SAU Journal of Management and Social Sciences *https:journals.sau.edu.ng/index.php/sjmas*
(ISSN: 2550-7302),
Vol. 6, Number 2, September 2021 (Special Issue on COVID-19 Pandemic).

Information Needs and Seeking Patterns of Rural Dwellers on COVID-19 Pandemic in Nigeria

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Abstract
This study was carried out to determine the information needs and seeking patterns of rural dwellers on COVID-19 pandemic in Nigeria. Anchored on the Health Belief Model (HBM), the researchers adopted survey research design with the questionnaire used as the research instrument for data collection. Data collected were analysed using a descriptive method, while Multivariate Frequency Distribution Tables and SPSS were the statistical tools used for data analysis. Findings revealed that hand washing, social distancing, use of face-mask, use of hand sanitiser constituted the major information needs of the rural dwellers on COVID-19, compared to other areas like origin of the COVID-19 pandemic, rate of infection and spread of the COVID-19 pandemic, causes of COVID-19 pandemic, among others. Finding also revealed in terms of the sources most available to the rural dwellers, it was the traditional media; in term of the one mostly used as official sources by government in reaching the rural areas, it was the mass media; while in terms of the one most trusted by the rural dwellers, it was the community health experts, followed by the mass media. The researchers concluded that information is very vital in the fight against disease outbreak and during the pandemic. Giving priority to all areas of information needs; paying attention also to official sources of information; government's better priority to the use of traditional media, among others were, therefore, recommended in the study.

Keywords: Information Need, Seeking Patterns, Rural Dwellers, COVID-19 Pandemic

Introduction
Information is one of the most precious assets for everyone in the society. Regarded as any message or news, viewed or read or told verbally which add to knowledge, awareness or understanding of some topics, or events, problems that prepares one for uncertainty of life (Rowshon & Muhammad, 2016, p. 359), information is the life blood of any society and vital to the activities of both the government and private sectors as well as a platform on which vibrant, meaningful and authoritative decision are made. Access to information is, therefore, an essential component of development; it is a human right and it does bring about sustained development and socio-economic progress (Harande, 2009).

As a result, information seeking and sourcing become a vital component of individuals from the highly-educated to the ordinary person (Ahmed, 2016). Rural dwellers are among the groups that are "in significant need of all types of information" (Rowshon & Muhammad (2016, p. 359) and their information seeking or sourcing patterns is dependent on the desire and need of

each individual or group. Information needs of the rural dwellers of Nigeria cut across areas but not limited to health information, education, economic, political and community development, agriculture and allied occupation, employment opportunities, housing, land, legal, welfare and family matters, transportation, religious matters, crime and safety (Momodu, 2002, in Ogar, Dika & Atanda, 2018). Ineffective information or lack of it "can hinder effective communication and acquisition of new skills" (Ifukor, 2013, p. 311).

There are indications that different sources of information exist for rural dwellers for their various information needs (Rowshon & Muhammad, 2016); and health is one of the areas that rural dwellers source for information to satisfy their different needs (Oluwatuyi, 2010; Medlock, Eslami, Askari & Arts, 2015; Chen *et al* 2019). Consequently, the outbreak of the Coronavirus (COVID-19) pandemic has increased the desire for information on all aspects of the pandemic. There are indications that effective provision of the COVID-19 information and the use of it among rural dwellers is important as it can "educate family members/ friends about current news on COVID-19, stop the spread of COVID-19 by observing precautionary measures, abide by government policies on COVID-19, understand how to seek medical help in the pandemic era, educate their kinsmen on preventive measures from the COVID-19 disease, among others" (Efe, 2020, p. 45). Therefore, this study seeks to examine the information needs and seeking patterns of rural dwellers on COVID-19 Pandemic in Nigeria.

Research Objectives

The objectives of the study were to:

1. Find out the specific information needs of rural dwellers on COVID-19 pandemic in Nigeria.
2. Ascertain the most available source of information on COVID-19 for rural dwellers pandemic in Nigeria.
3. Examine the most government used official COVID-19 source of information in reaching the rural dwellers in Nigeria.
4. Determine the most trusted COVID-19 source of information to rural dwellers in Nigeria.
5. Investigate the level of understanding and adoption of the information on COVID-19 pandemic among rural dwellers in Nigeria.

Literature Review

The emergence of the novel coronavirus disease (COVID-19) has imposed severe threat on health, economy and social relations globally. It has affected thousands of people who are either made to be sick or are being killed due to the spread of this disease. The most common symptoms of the Coronavirus disease are fever, cold, cough, bone pain and breathing problems, and ultimately leading to pneumonia (Huang, Wang & Li, 2020; Wang, Cao & Zhang, 2020). The World Health Organisation (2021) report indicates that, so far, there have been 144,358,956 confirmed cases of COVID-19, including 3,066,113 deaths globally with Nigeria having 164,588 confirmed cases with 2,061 deaths.

Effective information is one of the things that required in the prevention of any disease outbreak such as the novel Coronavirus, as it helps raising public awareness and encouraging preventive and health-promoting behaviour (Abu, Tabassum, Debayan, Asad & Firoz, 2020). In the other hand, absence or the spread of false and misleading information has the capacity to

change transmission patterns (Kim, Fast & Markuzon, 2019). Weiss, Crowder & Bernardi (2000) describe information as the cornerstone of successful socio-economic development because it plays a key role in decision making. Human beings express diversified information needs in their day-to-day activities. Reitz (2010) defines information need as a gap in a person's knowledge that, when experienced at the conscious level as a question, gives rise to a search for an answer.

There are a number of previous empirical studies on the information needs and seeking behaviour of rural dwellers on different issues in different places and the findings were revealing (Abu, Tabassum, Debayan, Asad & Firoz, 2020; Adeyoyin & Oyewusi, 2015; Fatiregun, Isere, Dosumu, Agunbiade & Onyibe, 2019; Hassan, 2019; Ifukor, 2013; Kassim & Katunzi-Mollel, 2017; Kotorai, 2014; Meludu & Ajibade, 2008; Ogar, Dika & Atanda, 2018; Selvam, Ashok & Pratheepkanth, 2019; Sokey & Adisah-Atta, 2017; Sokey, Adjei & Ankrah, 2018; Sonika, Vijay & Amarjeet, 2015; Tsegyu & Asemah, 2013; Whenayon, Olumuyiwa & Rohina, 2020; Wulystan, 2012). Most of the studies previously conducted indicate that rural dwellers are engaged in seeking information on diverse areas and subjects (Adeyoyin & Oyewusi. 2015; Ezema, 2016; Fatiregun, Isere, Dosumu, Agunbiade & Onyibe, 2019; Hassan, 2019; Kassim &Katunzi-Mollel, 2017; Sokey, Adjei & Ankrah, 2018). For instance, a study by Adeyoyin & Oyewusi (2015) revealed that nutrition ranked highest, followed by water treatment, sanitation and diagnosed medical conditions among the health information needs of the young adults. Women rural dwellers' information needs on reproductive health based on the study by Ezema (2016) were related to infertility; use of contraception; abortion; prevention of sexually transmitted diseases; antenatal care; and postnatal care. On Lassa fever, the study by Fatiregun, Isere, Dosumu, Agunbiade & Onyibe (2019) revealed that over three quarters 2, 537 (84.8%) of respondents were aware of Lassa fever of which 2, 363 (93.1%) knew that multimammate rat transmits the disease to humans. A study by Efe (2020) revealed that the COVID-19 information needs were on general emerging news on COVID-19, COVID-19 prevention, ways of seeking medical help in the pandemic era, government policies on COVID-19, among others.

Previous studies also revealed that there existed variety sources of information in rural areas to address different information needs of the people. The various information sources as identified by these scholars include: textbooks, newspapers/magazines, radio, television, internet, GSM mobile phones, leaflets, posters, billboard, interpersonal channels like doctors, community health workers, family, friends, town cries, group discussions, marketplaces, socio-political meetings, traditional festival, role play, songs and dance, demonstration, churches, herb hawkers, lecture and exhibition, among others (Wulystan, 2012; Ifukor, 2013; Adeyoyin & Oyewusi, 2015; Ezema, 2016; Kassim & Katunzi-Mollel, 2017; Sokey, Adjei & Ankrah, 2018; Hassan, 2019).

Furthermore, previous studies, however, indicate that rural dwellers encounter a number of challenges in accessing information which in most cases lead to their poor knowledge about issues and adoption of same. Such challenges as identified in these studies include: wild spread of illiteracy, poverty, hunger and disease, absence of basic infrastructure such as water, roads, schools, electricity and health services which by no means have a negative impact on information flow and development in rural areas (Tsegyu & Asemah, 2013; Kotorai, 2014; Adeyoyin & Oyewusi, 2015; Sonika, Vijay & Amarjeet, 2015; Ogar, Sokey & Adisah-Atta, 2017; Dika & Atanda, 2018; Abu, Tabassum, Debayan, Asad & Firoz, 2020; Efe, 2020).

Theoretical Framework

Health Belief Model (HBM)

This study is anchored by the Health Belief Model (HBM) to predict protective health behaviour. The model originally was proposed by Rosenstock (1966) and modified by Becker (1974). The model suggests that whether or not people change their behaviour will be influenced by an evaluation of its feasibility and its benefits weighed against its cost, in other words, people considering their behaviour engage in a cost-benefit analysis. This may include their belief concerning the likelihood of the injury happening to them (their susceptibility), the severity of the injury; and the efficacy of the action and whether it will have some personal benefit, or how likely it is to protect the person from the illness or injury. Peoples' perception and assessment of risk is central to the application of this model. Most people make a rough assessment about whether they are at risk (Olaigbe & Abiodun, n. d).

Relating this theory to this study, residents seek health information when they know they are sick or at risk of being infected by a disease on pandemic (perceived susceptibility) and that the mild symptoms can increase its severity (perceived severity) they tend to seek for quick and timely treatment. An individual who does not see bodily changes in terms of (Cues to action) that occur during illness as threatening, they tend to delay seeking health information during the manifestation of less signs and symptoms. A situation where the individual sees the benefit of seeking prompt health information rather than perceived barriers to taking such actions, they tend to quickly seek for good professional health information.

Methodology

In this study, descriptive survey research design was adopted with the questionnaire used as the research instrument for data collection. Survey research was used because it enabled us to interact with a large proportion of the respondents and obtained large amounts of data from them with relative ease. The population of the study comprised rural dwellers across the six geo-political zones of Nigeria. Rural dwellers from one state in each of the six geo-political zones of the country formed the population of the study as thus: (i) Oyo- 736071, (ii) Enugu- 688862, (iii) Edo- 1,148665, (iv) Kano- 3,626068, (v) Bauchi- 316149, and (vi) Plateau- 816824 (World Population Review, 2021).

Therefore, the population of the study comprised 7,332,640 rural dwellers in Nigeria. The sample size of the study was 1067 which was determined through the use of online sample size determination/calculator software known as Survey Monkey (2021) under the population size of 7,332,640, confidence level of 95% and 3% error margin. Stratified sampling technique was used to group the country into six zones based on the already existing stratifications, after which purposive sampling technique was used to select one state from each of the strata. Purposive sampling technique was used because it enabled us to select one state from each geopolitical zone which rural dwellers were affected by the COVID-19 pandemic as at the time of the study, except where state most affected in the zone was a metropolitan state. Based on this, the states sampled in the study were (i) Oyo (South West), (ii) Enugu (South East), (iii) Edo (South South), (iv) Kano (North West), (v) Bauchi (North East) and (vi) Plateau (North Central). Respondents were sampled proportionate to the population size of each state using the formula thus:

$$\frac{S \times n}{N}$$

Where; S = Size of State; n = Sample Size; and N = Total Population

Based on the proportionate sampling technique used, 107 respondents were sampled from Oyo, 100 from Enugu, 167 from Edo, 528 from Kano, 46 from Bauchi and 119 respondents from Plateau State respectively. The research instrument used in the study was the questionnaire. The questionnaire was administered on the respondents through face-to-face using the research assistants in the area which were taught how to carry out the exercise. The data collected were analysed using a descriptive method. Multivariate Frequency Distribution Tables and SPSS were used as statistical tools for data analysis under descriptive method.

Data Analysis/Discussion of Results

Table 1: Information Needs of Rural Dwellers on COVID-19 Pandemic in Nigeria

Response	**No of Respondents**											
	Oyo	**%**	**Enugu**	**%**	**Edo**	**%**	**Kano**	**%**	**Bauchi**	**%**	**Plateau**	**%**	**Total**	**%**
Origin of COVID-19 pandemic	4	3.85	3	3.09	11	6.79	37	7.24	1	2.22	7	6.03	63	6.09
Rate of infection and spread of COVID-19 pandemic	8	7.69	9	9.28	17		10.49	3	6.67	11	9.48	89	8.60	
Causes of COVID-19 pandemic	14	13.46	13	13.40	23		14.20	5	11.11	14	12.07	118	11.40	
COVID-19 Symptoms	19	18.27	17	17.53	27		16.67	6	13.33	15	12.93	135	13.04	
Effects of COVID-19 pandemic	8	7.69	7	7.22	11		6.79	7	15.56	9.	7.76	76	7.34	
COVID-19 safety prevention protocol (hand washing, social distancing, use of face-mask, use of hand sanitiser)	30	28.85	31	31.96	39		24.07	16	35. 56	42	36.21	349	33.72	
COVID-19 testing	5	4.81	4	4.12	13		8.02	2	4.44	6	5.17	68	6.57	
Location of COVID-19 isolation centres	9	8.65	7	7.22	15		9.26	3	6.67	5	4.31	74	7.15	
COVID-19 vaccination	7	6.83	6	6.19	6		3.70	2	4.44	7	6.03	63	6.09	
Total	**104**	**100**	**97**	**100**	**162**		**100**	**45**	**100**	**116**	**100**	**1035**	**100**	

Table 1 revealed that information needs of rural dwellers on COVID-19 are diverse and majority (33.72%) of them seek information more on COVID-19 safety/prevention protocol (i.e. hand washing, social distancing, use of face-mask, use of hand sanitiser) compared to other areas of information on the pandemic like origin of COVID-19 pandemic; rate of infection and spread; causes; Symptoms; effects; COVID-19 testing; location of COVID-19 isolation centres; COVID-19 vaccination/cure.

Table 2: Most Available Source of Information on COVID-19 Pandemic to Rural Dwellers in Nigeria

Response	No of Respondents													
	Oyo	%	Enugu	%	Edo	%	Kano	%	Bauchi	%	Plateau	%	Total	%
Traditional	32	30.77	31	31.96	51	31.48	262	51.27	15	33.33	36	31.03	427	41.26
Mass media	13	12.50	14	14.43	21	12.96	35	6.85	6	13.33	15	12.93	104	10.05
Community Health Experts	19	18.27	18	18.56	32	19.75	107	20.94	9	20.00	23	19.83	208	20.10
Traditional healers	11	10.58	13	13.40	19	11.73	47	9.20	5	11.11	10	8.62	105	10.14
Social media	8	7.69	6	6.19	13	8.02	19	3.72	3	6.67	9	7.76	58	5.60
Books	3	2.88	3	3.09	5	3.09	7	1.37	1	2.22	2	1.72	21	2.03
Fliers	7	6.73	5	5.15	9	5.56	15	2.94	2	4.44	9	7.76	47	4.54
Posters	11	10.58	7	7.22	12	7.41	19	3.72	4	8.89	12	10.34	65	6.28
Total	**104**	**100**	**97**	**100**	**162**	**100**	**511**	**100**	**45**	**100**	**116**	**100**	**1035**	**100**

Table 2 revealed that rural dwellers seek information on COVID-19 through different sources but traditional media (41.26%) are more available to them compared to other sources like the mass media; community health experts; traditional healers; social media; books; fliers; posters, among others.

Table 3: Government most used Official COVID-19 Source of Information in Rural Areas, Nigeria

Response	No of Respondents													
	Oyo	%	Enugu	%	Edo	%	Kano	%	Bauchi	%	Plateau	%	Total	%
Traditional	17	16.35	16	16.49	24	14.81	71	13.89	8	17.78	18	15.52	154	14.88
Mass media	37	35.58	35	36.08	61	37.65	217	42.47	19	42.22	38	32.76	407	39.32
Community Health Experts	21	20.19	17.	17.53	29	17.90	119	23.29	9	20.00	21	18.10	216	20.87
Traditional healers	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Social media	15	4.42	17	17.53	21	12.96	53	10.37	5	11.11	16	13.79	127	12.27
Books	2	1.92	1	1.03	5	3.09	9	1.76	1	2.22	3	2.59	21	2.03
Fliers	5	4.81	4	4.12	7	4.32	19	3.72	1	2.22	9	7.76	45	4.35
Posters	7	6.73	7	7,22	15	9.26	23	4.50	2	4.44	11	9.48	65	6.28
Total	**104**	**100**	**97**	**100**	**162**	**100**	**511**	**100**	**45**	**100**	**116**	**100**	**1035**	**100**

Table 3 revealed that government utilises different sources of information on COVID-19 in reaching rural dwellers but the mass media is utilised more (39.32%) in doing so compared to others like traditional media; community health experts; traditional healers; social media; books; fliers; and posters.

Table 4: Most trusted COVID-19 Source of Information to Rural Dwellers in Nigeria

Response	No of Respondents													
	Oyo	%	Enugu	%	Edo	%	Kano	%	Bauchi	%	Plateau	%	Total	%
Traditional	16	15.38	15	15.46	23	14.20	83	16.24	6	13.33	19	16.38	162	15.65
Mass media	20	19.23	21	21.65	31	19.14	122	23.87	8	17.78	29	25.00	231	22.32

Community health experts	29	27.88	28	28.87	51	31.48	162	31.70	15	33.33	34	29.31	319	30.82
Traditional healers	7	6.73	6	6.69	11	6.79	31	6.07	1	2.22	3	2.59	59	5.70
Social media	13	12.50	11	11.34	21	12.96	60	11.74	7	15.56	9	7.76	121	11.69
Books	2	1.92	1	1.03	3	1.85	8	1.57	1	2.22	2	1.72	17	1.64
Fliers	8	7.69	7	7.22	9	5.56	18	3.52	3	6.67	9	7.76	54	5.22
Posters	9	8.65	8	8.25	13	8.02	27	5.28	4	8.89	11	9,48	72	6.96
Total	**104**	**100**	**97**	**100**	**162**	**100**	**511**	**100**	**15**	**100**	**116**	**100**	**1035**	**100**

Table 4 revealed that community health officers (30.82%) followed by the mass media (22.32%) are the most trusted sources of the information on COVID-19 pandemic among rural dwellers in Nigeria compared to others like traditional media; traditional healers; social media; books; fliers and posters.

Table 5: Level of understanding and adoption of the COVID-19 Information among Rural Dwellers in Nigeria

	No. of Respondents							
Item	**To a Great Extent**		**To a Little Extent**		**Not at all**		**Total**	
Consistency in hand washing	271	26.18	700	67.63	64	6.18	1035	100
Consistency in the use of face mask	123	11.88	805	77.78	107	10.34	1035	100
Consistency in the use of hand sanitiser	109	10.53	801	77.39	125	12.08	1035	100
Social distancing	93	8.99	827	79.90	115	11.11	1035	100
COVID-19 testing	47	4.54	159	15.36	829	80.10	1035	100
COVID-19 vaccination	13	1.26	93	8.99	927	89.57	1035	100

Furthermore, table 5 revealed that that there is poor understanding and adoption of the information on COVID-19 in areas such as consistency in hand washing, use of face mask, use of hand sanitiser, social distancing while in the areas of COVID-19 testing and vaccination, there is 80% and 90% non-compliance and adoption so far among rural dwellers in Nigeria.

Discussion of Findings

The information needs of rural dwellers on COVID-19 are diverse and majority of them seek information more on safety/prevention protocol on COVID-19. This is evident as the information needs of the majority (33.72%) of the respondents in the study were on COVID-19 safety/prevention protocol (hand washing, social distancing, use of face-mask, use of hand sanitiser) compared to others areas. This finding agrees with the previous studies as reviewed in this work which revealed that rural dwellers are engaged in seeking information on diverse health related issues (Adeyoyin & Oyewusi. 2015; Ezema, 2016; Fatiregun, Isere, Dosumu, Agunbiade

& Onyibe, 2019; Hassan, 2019; Kassim & Katunzi-Mollel, 2017; Sokey, Adjei &Ankrah, 2018). This finding also aligns with Health Belief Model (HBM) which predicts the outcome of people being exposed to health information.

Rural dwellers seek information on COVID-19 through different sources but traditional media sources are more available to them in doing so compared to the rest of the sources. This is evident as majority (41.26%) of the respondents was of the opinion that traditional media were more available to them compared to others. This finding agrees with a number of previous empirical studies as reviewed in this work which revealed different sources of health awareness information for rural dwellers (Ifukor, 2013; Ezema, 2016; Kassim & Katunzi-Mollel, 2017; Sokey, Adjei & Ankrah, 2018; Hassan, 2019; Wulystan, 2012). Government utilises different sources of information in reaching rural dwellers on COVID-19 but mass media are sources more utilised by the government in doing so. This is evident as majority (39.32%) of the respondents believed that the mass media were used more by the government in reaching them compared to other sources. This aligns with finding from the study by Wulystan (2012) which indicated that health information was accessed mainly through radio, television, newspapers and magazines as compared to other sources. Community health officers followed by the mass media are the most trusted sources of the information on COVID-19 pandemic among rural dwellers in Nigeria. This is evident as majority (30.82%) of the respondents followed by (22.32%) have identified community health experts and mass media as their most trusted sources of COVID-19 information compared others. This finding aligns with finding from the study by Kassim & Katunzi-Mollel (2017) which indicated that majority of the women (93%) preferred to use professional healthcare workers as their sources of health information. A study by Efe (2020), also earlier identified mass media (Television, Radio, Newspapers) and healthcare providers/physicians as preferred information sources on COVID-19 among rural dwellers.

Furthermore, finding revealed that there is poor understanding and adoption of the information on COVID-19 in areas such as consistency in hand washing, use of face mask, use of hand sanitiser, social distancing while in the areas of COVID-19 testing and vaccination, there is 80% and 90% non-compliance and adoption so far among rural dwellers in Nigeria. This is evident as majority (67.63%, 77.78%, 77.39%, 79.90%) of the respondents showed low understanding and adoption of the COVID-19 information in the above areas. Efe (2020), in the earlier study revealed what challenges that contribute to poor access and use of the COVID-19 information.

Conclusion and Recommendations

The major information need of rural dwellers on COVID-19 pandemic is safety/prevention protocol/guideline such as hand washing, social distancing, use of face-mask, use of hand sanitiser among others. Traditional media are most available sources of COVID-19 information among rural dwellers compared to others sources. However, the government makes use of the mass media to reach rural dwellers on COVID-19 information while paying less attention to sources like traditional media, community health experts, social media, books, fliers and posters. Also, community health officers followed by the mass media are the most trusted sources of the information on COVID-19 pandemic among rural dwellers in Nigeria compared to others. There is poor understanding and adoption of the information on COVID-19.

Furthermore, information is very vital in the fight against disease outbreak and during the pandemic, rural dwellers are engaged in seeking different kinds of information through different channels of information even as they trust some channels as credible more than others. The following recommendations are hereby given:

1. Priority should always be given to all areas of information on a pandemic such as COVID-19 among rural dwellers in their information seeking patterns to give them better understanding about the whole nature of such pandemic.
2. Attention should also be paid to official sources of information on a pandemic such as COVID-19 among rural dwellers to enable them to have more trusted and credible information on the pandemic.
3. Government should give better priority to the use of traditional media in reaching the rural dwellers during pandemic such as this since such sources are available and closer to them.
4. Sources of information more available, but less credible for rural dwellers should be made more credible through training of experts in handling such sources during pandemic such as this to achieve more trust and credibility in reaching the people.
5. Information sources such as community health officers which the rural dwellers believed as being more credible are utilised more as official sources in reaching them during pandemic for more effective results.
6. Furthermore, rural dwellers should improve in the adoption of the information they gathered/received on the pandemic such as this to help speed up the fight against such the pandemic.

References

Abu, S., Tabassum, R., Debayan, P., Asad, I. & Firoz, A. (2020). Raising COVID-19 awareness in rural communities: A randomised experiment in Bangladesh and India. CDES Working Paper No. 07/20.

Adeyoyin, O. S. & Oyewusi, F. O. (2015). A survey of the needs and utilisation of health information among young adults in Abeokuta, Ogun State, Nigeria. *Library Philosophy and Practice* (e-journal). 1296. Retrieved from http://digitalcommons.unl.edu/libphilprac/1296

Ahmed, J. H. (2016). Information-seeking behaviour and their needs in rural population of Barak Valley: A survey. *International Journal of Academic Library and Information Science*, 4(2), 51-62.

Efe, R. T. (2020). COVID-19 information seeking strategies of rural dwellers in delta north, Nigeria. *Library Philosophy and Practice (e-journal).* 4421. Retrieved from https://digitalcommons.unl.edu/libphilprac/4421

Ezema, I. J. (2016). Reproductive health information needs and access among rural women in Nigeria: A study of Nsukka Zone in Enugu State. *The African Journal of Information and Communication* (AJIC), 18, 117-133.

Fatiregun, A. A., Isere, E., Dosumu, M., Agunbiade, O. & Onyibe, R. (2019). Lassa fever awareness and knowledge among community residents in Ondo State, Nigeria. *Journal of Community Medicine and Primary Health Care*, 31(2), 26-35.

Harande, Y. I. (2009). Information services for rural community development in Nigeria. *Library Philosophy and Practice*. (e-journal). 271. Retrieved from https://digitalcommons.unl.edu/libphilprac/271.

Hassan, M. D. (2019). Consumer health information needs, seeking and searching behaviour by rural residents in the Kachia Grazing Reserve, with a Focus on Vector-borne Diseases. Theses and Dissertations. 2310. Retrieved from https://dc.uwm.edu/etd/2310

Huang, C., Wang, Y. & Li, X. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *Lancet*, 395(10223), 497–506.

Ifukor, O. M. (2013). Channels of information acquisition and dissemination among rural dwellers. *International Journal of Library and Information Science*, 5(10), 306-312.

Kassim, M. & Katunzi-Mollel, K. R. (2017). Seeking health information in rural context: Exploring sources of maternal health information in rural Tanzania. *University of Dar es Salaam Library Journal*, 12(2), 37-61.

Kim, L., Fast, S. M. & Markuzon, N. (2019). Incorporating media data into a model of infectious disease transmission. *PLOS ONE*, *14*(2), e0197646. Retrieved from https://doi.org/10.1371/journal.pone.0197646.

Kotorai, G. (2014). Assessing sources used by rural women to access health information in Morogoro Rural District. *Information and Knowledge Management*, 4(12), 54-64.

Meludu, N. T. & Ajibade, O. Y. (2008). Rural dwellers' knowledge of nutrition and their food consumption pattern in Oyo State. *African Journal of Biomedical Research*, 12(1), 15-22.

Ogar, C. E., Dika, S. I. & Atanda, L. A. (2018). Challenges and prospects of information service delivery to rural people of Nigeria. *Research Journal of Library and Information Science*, 2(3), 14-28.

Olaigbe, T. A. & Abiodun, S. B. (n. d). A survey of health-seeking behaviour of residents in two local government areas in Ibadan, Oyo state, Nigeria during COVID-19 Pandemic.

Reitz, J. (2011). Online dictionary for library and information science. ODLIS (2010) Web. 20 July, 2011.

Rowshon, A. & Muhammad, M. (2016). Television as a medium of information for rural development in Bangladesh: A Case Study of Dinajpur District. 10th Convention PLANNER, NEHU, Shillong, Meghalaya, 09-11 November, 359-368.

Selvam, V., Ashok, D. & Pratheepkanth, P. (2019). Awareness and perception of health issues among rural women. *International Journal of Recent Technology and Engineering*, 7(55, 12-17.

Sokey, P. P. & Adisah-Atta, I. (2017). Challenges confronting rural dwellers in accessing health information in Ghana: Shai Osudoku District in perspective. *Soc. Sci*. 6(66), 1-17.

Sokey, P. P., Adjei, E. & Ankrah, E. (2018). Media use for health information dissemination to rural communities by the Ghana health service. *Journal of Information Science, Systems and Technology*, 2(1), 1-18.

Sonika, R., Vijay, L. S. & Amarjeet, S. (2015). The health information seeking behaviour and needs of community health workers in Chandigarh in Northern India. *Health Information & Libraries Journal*, 32, 143-149.

Survey Monkey. (2021). Sample size calculator. Retrieved from https://www.surveymonkey.com/mp/sample-size-calculator/.

Tsegyu, S. & Asemah, S. E. (2013). Public perception of the role of rural broadcasting in rural development in Nigeria. *Journal of Sustainable Development in Africa*, 15(7), 165-180.

United Nations High Commissioner for Refugees (UNHCR). (2020). Socio-economic impact assessment of COVID-19 pandemic among persons of concern in Nigeria. United Nations High Commissioner for Refugees (UNHCR).

Wang, M., Cao, R. & Zhang, L. (2020). Remdesivir and chloroquine effectively inhibit the recently emerged novel coronavirus (2019-nCoV) in vitro. *Cell Res*., 30(3), 269–271.

Weiss, A., Crowder, L. V. & Bernardi, M. (2000). Communicating agrometeorological information to farming communities. *Agricultural and Forest Meteorology Journal*, 103. Web. 24 October, 2011.

Whenayon, S. A., Olumuyiwa, O. O. & Rohina, J. (2020). COVID-19 outbreak situation in Nigeria and the need for effective engagement of community health workers for epidemic response. *Global Biosecurity,* 1(4). Retrieved from http://creativecommons.org/licenses/by/4.0/.

World Health Organisation. (2021). WHO Coronavirus (COVID-19) Dashboard. Retrieved from https://covid19.who.int/.

World Population Review (2021). Population of Nigeria (2021). Retrieved from https://worldpopulationreview.com/countries/cities/nigeria.

Wulystan, M. P. (2012). Access to and Usage of information among rural communities: a case study of Kilosa District Morogoro region in Tanzania. *Canadian Journal of Library and Information Practice and Research*, 7(1), 20-32.