

# OPERATIONAL EFFECTIVENESS OF THREE PMTCT PILOT SITES IN SOUTH AFRICA

**Chopra M<sup>1</sup>**

## **Background**

The South African National PMTCT Programme began in 2001. Eighteen pilot sites, one rural and one urban, were initiated in all 9 provinces. The operational effectiveness of this programme needs to be measured. The aims of this study were to describe the impact of the PMTCT programme on the health of infants born to HIV-positive mothers.

## **Methods**

This was a prospective cohort study of mothers and infants participating in three South African national PMTCT Programmes. Sites (Paarl, Rietvlei and Umlazi) were purposively selected to reflect different socio-economic, rural-urban and HIV prevalence regions. Six hundred and sixty four (664) HIV positive and two hundred and seventeen (217) HIV negative mother-baby pairs were recruited ante-natally or post-delivery. Data were collected by trained field staff using semi-structured interviews. Home visits were made at 3,5,7,9,12,16,20,24,28,32 and 36 weeks post-delivery. HIV infection in infants was determined from dried blood spots by qualitative HIV-1 DNA assays at 3, 24 and 36 weeks.

## **Results**

HIV transmission to infants varies substantially across the three pilot sites. These differences appear to be due in part to operational issues across the sites. This paper will present the HIV transmission rates for both the early and late post-partum periods. The differences seen across the sites and the contributors to these differences will be presented, with a focus on the health systems issues that may reduce effectiveness of the programme, along with recommendations for improvements.

## **Conclusions**

Mother-to-child transmission of HIV infection varies substantially across the South African national PMTCT programme pilot sites. Health systems issues appear to be underlying these differences.

*1. Health Systems Research Unit, Medical Research Council of South Africa*