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THE ROLE OF INFORMATION LITERACY IN THE ACTUALIZATION OF HEALTHY LIVING: A CASE STUDY OF ABIA STATE

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ABSTRACT

The study examines the role of information literacy in the actualization of healthy living in Nigeria, with a special focus on Abia State. Information literacy is viewed as the ability to recognise the need for information, identify and locate appropriate sources of information, access the information, evaluate and use it effectively. Information literacy empowers people to have skills that will assist them to become independent lifelong learners, with better decision making abilities, especially in healthy living. Healthy living is defined as maintaining a state of complete physical, mental, and social well-being, which is not necessarily devoid of disease or infirmity. It involves steps, actions, and strategies adopted to achieve optimum health. Healthy living is therefore taking responsibility and making good health choices for the present and future well-being; which involves eating right, being physically fit, emotionally and spiritually well, and preventing all that hampers good health. Six objectives guided the study. The study adopted survey research design. The area of study is Abia State, Nigeria, while the population of the study comprised people dwelling in Umuahia and Aba Metropolis, Abia State, Nigeria. The sample and sampling technique comprised 450 respondents randomly selected from Umuahia and Aba metropolis in Abia State. The instrument for data collection was structured questionnaire containing 77 items in 6 clusters. Method of data analysis adopted involved frequency counts and mean scores. The findings of the study revealed that people access healthy living information through books, newspapers, journals, library, internet, social media, conversation with friend and colleagues, interaction with medical practitioners, radio and television, among others. That the extent of accessing healthy living information is high among people, particularly the literates, owing to proliferation of information sources on health. The study equally revealed that effective utilization of health information include checking prescriptions, reading labels of drugs before taking them, communicating with doctors and nurses, locating and accessing health facilities, being mindful of what to eat, identification of symptoms of health disorder, regular check-ups, engaging in regular exercises, maintaining healthy weight and preventing diseases, among others. The findings also revealed that the benefits of accessing and utilizing healthy living information involve adopting appropriate health practices; enhances healthy eating; maintaining healthy weight, being physically active; going for regular check-ups; avoidance of stress; avoidance of emergency situations; reduction of mortality rate and avoidance of untimely death. Consequences of low information literacy rate on healthy living were equally identified. However, recommended strategies for improving information literacy on healthy living, which among others include identifying sources of information, accessing them, utilizing them effectively, and adopting the knowledge gained from such information for right healthy living decisions or choices. The study concluded that information literacy on healthy living is imperative so as to empower individuals in having adequate health knowledge and improved healthy living practices.

Keywords: Information, information literacy, health, healthy living, actualization.

INTRODUCTION

Development in information and communication technology has significantly impacted on the availability and accessibility of information in diverse areas of endeavour, including healthy living. This has consequently led to the proliferation of sources of information, resulting in increased need for making individuals information literate in order to effectively access and use needed information. Wooliscroft (1997) posits that access to information is one of the dominant factors in living well. The author further maintained that the need to determine what information we need, where to obtain it, how to select, evaluate and use it to advance individual and collective progress is of critical importance.

Information literacy therefore plays a significant role in the actualization of healthy living of individuals and the society, as goal 3 of the sustainable development goals stipulates ‘’good health and well-being for people’’, with the objective of ensuring healthy lives and promoting well-being for all at all ages. It is therefore imperative to emphasize the need for information literacy as a roadmap to the actualization of healthy living. This is also sequel to the understanding that over the years, information and communication technologies (ICTs) and its application in the wide spectrum of man’s endeavors have brought about paradigm shift culminating in the increased quest for information, and greater need for information literacy in order to cope with resultant effect of information explosion. Furthermore, the Institute of Medicine in Nielsen (2008) opines that competing sources of health information strengthen the need for enhanced health literacy. In addition, for sustainable development, health is important, making health information and information literacy essentially required to be able to actualize healthy living.

Information literacy according to Association of College and Research Libraries (ACRL) in Ranaweeral (n.d) "is the ability to recognise when information is needed and have the ability to locate, evaluate, and use information" (p.1). Information literacy is viewed as the ability to recognise the need for information, identify and locate appropriate sources of information, access the information, evaluate and use it effectively. It is a set of skills required to find, retrieve, analyze and use information effectively for problem solving and decision making. Information literacy empowers people to have enduring critical skills that assist them to become independent lifelong learners, with better decision making abilities. Candy in Woliscroft (1997) stated that " information literacy is not simply a response to the demands of the information society, but an important set of intellectual accomplishments that can aid in the realization of the ‘learning

society'(p.4). Information literacy can be seen as the foundation of a democratic society, making a society that is capable of accessing, evaluating, communicating and using information in an effective and efficient manner, a literate society with capabilities of achieving healthy living.

UNESCO (2005) maintained that the Alexandria Proclamation on information literacy and lifelong learning states that information literacy 'lies at the core of lifelong learning; and empowers people in all walks of life to seek, evaluate, use and create information effectively to achieve their personal, social, occupational and educational goals'. The proclamation further maintains that information literacy is a basic human right in a digital world and promotes social inclusion of all nations. Information literacy on healthy living otherwise termed health information literacy or health literacy as they could be used interchangeably, is thus, essentially required to empower individuals and society to achieve healthy living.

Health according to World Health Organisation Constitution in WHO (2012) is defined as "a state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity". Thus, healthy living means maintaining a state of complete physical, mental, and social well-being, which is not necessarily devoid of disease or infirmity. It involves steps, actions, and strategies adopted to achieve optimum health. Healthy living is therefore taking responsibility and making good health choices for the present and future well-being, which involves eating right, being physically fit, emotionally and spiritually well, and preventing all that hampers good health, among others. Consequently, health information literacy is arguably one of the concepts that cannot be over-emphasized when it comes to issue of actualization of healthy living. This is in response to Harris et al (2010) assertion that human beings regardless of *statusquo* and other stratification, are the greatest agents of development, are equally associated with health, and therefore require health information to survive.

Health information literacy is defined as "the degree to which individuals have the capacity to obtain, process, and understand basic health information services needed to make appropriate health decisions" (Healthy People, 2010). In the same vein, Health Information Literacy Tasks Force Report in Femi and Oyinade (2017) averred that health information literacy involves a set of skills that enable one to recognize a need for health information, identify sources of the information, be able to access and retrieve the relevant information, assess the quality and applicability to the specific situation and analyze, understand and use the information to make good health decisions. Health literacy on the other hand according to Kwan, Fankish and Rootman in World Health Organisation (2012) is defined as the degree to which people are able

to access, understand, appraise, and communicate information to engage with the demands of different health contexts in order to promote and maintain good health across the life-course" (p.13). World Health Organisation (2012) maintains that health literacy can be seen as an outcome of effective health education, which increases individual's capacities to access and use health information in order to make appropriate health decisions and thereby maintain basic health. The author went further to emphasize that health literacy represents the cognitive and social skills that determine the motivation and ability to gain access to, understand and use information in such a manner that promotes and maintains good health. Thus, health literacy goes beyond being able to read pamphlets and make appointments, as by improving people's access to health information and their capacity to use it effectively, health literacy fundamentally brings about empowerment. This is buttressed by U.S. Dept of Health & Human Services. Office of Disease Prevention and Health Promotion (2015), which stipulated that health literacy affects people's ability to navigate the healthcare system, including filling out complex forms and locating providers and services; share personal information, such as health history with providers; and engage in self-care and chronic disease management, among others.

Health information literacy or health literacy is used interchangeably with information literacy on healthy living in this study as it be viewed as a specialized arm of information literacy, which continues to grow in importance as more people seem to indulge in unhealthy living behaviours and practices, owing to lack of access or inability to access information on their health status, inadequate knowledge on how to go about it, effectively access, synthesize and utilize health information so as to adopt healthy living practices among others.

Access to health information should be considered as everybody's right, as all stakeholders are involved. Provision and access to the right health information should be considered everybody's right and privilege not minding the ethnic majority and minority, though it has been observed from empirical studies that many members of minority groups have low information literacy skills and are even unaware of the health information resources provided by libraries and information centers within their locality. In addition, Breivik in Woliscroft (1997) maintained that "information literacy is not limited to knowledge of resources, neither is it dependent on the library as the sole source nor on information finding but equally recognize the importance of understanding and evaluating that information". The US Dept. of Health and Health Services. Office of Disease Prevention and Health Promotion (2015) opined that the primary responsibility for improving health literacy lies with public health professionals and

healthcare and public health systems. As information gateways, the librarians are not left out among the stakeholders in inculcation of information literacy on healthy living or health literacy.

In this contemporary digital era, health information is ubiquitous, involving health information in print, on the Internet, websites, and other super highways, and equally in the various libraries, while information literacy enables individuals to identify need for, access, evaluate and effectively utilize the right health information. The proliferated health information in whatever format and from which ever source must be evaluated to ensure its quality, currency, reliability and usefulness, which strengthens the great need for improved information literacy on healthy living as opined by the Institute of Medicine in Nielsen (2008) owing to competing sources of health information. The Internet and its wealth of health information is predominantly a valuable tool for helping individuals learn more about common, chronic illnesses and wellness programs. Internet usage among individuals is growing geometrically, and they need to evaluate the information they access and use. Therefore, the health information that leads to healthy living are those that are timely, right, useful, aid decision making processes, relevant to circumstances at hand and also has problem-solving ability.

Sources of healthy living information are diverse. The benefits of having access, evaluating and effectively utilizing information on healthy living are immense, while consequences of inability to adequately access and utilize healthy living information abounds. The study therefore, explores the role of information literacy in actualization of healthy living in the society using Abia State, Nigeria as a focal point, so as to ensure that goal 3 of sustainable development goal is realized in the society.

Objectives of the Study

The main purpose of this study is to investigate the role of information literacy in the actualization of healthy living in Nigeria. Specifically, the objectives of the study are to:

1. Ascertain the sources of healthy living information
2. Examine the extent of accessing healthy living information
3. Identify how healthy living information are effectively utilized by people
4. Examine the benefits of accessing healthy living information
5. Ascertain the consequences of low information literacy on healthy living
6. Identify the challenges of accessing and utilizing healthy living information

Review of Related Literature

Information according to Case (2002) means knowledge, a packaged human experience, a source that provides a myriad of data, a resource that takes different formats, packaging, transfer media, and varied methods of delivery. The United States National Commission on Library and Information Science (2003) avers that information literacy encompasses knowledge of one's information concerns and needs, and the ability to identify, locate, evaluate, organize and effectively create, use and communicate information to address issues or problems at hand. It is a prerequisite for participating effectively in the information society, and is part of the basic human right of lifelong learning. Dolly in Gandhe (2011) defined information literacy as "a kind of ability to recognize a need for information, identify and locate appropriate information sources, know how to gain access to the information contained in those sources, evaluate the quality of information obtained, recognize the information and use the information effectively" The author further buttressed that the concept of information literacy is comprised of a set of abilities to identify the exact information, and the correct source of required information, access the required information from the selected source, evaluate the accessed information and apply the evaluated information .

According to Webb and Powis (2004), information literacy as a concept has come to be an indispensible tool in the world today and though related to information technology skills, has broader implications for the individual, the educational system, and for society. In the same vein, Bhandary (2004), opined information literacy enables an individual to use different tools available such as libraries, information and media centers, computers, software applications, databases, and other technologies to achieve a wide variety of academic, work-related, and personal goals. However, Information literacy, while showing significant overlap with information technology skills, is a distinct and broader area of competence, though information literate individuals necessarily develop some technology skills. Information literacy focuses on content, communication, analysis, information searching, and evaluation. Thus, information technology skills are interwoven with, and support, information literacy.

Ramesh (2008) viewed information literacy as an intellectual framework for understanding, finding, evaluating, and using information; activities which may be accomplished in part by fluency with information technology, in part by sound investigative methods, but most important, through critical discernment and reasoning Information literacy in the words of

Prabhavathi (2013) initiates, sustains, and extends lifelong learning through abilities which may use technologies but are ultimately independent of them. The skills that are required to be information literate according to CILIP (2017) call for an understanding of: a need for information; the resources available; how to find information; the need to evaluate information; how to work with or exploit results; ethics and responsibility of use; how to communicate or share the findings; and how to manage the findings.

It is imperative to note that a new definition of information literacy according to CILIP (2017) was launched in April 2018, which stipulates that as well as knowing the need for information and knowing how and where to find it, to be information literate, individuals also need to understand the social, economic and ethical use of information. Information literacy has relevance for democracy and active citizenship and equally has relevance outside of formal education and throughout an individual's lifetime as well as within educational institutions.

According to World Health Organisation (WHO) in Toole (2007), health is defined as a state of complete physical, mental , and social well-being, and not necessarily absence of disease. Healthy living on the other hand according to the author is simply defined as maintaining a state of complete physical, mental, and social well-being, which is not necessarily devoid of disease or infirmity. It involves the steps, actions, and strategies adopted to achieve optimum health; and also taking responsibility and making smart health choices for the present and future. The author maintained that it involves eating right, getting physically fit, emotionally and spiritually wellness and taking preventive measures. It requires being physically, emotionally and spiritually balanced. To achieve the foregoing, information literacy on healthy living or health information literacy or health literacy, as used interchangeably in this study, is essentially needed.

Nutbeam (2000) opined that health literacy is a relatively new concept in health promotion, and that examination of the concept identifies distinctions between functional health literacy and critical health literacy. The author emphasized that improving health literacy meant more than disseminating health information and developing skills to be able to read pamphlets and successfully make appointments, though it remains a fundamental role. The author however, opined that improving access to health information and capacity for its effective use is imperative, as it is argued that improved health literacy is critical to empowerment. The author further buttressed that improving health literacy could be achieved by assisting people to have confidence to act on that knowledge and the ability to work with and support others through

personal forms of communication, and through community-based educational outreach. This will invariably foster greater independence and empowerment and thereby assist in overcoming structural barriers to health and healthy living.

The American Library Association Presidential Committee on Information Literacy in Ranaweeral (n.d) points that “ultimately, information literate society comprises people who have learned how to learn. They know how to learn because they know how knowledge is organized, how to find information and how to use information in such a way that others can learn from them. They are people prepared for lifelong learning, because they can always find the information needed for any task or decision at hand” (p.2). In the same vein, Weber and Johnson in Femi and Oyinade (2017) asserted that information literate person is one who is "able to recognize when information is needed and have the ability to locate, evaluate, and use effective the needed information". ACRL (2006) in Ranaweeral (n.d) also opined that information literacy is important owing to its ability to provide solution to information explosion / data smog in the contemporary society. Nutbeam (2000) emphasized that health promotion outcome measures of health literacy include health-related knowledge attitudes, motivation, behavioural intentions, personal skills, and self-efficacy.

In discussing sources of healthy living information, Ibegwam (2013) advised health librarians and health information scientists should to fill up their shelves with the most usable information and make them accessible to the users, so as to engender effective and efficient utilization of the resources and services. The author also emphasized that although part of these literacy skills could be acquired outside the confines of the library, understanding the clients and patients brings the information provider closer to the information seeker and user thereby creating an atmosphere whereby the information provider learns to know and understand what the user community need and acquire such.

Extent of use of information on healthy living has been studied by some authors. Egunjobi and Akerele (2014) carried out a study on *health information literacy as a predictor of community information service utilization among citizens in Public and National libraries in South-west* Nigeria. The study found out that out of 16 items investigated, only 2 revealed high mean scores of 2.60 and 3.21 respectively, while others revealed low mean scores ranging from 1.01 to 2.46. The weighted average of 1.57 attested to the point that respondents exhibited low health information literacy. This implies that citizens have poor information seeking behaviour, poor information use, and lack ability to synthesize and evaluate information on health matters.

It was also discovered that provision of health information in some parts of America revealed that minority groups, have access to high quality health information. A study by Nelson (2002) on *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, revealed that racial and ethnic minorities experience a lower quality of health information services and systems, and are less likely to receive even routine medical procedures than their White Americans even when variations in factors such as insurance status, income, age, severity of conditions and symptom expression are taken into account and noted to be comparable. The findings revealed that these differences are associated with greater mortality among African American patients as a result of their uninformed healthy state and services. In addition, many members of minority groups are equally unaware of the health information resources that their local libraries and other information centers provide.

Information literacy on healthy living has some benefits. Nutbeam (2010) asserted that health literacy has both personal and social benefits which comprise: equipping people to overcome structural barriers to health; develop personal and social skills required to make positive health behaviour choices; making healthier lifestyle choices; making effective use of available health services; enables effective community action for health; and ensures development of social capital. The author also stated that health and social outcomes measures include reduced morbidity, disability, and avoidable mortality.

However, the consequences of low information literacy rate on healthy living are so diverse, as reported by many scholars, resulting in less knowledge of disease management and health promoting practices; less likelihood of using preventive services and measures; abuse of drugs, ignoring health conditions till it degenerates to worst conditions; ignoring disease symptoms; poor health status/outcomes, excessive use of emergency wards of hospitals and frequent admissions/hospitalizations, culminating in long period of stay; and ultimately experiencing untimely and preventable deaths, among others. The Institute of Medicine in Nielsen (2008) reported that adults with limited literacy have " less knowledge of disease management and health promoting behaviours; report poorer health status; poor health outcomes; increased medication errors; less likely to use preventive services; higher hospitalization rates and emergency service use". In corroboration, WHO (2012) averred that people with low literacy have poorer overall health, as low literacy leads to misuse of medication and misunderstanding of health information; preventable use of health services, including emergency care; wait longer

before seeking medical help, thus, allow health problems to reach crisis state. In the same vein, Ross in Femi and Oyinade (2017) equally opined that patients with low health and general literacy skills may have poorer health, higher expenses on healthcare, a high rate of hospitalizations, lower efficacy for preventive care practices and compliance to treatment regimens. According to Ibegwam (2013), citing Cunha, AJLA, Muhe, Qazi, Simeos, Tamburlini, Weber and Pierce, lack of access to health information leads directly and indirectly to wrong diagnosis, errors in treatment in the side of the health professionals, lack of tools to deliver health care, etc. in the area of the patients, lack of access to the right health information leads to unnecessary suffering, disability and death of patients among other issues.

Methodology

Descriptive survey design was adopted for the study. The Area of study was Abia Satae in the South East Nigeria, while the population of the study comprised dwellers in Umuahia and Aba Metropolis, Abia State, South-East Nigeria. Sample and sampling technique comprised a total of four hundred and fifty (450) respondents randomly selected. Instrument of data collection was structured questionnaire comprising 77 items in 7 clusters. Data was collected from the randomly selected respondents drawn from Umuahia and Aba Metropolis of Abia State comprising of artisans, traders, lecturers/ librarians, public / civil servants, civil servants, students and unemployed. Method of data collection involved the researcher personally distributing the instrument with the aid of four research assistants in Aba and Umuahia. Out of the 450 copies of questionnaire distributed, 415 were collected and found usable, giving 92% response rate. The structured questionnaire was designed using modified 4 point Likert scale: Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD); and also Very High Extent (VHE), High Extent (HE), Low Extent (LE), and Very Low Extent (VLE) as appropriate, with values of 4 - 1 respectively. The variables measured included sources of healthy living information, extent of access, pattern of use, benefits of accessing, consequences of low information literacy on healthy living, and challenges of accessing information literacy for healthy living. Method of data analysis involved the use of frequency count, mean and standard deviation. The criterion mean was 2.50, and the decision rule was acceptance of any item with mean scores of 2.50 and above , and rejection of items with mean scores below 2.50.

Results and Discussion of Findings

Response Rate

Table 1: Response Rate

No of Questionnaire Distributed	No of Questionnaire Returned	Response Rate (%)
450	415	92%

Table 1 above shows the response rate of the respondents in questionnaire distribution. The table indicates that out of the 450 copies of questionnaire distributed, 415 copies were returned, giving a response rate of 92%.

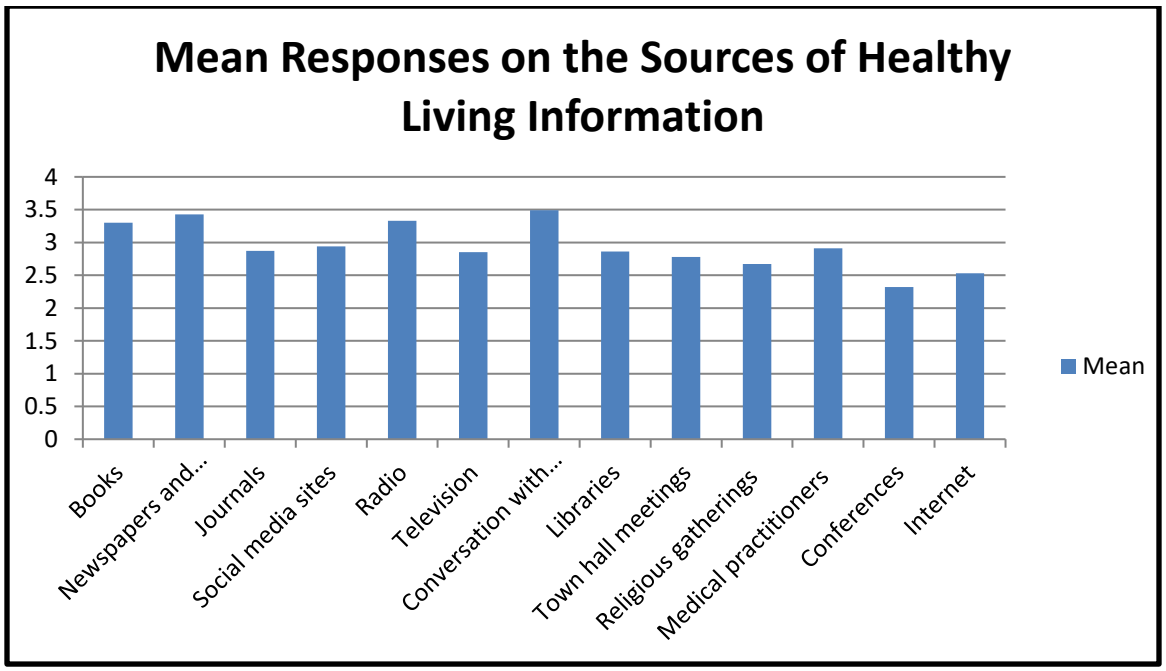
Sources of healthy living information

Table 2: Mean Responses on Sources of Healthy Living Information (N = 415)

S/N	Items	SA	A	D	SD	Mean	Decision
1	Books	223	142	0	50	**3.30**	**Accept**
2	Newspapers and Magazines	218	158	39	0	**3.43**	**Accept**
3	Journals	176	90	66	83	**2.87**	**Accept**
4	Social media sites	114	214	37	50	**2.94**	**Accept**
5	Listening to radio	165	236	2	12	**3.33**	**Accept**
6	Watching television	146	149	37	83	**2.85**	**Accept**
7	Conversation with friends/colleagues	202	213	0	0	**3.49**	**Accept**
8	Visiting the libraries (reading and consultation of information resources)	176	88	68	83	**2.86**	**Accept**
9	Town hall meetings	118	171	41	85	**2.78**	**Accept**
10	Religious gatherings like churches, mosques, among others.	158	104	11	142	**2.67**	**Accept**
11	Interactions with medical practitioners	151	151	38	75	**2.91**	**Accept**
12	Through conferences, workshops and seminars	134	36	75	170	**2.32**	**Reject**
13	Internet	145	61	78	131	**2.53**	**Accept**
	Grand Mean					**2.94**	**Accept**

The Table above sought to reveal respondents' mean ratings on sources of healthy living information. A total of thirteen (13) perceived sources were investigated and the findings show a high level of agreement on the sources of healthy living information. This is evident from the grand mean of 2.94, which is above the criterion mean chosen for the study. Furthermore, out of the thirteen (13) sources investigated, the result reports the acceptance of twelve sources and the rejection of one (1) source. The sources accepted, with their mean scores include, books (3.30); Newspapers and magazines (3.43); journals (2.87); social media sites (2.94); listening to radio (3.33); watching the television (2.85); conversation with friends/colleagues (3.49); visiting the libraries (reading and consultation of information resources) (2.86); town hall meetings (2.78);

religious gatherings like churches, mosques, among others (2.67); interactions with medical practitioners (2.91); and Internet (2.53). Majority of the respondents' rejected the sourcing of healthy living information through conferences/workshops/seminars with a mean score of 2.32. The findings of the study agree with the studies of Dutta-Bergman (2004) and Cotten and Gupta (2004) which found out that 'health-oriented' individuals used active sources such as the I nternet to seek information, whereas those who were not 'health-oriented' were more likely to obtain health information from passive media sources such as television and magazines, and also healthy and happy people were more likely to use online sources in health information seeking instead of relying only on offline sources. The finding is also in line with the study of Bhandary (2004), which stated that information literacy enables individuals to use different tools available such as libraries, information and media centres, computers, and databases, among others, to achieve a wide variety of academic, work-related and personal goals. The findings also agree with the work of Nölke and Colleagues (2015) which established that heavy use of health care services was associated with a higher likelihood of health information seeking from the different sources, more especially, the Internet.



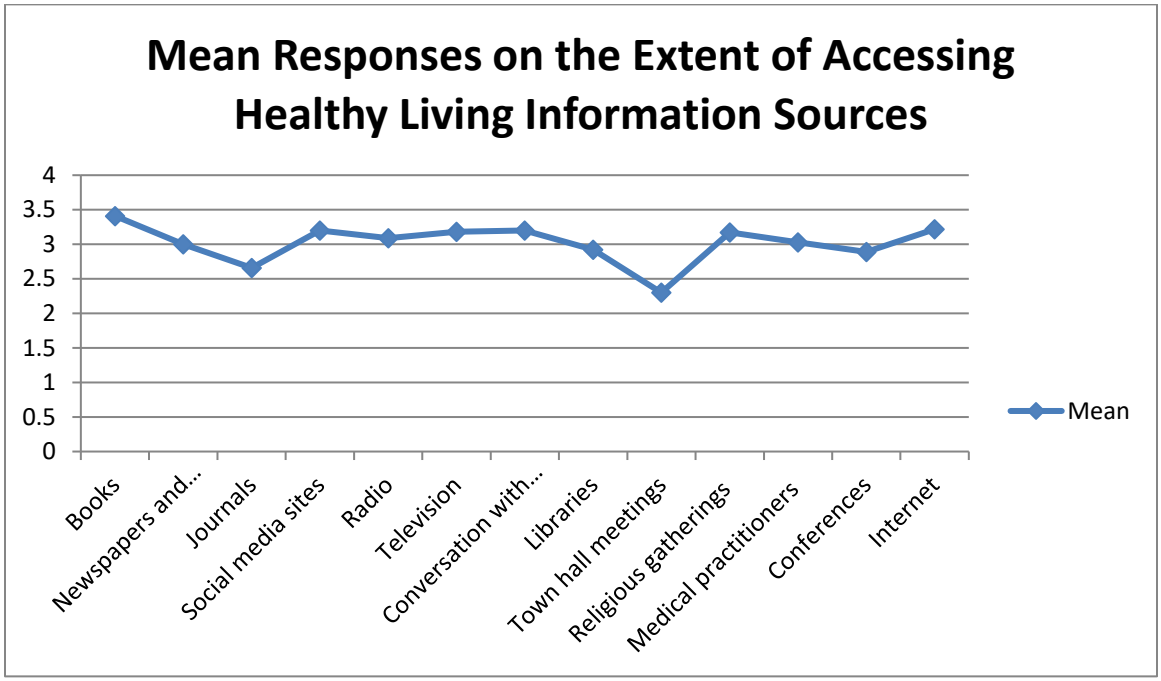
Extent of accessing healthy living information from the sources

Table 3: Mean Responses on Extent of Accessing Healthy Living Information (N = 415)

S/N	Items	VHE	HE	LE	VLE	Mean	Decision
14	Books	210	166	39	0	**3.41**	**Accept**
15	Newspapers and Magazines	78	298	39	0	**3.00**	**Accept**
16	Journals	54	205	117	39	**2.66**	**Accept**
17	Social media sites	85	330	0	0	**3.20**	**Accept**
18	Listening to radio	86	282	47	0	**3.09**	**Accept**
19	Watching the television	164	163	88	0	**3.18**	**Accept**
20	Conversation with friends/colleagues	171	156	88	0	**3.20**	**Accept**
21	Visiting the libraries (reading and consultation of information resources)	117	156	135	7	**2.92**	**Accept**
22	Town hall meetings	78	94	119	124	**2.30**	**Reject**
23	Religious gatherings like churches, mosques, among others.	164	156	95	0	**3.17**	**Accept**
24	Interactions with medical practitioners	112	247	11	45	**3.03**	**Accept**
25	Through conferences/workshops/seminars	44	80	91	200	**1.91**	**Reject**
26	Internet	221	110	40	44	**3.22**	**Accept**
	Grand Mean					**2.95**	**Accept**

Table 3 above presents the mean ratings of the respondents on the extent of accessing healthy living information. The grand mean score of 2.95 obtained indicates that the respondents accepted that there is high extent of accessing healthy living information based on the thirteen (13) items investigated. Out of the thirteen (13) sources investigated, the respondents accepted and rated twelve (12) sources high and rejected one source. The sources rated high, with their mean scores, include books (3.41); newspapers and magazines (3.00); journals (2.66); social media sites (3.20); listening to radio (3.09); watching the television (3.18); conversation with friends/colleagues (3.20); visiting the libraries (reading and consultation of information resources) (2.92); religious gatherings like churches, mosques, among others (3.17); interactions with medical practitioners (3.03); and Internet (3.22). town hall meetings, and through conferences/workshops/seminars with a mean scores of 2.30 and 1.91, respectively were rejected and rated low. To a great extent, the finding of the study and the ratings of the respondents on the extent of accessing healthy living information sources contradicts with the work of Egunjobi and Akerele (2014) which found out that out of 16 items investigated, only 2 revealed high mean score of 2.60 and 3.21 respectively. Others revealed low mean scores ranging from 1.01 to 2.46. The weighted average of 1.57 attested to the point that respondents exhibited low health information literacy. By implication, citizens have poor information seeking behaviour, poor information use, and lack ability to synthesize and evaluate information on health matters. However, this study agrees with the work of Suri, Chang, Majid and Foo (2014) which revealed

that there is a gradual increase in the use of the Internet by senior citizens seeking health information. Also, there has been a corresponding increase in a number of intervention studies in e-health literacy for senior citizens.



How healthy living information are being utilized

Table 4: Mean Responses on How Healthy Living Information are being Utilized (N = 415)

S/N	Item Statements	SA	A	D	SD	Mean	Decision
27	Checking prescriptions	306	36	73	0	**3.39**	**Accept**
28	Reading labels of drugs before taking them	278	70	48	19	**3.46**	**Accept**
29	Communicating with doctors and nurses	147	204	64	0	**3.05**	**Accept**
30	Being mindful of what to eat	215	142	58	0	**3.38**	**Accept**
31	Maintaining healthy weight	114	246	49	6	**3.13**	**Accept**
32	Identify symptoms of health disorder	107	239	4	65	**2.93**	**Accept**
33	Regular check-ups	166	157	89	3	**3.17**	**Accept**
34	Applying basic first aid measures	135	273	7	0	**3.31**	**Accept**
35	Engaging in regular exercises	168	82	55	110	**2.74**	**Accept**
36	Locating and accessing health facilities	121	182	50	62	**2.87**	**Accept**
	Grand Mean					**3.14**	**Accept**

The Table above presents mean ratings of respondents on how healthy living information are being utilized by the respondents. The findings revealed a grand mean of 3.14, which indicates the acceptance of the items in the cluster as different patterns individuals utilize healthy living information. These findings revealed different patterns of utilizing healthy living information as follows with their mean scores: checking prescription (3.39); reading labels of

drugs before taking them (3.46); communicating with doctors and nurses (3.05), being mindful of what to eat (3.38); maintaining healthy weight (3.13); identify symptoms of health disorder (2.93); regular check-ups (3.17); applying basic first aid measures (3.31); engaging in regular exercises (2.74); and locating and accessing health facilities (2.87). Based on this findings, the study correlates the earlier work of Ramanadhan and Viswnath (2006) which revealed indications that health information seeking is associated with outcomes such as discussing search results with physicians, knowledge of treatment options and decisions, and patient satisfaction, which may contribute to other health outcomes. This finding is in agreement with Nutbeam (2000) study which revealed that health promotion outcome measures of health literacy include health-related knowledge attitudes, motivation, behavioural intentions, personal skills, and self-efficacy. However, this proves that frequent seeking of health information has been associated with health knowledge and healthier behaviour.

Benefits of accessing healthy living information.

Table 5: Mean Responses on Benefits of Accessing Healthy Living Information (N = 415)

S/N	Item Statement	SA	A	D	SD	Mean	Decision
37	Helps in adopting appropriate health practices like accessing health facilities and adhering to doctor's advice.	294	35	0	86	**3.29**	**Accept**
38	It helps to maintain healthy living	208	132	28	47	**3.21**	**Accept**
39	It guides against drug abuse	240	99	31	45	**3.29**	**Accept**
40	It enables one to be physically active	250	126	39	0	**3.51**	**Accept**
41	It helps in preventing sickness/illness like malaria, typhoid, diabetes, high blood pressure, among others	320	48	47	0	**3.66**	**Accept**
42	It helps one to effectively manage sicknesses, and avoid complications.	195	220	0	0	**3.47**	**Accept**
43	It leads to avoidance of stress	164	197	54	0	**3.27**	**Accept**
44	It leads to avoidance of emergency situations	85	244	86	0	**3.00**	**Accept**
45	It brings about reduction in mortality and untimely death	274	134	7	0	**3.64**	**Accept**
46	It enhances healthy eating	242	165	8	0	**3.56**	**Accept**
47	It helps in maintaining healthy weight	203	173	39	0	**3.40**	**Accept**
48	It helps in avoidance of contacting and spreading communicable diseases	203	212	0	0	**3.49**	**Accept**
	Grand Mean					**3.40**	**Accept**

Table 5 above presents the mean ratings of the respondents on the benefits of accessing healthy living information. The result shows an acceptance of all the item statements and a high level of benefits from accessing healthy living information with a grand mean of 3.40, which is highly above the criterion mean of the study. These benefits as accepted by the respondents with their mean ratings include: helps in adopting appropriate health practices like accessing health

facilities and adhering to doctor's advice (3.29); it helps to maintain healthy living (3.21); it guides against drug abuse (3.29); it enables one to be physically active (3.51); it helps in preventing sickness/illness like malaria, typhoid, diabetes, high blood pressure, among others (3.66); it helps one to effectively manage sicknesses, and avoid complications (3.47); it leads to avoidance of stress (3.27). Others include it leads to avoidance of emergency situations (3.00); it brings about reduction in mortality and untimely death (3.64); it enhances healthy eating (3.56); it helps in maintaining healthy weight (3.40); and it helps in avoidance of contacting and spreading communicable diseases (3.49). This finding supports the work of Weaver et al. (2010) which revealed that people who actively seek for wellness information are likely to engage in physical activities, whereas people who seek for illness information are more likely to report health risks, such as not engaging in physical activities or use of prescription drugs. Moreover, people who sought for wellness information were likely to report having a good health status while people who seek for illness information are likely to report poorer health status, more diminished physical health days, and a poorer quality of life.

The findings of the study support Nutbeam (2010) study which implies that benefits of information on healthy living comprise: equipping people to overcome structural barriers to health; develop personal and social skills required to make positive health behaviour choices; making healthier lifestyle choices; making effective use of available health services; enables effective community action for health; and ensures development of social capital. The author also added that health and social outcomes measures include reduced morbidity, disability, and avoidable mortality.

Consequences of low information literacy on healthy living

Table 6: Mean Responses on Consequences of Low Information Literacy on Healthy Living (N = 415)

S/N		SA	A	D	SD	Mean	Decision
49	It leads to the acquisition of wrong healthy tips	233	96	31	55	**3.22**	**Accept**
50	Less knowledge of disease management	260	69	21	65	**3.26**	**Accept**
51	Results in avoidable health complications	199	98	57	61	**3.05**	**Accept**
52	Less knowledge of health-promoting practices	258	71	31	55	**3.28**	**Accept**
53	Poor health status	222	70	63	60	**3.10**	**Accept**
54	Frequent hospitalization	224	94	45	52	**3.18**	**Accept**
55	It leads to drug abuse	256	68	39	52	**3.29**	**Accept**
56	It may lead to frequent sickness and regular hospital visitation	223	99	48	45	**3.38**	**Accept**
57	It may lead to emergency situation and untimely death	220	101	39	55	**3.17**	**Accept**
58	Inability to use preventive services and measures	259	92	34	30	**3.38**	**Accept**
59	It may lead to unhealthy eating, malnutrition and deterioration in health	250	79	31	55	**3.26**	**Accept**
	Grand Mean					**3.23**	**Accept**

The table above presents the mean ratings of the respondents on the consequences of low information literacy on healthy living. A total of eleven (11) perceived consequences were investigated. The result of the study, with a grand mean of 3.23 shows that the items studied were accepted as consequences of low information literacy on healthy living. The findings revealed the following as consequences of low information literacy on healthy living, with their mean ratings: it leads to the acquisition of wrong healthy tips (3.22); less knowledge of disease management (3.26); results in avoidable health complications (3.05); less knowledge of health-promoting practices (3.28); poor health status (3.10); frequent hospitalization (3.18); it leads to drug abuse (3.29).Others involve it may lead to frequent sickness and regular hospital visitation (3.38); it may lead to emergency situation and untimely death (3.17); inability to use preventive services and measures (3.38); and it may lead to unhealthy eating, malnutrition and deterioration in health (3.26). The findings are in line with the studies of The Institute of Medicine in Nielsen (2008), WHO (2012), Ibegwam (2013), and Ross in Femi and Oyinade (2017), among others, which revealed consequences of low information literacy on healthy living. Jung (2014) study found no association between avoidance of information and self-rated health, which portray that avoidance of healthy living information has a negative influence on the health of the individual.

Challenges **of information literacy on healthy living information**

Table 7:Mean Responses on Challenges of Information Literacy on Healthy Living (N = 415)

S/N	Items Statement	SA	A	D	SD	Mean	Decision
60	High cost of some health-related information resources like books, journals, magazines, Internet access, among others	136	193	31	55	**2.99**	**Accept**
61	Inability to identify need for information on healthy living	132	275	8	0	**3.30**	**Accept**
62	Inability to access healthy living information	196	219	0	0	**3.47**	**Accept**
63	Inability to verify and evaluate health-living information	157	258	0	0	**3.38**	**Accept**
64	Lack of application of health information to daily living	242	173	0	0	**3.58**	**Accept**
65	Absence of health-promoting seminars	229	100	31	55	**3.21**	**Accept**
66	Activities of quack who dominates the health industries in developing countries	220	94	46	55	**3.20**	**Accept**
67	Closed-access nature of some health-related online information resources and databases	167	162	56	30	**3.12**	**Accept**
68	Strict nature of doctors	160	137	68	50	**2.99**	**Accept**
69	Inability to understand/interpret medical jargons used by health practitioners and found in health publications	144	185	31	55	**3.01**	**Accept**
70	Inadequate provision of health-related books in the library	138	161	61	55	**2.92**	**Accept**
71	Individual's less-concern attitude to health matters	229	121	40	25	**3.51**	**Accept**
72	High rate of illiteracy on the side of the individual	229	100	31	55	**3.21**	**Accept**
73	Absence of adequate extension health workers	220	97	33	65	**3.19**	**Accept**
74	Lack of fund on the side of the individual to acquire heath information resources	258	71	31	55	**3.28**	**Accept**
75	High cost of medicare in developing countries	199	130	31	55	**3.14**	**Accept**
76	Incessant power supply which affects watching television, listening to radio, and access to Internet and social media for healthy living information	106	100	154	55	**2.62**	**Accept**
77	Lack of regular display and exhibition of information materials on healthy living by libraries	129	200	31	55	**2.97**	**Accept**
	Grand Mean					**3.17**	**Accept**

Table 7 presents the mean ratings on challenges of information literacy on healthy living. The study shows a grand mean of 3.17, which indicate a high level of acceptance of the perceived items investigated as challenges of information literacy on healthy living. However, the study presents the acceptance of all the item statements as the challenges. These challenges with their mean scores include: high cost of some health-related information resources like books, journals, magazines, Internet access, among others (2.99); inability to identify need for information on healthy living (3.30); inability to access healthy living information (3.47); inability to verify and evaluate health-living information (3.38); lack of application of health

information to daily living (3.58); absence of health-promoting seminars (3.21); activities of quack who dominates the health industries in developing countries (3.20); closed-access nature of some health-related online information resources and databases (3.12). Others are strict nature of doctors (2.99); inability to understand/interpret medical jargons used by health practitioners and found in health publications (3.01); inadequate provision of health-related books in the library (2.92); individual's less-concern attitude to health matters (3.51); high rate of illiteracy on the side of the individual (3.21); absence of adequate extension health workers (3.19); lack of fund on the side of the individual to acquire heath information resources (3.28); high cost of medicare in developing countries (3.14); incessant power supply which affects watching television, listening to radio, and access to Internet and social media for healthy living information (2.62); and lack of regular display and exhibition of information materials on healthy living by libraries (2.97). However, the findings on challenges of information literacy on healthy living are in line with the report of Abiola and Olatokunbo (2012) which indicated that community information services in Nigerian in the area of health among other areas are bedeviled by factors like negative economics and political situation, lack of adequate and professional workforce, non-computerization of services, lack of well-defined policies, neglect from government, unimpressive facilities, low patronage, lack of current materials and poor funding, among others. The study is also in line with Egunjobi and Akerele (2014) findings, which indicated that health information literacy was low and it positively predicted community information services utilization, which depend on the level of health information literacy of citizens.

Conclusion

The study concludes that information literacy on healthy living has the potential of empowering individuals in having adequate health knowledge and improved healthy living practices. It enables individuals and the society to acquire critical skills for becoming independent lifelong learners, and ensures better decision making abilities on health and healthy living. Thus, the challenges confronting information literacy on healthy living should be addressed by the stakeholders, which include the individuals, libraries, educational institutions, health practitioners, and government at all levels, so as to engender effective access, evaluation, and utilization of health information for better healthy living decisions and practices in the society. This will enable people know when they have need for information on their health, seek

the information, effectively access, evaluate understand and use health information, make informed health decisions, so as to be able to choose a healthy lifestyle, know how and when to seek medical care, and equally take advantage of preventive measures, which will ensure avoidance of emergencies and bring about longevity.

Recommendation

Based on the findings, the following recommendations are made as strategies for improving information literacy on healthy living: information literacy and particularly health information literacy or health literacy should form part of the curriculum in all levels of education in Nigeria; effective teaching of information literacy across all disciplines both in the primary, secondary and university levels; regular organization of health seminars and workshops by health workers for the general public; giving attention to health conditions of citizens by government; government should subsidize and thereby reduce the cost of acquiring health-related information resources; provision of health-related resources, both print and electronic by library and information centres; encouraging access to healthy living information by libraries; regular display and exhibition of information on healthy living by libraries, development of interest on health issues by the individuals; individuals should increase the ability to identify need for information on healthy living; application of health information to daily living; devoting more time for hospital counseling; improved interpersonal communication with patients by medical practitioners and other health workers; and encouraging the service of extension health workers, among others.

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