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

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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) clinical measures of HIV and (2) partner seroconversion 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

- Baseline Age Category
- Married/Cohabitating
- Baseline Condom Use
- Contraceptive Coverage
- Baseline cART regimen
- Number of past pregnancies
- Baseline CD4
- Partner Seroconversion
- Baseline VL

Figure 2. Breakdown of 869 women by pregnancy status

- 1 pregnancy AE
- 2 pregnancies AE
- 3+ pregnancies AE
- Never pregnant
- Only at enrollment

*PAE = pregnancy after enrollment
Results -- Inference

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

- Partner SC
- VLS (Y vs N)
- CD4 (numeric)

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!

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