



SOCIAL MEDIA INFORMATION AND ROLE OF LIBRARIANS AMID COVID-19 PANDEMIC: A NIGERIAN PERSPECTIVE

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ABSTRACT

This study explored the influence of social media on the fight against the COVID-19 pandemic in Nigeria. The study employed a survey research design. A total of 344 librarians participated in the study. The stratified random sampling technique was used to select 252 female and 92 male librarians for the study. The study formulated three (3) research questions and three (3) hypotheses to achieve the aim of the study. The research instrument that was used for data collection was an online questionnaire (Google form) that was administered through social media platforms. Frequency counts, percentages, mean and standard deviation were used in data analysis while independent sample t-test was employed in hypotheses testing. Findings indicate that Facebook and WhatsApp were the social media frequently utilized by Librarians in Nigeria for retrieving and disseminating information on COVID-19. Also, in the case of Nigeria, Health hazards, Panic and stigmatization are the problems that emanate from social media misinformation on COVID-19. From findings, the study concluded that the roles played by Nigerian Librarians in the fight against COVID-19 pandemic are traditional, specialized roles as disaster information specialist was not significantly performed. Based on the study, it is recommended that the Nigerian Library Association issues a communiqué to both government and private institutions in Nigeria on the need for them to identify and utilize Librarians as Information first responders for disaster management. Furthermore, the Nigerian Library Association should institute special courses or workshops on disaster information management to equip professional Librarians with the required knowledge and skills for performing their roles as disaster information specialist for future disaster outbreaks such as pandemics.

Keywords: COVID-19, Information, Social Media, Librarian Role.

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INTRODUCTION

In December, 2019, China, the most populous Asian nation was hit by a novel Corona-virus, also known as COVID-19 which affects the respiratory systems of humans and results in death mostly in infected persons who had serious previous health challenges. Fast forward a few weeks later, the COVID-19 has grown into a pandemic ravaging every continent including Africa. Nigeria recorded its first confirmed COVID-19 case in February 2020 and since then thousands of Nigerians have become infected with the virus.

Information dissemination during pandemics, epidemics or just disease outbreak has been identified as a key element of preventive healthcare that effectively aid in the fight against these dangerous health situations whenever and wherever they may occur (Merchant, 2020). In the absence of proper information dissemination channels, people are left without adequate knowledge of preventive healthcare, appropriate channels for pandemic response thus leading to confusion and widespread panic. Hence, effective information dissemination is as important as the work done by pandemic emergency responders such as doctors, Nurses, Virologists, etc. This simply implies that Library and Information specialists/Professionals (Librarians) are important emergency responders in the fight on COVID-19 across the globe. Thus, Librarians as information specialists aid in the proper dissemination of important information on COVID-19 through media technologies.

Anwar and Zhiwar (2019) noted that 45% of the world population are active users of social media, this goes to show the role social media plays in information dissemination worldwide. Social media makes things easy to connect to; share and receive information from one end to another end of the world. Tthough this media of communication has changed attitude, thinking and perception of information service providers through the globe, it is said to be the most penetrative media form for information dissemination that is accessible and has a global reach. It is important to note that during the 1918 flu pandemic which was reported by the CDC to have infected a third of the world's population and resulted in about 50 million deaths, critical information regarding the virus was primarily shared via postal workers. This proved to be a bit counter-effective, however it was necessary because of the importance of information for preventive healthcare and public response during pandemics.

Comparatively, Depoux et al. (2020) observed that in China, during the community lockdowns, social media was used to inform the populace of the reasons behind the intention to quarantine as well as provide reassurance and practical suggestions to prevent transmission. In Nigeria, the case is not so different as social media platforms such as Facebook, WhatsApp, Twitter, Instagram etc are constantly flooded with information, reactions and discussion related to the COVID-19 pandemic outbreak. However, while a lot of these information cover updates on the COVID-19 situation, public response and preventive healthcare; a whole lot is dedicated to adjusting life to the realities of the COVID-19 pandemic and future threats in a socio-economic sense.

Thus, in situations of a pandemic outbreak like COVID-19 where the world relies on non-pharmaceutical interventions such as quarantine and social distancing, social media intelligence can be used to mobilize the local communities to adhere to quarantine procedures to swiftly decrease the spread of fear and uncertainty and improve public trust in public health measures. Furthermore, Wilder-Smith and Freedman (2020) noted that the use of digital technologies can help people overcome the social distancing constraints during mass quarantine and provide mental health support resources and solidarity with those persons in a

lockdown situation. To date, social media platforms have been important for disseminating information during the outbreak of COVID-19.

Jin (2020) also observed that the Centers for Disease Control and Prevention (CDCs), the World Health Organization (WHO), numerous scientific journals, Libraries and other health care organizations are regularly posting guidance across a host of platforms. Teams employed by larger social media platforms have also been involved in the response as searches for information about corona-virus are escalating and at times, dominating conversations online. Thus, Depoux et al. (2020) noted that a well-planned analysis of global online conversation geographically and over-time with regards to the pandemic situation could provide a rapid assessment of the spread and possible changes in public attitudes and behaviours (i.e self-isolating, hand washing, accessing healthcare, information search profile); awareness about the disease and its symptoms and the impact of important decisions taken during the COVID-19 outbreak such as quarantine measures, development of new vaccines, internationally coordinated responses on public perceptions and attitude which can effectively be utilized in developing key communication campaigns.

A key professional of social media information is the Librarian/Information specialist who in times of crisis, pandemic and/or disaster can effectively perform the role of disaster information specialist due to their specialized training in information dissemination and information user analysis. Zach (2011) posited that Librarians offer critical services to help support police, firefighters, emergency responders and medical personnel during disasters, crises and/or pandemic/epidemics. The study further noted that it is a natural role Librarians assume in the community without any official mandate as they are generally accepted as 'information first responders. Usually, Librarians fill the need for accurate information during pandemics, their knowledge and experience from information-user studies make them the perfect people to develop and deploy disaster information content. Though in Nigeria, there may not be specifically trained disaster information specialist/Librarians, however, the medical Librarians and other professional Librarians can effectively fulfill the role of disaster information specialist and their expertise in social media information deployment points to how much they can contribute in the fight against COVID-19 pandemic in Nigeria.

Statement of the Problem

No doubt social media has been an effective information dissemination tool that provides relevant information during this COVID-19 pandemic as it relates to preventive healthcare and pandemic situational reports all over the world. However, social media has also become a tool for spreading both rumours and deliberate misinformation. Within weeks of the inception of the novel corona-virus COVID-19 in China, rumours and conspiracy theories about its origin circulated the globe via social media, causing fear, xenophobia, racism, discrimination and massive purchase of essential medical supplies (nose masks, ventilators, gloves etc) at the detriment of others; all closely linked to the new "Infomedia" ecosystems of the 21st century marked by social media. In Nigeria, major discussions on social media have seen a lot of people accused the Federal Government of Nigeria of falsifying corona-virus cases thus implying that there is no corona-virus COVID-19 pandemic in the country. The effect of this misinformation has resulted in gross negligence of preventive healthcare by a lot of Nigerians; Nigerian have blatantly disobeyed quarantine laws and are not compliant to social distancing rules in Public. Furthermore, there have been a few reported cases of health hazards such as a

death resulting from an overdose of chloroquine and alcohol usage and also deaths from law enforcement agencies trying to enforce quarantine laws.

A unique observation during this crisis is the interaction between virology and virality; the virus, misinformation and information of the virus spread simultaneously at almost the same speed thus creating panic worldwide. Hence, it is safe to say that social media panic travelled faster than the COVID-19 spread. Thus, there is a need to identify the sources of information and misinformation in social media platforms in Nigeria and the role of Librarians in preventing such misinformation proliferations disaster information specialist as well as support services they perform during the COVID-19 pandemic in Nigeria.

Aims and objectives of the study

This study aims to identify the role of social media information and Librarians in the fight against COVID-19 in Nigeria. The objectives of the study are enumerated below:

- Determine how COVID-19 pandemic information is disseminated through social media in Nigeria.
- Determine the issues associated with social media misinformation on COVID-19 pandemic in Nigeria.
- Determine the role Librarian play amid the COVID-19 pandemic in Nigeria.

Research Questions

The following research questions were used to guide the study.

- How is information on COVID-19 pandemic disseminated through social media in Nigeria?
- What are the issues associated with social media misinformation on COVID-19 pandemic in Nigeria?
- What are the roles carried out by Librarians amid the COVID-19 pandemic in Nigeria?

Hypotheses

The following null hypotheses were used in testing the significance of the result of the study:

- H_{01} : There is no significant difference between the mean responses of male and female Librarians and sources of COVID-19 information on social media in Nigeria.
- H_{02} : There is no significant difference between the mean responses of male and female Librarians and associated social media misinformation on COVID-19 pandemic in Nigeria.
- H_{03} : There is no significant difference between the mean responses of male and female Librarians and amid COVID-19 pandemic in Nigeria.

LITERATURE REVIEW

Social media information has become the most popular form of information and several studies have been carried out to examine its dynamics from different aspects of life. Rogers (2012) defined social media information as information content created and published by people using scalable publishing technologies. It is a blend of sociology and technology that metamorphoses monologue into dialogue and it allows for increased rights to information thus transforming people from content readers into publishers. Social media information is electronic information created and disseminated using social media networks; which is a collection of digital platforms designed with an algorithm that facilitates social relationship building in the digital space such as Facebook, WhatsApp, Instagram, Twitter etc. With the increasing usage of social media technologies, the menace of misinformation has become a serious global issue which is even more destructive in times of disasters such as the COVID-19 pandemic been faced by the global community.

Misinformation is any kind of information, print or electronic, whose content is inaccurate, malicious and was created by unauthorized and unauthenticated sources usually with a motive to cause havoc, breed fear and panic for social gain such as money, fame and social agenda. Merchant and Lurie (2020) explored the relationship between social media and emergency preparedness in response to the novel coronavirus. The article is of the view that social media platforms can be harnessed to optimally support emergency response, resilience and preparedness. The article outlined a framework for integrating social media as a critical tool in managing the COVID-19 pandemic and preparing for future pandemic outbreaks. Thus, the article suggested that in such times for emergency preparedness, social media can be used in directing people to trusted sources of information; as a diagnostic and referral system; to enable social connections and provide psychological aid; for advanced remote learning and accelerating research. The article concluded that integrating social media as an essential tool in emergency preparedness, response and recovery can influence response to COVID-19 future public health threats and help develop a global culture of emergency preparedness.

Librarians have become adept users of social media and as information professionals are tasked with providing authentic information to various information users to mitigate the problem of misinformation. Due to their expertise in information management, Librarians are first information responders in the fight against the COVID-19 pandemic. Depoux et al. (2020) explored the impact of social media reporting amid the COVID-19 pandemic. The article identifies social media misinformation as a key factor militating against improved response to the COVID-19 outbreak. The article asserts that to address the urgent need to scale up public health measures to combat the outbreak, there is a strong need to combat the pandemic of social media misinformation.

The article suggested for analyses of discussions on social media with regards to the pandemic situation geographically and overtime which can result in real-time maps. Such real-time maps can then be used as a source of information on where to intervene with key communication campaigns. Also, it suggested for the development of a communication strategy with toolkits as a contribution to the immediate needs for a public health response and important groundwork for improving frameworks for response in the face of future global outbreaks. The article concluded that the provision of a real-time global information system on COVID-19 managed by health Librarians will enhance the ability of public health bodies and

relevant stakeholders to respond to misinformation about COVID-19 pandemic and help reduce community panic.

A librarian is a person who works in a library enabling access to information and sometimes provides social or technical programming support to users. Also, librarians provide instruction on information literacy to users. Due to their expertise in information management, Librarians are first information responders in the fight against the COVID-19 pandemic.

Empirical Study of Related Review

Donahue and Featherstone (2013) explored the roles of Libraries during disasters in a bid to evaluate their contributions to disaster management activities. The method of data collection was a simple survey delivered through a medical librarian email discussion list. The collated data was analyzed using an Excel spreadsheet. The findings revealed that during a disaster, medical Librarians provides a range of services (non-professional & professional) that include: providing information, participating in disaster simulation training, management of hospital's disaster command center, delivering food providing support to families. The study concluded that due to a lack of disaster management training and experience, most health Librarians were either used or offered their assistance in non-professional roles during disasters. The study recommended for further studies into the roles of Librarians during the mitigation, preparedness, response and recovery phases of disaster management activities.

Ali and Gatiti (2020) examined the role of Librarians and information professional amid the COVID-19 pandemic in Pakistan. The study explored the role of health science Librarians in the corona-virus pandemic fight. The study was explorative and thus employed the use of interviews to elicit information. Librarians in Pakistan were interviewed via online technologies at their remote workplace (home). From their responses, the study identified three dimensions to a Librarians role: to promote public health awareness by creating and disseminating information relating to preventive health measures; support research teams, researchers and faculty by providing information regarding the latest developments in research and literature; and to meet the core needs of regular library users. The study revealed that various COVID-19 response social platforms such as WHO's WhatsApp, WHO's Health Emergency Dashboard, ZB MED COVID-19 Hub have been created. These platforms aid Librarians in their role in promoting health awareness. The study also revealed that Librarians can efficiently support research teams, clinicians and the global community since leading publishers such as Elsevier, Oxford, Wiley, BMJ, Nature, Emerald and Cambridge provides free access to the latest literature on Corona-virus (articles, papers, commentaries, case reports). Librarians can easily share this information with clinicians, academicians and researchers. The study concluded that although social distancing is a good way of reducing the spread of COVID-19, however, authentic COVID-19 information access to users is key to reducing the spread of COVID-19 and this remains a social responsibility of Librarians and information personnel.

METHODS

The study employed a survey research design. The population of the study consisted of all registered Librarians in Nigeria estimated as 6074 professional Librarians, 2376 male and 3060 female Librarians as provided by the Librarian Registration Council of Nigeria (LRCN). A

total of 344 participants took part in the study. The study employed stratified random sampling technique to select 252 female and 92 male Librarians for the study. The research instrument that was used for data collection was an online questionnaire that was administered through social media platforms (Whatsapp and Facebook). Frequency counts, percentages, mean and standard deviation were used in data analysis while independent sample t-test was employed in hypotheses testing.

RESULTS

Demographic Information of the Respondents

The gender distribution of the respondents shows that two hundred and fifty-two (73.3%) of the respondents are female while 92 (26.7%) are male. This shows the dominance of females in the Library profession as well as that more female professional Librarian took part in the online survey than their male counterparts. The distribution for the age range of respondents shows forty-two (42) of the respondents were of the age range of (20-25) years, two hundred and twenty-two (222) were of the age range of (26-35) years, twenty-eight (28) were of the age range (36-45) years, forty-two (42) were of the age range of (46-55) years while only ten (10) of the respondents were of the age range (56 and above) years. This shows that younger Librarians were more interested and took part in the online survey. The distribution of the educational qualifications of the respondents shows that twenty-two (22) (6.4%) were PhD holders, One hundred and forty-four (144) (41.8%) were Masters (MLS) degree holders, one hundred and sixty-eight (168) (49.5%) were bachelors (BLS) degree holders, four (4)(1.1%) were HNDL(Library and information science) holders while only six (6) (1,2%) were OND(Library and information science) holders. This indicates that the bulk of the participants were professional Librarians. The study sought to identify the social media platforms through which information and updates on the fight on COVID-19 pandemic are disseminated through in Nigeria. Table1-3 presents the results:

Table 1: Social Media Platforms used for COVID-19 updates

Social Media Platform	Frequency	Percentage(%)	Male	Percentage(%)	Female	Percentage(%)
Facebook	144	41.8	30	32.6	114	45.2
WhatsApp	176	51.2	56	60.9	120	47.6
Twitter	16	5.0	2	2.2	14	5.6
Instagram	6	1.7	4	4.3	2	0.8
2go	2	0.3	0	0	2	0.8
Grand Total	344	100	92	100	252	100

Source: Authors' Computation from an online survey (2020)

Table 1 reveals that one hundred and forty-four (144) (41.8%) of the respondents received and/or accessed information on COVID-19 from Facebook, of which thirty (30) (32.6 %) were male respondents while one hundred and fourteen (114) (45.2%) were female respondents. Similarly, one hundred and seventy-six (176) (51.2%) of the respondents received and/or accessed information on COVID-19 from WhatsApp, of which fifty-six (56) (60.9 %) were male respondents while one hundred and twenty (120) (47.6%) were female respondents. Also, sixteen (16) (5.0%) of the respondents received and/or accessed information on COVID-19

from Twitter, of which two (2) (2.2 %) were male respondents while fourteen (14) (5.6%) were female respondents. Furthermore, six (6) (1.7%) of the respondents received and/or accessed information on COVID-19 from Instagram, of which four (4)(4.3%) were male respondents while only two (2) (0.8%) were female respondents. Lastly, two (2) (0.3%) of the respondents received and/or accessed information on COVID-19 from 2go, of which none were male respondents while only two (2) (0.8%) were female respondents.

Table 2a: Issues associated with Social Media Misinformation on COVID-19 (Male)

Issues	SA	%	A	%	NAD	%	D	%	SD	%	Mean	SD	Decision
Health Hazard	16	17.5	50	54.3	4	4.3	20	21.7	1	2.2	3.62	0.253	Accepted
Panic	26	28.3	46	50.0	8	8.7	12	13.0	0	0.0	3.93	0.243	Accepted
Stigmatization	40	43.5	28	30.4	12	13.0	10	10.9	1	2.2	4.01	0.222	Accepted
Discrimination	8	8.7	26	28.3	17	19.5	35	38.1	5	5.4	2.93	0.211	Rejected
Racism	4	4.3	6	6.5	8	8.8	11	12.0	63	68.4	1.66	0.368	Rejected
Grand											3.24	0.259	

Source: Authors' Computation from an online survey (2020)

Table 2a presents the frequency of male respondents on the issues associated or emanating from social media misinformation in Nigeria amid the COVID-19. Table 2a reveals that 16(17.5%) of the male respondents strongly agreed that health hazards are an issue associated with social media misinformation on COVID-19 in Nigeria, 50 (54.3%) Agreed, 4 (4.3%) Neither Agree nor Disagree, 20 (21.8%) disagreed while 1 (2.2%) strongly disagreed that health hazard is associated with social media misinformation on COVID-19 pandemic in Nigeria. Similarly, it reveals that 26 (28.3%) of the male respondents strongly agreed that panic is an issue associated with social media misinformation on COVID-19 in Nigeria, 46 (50.0%) Agreed, 8 (8.7%) Neither Agree nor Disagree, 12 (13.0%) disagreed while none strongly disagreed that panic is associated with social media misinformation on COVID-19 pandemic in Nigeria. Also, it reveals that 40 (43.5%) of the male respondents strongly agreed that stigmatization is an issue associated with social media misinformation on COVID-19 in Nigeria, 28 (30.4%) Agreed, 12 (13.0%) Neither Agree nor Disagree, 10 (10.9%) disagreed while 1 (2.2%) strongly disagreed that stigmatization is associated with social media misinformation on COVID-19 pandemic in Nigeria. Furthermore, it reveals that 8 (8.7%) of the male respondents strongly agreed that Discrimination is an issue associated with social media misinformation on COVID-19 in Nigeria, 26 (28.3%) Agreed, 17 (19.5%) Neither Agree nor Disagree, 35 (38.1%) disagreed while 5 (5.4%) strongly disagreed that Discrimination is associated with social media misinformation on COVID-19 pandemic in Nigeria. Lastly, it reveals that 4 (4.3%) of the male respondents strongly agreed that Racism is an issue associated with social media misinformation on COVID-19 in Nigeria, 6 (6.5%) Agreed, 8 (8.8%) Neither Agree nor Disagree, 11 (12.0%) disagreed while 63 (68.4%) strongly disagreed that Racism is associated with social media misinformation on COVID-19 pandemic in Nigeria.

Table 2b: Issues associated with Social Media Misinformation on COVID-19 (Female)

Issues	SA	%	A	%	NAD	%	D	%	SD	%	Mean	STD	Decision
Health Hazard	56	(22.2)	50	(54.3)	4	4.3	20	21.7	1	2.2	3.15	0.686	Accepted
Panic	96	38.1	124	49.2	20	8.0	12	4.7	0	0.0	4.00	0.762	Accepted
Stigmatization	46	18.3	102	41	66	26.2	38	14.5	0	0.0	3.61	0.644	Accepted
Discrimination	34	13.4	56	22.2	12	4.7	146	58.1	4	1.6	2.88	0.780	Rejected
Racism	20	8.0	40	15.9	34	13.4	154	61.0	4	1.6	2.56	0.800	Rejected
Grand											3.80	0.734	

Table 2b presents the frequency of female respondents on the issues associated or emanating from social media misinformation in Nigeria amid the COVID-19. Table 2b reveals that 56(22.2%) of the female respondents strongly agreed that health hazards is an issue associated with social media misinformation on COVID-19 in Nigeria, 120 (47.6%) Agreed, 45 (17.9%) Neither Agree nor Disagree, 28 (11.1%) disagreed while 3 (1.2%) strongly disagreed that health hazard is associated with social media misinformation on COVID-19 pandemic in Nigeria. Similarly, it reveals that 96 (38.1%) of the female respondents strongly agreed that panic is an issue associated with social media misinformation on COVID-19 in Nigeria, 124 (49.2%) Agreed, 20 (8.0%) Neither Agree nor Disagree, 12 (4.7%) disagreed while none strongly disagreed that panic is associated with social media misinformation on COVID-19 pandemic in Nigeria. Also, it reveals that 46 (18.3%) of the female respondents strongly agreed that stigmatization is an issue associated with social media misinformation on COVID-19 in Nigeria, 102 (41.0%) Agreed, 66 (26.2%) Neither Agree nor Disagree, 38 (14.5%) disagreed while none strongly disagreed that stigmatization is associated with social media misinformation on COVID-19 pandemic in Nigeria. Furthermore, it reveals that 34 (13.4%) of the female respondents strongly agreed that Discrimination is an issue associated with social media misinformation on COVID-19 in Nigeria, 56 (22.2%) Agreed, 12 (4.7%) Neither Agree nor Disagree, 146 (58.1%) disagreed while 4 (1.6%) strongly disagreed that Discrimination is associated with social media misinformation on COVID-19 pandemic in Nigeria. Lastly, it reveals that 20 (8.0%) of the female respondents strongly agreed that Racism is an issue associated with social media misinformation on COVID-19 in Nigeria, 40 (15.9%) Agreed, 34 (13.4%) Neither Agree nor Disagree, 154 (61.0%) disagreed while 4 (1.6%) strongly disagreed that Racism is associated with social media misinformation on COVID-19 pandemic in Nigeria.

Table 3a: Roles played by Nigerian Librarians amid the fight on COVID-19 (Male)

Roles of Librarians	LE	%	ME	%	SE	%	VSE	%	NA	%	Mean	STD	Decision
Librarians help prepare situational awareness and decision report based on COVID-19 pandemic information	10	10.9	26	28.3	18	(19.6)	4	4.3	34	36.9	2.72	0.151	Rejected
Librarians take part in crisis informatics research and make it available to the general public through social media and other new media forms	38	41.3	30	32.6	10	10.9	6	6.5	8	8.7	3.91	0.218	Accepted

Librarians help prepare COVID-19 pandemic response plans for government institutions, Libraries & private Organizations	28	30.3	22	24.1	24	26.1	6	6.5	12	13.0	3.52	0.190	Accepted
Librarians participate in COVID-19 pandemic emergency operational call center in taking questions from the public on the pandemic	18	19.7	20	21.8	16	17.3	4	4.3	34	36.9	2.82	0.205	Rejected
Librarians provide emergency reference services to researchers, emergency responders, Govt. Institutions and the general public	38	41.3	28	30.4	14	15.2	2	2.2	10	10.9	3.89	0.217	Accepted
Librarians participate in training emergency responders in disaster reporting and the COVID-19 pandemic	10	10.9	22	24.1	16	17.2	10	10.9	34	36.9	2.61	0.116	Rejected
Librarians provide accurate dissemination of COVID-19 related information on their official social media platforms and other web 2.0 technologies	54	58.8	20	21.7	12	13.0	0	0.0	6	6.5	4.26	0.265	Accepted
Librarians provide special user-based digital library services amid COVID-19 pandemic	36	40.0	20	21.7	12	13.0	16	17.2	8	8.7	3.65	0.197	Accepted
Librarians ensure library collection disinfection and management amid the COVID-19 pandemic	22	24.1	12	13.0	34	36.9	12	13.0	12	13.0	3.22	0.174	Accepted
Grand											3.40	0.194	

Source: Authors' Computation from an online survey (2020)

Table 3a presents the frequency of male respondents on the roles played by Librarians amid the fight on COVID-19 in Nigeria. Table 3a reveals that 10(10.9%) of the male respondents were of the view that to a large extent Nigerian Librarians help prepare situational awareness and decision report based on COVID-19 pandemic information, while 34 (36.9%) of the male respondents think that Nigerian Librarians do not help prepare situational awareness and decision report based on COVID-19 pandemic information. Similarly, it reveals that 38(41.3%) of the male respondents were of the view that to a large extent Nigerian Librarians take part in crisis informatics research and make it available to the general public through social media and other new media forms, while 8 (8.7%) of the male respondents think that Nigerian Librarians do not take part in crisis informatics research and make it available to the general public through social media and other new media forms. Also, it reveals that 28(30.3%) of the male respondents were of the view that to a large extent Nigerian Librarians help prepare COVID-19 pandemic response plans for government institutions, Libraries & private Organizations, while 12 (13.0%) of the male respondents believe that Nigerian Librarians do not help prepare COVID-19 pandemic response plans for government institutions, Libraries & private Organizations.

Also, it reveals that 28(30.3%) of the male respondents were of the view that to a large extent Nigerian Librarians participate in COVID-19 pandemic emergency operational call

centre in taking questions from the public on the pandemic., while 12 (13.0%) of the male respondents believe that Nigerian Librarians do not participate in COVID-19 pandemic emergency operational call center in taking questions from the public on the pandemic. Also, it reveals that 38(41.3%) of the male respondents were of the view that to a large extent Nigerian Librarians provide emergency reference services to researchers, emergency responders, Govt. Institutions and the general public, while 10 (10.9%) of the male respondents believe that Nigerian Librarians do not provide emergency reference services to researchers, emergency responders, Govt. Institutions and the general public. Also, it reveals that 10(10.9%) of the male respondents were of the view that to a large extent Nigerian Librarians participate in training emergency responders on disaster reporting for the COVID-19 pandemic., while 34 (36.9%) of the male respondents believe that Nigerian Librarians do not participate in training emergency responders on disaster reporting for the COVID-19 pandemic. Also, it reveals that 54(58.8%) of the male respondents were of the view that to a large extent Nigerian Librarians provide an accurate dissemination of COVID-19 related information on their official social media platforms and another web 2.0 technologies, while 6 (6.5%) of the male respondents believe that Nigerian Librarians do not provide an accurate dissemination of COVID-19 related information on their official social media platforms and another web 2.0 technologies. Furthermore, it reveals that 36(40.0%) of the male respondents were of the view that to a large extent Nigerian Librarians provide special user-based digital library services amid COVID-19 pandemic, while 8 (8.7%) of the male respondents believe that Nigerian Librarians do not provide special user-based digital library services amid COVID-19 pandemic. Lastly, it reveals that 22(24.1%) of the male respondents were of the view that to a large extent Nigerian Librarians ensure library collection disinfection and management amid the COVID-19 pandemic while 12 (13.0%) of the male respondents believe that Nigerian Librarians do not ensure library collection disinfection and management amid the COVID-19 pandemic.

Table 3b: Roles played by Nigerian Librarian amid the fight on COVID-19 (Female)

Roles of Librarians	LE	%	ME	%	SE	%	VSE	%	NA	%	Mean	STD	Decision
Librarians help prepare situational awareness and decision report based on COVID-19 pandemic information	34	13.4	76	30.1	42	16.7	22	9.6	78	30.2	2.80	0.589	Rejected
Librarians take part in crisis informatics research and make it available to the general public through social media and other new media forms	128	50.2	82	33.8	22	9.6	4	0.1	16	6.3	4.19	0.860	Accepted
Librarians help prepare COVID-19 pandemic response plans for government institutions, Libraries & private Organizations	88	34.0	60	23.8	44	17.5	38	15.1	22	9.6	3.61	0.741	Accepted
Librarians participate in COVID-19 pandemic emergency operational	40	15.9	58	23.1	56	22.2	44	17.4	54	21.4	2.94	0.603	Rejected

call center in taking questions from the public on the pandemic														
Librarians provide emergency reference services to researchers, emergency responders, Govt. Institutions and the general public	138	54.8	52	20.6	26	10.3	16	6.3	20	8.0	3.76	0.772	Accepted	
Librarians participate in training emergency responders in disaster reporting and the COVID-19 pandemic	36	14.3	68	27.0	42	16.7	50	19.8	56	22.2	2.91	0.97	Rejected	
Librarians provide accurate dissemination of COVID-19 related information on their official social media platforms and other web 2.0 technologies	148	58.8	62	24.6	18	7.1	16	6.3	8	3.2	4.30	0.882	Accepted	
Librarians provide special user-based digital library services amid COVID-19 pandemic	82	32.6	70	27.8	36	14.3	30	11.9	34	13.4	3.54	0.727	Accepted	
Librarians ensure library collection disinfection and management amid the COVID-19 pandemic	104	41.2	58	23.0	38	15.1	32	12.7	20	8.0	3.76	0.772	Accepted	
Grand											3.54	0.727		

Source: Authors' Computation from online survey (2020)

Table 3b presents the frequency of female respondents on the roles played by Librarians amid the fight on COVID-19 in Nigeria. Table 3b reveals that 34(13.4%) of the female respondents were of the view that to a large extent Nigerian Librarians help prepare situational awareness and decision report based on COVID-19 pandemic information, while 78 (30.2%) of the female respondents believe that Nigerian Librarians do not help prepare situational awareness and decision report based on COVID-19 pandemic information. Similarly, it reveals that 128(50.2%) of the female respondents were of the view that to a large extent Nigerian Librarians take part in crisis informatics research and make it available to the general public through social media and other new media forms, while 16 (6.3%) of the female respondents believe that Nigerian Librarians do not take part in crisis informatics research and make it available to the general public through social media and other new media forms.

Also, it reveals that 88(34.0%) of the female respondents were of the view that to a large extent Nigerian Librarians help prepare COVID-19 pandemic response plans for government institutions, Libraries & private Organizations, while 22 (9.6%) of the female respondents believe that Nigerian Librarians do not help prepare COVID-19 pandemic response plans for government institutions, Libraries & private Organizations. Also, it reveals that 40(15.9%) of the female respondents were of the view that to a large extent Nigerian Librarians participate in COVID-19 pandemic emergency operational call centre in taking

questions from the public on the pandemic., while 54 (21.4%) of the male respondents believe that Nigerian Librarians do not participate in COVID-19 pandemic emergency operational call center in taking questions from the public on the pandemic. Also, it reveals that 138(54.8%) of the female respondents were of the view that to a large extent Nigerian Librarians provide emergency reference services to researchers, emergency responders, Govt. Institutions and the general public, while 20 (8.0%) of the female respondents believe that Nigerian Librarians do not provide emergency reference services to researchers, emergency responders, Govt. Institutions and the general public. Also, it reveals that 36(14.3%) of the female respondents were of the view that to a large extent Nigerian Librarians participate in training emergency responders on disaster reporting for the COVID-19 pandemic., while 56 (22.2%) of the female respondents believe that Nigerian Librarians do not participate in training emergency responders on disaster reporting for the COVID-19 pandemic.

Also, it reveals that 148 (58.8%) of the female respondents were of the view that to a large extent Nigerian Librarians provide an accurate dissemination of COVID-19 related information on their official social media platforms and other web 2.0 technologies, while 8 (3.2%) of the female respondents believe that Nigerian Librarians do not provide an accurate dissemination of COVID-19 related information on their official social media platforms and another web 2.0 technologies. Furthermore, it reveals that 82(32.6%) of the female respondents were of the view that to a large extent Nigerian Librarians provide special user-based digital library services amid COVID-19 pandemic, while 34 (13.4%) of the female respondents believe that Nigerian Librarians do not provide special user-based digital library services amid COVID-19 pandemic. Lastly, it reveals that 104 (41.2%) of the female respondents were of the view that to a large extent Nigerian Librarians ensure library collection disinfection and management amid the COVID-19 pandemic while 20 (8.0%) of the female respondents believe that Nigerian Librarians do not ensure library collection disinfection and management amid the COVID-19 pandemic.

TEST OF HYPOTHESES

Table 4: Summary of independent Sample test on the difference in the mean responses of male and female Librarians on the sources of COVID-19 information on social media in Nigeria

Gender	N	Mean	Std. Deviation	T	df	p-value
Male	92	4.22	24.31	-0.020	342	0.984
Female	252	4.35	61.03			

Source: Authors' Computation from SPSS 23

The result from Table 4 shows Summary of independent Sample test on the difference in the mean responses of male and female Librarians on the sources of COVID-19 information on social media in Nigeria. It shows that the mean rating of male Librarians on the sources of COVID-19 information on social media in Nigeria was 4.22, SD= 24.31 whereas that of the female Librarians was 4.35, SD = 61.03. The result shows that there is no significant difference in the mean responses of male and female Librarians on the sources of COVID-19 information on social media in Nigeria ($t = 0.020$, $df = 342$, $p = 0.984$). Thus, null hypotheses one was not rejected at .05 level of significance.

Table 5: Summary of independent Sample test on the difference in the mean responses of male and female Librarians on the issues associated with social media misinformation on COVID-19 pandemic in Nigeria

Gender	N	Mean	Std. Deviation	T	Df	p-value
Male	92	3.23	0.98	-.117	342	0.907
Female	252	3.24	0.57			

Source: Authors' Computation from SPSS 23

The result from Table 5 shows Summary of independent Sample test on the difference in the mean responses of male and female Librarians on the issues associated with social media misinformation on COVID-19 pandemic in Nigeria. It shows that the mean rating of male Librarians on the issues associated with social media misinformation on COVID-19 pandemic in Nigeria was 3.23, SD= 0.98 whereas that of the female Librarians was 3.24, SD = 0.57. The result shows that there is no significant difference in the mean responses of male and female Librarians on the issues associated with social media misinformation on COVID-19 pandemic in Nigeria ($t = 0.117$, $df = 342$, $p = 0.907$). Thus, null hypotheses two was not rejected at .05 level of significance.

Table 6: Summary of independent Sample test on the difference in the mean responses of male and female Librarians on the roles carried out by Librarians amid COVID-19 pandemic in Nigeria

Gender	N	Mean	Std. Deviation	T	Df	p-value
Male	92	3.40	0.19	1.882	342	0.069
Female	252	3.54	0.73			

Source: Authors' Computation from SPSS 23

The result from Table 6 shows Summary of independent Sample test on the difference in the mean responses of male and female Librarians on the roles carried out by Librarians amid COVID-19 pandemic in Nigeria. It shows that the mean rating of male Librarians on the issues associated with social media misinformation on COVID-19 pandemic in Nigeria was 3.40, SD= 0.19 whereas that of the female Librarians was 3.54, SD = 0.73. The result shows that there is no significant difference in the mean responses of male and female Librarians on the roles carried out by Librarians amid COVID-19 pandemic in Nigeria ($t = 1.882$, $df = 342$, $p = 0.069$). Thus, null hypotheses three was not rejected at .05 level of significance.

DISCUSSION OF FINDINGS

Table 1 reveals that Facebook and WhatsApp were the social media platform from which Librarians accessed or disseminated COVID-19 related information more frequently than twitter, Instagram and 2go. Comparatively, it revealed that Male Librarians accessed or disseminated COVID-19 related information more frequently from WhatsApp than any of the listed social media platform while female Librarians used fakebook more than y other listed social media platform. This implies that Facebook and WhatsApp were the social media platform frequently utilized by Librarians in Nigeria for retrieving and disseminating information on COVID-19. This is backed by the findings of Merchant (2020) and Merchant

and Lurie (2020) who reported that the most widely used social media platform for COVID-19 updates is Facebook with an estimated 175 million adult users only in the United States of America. Facebook has seen increased usage duringg the COVID-19 due to its usefulness as a preventive health tool.

From table 2, whereas, male Librarians opinions indicate that the most serious issue emanating from social media misinformation is stigmatization, followed by panic and health hazard; female Librarians feel that panic is the main problem Nigerian encountered from social media misinformation, followed by stigmatization and health hazard. This implies that in the case of Nigeria, Stigmatization, panic and Health hazards, are the problems that emanate from social media misinformation on COVID-19. Cases of chloroquine overdose and similar drug abuse were generally reported across the country, similarly, several days before the country-wide lockdown, several queues were observed at different market places as Nigerians were panic buying of items both required and not required for an emergency like the COVID-19 pandemic. This is similar to findings observed by Merchant (2020) and Merchant and Lurie (2020) as few health hazards were observed in China and other advanced countries due to social media misinformation. However, while advanced countries saw an increase in discrimination and racism due to misinformation that colored people were transmitters of the virus, such experiences were insignificant in the case of Nigeria.

The result from table 3 implies that in the case of Nigeria, amid the fight on COVID-19, Librarians offered their professional expertise in:

- Crisis informatics research and making it available to the general public through social media and other new media forms.
- Preparing COVID-19 pandemic response plans for government institutions, Libraries & private Organizations.
- Providing emergency reference services to researchers, emergency responders, Govt. Institutions and the general public
- Providing accurate dissemination of COVID-19 related information on their official social media platforms and other web 2.0 technologies.
- Providing special user-based digital library services amid COVID-19 pandemic.
- Ensuring library collection disinfection and management amid the COVID-19 pandemic.

This is in line with the findings of Ali and Gatiti (2020) which asserted that the roles that professional Librarians carryout during times of pandemics are geared towards raising awareness through public health education, providing support to medical staff and public health professionals and providing ongoing, traditional and digital services to regular Library patrons. However, it can be clearly observed that professional Librarians in Nigeria amid the fight on COVID-19 has not be afforded the ability to perform their roles of information first responders as they have not significantly participated in the following:

- Preparing situational awareness and decision report based on COVID-19 pandemic information.
- COVID-19 pandemic emergency operational call center responders in taking questions from the public on the pandemic.
- Training emergency responders in disaster reporting and the COVID-19 pandemic.

CONCLUSION

From findings, the study concludes that Facebook and Whatsapp are the social media platforms frequently utilized by Librarians for accessing, retrieving and disseminating information on COVID-19 pandemic in Nigeria which can be attributed to the number of users on the platform and the ease of use. Also, that the roles played by Nigerian Librarians in the fight against COVID-19 pandemic are traditional as specialized roles as disaster information specialist was not significantly performed.

Recommendations

Based on the study, it is recommended the following recommendations were made:

- The Nigerian Library Association issues a communiqué to both government and private institutions in Nigeria on the need for them to identify and utilize Librarians as Information first responders for disaster management;
- The Nigerian Library Association should institute special course or workshops on disaster information management to equip professional Librarians with the required knowledge and skills for performing their roles as disaster information specialist for future disaster outbreaks such as pandemics, etc.

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