PREGNANCY RATES & CLINICAL OUTCOME COMPARISONS AMONG WOMEN LIVING WITH HIV: HPTN 052

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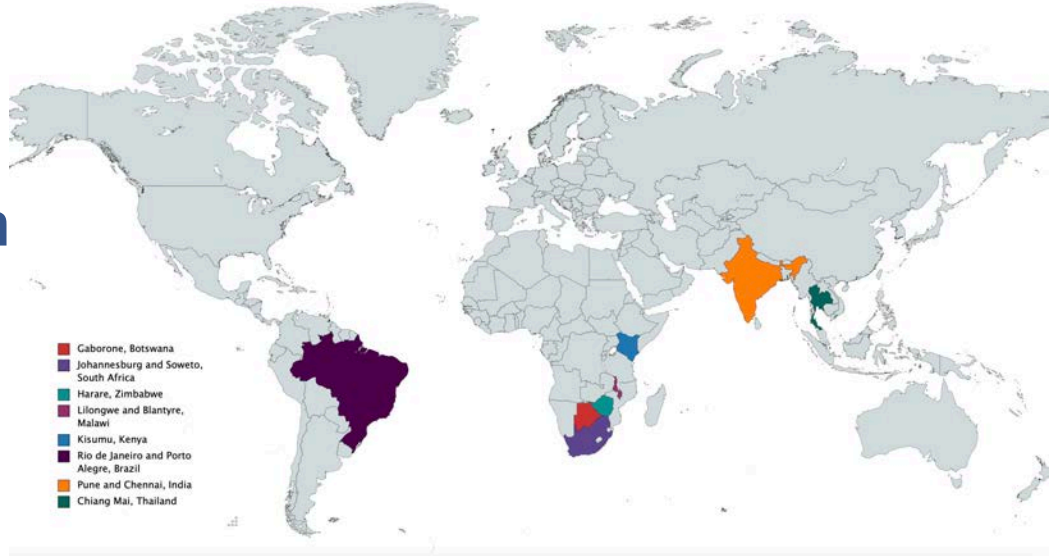
Presented at virtual CROI 2021

HPTN
HIV Prevention Trials Network

Background

- Pregnancy in LMIC often due to limited access to contraceptives
  - Coincides with worse health outcomes
- HPTN 052 was a multisite randomized trial evaluating effect of **early cART** on sexual HIV transmission in heterosexual serodiscordant couples
  - Diversely enrolled HIV infected men and women and their sexual partners
  - Recommended & provided **contraception**
  - First clinical trial of a therapeutic intervention (besides MTCT) that allowed pregnant women to enroll



***Hypotheses*: Are (1) <u>clinical measures of HIV</u> and (2) <u>partner seroconversion</u> associated with pregnancy among HIV infected women enrolled in HPTN 052?**

Data and Methods

- Single longitudinal cohort of **all 869 HIV-infected women** in HPTN 052
  - Univariable and multivariable **Cox regression** to infer associations between **hypothesized predictors** and time to first pregnancy after enrollment
  - Adjusted for age, married/cohabitating, condom use, published estimates of national level contraceptive coverage, baseline cART regimen and number of past pregnancies

Data Snapshot

- Average follow up time was 5.7 years with 7.3% annual pregnancy rate
- 115 women were pregnant at enrollment
- 532 women never pregnant (WNP) and 337 ever pregnant (WEP) during study
- Mean number of years on cART was 4.61 for WEP and 4.67 for WNP

Results – Data Description

Figure 1. Time to first pregnancy after enrollment stratified by baseline covariates and Hypothesized Predictors at baseline

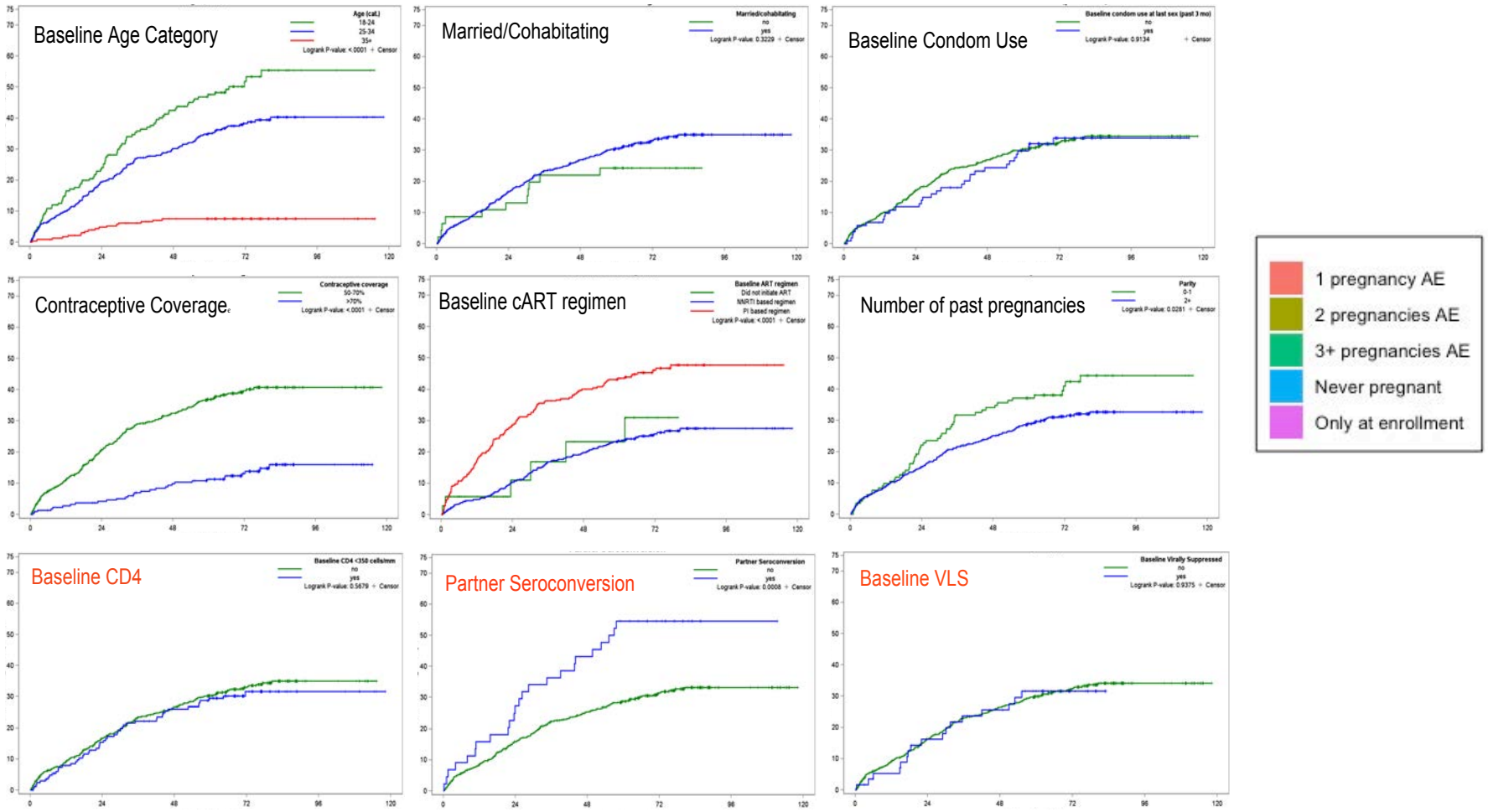


Figure 2. Breakdown of 869 women by pregnancy status

*PAE = pregnancy after enrollment

Results -- Inference

Figure 3. Point estimates and 95% confidence intervals of hypothesized predictors in Cox regression models

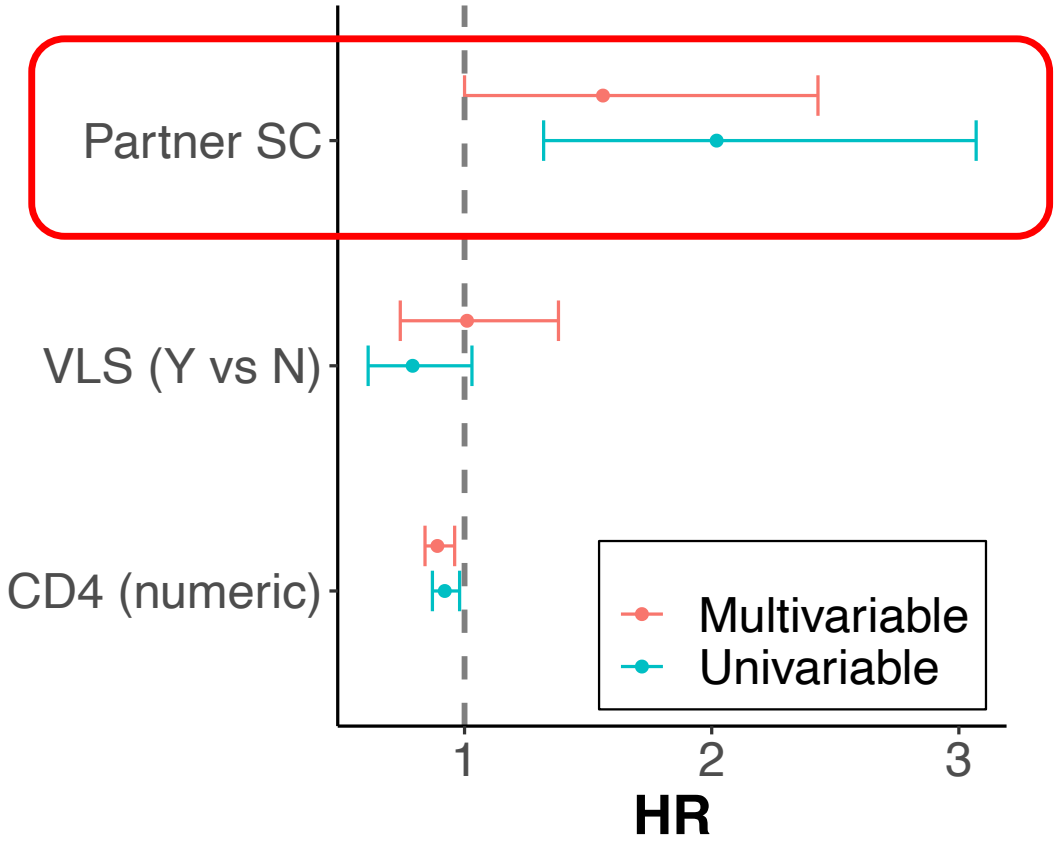
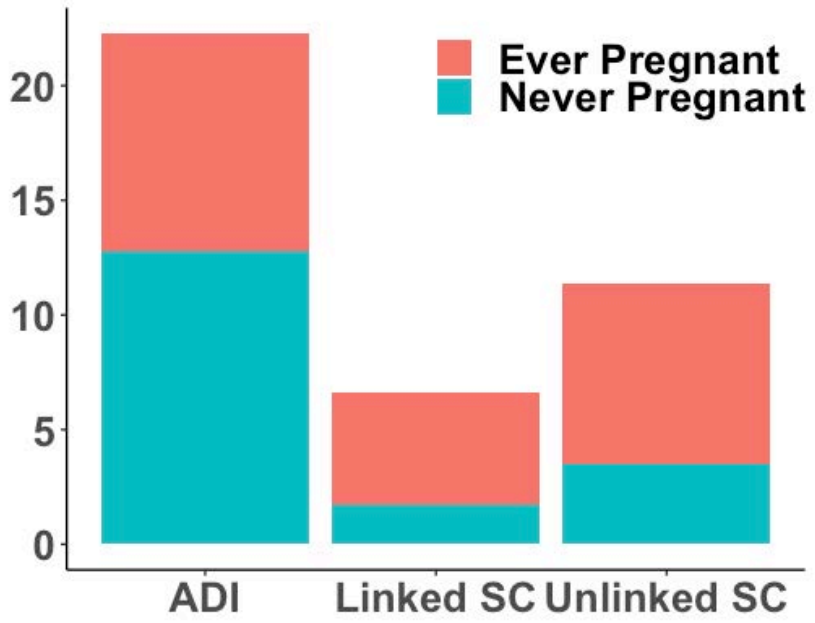


Figure 4. Stacked bar charts showing cumulative number of ever pregnant and never pregnant participants developing aids defining illness (ADI) and having their partner seroconvert: linked as well as unlinked seroconversions



Conclusions

- Similar clinical outcomes between ever pregnant & never pregnant women
  - women's overall health not impacted negatively by pregnancy
- Access to cART and contraceptives
  - can allow women living with HIV to live normally
  - can empower women living with HIV to make informed family planning decisions
- Only looked at associations in a clinical trial population
- Further research needed to
  - explore synergistic impact of cART and contraceptive access in real world settings
  - draw causal conclusions

Thank You!

HPTN Supported by NIH grants UM1AI068619-15,, and UM1AI068613-15. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.