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

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ABSTRACT

Information has a relevant role in the prevention of spreading of HIV/AIDS by widen the knowledge of People Living with HIV/AIDS (PLWHA). The prospect of information to be provided has to risk practices specific. This becomes necessary because PLWHA are evidently engaged in series of risk practices causing new infections among their relative and close associates. This work explored the level of PLWHA understanding of certain and common risk practices to identify their information needs.

The study adopted a survey research design which was conducted among PLWHA attending outpatient departments from five tertiary health institutions South-West, Nigeria. The study found out a positive correlation between information needs and risk practices and appropriate recommendations were made.

Keywords: HIV, Information, Risk practices, PLWHA

INTRODUCTION

Everyone in the society needs information to function well because it is the underlying resources for sustainable economic, political, communal and social development. Information transmutes and underpins knowledge or beliefs, aids in decision making, serves as freedom of choice one has in selecting message for those who can comprehend its meaning. It is communicated message received and understood that facilitates social interaction, cultural exchange and democratic intermingling. This is in line with Losce [1] definition of information as communicated or received knowledge regarding certain events. However, for effectiveness and efficiency of information as an intervention for prevention, it should be timely, relevant, accurate, recent, reliable, originated from trustworthy authority and source.

Information needs examine and express the psychological state that first motivates a person to engage in information behaviour. According to Sokari [2], everybody needs information for variety of purpose ranging from freedom from bondages associated with ignorance, delusion, false impression, economic indolence, health problems, communal strife and political unpredictability. Information needs are connected to obstacles, difficulties and challenges and an imperative concern is the manner by which those problems are assumed, defined and originated. Nicholas [3] argues that information needs emerge out of the aspiration to satisfy one of the indispensable human needs. Nonetheless,

information is not categorized as a principal necessity as the need for food or security for instance, according to Wilson [4] the need to be informed might be necessary to meet completely or partially the basic human needs. People hardly possess the information need itself until when problems are experienced or people are pressured by certain conditions, then they see a need for information for the purpose of completely or incompletely addressing such cases and achieving their ultimate objective. This confirms Belkin and Vickery's [5] conclusion, who stated that recognizing a gap in knowledge gives rise to information needs.

People living with HIV/AIDS (PLWHA) information needs are all-inclusive and extend to information on medical and social service, medication and correct usage, level of improvement in their health and financial empowerment

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information, social interaction and integration activities, HIV/AIDS status disclosure strategies, deteriorating conditions and death signs and pertinent religious-spiritual subject matters. PLWHA according to Opeyemi [6] "face challenges, including lower sense tremendous significance, stigmatization, work discrimination, lack of freedom and unavoidable suffering". In addition to these, information about mode of transmission, susceptibility and further vulnerability associated with risk practices among PLWHA is considered as a critical modifier of their information behavior. Information that is risk practices related that are germane in reducing the spread of HIV. These include information about nature of infectivity, risk factors and wellness, false beliefs and misconception, social supports, methods of disclosure, risk avoidance plan among others. PLWHA are suffering from disease that are naturally complex medically, degenerative with prolonged treatments that require the vigorous contribution of patients themselves and effect of the sickness on individuals is multidimensional. This could probably help PLWHA in developing and embracing risk avoidance behaviors. The position and function of information for HIV infected people cannot be overlooked because it plays a vital supportive mechanism to alleviate both mental and physical distress, pain and anxiety associated with the disease.

Risk means interacting with precariousness intentionally. It is ubiquitous in all areas of life. It is an unpredictable outcome of a deed [7]. Risk involves potential of gaining or losing something of value. Although everyone is at risk of getting infected with HIV, particular behaviors constitute risk practices which fan the spread and expansion of this infection. These majorly include engagement in high risk sexual behaviors, injectable drug use, blood transfusion and sharing of sharp objects. Others are mother to child transmissions which often occur by non-screening of mothers for HIV virus during pregnancy and absence of intervention in time of labor and breast-feeding. Risk Practices among PLWHA are indicated by evidences of engagement in activities such as unprotected sex, none or improper condom usage, multiple sexual partners, consumption of alcohol and other mood altering substances, stoppage of medication, missing of medical appointments, indiscriminate sharing of sharps and acquisition of sexually transmitted disease such as gonorrhea, syphilis among others.

Provision of adequate information empowers PLWHA and alters the notion of imminent deaths associated with HIV infection if only they keep away from risk practices. It gives them the mind-set that they are in control of their situations and not the virus as commonly insinuated. Wealth of information provides coping and managing strategies on how to positively live with HIV infection and subsequent development and adoption of risk avoidance plans. Not only have these information in form of health education assisted HIV positive individuals and communities to acquire the

knowledge and resources essential to live healthy. It arises whenever individuals assess their knowledge infrastructures about HIV related risk practices and discover deficits or much shortfall in required knowledge to deal with the situation such as quality of life. Moreover, it may come up when PLWHA realise through their internal models of environment, knowledge, actions, etc. are insufficient to attain the appropriate goals which may require input from external resources in order to attain the degrees of certainty required for reasonable action. Outcome of assessment of knowledge infrastructure may interplay the cognitive perception leading to the understanding of the real situation about HIV/AIDS related risk practices. The gaps observed will enable PLWHA to comprehend the real situation about how risk practices can put their own life at danger of sexually transmitted infection (STI), exposure to another strains of HIV, among others, thereby stimulate change towards adoption of risk free and excellent life.

People living with HIV/AIDS (PLWHA) are the main reservoirs of HIV infection to potential infectors which include their relatives and close associates. The mode of transmission of this disease is closely related to high risk sexual behaviors, drug and stimulant consumption, injectable drug use and sharing of sharp objects which are all categorized as risk practices. PLWHA attending clinics are counseled regularly through health talks, workshops and seminars, courses of adherence counseling, warning messages in posters and leaflets, radio, television programs and through other sources on the dangers in engaging in any of the risk practices. The information at the disposal of PLWHA is expected to reduce their risk practices, yet risk practices are still evidently sustained among them thereby complicating the collaborative responses of government, international bodies and other stakeholders' struggles and determination to control the spread of HIV infection in Nigeria. The study therefore sought to explore the connection between information needs and risk practices among PLWHA in South-West, Nigeria.

OBJECTIVE OF THE STUDY

- Find out information needs among PLWHA in South-West, Nigeria;
- Investigate the risk practices among PLWHA in South-West, Nigeria;
- 3. Examine the relationship between information needs and risk practices among PLWHA in South-West, Nigeria.

RESEARCH QUESTIONS

The study attempted to answer the following questions:

 What are the major information needs among PLWHA in South-West, Nigeria?

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 needs and risk practices among PLWHA in South-West, Nigeria.

Significance of the study

It is believed that this work would be beneficial to the PLWHA in ascertaining their information needs. It would also help health information managers, health librarians and information specialists to design information functional formation system adapted towards the needs of the PLWHA,

through the understanding of their information needs and preferences.

Methodology

The study adopted the survey research design. The design is quantitative method of data collection to determine whether significant relationship occurs between two or more variables. This study attempted to establish the relationship of information needs on risk practice among PLWHA in the South-Western Nigeria. According to synthesized data of NACA (2015), the prevalence rate of HIV in Nigeria was 3.4%. The population of this study comprises of PLWHA that had ever attended clinics in public tertiary health institutions in the South-West zone of Nigeria. The total of population of the HIV/AIDS patients in the tertiary health institutions is 537,234 as shown in **Table 1**.

Table 1. Public tertiary health institutions in south-west, Nigeria.

Name of Institutions	No. of HIV Patients		
Federal Medical Centre, Owo, Ondo State	3,294		
Federal Teaching Hospital, Ido Ekiti, Ekiti State	1,355		
Lagos University Teaching Hospital, Lagos, Lagos State	16,320		
Ladoke Akintola University Teaching Hospital, Osun State	3,486		
University College Hospital, Ibadan, Oyo State	509,303		
Total	533,758		

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

To draw sample for this study, an institution was purposively chosen per state to give equal representation to the all the states in the region. A pooled standard error of proportion was used to obtain minimum sample size of 103 participants per state using 5% percent margin error as the norm when dealing with human population [8]. The calculation goes thus:

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

$$E^2$$

Where, Z α at 5% of confidence=1.96; Z β at 80% of power=0.84; P=HIV national prevalence of 3.4% or 0.034; E at 5% of margin error=0.05

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

$$=\underbrace{7.84 * 0.033}_{0.05^2}$$

$$=\underbrace{0.257}_{0.0025}$$

$$=02.99$$

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 Four (4) Federal University Teaching Hospitals and Federal Medical Centres their clinics. The total sampling size was five hundred and sixty five (565) respondents. Questionnaire was distributed during the clinic days with the highest attendances in out-patient clinics of the selected hospitals. Only five hundred and ten (510) copies which represent 90% were analysed as other copies were found not to be good enough for analyses.

FINDINGS AND DISCUSSION

Presentation of results

Results are shown in Table 2.

Table 2. Distribution of respondents by demographic information.

Parameters	Classification (n=510)	Frequency	Percent %	
	<20	3	0.6	
	20-24	29	5.7	
	25-29	69	13.5	
Age of the Respondents (in years)	30-34	65	12.7	
	35-39	103	20.2	
	40-44	98	19.2	
	45-49	72	14.1	
	>=50	71	13.9	
	Total	510	100	
	Male	169	33.1	
Gender of the Respondents	Female	341	66.9	
	Total	510	100	
	Single	100	19.6	
	Married	288	56.5	
Marital Status of the	Widowed	62	12.2	
Respondents	Separated	41	8	
	Divorced	19	3.7	
	Total	510	100	
Religion of the Respondents	Islam	160	31.4	
	Christianity	348	68.2	
Kengion of the Respondents	Others	2	0.4	
	Total	510	100	
	None	49	9.6	
	Primary	69	13.5	
Educational Level of the	Secondary	198	38.8	
Respondents	Tertiary	193	37.8	
	Others	1	0.2	
	Total	510	100	
	Yoruba	374	73.3	
	Igbo	91	17.8	
Ethnicity of the Respondents	Hausa	33	6.5	
	Foreigner	2	0.4	
	Others	10	2	

	Total	510	100	
	Artisan	67	13.1	
	Schooling	64	12.5	
	None	34	6.7	
Occupation of the Respondents	Public Employee	116	22.7	
Occupation of the Respondents	Private Employee	84	16.5	
	Self Employed	129	25.3	
	Others	16	3.1	
	Total	510	100	
	<5	222	43.5	
	05-9	204	40	
Duration of the Respondents as	10-14	59	11.6	
HIV positive (in years)	15-19	16	3.1	
	20 and above	9	1.8	
	Total	510	100	

Source: Field Survey, 2016

Table 2 shows that most of the respondents were between the ages 35-36 (20.2%), followed by people of ages 40-44 years (19.2%), then people of ages 50 and above (13.9%). This was followed by the respondents of ages 25-29 years (13.5%), then people of ages 45-49 years (14.1%), then ages 30-34 years (12.7%), 20-24 years (5.7%). The least age group among the respondents was less than 20 years (0.6%). This results implies that majority of the respondents were youth and young adults.

Moreover, analysis of the participants in this study by gender indicated that 33.1% were males while 66.9% were females. This implies that majority of the respondents were females. Analysis of respondents by marital status revealed that most of the respondents were married (56.5%), 19.6% were single, 12.2% were widowed, 8.0% were separated, while minority of them were divorcees 3.7%. This suggested that majority of the respondents had marital commitment or a lot of them were couples.

In addition to these, **Table 1** denotes that 68.2% of the respondents were Christians, 31.4% were Muslims while 0.4% of the respondents practices other religions. Furthermore, it can be deduced from **Table 1** that only 9.6% of the respondents had no formal education. Most of the respondent 38.8% had secondary education, while 37.8% had tertiary education, 13.5% had primary education, while 0.2% claimed to have other level of education. This implies that majority of the respondents were educated.

Analysis by the ethnicity of the respondents depicts Yoruba ethnic group to be the majority 73.3%, followed by Igbos

17.8%, Hausas 6.5% and other Nigerians 2.0%. Foreigners constituted minority 0.4%. This indicates 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 (25.3%) were self-employed, 22.7% were public employees, 16.5% were private employees, 13.15 were artisans, students constituted 12.5% each, 3.1% do other works. 6.7% 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 43.5% of the respondents have been living with the infection in less than five years ago, 40.0% knew their HIV positive status between 5-9 years ago, 11.6% knew their status between 10-14 years ago while 3.1% knew they had the virus 15-19 years ago. 1.6% became aware of HIV status in at least 20 years ago. This implies that all the respondents knew they were HIV positive.

Research question one: What are the major information needs among people living with HIV/AIDS in south-west Nigeria?

Table 3 shows the major information needs among PLWHA in south-west Nigeria. The percentages of strongly agree and agree were summed up to form percentage of agreement. Considering the result obtained, the most important information needed by PLWHA was information about status disclosure as indicated by 47.8% of the respondents, followed by information on spiritually and HIV medication

(20.8%), then, clarification of false beliefs and misconceptions about HIV/AIDS 11.6%. Additionally, PLWHA needed information about risk factors aiding HIV/AIDS (5.9%), gonorrhea and other sexually transmitted diseases (5.7%), then information on dangers in drugs and alcohol consumption (4.5%) followed by information about

HIV/AIDS risk practices avoidance plan (4.5%), infectivity (3.5%) and information about the importance of social support in HIV/AIDS management (3.2%). Information needs on the use of recommended medication and information on risk practices avoidance were of the 2.6% each.

Table 3. Information needs among people living with HIV/AIDS in south-west Nigeria.

S/N	Information needs	Strongly Agree F (%)	Agree F (%)	Cannot say F (%)	Disagree F (%)	Strongly Disagree F (%)
1	Nature of HIV infectivity	4 (0.8)	14 (2.7)	23 (4.5)	195 (38.2)	274 (53.8)
2	Dangers in drugs and alcohol consumption in relation to HIV infectivity	5 (1.0)	18 (3.5)	34 (6.7)	228 (44.7)	225 (44.1)
3	The use of recommended medication	6 (1.2)	7 (1.4)	29 (5.7)	240 (47.1)	228 (44.6)
4	HIV/AIDS status disclosure processes	122 (23.9)	121 (23.7)	61 (12.0)	147 (28.8)	59 (11.6)
5	Risk factors aiding transmission	4 (0.8)	27 (5.3)	51 (10.0)	244 (47.8)	184 (36.1)
6	False beliefs and misconceptions about HIV/AIDS	34 (6.7)	25 (4.9)	34 (6.7)	242 (47.4)	175 (34.3)
7	Medication and clinics adherence	5 (1.0)	8 (1.6)	42 (8.2)	254 (49.8)	201 (39.4)
8	spirituality and HIV medications	60 (11.8)	46 (9.0)	54 (10.6)	216 (42.3)	134 (26.3)
9	Threats of Gonorrhoea and other sexually transmitted diseases	6 (1.2)	23 (4.5)	63 (12.4)	220 (43.1)	198 (38.8)
10	HIV/AIDS risk practices avoidance plan	4 (0.8)	19 (3.7)	50 (9.8)	244 (47.9)	193 (37.8)
11	Social support in HIV/AIDS management	4 (0.8)	12 (2.4)	51 (10.0)	237 (46.4)	206 (40.4)

Source: Field Survey, 2016

Research question two: What are the risk practices among PLWHA in south-west, Nigeria?

PLWHA were still evidently engaging in virtually all the HIV/AIDS related risk practices stated in the instrument according to **Table 4**. Percentage of risk practices of the respondents per item was calculated by adding the fractions of always, often and rarely responses together. The table was arranged in ordered form, from highest risk practices to the least one. Sex without condom was the most common (61.5%) risk practices engaged in by PLWHA, followed by multiple sexual partners (52.3), the casual sex with individual beside the spouse (49.8%), followed by alcohol

consumption (34.7%), then missing of their medical appointment and engagement in consumption of hard drugs recorded the same percentage 25.3, then, non-adherent to medication (24.9%), while 20.4% still share sharp objects. 17.3% hawked sex while 13.6% donated blood.

Table 4. Risk practices among PLWHA in south-west, Nigeria?

S/N	Risk Practices	Always	Often	Rarely	Never
1	Sex without condom	28 (5.5)	119 (23.3)	167 (32.7)	196 (38.5)
2	More than one sexual partners	51 (10.0)	96 (18.8)	120 (23.5)	243 (47.7)
3	Casual sex with individuals other than spouse	27 (5.3)	98 (19.2)	129 (25.3)	256 (50.2)
4	Alcohol Consumption	24 (4.7)	56 (11.0)	97 (19.0)	333 (65.3)
5	Hard drugs	26 (5.1)	41 (8.0)	62 (12.2)	381 (74.7)
6	Missing clinics	20 (3.9)	26 (5.1)	83 (16.3)	381 (74.7)
7	Missing medication	23 (4.5)	31 (6.1)	73 (14.3)	383 (75.1)
8	Share sharps	22 (4.3)	28 (5.5)	54 (10.6)	406 (79.6)
9	Sex Hawking	30 (5.9)	27 (5.3)	31 (6.1)	422 (82.7)
10	Blood Donation	25 (4.9)	11 (2.2)	33 (6.5)	441 (86.4)

Source: Field Survey, 2016

Risk practices among PLWHA

PLWHA were still evidently engaging in virtually all the HIV/AIDS related risk practices stated in the instrument. Sex related risk practices were found to be most common among PLWHA. Sex without condom was the most common, followed by multiple sexual partners, the casual sex with individual beside the spouse. This is in line with the opinion of Timothy and Palmer [9] which stated that risk practices among PLWHA is associated with mode of transmission which include engaging multiple sexual partners, unprotected sexual intercourse, sharing of needles and syringes by Injectable Drug Users among others. The duo also opines that PLWHA spreading of HIV infections by engaging high-risk sexual practices, hard drug consumption among others. Kalichman [10] also established that HIV transmission risk practices have become prevalent among PLWHA that one in three members of this group still engage

in the practice. Consumption of alcohol and hard drugs were also found to be very common. This result corroborates with the outcomes of Dangerfield et al. [11] in their research in Kuala, Malaysia report that HIV/AIDS is of high prevalence among drug and alcohol users. Moreover, this is line with the argument of Parry [12], Parker et al. [13] and Kotchick et al. [14] that sexual risk practice as an activity that is performed under the influence of mood altering items like alcohol. The study also revealed that PLWHA were still in the habit of non-adherent to medication prescription and missing of medical appointment. This according to Yaya et al. [15] forms part of challenges of PLWHA use of information along with low education level, non-adherence to ART, alcohol consumption before sex, the duration on ART. Sex hawking and sharing of sharp objects were performed on the same scale each. The least perpetuated risk practice according to **Table 5** was blood donation.

Table 5. Mean information needs of PLWHA.

Measures	Mean	%	Std.	N	Correlation	P-Value
			Deviation		coefficient (r)	
Information Needs of PLWHA	10.64	24.18	4.92	510	0.415	0.000
measured on 44-point scale						
Risk Practices of PLWHA measured	5.38	17.57	6.54			
on 30-point scale						

^{*}Significance at 0.05

a. Dependent Variable: RP

b. Predictors: (Constant), IN

Analysis of **Table 5** reveals that the mean information needs of PLWHA was 10.64 and SD=4.81 and that of risk practices was 5.27 and SD=6.38. Other information derived from the table shows that a positive and significant relationship between information needs and risk practices of PLWHA (r=0.415, p<0.05). Therefore, the null hypothesis is rejected and the research hypothesis is accepted and restated that there is a significant relationship between information needs and risk practices among people living with HIV/AIDS [16,17].

Information needs of PLWHA found to have positive significant relationship with risk practices among PLWHA both individually and mutually. The positive relationship between information needs and risk practices implies that the more the information needs the more the likelihood of engaging in risk practices by PLWHA and vice versa [18,19].

SUMMARY

The major findings of the study include:

- The major risk practices PLWHA engaged in were all sexually related and include sex without condom, multiple sexual partners, sex hawking and casual sex with individual beside the spouse. These were followed by consumption of alcohol and hard drugs, non-adherent to medication prescription and missing of medical appointment.
- 2. PLWHA needed information critically as regards issues of infectivity, false beliefs and misconception, medication adherence, status disclosure and transmission risk factors, HIV and spirituality, risk avoidance and social support in order to reduce their risk practices. The information needs of PLWHA was found to be low, hence the low percentage of risk practices. The more the information needs the more the risk practices.

RECOMMENDATIONS

1. PLWHA should be well educated on the importance of safe sex practices and other preventive measures such as faithfulness, abstinence where possible and proper use of condom to reduce transmission of HIV through sexual intercourse. In connection to these, the government should as a matter of policy, introduce sex education in school curriculum from secondary school to other higher institutions of learning in the country. In addition to these health agencies such as the National Action Committee on AIDS (NACA) in partnership with their international counterparts, such as USAID, UNAIDS, GHAIN need to incorporate behavioral change communication with emphasis on safe sex with biomedical and structural approaches management of HIV infection.

2. In an effort to address the issue of risk practices reduction among PLWHA, it is important that information specialists team up with other stakeholders to repackage information on infectivity, false beliefs, risk avoidance strategies, medication adherence, status disclosure and transmission risk factors, HIV and spirituality and social support into animation, visualization and drama series to address their HIV/AIDS risk practices information needs. This will aid their better understanding and invariably improve their information behavior. It would however be advisable that such information is made available to them through electronic and print sources.

REFERENCES

- 1. Losce RM (1990) Society development and libraries. Center for External Studies: University of Ibadan.
- 2. Sokari U (2006) The role of library and information management in promotion of information Literacy in the 21st century in Nigeria. Int J Res Educ 3: 125.
- 3. Nicholas D (2000) Assessing information needs: Tools, techniques and concepts for the internet age. 2nd Edn. London: Aslib.
- Wilson TD (2000) Models in information behavior research. J Documentation 55: 249-270.
- Belkin NJ, Vickery A (1985) Interaction in information systems: A review of research from document retrieval to knowledge-based systems. British Library, Library and Information Research Report 35: 246
- 6. Opeyemi A (2016) Meaning in life and information behavior of people living with HIV/AIDS in Oyo state, Nigeria. J HIV AIDS 2.
- Smith DM, Richman DD, Little SJ (2015) HIV super infection. J Infect Dis 192: 438-444.
- 8. Saunders M, Lewis P, Thornhill A (2009) Research methods for business students. 5th Edn.
- Hogan TP, Palmer CL (2005) Information preferences and practices among people living with HIV/AIDS: Results from a nationwide survey. J Med Libr Assoc 93: 431-439.
- Kalichman SC (2000) HIV transmission risk behaviors of men and women living with HIV-AIDS: Prevalence, predictors and emerging clinical interventions. Clin Psychol Sci Pract 7: 32-47.
- 11. Dangerfield DK, Gravitt P, Rompalo AM, Yap I, Tai R, et al. (2015) Awareness and utilisation of HIV services of an AIDS community based organisation in Kuala Lumpur, Malaysia. Int J STD AIDS 26: 20-26.
- 12. Parry C (2002) South Africa health review, alcohol and other drug use. Med Res Council 23: 441-454.

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13. Parker W, Makhubele B, Ntabalati P, Connolly C (2007) Concurrent Sexual partnerships among young adults in South Africa: Challenges for HIV prevention communication. Pretoria: CADRE.

- 14. Kotchick BA, Shaffer A, Forehand R, Miller KS (2011) Adolescent sexual risk behavior: A multi-system perspective. Clin Psychol Rev 21: 493-519.
- 15. Yaya I, Saka B, Landoh DE, Patchali PM, Makawa M, et al. (2014) Sexual risk behavior among people living with HIV and AIDS on antiretroviral therapy at the regional hospital of Sokodé, Togo. BMC Public Health 14: 636.
- 16. Adebayo T (2017) Information behavior and risk practices among people living with HIV/AIDS in southwestern, Nigeria. A Thesis submitted to the Department of Information Resources Management, Babcock University for the award of Doctor of Philosophy (PhD) in Health Information Management.
- 17. Ape R (2012) Meeting health information needs of people with HIV and AIDS through Public Library Services in Benue state. A Thesis Submitted to the Department of Library and Information Science, University Of Nigeria Nsukka for the award of Doctor of Philosophy (PhD) in Library and Information Science.
- International Treatment Preparedness Coalition (ITPC) (2005) Missing the target: A report on HIV/AIDS treatment access from the frontlines. Retrieved from: http://www.nigeriaaids.org/documents/ITPC TreatmentReportFinal.pdf
- 19. Simbayi LC, Kalichman SC, Strebel A, Cloete A, Henda N, et al. (2007) Disclosure of HIV status to sex partners and sexual risk behaviors among HIV-positive men and women, Cape Town, South Africa. Sex Transm Infect 83: 29-34.