

Paradigm shift of prevention of parent to child transmission in India; Multiple benefit

Debjit Chakraborty
ICMR- NICED, India

Statement of the Problem: Prevention of parent to child transmission (PPTCT) of HIV approaches towards early detection of HIV status and to provide cascades of services including Anti Retroviral Treatment (ART) for both maternal health benefit and to prevent vertical transmission. In India the major intervention adopted initially was intrapartum single dose nevirapine to mother baby pair. However to achieve global goal of elimination of pediatric HIV since 2014-16 WHO adopted multidrug ART regimen to antenatal HIV positive mother coupled with extended nevirapine prophylaxis to HIV exposed infants (6-12 weeks). Our study compared the effectiveness across this two regimens keeping ARV naïve as reference.

Findings: We conducted a series of retrospective cohort studies in West Bengal, India (since 2013-2020) where we observed a mother to child transmission rate of around 27% in absence of any prophylaxis. This was reduced to 10% and 3% respectively with administration of single dose nevirapine and multidrug ART regimen. Protective effectiveness of multidrug ART was 88% as compared to 62% for single dose nevirapine. Moreover, ART in pregnant mother was found 94% effective in reducing still birth rate in HIV infected pregnant women in India. Also we observed when ART is in place, the role of other factors such as maternal age, CD4, duration of ART, time of HIV detection, mode of delivery etc becomes insignificant.

Conclusion & Significance: It can be concluded from our studies that incorporation of multidrug ART in PPTCT is really a paradigm shift as it remarkably reduces HIV transmission rates from mother to child and also reduces a drastic reduction in adverse obstetric outcomes. Test and Treat policy of HIV since 2014 in India also enabled early ART initiation which showed the potential of elimination of Pediatric HIV.

Biography

Debjit Chakraborty is an expert in the field of epidemiology and public health working in the field of HIV and other communicable disease for last 13 years. He has basic education in Medicine and master in public health (epidemiology) from Kolkata, India. He has worked in the field of HIV, Cancer, Vector Borne Disease and Antimicrobial Resistance till date and has more than 40 publication in many national and international journals and conferences. He is presently working as Scientist D, in the division of Epidemiology in ICMR- National Institute of Cholera and Enteric Diseases in India.