

*Full Length Research*

# Health Information Literacy in the Era of Covid-19 Pandemic: The Roles of Medical Librarians

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This paper examined the roles of medical librarians in providing health information literacy in the era of Covid-19 pandemic. The aims of this paper are to know whether COVID 19 pandemic is a reality or myth? Due to differences in age, living habits, and knowledge backgrounds, obvious gaps between digital immigrants and digital natives regarding health information perception, application, motivation, technical ability, and information literacy have been discovered. Therefore, health information literacy is a hallmark to good health. Health information literacy is the ability of users to identify, how to locate the sources of information and how to apply it for decision making or solve health problems. In this period of COVID -19 pandemic, health information literacy is very important to the society. The ability of someone to know how to take guideline measures for the prevention of this deadly disease or the best way to go about its treatment is health information literacy. It has been observed that many Nigerians are not obeying the guidelines of COVID -19, let alone the best way to go about its treatment. Therefore, librarians being in the fore front of information providers, play very important roles in the provision of health information. In this period of COVID-19 pandemic, health information literacy is very important to the society. The ability of someone to know how to take guideline measures for the prevention of this deadly disease or the best way to go about its treatment is health information literacy. The paper covered concept of information, healthy information, and health information literacy as well as factors hiding access to information during COVID -19, types of literacy and finally roles of medical librarians in disseminating health information in the COVID 19 era were properly covered. The paper therefore concludes that COVID -19 is a reality, but if we take the preventive measures on information literacy knowledge, the virus/disease will not closed to us.

**KEYWORDS:** Health Literacy, Information, Covid-19 Pandemic, Information Literacy and Medical Librarians

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## INTRODUCTION

It is no longer news that the year 2020 was welcomed by deadly disease called COVID 19, the disease has come to stay in every part of the world. The problems now are that many people disbelief the existence of the virus/disease because of lack of proper information. When there is even proper information, majority of people

still lack health information literacy generally. Therefore, without proper information, health information literacy about the virus is nothing to the people. These issues motivated the researchers to write health information literacy as it relates to COVID 19 pandemic whether it is a reality or facts. Before defining information, it is essential to understand the distinction between data, information and knowledge.

In libraries and information centers, this distinction is useful and essential as it helps to determine the kinds of services to be planned and offered to the users. Therefore, data is raw facts that represent things or events that have happened. Data is observation of facts that are accurate and timely; specific and organized for a purpose, presented within a context that gives it meaning and relevance, and can lead to an increase in understanding and decrease uncertainty. Data can also arise from direct capture or as a by-product of another operation and can exist in any form, usable or not as it does not have any meaning. Data can equally be numbers, words, letters, images, and sound etc. (Kolawole & Igwe, 2016).

Information is a product of processed data or data that has been given meaning by way of relational connection. It is equivalent to finished goods produced after processing the raw material. The information has a value in decision making as it brings clarity and creates an intelligent human response in the mind. It is knowledge that one derives from facts placed in the right context with the purpose of reducing uncertainty. Information is valuable because it can affect behaviour, decisions, or an outcome (Institute of Medicine, 2018). Health information is another type of information. Therefore, Health information is the data related to a person's medical history, including symptoms, diagnoses, treatment, and results. Health information records include patient histories, laboratory results, x-rays, clinical information, and notes (Okogwu, & Nnam, 2013). A patient's health information can be viewed individually, to see how a patient's health has changed; it can also be viewed as a part of a larger data set to understand how a population's health has changed, and how medical interventions can change health outcomes for the better. Therefore, health information literacy is a hallmark to good health. The question is now, what is health information literacy? Simply put, Health information literacy is the ability of users to identify, know how to locate the sources of information and how to apply it for decision making or solve health problems.

In this period of COVID 19 pandemic, health information literacy is very important to the society. The ability of someone to know how to take guideline measures for the prevention of this deadly disease or the best way to go about its treatment is health information literacy. Therefore, librarians being in the fore front of information providers, play very important role in the provision of health information. In this period of COVID-19 pandemic, health information literacy is very important to the society (Ohia, Bakarey & Ahmad, 2020). Based on this backdrop, this chapter highlights some of the major problems in health information literacy and how we can overcome them.

### **Concept of Health Information**

Generally, health information is the data related to a person's medical history, including symptoms, diagnoses, treatments, and results. That is health information data generally means: patient histories, laboratory results, x-rays, clinical information, and notes. Health Informatics (HI) is a science that defines how health information is technically captured, transmitted, and utilized. Health informatics focuses on information systems, informatics principles, and information technology as it is applied to the continuum of healthcare delivery. It is an integrated discipline with specialty domains that include management science, management engineering principles, healthcare delivery and public health, patient safety, information science and computer technology (Chim, 2015).

At every level of healthcare system, individuals need information in varying ways to meet their needs. Health information users include consumers/patients, funders, researchers, global agencies, program managers, service providers, caregivers/communities, librarians, old people, etc.; all these units from consumers/patients to government/non-government organizations need health information on a range of health measurement areas. This may include mortality and morbidity rates, disease outbreaks, determinants of health (such as nutrition, environment, and socioeconomic status), access, coverage and quality of services, costs expenditures, and equity (WHO, 2005).

### **Concept of Health Information Literacy**

In 2003, the Medical Library Association (MLA) formed the Health Information Literacy (HIL) Task Force to assist the association in addressing health information literacy issues. The task force considered the Department of Health and Human Services (DHHS) definition of health literacy and the American Library Association's (ALA) definition of information literacy to develop MLA definition of "*health information literacy*". It is defined as the set of abilities needed to recognize a health information need, identify likely information sources and use them to retrieve relevant information, assess the quality of the information and its applicability to a specific situation, and analyze, understand, and use the information to make good health decisions.

It is also seen as the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions. The US Department of Education's National Center for Education Statistics published the first assessment of health literacy in the United States in 2006,

Based on these, health information literacy can be

defined as the set of abilities needed to recognize health information need, identify likely information sources and use them to retrieve relevant information, assess the quality of the information and its applicability to a specific situation, analyze, understand, and use the information to make good health decisions (Medical Library Association, 2003). Health literate individuals are those with the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions (National Research Council, 2004).

The World Health Organization (WHO, 2020) defines health literacy as 'the cognitive and social skills which determine the motivation and ability of individuals to gain access to understand and use information in ways which promote and maintain good 'health'. Health literacy means more than being able to read pamphlets and successfully make appointments. In fact, it is critical to empowerment and helps to improve people's access to health information and their capacity to use information effectively. The WHO's definition incorporates elements of communicative and critical literacy. Besides, it significantly broadens the scope of the content of health education and communication. More so, it indicates that health literacy may have both personal and social benefits, and has profound implications for education and communication methods.

In terms of content, the definition reveals that efforts to improve people's knowledge, understanding and capacity to act, should not only be directed at changing personal lifestyle or the way in which people use the health services. But health education could also raise awareness of the social, economic and environmental determinants of health, and be directed towards the promotion of individual and collective actions. In terms of health benefits, the definition implies that health literacy is not only a personal resource which leads to personal benefits. For example, healthier lifestyle choices and effective use of an available health services. It also implies that the achievement of higher levels of health literacy among a greater proportion of the population will have social benefits. In terms of the 'method of education' and communication, such a definition challenges people to communicate in ways that invite interaction, participation and critical analysis.

Patients and the public generally have many decisions to make about their healthcare and like all decision makers, they require health information to inform their choices. This information which should be timely, relevant, reliable and easy to understand should be from reliable sources in order to achieve greater patient involvement in healthcare system. Health information is an essential component of any strategy to promote health literacy, self-care, choice, shared decision making, medication adherence and self-management of chronic diseases such as the COVID-19.

Providing quality health information is at the core of

service provision, people need access to impartial and high-quality information to enable them make informed decisions to empower themselves and the society in which they live. Poor health information can prevent people from making effective choices and without information, people have no real choices at all. However, lack of information can be damaging for patients, their relatives, health professionals and the entire society. The aim of this review is to draw attention to the importance of health literacy as a major tool to improving patients' health outcomes especially now that the COVID-19 pandemic is not only ravaging but disrupting the global medical system.

### Types of Information Literacy

The field of literacy studies is active with the debate about different types of literacy and their practical application in everyday life. According to Freebody and Luke (1990), one approach to the classification of literacy simply identifies the types of literacy not as measures of achievement in terms of reading and writing, but more in connection with what literacy enables people to do for themselves and the society. However, Nutbeam (2008) classified literacy as follows:

**Basic information literacy:** This entails sufficient functional skills in reading and writing for one to be able to function effectively in everyday situation in a given society.

**Communicative information literacy:** This involves more advanced cognitive and literacy skills which, together with social skills, can be used to actively participate in everyday activities, to extract information and derive meaning from different forms of communication, and to apply new information to changing circumstances.

**Critical information literacy:** this is equally a more advanced cognitive skill which, together with social skills, can be applied to critically analyze information, and to use this information to exert greater control over life events and situations.

This classification indicates that the different levels of literacy progressively allow for greater autonomy and personal empowerment. Progression between levels is not only dependent upon cognitive development, but also exposure to different information. This in turn, is influenced by variable personal responses to such communication which is mediated by personal and social skills, and self-efficacy in relation to clearly characterized issues (Onotai, 2008). As people become more comfortable with making choices about their own health

and healthcare, so the public demand for information grows. Basically, there are two types of information needed by people. The first one is the general information which should be available to all about lifestyle options, care providers, diagnoses, self-care management and treatment options. Secondly, the personalized information which specifically deals with the individual's own condition, care options and possible outcomes.

Health literacy is stronger predictor of a person's health than age, income, employment status, education level, and race (Chim, 2015). The growing emphasis on health literacy actually evolved from a long history of both successful and unsuccessful strategies of health promotion and health education. However, the clinical approach to health literacy developed mainly within the United States to assist both physicians and patients to communicate better. Although, the clinical approach has aggressively pursued development of diagnostic tools of health literacy for clinical settings, the public health approach has made more progress in the development of conceptual frameworks and theories of health literacy.

### **Factors that Hinder Access to Health Information in Nigeria**

Information users in Nigeria and Africa in general encounter a lot of problems in the quest for information satisfaction. In this present age of information explosion, it is anticipated that every individual has equal access to useful information on which to base choices. To this effect, information is expected to be readily accessible or to have the quality of being at hand, and easy to use when needed. However, it has been observed that there are so many information messages that are going around the globe today but not all the messages that are sent get to those that they are actually meant for, due to many factors.

Montgomery (2004) concurred to and listed them as knowledge, health belief, barriers, and relationships with primary health care providers. Another identified issue is inappropriate contents, language problem, high illiteracy rate and inappropriate infrastructure as factors militating against information utilization in Nigeria. Capital is one of the hindrances against the use of information technology for purpose of improving the delivery of information to users in developing countries, as information technology is capital intensive.

### **The Roles of Medical Librarians**

Medical Librarians/Health sciences librarians are information professionals who specialize in health resources and provide medical information for

physicians, allied Health professionals, patients, consumers, students, and corporations. They have a direct impact on the quality of patient care, helping physicians, allied health professionals, administrators, students, faculty, and researchers stay abreast of and learn about new developments in their fields. Using materials ranging from traditional print sources to electronic databases. Medical Librarians devise and use innovative strategies to access and deliver information to their clients. Physicians sometimes call on Medical Librarians to provide life-saving information for patient care. In a large academic biomedical library, a day may involve staffing the reference desk for several hours. The Medical Librarian may give orientations to students on how to use the licensed electronic library resources; teach classes on how to search bibliographic databases or use software; handle reference questions via e-mail, the Internet, or phone; and attend meetings in the department (Medical library Association, 2021).

When medical/health science librarians get together the title and role of the "clinical medical librarian" or "clinical librarian" prompt curiosity and controversy. The role and its theoretical basis have been described elsewhere, but the practical question arises, "Just what do clinical librarians do?"

Medical librarians' involvement in the patient-care process is the subject of a growing body of research, much of which offers some evidence of the positive contributions librarians have made to the provision of health care. However, a substantial amount of this research addresses several issues still under debate, such as the role librarians should play in clinical care, the training medical librarians should have, and the ways in which librarians can make others more aware of their positive contribution to clinical care. No consensus seems to exist, either on these issues or on the correct terminology for medical librarians who participate in the provision of health care (Medical library Association, 2021).

Since 2000, the field appears to be in a state of flux, with the debate over medical librarians' functions continuing. They have many roles which could not mention all here:

- ❖ Medical librarians involve health initiatives are geared towards technological access to health information or rewriting existing health materials at a simpler language level. Both of these approaches are important, but limited. Easy-to-read materials and access to technology are only pieces of a process that must be placed in a larger community context. This may take the form of providing space for meetings, providing health literacy materials, or actively developing health literacy programs.
- ❖ Promote awareness of health literacy among health professionals by creating, clearing houses of health

literacy information, sponsoring health literacy seminars, and encouraging multi-organizational collaborations.

- ❖ Support for systematic reviews
- ❖ Support for social media
- ❖ Analysis/enhancement of user experience
- ❖ Help for faculty/staff with authorship issues
- ❖ Help for institutional authors to comply with National Institutes of Health (NIH) public-access policy
- ❖ Implementation/support for researcher profiling/collaboration tools
- ❖ Embedded librarian
- ❖ Help for authors/department/administrators to comply with funder mandates (Cooper and Crum, 2013). Many of these roles deal with the research enterprise of an institution, and Crum and Cooper note that hospital librarians are less likely than their academic counterparts to take on new roles.

Examples of how health sciences librarians work as part of the health care team include:

- ❖ Answering a surgeon's call from a hospital emergency room for rush information
- ❖ Helping a researcher develop a systematic review article for a prestigious journal by conducting an expert search of the literature.
- ❖ Connecting licensed electronic resources and decision tools into a patient's electronic medical record.
- ❖ Finding consumer health information in a patient's native language.

Health sciences librarians in Nigerian health care institutions should develop a strategy that would help to actualize the health plans of the nation. Also, because of the fact that policies are hardly well pursued in Nigeria, health librarians in Nigeria should come up with initiatives that would help educate the Nigerian populace on health literacy especially during the pandemic (Onotai, L.O. (2008). In addition to this, public awareness programs should be organized by health sciences librarians in conjunction with media houses in order to effectively sensitize the Nigerian populace on how to maintain positive health habits during the pandemic. Health librarians can also support the direct needs of health information consumers by providing materials that are multilingual, culturally appropriate and easy-to-read, and by developing methods and materials to teach consumers how to evaluate health information resources, especially those found on the Internet.

## CONCLUSION

In the wake of COVID-19, libraries around the world are

facing hard choices about which services to offer and how, ranging from minimal restrictions to full closure. We are aware that governments are taking different approaches, sometimes ordering the closure of all institutions, others indicating that life should continue as usual, and others simply leaving decisions up to library directors. Clearly any decision to restrict services or close a library is a difficult one and needs to be taken following an assessment of the relative risks. Libraries in different parts of the world are facing very different situations, from maintaining a full service to complete closure. Despite this sad reality, health sciences librarians in Nigeria must come up with clear strategies to promote health literacy among the Nigerian populace. Without health literacy, the effects of the pandemic will be more severe on the health of Nigerians as well as the economy. Health sciences librarians should therefore rise as information soldiers to combat health information illiteracy in this critical time.

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