

# **Rising Trend of Pediatric HIV Infection In North India: *Experience of a Tertiary Care Center***

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## **Abstract**

Pediatric HIV infection continues to pose a serious threat in the developing world. While in the developed world, mother to child transmission has been reduced to less than 3%, in India large-scale AZT intervention programs have still to operate in full swing. Some 25 million babies are born each year and the number of infected babies could be >50000 per year. The present study was designed to assess the change, if any, in the time trends of HIV infection in children over the last 18 years as observed at the surveillance center attached to Nehru Hospital Chandigarh.

All patients reporting to the surveillance center at the PGIMER Chandigarh were subjected to a detailed history and screened for HIV by the three tests protocol recommended by the WHO. DNA analysis was done to confirm infection in babies less than 18 months. Time trends were ascertained over an extended period of 18-years to assess the impact of IEC programme launched by NACO. Data indicates that the total number of HIV positive cases increased 10 fold over the last 10 years. During 1991, 41 cases were recorded; the number increased to 439 in year 2001, 574 in 2004 and 857 in 2005 ( $r=0.98$ ). A similar trend was observed in the pediatric age group. During the initial 5 years, i.e. 1987 to 1992 only 7 pediatric cases were documented positive while the number increased to 45 in the year 2001 and to 77 in the year 2005 with a cumulative figure of 400 children. Linear regression analysis showed a highly significant trend ( $r=0.94$ ). Out of these, 49% were symptomatic. Maximum number of babies was observed in the age group of 3-5 years. A significant number of babies (12%) had acquired the infection through blood. It calls for urgent antiretroviral intervention in antenatal mothers to control the emerging pediatric HIV epidemic in high-risk areas.