Conspiracy Theories and Misinformation on COVID-19: The Roles of Nigeria Academic Librarians

Hajara Yakubu [1*], Bala Haruna [2] and Maryam Muhammad Liman [3]
[1] University Library Complex, Federal University Dutsin-Ma, Katsina State, Nigeria.
[2] Bauchi State University, Gadau, PMB 065, Itas/Gadau LGA, Bauchi State, Nigeria.
[3] University Library, Bayero University Kano, Kano State, Nigeria.
*Corresponding author email id: balanjahun@gmail.com

Abstract – The novel coronavirus disease-2019 popularly called COVID-19 is being saturated by false information or misinformation which is also known globally as "infodemic". This has invariably created fear and tension amongst people. This paper highlights the conspiracy theories and misinformation hovering around the disease, its consequential effects on the public, the involvement of the community on measures to avert the spread of the disease, and its false information. The paper also discusses the roles required of academic librarians as information managers in the curtailment of the spread of the disease and the associated false information. It suggests a way forward that Nigeria academic librarians can utilize in restraining the spread of misinformation or false information and conspiracy theories regarding coronavirus as part of their contributions to the national development of the country and worldwide in general.

Keywords – Academic Librarians, Conspiracy theories, Misinformation, COVID-19, Nigeria.

I. INTRODUCTION

'Information is power' is a popular saying amongst people. Before the advent of ICT and social media, the spread of information was very slow. Now, technology has paved the way for easy dissemination of, and access to information through social media platforms many of which are false information. Misinformation can easily spread like wildfire. Likewise, COVID-19 is pregnant with a lot of false information which can lead to catastrophic actions and counteractions. One of the defining characteristics of this pandemic has been the spread of misinformation. The World Health Organization (WHO) terms the crisis, not just a pandemic, but also an "infodemic" (WHO, 2020). The outbreak of the novel coronavirus disease 2019 (COVID-19) has instigated prodigious anxiety or tension amongst people across the world. This is not only due to the outbreak of the disease but largely due to the "infodemic" attached to it. By implication, the spread of false information concerning COVID-19 surpasses the real or scientific information. The Director-General of the WHO, Tedros Adhanom Ghebreyesus, opines that the battle of fighting the pandemic must go in line with coordinating the "infodemic" inclined to it (Chisita, 2020; Zarocostas, 2020). By implication, the world is saddled with how to solve the two challenges concurrently: how to control the disease and how to avert the spread of false information relating to the pandemic. "Infodemic" is the dissemination of falsity about COVID-19 across the globe via an internet community forum. This can create superfluous fear or panic among the populace.

Academic librarians by nature have a major role to play; they have been taken charge of the trinity of knowledge acquisition, organization, and dissemination. In this digital era, these roles transcend beyond a three-in-one framework to the creation of speedy and simultaneous access, conversion, digitization, downloading, and uploading censored, genuine, and authentic information to save the time of users. This is in line with the five laws of librarianship propounded by Ranganathan which says "save the time of readers" (Walter, 2012).

Therefore, the study aims at providing the roles of academic librarians' as authentic information disseminators to address the gap between the conspiracy theories and misinformation on COVID-19.

II. CONSPIRACY THEORY AND MISINFORMATION ON COVID-19

Many scholars have written significantly on the widespread of false information and conspiratorial theories hovering and/or circulating the novel coronavirus disease vis-a-vis its consequences (Caulfield, 2020; Chong et al., 2020; Ferrara, 2020; Ioannidis, 2020; Lynas, 2020). A recent study indicates that social media spread false information more easily than any other means (Vosoughi, Roy, & Aral, 2018). In the analysis of 1225 false information stories of COVID-19 from fact-checkers, the findings reveal that social media false information account for 50%, while the rest are from multiple sources of information. Further, added that coronavirus is caused by 5G wireless technology and is a bioweapon (Caulfield, 2020). Similarly, part of the findings of Ferrara (2020) shows that some robots are professionally designed to specialize in uploading plotted deliberation about COVID-19. The social media platform is persistently perceived and disapproved for being a haven for misrepresentation and rumor-mongering (Payande, Ronaghikhameneh, & Mirzapour, n.d), which implies a willful distortion of the truth. Equally, misinformation confuses and frightens people, hindering the reaction to the outbreak (Depoux et al., 2020). Also, in a world of divergent opinions between distrust and trade tensions, the spread of COVID-19 within and among countries, is abetted by misleading information that travels far and wide in a twinkle of an eye (Garrett, 2020). This implies that the false information instigates fear among different individuals, groups, and promotes loss of trust, joy, and heightens sorrow about the novel coronavirus disease 2019.

Historically, coronavirus disease is not the first pandemic ever witnessed worldwide. Chisita (2020) traces the history of previous outbreaks of pandemic or epidemic such as the Spanish Flu of 1918-19, Hemagglutinin 1 Neuraminidase 1 (H1N1) of 2009. The author however emphasizes that the ideology of spreading false information and misinformation about any outbreak has become a kind of sacramental in the realm of our society. Also, French and Monahan (2020) concede that COVID-19 is not the first disease per se in this 21st century, rather a continuation of the Middle East Respiratory Syndrome (MERS-CoV), (2012) and SARS-CoV, Severe Acute Respiratory Syndrome, 2003. In a social media platform, Li, Bailey, Huynh, and Chan (2020) access the usability, accuracy of the most frequently watched YouTube video on COVID-19, the result of the study indicates that more than ¼ of the video show on YouTube is a piece of deceptive information about the novel coronavirus which is spread rapidly across the globe. The authors, therefore, suggest that health workers should map a strategy of delivering up-to-date and precise information on YouTube to reduce the spread of false rumors, gossip, and misleading information which endangers the lives of people globally. This will go a long way in sensitizing the mindset of people as well as managing the disease.

Furthermore, the study of Pulido, Villarejo-Carballido, Redondo-Sama, and Gomez (2020) indicates that approximately the 3-day concluding 942 selected samples of tweets and re-tweets disclose a conglomeration of contradictory, false, and scientific-proven statements on tweeter were circulated concerning enveloped COVID-19 pandemic in early February 2020. The study recommends that in a democratic dispensation, users should be privileged to access not only scientifically proven information but also be competent to appraise information to sieve genuine from false information; training of users toward critically evaluating information; awareness of users' preference to evidence-based re-tweet goes a long way in assisting health workers to disseminate tweet

from their homepage. Again, Chong et al. (2020) opine that involving the community services in the reduction of the pandemic could have been a good omen but this is paralyzed by the scourge of rumors and misinformation capable of abating the zeal of the human race to continue spreading the disease and this can be catastrophic to the stability of the populace.

III. CONSEQUENCES/IMPLICATIONS OF FALSE INFORMATION ON COVID-19

The term false information or misinformation that implies a willful distortion of the truth is not a new phenomenon, it has swiftly become a catchall word that lacks an accepted operational definition (Tandoc Jr, Lim, & Ling, 2018). Although, a sensible definition is provided by Lazer et al. (2018:2) as "fabricated information that mimics information media content in the form, but not in organizational process or intent". With the advent of the internet, disinformation has become a serious issue. However, Ioannidis (2020) has enumerated, analyzed the consequences of misleading and false information hovering around the novel coronavirus disease capable of devouring the stability as well as causing psychological trauma of the global community. These are:

- Viral assumption of 40-70% of the entire human race would be infected without scientific proof.

- Tweeting that 20-60% of adults would be infected (basically non-evidence-based).

- Overblowing the spread of the disease out of proportion.

- Over-reaction of measures taken against the spread of COVID-19 (total lockdown, the closing of institutions, offices which culminated to hike in prices of essential commodities including nose masks and hand sanitizers).

- Misplacement of priorities and misallocation of resources by some leaders in corridors of power.

- Prolong lockdown which does not necessitate the production of a vaccine to curb the disease due to its nature (series of medical laboratory tests and counter tests to ascertain efficacy, the lockdown may cause more harm than good).

- Adverse effects of the pandemic on socio-economic and cultural hegemony of one race over the other.

- Claims of adults, feeble, and people with a history of respiratory disorder are prone to infection.

- Making a comparison between the COVID-19 pandemic and that of the 1918 outbreak. Committed

- Exaggeration of the impact of COVID-19.

At the onset of the pandemic, conspiracy theories and misinformation remained endemic in Nigeria. The outlandish claim ranged from COVID-19 causes such as 5G wireless technology to lemon tea as a viable therapy. Another false information circulation within the country is that the disease was reused by others to spread fears among individuals, and divert the funds meant to fight the novel coronavirus. However, to fight against the false information and misleading information, the Nigerian government-initiated fact-checking in the country at "dubawa" using creative tools as graphic and video to tackle the spread of false information on the novel coronavirus diseases https://covidmotion.net/search/solr/select?q=text_t:%2214%20January%202021.%22&rows=100&grep=%22%22&wt=grephtml. Similarly, people took to social media in droves to share false

claims that covering the body chlorine or eating garlic are effective methods of fighting the virus, both of which are disproved by the World Health Organization (Turak, 2020). Similarly, Lynas (2020) asserts that the proliferation of false information, rumors, and threats supersede the COVID-19 pandemic popularly called infodemic. The author itemizes ten conspiracy theories connected to the disease such as:

- The belief that COVID-19 is a result of the 5G electromagnetic technology and biological particles, however, WHO clears the air that the spread of COVID-19 is not limited to countries with 5G technology.

- The likes of Bill Gates warning of the impending danger of the disease thereby creating unnecessary fear and worry among people.

- The insinuation that the virus emanated from a Chinese lab.

- The belief that COVID-19 was deliberately produced by a Chinese scientist.

- The viral assertion that the US imported the virus into China during their involvement in military games at Wuhan in 2019.

- The notion and rumor that genetically modified crops could be the cause of the pandemic.

- The ruling by some people that there is nothing like COVID-19 but rather a kind of warfare to jettison the freedom of the masses.

- The claim that the novel coronavirus is a manipulation of some elites to underscore the US President.

- Some people believe that the disease is a ploy by prominent pharmacists to market their products.

- Inflation of death rates and active cases.

IV. COMMUNITY ENGAGEMENT AND FALSE INFORMATION

Community engagement is crucial to arrest the threat posed by the novel coronavirus (COVID-19) outbreak. However, the COVID-19 pandemic has been accompanied by an "infodemic", a term that has been used to refer to the rapid spread of misinformation or false information through social media platforms and other outlets (Chong et al., 2020). Media has been recognized for the accumulation of firsthand collusion beliefs, misleading information, and delusion to the source, measure, symptoms, spread, preclusion, and management of any disease outbreak (Mukhtar, 2020). The author reiterates that the spread of rumors, gossips, and misleading information by media exacerbate the psychological calmness of the people. This implies that the proliferation of false information generally is detrimental, catastrophic, and is capable of causing pandemonium in society. Camargo Jr (2020) asserts that considering the explosion of misinformation coupled with the rush of published articles and its echoes in the media create an information overload that compromises public debate and the possibility of adopting sound policies, and possibly undermining the trust in science. However, in the history of 21st century, COVID-19 pandemic is first of its kind that poses a global challenge in the social media era due to false information, causing panic and mistrust worldwide, not only disrupting the outbreak but also hampering and disrupting the actions of existing strained healthcare delivery (Smith, Ng, & Li, 2020).

Community perception plays a vital role in the conspiracy and false information in this pandemic situation. Suffice to say that rumors and mistrust concerning the novel coronavirus disease depend on individual persons.

Hamlyn (2017) in Yolanda Williams, defines perception as away one's senses distinguish, and construe information received at a given point. The author stresses further that this also influences reaction and community behavior in a pandemic situation. The COVID-19 infodemic characterized by false information leading to threat, fear, and panic is clustered around the community perceptions of the individual. Recently the police denied the death of a Corporal after another dosage of Covid-19 vaccine, while still receiving treatment at the Taiping Hospital due to a heart blockage (Kaur, 2020) @ https://www.thestar.com.my/news/true-or-not/ 2021/04/04/fake-news-police-say-corporal-did-not-die-after-second-dose-of-covid-19-vaccine-still-receiving-treatment-for-heart-condition). The reporter said that the patient is conscious, stable, and would be referred to the National Heart Institute as well. The reporter further opined that this act may cause uncertainty among the public over the need to be vaccinated and urged citizens not to believe on any posts without authenticating it with the appropriate authorities while action would be taken against the holder account for disseminating fake news.

V. MEASURES TO CURTAIL COVID-19 FALSE INFORMATION

Technology platforms are an avenue to fight the rise in false information shared online about the novel coronavirus (COVID-19) outbreak. These actions range from preventing advertisements that reference the virus, directing users to World Health Organization (WHO) or local health service websites, or even removing all content that mentions the virus originating from unverified sources (Analytica, 2020). The study of Azim et al (2020) dwells into the history of past false information on an outbreak of diseases and suggests five measures, like the formation of a government portal for spreading of vital information; mounting of task-force for identification of false information in social media; establishment of nationwide central transparent open-sourcing information dissemination; publishing an executive summary of any scientific research; two-way communication between government and citizens should be entrenched.

On March 28, 2020, UN Secretary-General António Guterres called for efforts to "urgently promote facts and science" to address the "growing surge of misinformation" about COVID-19 (Earnshaw & Katz, 2020). French and Monahan (2020) as surveillance scholars analyze and criticize WHO requirements for surveillance and epidemiological data capturing as well as pinpoint the missing gaps in WHO analysis of surveillance in this COVID-19 pandemic situation. The authors emphasize the capturing of people's footage via closed-circuit television (CCTV), a global positioning system (GPS), and other measures. However, there is a need to address the issue of non-captured, unsuspected, remote, or primitive, and those who do not want to be associated with the disease and stigmatization. The Under-Secretary for Global Communication, Melissa Fleming lamented during a campaign launched on 21st May 2020, that the upsurge of false information going around the disease via the internet is alarming to an extent that it is causing pandemonium capable of jeopardizing the efforts of health workers. She suggests classy and convincing brand communication tactics (Stephenson, 2020). The attempt to address health issues both manually and electronically is becoming significantly instantaneous or intermingled. Internet community offers a room to directly disseminate health tips to the public. Health officers should develop nationwide and global disease discovery and scrutiny systems using checkmating internet community posts. Equally, emphasis should be laid on the demand for a proactive and agile public health presence on social media to combat the spread of false information (Abd-Alrazaq, Alhuwail, Househ, Hamdi, & Shah, 2020).

VI. The Role of Academic Librarians in Curbing Infodemic

Librarians as information managers of scholarly communications, highly depend on manual and electronic publications from various websites, databases, and authentic specialized social networking sites. Featherstone, Lyon, and Ruffin (2008) and Chisita (2020) investigate the oral history of the roles of librarians in disaster management and confirmed the understanding of multiple roles of taxonomists into eight categories. These are institutional supporters, collection managers, information disseminators, internal planners, community supporters, government partners, educators and trainers, and information community builders. This implies that librarians have multi-dimensional roles to play in the management of disasters like COVID-19 in terms of providing relevant information. Through 7consortia subscriptions to electronic resources, academic libraries can overcome the challenges of accessing high-quality research at a cost-effective rate. The development of library consortia globally has made it easier for them to provide access to a wide array of scholarly research of all types (Asif & Singh, 2020).

The birth of digital components has aided in closing the gap between the periods an epidemic breaks out and that logical research data becomes available to support evidence-based decision-making and further research (Teras, 2020). The proliferation of online publishing platforms makes it possible for researchers to publish research outputs more quickly. Moreover, spontaneous jumping on board with learning platforms and online learning has also raised concerns about privacy and surveillance and the impact on students' live and human dignity (Lee, LePrevost & Harwell, 2020). As the end to the COVID-19 remains uncertain (Ladan, Haruna, & Madu, 2020), however, librarians must apply special skills and knowledge to verify and authenticate the quality of the research. Therefore, academic librarians have a significant role to play by consolidating their capability to spread information to make the citizens take preventive steps against COVID-19. This kind of motive can be in the form of sanitizing library resources and spaces of shared freedoms, current awareness services, selective dissemination of information, and digital literacy training, mediation, and consolidation of information repackaging (Chisita, 2020). Libraries can use and maintain active links to provide access to reliable and credible resources in virtual spaces during a pandemic situation. Interestingly, the novel coronavirus creates a forum for academic librarians, to rejuvenate their roles as indispensable institutions in the fight against an "infodemic or information disorder" or "Covidinfo-deluge" (ALA, 2020). Generally, the emphasis is on preventing and transforming false information during pandemic situations should be considered as a breakthrough to mobilize the awareness, competencies, collective responsibility, and other emerging means inclined to the willingness of mankind regardless of race, color, gender, spiritual or radical inclination (Martzoukou, 2020).

The priority of any librarian is to create access to quality information. Therefore, the provision of access to authentic information is incumbent upon academic librarians particularly in times of uncertainty hence this determines the mindset of the patron community regarding the disease. ICT in libraries has widened the horizon of academic librarians in terms of resources, organization, storage retrieval, analyses, and information sharing compared to the olden days when information was limited to printed materials only. The collective consciousness of all professional librarians is called upon to mobilize the knowledge, skills, and material resources to fight COVID-19, through utilizing the exhibition of literacies (Parvin and Rahman, 2020). For instance, in information literacy sessions, academic librarians can demonstrate their relevance to society in times

of crisis. Generally, IFLA has contributed a series of online tutorials on how academic libraries can strengthen their connectivity to access information during pandemics (IFLA, 2020). A health information citizenry will not be gullible but will analyze any piece of authoritative information to avoid unnecessary dangerous anxiety and panic (Chisita, 2020).

VII. Recommendations

Academic librarians can avert or curb the 'infodemic' going around COVID-19 in the following ways: Awareness campaign: Academic librarians must intensify their efforts by making awareness crusade to their patron community. This can be accomplished via public address system, community participation, Google meet, zoom, Skype, visits, video, etc. By so doing, library professionals can contribute vehemently to the management /control of the crises as well as curtailing the misinformation hovering around COVID-19. This is to ensure that the information provided comes from a reliable and trusted source with a reputation for accuracy, as much false information imitates closely to the authentic information source by making a little change to their link. There is a need for government to join hands with the academic librarians and other communication teams to raise awareness on the campaign against the spread of false information or misinformation on COVID-19 and to encourage individuals to verify information using authentic and reliable platforms provided by the government.

1. *Data Sharing:*

Academic librarians are information harvesters, acquirers, organizers, and disseminators. Therefore, it is their responsibility to acquire relevant and up-to-date statistical data regarding coronavirus disease for their clientele.

2. *Information Verification:*

Academic librarians are dealing with information daily. It is duty incumbent upon them to verify the source of information before passing it onto the users. They could also sieve or censor any information that will benefit the public by verifying the ingenuity or authenticity and authorization of the information before dissemination.

3. *Creation of Digital Platforms:*

Digital platforms are created to disseminate information online to library users. This could be by using, establishing, and sharing information on Twitter, Facebook, Blog, WhatsApp, Email, LinkedIn, and Instagram.

4. *Collaboration:*

Teamwork is very important in the management of misinformation circulating the novel coronavirus. Academic librarians could achieve this by working hand-in-hand with the health personnel to retrieve germane information suitable to the library patrons. They can also play a supportive role to faculty members and researchers writing on the disease with the useful and latest information to enrich their research outputs on coronavirus.

5. *Information Sourcing:*

Academic librarians are in a better position to scout for relevant information and useful tips related to the novel disease from public health and professional organizations such as the World Health Organization(WHO), United Nations Education, Scientific, and Cultural Organization (UNESCO), United Nations Information, Children and Education Fund (UNICEF), Nigeria Centre for Disease Control (NDCD), International Federation

of Library Associations and Institutions (IFLA), American Library Association (ALA), WALA, Nigeria Library Association (NLA) and Librarian's Registration Council of Nigeria (LRCN), etcetera.

6. *Provision of Scholarly Communications:*

This is a process of disseminating relevant publications extracted from reputable databases and datasets to library clientele. Academic librarians should gather germane journal and other article on COVID-19 from recognized databases and upload onto the school websites for consultation by their patron community.

7. *Use of Noticeboard:*

Noticeboard from time immemorial has been a traditional form of disseminating information. Academic librarians need to get useful information, pictures, and posters; paste them on the noticeboard for users' guidance concerning the pandemic to curtail the conspiracy and misinformation that create fear and nervousness amongst the patron community.

8. *Guidance:*

Library professionals need to strategize their efforts by displaying useful tips regarding coronavirus disease on preventive measures such as social distancing measures, self-isolation, use of nose-masks, covering of mouth and nose while sneezing or coughing, persistent washing of hands with soap and water, use of hand sanitizer, measures to take in treating people that have contracted the disease as well as canvassing against stigmatization.

9. *Remote Services:*

This is a process of disseminating useful information online to users. The library clientele may not necessarily come to the library for fear of COVID-19 especially during the lockdown period; they can access information online with their smartphones and other electronic devices when connected to the network.

VIII. CONCLUSION

This paper discussed the misinformation and conspiracy theories in respect of the coronavirus disease 2019 (COVID-19). It divulged into the catastrophic implications of false information; clamoring for community participation, measures to curtail the disease; through the literature. The roles of academic librarians, as well as recommendations apt as measures against COVID-19 and its bane of false information, are suggested. The paper, therefore, concludes that academic libraries as authentic information disseminators can play vital roles in instilling confidence in users about the novel coronavirus disease through acquisition, subscription to relevant databases, open access and disseminate same to the library patrons. This will not eliminate the fear and anxiety caused by false information in them but goes a long way in sanitizing their mindset about the disease vis-a-vis the preventive techniques. The patron community may share their knowledge acquisition with other acquaintances outside the academic environment. Information is power. A well-informed society is a healthy society and an under-informed society is a deformed society that may continue to swim in the river of ignorance.

REFERENCES

[1] WHO. (2020). Coronavirus disease 2019 (COVID-19): situation report, 86.
[2] Chisita, C.T. (2020). Libraries in the midst of the Coronavirus (COVID-19): researchers experiences in dealing with the vexatious infodemic. Library Hi Tech News.
[3] Zarocostas, J. (2020). What next for the coronavirus response? The lancet, 395(10222), 401.
[4] Walter, S. (2012). Ranganathan Redux: The "Five Laws" and the Future of College & Research Libraries. College & Research libraries,

73(3), 213-215.

[5]   Caulfield, T. (2020). Does Debunking Work? Correcting COVID-19 Misinformation on Social Media.

[6]   Chong et al. (2020). COVID-19 pandemic, infodemic and the role of eHealth literacy. International Journal of Nursing Studies, 108, 103644.

[7]   Ferrara, E. (2020). covid-19 on twitter: Bots, conspiracies, and social media activism. arXiv preprint arXiv:2004.09531.

[8]   Ioannidis, J.P. (2020). Coronavirus disease 2019: the harms of exaggerated information and non-evidence-based measures. European journal of clinical investigation, 50(4), e13222.

[9]   Lynas, M. (2020). COVID: Top 10 Current Conspiracy Theories. Cornell Alliance for Science, April, 24.1.

[10]   Vosoughi, S., Roy, D., & Aral, S. (2018). The spread of true and false news online. Science, 359(6380), 1146-1151.

[11]   Caulfield, T. (2020). Does Debunking Work? Correcting COVID-19 Misinformation on Social Media.

[12]   Ferrara, E. (2020). covid-19 on twitter: Bots, conspiracies, and social media activism. arXiv preprint arXiv:2004.09531.

[13]   Payande, I.A. D., Ronaghikhameneh, A., & Mirzapour, H. (n.d). There must be a culpable behind the scenes; A novel trend in misinformation diffusion during the COVID-19 pandemic.

[14]   Depoux, A., Martin, S., Karafillakis, E., Preet, R., Wilder-Smith, A., & Larson, H. (2020). The pandemic of social media panic travels faster than the COVID-19 outbreak. In: Oxford University Press.

[15]   Garrett, L. (2020). COVID-19: the medium is the message. The lancet, 395(10228), 942-943.

[16]   Chisita, C.T. (2020). Libraries in the midst of the Coronavirus (COVID-19): researchers experiences in dealing with the vexatious infodemic. Library Hi Tech News.

[17]   French, M., & Monahan, T. (2020). Dis-ease surveillance: How might surveillance studies address COVID-19? Surveillance & Society, 18(1), 1-11.

[18]   Li, H.O.-Y. et al. (2020). YouTube as a source of information on COVID-19: a pandemic of misinformation? BMJ Global Health, 5(5), e002604.

[19]   Pulido, C.M., Villarejo-Carballido, B., Redondo-Sama, G., & Gomez, A. (2020). COVID-19 infodemic: More retweets for science-based information on coronavirus than for false information. International Sociology, 0268580920914755.

[20]   Chong et al. (2020). COVID-19 pandemic, infodemic and the role of eHealth literacy. International Journal of Nursing Studies, 108, 103644.

[21]   Tandoc Jr, E.C., Lim, Z.W., & Ling, R. (2018). Defining "fake news" A typology of scholarly definitions. Digital Journalism, 6(2), 137-153.

[22]   Lazer, D., Baum, M., Benkler, Y., Berinsky, A., Greenhill, K., Menczer, F., . . . Zittrain, J. (2018). The science of fake news. Science, 359(6380), 1094-1096.

[23]   Ioannidis, J.P. (2020). Coronavirus disease 2019: the harms of exaggerated information and non-evidence-based measures. European journal of clinical investigation, 50(4), e13222.

[24]   Turak, N. (2020). No, garlic won't protect you from coronavirus: WHO pushes back on rampant misinformation @ https://ww.google.com/amp/s/www. cnbc.com

[25]   Lynas (2020) Lynas, M. (2020). COVID: Top 10 Current Conspiracy Theories. Cornell Alliance for Science, April, 24.1

[26]   Chong et al. (2020). COVID-19 pandemic, infodemic and the role of eHealth literacy. International Journal of Nursing Studies, 108, 103644.

[27]   Mukhtar, S. (2020). Psychological health during the coronavirus disease 2019 pandemic outbreak. International Journal of Social Psychiatry, 0020764020925835.

[28]   Camargo Jr, K.R.d. (2020). Trying to make sense out of chaos: science, politics and the COVID-19 pandemic. Cadernos de Saude Publica (Public Health Notebooks), 36, e00088120.

[29]   Smith, G.D., Ng, F., & Li, W.H.C. (2020). COVID-19: Emerging compassion, courage and resilience in the face of misinformation and adversity. Journal of Clinical Nursing, 29(9-10), 1425.

[30]   Hamlyn, D.W. (2017). The psychology of perception: A philosophical examination of Gestalt theory and derivative theories of perception (Vol. 13): Routledge.

[31]   Kaur, M. (2021). Fake news: Police say corporal did not die after second dose of COVID-19 vaccine, still receiving treatment for heart condition.

[32]   Analytica, O. (2020). Misinformation will undermine coronavirus responses. Emerald Expert Briefings (oxan-db).

[33]   Azim, S.S., et al (2020). Fake news in the time of environmental disaster: Preparing framework for COVID-19.

[34]   Earnshaw, V.A., & Katz, I.T. (2020). Educate, Amplify, and Focus to Address COVID-19 Misinformation. Paper presented at the JAMA Health Forum.

[35]   French, M., & Monahan, T. (2020). Dis-ease Surveillance: How Might Surveillance Studies Address COVID-19? Surveillance & Society, 18(1), 1-11.

[36]   Stephenson, J. (2020). United Nations Seeks to Counter COVID-19 Misinformation with Digital First Responders. Paper presented at the JAMA Health Forum.

[37]   Abd-Alrazaq, A. et al. (2020). Top concerns of Tweeters during the COVID-19 pandemic: infoveillance study. Journal of Medical Internet Research, 22(4), e19016.

[38]   Featherstone, R.M., Lyon, B.J., & Ruffin, A.B. (2008). Library roles in disaster response: an oral history project by the National Library of Medicine. Journal of the Medical Library Association: JMLA, 96(4), 343.

[39]   Chisita, C.T. (2020). Libraries in the midst of the Coronavirus (COVID-19): researchers experiences in dealing with the vexatious infodemic. Library Hi Tech News.

[40]   Asif, M. & Singh, K.K. (2020). Trends, opportunities and scopes of libraries during COVID-19 pandemic@ https://doi.org 10:18231/j.ijlist.2020.005

[41]   Teras, M. et al. (2020). Post COVID-19 Education and Educational Technology' Solutionism': a Seller's Market. Postdigital Science and Education, 2(3), 863-878.

[42]   Lee, J.G.L., LePrvost, C.E. & Harwell, E.L. (2020). Coronavirus pandemic highlights critical gaps in rural internet access for migrants and seasonal farmworkers: a call for partnership with medical libraries. Journal of the Medical Library Association-ncbi.nim.nih.gov

[43]   Ladan, A., Haruna, B., & Madu, A. U. (2020). COVID-19 pandemic and social media news in Nigeria: The role of libraries and library associations in information dissemination. International Journal of Innovation and Research in Educational Sciences, 7(2), 2349-5219.

[44]   Chisita, C.T. (2020). Libraries in the midst of the Coronavirus (COVID-19): researchers experiences in dealing with the vexatious infodemic. Library Hi Tech News.

[45]   American Library Association (2020). Libraries respond: Combating Xenophobia and Fake news in light of COVID-19 @https://www.ala.org

[46]   Parvin, G.A., Ahsan, R., Rahman, M.H., & Abedin, M.A. (2020). Pandemic of Novel Coronavirus Disease (COVID-19): Role of the Print Media in Asian Countries. Frontiers in Communication, 5, 100.

[47] International Federation of Library Association and Federation. (2020). COVID-19 and the global library field. https://www.ifla.org/covid-19-and-libraries.

AUTHOR'S PROFILE

First Author
Hajara Yakubu, (MNLA, LRCN) is a PhD candidate in the Department of Library & Information Science, Faculty of Computer Science & Information Technology, University of Malaya. Kuala Lumpur, Malaysia, and a Principal Librarian at the University Library Complex, Federal University Dutsin-Ma, P.M.B, 5001, Katsina State, Nigeria.
email id: hyakubu@fudutsinma.edu.ng

Second Author
Bala Haruna, is a Research scholar in the Department of Library & Information Science, Faculty of Computer Science & Information Technology, University of Malaya. Malaysia. Presently, A Senior Librarian at Bauchi State University, Gadau. P.M.B 065, Itas/Gadau LGA, Bauchi, Nigeria. A member of the Librarians' Registration Council of Nigeria (LRCN) and the Nigerian Library Association (NLA). email id: balanjahun@gmail.com

Third Author
Maryam Muhammad Liman, CLN, PhD student at the Department of Library and Information Science. A Librarian I currently working in the University Library, Bayero University Kano, A member of the Librarian Registration Council of Nigeria Kano State, Nigeria.
email id: mmlimanlib@buk.edu.ng