

Full Length Research Paper

Effect of HIV/AIDS on crop production among farmers in Oturkpo Local Government Area of Benue State, Nigeria

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The effect of HIV/AIDS on crop production in Oturkpo Local Government Area of Benue State, Nigeria was determined. Structured questionnaire was administered to fifty HIV/AIDS infected farmers at Oturkpo General Hospital and Family Support Programme Centre. The data were analyzed using descriptive statistics. Most of the victims were within the age range of 36-50 years, having a family size of less than ten persons. Majority of the respondents (64%) were married, implying that married couples were more infected than single (with only 24% infected). More than half of the respondents (56%) spent an average of ₦18,000.00, while 24% the respondents spent an average of ₦23,000.00 per annum on HIV/AIDS treatment/medication. It was also found that the victims were unable to adequately purchase farm inputs, use machinery and cater for their children's needs due to their poor state of health. These are negative consequences of HIV/AIDS attributed to decline in crop production in the study area. The study therefore identified the need for governments at all levels in the country to intensify mass mobilization campaign against HIV/AIDS, alongside the community leaders to reduce, if not eliminate the spread of the virus.

virus that kills the immune system in human body. It progressively

Key words: Effect, HIV/AIDS, crop production, land, labour, yield.

INTRODUCTION

HIV is a identified in destroys the body's ability to fight infection. After a long time, the body system which can no longer withstand any attack is exposed to sickness which is diagnosed as AIDS, meaning: Acquired Immune Deficiency Syndrome (Mbakogu, 2004).

The virus can be transmitted through the exchange of fluids, primarily semen, blood and blood products (Reeves, 1999). Babatunde (2003) explained that HIV transmission through sexual intercourse remains the most important mode of spread in Nigeria due to the high level of risky sexual behaviour amongst high risk groups such as long distance lorry drivers, migrant labourers and early onset of sexual activity, rape, ignorance amongst youth about HIV/AIDS and sexuality issues and high prevalence of sexually transmitted infections (STIS)

leading to increased susceptibility to HIV/AIDS amongst those infected.

The HIV/AIDS epidemic is fast becoming a developmental rather than a mere health problem that transcends all aspects of human life. It is an issue, which if not tackled would affect human development adversely (Okpe, 2004). Infact, HIV/AIDS is one term that evokes jittery feelings in all that hears it, since the first case was the United States of America in 1981 (Zhu et al., 1998; Kanabus and Allen, 2003). The discovery in the United States gave rise to an earlier speculation that

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HIV/AIDS was behaviour specific, and that it originated from gay men. Later identification among bisexuals, heterosexuals, babies of infected mothers and drug users led to the conclusion that HIV/AIDS was an infective process and that transmission was through blood and blood associated products (Sterry et al., 1983; Anderson et al., 1991; NIMR, 2003).

Since the first cases of AIDS were diagnosed, the disease has spread so rapidly that it became one of the greatest threats to global development and stability and a long-term humanitarian crisis of unprecedented proportion. The death and misery it has caused in the last twenty years dwarfed all of the natural disasters that have occurred in that time combined (Piot and Anderson, 2002). In Africa, it has killed more people than all the wars and conflicts put together (Nwanze, 2001).

As at the end of 2003, global estimate of HIV/AIDS patients revealed that the number of people living with HIV was 37.8 million comprising 35.7 million adults (out of which 17 million were women) and 2.1 million were children (below 15 years) (UNAIDS, 2004).

Piot and Anderson (2002) reported that Africa is the region of the world where the epidemic has hit hardest and its impact increasingly threatens the stability of the whole societies. By 2002, the number of people infected in Africa was 23.3 million and the number jumped to 25.4 million in 2003 (UNAIDS, 2004). Sub-Saharan Africa, which has just over 10% of the world population is believed to have about 25 million people living with HIV/AIDS (NIMR, 2000; UNAIDS, 2000). An estimated 3 million people in the region become newly infected with the disease and 2.2 million died of it in 2003 alone (UNAIDS, 2004).

Since the first cases of AIDS were first diagnosed in Nigeria in 1986, the disease has systematically permeated the entire Nigerian societies. Data from national sentinel survey indicated that in 1992, 1.4% of the adult population (15-49 years) had been infected. This increased to 3.8% in 1994, 4.5% in 1996 and 5.4% in 1999 (NIMR, 2000). By the end of 2003, 7.8% adults and 1% children were living with AIDS in Nigeria (UNAIDS, 2004).

HIV/AIDS retards the capacity of a household to produce food and to generate income. Lack of enough food and income leads to increase in food insecurity which translates into poverty and consequently death of agricultural work force (Mohammed, 2007). For instance, FAO (2004) established that some 7 million agricultural workers died of AIDS in 25 most affected countries since 1985 and another 16 million could die from the disease by 2020. The effect of HIV/AIDS is most severe on small holder agriculture (Haddad and Gillespie, 2001) and the cost of the epidemic is largely borne by rural communities (Topouzis and Hemrich, 1994).

HIV/AIDS could lead to de-stocking. Once capitals are sold, the recovery potential of the affected household is severely diminished. A study in Uganda found that as

soon as household saving was gone due to increased spending on HIV/AIDS affected patient, the next thing was disposal of farm assets to raise more cash (FAO, 2001). The same problem was reported by FAO (2003), when it argued that many households affected by HIV/AIDS were forced to dispose their savings and sell their food crops, capital stock and even their land to cover medical and funeral expenses. In view of this alarming problem, the research focused on the effect of HIV/AIDS, as it affects farmers and crop production in Oturkpo Local Government Area of Benue State in northern Nigeria.

HIV/AIDS had already permeated the farming population in Africa and is adversely affecting their output and income (Bollinger et al., 1999). In Nigeria, many have died from the disease, and more are still dying every day. The case is not different in Benue State, Nigeria. Many people are living with the HIV virus which, in the long run, may affect the individual, the family, the society and the State at large if proper measures are not taken. This will affect agriculture, particularly crop production since most of the Nigerian farmers make use of family labour. In this regard, there is need to determine the effect of HIV/AIDS on crop production, particularly its effect on land, labour and yield. The study also determines the role of government in reducing HIV/AIDS and improving crop production.

METHODOLOGY

Oturkpo Local Government Area is located in Benue State, Nigeria. It lies between latitude 7° 00'N and 7° 03' N and longitude 7° 30' E and 8° 10' E.

Data for the study were collected from HIV/AIDS infected farmers at the Oturkpo General Hospital and Family Support Programme Centre with the aid of structured questionnaire. Purposive sampling technique was used to select 50 HIV/AIDS infected farmers. The data were analyzed using descriptive statistics in the form of percentages and frequencies.

RESULTS AND DISCUSSION

Socio-economic characteristics of the farmers

Table 1 showed the age distribution of the respondents. Majority of the HIV/AIDS infected farmers (74%) ranged between 36-50 years old. It indicated that HIV/AIDS infection occurred mostly among people of that age limit. HIV/AIDS affects the most productive members of societies, thereby increasing the dependency ratio (Mohammed, 2007). In Africa, more and more young children and older people are being supported by decreasing proportions of economically active adults (Cohen, 1992; Bollinger and Stover, 1999). The infection was very minimal (6%) among respondents that were within the age of 51-65 years. That was probably

Table 1. Socio-economic characteristics of the farmers (n=50).

Age (years)	Frequency	Percentage
15-35	10	20
36-50	37	74
51-65	3	6
Sex		
Male	33	66
Female	17	34
Marital status		
Married	32	64
Single	12	24
Widow	4	8
Widower	2	4
Family size		
0-10	47	94
11-20	3	6
Level of education		
Adult education	5	10
Primary	8	16
Secondary	22	44
Tertiary	15	30
Major occupation		
Farming	32	64
Civil service	3	6
Business	11	22
Others	4	8

Source: Field survey (2006).

because their old age prevented them from belonging to the working class (Akinsete, 2000).

Results of the study further showed that 66% of the respondents were male while 34% were female (Table 1). It could therefore be said that men were more infected with HIV/AIDS than their female counterpart. The finding supported Guery (1998), who showed that men were the major carriers of HIV/AIDS. That could be attributed to the fact that those of them that embarked on migration, engaged in sexual misconduct several times thereby contacting the HIV virus.

Most of the respondents (64%) were married while 24% were single (Table 1). It indicated that married individuals transfer the disease to their spouses during intercourse, which made the number of married respondents higher than their single counterparts. The study also revealed that most of the respondents (94%) had a family size of less than 10 persons, while only 6% had a family size between 11-20 persons (Table 1). The low family size of

Table 2. Duration of infection, expenditure and government assistance (n=50).

Duration of infection (years)	Frequency	Percentage
1-3	37	74
4-5	10	20
6-7	0	0
No response	3	6
Expenditure (₦)		
13,000	4	8
18,000	28	56
23,000	12	24
28,000	6	12
Government assistance		
Material	13	26
Financial	28	56
No response	9	18

Source: Field survey (2006).

the majority of the respondents could be attributed to their young age, since they were just within their marital life.

On the educational level of the respondents, 10% had adult education, 16% primary education, 44% secondary education and 30% tertiary education (Table 1). The result indicated that a larger number of the population of the HIV/AIDS victims in the study area had attained secondary school education.

The study also revealed that majority of the respondents (64%) had farming as their major occupation, while the others took farming as a minor occupation, among whom were civil servants (6%), business men and women (22%) and others (8%, consisting of weavers, herbalists and craftsmen) (Table 2). It was clear that majority of the HIV/AIDS infected persons were farmers who might have contacted the disease due to ignorance and therefore engaged in sexual misconduct which led to the infection (Akinsete, 2000).

Based on the level of expenditure on treatment/medication, the result showed that 8% of the respondents spent an average of ₦13,000, 56% an average of ₦18,000, 24% an average of ₦23,000, while the remaining 12% spent an average of ₦28,000 per annum (Table 2). Such expenditure could limit the level of income available for crop production.

Most of the respondents (74%) were diagnosed of HIV/AIDS within 1-3 years, which implied that they were in early stage of infection. It further suggested that the infection was yet to have a major deteriorating effect on their health. However, 20% of the respondents were diagnosed within 4-5 years. The remaining 6% gave no

Table 3. Effect of HIV/AIDS on crop production (n=50).

Effect on:	Yes	%	No	%	No response	%
Land reduction	38	76	3	6	9	18
Labour reduction	28	56	13	26	9	18
Declining yield	36	72	5	10	9	18
Abandoned farm	17	34	24	48	9	18
Frequently absent from farm	33	66	8	16	9	18
Reduction in farm input	35	70	6	12	9	18
Reduction in savings	50	100	0	0	0	0
Reduction in income	32	64	18	36	0	0
Reduction in food consumption	20	40	40	60	0	0

Source: Field survey (2006).

Table 4. Problems of the HIV/AIDS patients (n=50).

Problems	Yes		No	
	Frequency	%	Frequency	%
Abandoned	39	78	11	22
Inability to cater for family needs	26	52	21	42

Source: Field survey (2006).

Table 5. Assistance received from the government (n=50).

Assistance	Frequency	Percentage
Material	13	26
Financial	28	56
No response	9	18

Source: Field survey (2006).

response to the question, due to unwillingness to disclose the duration to the interviewer (Table 2).

Effect of HIV/AIDS on crop production

Result of the study revealed that majority of the respondents (76%) had reduced the sizes of the land they cultivated (Table 3). That confirmed Bollinger (1999), who had similarly noticed the effect of HIV/AIDS on output and income of farmers. It also showed the effect of HIV/AIDS on labour, in which 56% of the respondents had switched from the production of more labour demanding crops such as yam and cassava to less labour demanding crops such as sorghum and vegetables. The study also revealed that 34% of the respondents had completely abandoned their farms as a result of the illness. It was also discovered that 66% of the respondents frequently absent themselves from the farm, probably due to their inability to withstand the stress of farm work. It also indicated that 70% could not afford to

purchase farm inputs such as seeds, farm equipment, fertilizer, etc., due to their ill-health.

Problems of the HIV/AIDS infected farmers

Table 4 showed that 78% of the farmers felt abandoned as a result of their infection. This signifies the problem of stigmatization and dejection faced by the HIV/AIDS patients in the society. Many of the respondents (52%) were unable to cater for their family needs. That prevented their children from attending schools. They were also unable to provide all the types of food needed by their family members.

Assistance received from government

Only 26% of the respondents benefited from the government through the provision of materials such as clothes and drugs, although, 56% benefited financially, while 18% received no assistance (Table 5). However,

the gesture indicated that the government was ready to assist the victims.

Conclusion

HIV/AIDS has a major effect on crop production, since it compels the infected farmers to reduce the sizes of their land, labour and farm inputs. This leads to low produce, reduction in savings, income and food consumption. The victims frequently absent themselves from the farm, some had even abandoned the farm land due to ill-health. They were unable to save a reasonable part of their income for re-investing into farming.

RECOMMENDATIONS

Governments at all levels should assist the HIV/AIDS victims by providing for their basic needs and taking care of their families. They should also encourage them to form little groups like cooperatives to enhance their accessibility to medication and farm inputs. Awareness campaign programmes should be intensified to reduce the spread of the disease.

REFERENCES

- Akinsete I (2000). Situational analysis report on STD/HIV/AIDS in Nigeria, Federal Ministry of Health National Action Committee on AIDS. *Journalist against AIDS (JAAIDS) J.*, 2(2): 3-4.
- Babatunde O (2003). National Policy on HIV/AIDS. Federal Government of Nigeria.
- Bollinger L, Stover J (1999). The economic impact of AIDS. The Future Group International, Glanstonbury, CT.
- Cohen D (1992). The economic impact of HIV epidemic. Issue paper no 21, UNDP. <http://www.undp.org>. Cited on 4th June, 2003.
- FAO (2001). The impact of HIV/AIDS on food security. Committee on World Food Security. 27th session, Rome, 28th May – 1st June. Food and Agriculture Organization.
- FAO (2003). FAO examines impact of HIV/AIDS in rural Africa. Food and Agriculture Organization.
- FAO (2004). The impact of HIV/AIDS on Agriculture. <http://www.fao.org/english/newsroom>. Cited on 23rd December, 2004.
- Guerny JD (1998). Paper presented on rural children living in farm systems affected by HIV/AIDS. Some issues for the right of the child on the basis of FAO HIV/AIDS studies in Africa.
- Haddad L, Gillespie S (2001). Effective food nutrition policy responses to HIV/AIDS: What we know and what we need to know. International Food Policy Research Institute (IFPRI). Washington D.C. January.
- Kanabus A, Allen S (2003). The origin of AIDS and HIV and the first cases of AIDS, a united way agency. <http://www.avert.org>. Cited on 26th January, 2005.
- Mbakogu IA (2004). An overview of the problems of AIDS. A Nigerian social worker perspective.
- Mohammed AM (2007). Impact assessment of HIV/AIDS on resource use and household livelihood in Sokoto State Nigeria. Unpublished Ph.D thesis, Department of Economics and Extension, Usmanu Danfodiyo University, Sokoto, 195 pp.
- NIMR (2000). HIV/AIDS in Nigeria. Survey of health and laboratory facilities. Technical report. Niger. Inst. Med. Res., nimr@supernet300.com. Cited on 26th July, 2004.
- Nwanze FK (2001). Addressing the impact of HIV/AIDS on Agriculture. Medium term meeting of the CGIAR, Durban South Africa, 18th-26th May, 25pp.
- Okpe C (2004). The global AIDS Strategy, public health, human rights and development.
- Piot P, Andersen (2002). AIDS: the new challenge to food security. IFPRI 2001-2002 annual report essay.
- Reeves RH (1999). The plague in man, a glossary publication, American Museum of National History.
- Sterry W, Marmor M, Konrads A (1983). Kaposi Sarcoma, aplastic pancytopenia and multiple and multiple infections in homosexuals. *The Lancet*, April, 23: 924-926.
- Topouzis D, Hamrich G (1994). The socio-economic impact of HIV/AIDS on rural families in Uganda. An emphasis on youth study paper 2, HIV and development programme, UNDP.
- UNAIDS (2004). Joint United Nations Programme on HIV/AIDS. Report the global HIV/AIDS epidemic, Geneva.
- Zhu T, Karber B, Nahantias A (1998). An African HIV-1 sequence from 1959 and implications from the origin of the epidemic. *Nature*, (391): 594.