

The study of seroprevalence of HIV in pregnant women from rural area

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Abstract

The present study is six years retrospective analysis (2008-2013) to find out the seroprevalence of HIV in pregnant women in a tertiary care hospital in rural area of Latur, Maharashtra. A total of 9763 pregnant women were screened for HIV as per the NACO (National AIDS Control Organization) guidelines out of which 22 (0.22%) were found positive for HIV. Highest number of HIV positive cases (nine) was found in the year 2008 and only one case was found positive in the year 2013. A significant decline from 0.38% in 2008 to 0.09% in 2013 was observed in last 6 years. These results indicate that there is an overall decline in HIV prevalence rate in ANC attendees.

Keywords: HIV, ANC, PMTCT, seropositivity.

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INTRODUCTION

The emergence and pandemic spread of the acquired immunodeficiency (AIDS) has posed the great challenge to public health in modern times¹. HIV/AIDS has been considered as the most serious natural disaster and is one of the most complex health problems of the 21st century. Surveillance of HIV in pregnant women is an important focus because of the spread of HIV infection from pregnant mother to child. The transplacental transmission from mother to child had been reported to be 15-25% in developed countries and about 48% in developing countries². Apart from this route transmission of HIV from mother to child is also possible through breast feeding and about 20% infection may acquire infection by this route depending upon the duration and other risk factors such as mastitis, breast abscess, etc.³. The joint technical mission on prevention of parent to child transmission of HIV /AIDS (PPTCT) in 2006 estimated that out of 27 million annual pregnancies in

India, 1,89,000 were HIV positive mothers giving birth to 56700 infected babies in the absence of any intervention⁴. The proper counselling and testing of pregnant women for HIV through PPTCT programme will help to institute proper preventive measures as per the guidelines to prevent transmission HIV from mother to child. The present six years retrospective analysis from 2008 to 2013 is carried out to determine the prevalence and trend of HIV infection among pregnant women from rural area of Latur district presenting to Yashwantrao Chavan Rural Hospital and MIMSR Medical College, Latur.

MATERIAL AND METHODS

A total of 9763 pregnant women attending the Antenatal Clinic (ANC) during the period of January 2008 to December 2013 were included in the present study. All the pregnant women attending ANC clinic were referred to PPTCT center for pre-test counselling on HIV and HIV testing. After obtaining informed consent, a blood sample was collected and subjected for the HIV testing as per the NACO guidelines. If the initial test was positive for HIV antibodies, the second test was carried out for confirmation of positivity. A report was given after post-test counselling. The HIV positive pregnant women were followed up to promote institutional delivery, and the mother, and the child were given antiretroviral therapy (navirapine) to prevent the transmission of HIV from mother to child, and followed up further as per NACO guidelines.

RESULTS AND DISCUSSION

Table 1

Year	No of ANC Cases screened	No. of HIV Positive cases	Percentage
2008	2347	09	0.38
2009	1717	02	0.11
2010	1554	03	0.19
2011	1461	05	0.34
2012	1626	02	0.12
2013	1058	01	0.09
Total	2713	22	0.22

Out of 9763 pregnant women analysed during the period of five years, 22 (0.22%) were found positive for HIV antibodies. Maximum number of cases were found HIV positive in the year 2008 and only one case was found positive for HIV in the year 2013 (Table1). A significant decline from 0.38% in 2008 to 0.09% in 2013 was observed in last six years. The prevalence rate of 0.50% of HIV among the women attending ANC clinic in Maharashtra in 2007 has been reported⁵. However, at a national level, a prevalence rate of 0.49% among ANC clinic attendees has been reported in 2008-09. Except for Andhra Pradesh and Nagaland with a median HIV prevalence of 1%, all other states have shown less than 1% HIV prevalence among ANC attendees^{6,7}. A prevalence rate of 0.22% among ANC attendees from rural area is comparatively less than prevalence rates of 0.50% in Maharashtra and 0.48% in India. This may be attributed to proper awareness about HIV/AIDS implemented by Maharashtra AIDS Control Society

(MSACS). An overall decline in prevalence of HIV among ANC attendees is noted at all India level and in high prevalence states of India, except for some low and moderate prevalence states⁶. In the present study also, a significant decline in prevalence of HIV among ANC attendees from 0.38% in 2008 to 0.09% in 2013 has been observed with some exceptional minor increase in prevalence rate in-between. This finding fairly correlates with the reports on national level. The results of present study show that there is an overall decline in HIV prevalence rate among ANC attendees in this area. A decline trend of HIV indicates that effective implementation of PPTCT by NACO and various awareness programmes play an important role in the National AIDS control programme not only in reversing the HIV prevalence in pregnant women but also in reversing the overall prevalence rate of HIV in India.

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