CAUSES AND SOCIO-ECONOMIC CONSEQUENCES OF HIV/AIDS IN KWARA STATE

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Abstract

Using a cross section of household data and the Weighted Rank Analysis, this article examined the causes and the socio-economic consequences of HIV/AIDS in Kwara State. The results obtained revealed that the most likely cause of HIV/AIDS in the State [illegible] "Unknown cause" [illegible] HIV/AIDS. The [illegible] cause of HIV/AIDS [illegible] sexual intercourse, followed by [illegible] HIV/AIDS [illegible] HIV/AIDS in Kwara State [illegible] HIV/AIDS; PLWHA).

Introduction

Available data on the prevalence of HIV/AIDS in Nigeria [illegible] adults in 2007 [illegible] (PRB 2005). Although [illegible] HIV/AIDS [illegible] (NACA/UNICEF 2007). [illegible] HIV/AIDS could be [illegible] the disease is not just a public health problem but it also has far-reaching consequences [illegible] development.

As a health problem, HIV/AIDS has led to increase in morbidity and mortality which subsequently has created development problems [illegible] to the country in general. However in the case of health care services, [illegible] capital formation [illegible] needed for [illegible] education, [illegible] expenditure [illegible] orphans [illegible] high level of poverty, food insecurity and malnutrition.

For instance, in 2005, the estimated number of AIDS [illegible] In 2005 [illegible] people living with HIV/AIDS [illegible] Nigeria, the infant mortality rate [illegible] life expectancy [illegible] (UNDP, 2006) [illegible]

It is against this backdrop that this article seeks to answer to the following question: What are the key causes and consequences of HIV/AIDS in Nigeria? The rest of the paper is structured as follows: Section two provides a conceptual and empirical overview of HIV/AIDS, while section Three discusses the study area and provides the methodology. Section four presents and discusses the results. Conclusions and recommendations are contained in the last section.

HIV/AIDS: Conceptual clarification

Meaning of HIV/AIDS

Human Immuno-deficiency Virus (HIV) is the virus that destroys the body immune system. And Acquired Immune Deficiency Syndrome (AIDS) is the end stage [illegible] of the body immunity that leads to a range of serious illnesses and opportunistic infections. [illegible] two strains of the human immuno-deficiency virus, HIV-1 and HIV-2. HIV-1 is the more common strain [illegible] in different parts of the world, while HIV-2 is found predominantly in West Africa and some parts of Angola and Mozambique. When compared with HIV-1, HIV-2 is less infectious [illegible] Infection with HIV-1 and HIV-2 is possible. Once introduced into the human body, HIV mainly attacks a subset of immune system cells, which have a molecule called Cluster Designation 4 (CD4). [illegible] Cluster Designation [illegible] CD4+T cells and macrophages. These cells perform [illegible]

links related to the eventual breakdown of the immune system (CD4). [illegible] immune response by [illegible] to infection [illegible] and [illegible] in the future (see World Bank 1997; [illegible], et al 2002; WHO 2003).

Causes of HIV/AIDS

HIV can be transmitted through sexual intercourse, blood and blood products such as unsafe blood transfusions, use of contaminated instruments, traditional practices involving cuts, mother to child transmission during pregnancy, delivery and breast feeding, organ and tissue transplant. HIV cannot be transmitted by a person's handshake or other casual contact. In developing countries, heterosexual intercourse accounts for a great proportion of cases (Bloom and Mahal 1997; World Bank 1997; UNAIDS 2002; Robalino, et al 2002).

According to Bonnel (2000), several economic, socio-cultural and epidemiological variables account for the spread of the HIV/AIDS. The main economic variables are poverty, gender inequality, income inequality and the extent of labour migration. Poverty, gender and income inequality make societies more vulnerable to HIV. For instance, a poor woman will find herself at much greater risk of HIV infection than a poor man. Unequal regional development among countries as well as within countries can induce labour migration to urban areas or other countries. The resulting concentration of single men in urban areas is projected to be generally accompanied by a parallel increase in commercial and casual sex, with a concomitant rise in the risk of HIV infection. The socio-cultural variables include the types of sexual relations, religious belief, the [illegible] structure of [illegible] and social conflicts. For instance, the type of sexual relations is important because it affects the relative spread of HIV among men and women. In many parts of Asia, HIV is mainly spread through heterosexual relations. The epidemiological variables include the stage of the epidemic, the degree of sexual [illegible] to HIV infection. Several epidemiological studies have emphasized [illegible] (1993) [illegible] the transmission and [illegible] of HIV during sexual intercourse (Lamptey, et al 2002; [illegible] and [illegible] 2004).

Consequences of HIV/AIDS

As discussed by Cuddington (1993), World Bank (1993a), Ainsworth and Over (1994), World Bank (1995), World Bank (1997), Robalino, et al (2002), Bell, et al (2003), the effects of HIV/AIDS can be grouped into two categories: those associated with rising morbidity rates, and those associated with rising mortality rates for particular age cohorts, especially sexually active adults and children infected at birth. The rise in morbidity has three immediate effects: reduction in labour productivity, increase in health care spending and reduction in savings. The negative effect on productivity will arise because sick or worried workers are less productive than happy and healthy workers. Even the productivity of those who do not know

AIDS may fail to [illegible] among [illegible]. The health care expenditure effect relates to rising expenditures by households and the public or private organizations on health care services to tackle AIDS patients and their families in coping with deteriorating health. The effects on saving can be seen from the direct effect of higher medical expenditures which tend to reduce saving and the growth in per capita, life expectancy, age structure, and the total size of the population.

The HIV/AIDS epidemic's [illegible] reduction in capital formation [illegible] will have a potentially large adverse effect on per capita income in the long term. On the other hand, the gradual rise in mortality rates caused by AIDS will have two important demographic impacts with macroeconomic consequences. First, there will be a slower population growth rate, which will result in a smaller population at a future date. Second, the large number of deaths from AIDS will shift the age structure of the population towards the younger age cohorts. The shift in age structure will have several important effects on both aggregate supply and aggregate demand. On the supply side, the size of the working-age population (and perhaps the participation rate in the labour force) will be reduced. The smaller working age population will directly reduce potential output. The loss in output would be compounded by a fall in labour force productivity as the average age and experience of the labour force declines. On the demand side, the shift in the size and composition of the population will affect the level and composition of public expenditure as well as the economy's overall (private and public) saving rate. For example, the relatively greater number of young people will place heavier demands on the education system and the overall consumption rate will be higher because of the younger age structure (see e.g. World Bank 1992b; Ainsworth 1998; Over 1998; Squire 1996; Ainsworth and Filmer 2002; [illegible] 2004; Haacker 2004).

Barnett and [illegible] (2001) and Whiteside (2001) observe that other consequences of HIV/AIDS include household food insecurity and high levels of malnutrition among children, especially orphans, [illegible] because of the death of breadwinners [illegible] and [illegible] sufficient food. The death of young adults through HIV/AIDS also reduces households' earning power and therefore their ability to buy food and related goods and services. Illness and funerals would force households to spend most of their income on care, medicines and other expenses, with adverse consequences for food availability. Labour loss may also force households to forgo cash in favour of [illegible] food crops, thus worsening the ability of affected households to generate cash. The death of the productive adults also reduces the social networks that provide households with community help and support. [illegible] widows and their children [illegible]. [illegible] primarily due to [illegible] lack of sufficient [illegible] (see also Barnett and Whiteside 2002).

Trend of HIV/AIDS in Nigeria

In Nigeria, the first HIV sentinel surveillance was established in 1991 as a means of monitoring HIV/AIDS in the country. In 2005, the prevalence rate of HIV/AIDS was [illegible] percent of the adult population, a slight drop from [illegible] percent that was recorded in 2003. At the state level, a 2005 survey conducted shows that all the [illegible] reported cases of HIV/AIDS, with [illegible] from state to state. As indicated in Table 1, the states with the highest prevalence rates were Benue (10.0 percent) and Akwa Ibom (8.0 percent). The states with the lowest prevalence rates were [illegible] percent), [illegible] percent), [illegible] percent), [illegible] percent) and [illegible] percent).

Table 1: HIV/AIDS Prevalence in Nigeria 2005

State	Prevalence Rate in %
Abia	[illegible]
Adamawa	[illegible]
Akwa Ibom	[illegible]
[illegible]	[illegible]
Bauchi	[illegible]
Bayelsa	[illegible]
Benue	10.0
Cross River	[illegible]
Delta	[illegible]
[illegible]	[illegible]
Edo	[illegible]
Ekiti	[illegible]
Enugu	[illegible]
Federal Capital Territory	[illegible]
Gombe	[illegible]
Imo	[illegible]
Jigawa	[illegible]
Kaduna	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
Lagos	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
Totals	[illegible]

Kwara	[illegible]
Sokoto	[illegible]
Borno	[illegible]
Yobe	[illegible]
Zamfara	[illegible]

Source: Nigeria HIV [illegible] [illegible] (20[illegible])

Study Area and Methodology

Study Area

The focus of this study is Kwara State which was created on the 27th May 1967. The State occupies a geographically strategic position on the map of Nigeria because it is situated between Latitudes [illegible] and [illegible] N and between Longitude [illegible] and [illegible] E of the Equator. It is a link/meeting between the Northern and Southern parts of Nigeria. It is bordered in the North by Niger State and shares an international boundary with the Republic of Benin in the West. Its Southern border is Kogi State, while in the South it shares boundary with the three states of Ekiti, Osun and Oyo. The State is covered by the Sudan and Guinea Savannah vegetation with a mean annual rainfall and temperature of 1,200mm/year and [illegible] respectively. The State has 16 Local Government Areas namely: Asa, Baruten, Edu, Ekiti, Ilorin East, Ilorin South, Ilorin West, Ifelodun, Irepodun, Isin, Kaiama, Moro, Offa, Oke Ero, Oyun and Pategi. The total population of the state is estimated at 2.3 million people (KWSN, 2006; KWSG, 2008).

Methodology

In addition to the use of secondary data, a survey aimed at generating primary data on the causes and the socio-economic consequences of HIV/AIDS in Kwara State was conducted between the months of April and July 20[illegible] using structured questionnaire and a Participatory Rapid Appraisal (PRA) method (see [illegible] and [illegible] [illegible]; [illegible] et al. [illegible]).

Sample and Sample Selection Methods

This study was supposed to be a state-wide research, to be conducted by the distribution of structured questionnaire to some of the people living with HIV/AIDS in Kwara State, but it was difficult to identify the people living with the virus, so we had to interact with the HIV/AIDS units at the University of Ilorin Teaching Hospital, the Kwara State Ministry of Health, as well as the Coordinator of the Kwara State Action Committee on AIDS. With the assistance of these units, we were able to identify the people living with HIV/AIDS. From the administered questionnaire, only [illegible] of [illegible] of the people living with HIV/AIDS responded.

[illegible] used in the questionnaires include the background of the respondents: the location of the respondents, age, gender, marital status, religion, educational and occupational status, the likely causes of the disease, the consequences of the disease (e.g. on health care spending, productivity, income, household consumption, household care, children education, [illegible]). Questions on access to diagnosis, treatment and care were also raised.

Statistical Analysis

The data collected were first examined for omissions, errors and inconsistency before the analysis. Descriptive statistics such as percentage was used in describing the socio-demographic characteristics of the respondents who were people living with HIV/AIDS in Kwara State. In determining the most likely causes and consequences of HIV/AIDS, a Weighted Rank Analysis (WRA) was used (see Arumugam 1999). To complement this method of analysis, the respondents were asked about their perception of the causes and the consequences of HIV/AIDS through a Participatory Rapid Appraisal (PRA) method, which include, among other methods, the use of an in-depth interview.

Results and Discussion

Table 2: Socio-demographic Characteristics of the Respondents

	Characteristics	Percentage (%)
i.	Location of the Respondents	
	Urban area	[illegible]
	Rural area	[illegible]
ii.	Age of the Respondents	
	[illegible]	[illegible]
	[illegible] years	[illegible]
	Above [illegible] years	[illegible]
iii.	Gender	
	Male	[illegible]
	Female	[illegible]
iv.	Marital Status of the Respondents	
	Single	[illegible]
	Married	[illegible]
	Divorced/Separated	[illegible]
	Widow/Widower	[illegible]
v.	Religion of the Respondents	
	Islam	[illegible]
	Christianity	[illegible]
	Others	-
vi.	[illegible] of the Respondents	

Socio-demographic characteristics of the Respondents

In the course of this survey, certain features were identified as typical of the people living with HIV/AIDS in Kwara State. These features include the location of the respondents, the age range of the respondents, their gender, marital status, religion, household size, and occupational and educational status. As indicated in Table 2, the result of the study on the socio-demographic characteristics of the people living with HIV/AIDS in Kwara State shows that [illegible] percent of them reside in urban centres, with [illegible] percent of them living in rural, 69.7 percent of them are aged between 20 and 40 years and 68.7 percent of them married. The study also revealed that 59.2 of them are heads of their households and [illegible] percent and 14.7 percent were self employed and engaged in public sector activities respectively. Most of the respondents are low income earners, with [illegible] percent of them earning less than N50,000.00 every month.
The implication of this finding is that HIV/AIDS in Kwara State is largely an urban phenomenon, with low-income earners and women being the most vulnerable. The study also revealed that the adult work force is the most affected, which has implication for the state's level of productivity and economic activities.

Causes and consequences of HIV/AIDS in Kwara State, Nigeria

Based on the questionnaire, some possible causes and the socio-economic and environmental consequences of HIV/AIDS in Kwara State were shown. Table 3 summarizes the perception of the respondents on possible causes of HIV/AIDS using the Weighted Rank Analysis which positions the causes in the most likely causes of HIV/AIDS in Kwara State. As revealed by the study, the most likely cause of HIV/AIDS is not clearly known by the people living with the virus having been rated the first with 33.4 percentage score. This means the cause of HIV/AIDS is unknown or undetermined, which may be as a result of the years it takes for virus to manifest into a full blown AIDS. The perception of some of the respondents is in consonance with the percentage that responded "unknown". To them they cannot specify how they contracted the disease. The second most likely cause of HIV/AIDS is through sexual intercourse with a percentage score of 19.5 percent. Child birth is the second [illegible] the cause of HIV/AIDS [illegible] of the children that are infected with it which in turn is followed by [illegible] the use of [illegible] as a result of the virus. Transfusion of contaminated blood or blood products, reuse of contaminated needles, blades, clippers, razors and contaminated equipment at the barbers shop ranked fourth and fifth most possible causes of HIV/AIDS, respectively. The least possible cause of HIV/AIDS is the use of contaminated medical/surgical equipment in traditional and unconventional medical setting.

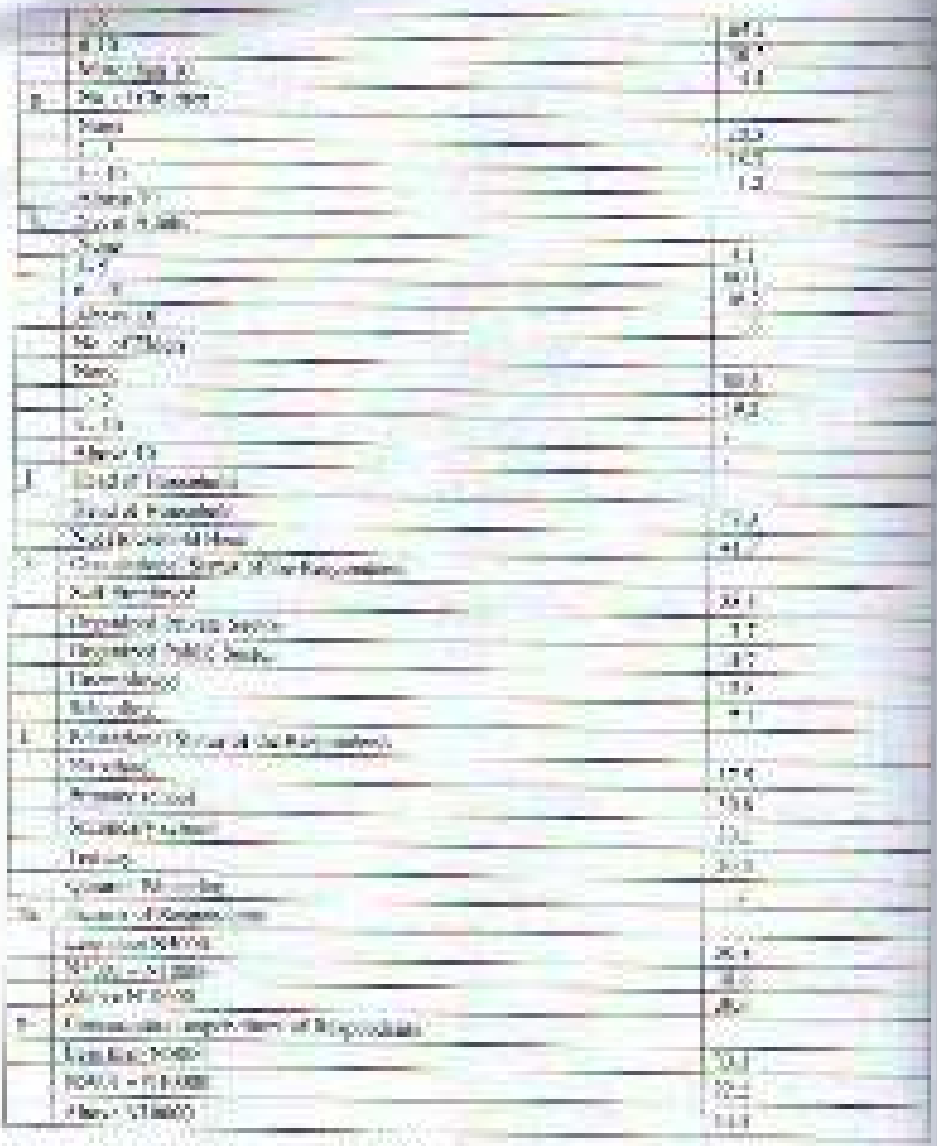

Table 4 summarizes the results of the most severe socio-economic consequences of HIV/AIDS in Kwara State using also the Weighted Rank Analysis. The most severe consequence of HIV/AIDS in Kwara State is [illegible] having been rated first with 18.5 percentage score, followed by increase in health spending with a score of 12.8 percent. Psychological distress, stigma, reduction in household food consumption, reduction in household income, reduction in labour productivity, and the negative effect that on children education are third, fourth, fifth, sixth [illegible], respectively. The least severe consequence is the negative effect it has on household care.

The perceptions of some of the respondents were [illegible] with the findings above. For instance, increase in health care spending was stated by some of them as a result of their need to [illegible] with [illegible] health and the need to regularly visit the clinic for [illegible] which is expensive and for drugs which has just been made free to them. [illegible] as revealed by the study is as a result of sickness and eventual psychological distress that comes with HIV/AIDS. For some of the widows, they are [illegible] of job, [illegible] primarily because of [illegible], [illegible] and [illegible] at the household and community levels. [illegible] among them have also lost their jobs because they were HIV positive. There was a case of a [illegible] who lost his job from the fear by the owner of the [illegible] that he might be infected with HIV by the [illegible]. There was also the case of a woman who was divorced by her husband and was asked to take her children along with her because of the fear that her children too could have been infected with the virus.

Table 2: Most Probable Causes of HIV/AIDS in Kwara State

FREQUENCY

	VARIABLE	[illegible]	ML	LL	NL	Total Score Per Cause of HIV/AIDS			Total	Total % Score Per Cause of HIV/AIDS	Cumulative Rank (CR)
			3	2	1	3	2	1			
A	Sexual intercourse	[illegible]	[illegible]	[illegible]	88	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
B	Because of contaminated syringes	[illegible]	11	8	[illegible]	[illegible]	16	[illegible]	[illegible]	[illegible]	[illegible]
C	Because of contaminated surgical equipment in unsterilized [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
D	Transfusion of unscreened blood and blood products	[illegible]	[illegible]	[illegible]	112	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
E	Because of [illegible]	[illegible]	[illegible]	[illegible]	112	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
F	Not aware of the cause [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Total								[illegible]	100	

KEYS: [illegible], ML = Most Likely, LL = Less Likely, NL = Not Likely

Source: Author's Computation from Field Survey, 201[illegible]

Table 3: Most Probable Causes of HIV/AIDS in Kwara State

FREQUENCY

	VARIABLE	N	VL	LL	NL	Total Score For Cause of HIV/AIDS			Total	Total % Score Per Cause of HIV AIDS	Cumulative Rank (X.R)
			4	2	1	[illegible]	[illegible]	[illegible]			
a	Sexual intercourse	145	60	[illegible]	20	240	[illegible]	60	300	16.4	[illegible]
b	Sharing of contaminated Syringes	145	51	3	[illegible]	[illegible]	[illegible]	117	[illegible]	14.[illegible]	[illegible]
c	Sharing of contaminated surgical equipment for piercing, nail cutting and medical cutting	145	58	7	[illegible]	[illegible]	14	176	[illegible]	14.4	[illegible]
d	Transfusion of contaminated blood or blood products	145	37	[illegible]	[illegible]	111	[illegible]	1[illegible]2	23[illegible]	13.4	[illegible]
e	Sharing of contaminated toothbrush, blade, clipper etc.	145	50	[illegible]	[illegible]	100	[illegible]	112	231	13.[illegible]	[illegible]
f	Mother to child transmission	145	78	3	75	[illegible]	[illegible]	[illegible]	[illegible]	20.4	[illegible]
	Total								[illegible]	100	

KEY: N = No. of observations, VL = Very Likely, LL = Less Likely, NL = Not Likely

Source: Authors Computation from fieldwork, 2007.

Table 4: Most severe socio-economic consequences of HIV/AIDS in Kwara State

FREQUENCY

	VARIABLE	N	MS	S	LS	Total Score Per Consequence of HIV/AIDS			Total	Total % Score Per Consequence of HIV/AIDS	Cumulative Rank (CR)
			3	2	1	3	2	1			
a.	Reduction in Labour Productivity	155	81	11	49	244	22	49	315	11.1	6th
b.	Increase in Health Spending	155	71	27	57	213	54	40	323	13.3	2nd
c.	Reduction in Household Saving/ Consumption	155	51	51	64	153	62	64	299	12.7	4th
d.	Reduction in Household Income	155	38	26	75	123	58	75	256	11.3	5th
e.	Effect on Household Size	155	32	26	114	96	18	114	228	9.4	8th
f.	Effect on Children Education	155	36	24	56	105	26	83	252	10.1	7th
g.	Discrimination/Stigmatization	155	116	16	23	348	32	23	402	16.3	1st
h.	Psychological Trauma/ Shame	155	73	28	54	219	56	54	329	13.6	3rd
	Total								2421	100	

KEY: N = No. of respondents, MS = Most Severe, S = Severe, LS = Least Severe

Source: Author's Fieldwork, [illegible]

Table 5: Access to Medical Attention and Frequency of Visits for Medical Attention by Persons Living with HIV/AIDS in Kwara State

	VARIABLE	Percentage (%)
a	Access to Medical Attention	
	Diagnosis	5.6
	Drugs	10.7
	Diagnosis and Drugs	83.3
b	Frequency of Visits for Medical Attention	
	Monthly	64.3
	Less Than a Month	24.6
	Every Six Month	1.1
	Yearly	-

Source: Authors' Computation from Field Survey, 2017

The study, as indicated in Table 5, revealed that 83.3 percent of the people living with HIV/AIDS in Kwara State has access to medical attention and 64.3 percent of them visited the medical and referral centres (which is the University of Ilorin Teaching Hospital) because of the affordability, quality of service and availability of diagnostic test and drugs. The visiting of the centres every three months especially those living in rural areas was because of distance, travel time and cost of travel to the Teaching Hospital, which seems to be the only one available for diagnostic test, drugs and care.

Recommendations and Conclusion

Recommendations

Based on the findings of this study, the following recommendations are made:

- All factors causing HIV infection should be eliminated through enlightenment campaign and legislation. The expansion of socio-economic infrastructure, facilities in the rural areas and in urban areas in order to reduce the drift of people from one place to the other, and the use of legislation. The legislation should be such that would prevent the use of unsafe blood for transfusion, use of unsterilized instruments and traditional practices involving cuts especially in the rural areas, that are more vulnerable to the spread of the disease. There should also be legislation on sex workers.

- To enhance the State government efforts at prevention, detection and treatment, the State House of Assembly should come up with a legislation that would mandate the government to allocate not less than 10 percent of the funds budgeted to the health sector for HIV/AIDS care services, especially for low income earners that are living with the disease, as well as HIV/AIDS service organizations that provide medical and non-medical assistance to those living with the disease.

- To intensify ... campaigns at the school level, there should also be a legislation that would require all schools to introduce into their curriculum the subject of HIV/AIDS.

- Since discrimination and stigmatization against the people living with HIV/AIDS has taken a critical dimension in the State, the State House of Assembly should also pass laws against them and enforce these laws through relevant agencies.

- The notion that "HIV/AIDS is a killer disease that cannot be prevented" and the related "[illegible]" [illegible] information of how deadly HIV/AIDS is should be [illegible] and replaced with the slogan that "HIV/AIDS can be managed", [illegible]. This is important given the cases of death already recorded, many [illegible] thought of as infected with HIV/AIDS [illegible] seeking for medical attention.

- Policies and programmes on HIV/AIDS should go beyond care and support for the infected to include prevention. This is because no matter how widespread the mitigation efforts are, the devastating impact of HIV/AIDS will remain unabated.

- The State government should work assiduously to reduce poverty level in the state. This is because unless something is done to change this, behavioural change can be [illegible]. For example, economic empowerment for the less privileged and the most vulnerable, most of them women, is essential. Removing institutional bottlenecks to the creation and expansion of small and medium scale enterprises and rural credit is necessary. Promoting women's education and enhancing their status is also essential in preventing and reducing the spread of HIV/AIDS in the State.

- The government of the State should also provide equal access to productive resources, social services (like health care, safe water, food and sanitation) to the most affected, and diagnostic equipment and drugs in all [illegible] local government area levels, given the difficulties faced by those infected with the disease in the rural areas. In this connection, improved [illegible] should be facilitated for the people in the rural areas. Because it is believed that the more access people living with HIV/AIDS have to these facilities, the longer they are likely to live.

- Equally important, the prevention and management of HIV/AIDS in the State should be viewed as a component of good governance.

Conclusion

The empirical conclusions of this study are as follows:

- HIV/AIDS in Kwara State is a [illegible] phenomenon because [illegible] per cent of the people living with [illegible] were found there.
- The [illegible] of this [illegible] and by this implication affect the State's productivity and economic activities.

- Most of the people living with HIV/AIDS in the State did not know how they got infected. However, many of the affected women did not rule out sexual intercourse, because their husbands were either dead or critically ill.

- The most severe consequence in the study area was discrimination/stigmatization that had led to loss of jobs, divorce, rejection and exclusion from family/social activities at the household and community levels, followed by increase in spending on health care services, which affected spending on other household needs.

- Majority of the people living with HIV/AIDS in the urban areas had access to medical attention, while those in the rural areas have limited access to medical attention.

End Note

[1] The 4 Local Government Areas selected from the three Senatorial Districts of Kwara State gave us a total of 12 Local Government Areas, which included the following: Ilorin East, [illegible], Ekiti, Ilorin South, Ilorin West, Irepodun, Isin, [illegible], Oyun and Offa.

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References

[illegible] (2002) [illegible] Washington D.C.: PRB.

Nigeria [illegible] (2003) The HIV/AIDS [illegible] in Nigeria [illegible] The Fight Against AIDS [illegible] Issue No. [illegible] Piot, P. (1994) [illegible] AIDS [illegible] World Bank Research and Development [illegible] Vol. 31, No. 1. Population Reference Bureau (2002) [illegible] Washington D.C.: PRB.

Saleh, [illegible] (2003) The Socio and Macroeconomic Impact of HIV/AIDS in the Middle East and North Africa [illegible] World Bank Policy Research Working Paper No. [illegible]

[illegible] (1996) Confronting AIDS [illegible] World Bank Research and Development [illegible] Vol. 31 No. 1.

[illegible] (2006) Overview of HIV/AIDS Epidemic in Nigeria [illegible]

[illegible] and [illegible] (1993) Monitoring and Evaluating [illegible] Programmes in Developing Countries: Handbook for Policy Makers, Managers and Researchers. World Bank [illegible] Development Studies. The World Bank: Washington, D.C.

Whiteside, A. (2001) AIDS [illegible] Development Crisis. In [illegible] (eds.) [illegible] Washington D.C.: International Food Policy Research Institute.

World Bank (1993) Investing in Health: World Development Report 1993. Oxford University Press: New York.

World Bank (1999) The Macroeconomic [illegible] of AIDS [illegible] World Bank Development Brief No. [illegible]

World Bank (1997) AIDS and Development [illegible] Washington, D.C.

World Bank (1997) Confronting AIDS: Public Priorities in a Global Epidemic. New York: Oxford University Press.

World Health Organization (2003) [illegible] New York: WHO.