ORIGINAL ARTICLE

HIV Prevalence amongst Clients Attending Antenatal Clinic at the Federal Medical Centre, Makurdi

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Abstract

Background: *Evidence from the 2005 National HIV Seroprevalence Sentinel Survey showed that Benue state has the highest seroprevalence rate of HIV infection in the country. Seroprevalence rate amongst antenatal women is a reflection of what is happening in the larger society. Knowledge of seroprevalence rate amongst pregnant women would help in targeting intervention strategies for prevention of mother to child transmission (PMTCT) of HIV.*

Objective: *The objective of the study is to determine the seroprevalence rate of HIV infection amongst clients attending antenatal clinic at the Federal Medical Centre Makurdi.*

Methods: *Cross-sectional study of 262 randomly selected women that booked for antenatal care at the Federal Medical Centre Makurdi between 1st January 2007 to 30th April, 2007 was carried out. Information regarding age, parity, gestational age at booking, educational status and HIV sero-status of the clients were looked into.*

Results: *A total of 50 women out of the 262 women studied were positive, giving a seroprevalence rate of 19.1%. The highest seroprevalence rate was amongst 25-29 years age group (40.8%). Women of parity 1-4 constituted the highest group (53.4%). Majority of them (45.5%) had secondary school education while 60 (22.9%) had tertiary education. One hundred and ten (42%) booked in the 3rd trimester while only 34 (13%) booked in the 1st trimester.*

Conclusion: *HIV seroprevalence is high amongst antenatal women in Makurdi and intervention strategies should be scaled up for prevention of vertical transmission of the virus.*

Key words*: HIV prevalence, Antenatal Clinic, Makurdi.*

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Introduction

The HIV/AIDS epidemic is one of the largest public health crises of the 21st century[1]. By the end of 2006, it was estimated that AIDS and AIDS-related illnesses have killed more than 25 million people and 39.5 million people were living with the virus, out of which 17.7 and 2.3 million were women and children respectively[2].

In Nigeria, since the first case of AIDS was reported in 1986, the epidemic has been on the increase.[2,3] By the end of 2006, it was estimated that 2.99 million Nigerians were living with the virus, with 305,080 new infections in adults and 74,520 in children, largely acquired through mother to child transmission.[2,4]

According to the 2005 National HIV Seroprevalence Sentinel Survey conducted amongst pregnant women, Benue State had the highest Seroprevalence rate of 10%, far above the national mean of 4.4%[4]. In a previous study, a HIV prevalence rate of 10.73% amongst pregnant women at the Federal Medical Centre, Makurdi was reported[5].

The Nigerian National Goal for PMTCT as contained in the 2003 AIDS policy is to reduce the transmission of the HIV through MTCT by 50% by the year 2010 and the increase access to quality HIV counselling and testing services by 50% by the same year.[2] The principal purpose of testing a women for HIV during pregnancy is to make decisions that reduce the risk of transmitting HIV to their babies.[6,7] It is estimated that the overall risk of MTCT is about 15-25% among HIV-infected women who do not breast feed and 25-45% among those who breast-feed.[3]

The objective of this study therefore, is to determine the current seroprevalence rate of HIV infection amongst antenatal clients in this hospital and make recommendations on the way forward as regards prevention of mother to child transmission.

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Materials and Methods

The Federal Medical Centre Makurdi is the only tertiary health institution in Benue state. It is one of the collaborating centres for APIN plus/PEPFAR programmes amongst which is PMTCT. Counselling and testing is done routinely at the booking clinic by trained nurses/midwives using the opt-out technique. The testing is done with two different types of simple/rapid kits. A third or a "tie-breaker" rapid test is done when two rapid tests are discordant. Two hundred and sixty two women that booked for antenatal clinic between January and April 2007 were randomly selected. Information regarding age, parity, gestational age at booking, educational status and HIV sero-status of the clients were looked into.

Results

A total of 50 out of the 262 women studied were positive giving a sero-prevalence rate of 19.1%. The highest sero-prevalence rate was amongst 25-29 year age group (40.8%) as shown on table I. Table II shows that multiparas (Paras 1-4) constituted the highest group (53.4%). Majority of them (45.4%) had secondary school education while 60 clients (22.9%) had tertiary education (Table III). One hundred and ten women (42%) booked in the 3rd trimester while only 34 (13%) booked in the 1st trimester (table IV).

Table I: Age Group Distribution

Age Group	No	Percentage
15 11	11	4.2
20 24	64	24.4
25 29	107	40.8
30 34	59	22.5
35 39	21	8.0
Total	**262**	**100%**

Table II: Parity Distribution

Parity	No	Percentage
Primigravida	82	31.3
Paras 1-4	140	53.4
Grandmultipara	40	15.3
Total	**262**	**100%**

Table III: Educational Status

Level of Education	No	Percentage
None	19	7.3
Primary	64	24.4
Secondary	119	45.4
Tertiary	60	22.9
Total	**262**	**100%**

Table IV: Gestational Age at Booking

Gestational age (weeks)	No	Percentage
< 13	34	13.0
14 26	109	41.6
≥ 27	110	42.0
Not stated	9	3.4
Total	**262**	**100%**

Discussion

Seroprevalence rate of 19.1% in this study shows a rising trend when compared to 10.73% earlier obtained in a similar study from this Medical Centre.[5] It is even higher than the Benue State average of 10% by the 2005 National HIV Seroprevalence Sentinel Survey.[4] It is much higher than similar findings from Abakaliki and Jos.[9,10] The seroprevalence rate is far higher than the National average of 4.4%.[4] This is inspite of concerted efforts by Federal government, State government and the International community to reduce the trend.

Since the late 1980s, country-specific HIV prevalence estimates in countries with generalized epidemics have been derived from data collected at health facilities providing antenatal care for pregnant women because they are considered a good proxy for the general population.[1,11] Routine voluntary testing in pregnancy is advisable anywhere, more especially in high HIV prevalence areas. It is an essential step in preventing MTCT and the onward spread of HIV.[7] Other advantages of testing in pregnancy include reinforcement of safer sex practices, provision of opportunity for counselling on infant feeding options, and enabling a woman to make informed choices about future pregnancies. It also reduces the risk of transmission of HIV to a partner who is negative and may eventually become the child's sole parent.[2,12]

The age group of 25-29 years had the highest seroprevalence rate. In a previous study in same centre, age group of 20-24 years had the highest seroprevalence rate.[5] This is also similar to the findings at Abakaliki.[9] About 93% of the clients had formal education to varying levels. This is in contrast to the findings from Abakaliki.[9]

This study also shows that majority of the women booked late in pregnancy as 42% of them booked in the 3rd trimester. Late booking in some cases may not allow enough time for some modes of intervention to be adequately implemented.

Voluntary counselling and testing in pregnancy to know the HIV status has a lot of advantages as has already been enumerated. There are however, limitations to effective implementation of this programme. Some of this limitations especially in the developing countries include, lack of privacy thereby making confidentiality a bit difficult, stigmatization of HIV-positive women by health workers and the community, additional work load on maternity services, high level of illiteracy and financial constraints.[2,7,13] Most of these constraints are

being addressed by efforts of Federal and State government and also by the International agencies.

HIV seroprevalence in pregnancy is still high in Makurdi despite intervention strategies so far put in place. There is therefore, a need to astronomically scale up the intervention strategies if we are to meet one of the goals of the June 2001 Declaration of Commitment of the United Nations General Assembly Special Session on HIV and AIDS (UNGASS) and the Nigerian National goal for Prevention of Mother to Child Transmission (PMTCT) as contained in the 2003 AIDS policys.[2]

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