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HEALTH INFORMATION LITERACY LEVEL OF RURAL PEOPLE: THE ROLE OF MEDICAL LIBRARIANS

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ABSTRACT

The health information literacy of rural people in Anambra State of Nigeria is, with significant barriers including limited access to education, low literacy rates, reliance on traditional healers, and a lack of readily available health information in understandable formats, particularly in local languages, making it difficult for them to understand and act upon health information effectively. This article explores the concept of health information literacy, the information-seeking behavior of rural people on health matters, and the health effects of oil pollution. The development of new skills among the people, the critical health literacy competencies of the rural people, community-based education and outreach programs, and health literacy strategies. Medical librarians' role in training rural people on health information literacy skills in rural area communities is a critical issue presently in the Medical Library Association in developed countries, particularly third-world countries. Thus, this is the crux of this article paper.

Keywords: Health, Information Literacy, Rural People, Anambra State and Medical Librarians

Introduction

Health information literacy (HIL) is crucial for empowering individuals to make informed decisions about their health. The article explores the HIL level of rural populations and the vital role medical librarians play in bridging the information gap. Rural communities often face unique challenges that hinder their ability to access and understand health information, leading to disparities in healthcare outcomes. One significant barrier is limited access to technology and reliable internet connectivity. As Bohr and Wheeler (n.d) noted in their study of nuclear fission, complex systems require detailed observation and understanding. Similarly, navigating the complex world of health information requires access to resources that rural communities often lack. This digital divide exacerbates existing inequalities and prevents individuals from accessing vital online health resources. Furthermore, rural populations may experience lower levels of formal education and health literacy skills, making it difficult to comprehend complex medical terminology and research findings. Medical librarians can serve as crucial intermediaries, translating complex information into accessible formats and providing tailored instruction to enhance health literacy skills. They can conduct workshops on evaluating online health information, identifying credible sources, and understanding medical jargon.

Medical librarians can collaborate with community organisations and healthcare providers to establish outreach programs and mobile libraries. By bringing resources directly to rural communities, medical librarians can overcome geographical barriers and provide personalised assistance to individuals seeking health information. This proactive approach can foster trust and empower individuals to take control of their health. In conclusion, addressing the HIL level of rural populations is essential for promoting health equity and improving healthcare outcomes. Medical librarians are critical in bridging the health information gap by providing access to reliable resources, enhancing health literacy skills, and collaborating with community stakeholders. By recognising rural communities' unique challenges and tailoring their services accordingly, medical librarians can empower individuals to make informed decisions about their health and well-being.

Concept of Health Information Literacy (HIL)

Health literacy as an outcome of health promotion (Nutbeam, 2000) has been defined differently by many authors (Wickline & Rosenthal, 2010; Dodson et al., 2015; Osborne, 2012). Wickline and Rosenthal (2010) define health literacy as the ability to locate medical facilities, schedule and keep appointments, describe, monitor, and measure symptoms, follow prescribed medication or treatment regimens, adjust medications or treatment as needed, seek care when appropriate, determine risk and take preventive actions. According to Dodson et al. (2015), health literacy means the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health.

Osborne (2012) says that health literacy involves two parts - patients or anyone receiving health communication and providers or anyone giving health communication. While some authors see health literacy as important to patients, others see it as important for everyone in the community regardless of their health status. The latter perception insists on preventive (most cost-effective) disease control mechanisms, while the former shows that health literacy is for people already affected by diseases. Since people need to stay healthy, health literacy becomes important to everyone. This is mainly because health literacy is often related to the health status of patients and the community (Powell et al., 2007; Baker et al., 2007; Tang et al., 2008; and Sanders et al., 2009). Health literacy is also linked to economic development such that people with low health literacy cannot engage effectively in socio-economic activities due to poor health status.

Health information literacy (HIL) is a crucial determinant of public health outcomes, influencing individuals' ability to access, understand, and utilise health-related information effectively. Rural populations often face distinct challenges in acquiring and applying health information due to limited resources, lower educational attainment, and infrastructural barriers (Nutbeam, 2008). This chapter explores rural populations' health information literacy levels, identifying key factors affecting literacy, challenges faced, and potential interventions for improvement. Health information literacy is obtaining, processing, and

understanding basic health information and services needed to make appropriate health decisions (Institute of Medicine, 2004). Adequate HIL empowers individuals to navigate healthcare systems, comprehend medical instructions, and adopt preventive healthcare measures (Berkman, Davis, & McCormack, 2010).

Navigating the Terrain: Challenges and Strategic Solutions for Medical Librarians in Enhancing Rural Health Information Literacy

The pursuit of enhancing Health Information Literacy (HIL) within rural demographics is a venture fraught with a complex constellation of barriers that perpetuate health disparities through informational inequity (Arcury et al., 2020). Successfully addressing this issue necessitates a clear-eyed diagnosis of these impediments and the formulation of a robust, strategic response. Medical librarians, by virtue of their specialized training in knowledge management and user education, are poised to act as pivotal agents in this endeavor (Shipman et al., 2022). This section elucidates the primary challenges and articulates a corresponding framework of evidence-informed solutions.

The Geospatial and Infrastructural Divide

A fundamental barrier impeding rural HIL is the potent combination of geographical isolation and infrastructural deficit. Rural communities are often situated at a significant remove from the academic medical centers and comprehensive libraries that serve as repositories of high-quality health information (Real & Rose, 2017). This spatial disparity is compounded by often-inadequate broadband internet infrastructure, a phenomenon widely known as the digital divide (Perzynski et al., 2017). Consequently, physical and digital access to credentialed information professionals and vetted resources is severely constrained.

In response to these constraints, medical librarians must adopt a multi-modal access strategy. The development of digital libraries and telehealth support portals, curated for rural residents, constitutes a critical first step (Eberle & Hurd, 2019). To bridge the connectivity gap, the implementation of mobile library services can deliver physical resources and expert guidance directly to remote community centers (Lawson & Marshall, 2021). Furthermore, an embedded librarianship model, wherein librarians establish

formal partnerships with rural health clinics, can integrate information expertise directly into the primary care ecosystem (Bandy et al., 2018).

The Dual Hurdle of Access and Digital Literacy

Merely providing access to technology is an insufficient remedy. A more nuanced challenge lies in the variable levels of digital and health literacy among rural populations (Ishikawa & Kiuchi, 2019). The ability to navigate complex online interfaces and specialized medical databases cannot be assumed, often rendering individuals vulnerable to misinformation (Swire-Thompson & Lazer, 2020). This challenge is frequently exacerbated by socioeconomic factors, which can correlate with lower foundational literacy skills (Manganello et al., 2017).

To surmount this dual hurdle, medical librarians must function as educators and translators. This involves designing structured digital literacy programs that focus on core information literacy competencies, such as critically evaluating online health information (Zhang et al., 2022). Concurrently, librarians must also develop and disseminate high-quality, plain-language print resources to ensure equitable access (Osborne, 2022). A train-the-trainer approach, which empowers trusted local intermediaries like community health workers, can exponentially extend the reach of these efforts (Real et al., 2020).

Socio-Cultural and Trust-Based Barriers

Initiatives imposed from outside the community are often met with skepticism, a factor acutely present in many rural areas characterized by strong cultural norms and local trust networks (Long et al., 2020). Health information from unfamiliar digital or institutional entities may be viewed with suspicion, as individuals gravitate towards personally recommended and culturally congruent sources (Sutton et al., 2019).

Addressing these barriers requires medical librarians to adopt a posture of cultural humility and strategic partnership. The most effective strategy is authentic collaboration with established community entities to leverage existing trust networks (Lucas & Wright, 2021). Furthermore, equipping local healthcare providers with curated, patient-friendly

information allows the trusted clinician to act as a conduit, effectively endorsing the librarian's resources (Bandy et al., 2018). Utilizing narrative and storytelling approaches to convey health information can also prove more effective than data-centric presentations, as stories foster relatability (Kreps & Maibach, 2019).

Professional Capacity and Sustainability

Finally, the librarians themselves often operate under significant constraints, including professional isolation and limited budgets, which can stifle innovation (Lucas & Wright, 2021).

Bolstering professional capacity is a prerequisite for success. This can be achieved through strengthening consortia and resource-sharing networks with larger academic medical libraries (Eberle & Hurd, 2019). Creating virtual professional learning communities (PLCs) can mitigate isolation, fostering peer support (Shipman et al., 2022). Finally, medical librarians must develop competencies in grant writing and advocacy to secure external funding and ensure the long-term sustainability of HIL initiatives (Latham & Hendrix, 2020).

The role of libraries in promoting health information literacy.

Libraries are known for collecting, cataloguing, classifying, retrieving and disseminating information accurately and promptly. They are known to support any nation's research, community development, education, and economic development.

Libraries act as a bridge of information between information providers such as government, organisations, and institutions and the people (Notlotlang, T. and Grand, B., 2016). Promoting health awareness to the populace is through the provision of adequate information. Libraries can collaborate with the Ministry of Health to educate the populace on health matters. This supports Notlolang T. et al. (2016), who state that public libraries in Botswana strive to provide accurate and helpful health information to community members by collecting and availing both print and electronic health information sources, such as libraries and academic libraries. Medical libraries and government special libraries. However, in the course of this write-up, nothing is known about how these libraries have been involved in health literacy campaigns to their

user community. This collaborates with Mnzaua, E.E. and Katabalwa, A.S. (2017) that Tanzania has a lot of libraries, including academic libraries, public libraries, hospital libraries and other health centres; however, nothing is known about how these libraries involve themselves in health promotion, except for the health libraries.

Libraries as custodians of past and current information collect vital information on the health of the individual and the environment. Libraries that store and retrieve health data on health issues can disseminate and educate others on how to retrieve information. This is in line with Lauseng, D and Alpikir, M. (2021) that libraries should collect and compile health information, store them in suitable media which can easily be accessed by policy and decision makers as well as other health information users Obidike and Nkerhi (2011) also stated that libraries are advised to partner with community health workers which include doctors or ventinary doctors and other health personnel in order to gain access on vital information issues for health development and disease awareness.

In many local communities, they keep domestic animals, and sometimes, these animals' contract diseases that cause their death and threaten the community's inhabitants. The owners of these infected animals need information on the cure for these animals. They need information on how these animals contract the diseases and who to contact for prevention and cure. Libraries, especially public libraries, can liaise with Heads of communities to get a veterinary doctor who will educate them on the prevention and cure through the information needs collected by the librarian. This can be done through the town crier, storytelling, posters, and other means of communication suitable for the community. This was supported by Chipungahelo et al. (215), who stated that libraries can collect vital health information, including information resources on how to avoid the circumstances that cause health problems and provide preventive health programs and treatment programs. The author further reiterated that libraries should be able to harness and store relevant health information resources to help combat communicable diseases.

Before the advent of orthodox medicine, communities and individuals were into traditional medicine. Most orthodox medicine is refined

from traditional medical prescriptions. Some traditional medicines are being disused due to a lack of record keeping. Delta state has public libraries in the 25 local government headquarters and other branch libraries in different rural and urban areas of the state (Onohwakpor, 2009). From the evaluation of the facilities, resources and services of the public libraries in Delta State, there is no record of traditional medicine. There is no service on health information or health information literacy.

The libraries can preserve and educate the populace and others connected to health issues through the following:

1. Through storytelling. Public libraries can collect and share information on different types of traditional medicine through storytelling. This can preserve the types and usage.
2. Libraries can act as an intermediary between users and health centres
3. Libraries embark on the creation of a database for traditional medicine.

In health literacy education, libraries should provide literacy education to individuals, communities, and health personnel. This was supported by Farukaoye, M.A. and Obadare, S.O. (2020) that health illiteracy is a challenge among the people, especially in rural communities. The paper stated that many people are unaware of the causes of many diseases, including coronavirus. It further stated that despite the efforts made by available NGOs, efforts are still needed to increase health literacy programmes, especially in rural communities. The involvement of libraries in Health literacy was further stressed by Orban (2005), who argues that libraries should work hard to increase awareness of diseases, their causes and preventive measures to meet the unique information needs of health consumers with inadequate health literacy skills.

As public libraries are primarily concerned with the larger populace, the academic libraries in Delta State should educate their users on health and improve their database literacy skills. The web is full of so much health information. Retrieving the correct and accurate information can be a problem for health personnel and even users. A medical library can assist physicians, health professionals, students, patients, consumers, medical researchers and information

specialists in finding health scientific information to improve, update, assess or evaluate health care.

Through social media, libraries can become part of their users' daily lives by collecting health data from research results on different health challenges. This collaborates with Lauseng, D.L. et'al (2021) that libraries' involvement in health informatics education for health professionals and students led to effective educational programmes for learning evidence-based medicine and medical computing skills. Libraries and librarians can give health information literacy education to users or health personnel by surveying the informatics skills of health professionals and students.

Medical libraries can create an e-repository of systematic documentation information resources or vital library promotion practice, including good practices and lessons learned, which will be consulted by practitioners, policy makers and academicians.

The Role of Medical Librarians

Healthcare professionals must incorporate health literacy assessments in routine care and use clear communication strategies to improve patient comprehension. Training rural healthcare providers on effective communication techniques is essential (Rudd, 2013). Medical librarians are pivotal in enhancing health literacy by bridging complex health information and diverse user needs. Their contributions can be categorised into several key areas:

Information Access and Navigation

1. They guide individuals in accessing reliable medical databases (e.g., PubMed, Cochrane Library) and trustworthy online resources, combating misinformation.
2. Assist in locating patient-friendly materials, ensuring information is evidence-based and current.

Education and Skill Development

Teach critical evaluation of sources, including credibility, peer-reviewed status, and bias. Conduct workshops on digital literacy, such as using health apps or understanding electronic health records.

Resource Curation and Development

1. Create tailored guides, toolkits, and FAQs on specific health topics (e.g., diabetes, mental health) to simplify complex information.
2. Ensure resources are culturally competent, multilingual, and accessible (e.g., videos, easy-read formats).

Collaboration with Healthcare Professionals

1. Support clinicians by providing the latest research, guidelines, and evidence-based practices, indirectly improving patient education.
2. Partner in developing plain-language patient materials and decision aids.

Community Outreach and Advocacy:

1. Organize health literacy workshops, seminars, and public health campaigns targeting underserved populations.
2. Advocate for health literacy policies, such as plain-language mandates or institutional training programs.

Technological Support

3. Assist users in navigating telehealth platforms, health apps, and electronic resources, addressing the digital divide.
4. Promote open-access resources to reduce barriers to information.

Research and Evidence-Based Practice:

1. Aid in systematic reviews and research projects, ensuring robust evidence informs health practices and education.
2. Contribute to studies on health literacy interventions and outcomes.

Addressing Challenges

Mitigate disparities by offering offline resources and collaborating with community organisations. Continuously update skills to keep pace with evolving medical knowledge and technology. By fulfilling these roles, medical librarians empower individuals to access, understand, and apply health information effectively, fostering informed decision-making and improved health outcomes. Their work is essential in creating a health-

literate society capable of navigating an increasingly complex healthcare.

Conclusion

Health information is important to health professionals, academics, individuals, policy makers, and society. With the growth of information on the web, libraries and librarians play a vital role in teaching others the skills to retrieve vital information accurately and promptly. Many lack the skills of retrieving information from the web accurately and promptly. Many also lack the skills and knowledge of sourcing information that can easily be retrieved by users when needed. The libraries are custodians of information, and that is why the libraries should collaborate with health professionals in collecting and storing information.

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