

Facebook and COVID-19 misinformation: Perception of residents of Jos North Local Government Area, Plateau State, Nigeria

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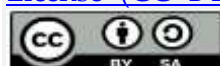
Abstract: The concerns over COVID-19 misinformation on social media platforms, particularly on Facebook have attracted scholarly interrogations worldwide, particularly on the use of its platform to peddle lies and share falsehoods about the pandemic. Hence, the study examined Facebook and COVID-19 misinformation: Perception of residents of Jos North Local Government Area, Plateau State, Nigeria. The work was guided by three research objectives and hinged on conspiracy theory. It employed a survey research design and a questionnaire for data collection. The population of the study was 4,200,400 while the sample size was 385 purposively selected and with 377 returned valid and analysed. Findings show that Facebook has been used to spread misinformation about COVID-19 and to a reasonable extent too. Further findings reveal that false information about COVID-19 on Facebook has compromised preventive actions. It, however, concluded that the menace could be curbed using multiple ways such as sourcing information from reliable Facebook accounts such as from the World Health Organization (WHO) and Nigeria Centre for Disease Control (NCDC); monitoring and removing COVID-19 misinformation as well as using verifiable testimonials of survivors on Facebook, including encouraging stakeholders in the health sector to increase their campaigns. Consequently, the paper recommends that Facebook users need always make critical judgments regarding the information they post concerning the virus. It also recommends that there should be intensive campaigns by the World Health Organization (WHO) and other relevant health institutions and governments across the globe on the need to sensitize people to desist from spreading misinformation on COVID-19.

Keywords: Conspiracy Theory, COVID-19, Facebook, Misinformation, Perception

1. Introduction

In a period of conflict, disaster, emergency, epidemic, or pandemic, the search for information is often at its peak. This was evident in the outbreak of the COVID-19 pandemic. The outbreak brought about an increase in the search for information about the disease (Izhar & Torabi, 2022). People searched for information on its origin, mode of transmission, treatments, management, and other related terms that became synonymous with the virus such as asymptomatic, community spread, contact tracing, flattening the curve, herd immunity, incubation period, index-case, and lockdown. Others include pandemic, community transmission, nonpharmaceutical measures, physical and or social distancing, personal protective equipment (PPE), SARS-CoV-2, quarantine, ventilator, vaccine, among others (Wang, Pan, Wan, Tan, Xu, Ho & Ho, 2020).

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Owing to the increased in the search for information about the novel virus, people turned to and relied on different information sources to satisfy their information needs as well as to educate themselves about the pandemic; its symptoms and precautionary measures (Khalifa, Al-Absy, Badran, Alkadash, Almaamari & Nagi, 2020). Adomi and Oyovwe-Tinuoye (2021) highlights this when they aver that the public's information sources on COVID-19 were the internet, (the government's - NCDC and WHO websites), social media, television, and radio. Both the traditional and new media provided information on the disease with some being false and others been factual (Khalifa et. al., 2020). While the traditional media provided information on the virus at press time; once a day for newspaper with daily publication and intermittently during programmes on radio and television, the new media such as Facebook, Instagram, Twitter, Google Trends, Bing, and Yahoo provided information almost on a regular basis thus became the leading sources of information on the coronavirus (Depoux, Martin, Karafillakis, Preet, Wilder-Smith & Larson, 2020). Ferreira and Borges (2020) corroborate Depoux et al. (2020) when they aver that during the peak of the pandemic, social media grew to become one of the most important sources of information with 65.2% of people turning to them for information.

The reliance on social media as information sources on the coronavirus did not come as a surprise considering the characteristics of web-based applications that enable people to create, speedily share and easily access information such as preventive measures and management strategies (Khalifa et al., 2020). Similarly, the increased use of social media platforms for sharing and sourcing information on the disease is attributed to the vast number of people who have access to them at a given point in time compared to the mainstream media. Chaffey (2022) estimated that there were 58.4% (4.62% billion people) users of social media as of January of 2022 thus making these platforms, not only a meeting place for socialization but a place with ample information, including on the coronavirus pandemic. More so, the social media users' numerical advantage and the pluralism of voices that it permits as opposed to the traditional media with limited voices, made them valuable as well as easily accessible sources of information on the pandemic (Brooks, Webster, Smith, Woodland, Wessely, Greenberg, FRCPsych & Rubin, 2020). At the peak of the pandemic, particularly during the lockdown, social media were not only used to provide information on the disease but were also used platforms to communicate with loved ones, release stress and escape tension as well as help patients in isolation to reduce loneliness. Information disseminated on social media was crucial in helping in the identification and detection of the disease; it furthers help in the interpretation of public attitudes, behaviors, and perceptions (Jordan, Hovet, Fung, Liang, Fu & Tse, 2018).

The above assertion is true for Facebook, a platform that has carved a niche for itself as the global leading social networking site in terms of daily and monthly active users which is put at 1.93 billion and 2.91 billion (Statista, 2022); time spent which is averaged at 2 hours and 24 minutes daily (Deyan, 2022) and preference when compared to other networking sites (NOI Polls, 2016). The social media platforms have become essential components of our everyday lives and it is used by government and their officialdom, non-governmental organization, healthcare organizations, and private citizens. Many organizations, especially those in the health sector, have adopted social media platforms and are using them to reach their target demographics (Thackeray, Neiger, Smith & Van Wagene, 2012).

Facebook with its massive daily user base has made it possible for the platform to play a crucial role in information sharing about the COVID-19 pandemic and influencing how the world responds to the disease (Merchant & Luriel, 2020). Health organizations such as the World Health Organization (WHO), the Centers for Disease Control and Prevention (CDC), and other healthcare organisations regularly give advice about the virus on various social media sites, including Facebook (Merchant & Luriel, 2020). The National Centers for Disease Control and Prevention (NCDC) often use Facebook to educate and inform Nigerians about the pandemic.

While Facebook should be commended for providing a platform for the dissemination of information on the pandemic to the global audience to help them respond to the disease and preventive measures positively, its platform has been paradoxically also being used to spread misleading information about the pandemic (Khalifa et al., 2020). Content on the pandemic from both health experts and nonexpert professionals flooded the platform. Laato, Islam, Islam and Whelan (2020) opine that people shared information from diverse sources without verifying them and because of information overload thus undermined global campaigns in curbing the spread of the virus. Nigerian Health Watch (2021) buttresses the above when they state that the overwhelming amount of information on Facebook about the pandemic provided multiple sources of information which created room for misleading information to be shared.

Information emanating from Facebook users who are not experts on health matters and who failed to verify the authenticity triggered the spread of misinformation on the virus on a global scale, including in Nigeria. Hence, the need to study Facebook and COVID-19 misinformation: perception of residents of Jos North Local Government Area, Plateau State, Nigeria.

2. Statement of the problem

Facebook has received criticism for allowing its users to use its platform to disseminate misleading information on COVID-19 thus making the prevention, curtailment, management, and treatment of the disease difficult (Broniatowski, Kerchner, Farooq, Huang, Jamison, Dredze, Quinn & Ayers 2022; Mayhew, 2021; Nigerian Health Watch, 2021). Scholars have looked at Facebook and misinformation on the pandemic from different perspectives (Egielewa & Ate, 2020; Inobemhe, Ugbe & Udeh, 2020; Adomi & Oyovwe-Tinuoye; Izhar & Torabi, 2022). For instance, Egielewa and Ate (2020) looked at COVID-19, misinformation and disinformation: an investigation of Nigerians' perspective of social media health awareness initiatives; Inobemhe, Ugber and Udeh (2020) examined COVID-19 conspiracies, myths, and fake news on social media and how the hoax was endangering Nigerians' lives; Annune, Agoh, Annune and Ihongo (2020) looked at sensitization and awareness creation as tools for curbing perceived effects of COVID-19 pandemic on university library users in Nigeria and, Adomi and Oyovwe-Tinuoye (2021) examined the pandemic from the standpoint of information seeking and utilisation among library and information science professionals in Nigeria. While these studies have contributed knowledge to the existing body of literature, there is, however, a dearth of literature on Facebook and COVID-19 misinformation from the standpoint of the public. Against this backdrop, this study, consequently, examines Facebook and COVID-19 misinformation from the perspective of residents in Jos North Local Government Area, Plateau State, Nigeria.

3. Research objectives

The investigation of Facebook and COVID-19 Misinformation: Perspective of Residents of Jos North Local Government Area, Plateau State, Nigeria, is the main goal of this study. While the specific objectives include:

1. To find out if the resident of Jos North Local Government Area, Plateau State, Nigeria perceive Facebook as a platform that spread misinformation on the COVID-19 pandemic.
2. To establish their perception of the extent to which misinformation on the COVID-19 pandemic spread on Facebook.
3. To ascertain their perception on how misinformation on the COVID-19 pandemic on Facebook has undermined preventive measures.
4. To establish their perception on how to curb misinformation on the COVID-19 pandemic on Facebook.

4. Literature review

4.1. COVID-19

COVID-19 also known as coronavirus is a novel and large family of zoonotic viruses that emanated towards late 2019. As a zoonotic virus, it implies that it can be transmitted from animals to humans. It causes illness ranging from common cold to more severe respiratory diseases with the first official cases documented on the 31st of December of the same year in Wuhan City, Hubei Province, China (World Health Organisation, 2023). Nwafor, Ugwuanyi and Amatu (2023) add that COVID-19 is a multifaceted international public health crisis that was first recorded in Wuhan, China in 2019. Since the incidence, there is a lot of infodemics around the world about the sickness; its mode of transmission, treatment and prevention. It was declared a public health emergency of international concern on the 30th of January 2020 and on 11th March 2020, it was declared a pandemic following its global spread; its first such designation since the swine flu caused by Hemagglutinin 1 Neuraminidase 1 (H1N1) influenza in 2009 (David, 2021). The virus's symptoms are likened to common cold and respiratory-related illnesses including dry cough, shortness of breath, and breathing difficulty. Others include fever, loss of sense of smell and taste, and diarrhea. Severe cases could cause pneumonia, severe acute respiratory syndrome, kidney failure as well as death (McLeod, 2020). The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was officially named on 11th of February

2020, by the Coronaviridae Study Group (CSG) of the International Committee on Taxonomy of Viruses (Coronavirus Study Group (CSG) of the International Committee on Taxonomy of Viruses, 2020).

The outbreak of the disease affected the world in multiple and negative ways. Social interaction was brought to the barest since the virus transmits through contacts with individuals who have contracted it; local and international travel were impeded as airports, railway and parks were shut; social events such as sports, carnivals and other related public functions were put on hold indefinitely; schools were forced to close, and international trades as well as other forms of international collaborations were adversely affected, particularly when national and international borders were compelled to shut down following the declaration of lockdown which lasted for several months (Amzat, Aminu, Kolo, Akinyele, Ogundairo & Danjibo, 2020).

As of 19th of March 2023, the world has recorded over 760 million confirmed cases, and over 6.8 million lives have been lost to the disease (WHO, 2023). The index case in Nigeria was reported on February 27, 2020, after an Italian national who worked there and had returned from Milan, Italy, two days earlier, returned a positive test in Lagos (Ministry of Health, 2020). As of 28th March 2023, 5,708,974 samples have been collected with 266,660 confirmed cases, and 3,155 recorded deaths (NCDC, 2023). Despite the huge figures stated, tremendous success has been recorded in flattening the curve of the pandemic, and death caused by the virus has been significantly curtailing across the world. One of the measures that have proven to be effective in curtailing the spread of the pandemic is the development, deployment, and administration of vaccines across the world (Lucas & Ejiga, 2022). Despite the successes recorded, like the COVID-19 pandemic, these vaccines have also been shrouded with misinformation shared online, including on Facebook (Harvard Kennedy School Misinformation Review, 2021).

4.2. Facebook

Studies and advancement of the Internet architectural framework from static Web 1.0 to interactive Web 2.0 paved the way for the emergence of social media platforms, including Facebook. Facebook was created in February 2004 as a website exclusively for Harvard students by Mark Zuckerberg, Dustin Moskovitz, and Chris Hughes. It rapidly expanded to include college students with.edu email addresses; then between 2005 and 2006 it further expanded to include high school networks, then workplace networks, and finally to include all users of the Internet worldwide (Valenzuela, Park & Kee, 2008). According to Olutade (2021), Facebook is a free platform of social networking sites that permits individuals around the globe to register and voluntarily create user's profiles, post pictures, and videos, keep in touch with loved ones. Since its modest beginnings in 2004, Facebook has expanded quickly with Statista (2022) estimating that the platform has over 2 billion users and 1.93 billion active daily users thus making it the most popular social media platform worldwide. In Nigeria, as of January 2023, Facebook users were estimated to be about 26,178,700 million (NapoleonCat, 2023).

The social media platform Facebook has proven to be popular and important in facilitating online communication. Several scholars have been interested in this social network due to its enormous popularity and expansion, and many of them have started studies. Via the COVID-19 Information Centre on the Facebook app and Instagram, which has connected over two billion people across 189 countries and provided accurate and useful COVID-19 information, the platform has continued to develop to satisfy the interactivity and interconnectivity needs of its users (Jin, 2021).

4.3. Misinformation

Advancement in technology and the proliferation of social media platforms has made information available to a global audience, increasing the spread of information and misinformation. The term "misinformation" became popular after the 2016 United States (U.S.) presidential election (Quandt, Boberg, Frischlich & Schatto-Eckrodt, 2019). It has several definitions depending on how it is formulated and the context in which it is used. As popular as the term misinformation is, there is, however, no universally accepted definition.

Cooke (2017) sees misinformation as a type of information while Zarocostas (2020) on the other hand sees it as false, rumors, gossip, and misleading use of facts. Lewandowsky, Ecker, Seifert, Schwarz, and Cook (2012) described misinformation as information originally presented as being accurate but found to be inaccurate. Misinformation has negative consequences on our societies' ability to digest information that can influence every facet of our national life, including the health sector (Aral, 2020). Zarocostas (2020) described

the term misinformation as false or inaccurate information deliberately intended to deceive. For this study, the term 'misinformation' is defined as unintentional information that misleads members of the public to make a wrong judgment or behave in a way that is contrary to the expected action.

4.4. Facebook and misinformation on the COVID-19

The COVID-19 misinformation on Facebook is not only peculiar to the western world but also a common occurrence in Nigeria. False conspiracy theories that claim the disease was bioengineered in a lab in Wuhan or that the 5G cellular network is causing or exacerbating symptoms of the virus are just two examples of the widespread misinformation about COVID-19 that has circulated on social media, especially Facebook (BBC News, 2020). There was a fallacy or myth that Nigerians were immune to the virus and that COVID-19 was a hoax that was endangering lives during the early phase of the virus outbreak in Nigeria (Aiyewumi & Okeke, 2020).

The spread of this untrue information has not helped matters in the management of the pandemic but has increasingly created problems, especially for the global healthcare system (BBC, 20221; Mayhew, 2020). According to a report by Milmo (2021), more than a dozen Facebook and Instagram profiles, pages, and groups that collectively have amassed about 370,000 followers over the past year have permitted the propagation of false information and skeptic views about COVID-19, notably on vaccines. Milmo (2021: 2) further claims that Facebook has been letting false information about the pandemic spread on its site, citing posts in Facebook groups that suggest youngsters are being "murdered by the experimental shot they're being urged to take".

4.5. The danger of COVID-19 misinformation of Facebook

Studies have established the danger misinformation poses to the campaign to win the war against the spread, mutations, and the death daily records as a result of the virus (Al-Zaman, 2021; BBC, 2021; Bode & Vraga, 2015; Broniatowski, Kerchner, Farooq, Huang, Jamison, Dredze, Quinn & Ayers, 2022; Collins 2021; Gabarron, Oyeyemi & Wynn, 2021; WHO, 2021). According to WHO (2021), there has been an excess flow of information on the pandemic, including misleading and fabricated news that are being spread thereby complicating response efforts. The WHO Director-General, Tedros Adhanom Ghebreyesus states, "We're not just battling the virus.... We're also battling the trolls and conspiracy theorists that push misinformation and undermine the outbreak response" (para. 2).

Collins (2021) posited that the misinformation on Facebook has been a long-time concern for physicians as the "viral spread of lies and conspiracy theories online has led people to refuse safe and effective vaccines and enabled a deadly wave of the Delta variant" (para.1). BBC (2021) expressed concerns on the danger of misinformation when they reported that it has a huge consequence on public health, public perspective on contagious like the ravaging COVID-19 and has influenced the level of compliance to safety measures. A study conducted by Bode and Vraga (2015) found that misinformation is misleading and has damaging consequences. Al-Zaman (2021) corroborated Bode and Vraga (2015) when he states that misinformation "challenges human communication, producing tension, misunderstanding, and disbelief" (p. 100). On the other hand, Mayhew (2020) said that inaccurate information about the COVID-19 on social media platforms has caused anxiety, tension, misunderstanding, and misinterpretation, creating a new hazard to public health communication. According to research by Broniatowski et al. (2022), also found that misinformation in the online space is undermining the campaign against the pandemic thus the need to address the negative effects of online disinformation on public health behaviours.

BBC News (2020, para. 1) avers that "At least 800 people may have died around the world because of coronavirus-related misinformation in the first three months of this year". While Ahmed, Vidal-Alaball, Downing, and López Segú (2020), as cited in Gabarron et al. (2021), proposed that inaccurate information about the pandemic is preventing people from acting in a way that would help protect their health and the health of others, leading them to spread the disease or engage in other problematic behaviours. The WHO has also acknowledged the risk posed by false information on COVID-19.

4.6. Curbing misinformation on the COVID-19 on Facebook

While COVID-19 misinformation on social media, especially Facebook, is a worldwide concern, it must be addressed from multiple angles to be contained. Facebook has collaborated with governments from more than 120 nations as well as international agencies like the World Health Organization (WHO) and United

Nations Children's Fund (UNICEF) to disseminate accurate information about the COVID-19, including providing support lines on WhatsApp. In addition to continuing to collaborate with researchers and public health officials by giving them up-to-date information and tools to help them forecast and understand the disease, effective prevention measures, the platform has been working tirelessly to combat the threat of misinformation on it (Jin, 2021).

WHO (2020) has created and made available shareable infographics to dispel myths and other false information. To promote accurate, factual, dependable, and true information above false information, the worldwide health organization has also produced and distributed shareable infographics (dubbed "mythbusters") that dispel specific COVID-19 falsehoods (WHO, 2021). According to academics like Juliet (2021) and Longstal (2005), Facebook should saturate its online space with accurate and trustworthy information that can aid the public in making informed decisions, changing their behavior for the better, and adhering to the measures, particularly the nonpharmaceutical protocols put in place to curtail the virus, including the types of treatment.

Creating campaigns against the spread of false information on the pandemic is effective. A prime example is BBC's "Stop the Spread," which debuted in May and June 2020 on its global television network, website, and apps (BBC, 2021). Another strategy employed by the World Health Organization (WHO) to reduce the harm and spread of inaccurate information is to increase public awareness of the amount of misinformation about the COVID-19 and to encourage individuals to confirm facts (2020). Similarly, removing or deleting misinformation is gradually proven to be an effective means of curbing the menace of misinformation on Facebook. Jin (2021: 6) emphasises this when she states, "we've removed more than 12 million pieces of content on Facebook and Instagram containing misinformation that could lead to imminent physical harm".

5. Empirical review

In a paper titled "COVID-19-Related Misinformation on Social Media: A Systematic Review," Gabarron, Oyeyemi and Wynn (2021) examined this issue. The study's major goal was to examine false information about the coronavirus disease of 2019 (COVID-19) that circulated on social media during the pandemic's initial stages and to explore strategies for dispelling false information. A qualitative research approach was used for this investigation. The percentage of COVID-19 misinformation on social media was found to range from 0.2% (413/212 846) to 28.8% (194/673) of posts, according to the research. Among the 22 investigations, 11 did not classify the kind of false information associated with COVID-19, nine detailed false information myths, and two reported sarcasm or humor. Only four studies examined the potential effects of disinformation about COVID-19, and all four investigations found that it caused dread or panic. According to the study's findings, social media is becoming a more significant tool for disseminating reliable information as well as false information. The study recommended that healthcare organizations use its findings to help them get ready for future COVID-19 infodemic phases and other infodemics in general.

In 138 nations, Al-Zaman (2021) studied the prevalence and source analysis of COVID-19 disinformation. In order to determine the prevalence and sources of misinformation in various nations, the study examined 9657 pieces of false information that originated in these 138 countries and were fact-checked by 94 organizations. India (15.94%), the USA (9.74%), Brazil (8.57%), and Spain (8.03%) are the four nations most affected by misinformation, according to the results. The study assumed that there would be a positive correlation between the COVID-19 solution and the occurrence of COVID-misinformation. Most of the COVID-19 misinformation came from social media (84.94%), and most of it overall (90.5%) came from the internet. According to the survey, out of all social media platforms, Facebook alone was responsible for 66.87% of the misinformation.

Fighting COVID-19 misinformation on social media: experimental evidence for a scaleable accuracy-nudge intervention was the focus of a 2020 study by Pennycook, McPhetres, Zhang, Lu and Rand (Pennycook, McPhetres, Zhang, Lu & Rand, 2020). The survey research design was used for the investigation. Results showed that people spread misleading information about COVID-19 in part because they do not consider the accuracy of the content well enough before sharing it. Comparatively to when they were questioned explicitly about accuracy, participants performed much worse when choosing what they would share on social media. Furthermore, discernment was linked to higher levels of cognitive reflection and science knowledge. Further findings revealed that a straightforward accuracy check at the start of the study-evaluating the correctness of a headline unrelated to COVID-19-nearly tripled the degree of real

discernment in participants' subsequent sharing intentions. According to the study, encouraging people to consider accuracy can help them make better decisions about what information to post on social media.

Daloeng and Ejiga (2020) used survey to obtain data from respondents in Jos on the topic "Use of internet memes in creating awareness of the COVID-19 pandemic among youths in Jos Metropolis, Plateau State, Nigeria". The study was guided by the visual rhetoric mode. Result from the research indicated that Facebook was the dominant social media tool that the youth in Jos used to get memes information concerning coronavirus. The study equally established that most of the information posted on Facebook using memes were misleading. As a way forward, the research suggested that governments and health workers all over the world should take advantage of Facebook to share health information to the people. It was also recommended that the mass media, health organizations, the government and the educational setting should devote time to educate the people on how to employ visual communication tools so as to assist in countering the deployment of memes to circulate fake information about ailments on the social media.

6. Theoretical framework

Conspiracies are the foundation of the study. COVID-19 has been the subject of conspiracy theories since the onset of the pandemic (Chen, 2021). The proliferation of conspiracy theories in the open media of the internet age has led to worries about how misinformation shapes public opinion and the COVID-19 pandemic problem.

A conspiracy theory is an explanation for an occurrence or circumstance that suggests a political, frequently evil, and strong group is involved (Jaron & Stef, 2021; Ted, 1994). This suggests that a conspiracy theory is a hypothesis in which a highly significant secret is being withheld from the general population. Conspiracy theories are attempts to explain events or behaviors in terms of actors secretly misusing their power to attain their own aims (Sunstein & Vermeule, 2009; Uscinski & Parent, 2014).

Facebook and other social media platforms aid in the propagation of rumours among partisan groups of people, but they do not always aid in the eradication of incorrect information (Shin, Jian, Driscoll, & Barr, 2016). Like with Facebook postings regarding the Zika virus in 2016, misleading posts are frequently more popular than posts with genuine information (Sharma, Yadav, Yadav & Ferdinand, 2017).

Conspiracy theories and misinformation are frequently supported by people due to their own psychological requirements for stability and control (Festinger, 1957; Kunda, 1990). When evaluated in the framework of a compelling story that aligns with one's preexisting ideas, unrelated and unresolved events and practices can be more easily understood. Liberals and conservatives alike are prone to accepting ideas that match with their pre-existing views, and partisan ideology has been proven to play a role in the motivated reasoning that goes into conspiracy theory endorsement (CTE) (Miller, Saunders & Farhart, 2015). Therefore, the theory was considered relevant to the study because some of the information disseminated online during the COVID-19 pandemic were capable of misleading policy makers, hindering crisis relief and public efforts to contain the disease, as well as undermine trust in institutions and science.

7. Methodology

For this study, a questionnaire was used as the primary data collection tool in a survey research design. Residents of Jos North Local Government Area in Plateau State made up the study's population, estimated to be 4,200,400 (City Population, 2021). Survey Monkey's sampling calculator was used to determine the study's sample size of 385 and they were then administered copies of the questionnaire on a face-to-face basis using the purposive sample approach which allowed for data collection from only the residents who use Facebook.

Further, the questionnaire was then administered to the respondents in Tudun Wada, Jenta Adamu, Kabong, Alheri, Farin Gada, Babale, Larantos, Angwa Rogo, Naraguta, Angwa Rukuba, Fudawa, Furaka, Gwash, Gwafan, Nasarrawa Gwog, Rusau, Terminus, Targwong and Dong. In the end, the researchers retrieved all the questionnaire copies distributed but only 377 were correctly filled and found valid for analysis. Therefore, the data presented and analyzed were based on 98% validity of the questionnaire administered. A five-point Likert scale and the criteria mean of 5 points is 3.00 and a frequency table was used. When the table mean is greater than the criteria mean, that is, from 3.00 and above, the statement is accepted, according to the Likert scale's criterion mean of 3.00. However, if the table mean is smaller than

the criteria mean-i.e., less than 3.00-it suggests that the assertion is rejected. The study then presented and analyzed data using mean deviation, frequency tables, and straightforward percentages.

8. Result and discussion

Table 1: Does Facebook Spread Misinformation on COVID-19 Pandemic?

Strongly Agreed	Agreed	Undecided	Disagreed	Strongly Disagreed	Mean Rating	Decision
75	147	71	43	39	3.5	Accepted

Sources: Field survey, 2023.

Table 1 implies that the respondents accepted that Facebook does spread misinformation on the COVID-19 pandemic with a mean rating of 3.5.

Table 2: To What Extent Does Misinformation on COVID-19 Spread on Facebook?

Very Great Extent	Great Extent	Medium Extent	Low Extent	Very Low Extent	Mean Rating	Decision
83	113	75	55	51	3.3	Accepted

Sources: Field survey, 2023.

Table 2 implies that the respondents accepted that misinformation on the COVID-19 pandemic spread to a reasonable extent on Facebook with a meaning rating of 3.3. It also implies that misinformation on the COVID-19 pandemic on Facebook has reached a worrisome height as perceived by the respondents.

Table 3: Has Misinformation on Facebook about the COVID-19 Undermined Preventive Measures of the Disease?

Strongly Agreed	Agreed	Undecided	Disagreed	Strongly Disagreed	Mean Rating	Decision
73	149	63	47	45	3.4	Accepted

Sources: Field survey, 2023.

Table 3 shows that the respondents accepted that misinformation on Facebook about the COVID-19 have undermined preventive measures of the disease with a mean rating of 3.41. It also implies that misinformation on Facebook about the COVID-19 is perceived by the respondents to be hindering preventive measures of the infectious disease.

Table 4: Would any of these be a Better Method of Curbing Misinformation on Facebook about the COVID-19 Pandemic?

Response	Frequency	Percentage [%]
Sourcing info from reliable sources like WHO and NCDC websites and Facebook accounts	63	17
Facebook monitoring and delete COVID-19 misinformation on Facebook.	43	11
Use of testimonials on Facebook on COVID-19 by survivors to establish whether the disease.	15	4
Relevant bodies [WHO, NCDC, and other recognised health institutions] should increase their campaigns on COVID-19 misinformation on Facebook.	22	6
The media [radio, television, newspaper, magazine, etc.] should increase awareness campaigns on the disease.	11	3
All of the Above	223	59
Total	377	100

Sources: Field survey, 2023.

Data contained in Table 4 implies that misinformation of the COVID-19 on Facebook could be curbed in multiple ways. Majority of the respondents [59%] perceived that COVID-19 misinformation on Facebook could be curbed, it, therefore, implies too that by implementing all of the above options provided in the table COVID-19 misinformation on Facebook will be addressed among the respondents.

9. Discussion of findings

The discussion of findings was done according to the research objectives as follows:

The data obtained and analysed reveals several things as it relates to Facebook and COVID-19 misinformation from the standpoint of the residents of the study.

Research Objective One: To find out if the residents of Jos North Local Government Area, Plateau State, Nigeria perceive Facebook as a platform that spread misinformation on the COVID-19 pandemic: The first finding of the study shows that Facebook does spread misinformation on the COVID-19 pandemic as perceived by the residents of Jos North Local Government in Plateau State, Nigeria. This finding agrees with the work of Bode and Vraga (2015) that found that, besides the platform being used for dissemination of information on the pandemic, it also provided misleading information that undermines measures rolled out to curtail the spread with damaging consequences. The misleading post on Facebook groups that that people who were receiving the early vaccines were being pressure to do so as well as being murdered (Melmo, 2021) also highlight this concern.

Research Objective Two: To establish their perception of the extent to which misinformation on the COVID-19 pandemic spread on Facebook: Another finding from the work reveals that misinformation on the COVID-19 pandemic spread to a reasonable extent on Facebook thus aligns with the report of WHO (2020) which avers that misinformation on social media, including Facebook spreads faster than the coronavirus diseases (COVID-19). The results is also in line with that of Melmo (2021) who found that false material regarding the COVID-19 vaccine was permitted to circulate on Facebook through more than a dozen accounts, pages, and groups that combined have amassed about 370,000 followers in the last year.

Research Objective Three: To ascertain their perception on how misinformation on the COVID-19 pandemic on Facebook has undermined preventive measures: Furthermore, finding from the study shows that COVID-19 misinformation on Facebook has undermined preventive measures as perceived by the respondents. This result supports Al-assertion Zaman's from 2021 that false information on Facebook "challenges human communication, generating tension, misunderstanding, and disbelief." The discovery supports the findings of Melmo (2021) and Mayhew (2020), who found that misinformation about COVID-19 on Facebook has caused anxiety, tension, misunderstanding, misinterpretation, and vaccine hesitation, posing a new hazard to public health communication. The finding is also in line with the assertion of Collins (2021) who posits that the widespread of misleading information and conspiracy theories online on COVID-19 have led people to refuse safe and effective vaccines and enabled a deadly wave of the Delta variant. BBC (2021) reported that misinformation has a huge consequence on public health, public perspective on contagious like the ravaging COVID-19 and has influenced the level of compliance to safety measures.

Research Objective Four: To establish their perception on how to curb misinformation on the COVID-19 pandemic on Facebook: The study also found that COVID-19 misinformation on Facebook could be curbed in multiple ways such as sourcing information from reliable sources like World Health Organization (WHO) and Nigeria Centre for Disease Control (NCDC) websites as well as their Facebook accounts; by Facebook monitoring and deleting of COVID-19 misinformation on its platform; use of testimonials on Facebook on COVID-19 by survivors to establish that the disease exists, relevant bodies [WHO, NCDC, and other recognised health institutions] should increase their campaigns on COVID-19 misinformation on Facebook and the mainstream media [radio, television, newspaper, magazine, etc.] should increase awareness campaigns on the disease. These findings are in agreement with the work of Jin (2021) who recommended that Facebook should take charge by removing the COVID-19 misinformation from its platform. The emphasise on health institutions increasing their sensitisation campaigns on the pandemic is in agreement with WHO (2020) advocacy for increase of sensitisation on the pandemic to have people stay safe and flatten the curve.

10. Conclusion/Recommendations

The study investigated how inhabitants of Jos North Local Government Area in Plateau State, Nigeria, perceived Facebook, and COVID-19 misinformation. In the study population, like in other areas of the world, the work concluded that Facebook has been found to be disseminating false information about the

virus to a reasonable extent, has established empirically. The study further concluded that, in the eyes of the citizens of Jos North Local Government in Plateau State, Nigeria, false information about COVID-19 on Facebook has compromised preventive actions. However, the research concluded that the menace of the COVID-19 misinformation on Facebook could be curbed in multiple ways such as sourcing information from reliable Facebook accounts such as from the World Health Organization (WHO) and Nigeria Centre for Disease Control (NCDC); monitoring and removing COVID-19 misinformation as well as using verifiable testimonials of survivors on Facebook, including encouraging stakeholders in the health sector to increase their campaigns on COVID-19 misinformation on Facebook.

Therefore, Facebook users need to always make critical judgments regarding the information they post and access on Facebook concerning COVID-19. Such users may be able to lessen their propensity to spread false information on COVID-19 if they have the necessary knowledge, awareness, and capacity to recognize bogus content on the platform. Equally important is intensive campaigns by World Health Organisation (WHO) and other relevant health institutions and governments across the globe on the need to sensitise people to desist from spreading misinformation on Facebook about COVID-19. Fake information about the COVID-19 is unacceptable as it undermines the preventive efforts of health authorities. Further, Facebook should increase their monitoring and removal of misleading information about the COVID-19 pandemic and should sanction users who repeatedly contravene their guidelines while using their platform.

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