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EFFECTS OF HIV/AIDS AMONG FARMERS IN JEMA'A AND GIWA LOCAL GOVERNMENT AREAS OF KADUNA STATE, NIGERIA

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Abstract
The main objective of this study was to analyze the effects of HIV / AIDS among men, women and youths in Jema'a and Giwa local government areas of Kaduna state, Nigeria. These areas of the study were purposively selected due to the prevalence of HIV / AIDS and the sample size (192) was randomly and proportionately selected at 10% of the population respectively. The population covers a period of 6 years (2007 2012) and was obtained from the local government general hospitals and relevant non-governmental organizations. Structured questionnaire was used and administered by trained enumerators, supervised by the researchers to collect relevant data from the respondents. Descriptive statistics was employed to analyze the data using simple percentage. Results obtained from the study reveals that hat free education be provided for the victims wards, accessibility and availability of treatment drugs, access to credit / loan, job creation and enlightenment programmes among others as means of managing their conditions. It is recommended that poverty reduction strategies or measures need to be taken seriously and given priority among rural people, direct support for HIV / AIDs infected farmers.

Keywords: *Effects of HIV-AIDS, Farmers, Crop Production and Agriculture*

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Background to the Study

Human Immunodeficiency Virus and Acquired Immune Deficiency Syndromes (HIV / AIDS) epidemic is a major threat to crop production and food security and diminishes availability of socio-economic and rural livelihood via direct loss of family labour, reduce time for farming, assets-striping, knowledge lose and void in farmers' generation (Mutangadura*et al*., 1999). Adoption of non-suitable farming practices due to reduction in labour force, cultivation of marginal and less productive lands, reduction of agricultural manpower, and loss of skilled labourers (Topouzis and Du-Guerny, 1999). Although HIV / AIDS statistics are not broken down into urban and rural areas, it is reasonable to infer from population data that the majority of the world's HIV / AIDS affected people live in rural areas. In sub-Saharan Africa, home of 70% of cases, more than two-third of the population of the 25 most affected countries lives in rural areas (Topouzis and DuGuerny, 1999). Research reports (World Bank, 1996; CTA, 1999; Adisa and Akunde, 2005) have shown that about 80% of the Nigerian population live in the rural area and are engaged mainly in agricultural production. These research findings also show that about 50% to 70% of agricultural related activities in Nigeria are performed by women and youth.

Acquired Immune Deficiency Syndrome is a chronic life threatening disease caused by the Immunodeficiency virus (HIV). The virus damages or destroys the cells of a person's immune system. Although, people do not die directly of HIV / AIDS, the disease merely weakens the body's ability to fight other diseases. When these diseases attack, they weaken the defense systems of an infected body and the body has no resources with which to fight off that attack. Haan (2004) states that this is what makes HIV / AIDS dangerous, making the infected person more vulnerable to almost any disease attack that might come along.

The first AIDS case in Nigeria was reported in 1987. However, based on the report published by the National AIDS/STDs Control Programme (NASCP) in 2001, Nigeria has been identified among African countries with prevalence rate of 1.8% in 1993, 3.8% in 1994, 4.5% in 1995 and 5.4% in 1999, representing a 20% rate (NPC, 2000; UNAIDS, 2000 and 2001). The present prediction has confirmed that HIV / AIDS already killed 7 million Nigerians and by the year 2020 16 million Nigerians could die with women and youth being the majority which could in turn affect the crop production sector in their communities (FAO, 2004). Hence according to UNAIDS executive Director, Dr. Peter Poit (FAO, 2004):

“Aids is no longer simply a public health issue: it cuts across agencies, disciplines, and national boundaries…That there is no part of society in the hardest hit areas that is not in some way touched by the epidemic”.

We are talking not only about health, but about education, agriculture, and the economy. Acquired Immunodeficiency Syndrome threatens to roll back decades of hard-won development. Indeed, it has become a full-fledge development crisis. It is against such scenarios as these, among others, that necessitated study such as this with a quest of finding solutions to the problems associated with HIV / AIDS.

Statement of Problem

Human Immunodeficiency Virus and Acquired Immune Deficiency Syndrome (HIV / AIDS) have become a universal phenomenon affecting the human race. AIDS has killed about seven million agricultural workers since 1985 in the 25 hardest-hit countries in Africa, and greater more number in other sector of the economy and could kill more before 2020 (FAO 2004). Hence, HIV / AIDS has become a threat to humanity nationally and internationally. It is affecting more and more people (men, women and youth) every day, every hour, minutes and even in seconds. Governments, Non-Governmental Organizations and corporate bodies all over the world have continued to express concern over the deadly disease, but it does not seem to have absolute medical solution since people continue to die on daily basis.

Objectives of the Study

The general objective of this study was to analyze the effects of HIV / AIDS among farmers in Jema'a and Giwa Local Government Areas of Kaduna State, Nigeria, while the specific objective is to determine factors influencing the spread of HIV / AIDS in the study areas.

Literature Review

The major factors causing the spread of HIV / AIDS epidemic in the rural and urban households of Nigeria is sexual abuse, poverty and ignorance (UNAIDS, 2003), as well as violence towards women and children and cultural norms and cultural practices (FMH, 2005; Bekele, 2007). Human Immunodeficiency Virus and Acquired Immune Deficiency Syndrome infection were mainly concentrated in homosexual communities in the United States because of the unprotected heterosexual and homosexual intercourse (UNAIDS 2003). Poverty and ignorance have been identified as the major causes of HIV / AIDS spreads in the United Kingdom, Africa, India and other Asian countries. Most countries in the sub-Saharan Africa have been identified among the poorest nations of the world. The need to meet their daily demands have compelled young women into prostitution (UNAIDS, 2003). “Help me to cure poverty and I will cure problems of HIV / AIDS says Uganda President” (World AIDS Day, 2005). According to a recent United Nation's Report, more than 70% of the nearly 1.3 billion people of the world who live in dire poverty are women and the situation is getting worse by the day (UN, 2001). It is largely for economic reasons that most women engage in prostitution and majority of these women are unable to negotiate safe sex. There are also situations where women are obliged to sell sex for food or money in order to keep themselves and their families alive. There are times when casual labour contracts have become abusive and women have been forced to have sex in order to have work (Bryceson, 2006). In this condition, it is difficult for the women to insist on safe sex. Research in Botswana and Swaziland has found that women who had recently been hungry were more likely to have sold sex and to have agreed not to use condoms than those who had had enough to eat (Weiser *et al*., 2007). Female heads have emerged in most of the impoverished households in sub-Saharan Africa (Cohen, 2001). In the face of increasing needs, these women would likely engage in transactional sexual activities either occasionally or as professional commercial sex workers, thereby promoting a vicious cycle in the spread of HIV / AIDS.

World Health Organization (1999) observed that 50% of the sexually active women in Africa engaged in commercial sex which is the commonest means of transmitting HIV / AIDS. This is observed in some parts of Nigeria where women move out of their communities and stay apart permanently as "commercial sex workers". Those involved in prostitution help in transmitting the virus from infected to uninfected partners. Women trafficked to all parts of the world are deceived with false promises of becoming engaged in white collar jobs abroad (especially in America, Italy and Belgium). These are compelled to have sex at the end with all kinds of creatures for money. Poverty and ignorance are therefore the most common factors for HIV / AIDS transmission. It has also been found that HIV / AIDS can also be transmitted through sharing of needles and syringes that result in direct exposure to the blood of an infected person and though blood transfusion, child birth by an infected mother during breast feeding (UNAIDS, 2002). Mutangadura (2005) has also reported that poverty and cross border migration due to absence of sustainable household living standard in the rural communities fall among the factors contributing to the spread of HIV / AIDS epidemic in Nigeria and Africa at large.

The rate of violence towards women and children in Nigeria is quite alarming and it remains relatively unchallenged by government, civil society and families. Sexual abuse of an increasing number of very young girls now working on streets, has been well documented demonstrating clear linkages to exposure to HIV and AIDS. On the other hand, the incidence of sexual abuse occurring within households remains a taboo subject with only anecdotal evidence and frequency of reporting in daily newspapers (Federal Ministry of Health, 2005). The percentage of sex crime victims 15 years old or below is 58% in Malaysia, 62% in United States, 58% in Chile (Santiago), and 40% in Papua New Guinea (WHO, 1997). In Botswana, over two-fifth of all the rape cases that get to the courts, involve girls who are under 16 years old (UNAIDS, 1997). The incidence of rape is now being linked to high prevalence of HIV / AID in South Africa.

Cultural norms and cultural practices within rural communities also contribute to the spread of HIV / AIDS among members of communities. The nature of African society dictates that women are not equal to men, and so men have every all rights over women. Various forms of marriage exist, for instance early marriage (young girls between 10 and 12 years) and remarriages by divorcees and widows. In a study conducted in Ethiopia by Yeshiwas (2007) it is confirmed that 75% of the respondents in the study area reported have had two or more marriages. Among the Kalangas of Zimbabwe, sex between a father in-law and daughter in-law is not only permissible, but compulsory. It is an initiation act never to be ignored and is meant to welcome the new bride into the household (Egbemode, 1999). These practices and those that make the African widow a veritable specimen of suffering have aided the spread of AIDS. In some areas in Igbo land, a widow is supposed to mourn her late husband for one year after which she is taken to the river for the "Aja-ani" ritual during which "Aja-ani" priest 'rapes' her. In other societies, the widow is raped by as many as ten men, to cleanse and make her available for other men (Egbemode, 1998). There exists also the phenomenon of multiple sex partners in Africa. The practice of multiple sex partners commonly prevails in urban as well as in rural areas. In the same study, Yeshiwas (2007) survey result showed that about 70%

have unprotected sex in extra-marital sex affairs. In a study in Zimbabwe, it was noted that majority of the HIV-positive women were actually infected by their spouses (UNAIDS, 2003).

The African society is a polygamous one. Fasugba (1999) argued that if a prostitute spreads AIDS fast in a society because she shares her sex partners with other women at the same time, then a polygamous wife too, who is compelled to share her sex partner with other wives at the same time is equally exposed to the spread of HIV / AIDS. Both the polygamist and a patron of prostitutes have one thing in common, both men and women have more than one sex partner at the same time. The spread of AIDS is further heightened by the practice in which a man has several wives and keeps them in different homes. Buckley (1997) observed that the practice of wife or widow inheritance is one reason Kenya's Busia district is reeling or hit from AIDS. The infection rate in its towns runs to about 30%, while the rate in the villages is between 14 to 16%. Most widows possess little education, have no property and in fact, do not hold jobs and therefore lack the requisite skills to find life easily. “They must therefore choose to be inherited and be infected and have food or starve”. In addition, marketing related risks (alcohol consumption) is another factor that fuels the spread of HIV / AIDS. Marketing involves much movement of sellers and buyers both into and out of rural areas, on journeys that may be completed within a day or two. Weekly rural markets in Africa are major social gatherings drawing people together, to buy and sell consumable commodities. Market days are often occasions for recreation, even if there was no business to conduct, they are acknowledged as an opportunity to meet secret lovers. Drinking on market days is common and a long established tradition and often leads to casual unprotected sex (Yeshiwas, 2007). In summary, in Nigeria, cultural norms and cultural practices, violence towards women and children, sexual abuse, poverty, ignorance and marketing related risks activities play major roles in the frequent spread of HIV / AIDS.

Empirical Findings on the Effects of HIV/AIDS

Loss of Quality in Health Services

Onuh (2005) stressed that HIV / AIDS will dominate our hospitals to the detriment of other areas of concern. Daudu (2005) agreed with Onuh, stating that accessibility of health care may likely become less because HIV / AIDS related illnesses will dominate the hospitals and home care system. The government may divert most of its budgeting allocations to the fight against HIV / AIDS leaving other areas of concern within the health sector or other sectors.

Most developing countries are faced with serious shortage of health care centres and facilities (Yeshiwas, 2007). The HIV / AIDS pandemic aggravates this situation by increasing the number of health services seekers and the demand for hospitals by AIDS patients. Since the majority of the population in developing countries comes from lower class bracket who cannot afford to pay for medical services in private hospitals, government health care centre will be crowded by service seekers. This in turn adversely affects the government expenditure on health sector leading to shortage of hospitals beds, medicines, medical equipment and other important supplies. A survey conducted by Yeshiwas (2007) in Ethiopia confirms that in some hospitals and health care centres, 20% of the beds are occupied by AIDS patients. The survey result also shows that the growing number of AIDS patients in the sampled areas leads to the occupation of significant number of hospital beds by AIDS

patients and shortage of medical facilities. In addition, a generalized HIV / AIDS epidemic outstretches the used of hospital facilities in farming communities. This is because about 80% of the hospital beds in the rural communities of Nigeria are already occupied with people suffering from HIV / AIDS (WHO, 1993).

Consequently, there is the increase in demand for medical care / facilities by the farmers in the area. This makes it difficult for women and youth suffering from other diseases to get good medical attention. The 2001 Swaziland Human Development Report estimated that people living with HIV / AIDS occupied half the beds in some health centres in the country. In Zimbabwe, 50% of all in-patients in wards studied were infected with HIV / AIDS and without major intervention the problem will worsen (UNAIDS, 2002). Also, health workers suffer or are being affected by the epidemic through the various means of HIV / AIDS transmission. The assistance or medical care provided by such health workers to farmers affected with HIV / AIDS may no longer be available; thus, mortality rate of farmers resulting from HIV / AIDS infection will be high (WHO, 1993). While HIV / AIDS is causing an increased demand for health services, large numbers of healthcare professionals are being directly affected by the epidemic. Botswana (http: / / www.avert.org / aids-botswana.htm), for example, lost 17% of its healthcare workforce due to HIV / AIDS between 1999 and 2005. A study in one region of Zambia (http: / / www.avert.org / aids-zambia.htm) found that 40% midwives were HIV / AIDS positive (UNAIDS, 2006). Healthcare workers are already scarce in most African countries. Excessive workload, poor pay and migration to richer countries are among the factors contributing to this shortage.

Although the recent increase in the provision of antiretroviral drugs (which significantly delay the progression of HIV / AIDS) has brought hope to many in Africa, it has also put increased strain on healthcare workers. Hence, as thousands of health workers, civil servants, agricultural extension workers, university professors, farmers and many others who could make productive contributions to the communal, national and regional development succumb to the disease, the HIV / AIDS epidemic will continue to present a major public health, economic, social and political challenge and a major threat to national peace and stability (World Bank, 2002; UNIAD, 2001).

Effects of HIV/AIDS on Farmers

HIV / AIDS is no longer a health issue only but a developmental crisis, in which people are affected or infected directly or indirectly. Survey conducted to determine the socio-economic characteristics of HIV / AIDS infected people in the United Nations reveals that the large population of infected people were pre-occupied either by agricultural activities or by crop production or may be working in agricultural commercial banking sectors meant to disburse agricultural loans to farmers (WHO, 1999). The effect of HIV / AIDS on crop production and livelihood considered to be very severe in Kaduna State especially in the rural areas. Because of the reported prevalence rate of HIV / AIDS in the State, which 'mysteriously' declined from 15.5% in 1999 to 5.6% in 2001 (NACA, 2001), it affects mostly the productive age groups, output at both household and the State in general. The immediate impact on the household would include a drop in household income, presence of older household members in the labour market, early entry of children into labour market and increase withdrawal of

children from school among others (UNAIDS, 2004).

Loss of Agricultural Output

The responses indicated that a significant proportion of households affected by HIV / AIDS have reduced hours of school for family members especially children. According to La'ah (2003) the responses from the affected household indicate that hours for schooling could be reduced by over 45%. This is usually as a result of skipping of days or going to school late or both. In addition, that nearly 90% have had to borrow or sell personal possessions in order to cater for relations, while 55% have to stop working because of HIV / AIDS sickness. Although, care related expenses push many families deeper into poverty, the effect of HIV / AIDS may be enormous after dead than during sickness. Some households may spend more than 50% of total expenditure on funerals (Laah, 2003). Since outbreak of HIV / AIDS, it has affected 25 million people in the rural communities whose major activity is agriculture (Laketch, 2002). The sick condition of productive members of the household especially women leads to a double loss. The productive individual works less and there is a major demand for caring for him / her. Studies indicate that households with sick individuals spend far less time on crop production activities than others, leading to neglect of fields, decrease in cultivation, switching over to less labour demanding crops, and the like (Laketch, 2002). Women are generally responsible for crop production and other tasks such as clearing of farm lands and doing household chores. The death of a wife or a family member due to AIDS can make it difficult for other members of the household to carry out these tasks in addition to caring for the children and also leads to reduction in savings and investment. The stock of food grain can be depleted, livestock sold to provide food for mourners as well as to cover other expenses. Such loss of production assets makes future survival very difficult.

According to Spore No. 69, "There is no great surprise that studies of the effects of HIV / AIDS reported a decline in crop yield on small farms especially in the last ten years." Illness and death directly affect the availability of labour and those who remained healthy are pre-occupied with nursing those affected or undertaking additional task that were previously done by those affected. As a result, time consuming work like weeding, mulching, pruning and harvesting is either not carried out properly or left undone (Spore No. 69). As a result, families affected by HIV / AIDS have to survive with less labour, reduce output and consequently earn lower income from the sales of farm produce.

Loss of Labour Force and Education

The HIV / AIDS menace affects the society or a community in diverse ways, the first being reduced productivity (UNAIDS, 2001). In this aspect it robs most communities of able bodied adults that can contribute meaningfully to its development. This results in slowing down all developmental sectors of the community. Haan (2004) reported that some countries may lose up to a quarter of their work force by the year 2020 as more employees become infected. Already mining companies and industries are feeling the effects of loss in productivity. With such a diminished workforce, it will become very difficult for affected nations to attract industrial and economic investments from other countries, and without such investments there will be fewer resources with which to fight the disease. It therefore, becomes a self-defeating vicious cycle of despair. The work force and work place of Africa is now badly

affected by the HIV / AIDS scourge.

Methodology

Random sampling technique was employed to select 10% of the total population of HIV / AIDS infected men, women and youth in the study area to give a sample size of 192. Primary and secondary data were utilized in the study and the data were collected through the use of structured questionnaire. The data were analyzed using descriptive statistics.

Sampling Technique and Sample Size

Purposive sampling procedure was adopted because of the prevalence of HIV / AIDS in the study areas. The population of the HIV / AIDS infected rural men, women and youth were sought from the Local Government General Hospitals, alongside with Non-governmental organizations that relate and keep records of such people. Ten percent (10%) of the total population of HIV / AIDS infected men, women and youth in the study areas was randomly selected from the the general hospitals.

Table 1:

Location	Sampling size	Population Sample (10%)
Men	220	22
Women	595	60
Youth	480	48
Jema'a Total	1,295	130
Men	180	18
Women	236	24
Youth	210	21
Giwa Total	626	62
Grand Total	1,921	192

Result and Discussion

Table 2: Distribution of Responses According to Effects of HIV/AIDS on Farmers in Giwa and Jema'a Local Government Areas of Kaduna State

LGA	Respondents	Effect indicators	Agree		Disagree		Grand total	
			Freq.	%	Freq.	%	Freq.	%
GIWA	Female	Income	4	80.00	1	20.00	5	2.60
		level of living	4	66.67	2	33.33	6	3.13
		Output	4	66.67	2	33.33	6	3.13
	Female total		12	70.59	5	29.41	17	8.85
	Male	Income	3	100.00	0	0.00	3	1.56
		level of living	3	100.00	0	0.00	3	1.56
		Output	3	100.00	0	0.00	3	1.56
	Male Total		9	100.00	0	0.00	9	4.69
	Youth	Income	32	82.05	7	17.95	39	20.31
		level of living	35	77.78	10	22.22	45	23.44
		Output	25	67.57	12	32.43	37	19.27
	Youth Total		92	76.03	29	23.97	121	63.02
	Giwa Total		113	76.87	34	23.13	147	76.56

LGA	Respondents	Effect Indicators	Agree		Disagree		Grand total	
			Freq.	%	Freq.	%	Freq.	%
Jema'a	Female	Income	9	100.00	0	0.00	9	4.69
		level of living	12	100.00	0	0	12	6.25
		Output	14	100.00	0	0	14	7.29
	Female total		35	100.00	0	0	35	18.23
	Male	Income	9	69.23	4	30.77	13	6.77
		level of living	10	76.92	3	23.08	13	6.77
		Output	12	80.00	3	20.00	15	7.81
	Male Total		31	75.61	10	24.39	41	21.35
	Youth	Income	32	94.12	2	5.88	34	17.71
		level of living	33	94.29	2	5.71	35	18.25
		Output	30	90.91	3	9.09	33	17.19
	Youth Total		95	93.14	7	6.86	102	53.13
	Jema'a Total		161	90.45	17	9.55	178	92.71
	Grand Total		274	84.31	51	15.09	325	169.27

Findings on Table 2 shows that 76.9% of the respondents in Giwa (male, female and youth) agreed that income, level of living and crops output are affected by HIV / AIDS, while 23.1% disagreed. Giwa females formed 8.9% of the total sample. Out of this, 70.6% agree the HIV / AIDS affects their income, level of living and crops output, while 29.4% disagree. Giwa males form 4.7% of total sample. All (100%) of them agreed that HIV / AIDS affects their income, level of living and crops output. Youth form the majority of the respondents in Giwa with 63%. Out of this, 76% agree that HIV / AIDS affects their income, level of living and crops output while only 24% did not agree. In Jema'a, 90.5% of the respondents agreed that income, level of living and crops output were affected by HIV / AIDS, while 9.6% disagreed. Jema'a female form 18.2% of the total sample. Out of this all (100%) agreed that HIV / AIDS affect their income, level of living and crops output. Jema'amales form 21.4% of the total sample, 75.6% of them agreed that HIV / AIDS affects their income, level of living and crops output while 24.4% disagreed. Youth from Jema'a form 53.1% of the total sample. 93.1% of them agreed that HIV / AIDS affects their income, level of living and crops output, while 6.9% disagreed (Table 2). This study agrees with the study of Mather *et al.* (2003) which shows that cash, livestock, assets, total and per adult equivalent income were lower for households experiencing death in Mozambique as a result of HIV / AIDS infection. There is also sale of livestock such as cattle, goats and donkeys to cover medical and funeral expenses (Rugalema, 1999; Bukola*et al.*, 2005).

Conclusion

Based on the findings of this study, it can be concluded that poverty and self-satisfaction are factors responsible for the spread of HIV / AIDS in the study area. In addition, the study posit that HIV / AIDs has significant economic effects on crops output and income of the respondents in the study area implying that there might be a diverted attention, time and money to nursing the HIV / AIDs patients and burial or funeral services instead of on crop production. This in great measures affects crops output and income of the HIV / AIDs infected farmers.

Recommendations

Based on the conclusion of this study, the following recommendations are made possibly as coping strategies of HIV / AIDS infected farmers in the study areas and probably other rural communities:

1. Arising from the influence of poverty in the spread of HIV / AIDS in the study area, it is recommended that poverty reduction strategies or measures need to be taken seriously and given priority among rural people. HIV / AIDS flourishes in an impoverished environment.
2. Youth were found to be adventurous group of people and may not take pieces of advice seriously especially in the area of HIV / AIDS spread. Therefore, enlightenment campaign on abstinence should be intensified and use of condoms if abstinence is not possible should be the best alternative for this active stubborn group.
3. Direct support for HIV / AIDS infected farmers such as credit facilities and inputs need to be provided promptly at highly subsidized rates and should be directly delivered to the farmers in good time by the governmental agencies at any of their meeting points so as to cushion the effects of HIV / AIDS on their crops output and income.

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