



## Prevalence of Hiv Among Pregnant Women Attending Antenatal Clinics at a Tertiary Care Hospital in Central India

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**ABSTRACT**

**Background:** The Prevention of Parent to Child Transmission of HIV/AIDS (PPTCT) programme was launched in the country in the year 2002. Estimating the prevalence of HIV in pregnant women provides essential information about prevalence and trends about HIV in general population. Data thus generated is used for the monitoring of HIV spread across the country and for implementation of control programme.

**Methods:** This is a cross-sectional study. Pregnant women who attended for first time at antenatal OPD were included in the study. HIV testing was done after taking written informed consent and as per NACO guideline.

**Results:** Out of total 4504 antenatal patients 3204 (71.12%) patient opted for HIV testing. Seroprevalence of HIV is found to be 0.24%. Most of antenatal mother were in age group 21-25 years (50.0%) and were primigravidas (62.5%).

**Conclusions:** The seroprevalence of HIV infection in antenatal women is low.

**KEYWORDS**

Seroprevalence of HIV, Antenatal care, Counseling

**Introduction :** HIV / AIDS is a global diseases. No country, no race, no religion, no age group is spared from AIDS pandemic(World Health Organisation [WHO], 2012). First case of HIV was found in India in the year 1986 in Chennai in a sex worker, since then the HIV has spread to the length and breadth of the country(National AIDS Control Organisation [NACO], 2010). It has been long proven that prevention is the only successful strategy to counter the spread of HIV and an important part of this preventive strategy is to prevent the transmission of HIV from infected mother to infant. The Prevention of Parent to Child Transmission of HIV/AIDS (PPTCT) programme was launched in India in the year 2002. Currently, there are more than 15000 Integrated Counselling and Testing Centres (ICTCs) in the country. Of these ICTCs, nearly 550 are located in Obstetrics and Gynaecology Departments and in Maternity Homes where the client load is predominantly comprised of pregnant women(NACO 2009).And all antenatal mothers are regularly screened for HIV/AIDS during their visit to the hospital. The present study was conducted to calculate the prevalence of HIV in women availing antenatal care in a tertiary care hospital and to study related bio social characteristic.

**Materials and Methods :** This was a hospital based cross sectional study done at a tertiary care centre NSCBMC, Jabalpur. The duration of study was 15 months. Study participants were pregnant women of all groups. Purposive sampling was used to select study participants. Inclusion criteria: women visiting the OPD of department of Obstetrics and Gynecology for antenatal care for the first time who gave written consent and whose HIV status was unknown. Exclusion criteria :Those who did not give consent for HIV testing and opted out from screening programme and those who were already HIV positive. Women were asked to attend a counseling session. Those who refused were excluded from the study. Group counseling was done in group of 4 – 5 participants at a time in PPTCT center regarding importance of HIV testing and HIV prevention. Those who had given written consent were tested for HIV by three rapid tests according to strategy given in of National Guideline of testing(NACO). Data about Socio-demographic variables were gathered by a pre-designed and pretested questionnaires. The study was approved by the ethics committee of the respective institution. Confidentiality of data was maintained at all the time. Data were entered in Microsoft Excel and percentage and proportion were calculated.

Results: "Table 1 about here"

Study Participants	Total number (n)	%
Total ANC registered	4505	100
Women who accepted counseling	3751	83.2
Women who accepted testing	3204	71.12
Women who tested for HIV	8	0.24

As shown in table 1 during the period of study a total of 4505 pregnant women were registered. Out of this only 3751 agreed for counseling. And after that a net 3204 gave informed consent for study. 22 women who were referred from ART centre Jabalpur and who were already HIV positive were excluded from the study. The HIV screening test was positive in only 8 of the tested 3204 antenatal women. Thus the seroprevalence was 0.24 percent in present study and remaining 3196 were all HIV negative.

**Table 1: Women receiving Antenatal care and HIV Seroprevalence**

"Table 2 about here"

Age of HIV positive Antenatal Women	n = 8	%
16-20	1	12.5
21-25	4	50
26-30	2	25
31-35	1	12.5
<b>Parity of Antenatal women</b>		
Primigravidas	5	62.5
Multigravidas	3	37.5
<b>Trimester At diagnosis of HIV</b>		
Ist	5	37.5
IInd	3	62.5
IIIrd	0	0

As can be seen from Table 2, out of the 8 HIV positive pregnant women, 4 (50.0%) were in the age group of 21-25 years, followed by 2 (25.0%) in the age group of 26-30 years. Parity wise out of the 8 HIV positive pregnant women, major

ity 5 (62.5.0%) were primigravidas and rest 3 (37.5.0%) were multigravidas. In this study majority of HIV positive cases were women attending the antenatal clinic were in second trimester 5(62.5%) of their , followed by first trimester 3 (37.5 %).

**Table 2: Age, Parity and Trimester of HIV positive Antenatal women**

**Discussion :**In present study 3204 gave consent for HIV testing and prevalence of HIV was found to be 0.24%. In a study done by Ashtagiet *al.* at KEM, Hospital Belgaum, the prevalence of HIV among pregnant women attending the ANC clinic was 0.70%, while a study by Gupta *et al.* done in North India revealed that the prevalence of HIV was 0.88%. More recently a study done by Giri, *et al.*: in the rural areas of Maharashtra found a sero-prevalence rate of 0.41 %.In our study, out of total 08 HIV positive pregnant women 4 (50.0%) were in the age group of 21-25 years, followed by 2 (25.0%) in the age group of 26-30 years. Giriet *al.* found in their study that of the total 50 HIV positive women 17 (34%) were aged 18-23 years, 21 (42%) aged 24-28 years. Similarly a study done by Ashtagiet *al.* revealedthat, out of 716 pregnant women who availed PPTCT services, 360 (50.28%) were in the age group of 21-25 years, 209 (29.19%) in the age group of 15-20 years.

## REFERENCES

1. Ashotagi GS, Metgud CS, Walvekar PR, Naik VA. Prevalence of HIV among Rural Pregnant Women Attending PPTCT Services at KLEvHospital, Belgaum. *Al Ameen J Med Sci* 2011;4:45-8. | 2. Gupta S, Gupta R, Singh S. Seroprevalence of HIV in pregnant women in North India. *BMC Infect Dis* 2007;7:133. | 3. Giri PA, Bangal VB, Phalke DB. Prevalence of HIV among rural pregnant women attending antenatal clinics at Pravara Rural Hospital, Loni, Maharashtra, India. *Int J Health Allied Sci* 2012;1:13-5. | 4. NationalAIDS control organisation Retrieved on 13 January 2015 from [http://naco.gov.in/NACO/National\\_AIDS\\_Control\\_Program/Services\\_for\\_Prevention/PPTCT/](http://naco.gov.in/NACO/National_AIDS_Control_Program/Services_for_Prevention/PPTCT/) | 5. World Health Organisation Retrieved on 23 January 2015 from [http://gamapserver.who.int/mapLibrary/Files/Maps/HIV\\_all\\_2013.png?ua=1](http://gamapserver.who.int/mapLibrary/Files/Maps/HIV_all_2013.png?ua=1) |