

HIV/AIDS AWARENESS AMONG PREGNANT WOMEN IN A RURAL NIGERIAN HOSPITAL.

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ABSTRACT

Background: Pregnant women's awareness of HIV infection encourages voluntary counseling and testing, an important step in preventing mother to child transmission. We sought to determine the level of HIV/AIDS awareness among pregnant women attending a rural hospital in Nigeria.

Methods: We conducted a cross-sectional descriptive study of pregnant women attending antenatal clinic of a rural mission hospital in northern Nigeria between June and October 2005. Pregnant women were assessed regarding HIV/AIDS awareness before voluntary counseling.

Results: We enrolled 350 pregnant women with a mean age (\pm SD) of 26.8 \pm 6.4years. Nearly all had heard of HIV/AIDS (98.6%, 95%CI=96.5-99.5%) and 79.7% (75.1-83.8%) thought they could have HIV/AIDS. A total of 335(96%, 92.9-97.5%) knew that HIV/AIDS could be transferred from mother to child and 89.7% (86.0-92.7%) knew that mother to child transmission could be prevented. None of the pregnant women knew their HIV status while few (15%) knew the HIV status of their partners.

Conclusion: HIV/AIDS awareness in pregnant women attending antenatal clinic in rural Nigeria was high. Therefore, pregnant women in rural settings would readily accept voluntary counseling and testing of HIV infection if such service is extended to them.

Key words: HIV, Africa, awareness, pregnancy

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INTRODUCTION

HIV infection has continued to be a global medical problem with Sub-Sahara Africa being the worst hit.¹ Sub-Saharan Africa has 60% of the people living with HIV, with over 25 million persons living with HIV at the end of 2005.² Mother to child transmission accounts for over 90% of the world's HIV infected children.³ It is estimated that the number of orphans resulting from HIV infection may rise until 2010 by which time one third of Africa children may be orphaned.⁴ The national HIV prevalence in Nigeria among pregnant women has steadily increased from 1.8% in 1991 to 5.8% in 2001, but dropped to 4.4% in 2005.⁵

Pregnant women's awareness of HIV infection and their own serostatus are essential in the prevention of vertical transmission to infants and horizontal transmission to partners and it also encourages the women to access medical care.⁶ A

high level of awareness about HIV/AIDS has been reported in both developed and developing countries.⁷⁻⁹ In Nigeria, awareness about HIV/AIDS is generally high,¹⁰⁻¹² even though knowledge about mother to child transmission was low in some studies.¹² Most studies of HIV/AIDS awareness were done in urban settings in Nigeria and few have been in rural settings.¹⁰⁻¹² People living in the rural settings in Sub-Sahara Africa are usually at risk of being

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neglected compared with urban populations. We carried out a cross-sectional study to determine the level of HIV/AIDS awareness among pregnant women attending a rural antenatal clinic in Nigeria before voluntary counseling and testing.

SUBJECTS AND METHODS

Study setting

The study was carried out in Zawan community, a settlement about 20 kilometers outside Jos city, Nigeria. The population of Zawan was 4,443 (National Population Commission Census 1991, Plateau State). By the end of 2004 its population was estimated at 6,520 based on an estimated annual increase of 3%.

The majority of the inhabitants of Zawan are Berom natives, and they share similar cultural beliefs and practices. The major occupations of this community are farming and tin mining. The study setting was the antenatal clinic of the Our Lady's of Apostles Hospital, Zawan. The hospital has a 90-bed capacity and provides primary and secondary health care. The antenatal clinic attends to a daily average of 20 women.

RESEARCH SUBJECTS

The study design was a cross-sectional descriptive study to ascertain the level of HIV/AIDS awareness among pregnant women attending antenatal clinic in Zawan community. The study was carried out during the rainy season between June and October 2005. Consecutive pregnant women who presented at the antenatal clinic and gave voluntary written informed consent were included in the study. Pregnant women who were severely ill were excluded from the study.

Each pregnant woman was given information regarding the research objectives and voluntary written informed consent was obtained. The study was approved by the Ethical Committee of the Jos University Teaching Hospital, and by the management of Our Lady's of Apostles Hospital. Sociodemographic data were collected with a structured questionnaire by one of the authors (EAE). The questionnaire was written in English but interpreted in one of the local languages (Hausa or Berom) for mothers who did not speak English.

STATISTICAL ANALYSIS

To estimate the required sample size of 346, we assumed a HIV prevalence rate of 8.9%¹³ with a sampling error of 3%. Data entry and analysis were done with Epi Info 3.2.2 (CDC, Atlanta, Georgia, USA).

RESULTS

A total of 350 pregnant women were recruited. The baseline demographic characteristics of the study pregnant women are shown in Table 1. The majority of pregnant women (98.3%) were married and the mean age of the study pregnant women was 26.8 ± 6.4 with a minority over 30 years of age. Nearly all pregnant women (96%) had at least some primary education and most women (65.4%) did not work outside the home.

HIV/AIDS awareness of the study pregnant women is shown in Table 2. Nearly all the pregnant women (98.6%) had heard of HIV/AIDS and 79.7% thought they could have HIV/AIDS. Nearly all (96%) of the pregnant women knew that HIV/AIDS could be transferred from mother to child and 89.7% knew that mother to child transmission could be prevented. None of the pregnant women knew their HIV status while few (15%) knew the HIV status of their partners.

DISCUSSION AND CONCLUSION

We found high level of awareness of HIV/AIDS among pregnant women attending antenatal clinic in a rural hospital in Nigeria. The proportion of the pregnant women who had heard of HIV/AIDS (98.6%) was similar to reports from South Africa,⁸ Uganda,⁹ and other Nigerian towns,^{11,12} even though most of these studies were done in urban settings. The high level of awareness of HIV/AIDS in this study could be attributed to the literacy rate of the pregnant women, since up to 96% of women had received some form of education. This was not surprising since educated women are better informed and have greater access to print and electronic media. These results contrast with a previous report in which 20% of pregnant Nigerian women had heard of HIV/AIDS, a finding attributed to a poor enlightenment campaign.¹⁰

The level of awareness of mother- to- child

transmission was likewise high (95.7%) among pregnant women in this study. This finding was similar to other studies.^{10,14} However, several studies in Nigeria^{10,12} reported low levels of knowledge about mother-to-child transmission of HIV infection in contrast to this study. The difference observed in this study and previous studies may be attributed to increased HIV/AIDS campaigns in mass media as well as the involvement community leaders during HIV/AIDS campaigns. Majority of the pregnant women (89.7%) in this study were also aware of prevention of mother-to-child transmission of HIV infection as observed in similar studies in developed countries^{7,14} but in contrast to a study in Abakilki, Nigeria in which the pregnant women were ignorant of mother-to-child transmission.¹³ The high level of awareness of mother-to-child transmission of HIV infection and of the possibility of its prevention could also be attributed to the women's literacy rate, the effect of HIV/AIDS campaigns in the mass media and community leaders involvement in the fight against HIV/AIDS. Despite the high degree of literacy and awareness in this study, we previously reported that HIV infection was associated with advancing educational attainment and skilled labor.¹⁵ Thus, it does not appear that enlightenment alone reduces the risk of HIV infection.

Our findings demonstrate that the level awareness of HIV/AIDS in pregnant women attending a rural antenatal clinic was high but the majority of women did not know the HIV status of themselves or their partners. A high level of awareness of HIV/AIDS in pregnant women in a rural setting may be attributed to the effect of HIV/AIDS campaigns in the mass media and community leaders' involvement in the fight against HIV/AIDS. Rural pregnant women in our study readily accepted the offer of Voluntary counseling and testing (VCT) for HIV infection. However, the high prevalence rate of HIV among these pregnant women despite their high level of HIV/AIDS awareness calls for an emphasis on positive behavioral changes.

One limitation of this study was that it was hospital-based and assessed only rural women who presented for antenatal care. Thus, rural women who chose not to obtain antenatal care were not represented. It is likely that such women

are less educated and may have less awareness about HIV and mother-to-child transmission than the rural women included in this study. Community-based studies are needed in rural settings to assess HIV awareness and reasons that women do not avail themselves of antenatal care and antiretroviral therapy to prevent mother-to-child transmission.

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Table 1:
DEMOGRAPHIC CHARACTERISTICS OF 350 NIGERIAN WOMEN ATTENDING ANTENATAL CLINIC AT OLA HOSPITAL, ZAWAN.

Characteristic	Frequency (%)	95% confidence Interval (%)
Marital status		
Married	344 (98.3)	96.1-99.3
Single	4 (1.1)	0.4-3.1
Divorced	2 (0.6)	0.1-2.3
Age group (yr)		
16-20	62 (17.7)	13.9-22.2
21-25	108 (30.9)	26.1-36.0
26-30	92 (26.3)	21.8-31.3
31-35	55 (15.7)	12.1-20.1
36-40	23 (6.6)	4.3-9.8
41-45	8 (2.3)	1.1-4.6
46-50	2(0.6)	0.1-2.3
Occupation		
House wife	229 (65.4)	60.2-70.4
Petty trader	59 (16.9)	13.2-21.3
Civil servant	35 (10.0)	7.2-13.8
Skilled worker	12 (3.4)	1.9-6.1
Farmer	9 (2.6)	1.3-5.0
Business	6 (1.7)	0.7-3.9
Partner's occupation		
Civil servant	93 (26.6)	22.1-31.6
Skilled worker	82 (23.4)	19.2-28.3
Petty trader	82 (23.4)	19.2-28.3
Farmer	45 (12.9)	9.6-16.9

Table 2:
H I V / A I D S A W A R E N E S S CHARACTERISTICS OF 350 NIGERIAN WOMEN ATTENDING ANTENATAL CLINIC AT OLA HOSPITAL, ZAWAN

Characteristic	Frequency (%)	95% confidence Interval (%)
Heard of HIV/AIDS		
Yes	345 (98.6)	96.5-99.5
No	5 (1.4)	0.5-3.5
Think could have HIV/AIDS		
Yes	279 (79.7)	75.1-83.8
No	40 (11.4)	8.4-15.3
Do not know	31 (8.9)	6.2-12.5
HIV/AIDS can be transferred from mother to baby		
Yes	335 (95.7)	92.9-97.5
No	3 (0.9)	0.2-2.7
Do not know	12 (3.4)	1.9-6.1
Mother to baby HIV/AIDS transmission can be prevented		
Yes		
No		
Do not know	314 (89.7)	86.0-92.7
	10 (2.9)	1.5-5.4
	26 (7.4)	5.0-10.8
Partner's HIV status		
Do not know	296 (84.6)	80.4-88.2