The prevalence of syphilis and pregnancy outcome among HIV infected pregnant women attending antenatal syphilis screening program at IDI, Uganda

By Namale Gertrude
Infectious Diseases Institute
Kampala, Uganda

WHO scholarship

Training Course in Sexual and Reproductive Health Research
Geneva, 2 March 2009
Background

- Syphilis infection in pregnancy is highly prevalent in many areas of the world

  Maternal syphilis contributes to 29% of perinatal deaths, 11% of neonatal deaths, and 26% of stillbirths around the world

- A high prevalence throughout sub-Saharan Africa, ranging between 2.5% in Burkina Faso, 8.4% in South Africa, 4% in Uganda and 17.4% in Cameroon
Problem and Justification

- Limited information on prevalence of syphilis and pregnancy outcome among HIV infected pregnant women in Uganda.
- Infants born to mothers co-infected with HIV and syphilis may be at higher risk of acquiring congenital syphilis and HIV.
- In Uganda routine antenatal syphilis screening policy has not automatically translated into an effective health programme.
- In few facilities where pregnant women are screened, often not followed up to assess prevalence and pregnancy outcome.
- Urgent need to ascertain prevalence and pregnancy outcome with special focus among HIV pregnant mothers in to scale up services.
Hypothesis

- We do believe that:
  - Screening and treating syphilis among HIV infected pregnant women during antenatal care would positively affect pregnancy outcome.
Objectives

**General:**
To determine the prevalence of syphilis and pregnancy outcome among HIV infected pregnant women attending antenatal syphilis screening program so as provide information to enable policy scale up services in Uganda.

**Specific:**
To determine the prevalence of syphilis among HIV/AIDS infected pregnant women attending antenatal syphilis screening program at IDI Clinic.
To establish social-demographic factors associated with syphilis among HIV/AIDS infected pregnant women.
To determine pregnancy outcomes among HIV/AIDS infected pregnant women screened and treated for syphilis.
Methods

- **Study setting:** Infectious Diseases Institute-HIV/AIDS Antenatal clinic

- **Design:** Prospective cohort study for a period of two years
  - **Primary outcome:** pregnancy outcome (congenital syphilis, stillbirth, perinatal death, spontaneous abortion) at defined points in time - 7 days postpartum

- **Study population:** HIV/AIDS pregnant women attending antenatal clinic at the infectious disease clinic - Mulago hospital
Inclusion and Exclusion

- **Inclusion**: HIV positive women attending antenatal clinic at the infectious diseases clinic

- **Exclusion**:
  - Non consenting-decline
  - Non residents
  - Too sick to participate
Sample size

- Assumptions:
  - desired level of significance = 5%
  - power of the study = 0.80
  - frequency of exposure in the ve+ outcome = ----
  - level of risk that warrant detection (RR) = 2
  - n=----- ve+ outcome
  - n=----- ve- outcome
Data collection and sampling procedure

HIV+ Preg. In ANC

Screen for syphilis by RPR

Exclude

Syphilis -
Outcome +
Outcome -

Syphilis +
Outcome +
Outcome -
Data analysis and management

- Data will be entered, edited and cleaned in SPSS statistical package then exported to STATA for statistical analysis.
- Proportions, means, relative risk and 95% confidence intervals (CI) will be determined.
- Statistical significance will be taken as P<0.05, potential confounders will be adjusted for during multivariate analysis.
Ethical consideration

- Permission from Uganda National Council of Science and Technology through the IDI - Scientific Review Committee.
- Informed consent will be obtained from the individual women to participate in the study.
- Confidentiality will be ensured at all stages of data collection, analysis, report writing and dissemination.
Acknowledgement

- GFMER
- WHO
- IDI
- Course facilitators
- All participants
- My family

THANK YOU