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HEALTH INFORMATION LITERACY AS A PANACEA FOR MITIGATING THE SPREAD OF CORONAVIRUS PANDEMIC IN NIGERIA

By

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Abstract

The most recently discovered Corona Virus (COVID-19) pandemic has brought untold hardships to people of all nations and no one can predict when it will end. The virus which started in China in December, 2019 virtually infected every country of the world. Governments all over the globe are making frantic efforts to suppress the spread of the disease yet the infection is still continually rising. The virus has to be contained through preventive measures and health information literacy (HIL) is imperative to power and sustain government efforts in the fight against the pandemic. This study therefore examined the role of health information literacy in reducing the spread of Corona Virus (Covid-19) pandemic in Nigeria. It specifically focused on finding out the health information literacy programmes available in Nigeria; identifying the channels through which health information literacy programmes are provided for Covid-19 information; examining the information spread on Covid-19 pandemic in Nigeria; and examining the health information literacy programmes produced for mitigating the spread of Covid-19 pandemic. Do*cumentary research* method was used to gather, review and critically analyse recent studies and other related literature on the subject matter. *The study identified some of the burning issues concerning COVID-19 pandemic and health information literacy. It also drew the attention of leaders and authorities concerned about the positive impact of health information literacy in curtailing the pandemic in Nigeria.*

Keywords: Health Information Literacy, Health Literacy, Coronavirus, COVID-19, Global Pandemic, Nigeria

Introduction

Since late December 2019, the World has been confronted with a new deadly disease called Coronavirus (COVID-19), which put the whole world on hold for months. The first case of the virus was reported on 31st December, 2019 in China. Since then, there has been an aggressive growth in the number of emerging cases suggesting rapid spread of the virus (Lakhani, Pillai, Zehra, Sharma & Sodhi, 2020). The virus has resulted in thousands of deaths worldwide and has caused more fatalities than the previous two coronavirus pandemics combined (i.e. SARS and MERS) (Szmuda, Ozdemir, Ali, Singh, Syed & Słoniewski, 2020). Consequently, the World Health Organization declared the outbreak of the virus on the 11th March, 2020 as a pandemic due to its global public health concern (WHO, 2020). Therefore, preventive measures are highly recommended so as to prevent the disease from spreading.

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In response to the WHO's recommendation, governments all over the globe, including Nigeria swift into action. The responses of various governments to the COVID-19 pandemic have been multifaceted, including outbreak management (suppression versus mitigation), provision of adequate clinical treatment facilities for severe cases and measures to alleviate the economic and psychosocial impact of the pandemic and the measures taken to manage it (Wilder-Smith, Chiew & Lee, 2020). Furthermore, public health measures implemented in many countries encompass contact restrictions and physical distancing, hygiene rules (i.e. frequent and thorough hand washing or disinfection), mask wearing, eye protection and recommendations about how to sneeze and cough (Lai, Shih, Ko, Tang & Hsueh, 2020; Chu, Akl, Duda, Solo, Yaacoub & Schünemann, 2020).

In order to ensure success, those measures require that adequate information and advise be provided so that individuals understand what they need to do, how to follow instructions and guidance, and how to ultimately make effective decisions related to their own health and the health of others (Riiser, Helseth, Haraldstad, Torbjørnsen, & Richardsen, 2020). In this regard, Abel and McQueen (2020) and Paakkari and Okan (2020) are of the view that what is necessary beyond governmental regulations and policy is an increase in the levels of COVID-19 related health literacy (HL). Similarly, Hassiotis, Ali, Courtemanche, Lunsky, McIntyre, Napolitamo, van der Nagel and Werner (2020) are of the opinion that "given the lack of specific treatment for COVID-19, people must be provided with important health literacy strategies, such as good hand washing techniques and practice with social distancing".

In their view, Fauzi, Husamah, Miharja, Fatmawati, Permana and Hudha (2020) argued that society with adequate health literacy (HL) have the awareness of when the worst health situations will likely occur, which, in turn, enable them in comprehending the way they must protect themselves and the others through basic treatments. They further stressed that in a pandemic situation, the well-informed individual behavior is the main point besides medical treatment and the accessible governmental policy. This implies that the public has to be well informed about the pandemic so as to take proactive measures to prevent themselves from contacting or spreading the virus. Okan, Sørensen & Messer (2020) collaborated this assertion and inferred that HIL is a crucial determinant in suppressing virus spread rate as considerably as decreasing COVID-19 effects. The underlying premise of HIL is that someone will be better prepared to face the disease threat just in case they have good comprehension about the disease they deal with (Fauzi, et al, 2020). Conversely, society with poor health literacy are more at risk of being infected by COVID-19 (Okan et al., 2020; Sørensen, 2020). Scholars inferred that low level of health literacy also affects the worst health status, bad comprehension of medical condition, medical information and preventive health services, as depraved as the increase of hospitalization rate and advanced health care cost (McCray, 2005; Griffey, 2014; Batterham, Beauchamp & Osborne, 2016; MacLeod, 2017).

The Centre for Disease Control and Prevention (CDC) (as cited in Esri Whitepaper, 2020) advocated that when disease can travel so quickly, information has to move even faster. According to them, "COVID-19 outbreak has been more data transparent than any other major outbreak in history, and a variety of information products already exist". Worrall (2020) postulated that in the current Coronavirus global pandemic, health information is being produced, revised, updated and disseminated at an increasingly rapid rate. Rudd and Baur (2020) supported this assertion by indicating that vast amount of COVID-19 information, including daily reports from affected

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countries, charts of numbers of deaths, discussions of deficiencies in needed equipment, critical action alerts, as well as the multiple stories of affected communities, families, and individuals is flowing through media channels.

In the developing countries in particular, the challenge is in the ability of the general populace to identify likely information sources and use them to retrieve relevant information to guide their behaviour towards the prevention and control of the COVID-19 disease. Individuals, communities and a nation with low health literacy will unarguably be saddled with a wide spread of COVID-19 diseases. According to John (2020) and Leena & Orkan (2020), Covid-19 outbreak has revealed that low health literacy among a population is an underestimated public health issue globally. Caballero, Leath and Watson (2020) also inferred that the public health crisis due to COVID-19 outbreak presents a special challenge to clear health communication because some populations most affected by the virus are also at risk for limited HL. During this pandemic, research, effective communication, HL and health behavior have become crucial steps in attaining health and safety within the public (Jay, 2004). Thus, to stem the spread of the disease, people must be trained and the information literate should be able to use information as means to find solutions to all their health problems (Mabera & Tsagem, 2019). HIL is critical as it helps people to keep abreast of new developments and make informed decisions for themselves, their families and their communities, as well as be prepared to take action, especially during times of natural disasters and emergencies (Rudd & Baur, 2020). HIL is imperative to power and sustain government efforts in the fight against COVID-19 pandemic.

In Nigeria, the battle of COVID-19 began on 27th February, 2020 when an Italian citizen became the index case for COVID-19. Since then, the situation has escalated rapidly, resulting to 49,902 confirmed cases, 972 deaths and 37,171 recoveries as of 12th August 2020 (Nigerian Centre for Disease Control - NCDC(2020). This paper therefore attempts to critically look into the contemporary global health issue and concerns brought about by the COVID-19 pandemic and the role of health information literacy with particular reference to the peculiar situation in Nigeria.

Objectives of the Study

The primary aim of this paper is to examine the role of health information literacy in reducing the spread of Corona Virus (Covid-19) pandemic in Nigeria. Specifically, the paper is designed to achieve the following specific objectives:

i. To find out health the health information literacy programmes available in Nigeria.
ii. To identify the channels through which health information literacy programmes are provided for Covid-19 information in Nigeria.
iii. To examine information spread on Covid-19 pandemic in Nigeria.
iv. To examine the types of health information literacy programmes produced for mitigating the spread of Covid-19 pandemic in Nigeria.

Methodology

The paper adopted a documentary research method where recent studies and other related literature are gathered, reviewed and critically analysed with a view to understanding the emergent concept and issues concerning health information literacy and the Corona Virus (Covid-19) pandemic with particular reference to Nigerian situation.

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Review of Related Literature

The Concept of Health Information Literacy

The concept of HIL has been variously defined or explained by different scholars. In Spark's (2009) opinion, HIL is a tool that can be used to inform, enlighten and empower individuals and communities so that they are aware of the political nature of healthy equity. The National Academy on an Aging Society as cited by Egbert & Nanna (2009) on their part, stated that individuals with low to moderate health care literacy skills face implications that may include the incompetence to carry out positive self-management, it also means higher medical costs due to more medication and treatment errors, more frequent hospitalizations, longer hospital stays, more frequent visits to their health care provider, as well as lack of necessary skills to obtain needed services.

Likewise, the United States Department of Health and Human Services (2012) defines HL 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 concerning their health. It is equally opined that, on the part of the government, the lack of health information literacy and the attendant burden among government officials makes it difficult for them to comprehend the situation in the health sector and seek ways to ameliorate the burden on the health care providers (Soetan, 2013). This relates to the ability to obtain, process and understand basic information services to make appropriate decisions (Egunjobi & Ekerele, 2014).

According to Mayer (2017), HIL is a concept that has become synonymous with health literacy, it is an emerging concept focusing on active searching and evaluating health related information by people to make informed decisions regarding their health and the health of others. It is a tool by which people develop the knowledge, skills, attitude etc to promote personal health, protect the environment from harm, provide health services to the community and have the confidence to appropriately respond to uncertainties (Apie, 2019).

However, according to the Medical Library Association (2016) as cited in Ekoko, (2020), HIL is a set of abilities needed to recognize health information needs, identify likely information sources and use them to retrieve relevant information. Xu, Zhang and Wang (2020) explained that, HIL "represents the core of health literacy—it can greatly improve the public's capacity for self-protection in order to improve the overall response to public health emergencies". When an individual is health literate, it improves knowledge and build skills to help them make appropriate decisions regarding their health (Ekoko, 2020). Recently, Stormacq et al (2020) defined HL as a person's competence in accessing, understanding, appraising and applying health information in order to make sound health decisions.

Health information literate individuals who are knowledgeable about finding, evaluating, analyzing, integrating, managing and conveying information to others efficiently and effectively are respected more (Sasikala & Dhanraju, 2011). Similarly, Rudd and Baur (2020) lamented that low literate people in all societies are clearly more vulnerable to COVID-19 in multiple ways: they are more likely to be living in compromised or hazardous environments; they will be dealing with a variety of problematic health issues; they will be facing economic hardships, and they will engage in occupations that put them at further risk.

From the foregoing, HIL can be summarised as the knowledge and skills required to identify information needed to unravel health problems, to proficiently search for the needed information, to organize and interpret the information and apply the information in order to make good health decisions. This becomes even more necessary in a situation where movement restrictions are relaxed or lifted; hence individual HIL becomes essential so as to control the pandemic and prevent a total lockdown.

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Role of Health Information Literacy in Stemming the Spread of COVID 19

Peyvand, Kargar and Hajizade (2020) hinted that with the coronavirus outbreak crisis, the importance of HL is becoming clearer than at any other time that the outbreak could be prevented by promoting the HL since the Coronavirus we are witnessing today is not the first and may not be the last epidemic in the world. People must therefore be empowered so as to be able to have access to the right information about the Coronavirus from the right sources as well as to learn how to use the right approach to manage the situation (Peyvand, et al, 2020). HIL makes people have a better understanding and interpretation of different challenges that are tied to their health, and then have a better reaction against pathogens and look after themselves and those around them (Ansari, Almasi, Ansari-Moghaddam, Mohammadi, Peyvand, Hajmohammadi and Bagheri, 2016).

For Rudd and Baur (2020), having an insight into HL will no doubt support strategies to broaden the reach of health information and will consequently contribute to the efforts of mitigating the ravages of disparities in society. Great numbers of people have suffered and many are still suffering from Covid-19 across the globe which eventually leads to the death of hundreds. At a critical time when there is cure, the emphasis is on prevention of the diseases. It is very important for individuals to be healthy and have a healthy lifestyle, which is a way of living that will lower the risk of being infected with COVID-19. Large proportion of deaths can be avoided while the diseases can be prevented through preventive measures. Prevention is always better than cure which also promotes a healthy lifestyle. Healthy living means making good choices in areas of choosing healthy food and regular exercise. Alabi (2009) postulated that man covets and has a quest for a long healthy life, but there is only one way of achieving this that is through awareness or literacy. HIL plays a major role in the lifestyles of individuals, community and nation. Low HIL on the other hand may serve as a barrier that limits people's opportunity, resources, control over their lives and ability to make informed choices.

The importance of HIL lies in its component of equipping individuals and communities with requisites skills to manage a range of personal, social, economic and environmental factors that determine their health status and that of the larger society (Nwafor-Orizu, 2015). The benefits of HIL in the fight against COVID 19 are threefold: benefits to individuals, community and nation. For individuals, the ultimate benefits are knowledge of symptoms and mode of transmission of COVID-19 and effective use of preventive measures and use of health systems and services which will prevent individuals from contacting the disease or transmitting the disease to others. According to Schillinger (2005), individuals have different motivations for changing their behaviour, the actions that they are taking to change their health behaviour depends on adequate knowledge which increases adequate HIL. According to Nongo, Ezukwuoke and Adejoh (2020) HI benefits individuals in a number of ways. For example, when it facilitates access to new therapies, improved diagnostics, and more effective ways to prevent illness and deliver care. The authors further emphasized that the primary justification for HI is to protect the health interests of individuals bearing diverse health problems. In the same way, the American Institute for Research (2006) advanced that, HIL is important to individuals and society because it enhances people's ability to:

1. navigate the healthcare system, including locating services and filling out forms;
2. share health information with providers;
3. engage in self-care and chronic diseases management;

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4. adopt health promoting behaviours such as exercising and eating a healthy diet; and
5. act on health related news announcement.

According to the Center for Disease Control and Prevention (n.d), individuals in the community need HIL skills to:

1. find information and services;
2. communicate their needs and preferences and respond to information and services;
3. process the meaning and usefulness of the information and services;
4. understand the choice, consequences and context of the information and services; and
5. decide which information and services match their needs and preferences so they can act.

HIL is also of significant to providers of health information and services such as medical librarians, doctors, nurses, dentists, pharmacists and other public health workers. These categories of people need HIL skills in order to:

1. help people find information and services;
2. communicate about health and healthcare;
3. process what people are explicitly and implicitly asking for;
4. understand how to provide useful information and services; and
5. decide which information and services work best for different situations and people (such as COVID-19 pandemic) so they can act.

Brørs, Norman and Norekvål (2020) added that the healthcare system needs available resources to provide service and relevant information, and the providers must have the necessary skills not only to deliver the services but also to help contain the spread of the COVID-19. The benefit of HIL to the community and the nation lies in the old saying that says 'a healthy nation is a wealthy nation'. HL is not a personal characteristic; it is also a key determinant of population health (Pavlekvic, 2000). It is believed that the level of HIL of any community or nation reflects on the social and economic status of such a community or nation (Nwafor-Orizu, 2015). HL as a discrete form of information literacy is increasingly becoming more important for social and economic development of nations of the world (Kickbush, 2001 as cited in Nwafor-Orizu, 2015). Based on this assertion, the United Nations Economic and Social Council (2009) believe that raising the health literacy level especially in low and middle income countries (like Nigeria) will alleviate the wide range of development and public health issues confronting them (such as COVID-19).

In summary, the expected impact of high health literacy levels of any community and or nation includes reduction of disease burden generally and achievement of health and wellbeing of the people. It also ensures better management of public health emergencies like the COVID-19 pandemic as it empowers the populace for collective development resulting in accelerated progress on health commitment (Nwafor-Orizu, 2015). It will educate the individual and the community against the background of some beliefs and practices that negate the use of social distancing, regular hand washing, facemask, eating health food, regular exercise and eventual use vaccines when made available. It will similarly inform the people about government efforts towards preventing the spread of CVID-19 disease as well as palliatives or interventions towards alleviating the suffering of the pandemic.

Barriers to Health Information Literacy in Nigeria

It is common knowledge that the literacy rate among Nigerians still falls below the expected standard, worse still is HIL (Soetan, 2013) as evidently reported by Ilon (2017) who shows that

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nearly 65 to 75 million Nigerians are Illiterate (Nkamnebe & Nkamnebe, 2018). It was further lamented that about 51% of the population in Nigeria has insufficient HIL skills (Omolase, Afolabi, Omolase & Ihemedu, 2012). The implication of this low literacy level is poor knowledge of and adherence to simple health protocols, medication and recommendation, which could contribute to wide spread of diseases such as COVID-19 and reduction in the effectiveness and efficiency of health care interventions in the country (Omolase, et al., 2012).

Recent studies conducted in Nigeria on HIL by Atulomah & Atulomah (2013), Joseph (2014), Anyaoku(2018), Shabi & Oyewusi (2018), Agboola, Adeyemo & Ojobanikan (2019) and Ekoko (2020) revealed low literacy level among Nigerians. Similarly, Rudd, Anderson, Oppenheimer and Nath (2007) discovered that the complexity of written and verbal health information and the shortage of health information in languages other than English make it difficult for people with low general literacy skills to comprehend. Illiteracy constitutes a big mishap to individuals, community and the nation at large. This is why Bakare (2015) as cited in Nkamnebe & Nkamnebe(2018) stated that people who are illiterate are far more likely to live in poverty, facing a lifetime marred by poor health and social vulnerability. Going by the definitions of HL advanced above, a seemingly literate person can still become illiterate when confronted with health information which may overwhelm such an individual (Soetan, 2013). HIL problems have grown as health care providers expect people to assume more responsibility for their care at a time when the healthcare system is progressively more fragmented, complex and technologically sophisticated such as the present time of COVID-19 pandemic (Omolase, et al., 2012).

Low HL level has remained a major source of concern in Nigeria among all strata of the society resulting in high disease burden which sabotages development efforts with its attendant multiplier effects (Nwafor-Orizu, 2015). The prevailing limited HIL in the country is central to patient safety, medication errors, including lack of appreciation for the role of health care service providers and patronage of quacks (Soetan, 2013). According to Soetan (2013), the most vulnerable groups are the adult population (many of whom grapple with chronic age-related illness), children (especially those with illiterate parents), people living in rural areas, illiterates. Soetan further lamented that health information can be quite daunting, and if not properly understood, it puts the individual in poorer health, leading to more hospital visits, increase in health care spending, reduction in productivity, increase in morbidity and mortality rate, amongst several other factors.

Atuloma and Atuloma (2012) inferred that individuals with poor HL can be at serious social disadvantage concerning their ability to read and understand written medical instructions, including medication dosages and understanding results of medical test and diagnosis, locate health providers and services offered, share personal information such as health history, provide self-care in chronic illnesses, understand how to take medicines. Similarly, Kickbush et al (2013 as cited in Nwafor-Orzu, 2015) associated poor health literate individuals with less participation in health promoting and disease detection activities, riskier health choices (such as higher smoking rates), more work accidents, diminished management of chronic diseases (such as COVID 19), poor adherence to medication, increased hospitalization and re-hospitalization, increased morbidity and premature death. Soetan (2013) and Nwafor-Orizu (2015) have identified the following as factors affecting the low health literacy level in Nigeria:

1. underdevelopment of public libraries. The poor or rather abysmal attention paid to libraries is one major factor holding Nigeria away from the high literacy rates today;
2. inadequate literature on health literacy;
3. absence of direct effective government intervention programmes and poor implementation of existing ones;
4. underdevelopment and poor performance of health systems; and

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5. poor funding of health sector and shortage of needed manpower.

Conclusion and Recommendations

Prevention and control of diseases such as COVID-19 pandemic is highly dependent on access to healthcare, while the success of the healthcare system also depends on the health information literacy level of the individuals and communities on diseases and illness. Health information has critical roles to play in stemming the spread of diseases. For these roles to be realized, the place of HIL cannot be underplayed in prevention and control of the spread of diseases and illness. This paper has raised issues and concerns on the role of HIL as a critical means of stemming the spread of COVID-19 in Nigeria. HIL no doubt can benefit individuals, community and the nation at large and the ultimate benefits are healthier lifestyles that are free diseases such as COVID-19. The paper posits that regardless of the relative development in Nigeria, the level of health information is low. It is also argued that low HIL has some far reaching implications for stemming the spread of COVID-19 in Nigeria, such that individuals may not know the symptoms and signs of the disease; when infected they are less likely to make use of screening and or navigate the healthcare systems for medical help. Consequently, they may end up transmitting the disease to others, and which may result in health crises or pandemic in the society.

From the foregoing majority of Nigerians are illiterate; if they are to leave a healthy life in the face of COVID-19 pandemic, they must be released from the bondage of illiteracy if they are to make their best contribution to stem the spread of the disease to their families, the communities and the nation (Youngman, 2000). Healthy lifestyle is unimaginable, and cannot be achieved in the absence of health literacy. In the light of this, the following recommendations are made:

1. The three tiers of government in Nigeria must, as a matter of urgency, ensure adequate provision of public libraries that are well equipped with relevant information resources, facilities and professional librarians necessary for efficient and effective services to the general public, so as to improve their literacy level.
2. There should be a strong synergy between libraries and health service agencies at local, state and federal government levels for effective health literacy services and programmes. The government should formulate, implement and advocate policies that would facilitate easy access to the needed health information by the general public. Information resources on COVID-19 should be translated in national languages in forms of pamphlets, booklets, CD/DVD and audiovisuals to enlighten people on all aspects of self-care.
3. Integrating health information literacy into ongoing programmes of the target population in the community. The librarians, especially in the medical and public libraries as well as healthcare providers should ensure proper education of the teeming populace on health care information through regular outreach programmes, radio/TV talks, use of billboards, and other possible means of public awareness and enlightenment.

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