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## The Study of seroprevalence of HIV in pregnant women in a tertiary care hospital.

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### ABSTRACT

*This study was done to determine the seroprevalence of HIV in pregnant women in Kurnool Medical College, India. This study was conducted during the year 2011 and included 11671 pregnant women, all of whom were screened for HIV, 53 were found to be positive for HIV (0.45%).*

**Keywords:** HIV, Pregnant women, Screening, MTCT

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### INTRODUCTION

In 1986 the Government of India established a national AIDS control committee under the ministry of Health and Family welfare to formulate a strategy for responding to HIV- Aids prevalence[1]. HIV prevalence has been increasing among pregnant women in many regions with in the country, hence India launched a National AIDS Control Programme in 1987 [2].

Early marriage, violence and sexual abuse against women, illiteracy are the major socioeconomic reasons of their vulnerability to HIV infection. Six Indian states are considered to have high HIV- AIDS prevalence (>1%) Manipur, Nagaland, Andhra Pradesh Tamil nadu, Karnataka and Maharashtra.

HIV prevalence has been increasing among pregnant women in many regions with in the country. HIV screening in antenatal women is important, because HIV can be transmitted from an infected mother to her child during pregnancy, labour and delivery, and through breast feeding. In the absence of breastfeeding most infections occur during labour and delivery. Reported transmission rates ranged from 13-32% in industrialized countries and from 25 to 48% in developing countries[3].

In breastfed infants upto 20% of infants may acquire HIV through breastfeeding, depending on the duration of breastfeeding and other risk factors such as the presence of mastitis, breast abscess and other local factors [4].

To prevent Mother to Child Transmission (MTCT) in developing countries a single dose of 200mg of nevirapine will be administered to the mother during the first stage of labour and single dose of 2mg/kg bodyweight to the newborn with in 72hours of birth is given[5].

## MATERIALS AND METHODS

The study was conducted at Kurnool Medical College, Kurnool, India

This study was hospital based study which included 11671 pregnant women who attended the Ante Natal Clinic of Kurnool Medical College from January 2011 to December 2011. For the antenatal women first pretest counselling was done and then informed consent was taken, and then blood sample was collected. The sample was tested for HIV antibodies as per NACO guidelines. Usually the first antibody test was ELISA (Enzyme linked Immuno sorbent assay). If the initial result is positive it is confirmed using two other supplemental tests.

After the HIV test result is known, post test counselling is done and result declared. It should be private, and kept confidential. The HIV positive pregnant women get their CD4 count done, and tested for any other infection. Proper antenatal care is given, hospital delivery is advised for them following universal precautions.

## RESULTS AND DISCUSSION

11671 antenatal women were included in this study which lasted for a duration of 12 months from January to December 2011.

Out of this 53 women were detected to be positive for HIV, accounting for 0.45%.

In our study of 11671 pregnant women the seroprevalence of 0.45% was noted. The average HIV prevalence among women attending antenatal clinic in India is 0.48% as per NACO annual report 2010-2011. The result of our study is in agreement with national average HIV prevalence among antenatal women. The figures vary widely between the various states of India- Andhra Pradesh 1%, Andaman and Nicobar Islands 0.25%. In Pune, India the HIV infection rate in antenatal women was 2.2% in 2002-2003 and has declined to 0.73% in 2006 [6].

In some recent studies the incidence was found to be low 0.27% [7].

## CONCLUSION

Every antenatal woman should be screened for HIV after pretest counselling and taking informed consent. Mother to child transmission of HIV infection during pregnancy, delivery or breast feeding is responsible for more than 90% of Pediatric AIDS. Appropriate antenatal screening, interventions and preventive strategies during pregnancy, delivery and breastfeeding will bring down the mother to child transmission of HIV [4].

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