

Relationship Between HIV/AIDS and Poverty: A Case Study of Two Cities in Abia State, Nigeria

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Abstract: A study was conducted between March and September 2007 to determine the relationship between HIV/AIDS and poverty in two urban cities in Abia State, Nigeria. A total of 382 respondents, made up of 235 (61.5%) HIV/AIDS positive patients, 119 (31.2%) HIV-negatives, while 28 (7.3%) were of unknown status. Using educational level, employment status and salary structure, it was found that the disease in the state was not caused by poverty. It was therefore concluded that drastic measures besides poverty alleviation, should be adopted if emergence of new infections in the state must be checked.

Key words: Aba, education, employment, HIV/AIDS, Nigeria, poverty, sex, umuahia

INTRODUCTION

More than twenty years after AIDS was first diagnosed, it has become the most devastating disease yet faced by humanity, striking, on average, 14,000 men, women and children daily, and is considered to be the leading cause of death in sub-Saharan Africa and the world's fourth biggest killer. AIDS poses a greater threat to development prospects in poor countries than any other disease with the impact said to be hardest among the poor, who are the weakest social support of any group with no economic strength to cushion the impact of the disease (UNAIDS, 2002).

The spread of HIV/AIDS has been attributed to poverty. The ingredients of poverty which encourage the spread of the infection include undernourishment; lack of clean water, sanitation and hygienic living conditions. Others include general low levels of health, compromised immune systems, high incidence of other infections, including genital infections, and exposure to diseases such as tuberculosis and malaria; inadequate public health services; illiteracy and ignorance; pressures encouraging high-risk behaviour, from labour migration to alcohol abuse and gender violence; an inadequate leadership response to either HIV/AIDS or the problems of the poor; and finally, lack of confidence or hope for the future (Epstein, 2002).

By the end of 2010, about 40 million children worldwide would have been orphaned by the pandemic.

The death of young working adults and the increase in widows, widowers and orphans will increase dependency as well as poverty. Increased deaths, fewer births and reduced fertility will indeed slow or reverse population growth. Also, with life expectancy already reported to have fallen by 10 to 15 years in some countries, Sub-Saharan Africa will have 71 million fewer people by the end of 2010 than it would have had without AIDS, thus subjecting the economies, social structures and political stability of entire societies to very serious threat (United Nations General Assembly, 2002).

In Nigeria, an estimated 3.1% of adults between ages 15-49 are living with HIV and AIDS (UNAIDS, 2008). Although the HIV prevalence is much lower in Nigeria than in other African countries such as South Africa and Zambia, the size of Nigeria's population, which is around 138 million meant that by the end of 2007, there were an estimated 2,600,000 people infected with HIV with approximately 170,000 deaths (UNAIDS, 2008). With this large number of recorded deaths attributed to AIDS alone, Nigeria's life expectancy has declined significantly prompting the WHO (2008) to report that the average life expectancy in the country which was 53.8 years for women and 52.6 years for men in 1991 has dropped respectively to 46 and 47 in 2007.

Reports have shown that HIV/AIDS contribute to the worsening poverty situation at household levels in many countries in Africa. For instance, a November 2001 Government of Nigeria sentinel survey reported that

Nigeria had 5.8% HIV prevalence rate, prompting the United Nations, based on the number of HIV infections in 1999 alone, to rank Nigeria as the fourth-worst affected country. However, with poor economic performance, corruption and the citizen's inability to pay for treatment once infected, the number of HIV/AIDS in Nigeria is expected to increase in future (USAID, 1999, 2000).

There is considerable variation in the urban/rural prevalence of HIV/AIDS among the states in Nigeria. In some states, urban prevalence figures are higher than that of the rural, though the reverse is the case in others. For instance, in Abia State, the recorded rural prevalence of infection is 7.7% while that of the urban is 2.2%. The implication of this for the state is that there is a high reservoir of infection in the rural than urban areas. There is however little or no treatment and care services within the rural setting, prompting majority of the patients who can afford it, to travel to the urban centers of Aba and Umuahia for access to care and treatment services (Federal Ministry of Health, 2005).

Whereas poverty in Nigeria is decades older than the HIV/AIDS epidemic, the rise of the latter has bestowed a bi-causal relationship that is mutually reinforcing, thus justifying the need for a study to determine how the scourge has contributed to aggravating the poverty situation in the country and to draw possible recommendations on measures that could counteract the impact of the causality between HIV/AIDS and poverty in Nigeria.

MATERIALS AND METHODS

The study was carried out between March and September 2007 in two urban cities, comprising of Aba and Umuahia, in Abia State, Nigeria.

Study site: Abia State is located in the South-Eastern geopolitical zone of Nigeria. It is situated in the rain forest zone of the country between longitudes 7° and 8.5° East and latitudes 4.5° and 6° North. The population of the state according to the 2006 census is about 2.8 million (Federal Government of Nigeria, 2007). It has a mean relative humidity of 80% and mean temperature of 26-29.5°C.

Aba, one of the study cities, has a population of about 932,411 (Federal Government of Nigeria, 2007). It is the commercial nerve center of Abia State, with three main international markets, namely, Ariaria Market, New Market/Ekeoha Shopping Center and Cemetery Market. In addition to these markets, Aba also houses six multinational industries comprising of Coca Cola, 7-up, Nigeria Breweries, PZ, International Equitable Associations and Unilever. Apart from these main commercial centers, the entire city of Aba is filled with many small markets and industries. As a result of its high

level of commercial activities, the city provides a veritable ground for HIV-related high risk sexual behaviours as some girls from Abia Polytechnic located in the city; those from the secondary schools as well as free sex hawkers in the city are readily available for men, both the high and the low.

Umuahia, the other city studied, is the capital of Abia State, with a population of about 359,230 (Federal Government of Nigeria, 2007). It houses the Abia State Government House, the ministries and parastatals belonging to the Abia State Government and Federal Government of Nigeria in addition to the offices of development partners involving multilateral and bilateral organizations. It has a University of Agriculture, Federal Research Institutes, many secondary schools, big hospitals brewing and industries. Invariably, many government contractors, businessmen and women as well as traders, transporters and sex workers live within or around the Umuahia city, providing a setting for high risk sexual activities as reported by Anyanwu *et al.* (1996).

Sample population: The study was carried out between March and September 2007. The sample population consisted of people living with HIV/AIDS in two support groups in Aba and Umuahia. The cases and first control group comprised of these two support groups of people living with HIV/AIDS (PLWHA) while the second group consisted of those who are HIV negative or people of unknown HIV status, chosen at random, from the two research cities. Each of the patients was receiving psychosocial support from Presbyterian Community Services and Development, an Abia State home-based care project at the time of the study. Support groups of people living with HIV/AIDS were chosen instead of a hospital because most HIV/AIDS patients were taken care of at home in the two selected study cities and they join the support group, Presbyterian Community Services and Development for psychosocial support. All cases and control were within the age range of 16-59. The purpose of the study was explained to them (and the Support Group coordinators) and their informed consents obtained prior to the study as recommended by the World Health Organization (TDR, 2002).

Sampling procedure: The study group comprised of all HIV/AIDS patients, both employed and unemployed who attended support group meeting on the days of interview while the control group included HIV negative respondents and people of unknown HIV status, gainfully employed who also attended the same support group meeting on the same days of interview. Meeting/interview days were Tuesdays of every week. Interviews were held once a month throughout the six months duration of the study. Questionnaires were administered to both cases by trained interviewers. The questionnaire used in the study was structured as shown in Appendix 1.

Table 1: Sex distribution of respondents in an HIV study in Abia State, Nigeria, (Figures in parenthesis represent percentages)

Sex	Frequency	No positive	No negative	Unknown status
Male	158 (41.4)	85 (22.3)	63 (16.5)	10 (2.6)
Female	224 (58.6)	150 (39.2)	56 (14.7)	18 (4.7)
Total	382 (100)	235 (61.5)	119 (31.2)	28 (7.3)

Table 2: Education level of respondents in an HIV study in Abia State, Nigeria (Figures in parenthesis represent percentages)

Education level	Frequency	No positive	No negative	Unknown status
None	1 (0.3)	1 (0.3)	0 (0.0)	0 (0.0)
Primary	58 (15.2)	32 (8.4)	18 (4.7)	8 (2.1)
Secondary	170 (44.5)	93 (24.3)	67 (17.5)	10 (2.6)
Tertiary	136 (35.6)	102 (26.7)	24 (6.3)	10 (2.6)
Postgraduate	17 (4.5)	7 (1.8)	10 (2.6)	0 (0.0)
Total	382 (100)	235 (61.5)	119 (31.2)	28 (7.3)

Table 3: Employment status of respondents in a HIV case study in Abia State, Nigeria, (Figures in parenthesis represent percentages)

Employment status	Frequency	No positive	No negative	Unknown status
Working now	308 (80.6)	200 (52.4)	98 (25.7)	10 (2.6)
Worked before	56 (14.7)	30 (7.9)	16 (4.2)	10 (2.6)
Seeking 1 st work ever	13 (3.4)	3 (0.8)	4 (1.0)	6 (1.6)
House wives	5 (1.3)	2 (0.5)	1 (0.3)	2 (0.5)
Total	382 (100)	235 (61.5)	119 (31.2)	28 (7.3)

Table 4: Monthly income of respondents in an HIV study in Abia State, Nigeria (Figures in parenthesis represent percentages)

Monthly income/month	Frequency	No positive	No negative	Unknown status (in Naira (N))
< 1000	41 (10.7)	23 (6.0)	10 (2.6)	8 (2.1)
1000 – 5000	79 (20.7)	45 (11.8)	30 (7.9)	4 (1)
6000 – 10000	99 (25.9)	54 (14.1)	34 (8.9)	11 (2.9)
11000 – 15000	72 (18.8)	58 (15.2)	14 (3.7)	0 (0.0)
16000 – 20000	38 (9.5)	23 (6.0)	12 (3.1)	3 (0.8)
21000 – 30000	33 (8.6)	22 (5.8)	9 (2.4)	2 (0.5)
31000 – 40000	13 (3.4)	8 (2.1)	5 (1.3)	0 (0.0)
41000 – 50000	1 (0.3)	0 (0.0)	1 (0.3)	0 (0.0)
51000 and above	6 (1.6)	2 (0.5)	4 (1.0)	0 (0.0)
Total	382 (100)	235 (61.5)	119 (31.2)	28 (7.3)

RESULTS AND DISCUSSION

The group sampled for the study included 158 (41.4%) males and 224 (58.6%) females. The HIV status of both genders as revealed in Table 1 shows that a total of 85 (22.3%) men were HIV positive, 63 (16.5%) HIV negative and 10 (2.6%) of unknown status while a total of 150 (39.3%) females were positive, 56 (14.7%) negative and 18 (4.7%) of unknown status. 235 (61.5%) respondents were HIV positive, 119 (31.2%) were HIV negative, while 28 (7.3%) were of unknown HIV status.

Table 2 represents the educational level of the respondents. As revealed by the Table, respondents with tertiary education produced the highest number of HIV positive cases with 102 (26.7%). The only respondent with no form of formal education was also HIV positive, while 7 (1.8%) out of the 17 (4.5%) respondents with postgraduate education were positive too.

Table 3 represents the employment status of respondents. The Table reveals that HIV positive respondents belong to the group with the highest employment figure of 200 (52.4%). Also they represent the highest group that was once gainfully employed but are not working as at the time of this study with 30 (7.9%). The group with unknown HIV status make up the highest number of respondents seeking first ever employment with 6(1.6%). Both the HIV positive

respondents and those with unknown status constitute the greater number of the housewives with 2(0.5) each.

Table 4 revealed the monthly income of the respondents. As could be observed from the result, HIV positive cases 23 (6.0%) represent respondents with the least monthly income of less than N1, 000.00 which is equivalent to \$6.6 per month, while the respondents who were HIV negative 4 (1%) fell into group of high income earners of N51, 000. 00 and above or \$340 per month. Incidentally, only 2 (0.5%) of HIV positive respondents were members of this high-income group.

The ratio of male / female HIV infected individuals in Abia State, exhibited the usual gender pattern typical of HIV observed elsewhere (UNFPA, 2003), with more women, 150 (39.3%), infected with the virus than men 85 (22.3%), as revealed in Table 1. The Table also revealed that more women 18 (4.7%) were ignorant of their HIV status than men 10 (2.6%). This latter group may have decided to remain ignorant of their HIV status, inspite of calls for this knowledge as a result of fear of a possible declaration of a positive state to the infection should they submit themselves for screening.

As revealed in Table 2, the only respondent in the group studied with no formal education was observed to belong to the HIV positive class. There was also a steady increase in the prevalence of the infection observed with those with only primary school education, 32 (8.4%),

constituting the respondents with the least infection rate, followed by those with only secondary school education, 93 (24.3%), while those with tertiary education, 102 (26.7%), made up the group with the highest positive cases. There was a decline, 7 (1.8%), observed among those with postgraduate education.

Ignorance and illiteracy (Lloyd, 2001) may be adduced as the reasons for the prevalence of the infection among the first two less educated groups while the third group is made up of people considered to be in the prime of their reproductive and productive years (Boyseen, 2003). The people in the latter group may have indulged in risky behaviours while on campus and this result confirms earlier findings that HIV/AIDS in Abia State, like in other places in the world, affects younger people in the prime of their life (UNAIDS, 2006).

HIV/AIDS respondents represent the highest group gainfully employed as at the time of this study with 200 (52.4%), as well as those no longer engaged in the services of any establishment with 30 (7.9%), as revealed in Table 3. The high percentage of HIV positive cases in Abia State involving those who were gainfully employed may have been as a result of compliance by employers to government directives, not to discriminate on the basis of HIV status. However, those who lost their jobs may have done so due to long absence from work as a result of HIV-related illnesses.

Despite being the highest group gainfully employed, HIV/AIDS respondents still constituted the highest category of low-income earners with 23 (6.0%) earning less than N1000.00, equivalent of \$6.6 per month, in Abia State. The same category of respondents also involves the group of high income earners with 8 (2.1%), receiving between N31000 - N40000, equivalent to \$206 - \$266 per month, while 2 (0.5%), were among the highest earners, receiving N51000, and above equivalent to \$340 per month, as shown in Table 4. From this result it could be deduced that, though prevalent in Abia State, HIV/AIDS has not impoverished its patients in the state. This result agrees with that of Akankunda (2009) who conducted a study in Uganda and reported that, though the scourge is at an epidemic level in the East African country, the poor were not made poorer by the disease.

Several reasons could be given for this improved life expectancy among HIV/AIDS patients in Abia State; the most important being the constant availability and supply of anti-retroviral drugs / counseling by the Abia State Government and other stake holders to those affected, which Amadi *et al.* (2009) identified as considerably improving the work productivity of HIV/AIDS patients in the state.

Our finding in this study in Abia State has illustrated clearly that HIV/AIDS is not a disease directly associated with poverty and a lack of development. The finding further supports the claim of Gould (2009) who asserted

that the anomalous relationships between HIV/AIDS and poverty in Sub-Saharan Africa illustrate firstly, that the disease is not directly caused by extreme poverty, or by lack of development in the region, as are most common communicable epidemic diseases, such as malaria or measles. Secondly, that it is not a disease that can be or will be eradicated or even greatly alleviated in its severity by development, as traditionally conceived in terms of rising incomes or better health services and public health.

People living with HIV/AIDS are part and parcel of the society. They are just victims of circumstances but notwithstanding, what an HIV-negative person can do, they can also do even better, because they have vision, mission and are full of hope for a greater future. Since the greatest cause of poverty in Africa is bad leadership (Dennis, 2010), the issue of poverty in Abia State must be viewed as being caused by other factors such as bad political leadership and not by HIV / AIDS as this study conducted in the state has shown. The leaders of the state and other states in Nigeria, must therefore as a matter of urgency, operate a system of government that is people-oriented, and embark on projects aimed at alleviating the high poverty index in the state. Finally, the current effort being made by the authorities of the state and other stake holders to check the spread of the disease through adequate provision of anti-retroviral drugs, enlightenment campaigns and economic empowerment must be sustained.

Appendix 1

Questionnaire for the research on the relationship between hiv/aids and poverty: A case study of two cities in Abia State, Nigeria

Dear Respondent: I bring you greetings in the name of our Lord, Jesus. Below is a questionnaire to determine the relationship between HIV/AIDS and poverty in Abia State, Nigeria. The usefulness of the research is to contribute to the knowledge of the relationship between HIV/AIDS and poverty in Abia State. I appeal to you to give an honest and accurate answer to each of the questions. No answer to each of the questions shall be linked to you nor can any of them be used against you. As you can see, there is no column for your name or address.

- | | | |
|---|---|--|
| 1 | Sex: | <ul style="list-style-type: none"> • Male • Female |
| 2 | Age | years |
| 3 | Marital Status: | <ul style="list-style-type: none"> • Never married • Married • Separated • Divorced • Widowed |
| 4 | In respect of the last 12 months which of these applies to you? | <ul style="list-style-type: none"> • Working now (Including unpaid, farm or business) • Worked before but not now • Seeking first work ever • Student / Dependent / Retired • House worker / House wife |
| 5 | What is your HIV status? | <ul style="list-style-type: none"> • Positive • Negative • Unknown |
| 6 | Are you on anti-retroviral therapy (ART)? | <ul style="list-style-type: none"> • Yes • No • HIV negative therefore not necessary |

- 7 If your answer to no. 6 is yes, how long have you been on ART? • 6-7 months
• 8-9 months
• 10-11 months
• 12 months
- 8a Which of the conditions do you have now (if you are not on ART) OR did you have before you started taking ART? (You can tick more than one)
• Weight loss
• Fever
• Diarrhoea
• Swelling at the groin, armpit, neck etc.
• General weakness
• Rashes
• White coating in the mouth
• Cough
• Others (Please specify).....
- 8b Which of the conditions do you have after starting ART (You can tick more than one)
• Weight loss
• Fever
• Diarrhoea
• Swelling at the groin, armpit, neck etc.
• General weakness of the body most of the times; · Rashes
• White coating in the mouth;
• Cough
• Others (Please specify)
- 9 How many days within the past one-month did you not complete your task due to illness? days
- 10 How many days within the past one-month were you in bed most of the time due to illness? days
- 11 How many days within the past one-month were you absent from work or school due to illness? days
- 12 How many times within the past one year have you been reprimanded or queried at job due to absenteeism? days

Note:

- Only people who are between the ages of 15-59 years are eligible to fill the questionnaire. Please if you are below 15 years or above 60 years of age, you do not need to participate in this research
- Please tick in the box provided which category of options best fits you
- If you are HIV positive please answer question 6. If you are negative please go to questions 9 - 13
- Please use the calendar provided to help you answer questions 9-12

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