CHAPTER SIXTEEN

INFORMATION DISSEMINATION IN AN ERA OF COVID-19: THE ROLE OF THE LIBRARY

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ABSTRACT

Libraries are strategic segments of the society and information management institutions that are in the vanguard of information generation, acquisition, processing, organization and dissemination in the society for self-development. A holistic appraisal of the events in this period of pandemic signals the fact that survival has to be structured on self-reliance that can only be attained through an adequate enlightenment of the masses. This paper aims at offering an exposition to the role of the librarians in information dissemination in this era of the COVID-19 pandemic as it explains the essence of information as a key player in the attainment of a COVID-19 free society. The paper specifically, identifies the meaning of information dissemination, the importance of information in the prevention and control of the spread of COVID-19 and the role of the library, this role includes: personal space/my library, test notifications, mobile Apps, artificial intelligence-based chatbots, social media testing, video-based lecturer, electronic resources, social media, quick response, online reference services, library websites, mailing lists in information dissemination to curb the spread of COVID-19. In order for effective utilization of these roles, the paper recommends a full automation of the libraries, proper training for staff on the use of information and communication devices and adequate funding for the library among others.

KEYWORDS: Information, information dissemination, COVID-19 and librarians.

INTRODUCTION

From time immemorial, information has always played a significant role in almost every aspect of human endeavor to an extent that its value in the development process has been a topic of extensive discussion. Despite that, a lot of people have suffered from not enjoying any meaningful and sustainable development largely because of the policy implementation gap that has been artificially created by the leaders. As a result, most people have lacked access to basic and quality information. These have led to the widespread of COVID-19, such austere condition of lack of information being experienced has result to low concern about the COVID-19 prevention tips.

The term information has been defined by different authors in different ways, in a strict sense, it implies an unprocessed or raw data, which serves as raw materials for the generation of knowledge just as land, labor, capital and skills are basic prerequisites for production, information is considered to be a vital resource for human and economic development. In this era of COVID-19 health information is timely needs to be handled as a matter of urgent importance. It leads to be the decimation of populations of neglected, especially in case of high infection mobility. The need, therefore, of concerted effort by special information handling agencies especially the library is required. With much support from international agencies, government etc. to raise awareness on COVID-19 and with the current report of daily increases, the response to the pandemic has now moved to a phase of community transmission. The focus is no longer slowing transmission but ending the pandemic. To achieve this goal as quickly as possible efforts have moved rapidly from building infrastructure to ensuring that capacity for prevention is increased. It means that more information workers are needed for this job. This is where the librarians come in.

COVID-19 BRIEF:

Scientists and health professionals are working day and night tire to limit COVID-19 from further infections. COVID-19 is a disease caused by a new strain of coronavirus, "co" stands for corona, "vi" for virus, a "D" for disease (UNIEF, 2020). Formerly, this disease was referred to as 2019 novel coronavirus or "2019-nCov". The COVID-19 virus is a new virus linked to the same family of viruses a Severe Acute Respiratory Syndrome (SARS) and some types of common cold; with symptoms such as fever, cough, loss of smell, tiredness, muscle pain and shortness of breath. In more severe cases, infection can cause pneumonia or breathing difficulties. More rarely, the disease can be fatal (WHO, 2020). These symptoms are similar to the flu (influenza) or a common cold, which are a lot more common than COVID-19. This is why testing is required to confirm if someone has COVID-19.

The virus is transmitted through direct contact with respiratory droplets of an infected person (generated through coughing and sneezing). When someone with COVID-19 coughs or exhales, they release droplets of infected fluid and a person standing close to someone with COVID-19 (within I metre) can become infected by breathing in droplets coughed or exhaled into the air. But most of these droplets fall on nearby surface and objects, such as tables or telephones. People catch COVID-19 be touching contaminated surface or objects, touching their eyes, nose or mouth (WHO, 2020).

Contamination on surfaces especially those frequently touched by multiple people (e.g staff, ushers, clients and the general public) is one of the main ways that the disease spreads. Frequently touched surfaces must be identified, then regularly cleaned and disinfected to reduce the risk of infection. These surfaces include a lift or elevator buttons, handrails, doorknobs and handles armrests, seatbacks, tables light switches, keyboards, remote controls and many other items (WHO, 2020).

Older people and people with chronic medical conditions such as diabetes and heart disease, appear to be more at risk of developing severe symptoms. The virus can be fatal in rare cages so far mainly among older people with pre-existing medical conditions. There is no currently available vaccine for COVID-19. However, many of the symptoms can be treated and getting early care from a healthcare provider can make

the disease less dangerous (WHO, 2020). Several clinical trials are being conducted to evaluate potential therapeutics for COVID-19.

Therefore, precautions should be taken to prevent the potential spread of COVID-19. These include:

- Promote regular and thorough hand hygiene by everyone through hand washing with soap and water or alcohol-based hand rub, provide dispensers with alcohol-based hand rub (at least 60% ethyl alcohol) in prominent places throughout the setting. Ensure hand hygiene stations are placed in front of all entrance/exist points to allow everyone to practise hand hygiene when entering and leaving (WHO, 2020).
- Avoid touching eyes, nose or mouth, especially when hands are not clean.
- Promote good respiratory hygiene. Cough or sneeze into bent elbows. If not a disposable tissue should be used to cover mouth and nose when coughing or sneezing, then thrown in a bin with lid perform hand hygiene after disposal.
- Practise physical distancing; maintain a minimum 1-meter distance, where possible. Limit the number of people in confined spaces, such as lifts.
- Individuals, with respiratory symptoms or fever, should stay home/be isolated and seek medical advice.
- If a person has a suspected or confirmed COVID-19infections identify the areas they have used or visited. These areas require thorough cleaning and disinfection (WHO, 2020).

According to the World Health Organization (WHO) as of 24 September 2020, there were close to 43 million confirmed cases globally and since then has risen. Substantially, as scientists and health professionals search for solutions to COVID-19, librarians have the important role of disseminating COVID-19, related information and resources to the public through various virtual media channels available to them, as most people may not come to the library or because the library may be closed during the COVID-19 pandemic.

INFORMATION NEEDS

Librarians and information professionals disseminate information as often as they have access to authoritative information and resources. Information dissemination, according to Wu et al. (2016), is the transportation of information to the intended recipients while satisfying certain requirements such as delays, reliability and so forth. Stating that these requirements vary, depending upon the information being disseminated, Dhawan (2018) notes that:

Information dissemination is 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.

Bellow 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.

Technology has impacted the way we access and handle information resources, thereby improving quality of information we have at our disposal. It is worthy to note, based on a study by Shonhe and Jain (2017), that potential library users have positive attitudes towards technology; they have competent skills to use mobile technology and they access information daily using mobile technology. It is observed that changes in user information needs have put more pressure on the delivery of library services. According to Verma and Verma (2014), today's libraries are operating in a more advanced technological era, and hence the need to remodel library resources and services to fit into the 21st-century era. Nkiko and Iroaganachi (2015) noted that information accessibility and utilization presuppose removal of all barriers in format, content, cost, distance, time and language for effective dissemination to the targeted audience. This means that information resources should get to the user in the easiest format in a timely matter.

Belloe and Aghadiuno (2019) suggest that the librarian must be adapt and be knowledgeable in all fields of human endeavour and proficiency in using print and digital options for information dissemination. Those individuals who could not afford or attain formal education underserved populations are unaware or unable to access information from libraries. Librarians must assess the needs of various populations via relevant surveys and other ways of gathering data. As a result, librarians become adequately equipped to disseminate necessary information based on a needs assessment to a diverse population (Akparobore, 2011; Nkiko and Iroaganachi, 2015).

LIBRARIANS AND INFORMATION DISSEMINATION REDEFINED

Today, librarians are expected to manage digital libraries, organize digital knowledge and information and disseminate digital information because we are all have become a global village as a result of the internet. Pal (2013) notes that today's librarians must also acquire new psychological, praxeological, social and professional capabilities. Additionally, Sreenivasulu (2000) notes that the ultimate goal of digital librarians is to facilitate access to information just in time to the critical wants of endusers and additionally to facilitate electronic publishing. Many libraries are renovating their library's physical spaces and environments around the concept of "learning commons" (Litzenberger, 2016).

In this era of information explosion where thousands of bits of information are chunked out on daily basis, librarians are expected to collect, organize, store and disseminate the information for consumption of the users. In the current global pandemic, there are new ways to deliver information both real and fake; it is left for librarians to sort out the real information for their users to avoid misinformation. It is expected that librarians work independently to deliver service-oriented, researcher-centred applications, instructional programmes, projects and services. Tait et al. (2016) note that the tools and resources used to supply required information and transform it into knowledge have changed, but the librarian's role has remained unchanged. Especially now, it seems necessary to reflect and redefine the characteristics of a modern librarian that would best serve all users.

Librarians may be indispensable in the era of the information dissemination because they play a distinctive and dynamic role in providing easy access to authoritative information at the right time and disseminating to the user in appropriate formats based on local user needs. Librarians must also possess high level of security to prevent hackers from users' details and the type of information they access. Okike and Adetoro (2019) confirmed in their study that it is pertinent that librarians re-tool and up-skill themselves in information and communication technology to ensure secure information systems.

STRATEGIES

Library and information science indicates that libraries stated off as storehouses, where books were more preserved than utilized and librarians as the custodians of the books and their interaction with users were minimal, as a custodian the librarian did not encourage the use of books as the users are expected to use the library on their own. At most, if a user asked for a book, then the service that would be offered by the librarian was to pass on the book and leave the user alone. From the ancient times to present, it is evidently clear that these trend in services were tremendously changing due to information technology (Mayega, 2008).

Librarians have to reach user populations and their need for up-to-date relevant information through automation of the library. Library automation is a generic term often used in discussing the use of computers and related equipment to help libraries handle and manage the physical materials that comprise library collections. For philosophical and semantic reasons some prefer to use "library mechanization" or data processing in libraries, all these terms refer essentially to the same activities. Since no universal definition of library automation seems to exist a functional explanation appropriate to this work is "the use of electronic data processing equipment and supporting technology to assist in acquiring processing, storing and maintaining the collection and in making the collection available to users by circulation, reference services, inter library loan and telecommunication. Technological assistance has been most effective in creating and maintaining the many records including the bibliographic apparatus (catalogs), necessary for proper control of the collection and for providing service to library users (Shera, 1976).

According to Ram (2018), library automation is used to refer "the extensive use of mechanical electronic or microelectronic equipments to perform the functions and activities associated with the libraries, such as acquisition, serial control, cataloguing and circulation and also to library and information services and networking". Computers are used in libraries to assist in a number of library routines necessary for efficient day-to-day functioning what is called housekeeping activities. They are used for formatting and generation of indexes.

The computers are of great significance with the advancement of telecommunication and reprography technologies in the library automation, when computers interconnected by some of the modern communication vehicles, one can have information over vast distances in no time. The computers are being increasingly used in library and information services for information processing and repackaging of information and on improving products and services of library and information centres. They offer a versatile tool for organization and retrieval of information (Ram, 2018).

When this is done, there can be limitless access to the library and information resources by millions of users and information seekers and their optimal use.

In the quest to meet up with the needs of library users and the general public the Librarian may use the following digital information channels.

Personal space/my library is a self-service platform where library users manage their personalized accounts with custom-made collections. Here users can set up and manage their profile, preferences for searching library collections, receive alerts on reserved items, check their records, track interlibrary loan requests and renew borrowed items and document delivery requests (Saxena & Yadav, 2013; Verma & Verma, 2014). In this regards, librarians can send customized scanned documents, images, audiobooks and ebooks to library users' personalized accounts.

Test notifications via the use of mobile devices can disseminate information and multimedia content such as videos, images and audio files. Librarians can use this service to alert patrons regarding the latest information on happenings around COVID-19 on how to stay safe or other related information. In a study conducted by Shonhe and Jain (2017), most respondents prefer to access library collections or resources through mobile devices.

Mobile Apps: COVID-19 is a contagious disease; 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.

Artificial Intelligence-Based Chatbots: Is a tool to chat with the general public. This Chatbot is designed in different local and international languages by developers, and one can shat 24/7 and get information about the symptoms, diagnosis and precautionary measures.

Social Media Testing. Social media platforms are also one the fastest mode/medium of public health awareness, and Twitter # tag information provided about what going on all over the world in the fastest mode. Facebook, WhatsApp, and Instagram are also other renowned forms of message sharing to the public about the latest updates of the situation. Patient and their attendant also engage via social media and share their experience to create awareness to the public. In addition to authentic information, some fake news and information are also shared via social media about this pandemic. Such types of information create panic in public health, social media or alternate news creates some fear and rumors about the pandemic during the lockdown period.

Video-based Lecture: Video-based lecturers 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.

Electronic resources: Medical staff, faculty members, researchers, health support organizations, and paramedical staff support disseminating the latest developments regarding the vaccination, diagnosis kits, and latest literature published on the topic. All the renowned databases provide free access to COVID-19 coronavirus literature. Renowned and leading publishers, that is, Elsevier, Oxford, Wiley, BMJ, Nature, Sage, Emerald, Cambridge, and others, provide free access to the latest literature on coronavirus in the fight against coronavirus.

LIBRARY AND INFORMATION SCIENCE COMPENDIUM

Social media are more appropriate for use on marketing information and delivering personalized information resources to groups of people or individuals.

Quick response (QR) codes, two-dimensional barcodes that direct users to desired websites, can be used by libraries on a certain topic or subject area. Verma and Verma (2014) noted that QR codes are akin to mobile tagging.

Online reference services can use for research outreach. According to Barnhart and Pierce (2011), online platforms allow librarians to create a bond with patrons and improve their efficiency through provision of a 24/7 reference and information service.

Library websites can be used effectively to share information, links, share updates and announce the news.

Mailing lists to targeted fusers can be used by libraries to receive personalized information at the same time.

SUMMARY

Librarians should serve as catalysts for the effective dissemination of information to promote true knowledge. Librarians should disseminate information via existing and digital media platforms to educate users. For better dissemination of information, especially in a time of great need for accurate health-related information resources in an ever-increasing digital environment, libraries should establish working relationships with health agencies and communication organizations with the objective of cooperative developments of collections, referrals and information shared and learning for users and a new breed of reimagined librarians.

RECOMMENDATIONS

The following recommendations are hereby made:

- 1. Librarians should mobilize Tertiary Education Trust Fund allocation for the library to fund automation projects and subsequent provision of adequate budgetary allocation for training and development of librarians.
- 2. Librarians should survey different automated libraries to exchange experiences before selecting the software for their library. Choice of the library software must be carefully considered with emphasis on the flexibility and ability to meet present as well as future library needs.
- 3. Library management should ensure maintenance culture. The equipment should be consistently sustained by adequately providing for Internet subscription and maintenance of the facilities and equipment.
- 4. Orienting library professionals on the need for library automation training and librarians changing role. There must be a drastic attitudinal change in the way librarians leave the entire library automation project in the hands of computer experts. Librarians should brace up to fill the gap in computer application and use which presently constitutes a boundary between them and system analysts.

LIBRARY AND INFORMATION SCIENCE COMPENDIUM

5. Training and retraining of all the staff that are involved in the automation service provision chain. Likewise, to overcome the low comfort level of technologies, there is a need to embark on result-oriented training practices for library professionals.

REFERENCES

- Akparobore, O.D (2011). The role of public libraries in promoting adult education in Nigeria. *Library Philosophy and Practice (e-Journal)*, 453.
- Ali, M.Y, & Gatiti, P. (2020). The COVID-19 (Coronavirus) pandemic: Reflections on the roles of librarians and information professionals. *Health Info. Libr. J.* doi:10.1111/hir.12307
- Barnhart, F.D and Pierce, J.E (2011). Becoming mobile: Reference in the ubiquitous library. *Journal of Library Administration*, 51(3), 279-290.
- Bellow, S.A and Aghadiuno, P.C (2019). Information needs, repackaging and dissemination: Sustainable library services for national development. *International Journal of Arts, Languages and Business Studies (IJALBS)*, 2(1), 176-186.
- Boberg, S., Quandt, T., Schatto-Eckrodt, T., & Frischlich, L. (2020). *Pandemic populism*: Facebook pages of alternative news media and the corona crisis a computational content analysis. https://arxiv.org/pdf/2004.02566.pdf.
- Dhawan, S.M (2018). *Basics of information dissemination*. Retrieved from: https://aladin.uil.unesco.org/paldin/pdf/course02/unit_05.pdf
- Echezona, R.I (2007). The role of libraries in information dissemination for conflict resolution, peace promotion and reconciliation. *African Journal of Library, Archives & Information Science*, 17(2), 153-162.
- Litzenberger, A. (2016). *Characteristics of the 21st century library*. Available at: www.eab.com/research-and-insights/facilities-forum/expertinsights/2016/
- Mayo, L. (2001). Delivering continuing professional library education in Africa: The technology challenge delivering lifelong continuing professional education across space and time. *International Federation of Library Association*, *3*(5), 25-30.
- Nkiko, C. and Iroaganachi, M.A (2015). Community-focused selective dissemination of information services for empowering women through information provision and utilization: Center for learning resources as a catalyst for social change. *International Federal of Library Association (IFLA)*, retrieved from: http://repository.elizadeuniversity.edu.ng/handle/20.500.12398/141
- Okike, B.O.I and Adetoro, N. (2019). Securing the information systems of libraries and the influence of tech-skills of librarians and users. *Education and Information Technologies*, 24(2), 1583-1602.
- Okiy, R.B (2010). Globalization and ICT in academic libraries in Nigeria: The way forward. *Library Philosophy and Practice (e-Journal)*, 1519.
- Pal, S.K (2013). Role of librarian (cybrarian) in the modern library (cybrary): with special reference to research library, in *Proceeding Research Libraries: Need of the Time*, Aurangabad (MS), Ajanta Prakashan, vol. 1.

- Ram, M. (2018). *Information technology for library management and automation*. New Delhi India: Random Publication.
- Saxena, A. and Yadav, R. (2013). Impact of mobile technology on libraries: A descriptive study. *International Journal of Digital Library Services*, 3(4), 1 -58.
- Shera, J.H (1976). *Introduction to library science bittleton.* Colorado: Libraries Unlimited, Inc.
- Shonhe, L. (2017). A literature review of information dissemination techniques in the 21st century era. *Library Philosophy and Practice (e-Journal)*, 1731.
- Shonhe, L. and Jain, P. (2017). Information dissemination in the 21st century: The use of mobile technologies in Mnjama, N. and Jain, P. (Eds). *Information and Knowledge for Competitiveness*. Department of Library and Information Studies-University of Botswana, Gaborone, pp. 425-447.
- Streenivasulu, V. (2000). The role of a digital librarian in the management of digital information systems (DIS). *The Electronic Library*, 18(1), 12-20.
- Tait, E., Martzoukou, K. and Reid, P. (2010). Libraries for the future: The role of IT utilities in the transformation of academic libraries. *Palgrave Communications*, 2(1), 1-9.
- Thelwall, M. & Thelwall, S. (2004). *Retweeting for COVID-19*: Consensus building, information sharing, dissent, and lockdown life. Retrieved from: https://arxiv.org/ftp/arxiv/papers/2004/2004.02793.pdf.
- Verma, N.K and Verma, M.K (2014). Application of mobile technology in the libraries, in Singh, M., Singh, P.K and Kumar, A. (Eds.). *libraries: Towards Digital Paradigm*, Bharati publishers & distributers, Uttar Pradesh, pp. 32-38.
- WHO and UNICEF (2020). Water, sanitation, hygiene and waste management for COVID-19. Geneva: WHO & UNICEF https://apps.who.inf/iris/handle/10665/331499
- World Health Organization (WHO) (2020). Getting your workplace ready for COVID-19. Geneva: World Health Organization; https://apps.who.inf/handle/10665/531584
- World Health Organization (WHO) (2020). Interim recommendations on obligatory hand hygiene against transmission of COVID-19. Geneva: World Health Organization. https://www.who.inf/who-documents-detail/interim-recommendations-on-obligatory-hand-hygiene-against-Tramissionofcovid-19.
- Wu, W., Yang, Z., and Li, K. (2016). Internet of vehicles and applications. *Internet of things*, Morgan Kaufmann, pp. 299-317.