

# Librarians' Use of Social Media in Disseminating Health Information on COVID-19

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## ABSTRACT

Due to the high rate of transmission of the Covid 19, it is evidenced that people in rural and urban areas have not been properly informed about this scourge. Illiteracy may have formed part of the problems for them to access the social media tools that contain information disseminated on Covid 19. Fake information on social media has dominated the social space with its attendant conspiracy theories. This has provided conflicting beliefs about this pandemic. This, therefore, has provided a gap for the librarians to fill. This theoretical paper assesses the librarians' use of social media in disseminating health information on Covid 19. The paper using updated and relevant literatures, gave concepts for social media, health information, dissemination/information dissemination, and Coronavirus disease (Covid 19). The paper discussed the librarians' use of social media trusted sources to disseminate Covid 19 information. The paper also x-rayed the social media used by librarians for Covid 19 information dissemination. The paper further discussed the problems of librarians' use of social media in dissemination of Covid 19 health information. Conclusion was that in this information age, public health awareness is key to minimize causalities, and librarians can play a vital role to disseminate this information with

health care workers, society, and communities by utilizing effective social media platforms such as Facebook, LinkedIn, Whatsapp, 2go, YouTube, Instagram, Pinterest, Twitter, WordPress, Tumblr, Blogger, among others to educate people on maintaining preventive measures during the lockdown phase. The paper recommended that librarians in all institutions should be motivated by means of enhanced packages to cover cost for subscription and other social media tools that will boost their dissemination of health information on Covid 19 to the people

**Keywords:** Librarian, Social media, Dissemination, Health information, Covid-19

## INTRODUCTION

In line with the aims of the sustainable development goals (SDGs) to specifically reduce child mortality, improve maternal health, and Combat HIV/AIDS, malaria and other diseases (Chetley, 2006), there has been an increased need to improve on the health of the entire world citizens, mostly from the undeveloped countries. This effort has been heightened due to the incessant poor health status of the poorest world populace. According to Bras et al, cited in Sokey, Adjei and Ankrah (2018), there has also been an increase of a wide range of controlled, uncontrolled,

preventable and non-preventable diseases, and inadequate healthcare services which are considered a major deterrent to human, social and economic development in developing countries. Therefore, to improve on the health status of the rural and urban dwellers, there is the need for sufficient access to health information.

Health information can be defined as recorded information in any format, oral, written or electronic. An individual's access to health information especially is considered one of the ways of minimizing the social and economic impact of preventable and non-preventable diseases and illnesses (Aryee, 2014). Over the years till this present day, there have been a number of health diseases and viral infections that has taken over the airspace as a result of poor health information; among them are Ebola virus, bird flu and the recently announced global pandemic known as Corona Virus (Covid 19) (WHO, 2020). Coronavirus first appeared in the city of Wuhan, China, and has spread rapidly to almost all countries across the world. According to World Health Organization WHO (2020) corona virus disease is an infectious disease caused by a newly discovered coronavirus which affect people in different ways.

Covid-19 seems to spread from person to person by the same mechanism as other common cold or influenza viruses- i.e. by face to face contact with a sneeze or cough, or from contact with secretions of people who are infected (WHO, 2020). The role of fecal-oral transmission has yet to be determined in COVID-19 but was found to occur during the earlier Severe Acute Respiratory Syndrome (SARS) outbreak (Heymann & Shindo, 2020). Current report shows that there are over 14 million confirmed cases of coronavirus with over 580, 000 deaths (European Centre for Disease Prevention and Control (ECDC, 2020). The rate of infection on the COVID-19 pandemic might be due to lack of proper dissemination of information and public awareness on the virus, and this has

increased the need for use of social media as it has the ability to inform a wide population in the shortest possible time

Social media network sites are online platforms through which individuals, groups and organizations create presence and share information through texts, photos, music videos etc. Social media platforms are also one the fastest mode/medium of public health awareness, and twitter # tag information provided (Thelwall & Thelwall, 2020) about what going on all over the world in the fastest mode. Examples of social media are Facebook, WhatsApp, Twitter and Instagram etc which are renowned forums of message sharing to the public about the latest updates of the situation (Ali & Bhatti, 2020). According to Allcott, Gentzkow and Yu (2019), the more worrisome aspect of the social media is its potency to be used to spread fake news with its significant negative effects on the society and on people's decisions and behaviours.

Over time, patrons as well as health patient and their attendant has been misled through the social media. Majority of citizens are uninformed (Jogwu, 2010) and this affects their perception and reaction to every post on the social media. In addition to authentic information on Covid 19, some fake news and information are also disseminated via social media. According to Boberg, Quandt, Schatto-Eckrodt and Frischlich (2020) and Ashrafi-rizi and Kazempour, (2020), such types of information create panic, fear and rumors about the pandemic during the lockdown period. This poor dissemination and spread of fake news on health information such as the Covid 19 pandemic has provided a gap for the librarians to fill.

The potentials of librarians and its associates to acquire, evaluate, package, store and disseminate information, especially to the information poor society has placed a huge demand on it to intervene in critical situation such as COVID-19 pandemic era (Ladan, Haruna & Madu, 2020). The librarian's aim is to ensure that patrons are provided with updated

information on various aspects of their needs. As information specialists, librarians also deliver specialized information to their parents as a number of them also practice privately as consultants or information brokers. Librarians are also expected to provide decentralized and accessible health knowledge through social media which is one of the prominent goals of primary health care in developing countries. Yet, lack of knowledge and information dissemination using appropriate social media platforms remains a significant deterrent to good health practices, leading to heightened health risk (Kargbo cited in Sokey, Adjei & Ankrah, 2018).

Social media as a Web-based channel of information dissemination is rapidly permeating all aspects of the librarians' profession as it has been used to communicate with potential library users, as well as extending the information services to other remote users particularly in the community (Ganiyu & Oluwafemi, 2016). Librarians are now realizing the potentials of social media such as Facebook, Twitter, YouTube, LinkedIn, Skype, and Google+, and other social tools found in the study, and are making efforts to integrate them into library services. Sahu (2013) maintained that some of the information disseminated by librarians through social media tools includes selective dissemination of information (SDI), and customer services in general which includes information on Covid 19. With more than 2.9 billion individuals accessing social media (Statista report for 2019 in Clement, 2019) on mobile phones regularly, it could prove useful for librarians to utilize this platform for dissemination Covid 19 information. In this view, this paper will x-ray the role of librarians in the use of social media in disseminating health information on Covid 19.

### **Social Media Defined**

Social media has been defined by several authors. Fang, Hu, Li, & Tsai (2014) defined social media as computer and

mobile-mediated tools that facilitate interaction and sharing of information in text, visual, audio and video forms in an online networking environment. Social media according to Bradley and McDonald (2011) is defined to include any Internet-based or mobile application that operates for the purpose of collaboration, which allows participants to connect, create, comment, view, share, rate, discover, profile, and exchange user-generated content. Social media, according to Suraweera, Razali, Chouhan, Tamang, Hubilla, Ratnayake and Mahesar (2010) is referred to a process of relationship building among a group with a common interest.

According to Rogers (2012), social media is information content created by people using highly accessible and scalable publishing technologies. At its most basic sense, social media is a shift in how people discover, read, and share news, information, and content. It's a fusion of sociology and technology that transforms monologue (one-to-many) into dialogue (many-to-many), and is the democratization of information that transforms people from content readers into publishers (Ganiyu & Oluwafemi, 2016).

Kruger & Painter (2011) described social media as a virtual information sharing space which promotes face-to-face interaction and relationships between individuals. A common position in all the definitions is that social media are online tools whose principal aim is to offer social interactions and exchange of items, ideas, products and services among people of common interests (Chitumbo & Chew 2015). Social media operate in dialogic transmission where there may be many sources to many receivers of information, pictures, images and other resources. Examples of social media applications include the Facebook, MySpace, Twitter, You tube, Blogs, Wikis, LinkedIn, WhatsApp, Flickr, Orkut among others.

## **Health Information**

Health information can be defined as any type of information presented in oral, written or electronic form. Health information in all its formats, be it health information management, health information system or health information technology, is geared towards the goal of providing quality health care delivery (Sokey, Adjei & Ankrah, 2018). The timely availability and accuracy of health information is very crucial in health delivery. It is therefore not surprising that the search for and usage of health information has become a great concern for both individuals and health care providers. Gupta and Sinha (2010) opine that there is a greater demand and need for accurate, relevant, rapid and impartial public health information by people, and a growing reliance on mass media can facilitate this means for a veritable source of information.

Johnson & Meischke (1991) identified two main sources of health related information, namely interpersonal and mass media sources. The interpersonal sources of health information include doctors, nurses, family and friends, health groups, voluntary organisations, and other professions allied to medicine. These face-to-face information channels are preferred for information dissemination and the teaching of complex skills that need two-way communications between individuals (Parrott, 2004). The mass media sources include TV, radio, posters, books, magazines and newspapers, videos and the internet. In the view of Mills and Sullivan cited in Sokey, Adjei and Ankrah (2018), media related sources normally offer broad coverage so that communicated messages reach a vast number of the target audience quickly and frequently.

## **Dissemination/ Information Dissemination**

Dissemination is an information alerting services designed to keep individuals informed about the new developments in their particular field and

interest. Dissemination basically sends information to an audience, without direct contact to the receiver, and without a direct response or clarification method that a conversation or dialogue would have. As such, Chhiato (2018) defined information dissemination is the activity of conveying and spreading of one's ideas, knowledge through the exchange of thoughts, messages as by symbols, signs, speeches, visuals, signals, writing or behavior. It is meaningful exchange of information between two or among a group of people. According to Bauman cited in Chhiato (2018), Information Dissemination refers to the process of communicating information through defined channels and media in order to reach various target groups

Information dissemination, according to Wu, Yang and Li (2016), is the transportation of information to the intended recipients while satisfying certain requirements such as delays, reliability and so forth. Dhawan (2018) sees information dissemination as a proactive information service designed to educate and inform various groups of users on social, economic and educational issues, problems, and opportunities of interest to them. It requires systematic planning, collection, organization, and storage of information for its delivery to the target.

Conferences, meetings, festivals and procession are the events of information dissemination and Journals, Newspapers, Radio, Television and Video are the medium of information dissemination (Daudu & Mohammed, 2013). Phones, computers satellites and Internet are the technologies of information dissemination and Librarians, Journalists, Advertisers, Public relation personals, Camera crew and Newsreaders are the professionals in the act of Information dissemination. Bello and Aghadiuno (2019) summarized information dissemination as the channel through which facts are linked to the rightful individual seekers and organizations. All these may not be achieved without the necessary technology in place.



### **Coronavirus Disease (Covid 19)**

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered novel strain of coronavirus, SARS-CoV-2 (WHO, 2020). It first appeared in the city of Wuhan, China, and has spread rapidly to almost all countries across the world. The coronavirus belongs to a family of viruses that may cause various symptoms such as pneumonia, fever, breathing difficulty, and lung infection (WMHC, 2020). These viruses are common in animals worldwide, but very few cases have been known to affect humans. The World Health Organization (WHO) used the term 2019 novel coronavirus to refer to a coronavirus that affected the lower respiratory tract of patients with pneumonia in Wuhan, China on 29 December 2019 (Li, Guan, Wu, Wang, Zhoum & Tong, 2020). The WHO announced that the official name of the 2019 novel coronavirus is coronavirus disease (COVID-19) (WHO, 2020). And the current reference name for the virus is severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). It was reported that a cluster of patients with pneumonia of unknown cause was linked to a local Huanan South China Seafood Market in Wuhan, Hubei Province, China in December 2019 (Zhu, Zhang, Wang, Li, Yang & Song, 2020).

According to World Health Organization WHO (2020) corona virus seems to spread from person to person by the same mechanism as other common cold or influenza viruses—i.e. by face to face contact with a sneeze or cough, or from contact with secretions of people who are infected. The common symptoms include fever, dry cough, tiredness, shortness of breath, pains and aches, sore throat, and very few people will report diarrhoea, nausea or a runny nose (WHO, 2020). Most people infected with the COVID-19 will experience mild-to-moderate fever and respiratory illness with no special treatment available. The 2019 novel coronavirus disease (COVID-19) is currently the disorder with the greatest social impact

(Ryu & Chun, 2020) due to several factors, including associated deaths, its geographical expansion, stock exchange fall worldwide, cancellation of sporting/ artistic events, shortage of goods in marketplaces, among others (Castro, 2020). That in turn is related to the behavior of societies at different levels (micro and macro) (Villegas-Chiroque, 2020)

### **Librarians' uses of social media trusted sources to disseminate Covid 19 information**

Due to the hard hit from the Covid 19 pandemic, public services have been paralyzed, academic activities and classes have restricted to online due to closure of colleges. Community members and the public need information on how to protect themselves against coronavirus. In this view, librarians have been highly engaged to control the situation through effective dissemination of relevant health information on Covid 19. IFLA (2020) reported that on 23rd March 2020, the president of IFLA had announced that “Libraries around the world are being affected by the emergence and spread of the coronavirus. This situation has made librarians around the globe to mobilize and provide a collection of valuable and reliable information on coronavirus in order to give people a source they can trust (IFLA, 2020).

It is apparent that fake news and misinformation have created confusion and subsequently, posed greater challenge to every effort to curtail the spread of the virus. In this regard, librarians can strengthen social media online services to provide access to their resources. Recently, National Digital Library of India (NDLI) has initiated of specially designed collections of e-resources for specific group of students to help the student community in the difficult situation rising out of the suspension of physical classes and closure of physical libraries arising out of COVID-19 lockdown. These services are provided through the library social networking pages (National Digital Library of India, 2020).

Librarians can provide and share information quickly, efficiently and in real-time as strategies in response to COVID-19 pandemic through their social networking pages like Facebook, Twitter, Instagram and LinkedIn (Ladan, Haruna & Madu, 2020). They can provide a platform for gathering and disseminating information to promote awareness of the current situation through their use of internet and blogs.

The librarians' use of social media trusted platforms allow patrons to access local issues and acquire global awareness through online activism and campaigns. In the current scenario of the Coronavirus Disease 2019 (COVID-19) outbreak, social media platforms as currently applied by librarians are crucially disseminating information worldwide. The Center for Disease Control and Prevention, the World Health Organization (WHO), a large number of healthcare organizations and journals are regularly posting and updating awareness and guidance across a host of online platforms (WHO, 2020). Librarians can utilize these resources to create a blog to disseminate Covid 19 information. Librarians can also leverage on social media, as these online tools offer global platforms for dissemination of information, content and opinion, and also promote social interactions among and between individuals, and organisations (Botha and Mills cited in Brindha, Jayaseelan & Kadeswara, 2020).

According to Brindha, Jayaseelan and Kadeswara (2020), Facebook is engaging its newsfeed function to direct users to the websites of WHO and local health authorities. Google Scholar has highlighted leading medical journals and other sites related to the outbreak. Social media sites like Twitter are particular in pointing individuals who search (accounting for misspellings) for coronavirus-related content to reliable resources. Healthcare organizations, physicians, and social media influencers similarly direct online traffic to

trusted sources. The WHO is working with Facebook, Pinterest, Twitter, Tencent and TikTok to provide the public with accurate information on time and eliminate misinformation and disinformation. These innovations by these social media organizations can be correlated by librarians through sharing these sources with their clients, and patrons.

In view of the rate of infection of Covid 19 on the people, librarians can beef up their efforts to link users and patrons on the right social media sources to access thereby directly playing their role in public health information and to educate users, regarding the importance of proper hand washing and social distancing. If librarians take on this approach will reduce the probability of millions of people contracting the Covid 19 virus, thereby limiting its transmission rate

### **Social media used by librarians for Covid 19 information dissemination**

In today's modern society, the creation, circulation and manipulation of information are activities that pervade many aspects of our cultural, economic and social life (Bruno et al., 2008). The internet and social media are considered as tools to seek health information (Mohammed cited in Brindha, Jayaseelan and Kadeswara (2020). The coronavirus outbreak has not been the first pandemic witnessed in the age of social media. At least three other pandemics have occurred in the last decade; there was the swine flu in 2009, Ebola virus in 2014 and Zika virus in 2015, with all the outbreaks having had prominence, wide documentation and considerable influence on social media.

At present, there are a number of social media available that can be used to disseminate health information including Covid 19. The following chart is based on the information presented in Social Media by Dewing (2012):

Type of social media	Description	Popular examples
Social network sites	Allow individuals to create a public or semi-public profile within a bounded system and connect with other users with whom they share a connection.	Facebook, LinkedIn, Whatsapp, 2go
Media-sharing sites	Allow users to post videos or photographs that others can share, comment, or „like“.	YouTube, Instagram, Pinterest
Status-update services	Also known as microblogging services, allow users to share short updates (e.g. tweets) and to see updates of others.	Twitter
Blogs	An online journal often centered on core area(s) of interest where pages are usually displayed in reverse chronological order.	WordPress, Tumblr, Blogger
Social bookmarking	Allow users to organize and share links to websites	reddit, Digg
Virtual world content	Offer game-like virtual environments in which users interact, often creating avatars (a virtual representation of the user) to interact with others.	Second Life
Wikis	A collective website where all participants are able to modify any page or create new pages.	Wikipedia

These above social medium have been a source of information to people in gaining knowledge on various aspects of life including Covid 19 health information. In this regard, librarians are expected to utilize these social media to provide effective health information to their numerous patrons. These social media allow librarians to adopt a new role by placing themselves into a social realm with patrons from different part of the country. By reading blogs, group postings, and message boards, the librarian becomes an active participant, who is able to anticipate and advise patrons as needs arise. Linking to patron profiles also keeps the librarian within the consciousness of patrons, which can potentially increase interaction (Courtney, 2007), and promote their knowledge of various health information

Other information dissemination media that can be used by the librarians during the pandemic of COVID 19 to facilitate public health awareness are as summarized by Ali and Bhatti (2020) are:

#### **Mobile Apps**

Mobile apps are used to educate the people to know about the early stage diagnosis symptoms of COVID-19 and to inform the general public about the disease. Health organization, IT companies, and universities worldwide have introduced mobile applications, and this will reduce the influx load to the hospital/health care center. This can support the task of librarians in Covid 19 health information dissemination

#### **Artificial Intelligence–Based Chatbots**

Artificial intelligence–based chatbots are also one the successful tools used to chat with the general public. This chatbot is designed in different local and international languages by developers, and one can chat 24/7 and get information about coronavirus symptoms, diagnosis, and precautionary measures. Librarians can leverage on this platform to disseminate Covid 19 health information

#### **Social Media Trolling**

Facebook, WhatsApp, and Instagram facilitate health information sharing to the public about the latest updates of the Covid 19 situation. They are the fastest mode used for public health awareness on what going on all over the world. Also, some librarians use Twitter to connect themselves/patrons with important information sources (Milstein, 2009), while research found that Facebook engages students when applied in libraries (Mack, Behler, Roberts & Rimland, 2007). Librarians are currently utilizing these media all over the world

#### **Video-Based Lecture**

Video-based lectures on YouTube, Vimeo, and Dailymotion are other sources where infectious disease experts share video clips about coronavirus symptoms, cure, and possible measure to avoid this pandemic. Librarians also in recent times, have utilized this medium

#### **Electronic Resources**

Medical researchers have been disseminating the latest developments regarding the vaccination, diagnosis kits, and latest literature published on the topic.

Renowned publishers such Elsevier, Oxford, Wiley, BMJ, Nature, Sage, Emerald, Cambridge, and others, have provided free access to the latest literature on coronavirus in the fight against coronavirus. Librarians can also partner with these publishers to receive updates on these latest developments and share same to all information seeking individuals on COVID-19 coronavirus literature

Additionally, it has been attested that all enhanced media provides librarians with an innovative and effective way of connecting with their users (O'Dell, 2010). Librarians make use of social media in order to have a sense of belonging in their communities (De Rosa, Cantrell, Havens, Hawk, Jenkins, Gauder, & Cellentani, 2007), or promoting libraries' services and events (Hendrix, Chiarella, Hasman, Murphy & Zafron, 2009). Popular activities librarians could carry out include updating Covid 19 health information in "status", sharing photos and archiving events, getting updates on Covid 19, and sending messages privately, or in other professional chatrooms.

With millions of users, social media offers opportunities for librarians to reach out to communities and gather knowledge (O'Dell, 2010) mostly on Covid 19 health information thereby contributing their knowledge through the online network. Ezeani and Eke (2010) posited that the most applicable Web 2.0 technology for library services is social networking tools. These tools will allow librarians to interact with their users in order to study their needs and provide feedback. These tools can also give patrons various updates on Covid 19 health information

### **Problems of librarians' use of social media in dissemination of Covid 19 health information**

Over time, there have been enormous advantages of the social media in health information dissemination. Researchers like Akporhonor and Olise (2015) have continuously raised "...issues such as poor awareness of librarians to

social media, poor infrastructure, low bandwidth ..." as hindrances to effective use of social media adoption. This will of course affect the librarians in dissemination of health information on Covid 19.

There are also the issue of fake news and conspiracy theories. This is alarming, because fake news about Covid 19 has been wrongly understood by many people. Lies, falsehoods and propaganda have dominated the social media space and these have provided conflicting ideas and belief about Covid 19. Some conspiracy theories do not believe in the use of face mask as it opposes the use masks, hand washing measures or vaccination. Therefore, many librarians has taken sides with some of these theorists and this has affected proper health information dissemination on Covid 19

With the high population density, poverty and hunger in most countries, especially in poor urban areas, they may not be able to afford subscription for access to trusted social media that will inform them on Covid 19 health information. The librarians may find it difficult to reach these disadvantaged persons. Also, due to misunderstanding and personal interest, some of the religious leaders both in Islam and Christianity do not accept the reality of coronavirus. They believed that coronavirus is an invention by China/US or Israel to archive their political and economic will and to depressed Islam religion and Islamic states. It was reported that some of the leader called the attention of their followers to ignore any restrictions by government. Their stance on this believes will negate the librarians' effort to use social media on these set of patrons towards changing their perception

Majority of people resist adhering to Covid 19 preventive measures as they continuously attend social and religious gatherings such as marriages, funerals, demonstrations, clubs, open markets, malls. Attendance to marriage ceremonies, ignorance and illiteracy will make this very difficult for the librarian to use the social media to achieve compliance from these set



of people. Also, majority of people in developing countries are illiterate and do not have basic skills in the use of social media tools. This high level of illiteracy, especially among the rural dwellers have undermined the librarians use of social media to educate people on social distancing which is seen as one of the major steps to curb the spread of covid-19 pandemic.

## CONCLUSION

Irregular statement by government based on prevailing information has created doubt in the mind of citizen regarding the authenticity of the news on Covid-19, and the prevailing fake news that are spread through the social media have impaired compliance to measures aimed to curtailing the spread of the virus. However, various medical and information professionals have advocated for safety measures at curbing health related challenges such as the Covid 19. Social distance, use of face mask, hand washing and keeping good hygiene is one of the keys to protecting ourselves from any health problems. In this information age, public health awareness is key to minimize causalities, and librarians can play a vital role to disseminate this information with health care workers, society, and communities. Librarians can utilize effective social media platforms such as Facebook, LinkedIn, Whatsapp, 2go, YouTube, Instagram, Pinterest, Twitter, WordPress, Tumblr, Blogger, among others to educate people on maintaining preventive measures during the lockdown phase. These social media channels if properly utilized by librarians play a vital role in informing and updating the general public on new updates about public health information

## Recommendations

Having observed the efforts and role of librarians in their use of social media in the dissemination of Covid 19 health information, the following recommendations are given to step up their roles:

- i. Librarians in all institutions should be motivated by means of enhanced packages that can be used to cover cost for subscription and other social media tools that will boast their dissemination of health information on Covid 19 to the people
- ii. Librarians should center their health information dissemination on Covid 19 on the need to adhere to measures such as isolation and lock down, going out for only vital reasons and essential services, stopping local travel, maintain proper hygiene, avoid hands shake, touch, hug, kiss and to employ a social distancing of one meter from each other.
- iii. Librarians should carefully plan, efficiently executed, well reported means of disseminating authentic and reliable information on Covid 19 health information to people by using the most appropriate trusted social media so as to curb false information.
- iv. Librarians must organize from time to time public sensitization using the social media to educate people on how to use their mobile phones to access or interact with the health professionals on any health related issue.
- v. Health information delivery programmes that utilize emerging technologies, such as the MoTech, have great potential to reach more people in rural communities quickly and cheaply per person. Librarians can design, test and utilize them to aid health workers in disseminating health information.

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