

Original Article

## INCIDENCE OF HIV INFECTION IN ANTENATAL MOTHERS

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### ABSTRACT

**Objectives:** To determine the number of mothers detected as HIV positive during the period of April 2016 to September 2017 in COM&JNM Hospital Kalyani Nadia attending ICTC unit.

**Methods:** This is a retrospective cohort study. All antenatal mothers attending antenatal OPD for first time was counselled for HIV testing. Antenatal patient after giving consent was tested for HIV in ICTC. Confirmative test was done for positive patients.

**Results:** Total 1557 patient was tested for HIV during the time period of 18 months. Only 2 mothers came positive. So, 0.12% patient was detected with HIV.

**Conclusion:** HIV incidence is less in compare to west Bengal and India in our institute.

**Key words:** HIV, antenatal, ICTC, PPTCT.

### INTRODUCTION

Despite being home to the world's third largest population suffering from HIV/AIDS (with South Africa and Nigeria having more) the prevalence in India is lower than in many others country. In 2016 HIV prevalence in India was 0.3%.<sup>1</sup> But with a huge population (1.324 billions) - 2.1 million people in India is suffering from HIV.<sup>1</sup> New HIV infection in India in 2016 is 80000 (62000-100000)<sup>2</sup> and new infection in children <15 years is 9100 (7200- 12000).<sup>3</sup>

Prevention of parent to child transmission (PPTCT) in India was started in 2002. Based on 2013 WHO guidelines the programme aims to initiate anti retro viral treatment for all pregnant and breast feeding women living with HIV regardless of CD4 count or stage of HIV infection.<sup>4</sup>

However, in 2015 only 38% of pregnant in India living with HIV received PPTCT treatment<sup>5</sup> and in

2016 only 41% pregnant mothers received treatment<sup>3</sup>. There is a wide variation of HIV in adults as well as pregnant women in different states.

The present study aims at finding out incidence of HIV among the pregnant mothers undergoing testing in our set up. The determination of HIV incidence in a population is important to a) monitor the epidemic b) to improve the target population for intervention. c) to evaluate the effectiveness of HIV prevention and treatment programmes in our community.

### MATERIALS & METHODS

This is a retrospective cohort study done for a period of 18 months from April 2016 to September 2017. The data was collected from the registry of ICTC (Integrated counselling and testing centre) of college of medicine and JNM Hospital, Kalyani, Nadia, West Bengal.

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The following parameters were seen a) number of antenatal mothers screened b) number of antenatal mother received pretest counselling. c) number of test done in our centre d) number of HIV positive mothers, their period of gestation at detection and starting of ART prophylaxis.

Antenatal mothers after proper pretest counselling and consent was tested for HIV antibodies (HIV 1 and 2). If detected positive confirmatory test was done. Post-test counselling done in positive mothers maintaining confidentiality of the report. If the mother was found positive after confirmatory test HAART (highly active anti retro viral therapy) was started irrespective of viral load or CD 4 count. Baby born of HIV positive mother was given single dose of Niverepine Syrup (2 mg/kg) immediately after birth. HAART was continued in mother after delivery.

## RESULT

In our set up total antenatal mothers tested after pretest counselling was 1557. From April 2016 to March 2017 mothers screened was 873, and from April 2017 to September 2017 was 684. This shows number of counselling and testing is increased per month in 2017 than 2016. 2 mothers was detected HIV positive and confirmed by confirmative test. One case was detected in June 2017 and other July 2017. Both mother's age was less than 30. One was at 27 weeks gestation and other at 40 weeks. HAART was started in both cases. Both women was housewife with one being illiterate. One was delivered by caesarean section and baby being fine received syrup Niverepine on delivery. Another is yet to deliver.

Table 1: Particulars of the 2 positive mothers

Age	Gravida	Occupation	Education	Gestational Age at detection
26 yrs	2	Housewife	Illiterate	27 weeks
20 yrs	1	Housewife	Secondary school	40 weeks

In our study shows in the last 18 months only 0.12 % of mother is detected positive in our set up.

## DISCUSSION

The Indian Government is committed to eliminate new HIV infection in children. In India prevention of parent to child transmission of HIV/AIDS started on 2002.

Perinatal transmission of HIV infection occurs in absence of any intervention. The risk of transmission from mother to child is proportional to the plasma viral load of the mother. Untreated mothers with viral load >100000 copies/ml have a transmission risk over 50%.<sup>6</sup> When viral loads are < 1000 copies/ml

the transmission risk is less than 1 %.<sup>7</sup> So HAART for mother both before and during delivery and ART for new born of positive mothers after delivery are recommended to substantially reduce risk of transmission.

India technical report for HIV estimation 2015 shows that there is a declining trend in the number of mother needing PPTCT care. In 2007 it was estimated as 52806 (lower 41208 higher 67575) women needed PPTCT whereas in 2015 mothers needed was 35255 (27351-45965). The trend is also declining in West Bengal. 3539 (2664-4638) needed in 2007 and 1777 (1258-2427) had a need of PPTCT care in 2015.<sup>8</sup>

All states in the country (except Nagaland) and all district in our state have shown less than 1% HIV prevalence among ANC clinic attendees in 14 th round (HSS 2014-15).<sup>9</sup>

The West Bengal AIDS prevention and control society (WBSAPCS) report shows cumulative number of people found positive in ICTC in WB still September 2015 is 65478. Among them 49665 have registered to ICTC and 31021 have enrolled and ever started ART in WB.<sup>9</sup>

However people living in India with HIV and AIDS continue to experience high level of discrimination in a variety of society including household, communities and workplaces. While ART is free the uptake remains low and requires a dramatic scaling up especially in the wake of new 2013 WHO treatment guidelines. Moreover stigma and discrimination remain a significant barrier preventing key affected groups and those at high risk of high risk of HIV transmission preventing from accessing vital health care services.

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## REFERENCES

- UNAIDS (2017) data book [ pdf]
- NACO (2015) Annual report 2016-16' [pdf]
- UNAIDS DATA 2017 Avert.dox
- NACO (2014) Annual report
- UNAIDS (2016) Prevention gap report.
- Garcia PM, Kalish LA, Pitt J et al. Maternal level of plasma Human immunodeficiency virus Type 1 RNA and the risk of perinatal transmission *New Eng J Med* 1999; 34(6): 394-402.
- European collaborative study. Mother to child transmission of HIV infection in the era of Highly Active Antiretroviral Therapy. *Clin Infect Dis* 2005; 40(3): 458-65.
- India HIV Estimation 2015. Technical Report NACO, NIMS (ICMR).
- HIV sentinel surveillance, West Bengal state AIDS prevention and control society. wbsapcs.wbhealth.gov.in