



## Previously on PrEP, now pregnant – What to do??

**Sebitloane HM,**

Assoc Prof – Head of Clinical Department and Head of Academic Department

Obstetrics and Gynaecology

University of KwaZulu Natal

# Introduction

- Pregnancies amongst adolescents and young women – 16% of all births
  - 19% will have repeat pregnancies before age 20
- Proportions HIV infections – 19% amongst adolescents (- 29.5% nationally 15 – 49yrs)
- HIV risk up to 6X higher in young women (15-24 years) compared to male peers
- AIDS is the 2<sup>nd</sup> leading cause of death among adolescents (NCCEMD)

# Seroconversion in pregnancy

- Women remain vulnerable to HIV during pregnancy and even more so postdelivery.
- Local studies have shown sero-conversion rates of 1.3% to 3.0% in pregnancy (2005-2009), and 3.3% (95% CI: 2.8%-3.8%) in 2011 – 2012 data
- The pooled meta-analysis - HIV incidence was not significantly higher among pregnant or postpartum (3.9 per 100 person-years (4.7 during pregnancy and 2.9 postpartum) women vs nonpregnant/ postpartum women,
- similar to that defined as “substantial risk” in nonpregnant individuals, (eg female sex workers)
- Recent analysis - risk per condomless coital act was significantly increased during pregnancy through 6 months' postpartum - **aRR 2.76; (95% CI, 1.6–4.8)** compared to nonpregnant/nonpostpartum time and was highest during **late pregnancy (aRR 2.82; 95% CI, 1.3–6.2)** and **postpartum (aRR 3.97; 95% CI, 1.5–10.5)**.



# Risk of MTCT

- Great efforts in reduction of MTCT, (4% at 4-8 weeks despite the 88% ARV prophylaxis coverage)
- 40 000 children are newly infected in SA annually
- Johnson et al modelled a 34% projected increase in MTCT from recently infected mothers in the absence of any intervention.
  - further cautions that MTCT from women who seroconvert during lactation will become the dominant mode of MTCT.
- **Incident HIV infection during pregnancy and breastfeeding contributes to a significant proportion of infants with HIV in very high incidence settings,**

# Case for PrEP

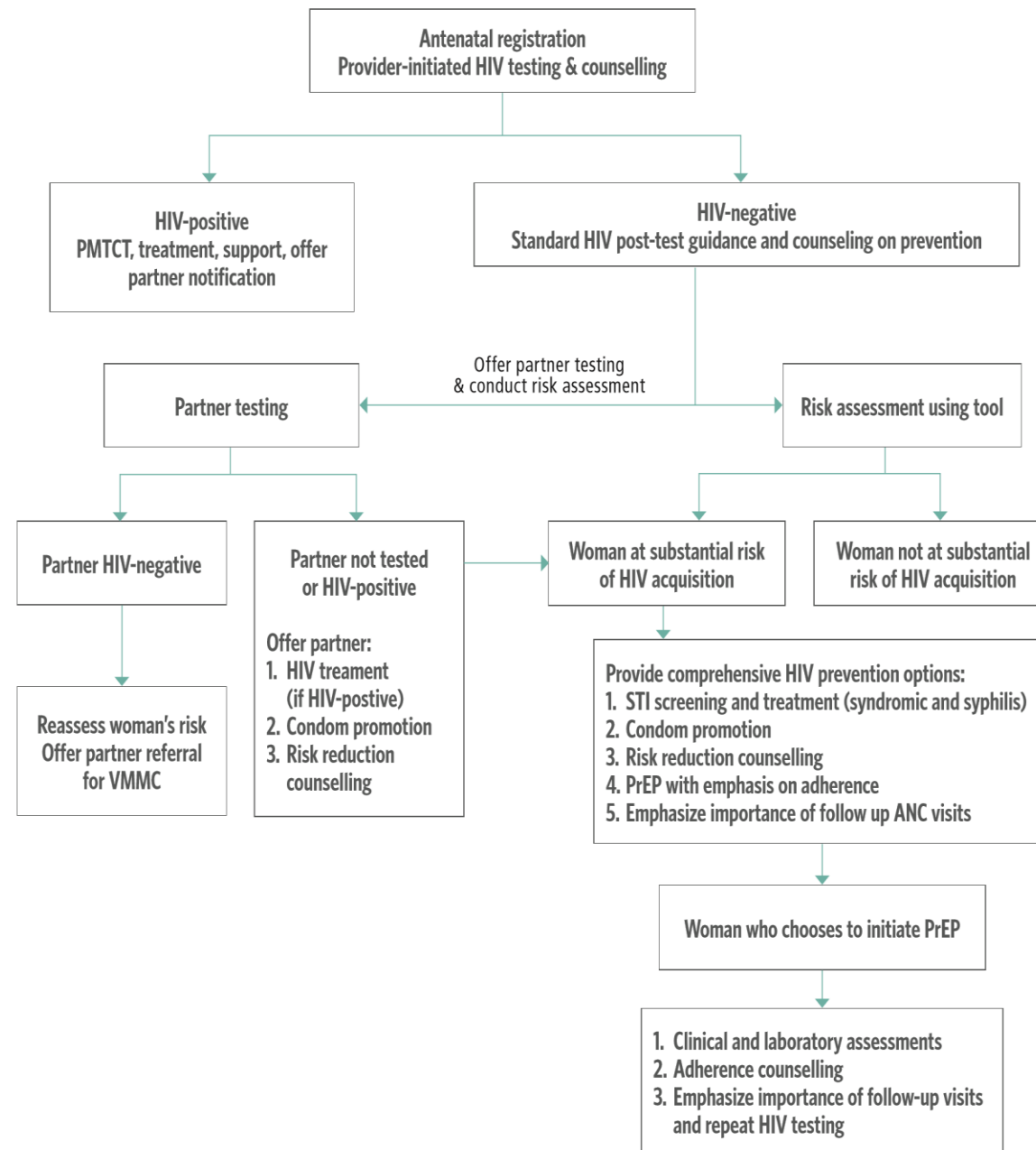
- PrEP could **complement** established HIV prevention strategies for pregnant and breastfeeding women as **part of a comprehensive package** to reduce HIV infections among women and transmission from mothers to infants in settings with high HIV incidence
- In 2015, WHO recommended that oral PrEP containing TDF be offered as an additional prevention choice for people at substantial risk of HIV infection, as part of combination HIV prevention approaches.
- Although there is limited experience with the use of PrEP in antenatal and postnatal care services, it is an important new HIV prevention method to consider, particularly for high-burden settings where women remain at significant HIV risk.

# Criteria for PrEP

3 scenarios for women who would most benefit most during pregnancy and breastfeeding:

- woman taking PrEP who subsequently becomes pregnant and remains at substantial risk of HIV infection;
  - pregnant or breastfeeding HIV-negative woman living in a setting with high HIV incidence who is at substantial risk of HIV acquisition; or
  - woman whose partner is HIV-positive but is not virally suppressed.
- **PrEP combined with screening for acute infection**, adherence counselling, safety monitoring and **HIV retesting every three months**, in addition to other existing HIV prevention options, including condoms, should be offered

Figure 2. A suggested prioritization framework for offering PrEP to pregnant and breastfeeding women (4)





# Risk assessment tool (Kenyan)

- No of lifetime partners
- Male partner's HIV status (6 for unknown)
- RPR (5 for reactive)
- BV
- Candidiasis

# Safety of PrEP in pregnancy

- TDF, based PrEP is part of the WHO preferred first-line ART regimen recommended for adults, including pregnant women.
- The existing safety data support the use of PrEP in pregnant and breastfeeding women who are at continuing substantial risk of HIV infection.
- It is widely used with good tolerance and no increased reports of safety and adverse events.
- In PrEP trials, exposure to TDF-containing PrEP during the first trimester of pregnancy was not associated with adverse pregnancy or infant outcomes

# Ongoing surveillance

- There is no safety-related rationale for disallowing or discontinuing PrEP use during pregnancy and breastfeeding for HIV-negative women who are receiving PrEP and remain at risk of HIV acquisition
- - benefits of preventing HIV acquisition in the mother, and the accompanying reduced risk of mother-to-child HIV transmission outweigh any potential risks of PrEP, including any risks of fetal and infant exposure to TDF and FTC in PrEP regimens

WHO Technical brief, PrEP, 2017

# Ongoing surveillance

3 areas to be monitored during PrEP use.

- **Maternal adverse outcomes:** monitoring treatment-limiting toxicities associated with ART in pregnant women, particularly mortality;
  - morbidity – renal impairment – creatinine / proteinuria as well as **BMD** (esp during breastfeeding, and does it reverse upon stopping)
- **Adverse birth outcomes:** monitoring toxicity in the fetus in utero , (SB / PTB / LBW and major congenital anomalies or early infant deaths.
- **Adverse infant and child outcomes:** monitoring health outcomes in infants and young children exposed to ARV drugs in utero or via breast milk, esp impact on growth and development.

# Regular ANC

- At baseline
- Screen for creatinine as in PMTCT program;
- Hep B screen - if +ve regular LFT testing
- Watch for proteinuria / BP
- STI screen including BV
- Repeat HIV testing every 3 months
- Re-evaluate risk at regular visits,

# Key messages

- PrEP is safe during pregnancy and breastfeeding.
- PrEP should be provided as part of a comprehensive package.
- Adherence matters.
- Disclosure can have benefits.
- Recognize “seasons of risk”.
- PrEP can be cost-effective.
- PrEP is not for everyone.
- Ongoing surveillance is necessary.

Thank you