#### ECONOMIC PROBLEMS OF YOUTH WITH HIV/AIDS IN IBADAN, NIGERIA

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## ABSTRACT

*Background:* HIV/AIDS has emerged as one of the major global public health problems and it also has substantial economic impact on individuals and their families.

*Objectives:* This paper describes the economic problems of youth with HIV in Ibadan, Nigeria.

*Methods:* A cross-sectional survey of PLWHA attending two HIV/AIDS support groups in Ibadan and the University College Hospital (UCH) antiretroviral (ARV) clinic was carried out. Information was obtained on socio-demographic characteristics and economic problems.

Results: One hundred and seventy youth aged 18-35 years were interviewed; 140 (82.4%) were female. One hundred and eight (63.5%) respondents were currently employed, 57 (52.8%) of whom were traders. Reasons for unemployment were that respondent's business capital had been used up to pay for healthcare (38.3%) and ill health (23.4%); while 38.3% were currently schooling. Common economic problems experienced by the respondents were significant increase in healthcare expenses (38.8%) and loss of employment (22.0%). Coping strategies employed to mitigate these problems included depletion of savings 61.1%, borrowing (18.8%) and sale of property (9.4%). Loss of employment was significantly higher among respondents who were symptomatic prior to diagnosis and among those who had a health complaint at the time of the study. Female respondents were also more likely to have lost their jobs compared to male.

*Conclusion:* The study highlights the economic impact HIV as a chronic disease has on those infected. Care and support programs thus need to have a strong economic component in order to adequately meet the needs of PLWHA.

Key Words: Economic problems, HIV/AIDS, Youth

#### **INTRODUCTION**

HIV has remained a global public health problem. At the end of 2010, more than 40 million people were said to be living with HIV/AIDS globally, with most of them living in developing countries.<sup>1</sup> The 2008 National HIV Sentinel Survey in Nigeria showed that the national HIV prevalence for women attending antenatal clinics was 4.6% and the highest prevalence was recorded among youths aged 25-29 years.<sup>2</sup> The disease affects those in the most productive age group and once the diagnosis is made, they require antiretroviral therapy, treatment of other infections and nursing care. People Living with HIV/AIDS (PLWHA) often experience significant changes in all aspects of their lives. The health problems of HIVinfection thus become financial problems first for the individual with HIV, then for his/her family and eventually for the larger society. Economic problems faced by PLWHA include loss of income as a result of job loss or inability to work because of the illness, and increased medical expenses from payments for drugs and other remedies.<sup>3-7</sup> Studies have further reported that PLWHA employ various strategies to cope with the economic problems associated with the disease.<sup>3,8-11</sup>

Some coping strategies employed by individuals and households with HIV include utilization of savings, reduction in consumption expenditure, sale of assets, borrowing, obtaining help from parents, extended family and other community actors and withdrawal of children from school.<sup>3,8-11</sup> Although some PLWHA are able to cope with their economic challenges, it has been reported that many more struggle rather than cope with the disease.<sup>12</sup> This has immense implications on their lives after diagnosis.

Many of the studies conducted among PLWHA focus on problems and challenges experienced by PLWHA in general although National data shows that the prevalence of HIV is higher among Nigerian youths. This paper thus reports the economic problems faced by youths with HIV as well as the coping strategies they adopt to mitigate the impact of the disease. The findings presented here are part of a larger study on the social and economic problems of adult PLWHA receiving care and support in Ibadan.

## MATERIALS AND METHODS

This cross-sectional study was carried out in Ibadan, the capital of Oyo state between 2004 and 2005. The minimum sample size for the main study was calculated using the sample size formula for cross-sectional studies  $([Z^2pq]/d^2)^{13}$ . A standard normal deviate (Z) of 1.96 and degree of accuracy (d) of 0.05 were used. Unemployment rate was utilized as an indicator of socio-economic problems of PLWHA and a prevalence of 29% was used based on findings from a study of PLWHA in India<sup>14</sup>. This gave a minimum sample size of 161. This value was then multiplied by 2 to adjust for the design effect of using a cluster sampling technique<sup>15</sup>. About 372 respondents were approached, 322 of whom eventually consented to participate in the study (response rate \$\$6.65). Data on the 170 respondents aged 18-35 years were then extracted from the main dataset and analyzed.

A cluster sampling technique was used to select respondents from the HIV/AIDS support groups. Two of the three registered HIV/AIDS support groups for adults with HIV in Ibadan at the time of the study were chosen by simple random sampling and all consenting members present at the time of data collection were selected. In addition, all consenting people with HIV referred to the Anti-Retroviral Treatment Clinic of the University College Hospital (UCH) Ibadan via the UCH General Out-patients clinic Ibadan, Oyo State, Nigeria were also included in the study. The working definition of youth used in this paper is as given by the National Youth Policy and strategic Plan of Action of the Federal Republic of Nigeria which defines youth as, 'all males and females aged 18 to 35, who are citizens of the Federal Republic of Nigeria' 16.

A semi-structured interviewer-administered questionnaire was used to obtain information on socio-demographic characteristics, medical and economic problems and strategies adopted by respondents to cope with the economic problems they faced (if any). Ethical Approval was obtained from the University of Ibadan/University College Hospital Ethical Review Board. The purpose of the study was explained to the respondents and, informed consent obtained from them. Trained research assistants then administered the questionnaire to respondents. Data were analysed using the Statistical Package for Social Sciences (SPSS) version 16. Frequencies and proportions were generated and chi-square test used to determine associations between categorical variables (socio-demographic characteristics and loss of employment).

Socio-demographic characteristics		Ν	0/0
Age group(years)	=24	17	10.0
	25 - 30	77	45.3
	31 – 35	76	44.7
Sex	Male	30	17.6
	Female	140	82.4
Highest level	No formal education	5	2.9
ofeducation	Primary	27	15.9
	Secondary,	89	52.4
	Tertiary	49	28.8
Marital Status	Single, never married	67	39.4
	Currently Married	67	39.4
	Widowed	20	11.8
	Separated/divorced	16	9.4
Family type	Monogamous	55	82.1
$(n = 67)^{-1}$	Polygamous	12	17.9

Table 1: Socio-demographic characteristics of respondents

### RESULTS

#### Socio-demographic characteristics

A total of 170 young people aged 18–35 years were interviewed. There were 140 (82.4%) females. Sixtyseven (39.4%) respondents were currently married, 55 (82.1%) of who were in monogamous marriages (Table 1). One hundred and eight (63.5%) respondents were currently employed, and over half, of them (52.8%) were traders. Some reasons given for unemployment by those who were unemployed were as follows: 23 (38.3%) had used up their finances to obtain health care while 12 (20.0%) mentioned that

Respondents' employment status		Ν	%
Currently Employed	Yes	108	63.5
	No	62	36.5
Reasons for unemployment	Capital was used up for treatment	23	38.3
(n = 60)*	Schooling		38.3
	Too weak to maintain job	12	20.0
	Lost clientele during period of prolonged ill		
	health	1	1.7
	Retrenched due to chronic ill health	1	1.7
Occupation			
(n = 108)	Trading	57	52.8
	Artisans	19	17.6
	Civil servant	10	9.2
	Business people	5	4.6
	Driving	4	3.7
	Professionals	4	3.7
	Teaching	2	1.9
	Others	7	6.5

Table 2: Employment status of respondents

Respondents' health status	N	%
Did respondent have any persistent/recurrent		
symptoms prior to HIV diagnosis?		
Yes	122	71.8
No	48	28.2
Symptoms specified n = 122		
(multiple response)		
Recurrent ill-health	55	45.1
Recurrent diarrhoea	37	30.3
Chronic cough	30	24.6
Unexplained weight loss	27	22.1
Recurrent fever and weakness	15	12.3
Others*	12	9.8
Does respondent currently have a health complaint?		
Yes	102	60.0
No	68	40.0
Current health problem		
(multiple response)		
Headache	48	47.1
Cough	40	39.2
Fever	37	36.3
Skin problems	37	36.3
Mouth sores	15	14.7
Dental problems	14	13.7
Thrush	7	6.9
Others**	16	15.7

\*Others such as unexplained weakness, body rashes, cervical lymphnode, general body pain and malaise \*\*Others such as abdominal discomfort/pain, generalized weakness, weight loss, swollen lower limbs

Table 3: Respondents' health status

	Loss of employment				
	Yes (%)	No (%)		$\mathbf{X}^2$	p-value
Sex (n = 132)	-		•	-	
Male	2(9.5)	19 (90.5)	21 (100)		
Female	27(24.3)	84 (75.7)	111 (100)	2.256	0.133
Level of education $(n = 132)$					
No formal &					
primary education	8 (28.6)	20(71.4)	28 (100)		
Secondary	18 (24.7)	55(75.3)	73(100)		
Tertiary	3 (9.7)	28 (90.3)	31 (100)	3.752	0.153
Marital status ( $n = 132$ )					
Single	7 (19.4)	29 (80.6)	36 (100)		
Married	11 (17.5)	52 (82.5)	63(100)		
Separated/divorced	7 (43.8)	9(56.3)	16 (100)		
Widowed	4 (23.5)	13 (76.5)	17 (100)	5.333	0.149
Respondent symptomatic prior		× ,			
to diagnosis)					
Yes	26 (27.7)	68 (72.3)	94(100)		
No	3 (7.9)	35(92.1)	38 (100)	6.166	0.013
Current health complaint					
Yes	23 (28.4)	58 (71.6)	81 (100)		
No	6 (11.8)	45 (88.2)	51 (100)	5.049	0.025
Respondent on ARV					
Yes	18 (24.3)	56 (75.7)	74 (100)		
No	11(19.0)	47 (81.0)	58 (100)	0.545	0.461

Table 4: Factors associated with loss of employment among respondents

they were too weak to work. Two respondents did not provide any reason why they were unemployed. Twenty-three (37.1%) of those unemployed were students (Table 2).

#### Health status of respondents

One hundred and twenty-two reported that they had recurrent symptoms suggestive of HIV/AIDS prior to diagnosis. Symptoms included the following: recurrent ill-health (45.1%), recurrent diarrhoea (30.3%) and chronic cough (24.6%) (Table 3). More than half, 90 (52.9%) of the respondents were currently on antiretroviral drugs. One hundred and two (60.0%) youth reported that they had a health problem at the time of the study. Some of the problems mentioned were headache (47.1%), cough (39.2%), fever (36.3%) and skin problems (336.3%) (Table 3).

#### Economic problems

Prior to diagnosis, 132 respondents were employed while 38 (22.4%) were unemployed. Twenty-nine (22.0%) of those who were employed before diagnosis had lost their jobs since the time they were diagnosed HIV positive. Although all respondents mentioned that their expenditure on healthcare had increased, 83 (48.8%) reported that this increase was minimal, 21 (12.4%) reported that the increased expenditure was moderate while for 66 (38.8%) the increase was substantial.

#### Strategies for coping with economic problems

One hundred and ten (64.7%) mentioned that they had been constrained to reduce expenditure on household and other subsistence needs since they became ill. Thirty-two (18.8%) young persons had borrowed money since the onset of the disease and thirty of them mentioned the sources of borrowed funds. These included friends, 12 (40.0%), Cooperative societies, five (16.7%), neighbours, five (16.7%) and colleagues two (6.7%) among others. Five (15.6%) of the youth with HIV interviewed had repaid the money borrowed (all at once), 18 (56.3%) paid back instalmentally and 9 (28.1%) were yet to repay the money. Of the 113 respondents who reported that they had savings prior to the onset of the disease, 69 (61.1%), had depleted their savings. Sixteen (9.4%) of respondents had sold assets since the onset of the disease.

#### Factors associated with loss of employment

A higher proportion of females, (24.3%) than males, (9.5%) had lost employment following onset of the disease (p= 0.133) though this was not statistically significant. A significantly higher proportion of respondents (27.7%) who had symptoms suggestive

of HIV infection/ AIDS prior to the time they were diagnosed HIV positive had lost their jobs compared to those asymptomatic at diagnosis (7.9%) (p = 0.013). Loss of employment had occurred more among those who had a health complaint at the time of the study (28.4%) compared with those who had no complaint (11.8%) (p = 0.025), (Table 4).

## DISCUSSION

Majority of the youth studied were female and this is reflective of the situation of the epidemic globally and in Sub-Saharan Africa where majority of those infected are young women aged 15–24 years<sup>1</sup>. The UNAIDS report on the Global AIDS epidemic states that young women aged 15–24 years are more than eight times more likely to be HIV positive when compared to men<sup>1</sup>.

At the time of conducting the study, about a third of the respondents were unemployed. This is comparable with rates obtained in studies carried out in the United States, Europe, Australia and India which reported that among PLWHA, rates of unemployment ranged from 29 to 65%<sup>14, 17-19</sup>. About a fifth of the youth with HIV had lost their jobs since they were diagnosed positive. This is comparable with findings in Australia that reported that 35-50% of subjects who had been HIV infected for several years had lost their job since the HIV diagnosis<sup>19</sup>. Our study showed that female youth were about three times more likely than their male counterparts to have lost their jobs. Other, studies among PLWHA have also revealed that females are more infected and affected by HIV than males<sup>1, 3</sup>. Similarly, a study of PLWHA in Kenya also revealed that women of all ages were more likely to be affected by HIV/AIDS than their male counterparts.<sup>20</sup>

Our study showed that respondents who had an AIDSdefining symptom prior to diagnosis and those who reported that they had a current health complaint at the time of the study were significantly more likely to have lost employment. This further underscores the effect of ill health on the ability of an individual to be gainfully employed. Occupational status has been found to be associated with the severity of infection, with the sickest patients least likely to still be working. Yelin and colleagues reported that, at comparable disease stage, patients with physically demanding work, those who had low control over the pace and scheduling of their work activities had the highest risk of losing their jobs<sup>21</sup>.

All the respondents reported an increase in medical expenditure. Although more than half of them reported that they could cope with this increment. Increased expenditure on health care has been well documented among PLWHA and indeed among people with other chronic diseases<sup>3-7</sup>. About two-thirds of respondents had been forced to reduce expenditure on other household needs. Steinberg and colleagues also documented that in South Africa already poor households coping with a member who had AIDS were reducing spending on basic necessities.<sup>22</sup> More than 60% of our respondents mentioned that they had depleted their savings, 18% had been constrained to borrowed money and about nine percent had sold their property. These coping mechanisms are similar to those reported by other studies and highlight the far-reaching economic effects the disease has on PLWHA<sup>3,14-20,23</sup>.

# CONCLUSION

This cross-sectional study revealed that youth with HIV in Ibadan are experiencing various economic problems. Those worst hit by the disease were those who were symptomatic prior to diagnosis, those who had a current medical symptom, the females and those with low levels of education. Coping mechanisms reported by other studies were also adopted by the PLWHA. In order to reduce the economic impact of HIV/ AIDS on PLWHA, we proffer the following recommendations:

- 1. Early diagnosis of HIV through VCT should be encouraged by the government as those who were diagnosed in the late stages of the disease experienced more economic challenges (loss of jobs) than their counterparts who were not symptomatic when they were diagnosed.
- 2. Comprehensive care programmes for PLWHA should target the socially and economically disadvantaged PLWHA such as the females, those with insecure sources of income or physically demanding work as they are most likely to be tipped into adverse financial circumstances if left without support.

## Limitations of the study

At the time of the study, patients had to pay for their investigations before they were included in the ARV programme, thus the study might have excluded some patients who were overwhelmed by the illness costs. This problem had been envisaged and thus PLWHA were recruited from support groups in an attempt to overcome this limitation. Some of the questions required respondents to recollect events which occurred when they were first diagnosed and this could have introduced some recall bias.

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