

*Original article*

# Hospital-based care for people living with HIV/AIDS in Ibadan, South Western Nigeria

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## Abstract

**Objective:** To describe the pattern of admission-defining ailments and outcomes of care among people living with human immunodeficiency virus (HIV)/acquired immune deficiency syndrome (AIDS) (PLWHA) who presented for treatment at a tertiary health care institution in Nigeria. **Methods:** We reviewed the hospital records of all patients admitted for AIDS and AIDS-related illnesses at the University College Hospital, Ibadan, Nigeria, from January 2005 to January 2006. **Results:** Seventy-two PLWHA were admitted during the study period. There were 39 females (54.2%) and 33 (45.8%) males. Sixty-seven (95%) PLWHA presented with AIDS. Only 12 (17%) were already receiving highly active antiretroviral therapy before admission. Forty-three patients (60%) commenced antiretroviral (ARV) therapy on admission. Thirty-three patients (46%) had pulmonary tuberculosis, 10 (14%) had extrapulmonary tuberculosis, 21 (29.1%) had diarrhoea-related illnesses, 20 (28%) had anaemia, and nine (12.5%) presented with coma. Twenty-nine patients (40.3%) were discharged home, and 43 (59.7%) died before discharge. Sixty-nine patients (95.6%) were judged to be indigent, and required financial support. The contributory causes of death included pulmonary tuberculosis in 21 (48.8%), diarrhoeal diseases in five (11.6%), anaemia in five (11.6%), coma in nine (20.9%), and pneumonia in three (7.1%). **Conclusion:** Tuberculosis was the major admission-defining ailment among PLWHA.

**Keywords:** Hospital Care; Tuberculosis; PLWHA

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## INTRODUCTION

Human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) was first discovered among homosexuals in the USA in 1981, and

has since been found in all regions of the world, with a particularly devastating effect in sub-Saharan Africa<sup>[1]</sup>. The first case of AIDS in Nigeria was reported in 1986<sup>[2]</sup>, and since then, the prevalence of HIV infection among pregnant women has increased from 1.8% in 1991, to 4.4% in 2005<sup>[2]</sup>. People living with HIV/AIDS (PLWHA) in Nigeria receive palliative care, including the prevention and treatment of opportunistic infections and antiretroviral (ARV) drug therapy<sup>[2,4]</sup>.

The University College Hospital (UCH) is strategically located in Ibadan, the capital of Oyo State,

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in the southwestern part of Nigeria. It was established by an Act of Parliament in 1952, and was the first teaching hospital in Nigeria. It now has 812 beds. The ARV clinic was established and funded by the Federal Government of Nigeria in 2002. Introduction of the President Bush Emergency Plan for AIDS Relief in 2004 provided support for the scale up of the ARV treatment programme, initially offering ARV drugs at the government subsidized rate of 1 000 Naira (8.3 USD) per month, but free drugs have been offered since January 2005. The clinic presently provides antiretroviral therapy to over 1 000 patients. The morbidity and mortality patterns of PLWHA admitted to UCH have not previously been reported. This study aimed to determine the admission-defining ailments and the outcomes of care and treatment among PLWHA admitted to the hospital.

## MATERIALS AND METHODS

We retrospectively reviewed the hospital records of all patients who were admitted to UCH, Ibadan, from January 2005 to January 2006. Records were obtained from the hospital medical records department. The data included information on age, sex, level of education, sources of financial support for care, occupation, immunological status, viral load, diagnosis at presentation, and outcome of hospital care. The extracted data were analyzed using SPSS11 software. Summary statistics using mean or median, and standard deviation or range for continuous variables, and frequencies/percentages for categorical variables were generated.

## RESULTS

A total of 72 PLWHA were admitted during the study period (Table 1). The mean age at presentation was  $37.0 \pm 9.1$  years. There were 39 females (54.2%) and 33 (45.8%) males. Nearly all patients (95.8%) had received formal education. Forty patients (55.6%) were married, and the majority were artisans (37.5%) and traders (26.4%). Sixty-seven (95%) PLWHA presented with AIDS. The length

of stay ranged from 12 hours to 4 months, with a mean of  $7 \pm 0.5$  days. Only 12 patients (17%) were already receiving highly active antiretroviral therapy (HAART) before admission, 43 (60%) commenced ARV after admission, while 12 died before commencement of ARV. Thirty-three patients (46.0%) presented with pulmonary tuberculosis, 10 (13.9%) had extrapulmonary tuberculosis, 21 (29.2%) had diarrhoea-related illnesses, 20 (27.8%) had anaemia, and nine (12.5%) presented with coma (Table 2). Eighty-two percent had oral candidiasis. Twenty-nine patients (40.3%) were discharged home, but 43 (59.7%) died after admission. Sixty-nine (95.6%) patients were judged to be indigent and required financial support. The contributory causes of death included pulmonary tuberculosis in 21 patients (48.8%), diarrhoeal diseases in five (11.6%), anaemia in five (11.6%), coma in nine (20.9%), and pneumonia in three (7.1%) (Table 3).

## DISCUSSION

The level of awareness of HIV/AIDS among patients has increased in nearly every Nigerian community. More people now have access to HIV testing and treatments due to the increase in the number of voluntary counseling centers and ARV clinics nationwide<sup>[1,2]</sup>. This results in large number of very ill patients attending these centers.

This study demonstrated that nearly all patients presented in the late stages of HIV/AIDS with pulmonary tuberculosis and diarrhoea. Previous studies have shown that opportunistic infections such as pulmonary tuberculosis, diarrhoea and oral candidiasis are prevalent among PLWHA in sub-Saharan Africa<sup>[5-7]</sup>. Many patients initially seek care from traditional healers and local drug sellers/peddlers, and so present late to the ARV centers<sup>[8]</sup>. This could be due to the prevalent belief that only promiscuous people get infected, while some people still believe that illness has spiritual undertones<sup>[8]</sup>. A fear of stigma and discrimination can also mean that some clients fail to present at ARV clinics until late in their disease course<sup>[9-12]</sup>. Some misconceptions, in-

cluding the myth that HIV-positive patients who attend UCH are detained and imprisoned, could also account for patients presenting in advanced stages of the disease. Some Nigerians also avoid teaching hospitals either because they are expensive, or because of long waiting times before seeing a doctor, and previous studies have shown that HIV-positive patients seen at hospitals in Nigeria are stigmatized and treated badly by health care workers<sup>[9-12]</sup>. In addition, most PLWHA who require treatment in an intensive care unit either cannot pay for it, or are denied it<sup>[13]</sup>. Some patients are treated with disdain by some health care workers, who sometimes blame them for being HIV-positive<sup>[11, 12]</sup>, and are afraid of becoming infected themselves. It is hoped that the advent of universal precautions means that these workers will be more friendly towards these patients<sup>[14]</sup>.

A significant number of the patients in our study were too poor to buy the necessary drugs or to eat the prescribed diet. Some of these poor patients died before money could be released from the ARV clinic indigent committee fund. Various reports have documented the interaction between HIV infection and poverty, showing that PLWHA are likely to be poor and unable to cater for themselves<sup>[15, 16]</sup>.

None of the patients who died underwent post-mortem examinations: Postmortem examinations of PLWHA are usually avoided either because relatives refuse permission for religious reasons, or because of their inability to pay for the procedure. The pathological causes of death were therefore not determined and diagnoses were based mainly on clinical and laboratory/radiological findings.

In conclusion, this study provides background information on the socio-demographic characteristics, the patterns of presentation, and the outcomes of treatment of PLWHA admitted to UCH, Ibadan. Tuberculosis was the major reason for admission and the major cause of death among PLWHA. Most PLWHA presented late in the illness. More advocacies and community home-based care is needed, especially in rural areas, in order to improve the early detection and treatment of identified opportunistic infections, such as tuberculosis and diarrhoeal illness.

**Table 1** Socio-demographic characteristics of people living with HIV/AIDS admitted to University College Hospital, Ibadan.

Sociodemographic characteristics	Frequency <i>n</i> = 72	%
Age group		
20-29	12	16.7
30-39	38	52.8
40-49	14	19.4
50 and above	8	11.1
Sex		
Male	33	45.8
Female	39	54.2
Level of education		
None	3	4.2
Primary school	25	34.7
Secondary school	27	37.5
Tertiary school	17	23.6
Marital status		
Single	14	19.4
Married	40	55.6
Divorced	7	9.7
Widowed	11	15.3
Occupation		
Artisan	27	37.5
Trading	19	26.4
Civil servant	11	15.3
Student	4	5.6
Soldier	3	4.2
Religious leader	2	2.8
Pensioner	1	1.4
Unemployed	5	6.9

**Table 2** Diagnosis at presentation of people living with HIV/AIDS admitted to University College Hospital, Ibadan.

Diagnosis *	Frequency <i>n</i> = 72	%
Pulmonary TB * *	33	46.0
Diarrhoea	21	29.2
Anaemia	20	27.8
Extrapulmonary TB	10	13.9
Coma	9	12.5

\* multiple diagnoses are possible \* \* Tuberculosis

**Table 3** Causes of death of people living with HIV/AIDS admitted to University College Hospital, Ibadan.

Cause of death	Frequency <i>n</i> = 43	%
Pulmonary TB	21	48.8
Diarrhoea	5	11.6
Anaemia	5	11.6
Coma	9	20.9
Pneumonia	3	7.1

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