

Uptake of prevention of mother to child transmission interventions in Kenya: health systems are more influential than stigma

Kinuthia, J; Kiarie, James N; Farquhar, Carey; Richardson, Barbra A; Nduati, RW; Mbori-Ngacha, DA; John-Stewart, Grace
Date: 2011-12-28

Abstract

Abstract Background We set out to determine the relative roles of stigma versus health systems in non-uptake of prevention of mother to child transmission (PMTCT) of HIV-1 interventions: we conducted cross-sectional assessment of all consenting mothers accompanying infants for six-week immunizations. **Methods** Between September 2008 and March 2009, mothers at six maternal and child health clinics in Kenya's Nairobi and Nyanza provinces were interviewed regarding PMTCT intervention uptake during recent pregnancy. Stigma was ascertained using a previously published standardized questionnaire and infant HIV-1 status determined by HIV-1 polymerase chain reaction. **Results** Among 2663 mothers, 2453 (92.1%) reported antenatal HIV-1 testing. Untested mothers were more likely to have less than secondary education (85.2% vs. 74.9%, $p = 0.001$), be from Nyanza (47.1% vs. 32.2%, $p < 0.001$) and have lower socio-economic status. Among 318 HIV-1-infected mothers, 90% reported use of maternal or infant antiretrovirals. Facility delivery was less common among HIV-1-infected mothers (69% vs. 76%, $p = 0.009$) and was associated with antiretroviral use ($p < 0.001$). Although internal or external stigma indicators were reported by between 12% and 59% of women, stigma was not associated with lower HIV-1 testing or infant HIV-1 infection rates; internal stigma was associated with modestly decreased antiretroviral uptake. Health system factors contributed to about 60% of non-testing among mothers who attended antenatal clinics and to missed opportunities in offering antiretrovirals and utilization of facility delivery. Eight percent of six-week-old HIV-1-exposed infants were HIV-1 infected. **Conclusions** Antenatal HIV-1 testing and antiretroviral uptake was high (both more than 90%) and infant HIV-1 infection risk was low, reflecting high PMTCT coverage. Investment in health systems to deliver HIV-1 testing and antiretrovirals can effectively prevent infant HIV-1 infection despite substantial HIV-1 stigma.