International Journal of Information Science and Management
Vol. 21, No. 3, 2023, 145-159
DOI: https://doi.org/10.22034/ijism.2023.1977768.0 / DOR: https://dorl.net/dor/20.1001.1.20088302.2023.21.3.9.3

Original Research

COVID-19 Misinformation and the Role of the Information Professional

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Received: 24 March 2022
Accepted: 13 August 2022

Abstract

One group whose work involves information management is librarians. The study thus sought to understand their information management and sharing behavior during the current pandemic. An online survey was activated and shared among respondents. The questionnaires created with Google Forms were sent through the WhatsApp messaging system and email addresses of the members of the national library association (The Ghana Library Association). The questionnaire elicited information on COVID-19 information sharing and management of librarians in Ghana. Librarians in the country were asked how they receive, share and check the credibility of information regarding the pandemic. Results indicated that different people treated pandemic-related information differently. The respondents were involved in information sharing and considered information management as very important in the fight against the disease. It came out that the surest way to contain the disease would be through a well-coordinated channel such as educating the masses in information literacy and news literacy skills.

Keywords: COVID-19, Coronavirus Pandemic, Misinformation, Infodemic, News Literacy, Information Professionals.

Introduction

In late 2019 and early 2020, many people in different countries worldwide became infected by the new Coronavirus, also called COVID-19. This created challenges for these countries in many aspects, including economic, political, social, health, etc. Some of these challenges are directly or indirectly related to information discussion because providing the correct information at the right time and to the right audience can solve or reduce some of the challenges. However, there were problems in this process during this crisis. Various individuals and organizations began to produce and disseminate information that, given the unique circumstances of this crisis (that most countries have rarely experienced), produced types of information worth considering.

To stem the tide of misinformation about the disease, institutions like the World Health Organization (WHO) and Johns Hopkins Medicine created platforms to educate people. According to Zarocostas (2020), the WHO launched a platform to combat misinformation around COVID-19. The United Nations Education, Scientific, and Cultural Organisation (UNESCO) also used hashtags such as #ThinkBeforeClicking, #ThinkBeforeSharing, and #ShareKnowledge to counter misinformation and promote the facts about the COVID-19 disease (Naeem & Bhatti, 2020). But this global epidemic of misinformation spreading rapidly through social media platforms and other outlets posing as a severe public health problem continued unabated (Zarocostas, 2020). As a result, WHO Director-General Tedros Adhanom Ghebreyesus at the Munich Security Conference on 15th February 2020 said, "We're not just fighting an epidemic; we're fighting an infodemic" (WHO, 2020).

The pandemic outbreak in late 2019 in China has been accompanied by a vast amount of medical misinformation, rumors, and half-backed conspiracy theories from unfiltered channels, often disseminated through social media and other outlets (Naeem & Bhatti, 2020). Among the false information shared are the effect of 5G in spreading the disease, the use of antibiotics to cure the disease, the eating of garlic to cure the disease, rinsing of the nose with saline to prevent infection with the disease, the use of pneumonia vaccines to protect one against the disease, spraying of alcohol on one's body to kill the virus, intake of hydroxyl chlorine and several others (WHO, 2020; Naeem and Bhatti, 2020). Everyone shared This false information worldwide, including information professionals who were supposed to know how to be professional in information dissemination. This is because information professionals have been trained to evaluate information critically before making the information accessible for public use. This study, therefore, seeks to understand the news (information) literacy skills of information professionals in Ghana in the wake of misinformation about the novel coronavirus disease (COVID-19), which has taken the whole world by storm.

COVID-19 Misinformation in Ghana

Like many other countries, Ghana was not spared by the COVID-19 pandemic. The first COVID-19 case was recorded in Ghana on 12th March 2020 from a laboratory test conducted at the Noguchi Memorial Institute for Medical Research of the University of Ghana (Ministry of Health, 2020; Yendork and James, 2020). These cases were imported from Turkey and Norway (Adom, 2020). Since then, the number of cases has increased to 125,565, with about 1125 confirmed dead as of 21st September 2021 (WHO, 2021). The disease outbreak in the country led to a lockdown aimed at regulating public and even elements of private life to enforce social distancing (Durizzo, Asiedu, Van der Merwe, Van Niekerk & Günther, 2021). This lockdown, of course, came with its associated problems. As Durizzo et al. (2021) opine, the cost of such lockdowns is highest for poor individuals, who are likelier to work in the informal economy and depend on a daily wage. Most Ghanaians were affected by the loss of income and increasing food prices (ibid).

Ghana also had its fair share of misinformation, fake news, and disinformation about the disease. This misinformation had preventive, management, cure, economic, and causative agent on the disease. Among the misinformation and myths mainly circulated on social media in Ghana were that the virus cannot survive in high temperatures (Abu-Bonsrah, et al., 2023; Tabong and Segtub, 2021) , COVID-19 infection was immune to the black genes (Adom, 2020; Tabong and Segtub, 2021), COVID-19 is a matter of faith, boosting of the immune system by

consuming high aggregates of garlic, and inhaling the steam from boiled water mixed with Neem leaves or lemon (Adom, 2020; Tabong and Segtub, 2021), the disease only affects older people while younger individuals were less susceptible to the disease, drinking of apple cider vinegar and drinking of locally manufactured alcoholic drink (akpetseshie) as a preventive measure against the disease, COVID-19 was a biological weapon to bring down countries who were competing with China for both socio-economic and control of developing countries, the disease was caused by 5G networks, use of hydroxychloroquine as prophylaxis and management, inhaling steam from boiled Pawpaw leaves, recovered individuals could still be infectious (Tabong and Segtub, 2021). Coupled with these myths and misinformation were suspicions of underreporting the number of cases, recoveries, and deaths to show that the country was managing the pandemic well (ibid). This suspicion led to a growing mistrust of the citizenry about the information associated with the disease coming from official sources. It impacted the observation of the safety protocols among the populace.

Literature Review

Information practices are socially and culturally established ways to identify needs, seek, evaluate, share, and use information (Savolainen, 2008). The social process of learning about the new information environment and understanding how to deal with information in the new setting is emphasized in information practices (Lloyd, Kennan, Thompson & Qayyum, 2013). The review will focus on misinformation, news literacy skills, and the information professional's role.

Misinformation

Fake news is not new; propaganda is as old as 44 BC (Ameen & Naeem, 2021). O'Connor and Weatherall (2020) and Ameen and Naeem (2021) contend that misinformation has become widespread and more effective today due to recent technologies. O'Connor and Weatherall (2019) trace the history of misinformation or fake news to the Vegetable Lamb story, which they sum up as a "harmless historical curiosity." Despite these and many other stories about fake news, the phenomenon gained more prominence in the 2016 US presidential election (Ameen & Naeem, 2021; O'Connor & Weatherall, 2019; Revez & Corujo, 2021). Fake news and false beliefs were pivotal in the 2016 US election, the UK Brexit vote, and other European elections (O'Connor & Weatherall, 2019). Misinformation, according to Karlova (2018), may be a piece of information that is inaccurate, uncertain (perhaps by presenting more than one possibility or choice), vague (unclear), or ambiguous (open to multiple interpretations). Lim (2020) defines misinformation as "intentionally misleading and biased representational information for the benefit of the message sender, which contains false information, with or without a blend of one or more components of omitted important information, a decontextualized content, misleading headlines, or clickbait." The motivation for creating fake news is to mislead, for fun, gain power or influence, or get richer (Farmer, 2019). According to Karlova and Fisher (2013), people enjoy sharing information, especially 'news'. Even though they may not believe such information, they delight in spreading it through their social networks. It enables misinformation (inaccurate information) and disinformation (misleading information) to diffuse, over time, across social groups quickly. Social media, such as WhatsApp, Twitter, and Facebook, have made dissemination and diffusion easier and faster (ibid). Shao, Ciampaglia, Flammini and Menczer (2016); Frederiksen (2017); Fernandez and

Alani (2018); Laato, Islam, Islam and Whelan (2020); Naeem and Bhatti (2020); Pennycook, McPhetres, Yanhao, Lu and Rand (2020); Singh *et al.* (2020); Ameen and Naeem (2021); Revez and Corujo (2021) mentioned social media platforms such as Twitter, Facebook, WhatsApp, Instagram and sometimes the Internet as the most prevalent platforms for the sharing of fake news. Examples of misinformation shared on social media include rumors, hoaxes, fake news, and conspiracy theories (Shao, Ciampaglia, Flammini & Menczer, 2016). High-impact topics, for example, health, politics, finances, and technology trends, are prime sources of misinformation and disinformation in wide-ranging contexts (Karlova & Fisher, 2013). Fake news poses a serious threat to health, democracy, and information ecosystems, as truth is no longer related to authority, expertise, or real facts but to interpretation, perception, emotions, and sentiments (Cooke, 2018; Cosentino, 2020; Revez & Corujo, 2021). Within the information, ecosystem is also the emergence of post-truth, which amounts to ideological supremacy, whereby its practitioners try to compel people to believe in something, whether there is good evidence for it or not (Revez & Corujo, 2021). News literacy skills can only mitigate the dangers of misinformation, fake news, and propaganda.

News literacy skills

Like the interest of librarians in information literacy, news literacy is also an area of interest for journalism scholars due to misinformation. Just as students are required to use credible resources to complete their research assignments, the general public is also required multiple times a day to make decisions based on information sources they find in the mass media, on the Web, and through their social media accounts (Neely-Sardon & Tignor, 2018). News literacy, a term related to information literacy, is defined as "being able to differentiate news and quality information that can come from a variety of sources from the plethora of content that circulates online, some of which are designed to mislead audiences about the source and the standards upheld in creating it" (Vraga, Tully, Maksl, Craft, & Ashley, 2021). Similarly, the Stony Brook University Center for News Literacy (2014) defines news literacy as "the ability to use critical thinking skills to judge the reliability and credibility of news reports from all media: print, TV, radio or the web". This means that an information literate individual must tell if the news source they are reading is satire, native advertising, heavily biased reporting, an editorial, or an accurate news article written by an ethical and competent journalist (Neely-Sardon & Tignor, 2018). News literacy addresses the knowledge and skills necessary to become a more mindful and sceptical news consumer who understands the relationship between journalists, news production, citizens, and democracy in changing media environments (Vraga & Tully, 2021). What is the information professional's role, and what can the information professional do to address the issue of misinformation and vile propaganda about COVID-19?

The role of the information professional

Information professionals play essential roles in the information society by providing physical and intellectual access to their resources (Farmer, 2019). In an era where fake news, misinformation, and propaganda are circulated rapidly via social media, which destabilize traditional expertise and authority, information scholars and professionals are called upon to respond (Julien, n.d.) and "take leadership in the current crisis" (Jacobson, 2017). The response from the profession has been to reaffirm the core values of librarianship and to hold up traditional services as a means for combating misinformation. The primary response from the

profession to the alternative facts was information literacy which was seen as a comprehensive strategy (Revez & Corujo, 2021). Other solutions to misinformation have been the development of library guides, tools, and instructions (Ameen & Naeem, 2021). Even though these solutions are laudable, the problem is that the solutions were offered in the absence of a complete understanding of the real danger of misinformation, which is "not just that misinformation is 'out there,'" but "what misinformation does to our mind" (Ecker, 2015). Librarians need to engage in the public discourse about misinformation and its effects and support those working in the information dissemination environment to counteract it (Julien, n.d.). Moreover, educating future information professionals who can engage in these conversations and help others develop news literacy skills is vital. Perhaps now more than ever, news literacy matters, not just as a skill set to enable people to analyze and evaluate the information, they come across but also critical to many important social phenomena, including positive health outcomes (ibid).

Research Objectives

The purpose of this paper is to examine the role of information professionals in the management of news and misinformation about COVID-19.

The specific objectives of the paper are:

1. To identify when, where, and how often information professionals receive COVID-19 news
2. To identify which platforms are used in sharing the COVID-19 information
3. To identify how the credit checks of COVID-19 information are done

Significance of the Study

This topic is essential for Library and Information Science, where the awareness of misinformation as a part of information practices or behavior is still developing among information professionals. The study also has societal importance by creating knowledge about the information management of potential COVID-19 patients in Ghana. Understanding the presence of misinformation in the citizenry's lives helps service providers and other actors give accurate information that is understandable, usable, and culturally meaningful for the patient of the virus. Receiving accurate information is also essential for their social inclusion.

Materials and Methods

The paper examines the kind of attention professionals attribute to information about COVID-19. Information professionals were particularly sampled for the simple reason that they are trained with knowledge about digital platforms. Their role in online platforms is expected to attain a standard worthy of emulation. A quantitative approach that allows for the generalization and replication of research findings was adopted for this study.

An online survey platform, Google Forms, activated for two months (i.e., between April and May 2020), served as the instrument for data collection. The questionnaire developed by the authors touched on the subject matter of the study to elicit the required information. They included the demographics of the respondents, sharing of information (news) about COVID-19, the platforms on which they receive and share information about COVID-19, frequency of information sharing, the credibility of the information shared, the sources used to judge the credibility of the information shared and their perception of knowledge management. Each question either required a selection of multiple responses or sometimes Yes/No.

The questionnaires were first given to the authors to share with their contacts on the WhatsApp messaging platform. It was sent to the three hundred email addresses obtained from the listserv of the Ghana Library Association. The questionnaire was piloted with two librarians from different universities before sending it to the respondents. This was done to test the efficacy of the instrument.

The questionnaire received inadequate responses initially due to the outbreak of COVID-19. This compelled the authors to resend the questions but did not automatically encourage responses. Traditionally responding to questionnaires is seen as a bother (Dillman, Sinclair & Clark, 1993), and in some African countries and Ghana in particular, the situation could be worse. Lack of time and interest has been associated with this trend. However, a different reason may have popped up in an online environment. While Internet service is almost becoming necessary, access to this technology can be expensive in some parts, especially in developing economies. Given the relatively high cost of the Internet in Ghana, most people who do not have the facility in their offices would prefer to do something else with the short time they have with the Internet. This accounts for the low patronage of the survey. Reminders were sent many times to remedy the situation, and after a while, the team decided to close the survey. A total of seventy-four (74) copies of the questionnaire, 54.1% male and 48.6% female were returned for analysis. The Statistical Package for the Social Sciences (SPSS) was used to analyze data. The analyzed data were presented in percentages using simple figures.

Results

COVID-19 Information Sharing

The respondents were asked to indicate whether they shared information about the disease. From the results, an overwhelming majority (96%) of the respondents affirmed that they have been sharing information about the disease. Only a tiny proportion of the respondents were sharing COVID-19-related information. A sequel to this question inquired from those involved with the COVID-19 information sharing to mention those with whom they share the information. Their response is illustrated in Figure 1. Many respondents (85.1) mentioned friends as those with whom they have been sharing COVID-19-related information. Those who shared with family members recorded a response rate of (81.1). Other responses can be seen in Figure 1.

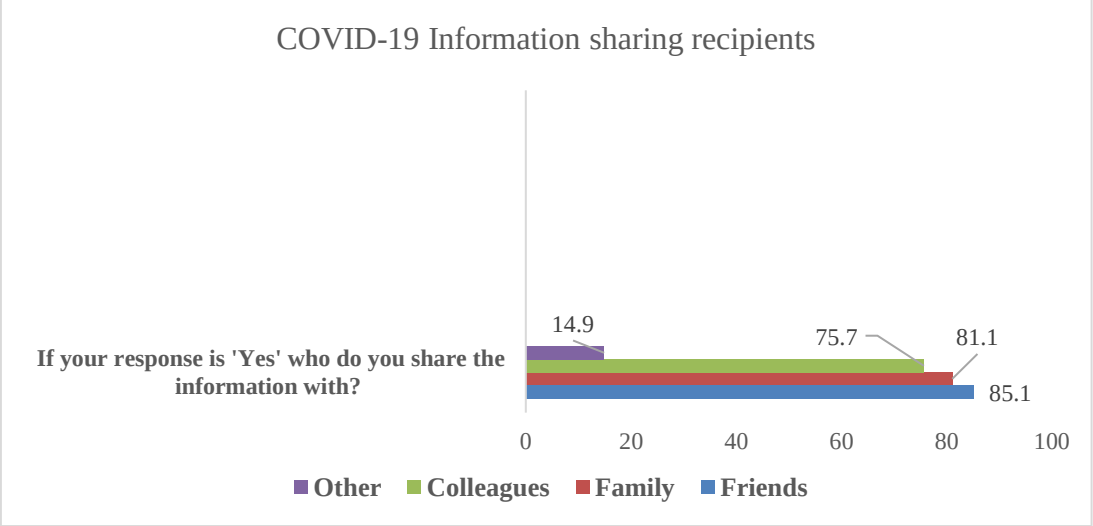

Figure 1: COVID-19 Information Sharing Recipients

Outlets for Sharing COVID-19 Information

Figure 2 presents statistics on the outlets used by the respondents to share COVID-19 information. Many respondents (78.4) mentioned electronic media as the platform they used to share COVID-19 information. Social media followed with a 71.6 response rate, with 59.5 and 47.3 responses recorded for Internet and print media, respectively.

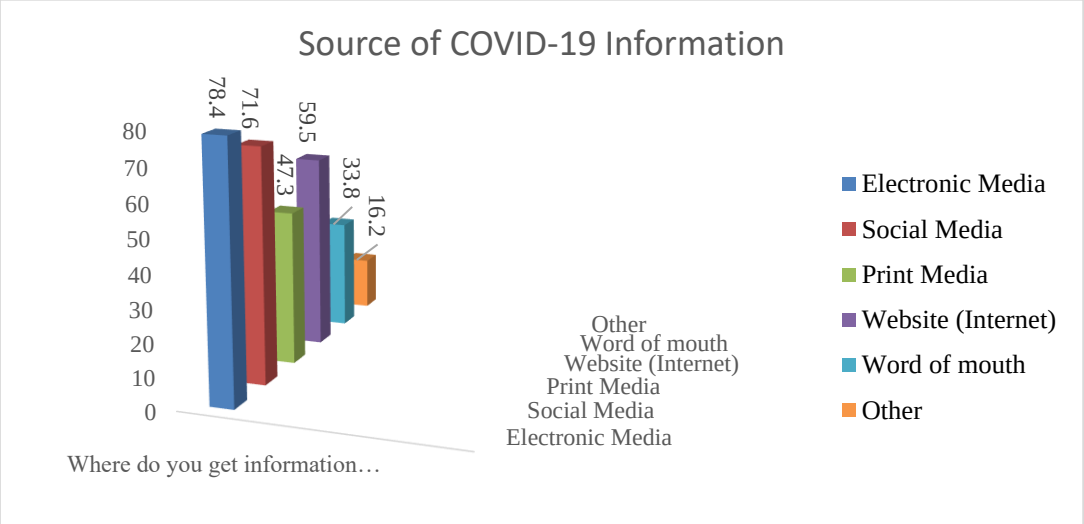

Figure 2: Source of COVID-19 Information

COVID-19 Information-Sharing Frequency

Figure 3 presents statistics about the frequency of sharing COVID-19 information. Figure 3 illustrates that about half of the respondents (47%) shared and received information about COVID-19 with their contacts. Some respondents (24%) were unsure if they were involved in any information sharing about COVID-19. See Figure 3 for the rest of the responses.

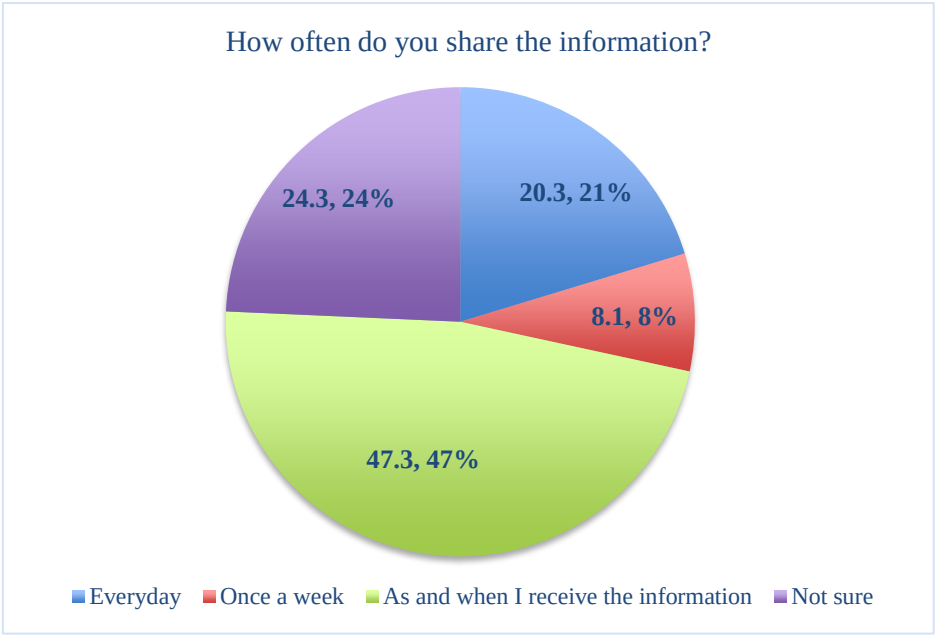

Figure 3: Information sharing frequency

Trust for COVID-19 Information

This question sought the respondents' views on their trust in the information they received or shared about COVID-19 on social media. A significant number of the respondents (76.7%) indicated that they do not believe wholeheartedly in the information received on social media about the disease. A little above a quarter (16.4%) of the respondents somehow trusted the information they received. Only a tiny fraction (6.8%) of the respondents trusted the information they received about the disease.

Criteria for checking the authenticity of information

Figures 4 and 5 depict the responses about whether the respondents check for the authenticity of the information they receive about COVID-19 and, if they do, what they use to check it. In response to whether they check for the truthfulness of the information they share, the majority (75.3%) of the respondents answered in the affirmative.

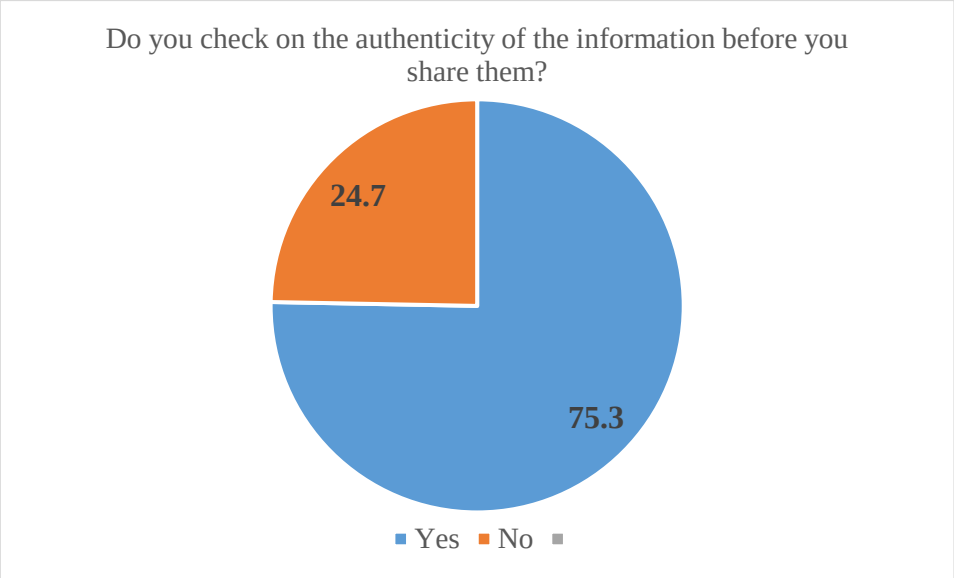

Figure 4: Checking for authenticity

In a follow-up question about what they use to authenticate the information, most respondents (80.7%) who indicated that they check for the authenticity of every piece of information sent to them mentioned that they rely on the organization releasing the information as their credibility pointer (Figure 5). Others said the author of the information and facts check platforms are the pointers they use to authenticate the information they receive.

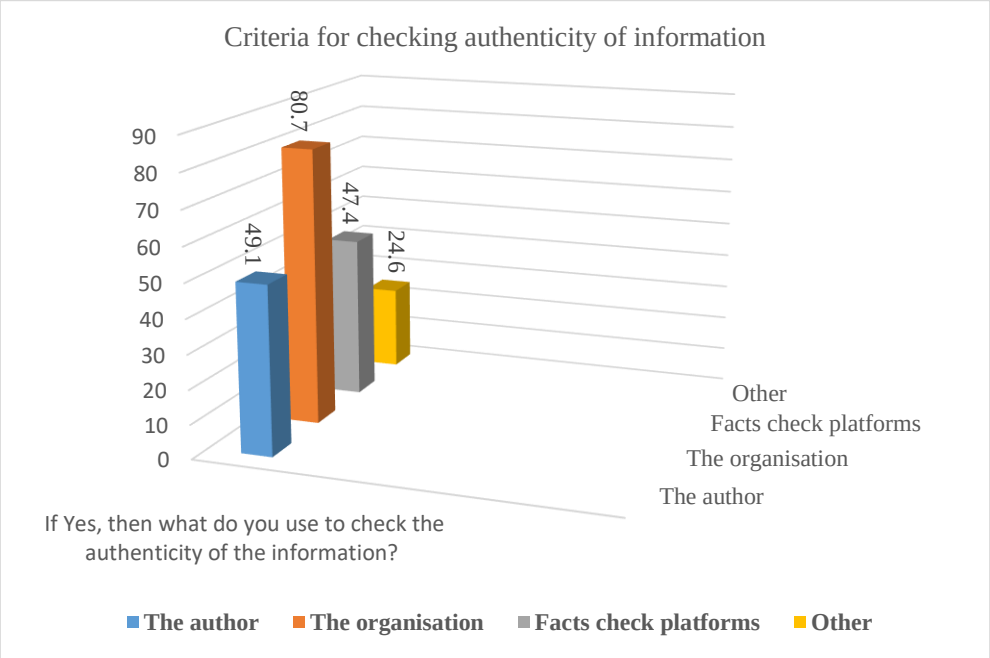

Figure 5: Criteria for checking the authenticity of information

Awareness of credible COVID-19 Information Sources

This part of the study sought the respondents' knowledge of credible COVID-19 information sources (see Figures 6 and 7). On the international front, most respondents (93.2) were aware of the World Health Organisation as a credible source of information about the disease. Other international COVID-19 information sources, such as the Johns Hopkins University and Medicine and Centers for Disease Control and Prevention, had 52.7 and 48.6 respondents, respectively.

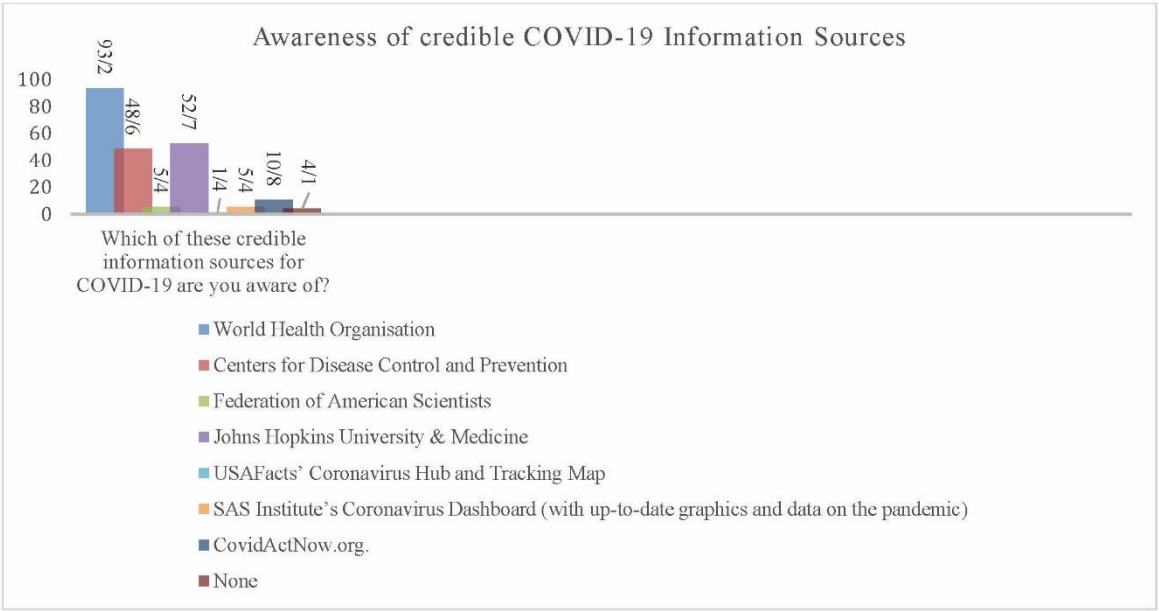

Figure 6: Awareness of credible COVID-19 international information sources

On the local front, 33% of the respondents were aware of the Ghana Health Service, 27%

were aware of the Ministry of Health, and 24% were aware of the Ministry of Information. The other governmental agencies also playing roles in the fight against the disease that many respondents are unfamiliar with can be seen in Figure 7.

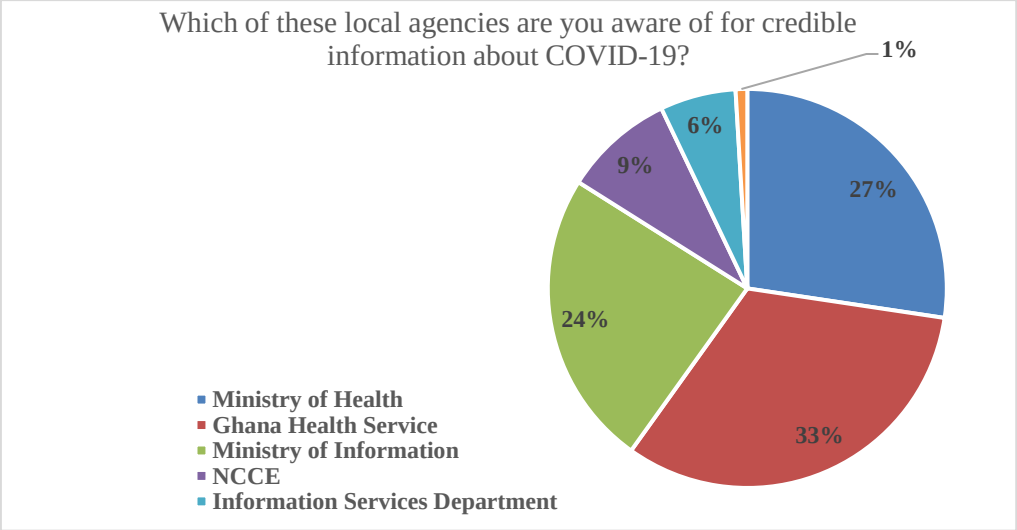

Figure 7: Awareness of credible COVID-19 local information sources

Fact-checking websites

Figure 8 presents statistics about the awareness of fact-checking websites by the respondents. As the Figure shows, less than half (37%) of the respondents were unaware of any fact-checking website. Factcheck.org was the item many respondents (34%) were aware of. Others such as AFP Fact Check, Politifact, and Truth or Fiction, received eight and six percent, respectively.

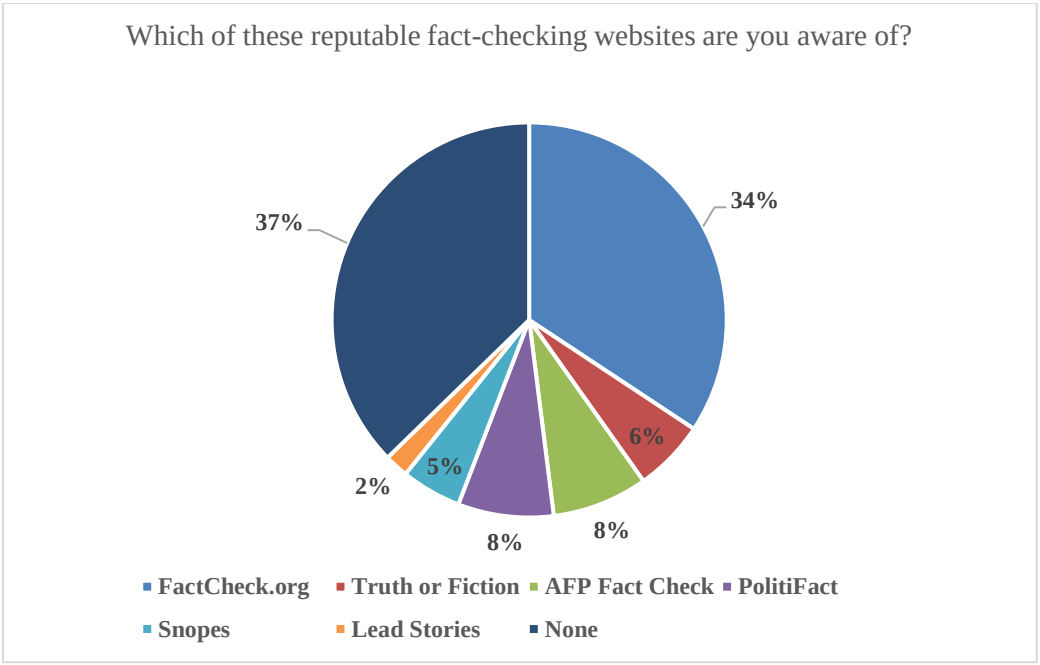

Figure 8: Awareness of fact-checking websites

Information Management

This question sought to know respondents' perceptions of information management during COVID-19. Most respondents (97%) affirmed that information management in a pandemic is crucial. A small fraction (3%) did not consider the information necessary to contain the disease.

Discussion

Information sharing during a pandemic will be vital in mitigating the effects on the citizens, a position supported by (Garrido-Pelaz, González-Manzano & Pastrana, 2016). Garrido-Pelaz, González-Manzano & Pastrana (2016) intimated that information sharing enables a common understanding of threats and how to deal with such threats. Information sharing comes from the desire of people to give information to others (Thompson, Wang & Daya, 2020). Several people have shared a plethora of information relating to the pandemic in diverse professions and backgrounds since December 2020. Areas of information shared include awareness of the disease, how to contract it, what to do when one acquires it, and how to treat it. Among this information shared has also been a large volume of misinformation. Most respondents affirmed that they had shared information about the disease with their friends, families, and colleagues. This high response rate is not surprising since the respondents' primary function is looking for information and making it available for others to access and utilize.

Many participants shared information about the disease using electronic media, i.e. radio and television. This revelation goes counter to earlier studies by Laato, Islam, Islam and Whelan (2020); Naeem and Bhatti (2020); Pennycook, McPhetres, Yanhao, Lu and Rand (2020); Singh *et al.* (2020); Ameen and Naeem (2021); Revez and Corujo (2021), which mentioned social media and the Internet as the prevalent platforms on which information about the disease has been shared.

It is almost impossible to accurately determine whether a piece of news is reliable based on the article. Therefore, additional information verification sources are needed (Del Vicario *et al*., 2016). Several reliable international and local bodies daily provide credible information about the disease. Many respondents were aware of the World Health Organisation, Johns Hopkins University, and Medicine, Centers for Disease Control and Prevention, the Ghana Health Service, the Ministry of Health, and the Ministry of Information as credible sources for information about the disease.

Except for Factcheck.org, which a small proportion of the respondents were aware of, a significant number of respondents were unaware of any fact-checking websites. The implication is that many respondents will likely accept any information they receive about the disease at its face value without doing further due diligence to authenticate the information received. Fact-checking has become imperative since all manner of information is made available to the general public by persons and groups to educate or deceive the recipients. According to Brennen, Simon, Howard and Nielsen (2020), "As COVID-19 spreads, fact-checking efforts are multiplying, with the number of English-language fact-checks about COVID-19 increasing by more than 900% from January to March 2020". Many fact-checking outlets worldwide devote much - if not most – of their time and resources to debunking claims about the pandemic (Brennen, Simon, Howard & Nielsen, 2020). Scheufele and Krause (2019) believe fact-checking can be of limited utility - or worse, and it can backfire - in contexts where audiences are motivated to defend their pre-existing beliefs.

The majority of the respondents affirmed that information management is essential.

Information management is very critical in the lives of individuals and businesses. It determines to a large extent, the failures and successes of individuals and companies. One of the reasons for information management mentioned by Picot (1989) "is to ensure that information is used effectively and efficiently". Therefore, how COVID-19 information is managed and used will play a pivotal role in the containment of the disease.

Conclusion

Misinformation or disinformation about COVID-19 has become a worrying phenomenon that needs to be checked if the world wants to win the war against the disease. A much-coordinated effort through sharing credible information by all and sundry will go a long way to help mitigate the effects of the disease on the citizenry. Information professionals have a more significant role in ensuring the sharing of credible information about the disease. The study revealed that the information professionals in Ghana are deeply involved in sharing information about the disease and know what to use to check the credibility of the information they either shared or shared with them. They also appreciated that information management is one key thing to pay much attention to in a pandemic like this. Therefore, educating people on differentiating credible information from unreliable information will be the most critical action librarians, and information professionals can take in the face of these crises. Again, teaching information literacy, news literacy, health literacy, and explaining appropriate behavior in times of crisis are other actions librarians should consider. In addition to efforts at various levels to prevent the spread of the disease and other problematic conditions, special attention should be paid to the community's mental health issues by releasing authentic information. Hopefully, this crisis experience will encourage librarians to become more active and have a more effective presence in future disasters.

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