Information Accessibility and Risk Practices among People Living with HIV/AIDS in South-West, Nigeria

Tajudeen Adebayo, Segun Omole, Muyiwa Ameen, Adebayo Ogunniran

Information accessibility implies the ease with which the required information is reachable at the right place, to the right users. Access to information lifts individual from the state of ignorance, illiteracy and poverty to a state of enlightenment, posterity and literacy. Information accessibility is considered by Bartlett and Toms (2005) as critical in the background of a goal-targeted problem solving information. PLWHA have important roles to play if HIV/AIDS related health objective visions by the Government are to be achieved by updating themselves with relevant information. Sustainable access to information resources is essential for them to complement health services received from Health Care Providers. Access to information resources which can be either through printed and non-printed resources have become the backbone of every developed nation.

Risk is the potential of losing something of value, weighed against the potential to gain something of value. Values (such as physical health, social status, emotional wellbeing or financial wealth) can be gained or lost when taking risk resulting from a given action, activity and/or inaction, foreseen or unforeseen. PLWHA may need to access information to have more knowledge about how they can avoid spreading the disease and prevent them from complicating their situation by avoiding risk practices. HIV/AIDS risk practices information accessibility is essential in the context of a goal-oriented problem solving information (Bartlett & Toms; 2005). Supporting this view, Wilson (1999) affirmed that information accessibility was one of the three core elements of information bahaviours, along with information needs and information seeking. This is in line with the assertion of Peterson and Obileye (2002) that access to HIV/AIDS information could help improve the quality of life by reducing viral load. Therefore, access to quality information on HIV/AIDS is necessary in the intervention efforts by local, national and international bodies, though, this can be influenced by a number of factors ranging from location, language, credibility, distance, format and cost (Erica, 2008; Iwara, 2013).

Accessibility is identified as a key factor to information utilization by the PLWHA (Kritz, Gschwandtner, Stefanov, Hanbury and Samwald, 2013). Awareness of accessibility issues is the first step for potentially achieving the targeted goal of providing information

resources to all users. Though, it is very certain that availability does not guarantee accessibility but without availability, there may not be accessibility. The issue of universal access to PLWHA on HIV/AIDS and related risk practices is stressed by the United Nation and inform its pronouncement that "universal access to HIV/AIDS information must be a global commitment" (UN, 2006).

One of the information accessible medium is the internet which has been particularly identified by (Tajafari, 2014) as an easy and quick access to information. The Internet has also become a useful resource for some PLWHA. In a study of Internet use and coping by Reeves (2001), it was discovered that PLWHA access the Internet for locating general and specific health information, making social connections, fostering a sense of community, advocating, and escaping from the stress of living with the disease. PLWHA who access the Internet for health information seem better informed about HIV/AIDS and report more use of active coping strategies, including information seeking, and greater social support (Kalichman;2003). PLWHA can also access abundant information resources through various possible means either by printed or non-printed sources such as newsletters, print publications, online journals, e-books and e-publications. PLWHA do have common constraints to information access which include location of health facilities, stigma, inadequate fund, distance of ARV trial centers, stigmatization and discrimination, and poor communication strategies (Nelson, 2010). The frequency of accessibility of HIV/AIDS information according to the study conducted by Nelson in South-South of Nigeria (2010) established that 65.8 percent of the 120 respondents very often access information, 31.7 often access while 2.5 rarely accessed information on HIV related issues.

Despite the continued growth of the HIV/AIDS pandemic information from many national AIDS programmes, accessibility to healthcare information remains a serious challenge. Many factors are militating against the efforts of Federal Government of Nigeria in the prevention of spread of HIV viruses such as: ignorance of the people about the nature of the disease, lack of awareness of health information on HIVAIDS and the adverse effect of the disease on the socio-cultural, economic, educational development, religious influence, beliefs of the people in the society and stigmatization. Stigmatization is a dynamic process of devaluation and has ancient roots in long existing cultures that branded people or groups as outcast. Stigmatization leads to discrimination. Discrimination is a negative act that results from stigma and served to devalue the stigmatized (Abiona, 2003). HIV/AIDS related stigma becomes more intense as it builds upon negative thoughts. Family and community often perpetuate stigma and discrimination partly out of fear, ignorance and because it is

convenient to blame those who are affected. It could even lead to denial of relevant assistance to HIV/AIDS patients in the society. Those who have access to information lack willingness to carry out HIV test, lack of financial support and difficulties prevented access to necessary care and relevant Ante-retroviral treatment for the infected patients.

People living with HIV/AIDS in Nigeria have been found to be subject to discrimination and stigmatization in the workplace and family communities. In fact, they may also face discrimination from those employed in the health sector. Such attitude may actually create an atmosphere that interferes with effective prevention and treatment by discouraging individuals from being tested or seeking information on how to protect themselves and others from HIV/AIDS. According to Reiz et.al (2005) in the study he conducted, out of population of 1,021 healthcare professionals, 163 respondents sampled from public tertiary health facilities, 9% of the healthcare professionals reported refusing to care for an HIV/AIDS patients, and 9% indicated that they had refused an HIV/AIDS patients admission to a hospital, 59% agreed that people with HIV/AIDS virus should be on separate ward, while 40% believed that healthcare professionals who are HIV/AIDS patients should not be allowed to work in any area of healthcare that requires patients contact. Meanwhile the reasons for the inconsistencies are based on inadequate utilization of available healthcare information in disposal, inadequate education about HIV/AIDS and lack of information on protective measures and supply of treatment materials appear to contribute to those practices and attitudes.

Managing HIV/AIDS cases effectively healthcare providers must take advantage of information technology (ICT) resources in order to facilitate an effective treatment. At the same time, use of electronic resources required that users be trained to be able to use the resources effectively. Fraiser (2004) opined that lack of ICT infrastructure is a barrier to successful HIV treatment programme in resource poor areas. Efforts must be made to improve ICT infrastructure and as well reduce errors arising in the process of entering and retrieving information (Joan, et al, 2004). Access to the right healthcare information such as e-books, journals (both print and electronics) healthcare databases such as HINARI, PubMed, Medline, Medline-plus, DIRLINE and other resources is of utmost importance (English Dictionary, 2007). At times, HIV/AIDS patients could find it boring to enter a traditional library to request for information resources that directly provides information on HIV virus and related infections. Availability of electronic resources such as mobile phone, Personal computers with the internet subscriptions or wireless facilities in a virtual environment could enhance access to health information and further increase level of awareness. Access to

health information by hard-to-reach groups such as youths and how to determine the medium of information is another serious challenge. Due to financial constraints not many could afford available electronic resources needed. The society needs to be fully educated to know that a person cannot be infected with HIV virus by mere shaking hands together, talking to them or by offering assistance to an HIV patients except when there is intimate contact such as sexual intercourse without protection, sharing syringes and needles with infected person. Ignorance, stigmatization and financial difficulties are strong factors that must be addressed in order to facilitate easy access to health care information.

Information accessibility has been considered as essential factor in achieving National and International goal of reducing HIV scourge in the continent. PLWHA remain the main reservoirs of HIV infection and are responsible for further transmission to other people. PLWHA attending clinics are cautioned regularly on the need to live a risk free life true an organized health talks on nature of infectivity, risk prevention preventive care, medication adherence. However, it has been observed that this set of Patient still engaged in one form of risk practices or other. The study therefore wished to establish the level of information accessibility that is available to PLWHA and the relationship between information accessibility and risk practices among PLWHA in South-West, Nigeria.

Objective of the Study

1. find out frequency of information accessibility among PLWHA in South-West, Nigeria;
2. discover common risk practices among PLWHA in South-West, Nigeria;
3. establish the relationship between information accessibility and risk practices among PLWHA in South-West, Nigeria.

Research Questions

The study attempted to answer the following questions:

1 What is the frequency of risk-related information accessibility among PLWHA in South-West, Nigeria?

2 What are the risk practices among PLWHA in South-West, Nigeria, Nigeria?

Hypothesis

The study was tested under the following research hypothesis at 0.05 level of significance:

1. There is significant relationship between information accessibility and risk practices among PLWHA in South-West, Nigeria.

Significance of the study

This work upon completion is expected to be a useful hint on the risk related information paradigm require for adequate education of PLWHA. All information specialists will find this work germane to their information design effort to help reduce information gap between PLWHA and risk related information dissemination structured and strategies.

Methodology

Survey research design was adopted for the study. It is a quantitative method of data collection to find out if any relationship occurred between two or more variables. This work endeavoured to institute the association between information accessibility and risk practices among PLWHA in the South-Western, Nigeria. Synthesised data of NACA (2015) put HIV prevalence rate at 3.4%. The population of study was 8,135 members of PLWHA who had ever attended clinics in the 3 health institutions itemised in table 1.

Table: 1

Name of Institutions	No. HIV Patients
Federal Medical Centre, Owo, Ondo State	3,294
Federal Teaching Hospital, Ido Ekiti, Ekiti State	1,355
Ladoke Akintola University Teaching Hospital, Osun State	3,486
Total	8,135

Source: Patient Monitoring and Management Office of each Institution (2016)

To draw sample from the population, a pool standard error of proportion was used to obtain minimum sample size of 103 participants per health institution using 5% margin error as the norm when dealing with human population. (Saunders, Lewis & Thornhill, 2009). The calculation goes thus:

$$N2 = \frac{(Z\alpha + Z\beta)^2 \times p\,(1-p)}{E^2}$$

Where: $Z\alpha$ at 5% of confidence = 1.96

$Z\beta$ at 80% of power = 0.84

P= HIV national prevalence of 3.4% or 0.034

E at 5% of margin error = 0.05

$$N= \frac{(1.96+0.84)^2 * 0.034 * 0.0966}{0.05^2}$$

$$= \frac{7.84 * 0.033}{0.05^2}$$

$$= \frac{0.257}{0.0025}$$

$$= 102.99$$

Pooled Standard Error of Proportion

Additional 10% was considered for response bias.

Critical Incident technique was used to select the population of the one hundred and thirteen (113) consenting respondents who were adults from each of the Two (2) University Teaching Hospitals and a Federal Medical Centre their clinics. The total sampling size was Three hundred and thirty nine (339) respondents. Questionnaire was distributed during the clinic days with the highest attendances in out-patient clinics of the selected hospitals. Only three hundred and eight (308) copies which represent 91% were analysed as other copies were found not to be good enough for analyses.

Table 2: Distribution of Respondents by Demographic Information

Parameters	Classification (n = 308)	Frequency	Per cent %
Age of the Respondents (in years)	<20	0	0
	20-24	15	4.9
	25-29	41	13.3
	30-34	41	13.3
	35-39	67	21.8
	40-44	70	22.7
	45-49	46	14.9
	>=50	28	9.1
	Total	308	100.0
Gender of the Respondents	Male	109	35.4
	Female	199	64.6
	Total	308	100.0
Marital Status of the Respondents	Single	58	18.8
	Married	179	58.1
	Widowed	39	12.7
	Separated	22	7.1
	Divorced	10	3.2
	Total	308	100.0

Religion of the Respondents	Islam	86	27.9
	Christianity	221	71.8
	Others	1	.3
	Total	308	100.0
Educational Level of the Respondents	None	28	9.1
	Primary	48	15.6
	Secondary	127	41.2
	Tertiary	104	33.8
	Others	1	.3
	Total	308	100.0
Ethnicity of the Respondents	Yoruba	227	73.7
	Igbo	55	17.9
	Hausa	18	5.8
	Foreigner	1	.3
	Others	7	2.3
	Total	308	100.0
Occupation of the Respondents	Artisan	32	10.4
	Schooling	44	14.3
	None	23	7.5
	Public Employee	73	23.7
	Private Employee	47	15.3
	Self Employed	80	26.0
	Others	9	2.9
	Total	308	100.0
Duration of the Respondents as HIV positive (in years)	<5	152	49.4
	5-9	115	37.3
	10-14	27	8.8
	15-19	7	2.3
	20 and above	7	2.3
	Total		100.0

Source: Field Survey, 2016

Table 2 depicts the highest percentage of the participants were between the ages 40-44 years (22.7%), closely followed the participants who were aged 35-39 years (21.8%), next those who fell between the ages of 45-49 years (14.9%). The respondents between the ages 20-24 years and 30-34 years recorded the same percentages of 13.3%, then those patients who were 50 years and above (9.1%). The participants with lowest percentage were aged 20-24 years (4.9%) while none of the participants was lower than 20years. The implication of this result is that most of PLWHA were youth and young Adults. Exploration of respondents by marital status shown that most of the respondents were married (58.1%), 18.8% were single,

12.7% were widowed, 7.1% were separated, while minority of them (3.2%) were divorcees. This suggested that majority of the respondents had marital commitment or a lot of them were couples. Religion wise, 27.9% of the respondents were Muslims, 71.8% were Christian while the remaining 0.3% practiced other religions. Additional scrutiny of the data revealed that most of the respondents had secondary education (41.2%), followed by those with tertiary education (33.8%), after which were those with primary school certificate (15.6%). 0.3% had other certificate while 9.1% of the respondents had no education at all. This revealed that a good percentage of the respondents were educated.

Table 2 depicts the ethnic distribution of the respondents. Most of the participants were from Yoruba ethnic group 73.7%, followed by Igbos 176.9%, Hausas 5.8%, and other Nigerians 2.3%. Foreigners constituted minority 0.3%. This specifies that all major ethnic groups in the country participated in the study, though the Yoruba ethnic group formed the significant part, possibly because the study is centred on South-West geopolitical zone. The bulk of the respondents (26.0%) were self-employed, 23.7% were public employees, 15.3% were private employees, students constituted 14.3% each, artisans (10.4%), 2.9% do other works. 7.5% of the respondents had no work. This means good percentage of them had means of livelihood.

Analysis by duration of the respondents as HIV positive (in years) shows that 49.4% of the respondents have been living with the infection in less than five years ago, 37.3% knew their HIV positive status between 5-9 years ago, 8.8% knew their status between 10-14 years ago while 2.3% knew they had the virus 15-19 and 20 years ago. This implies that all the respondents knew they were living with HIV.

Table 3: Level of Information Accessibility among PLWHA in South-West, Nigeria.

S/N	Level of Information Accessibility	At all times	Some time	Rarely	At no time
1	There are professionals available at the health facility designated for education on HIV infectivity	244 (79.2)	56(18.2)	4(1.3)	4 (1.3)
2	HIV Counselling and Testing staff are available to educate me about risk reduction plan	252 (81.8)	38 (12.3)	11 (3.6)	7 (2.3)
3	I have access to information on medication adherence from leaflet/poster giving in the clinic	220 (71.4)	55 (17.9)	29 (9.4)	4 (1.3)
4	I receive materials explaining the use of condom	210 (68.2)	75 (24.4)	16 (5.2)	7 (2.3)
5	I understand completely the messages in the leaflets received	193 (63.0)	83 (26.9)	26 (8.1)	6 (1.9)
6	Information about how to prevent oneself is available on radio programme	163 (52.9)	108 (35.1)	31 (10.1)	6 (1.9)

7	I have challenge in obtaining information about prevention of HIV- transmission	89 (28.9)	60 (19.5)	69 (22.4)	90 (29.2)
8	No information about multiple sexual partners come from NEPWAN meetings	103 (33.4)	59 (19.2)	67 (21.8)	79 (25.6)
9	I learn about Medication from my peers	102 (33.1)	90 (29.2)	40 (13.0)	76 (24.7)
10	My knowledge about HIV transmission has been enhanced through NGO's support	139 (45.1)	105 (34.1)	55 (17.9)	9 (2.9)
11	I am not able to get information about HIV because the clinic is far from my house	111 (36.0)	69 (22.4)	55 (17.9)	73 (23.7)
12	It is not convenient for me to access source of information about HIV because of my schedule.	119 (38.6)	113 (36.7)	47 (15.3)	29 (9.4)

Source: Field Survey, 2016

Table 3 shows that the hospital sources account for the highest level of information accessibility among PLWHA. Percentage of level of information accessibility of the respondents per item was calculated by adding the fractions of at all times, sometime and rarely responses together. Leading the rating are information accessibility on infectivity form health professionals generally and medication from other materials (98.7%) each, followed by messages on leaflets and radio programme on prevention (98.1%) each, then HIV Counselling and Testing staff about risk reduction plan and other materials for the use of condom (97.7%) each. In addition to these, the Table also depicts the enhancement about HIV transmission through NGO's Support (97.1%), while (90.6%) denied that their schedule inconvenient them from accessing source of information about HIV. 76.30% also disagreed that distance of clinic from their house deprived them from getting access to information. 75.30% claimed they learnt about HIV medication from their peers, 74.4 admitted they accessed information about the dangers of multiple partners from NEPWAN meetings. There appears to be challenge in obtaining information about prevention of HIV-transmission as opined by 70.8% of the respondents. The level of information access is 73.12% derived by dividing the mean information access (26.34) by highest measurement of the instrument (36 points) expressed in percentage.

Table 4: Risk Practices among PLWHA in South-West, Nigeria?

S/N	Risk Practices	Always	Often	Rarely	Never
1	Sex without condom	29 (9.4)	65 (21.1)	51 (16.6)	163 (52.9)
2	More than one sexual partners	16 (5.2)	77 (25.0)	83 (26.9)	132 (42.9)
3	Casual sex with individuals other than spouse	19 (6.2)	66 (21.4)	54 (17.5)	169 (54.9)
4	Alcohol Consumption	13 (4.2)	19 (6.2)	20 (6.5)	256 (83.1)
5	Hard drugs	12 (3.9)	21 (6.8)	39 (12.7)	236 (76.6)

6	Missing clinics	11 (3.6)	27 (8.8)	41 (13.3)	229 (74.4)
7	Missing medication	10 (3.2)	19 (6.2)	32 (10.4)	247 (80.2)
8	Share sharps	12 (3.9)	16 (5.2)	39 (12.7)	241 (78.2)
9	Sex Hawking	9 (2.9)	13 (4.2)	40 (13.0)	246 (79.9)

Source: Field Survey, 2016

Table 4 revealed the risk practices prevalent among PLWHA and the percentages engaging in them. Percentage of risk practices of the respondents per item was calculated by adding the fractions of always, often and rarely responses together. Having multiple sexual partners among PLWHA was the highest risk practices 57.1% of them still engaged in this. This was followed by sex without condom (47.1%), then casual sex with individual other than spouse (45.1%) after which was missing of medical appointment (25.6%). Next to this was consumption of Hard Drugs (23.4%), then, sharing of sharps (23.8%), then, sex hawking (20.1%), missing of medication (19.8%), while the least was alcohol consumption (16.9%). The level of risk practice among PLWHA is 17.3%

Hypothesis One: There is no significant relationship between information accessibility and risk practices among PLWHA in South-West, Nigeria.

Table 5a: Correlations Matrix of relationship between Information Use and Risk Practices

		Risk Practices	Preventive care	Medication Adherence	Infectivity	Risk Avoidance	Care and Support
Risk Practices	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	308					
Preventive Care	Pearson Correlation	-.340**	1				
	Sig. (2-tailed)	.000					
	N	308	308				
Medication Adherence	Pearson Correlation	-.059	.370**	1			
	Sig. (2-tailed)	.299	.000				
	N	308	308	308			
Nature of Infectivity	Pearson Correlation	-.296**	.417**	.225**	1		
	Sig. (2-tailed)	.000	.000	.000			
	N	308	308	308	308		
Risk Avoidance	Pearson Correlation	-.361**	.246**	-.202**	.410**	1	
	Sig. (2-tailed)	.000	.000	.000	.000		
	N	308	308	308	308	308	
Care Support	Pearson Correlation	-.306**	.506**	.268**	.230**	.126*	1

	Sig. (2-tailed)	.000	.000	.000	.000	.027	
	N	308	308	308	308	308	308
**. Correlation is significant at the 0.01 level (2-tailed).							
*. Correlation is significant at the 0.05 level (2-tailed).							

Table 4.10b: Correlation Analysis between Information Accessibility and Risk Practices among PLWHA in South-West, Nigeria.

Measure	Mean	%	Std. Deviation	N	Correlation coefficient (r)	P-Value
Risk Practices of PLWHA measured on 27-point scale	4.67	17.30	5.57	308	-.517	.000
Information Accessibility of PLWHA measured on 36-points scale	26.34	73.12	4.60			

a. Dependent Variable: RP *Significance at 0.05.
b. Predictors: (Constant), IS

Analysis of Table 5a reveals that information access on each of infectivity (r= -0.296, p<0.05), risk avoidance (r= -0.361, p<0.05), preventive care (r= -0.340, p<0.05), and care and support (r= -0.306, p<0.05) by PLWHA has significant relationship with HIV/AIDS related risk practices, while medication (r= -0.059, p>0.05) has no significant relationship risk practices. Table 4b reveals that the mean of information access of people living with HIV/AIDS was 26.34 (73.12%) and SD=4.60 while mean of risk practices was 4.67 (17.30%), SD=5.57. Further information derived from the Table reveals a negative but strong and significant relationship (r= -0.517, p<0.05), between information access and risk practices among people living with HIV/AIDS. Therefore, the null hypothesis is rejected and the research hypothesis is accepted and restated that there is a significant relationship between information access and risk practices among people living with HIV/AIDS.

The study discovered that the hospital sources account for the highest level of information accessibility among PLWHA. This may be attributed to twenty four hours services rendered in tertiary health institutions. Leading the rating is health professionals generally, followed by HIV Counselling and Testing staff, then accessibility of HIV/AIDS risk related information from leaflet and posters. PLWHA information access level from other materials is also high, so also the comprehension of the messages from leaflet was high. The study also depicts high level of information accessibility on radio and television. This finding is strongly supported by Gupta, Verma, Tripathi, Gupta, and Kumar (2014) in their research on knowledge and awareness of HIV/AIDS among students of a technical institution in Gorakhpur, India when they established that information from the television and radio had capacity to bring exposure to preventive measures against HIV/AIDS. Similarly, Vian, Semrau, Hamer and Sabin (2012) in their study in Vietnam among most-at-risk group

affirmed that media like radio and television carry the advantage of communicating to diverse and widely dispersed community Accessibility of information from peers was almost average. However, many respondents admitted they have challenges in accessing information, while distance and respondents scheduled had fairly affected level of accessibility and respectively. Information accessibility from NEPWAN meetings had been rated low and insignificant. The study shows that there are various sources of information to PLWHA which they can easily be accessed for their survival, which according to Nelson (2010) hinges on the volume of relevant quality health information available to them. The level of information access was found to be very high.

The result of the study shows that ease and frequent access to information about risk practices by PLWHA reduces such practices. That is, the more accessible the information the less the risk practices. This means information accessibility can strengthen the healthy well-being of PLWHA. This view corresponds with the recommendation of the United Nation (2006) that access to information must be a global commitment, aimed at strengthening the health care delivery system (Daniels, 2010). The information accessibility was found to be very high, hence supporting the outcome of the research of Nelson in South-South of Nigeria (2010) on HIV/AID accessibility which established that 65.8 percent of the 120 respondents were very often access information, 31.7 often access while 2.5 rarely accessed information on HIV related issues. Critical to the success were information access on each of risk prevention, preventive care, and care and support by PLWHA, information access on medication and infectivity each has little or no effects on their risk practices.

Summary

1. The ease and frequent access of information about risk practices by PLWHA was high, the risk practices was low. That is, information accessibility reduces engagement in risk practices. The more the information on risk practices is accessible the lesser the risk practices and vice versa.
2. More relevant, according to the study, were information access on risk prevention, preventive care, infectivity and care and support by PLWHA, information access on medication has minimal effects on their risk practices.

Recommendations

1. Literacy level of PLWHA should be upgraded by providing them with free educational materials, workshop and seminars thereby expanding their scope of knowledge about HIV/AIDS risk practices. In line with this, the Government

ministry of health in collaboration with National Orientation Agency and other Non-governmental organizations can partner together with information specialists and health care professionals workshops and seminars for PLWHA.

2. Efforts should be made to make information on risk prevention, nature of infectivity and risk avoidance plan accessible to PLWHA in order to eradicate their risk practices. These could form a permanent topics in the organized health talks on the clinic days
3. Health care provider should make information on Care and Support programmes available in the hospital more accessible to PLWHA.

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