that a negative COVID test result means one is safe.
2. Another misinformation on social media was that taking Quercetin, essential oils and other supplements can protect one from the coronavirus or treat COVID-19.
3. Herd immunity will end the coronavirus pandemic. Herd immunity is a term that refers to cases of an infectious disease slowing down and stopping when enough people in a population have immunity, either from getting and surviving a disease or from being vaccinated.
4. You can protect yourself from COVID-19 by injecting, swallowing, bathing in, or rubbing onto your body bleach, disinfectants, or alcohols.
5. Warm water or saline will protect you from getting sick if you're exposed to the coronavirus.

3.3 Method

This study employed the survey research method to elicit responses from Abraka residents concerning COVID-19 pandemic misinformation and disinformation on Social media to fulfil the objectives of the study. The population of the study is the entire residents of Abraka as enumerated by the National Population Commission during the 2006 Census. The Sampling technique adopted is the purposive sampling method whereby the respondents were selected based on their possessing certain common characteristics of being certified teachers and staff of public schools. This means that these respondents are educated, enlightened and knowledgeable about the phenomenon of study Also known as subjective sampling; purposive sampling is a non-probability sampling technique where the researcher relies on his or her discretion to choose variables for the sample population. Here, the entire sampling process depends on the researcher's judgment and knowledge of the context.

Three public schools and three private schools in Abraka were chosen for this study. In each school, twenty teaching and non-teaching staff members were administered the structured questionnaire containing demographic and thematic questions

intended to provide answers to the research questions formulated to achieve the objectives of the study. This study adopted the focus group discussion approach whereby a particular group, teachers and non-teaching staff of three public and three private schools were chosen because they are educated and enlightened and thus deemed qualified to provide honest and objective answers to the structured questionnaire questions. The sample size was thus 120 respondents. The responses of the 120 purposively selected respondents provided the data analysed for the study. Out of the 120 questionnaires administered on a person-to-person basis, 118 copies were retrieved and found usable.

The responses of the 118 respondents are tabulated in the following tables.

Demographics

Table 1: Gender of Respondents

Gender	No. of Respondents	Percentage
Male	52	44%
Female	66	56%
Total	118	100

There were more females among the Focus group members.

Table 2: Age brackets of Respondents

Age Bracket	No. of Respondents	Percentage
22 – 32years	51	43%
33 – 41years	38	32%
42years & Above	29	25%
Total	118	100

Many of the respondents were young adults.

Table 3: Marital Status of Respondents

Marital Status	No. of Respondents	Percentage
Married	81	69%
Single	24	20%
Divorced	13	11%
Total	118	100

Table 4: Religion of Respondents

Religion	No. of Respondents	Percentage
Christianity	79	67%
Islam	6	5%
Traditional	33	28%
Total	118	100

Table 5: Occupation of Respondents

Occupation	No. of Respondents	Percentage
Teaching	82	69%
Non-teaching	36	31%
Total	118	100

Table 6: Educational Attainment of Focus group members

Educational Attainment	No. of Respondents	Percentage
NCE	48	41%
BA/BSc.	57	48%
MA/MSc/PhD	13	11%
Total	118	100

All the respondents were educated enough to understand the questionnaire questions.

Thematic Questions

Table 7: COVID- 19 Awareness

Extent of Awareness	No. of Respondents	Percentage
Barely Aware	21	18%
Very Aware	97	82%
Total	118	100

Majority of the respondents were aware of the COVID-19 pandemic

Table 8: Belief in the Existence of COVID-19

Response	No. of Respondents	Percentage
Agree	94	80%
Disagree	17	14%
Not Certain	7	6%
Total	118	100

Majority of the focus group members believed that COVID- 19 was real.

Table 9: Source of Knowledge of COVID -19

Source	No. of Respondents	Percentage
Radio	40	34%
Television	43	36%
Newspaper/Magazines	13	11%
Social media	22	19%
Total	118	100

Many of the focus group members got to know about COVID-19 from the Radio and Television.

Table 10: Believability/Acceptance of COVID-19 Information

Response	No. of Respondents	Percentage
Yes	39	33%
No	61	52%
Sometimes	18	15%
Total	118	100

There were more focus group members who did not believe nor accepted information they got on COVID – 19.

Table 11: Satisfaction with Health Information

Extent of Satisfaction	No. of Respondents	Percentage
Satisfied	43	36%
Dissatisfied	33	28%
Very Dissatisfied	42	36%
Total	118	100

Some of the respondents were satisfied with the health information they got while others were not satisfied.

Table 12: Perception of Sources of Information on COVID-19

Perception	No. of Respondents	Percentage
Positive	72	61%
Negative	42	36%
Undecided	4	3%
Total	118	100

Over half of the focus group members had a positive attitude towards the sources of COVID-19 information.

Table 13: Most Believed Source of COVID-19 Information

Source	No. of Respondents	Percentage
Government/Official	36	31%
Traditional media	38	32%
Social media	20	17%
Word of mouth	24	20%
Total	118	100

Table contains the responses of the 118 members of the focus group concerning the **mostbelieved** source of COVID -19 information.

Table 14: Knowledge/Awareness of Misinformation/Disinformation of COVID- 19

Response	No. of Respondents	Percentage
Yes	92	78%
No	10	8%
Not really	16	14%
Total	118	100

Majority of the focus group members were aware of misinformation and disinformation on COVID -19.

Table 15: Type of Misinformation/Disinformation known about COVID -19

Category of Misinformation/Disinformation	No. of Respondents	Percentage
A negative result from COVID-19 means one is safe	47	40%
Herb immunity ends COVID-19	22	19%
COVID -19 is caused by 5G Technology	21	18%
Alcohol and other ingested chemicals protect a person from COVID-19 infection	11	9%
Warm water or saline protects one from COVID-19 infection	17	14%
Total	118	100

The most circulated/known COVID -19 Misinformation/Disinformation is the one that alleged that COVID-19 was/is caused by 5G Technology.

Table 16: Reason for Choosing a Particular Misinformation/Disinformation.

Reason	No. of Respondents	Percentage
Personal Belief	39	33%
Because of Social Media	41	35%
My Intuition/Conviction/Religion	26	22%
Because of government/officials	12	10%
Total	118	100%

The responses of the Focus group members on reasons for picking a particular misinformation/disinformation are as tabulated above.

Table 17: Credible Source of Information on COVID -19

Source	No. of Respondents	Percentage
Government/Official	27	23%
Television	29	25%
Radio	23	19%
Social media/Internet	27	23%
Newspaper/magazines	12	10%
Total	118	100

Members of the Focus Group returned that Television sources were the most credible sources of information on COVID -19.

Table 18: Confirmation of Misinformation/Disinformation of COVID -19

Response	No. of Respondents	Percentage
Yes	87	74%
No	31	26%
Total	118	100

Most Focus group members later found that the initial information believed about COVID -19 turned out to be false – Misinformation.

Table 19: Social media Platforms as Sources of Misinformation/Disinformation

Response	No. of Respondents	Percentage
Agree	82	69%
Disagree	36	31%
Total	118	100

Most members of the focus agreed that Social Media platforms were sources of Misinformation and disinformation about COVID-19.

4.0 result of analysis and discussion

Relationship between covid-19 misinformation and disinformation on social media.

Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.980 ^a	.961	.948	2.11349

a. Predictors: (Constant), disinformation

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	331.799	1	331.799	74.280	.003 ^b
	Residual	13.401	3	4.467		
	Total	345.200	4			

a. Dependent Variable: misinformation

b. Predictors: (Constant), disinformation

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-6.264	3.592		-1.744	.179
	Disinformation	1.265	.147	.980	8.619	.003

a. Dependent Variable: misinformation

DECISION: Since p-value (0.003) is less than alpha value (0.005) we accept the null hypothesis and conclude that, there is significant relationship between covid-19 misinformation and disinformation on social media.

96.1% of the variance in covid-19 misinformation can be predicted by the variable 'covid-19 disinformation' which shows that the model is adequate for prediction.

Extent to which social media contributed to the spread of covid-19 misinformation and disinformation.

Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.984 ^a	.968	.957	.32845

a. Predictors: (Constant), the extent of contribution

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	9.676	1	9.676	89.695	.002 ^b
	Residual	.324	3	.108		
	Total	10.000	4			

a. Dependent Variable: social media

b. Predictors: (Constant), extent of contribution.

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.281	.322		.873	.447
	Contribution	.115	.012	.984	9.471	.002

a. Dependent Variable: social media

DECISION: Since p-value (0.002) is less than the alpha value (0.005), we accept the null hypothesis and conclude that there is a significant social media contribution to the spread of covid-19 misinformation and disinformation.96.8% variance in social media can be predicted by the variable 'extent of contribution' which shows that the model is adequate for prediction.

TO WHAT EXTENT HAVE NIGERIANS REACTED TO THE SPREAD OF COVID-19 MISINFORMATION AND DISINFORMATION ON SOCIAL MEDIA?

Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.987 ^a	.974	.965	.29370

a. Predictors: (Constant), reactions

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.741	1	9.741	112.926	.002 ^b
	Residual	.259	3	.086		
	Total	10.000	4			

a. Dependent Variable: social media

b. Predictors: (Constant), reactions

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.724	.251		2.881	.063
	Reactions	.096	.009	.987	10.627	.002

a. Dependent Variable: social media

DECISION: Since p-value (0.002) is less than alpha value (0.005) we accept the null hypothesis and conclude that there is a significant reaction to the spread of covid-19 misinformation and disinformation on social media.97.4% variance in social media can be predicted by the variable ‘extent of reaction’ which shows that the model is adequate for prediction.

EXTENT OF COMPLIANCE AND ACCEPTANCE WITH THE EXISTENCE AND SPREAD OF COVID-19 MISINFORMATION AND DISINFORMATION ON SOCIAL MEDIA.

Regression

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.979 ^a	.959	.945	.37058

a. Predictors: (Constant), compliance/acceptance

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.588	1	9.588	69.818	.004 ^b
	Residual	.412	3	.137		
	Total	10.000	4			

a. Dependent Variable: social media

b. Predictors: (Constant), compliance/acceptance

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.536	.454		-1.179	.324
	Compliance/accept	.150	.018	.979	8.356	.004

a. Dependent Variable: social media

Decision: Since p-value (0.004) is less than alpha value (0.005) we accept the null hypothesis and conclude that there is significant compliance and acceptance with the existence and spread of covid-19 misinformation and disinformation on social media.95.9% variance in social media can be predicted by the variable ‘extent of compliance and acceptance’ which shows that the model is adequate for prediction.

5.0 Summary

The study looked at how some enlightened and literate members (Primary and Secondary School staff members) of the society (Abraka and environs) perceive and believed in the misinformation and disinformation about COVID-19. This study employed the survey research method to elicit responses from Abraka residents concerning COVID-19 pandemic misinformation and disinformation on Social media to fulfil the objectives of the study. The population of the study is the entire residents of Abraka as enumerated by the National Population Commission during the 2006 Census. The Sampling technique adopted is the purposive sampling method whereby the respondents were selected based on their possessing certain common characteristics of being certified teachers and staff of public schools. This means that these respondents are educated, enlightened and knowledgeable about the phenomenon of study Also known as subjective sampling. The statistics reveal that misinformation and disinformation is a twin problem fighting against the efforts made by Government in addressing the COVID-19 pandemic in Nigeria and in Abraka to be specific as the study typifies

5.1 Conclusion

According to the data reviewed for this study, misinformation and disinformation which mostly originated from social media had an impact on the COVID-19 perception and treatment by Abraka residents.This is consistent with Hypodermic Needle Theory and the Agenda-Setting Theory which act as the stimulus in response to misinformation and disinformation that is detrimental to the management of the dreadful pandemic.However, the statistics reveal that misinformation and disinformation is a twin problem fighting against the efforts made by Government in addressing the COVID-19 pandemic in Nigeria and in Abraka to be specific as the study typifies. This is quite disturbing, as it is expected that the target population are educated and enlightened to know what wrong information from the right ones is. This trend gives a disturbing publicity to the negative perception of COVID -19 and its treatment options by other population of the society that are not educated, who rely on the educated people for information.

5.2 Recommendations

One of the recommendations of this study encourages the general public to watch against misinformation and disinformation by checking the credibility of any information received to guard against the misleading citizens about issues of health. The public health authorities such as the NCDC, WHO, UN, cooperate bodies, NGOs, should be relentless in initiating proper measures against disastrous information at all times especially during a pandemic.

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