Pattern Of Presentation Among Hiv/Aids Patients In Makurdi, Nigeria

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Abstract

Background: Documentation and analysis of the common mode of presentation of HIV/AIDS is a major step forward in the control of the disease in our environment as these will help in diagnosis and improved modality of care.
Objectives: To analyze the clinical presentation and outcome of the disease among patients managed for HIV/AIDS in Federal Medical Centre, Markurdi.
Method: This is a retrospective study on HIV/AIDS patients who were admitted and managed at the Federal Medical Center, Markurdi, between October 2005 and September 2006.
Results: There were 218 patients within the period under review. Ninety-four of them were males while 124 were females giving a male to female ratio of 1 to 1.3. The mean age of the patients was 35.4 years (range 14- 82 years). The mean duration of the illness before admission was 50weeks (range 3weeks - 7years). The commonest mode of presentation was oral thrush followed closely by pulmonary tuberculosis. Dermatosis was the least common form of presentation in this center. Among the 218 patients admitted, 32 of them died giving a mortality rate of 14.7%. Seventeen (53%) died of respiratory failure, 8 died of multiple organ failure and 3 died of hepatic failure.
Conclusion: Patients with oral thrush and pulmonary tuberculosis should be viewed with high index of suspicion for HIV/AIDS. Furthermore, considering the high level of mortality associated with AIDS in this environment there is a need to increase surveillance for early detection and management of cases.

INTRODUCTION

The AIDS pandemic continues to spread globally with sub-Sahara Africa being the worst hit region. [1] Nigeria has been regarded as the nation with the third largest number of HIV/AIDS patients globally after India and South Africa. [2] However, with the present national prevalence of 3.9% [3] , over 6 million Nigerians may be under varied burden of HIV. [3,4] This calls for the need to employ every available initiative in the control of the disease. The Federal government of Nigeria has demonstrated commitment to HIV/AIDS care through the free antiretroviral treatment programme, voluntary counseling and testing, establishment of zonal blood transfusion centers and the prevention of mother to child transmission initiative [2,5] with the partnership and support from various health institutions and NGOs. [2,4,5,6,7] However, there is still need for a great lot of improvement in terms of prevention, accessibility to treatment and social support especially at the community level. [2,8,9]

Early diagnosis and commencement of treatment, has been advocated in reducing the spread, morbidity and mortality from HIV/AIDS. [10] This can be achieved among the healthy HIV carriers through Voluntary Counseling and Testing (VCT). Similarly, constant review of the mode of presentation among HIV/AIDS patients will in no small way heighten the index of suspicion resulting in early diagnosis among hospital patients pending the availability of free HIV screening in all our government and private hospital settings. [11] Moreover, changes in the epidemiology of the disease resulting from on-going antiretroviral therapy calls for regular review of cases in our various settings.

Therefore documentation and analysis of the common mode of presentation of HIV/AIDS in this environment is a major step forward in the control of the disease as these will help in early diagnosis and improved modality of care.

Makurdi is the capital city of Benue state located in the North central zone of Nigeria; the state is with one of the highest prevalence of HIV/AIDS in the country. [12] The

Federal Medical Center, Makurdi is the only functional tertiary health institution in the state at present and serves as the referral center to the people of the state and other neighboring states.

We hereby review HIV/AIDS patients admitted at the center over the duration of one year with the view to analyze the clinical presentation and outcome of the disease among patients managed for HIV/AIDS in the tertiary health institution.

METHODOLOGY

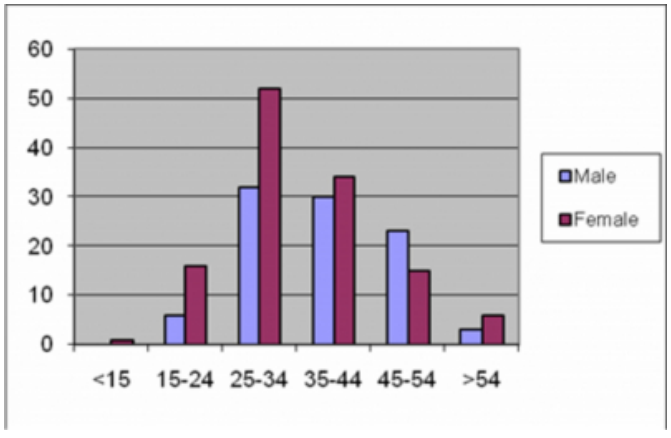
This is a retrospective study in which the case notes of all patients admitted, diagnosed and managed as HIV/AIDS at Federal Medical Center, Makurdi, Nigeria between October 2005 and September 2006 were retrieved from the medical health record department. The ethical committee of the centre gave approval for the study. Data such as the age, sex, duration of illness, clinical presentation, laboratory findings and outcome of the disease were extracted and analyzed by simple statistical methods.

RESULTS

There were 218 patients admitted and managed for HIV/AIDS within the period under review. Ninety-four of them were males while 124 were females giving a male to female ratio of 1 to 1.3. Majorities (95.4%) of the patients were age between 15 and 54 years, there was early occurrence which peaks at ages between 25 and 34 years among the females, while cases spread between the ages of 25 and 54 years among the males (Figure 1). The mean age of the patients was 35.4 years (range 14- 82 years).

Figure 1

Figure 1: Age range and sex of patients.



Age group 21-50 = 92.7% M:F Ratio = 1:1.3

The commonest mode of presentation was oral thrush (Table 1) followed closely by pulmonary tuberculosis. Dermatosis was the least common form of presentation in the center. The mean duration of the illness before admission was 50weeks (range 3weeks - 7years). Out of 218 patients admitted, 32 of them died giving a mortality rate of 14.7%.

Figure 2

Table 1: Mode of Presentation of the patients.

Sex	DERM	PL	PTB	OT	AN	GE	HVN	DEMEN
Male	1	30	33	59	28	33	7	7
Female	0	56	85	69	40	40	4	3
Total	1	86	118	128	68	73	11	10

Key: DERM—Dermatosis; PL—Peripheral lmyphadenopathy; PTB—Pulmonary Tuberculosis; OT—Oral thrush; AN – Anaemia; GE—Gastroenteritis; HVN—HIVAN; DEMEN—Dementia.

Table 2 showed that Seventeen (53%) died of respiratory failure, 8 died of multiple organ failure and 3 died of hepatic failure.

Figure 3

Table 2: Causes of death among HIV/AIDS patients

Cause of death	Frequency	Percentage
Diabetes ketoacidosis	2	6.3
Hepartic failure	3	9.4
Multiple organ failure	8	25
Respiratory failure	17	53.1
Tuberculous effusion	1	3.1
Tuberculose meningitis	1	3.1
Total	32	100

DISCUSSION

Progression from HIV infection to disease is often insidious, but once sufficient immunologic damage and immunosuppression have occurred, a variety of signs and symptoms appear depending on the clinical severity and immunopathology of the disease. [13] Nonetheless, the disease course is variable and patient may present with mild, moderate or severe manifestation. [13] In about 60% to 80% of HIV-infected persons, a characteristic clinical syndrome known as the acute retroviral syndrome occurs at the time the infection is acquired. The illness, which resembles infectious mononucleosis from primary infection with Epstein-Barr virus (EBV), is a consideration in differential diagnosis of heterophil-negative mononucleosis. The period between acquisition of HIV and onset of symptoms is about 14 days (range, 5 to 30 days), [14] and the characteristic signs and symptoms range from a mild fever and sore throat to a

severe mononucleosis-type syndrome with high spiking fevers and a measles-like rash. Most patient in the developing country do not usually seek medical advise at this stage, medications without prescription are usually taken and once fever subsides further clinical assessment is not sought. Clinical manifestations of HIV infection are protean and mimic a number of other illnesses. A high index of suspicion would therefore help in early and appropriate diagnosis [14].

In the present study the findings of female predominantly infected with HIV/AIDS is consistent with global occurrence. [5,15,16] Research indicates women are two to four times more vulnerable to HIV infection than men during unprotected sexual intercourse because of the larger surface areas exposed to contact, the female is the recipient of semen and she is prone to micro trauma during sexual activity. Other factors responsible include early exposure to sexual activity, gender inequality and poverty. The majority of the study population (95.5%) falls between 15 and 54years. This is the group commonly affected with the disease with its attendant negative developmental impact. There is higher prevalence among the younger age group among the females in this study. This can be related to cultural practices in which young girls are married for a much older man (Trans-generational sex) by the elderly wife who in turn take the new wife as a daughter (Personal information).

The commonest manifestations associated with HIV/AIDS in this study are oral thrush and pulmonary tuberculosis. This is consistent with previous findings in which pulmonary tuberculosis were commonly seen among HIV/AIDS patients [11,17] raising the need for high index of suspicion of HIV/AIDS among patient with oral thrush or pulmonary tuberculosis in this environment.

The mortality rate among patients managed for HIV/AIDS in this study was lower than that in Abakaliki (2003) [11], but higher than that found in Nnewi (2006) [17]. However, our finding of 14.7% is similar to the findings of YB Amusa (2004) [15] who found 18% among patients managed for HIV/AIDS at the Otorhinolaryngology clinic, in Ile-Ife. This level of mortality may be related to the high prevalence of co-infection with pulmonary tuberculosis (PTB) which is directly responsible for over 50% of death among the patients in this study. HIV/AIDS and TB co-morbidity has been known to be deadly [1,18]. The impact of PTB on HIV/AIDS patients include its effect on HIV diagnosis and on the pattern of HIV diagnosis, the pattern of HIV- related TB, the response of HIV-infected TB patients to TB treatment, the benefit of antiretroviral therapy (ART) and the quality and continuity of care for TB patients [1].

Pulmonary tuberculosis was the most important factor of mortality among the patients managed for HIV/AIDS in this center. This is similar to other findings in which the major attributed causes of death among HIV/AIDS patients were wasting syndrome, tuberculosis, acute bacterial infections, malignancy and immune reconstitution disease [18,19,20] and has been advocated for, as an important entry point for identifying antiretroviral therapy (ART) eligible patients [21].

CONCLUSION

We therefore conclude that oral thrush and pulmonary tuberculosis are strong predictors of HIV/AIDS in this environment and should be viewed with high index of suspicion. There is a high level of mortality among diagnosed HIV/AIDS patients in our environment calling for increase surveillance for early detection and management of cases. Best management techniques should be employed in patients with HIV/AIDS and PTB co-morbidity.

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