

# Alcohol Use and Associated HIV risk in Pregnant Women in Cape Town

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## PrEP-PP

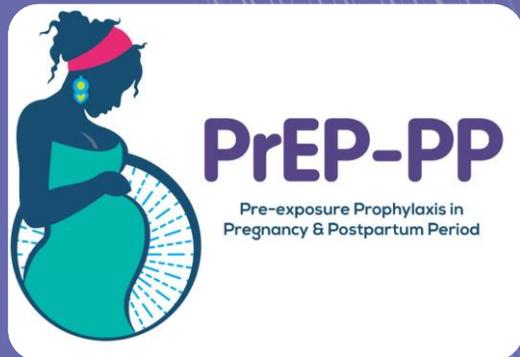
Pre-exposure Prophylaxis in  
Pregnancy & Postpartum Period

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# Background and Objectives

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- Alcohol use and HIV: interrelated public health issues associated with adverse health outcomes for the mother and fetus.
  - SA experiences exceedingly high rates of FAS.
  - HIV prevalence among pregnant women: 29%
  - Addressing these issues is critical to HIV prevention and to promote healthy pregnancies and births.
  
- We examined associations between reported alcohol use and HIV risk behaviors among pregnant women in Cape Town, SA.



# Methods

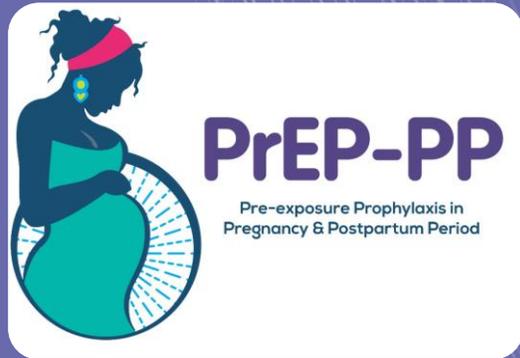
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Baseline data from PrEP-PP was analyzed (n=1201).

- HIV-uninfected pregnant women, 16+ years, attending their first ANC visit.

Variables:

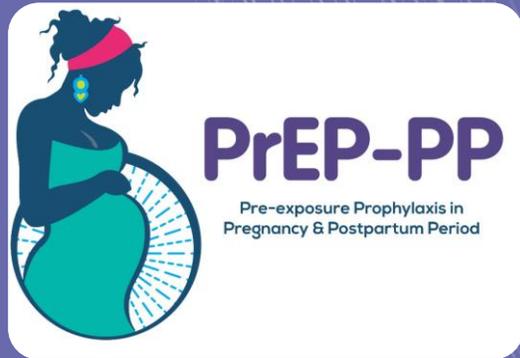
- AUDIT-C (score  $\geq 3$ )
- Alcohol use in past year before/during pregnancy,
- HIV sexual risk: STI (Chlamydia trachomatis, Neisseria gonorrhoeae, and Trichomonas vaginalis POC testing) , multiple recent sexual partners, partner HIV serostatus, condomless sex at last sex.



# Methods

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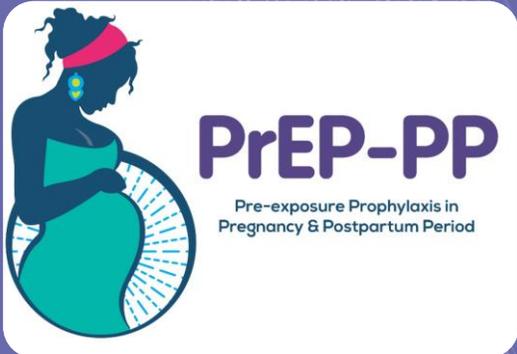
- Sensitivity analysis was performed to identify alcohol use variable for main analysis.
- Binary HIV sexual risk variable was created for those at high-risk vs not high-risk. Results are presented for two cut offs: 2+ risk factors and 3+ risk factors
- Multivariable logistic regression models adjusted for a priori confounders to examine associations between alcohol use and HIV risk.



# Results

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- Median age: 26.6 yrs | Median gestational age: 21 wks.
- Alcohol prior to pregnancy: 50% (2/3 hazardous use)
- Alcohol use during pregnancy: 6% (1/3 hazardous use)
- Current STI (29%) | partner of positive/unknown HIV status (24%). | Multiple partners (3%) | No condom at last sex (88%)

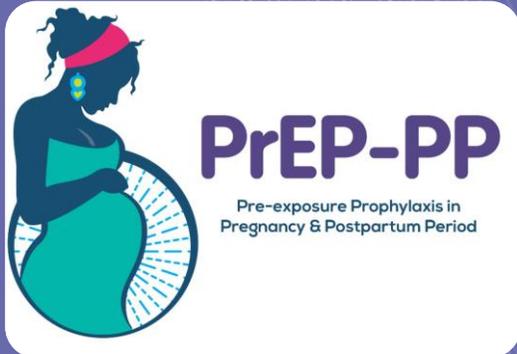


# Results

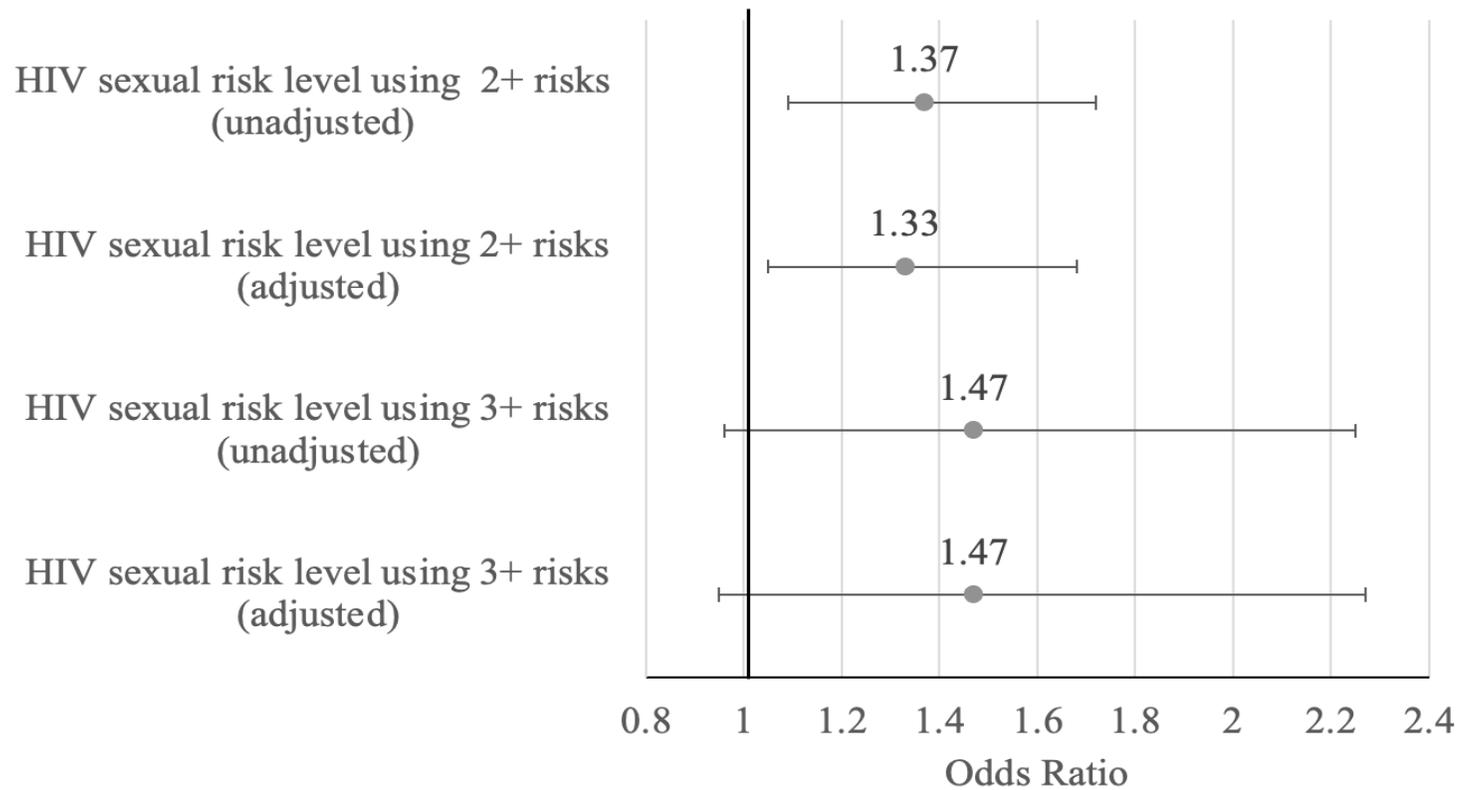
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Persons reporting alcohol use were...

- younger
- ↓ to feel pregnancy timing was good (45% vs 55%)
- ↓ to report wanting to have the baby (30% vs 42%)
- ↑ to have a partner of unknown HIV status (25% vs 19%)
- ↑ to report IPV (17% vs 8%)
- ↑ to have multiple partners (5% vs 1%).



**Figure 1. Unadjusted and adjusted<sup>1</sup> analyses of associations between any alcohol use before pregnancy and HIV sexual risk<sup>2</sup>**



### Composite HIV sexual risk measure

0 risk factors (n=74): 6.2%

1 risk factor (n=625): 52.0%

2 risk factors (n=408): 34.0%

3+ risk factors (n=94): 7.8%

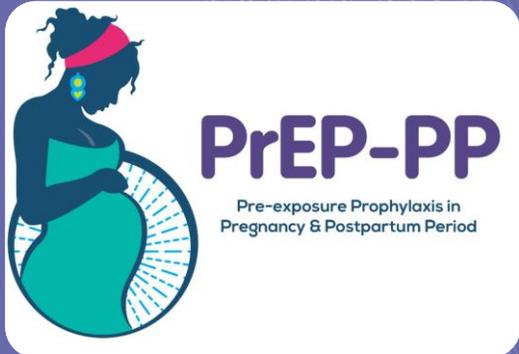
<sup>1</sup>Model adjusted for age, education level, employment status, residence type and current partner

<sup>2</sup>HIV sexual risk measured by presence of an STI, multiple partners, condom use at last sex and partner HIV status. Individuals with three or more of these risks were considered "high risk"

# Discussion

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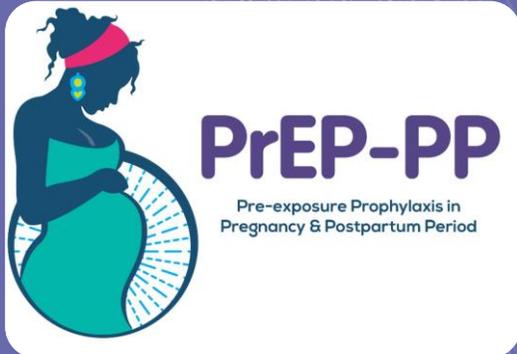
- High prevalence of alcohol use prior to pregnancy.
- Lower prevalence of alcohol use during pregnancy than expected based on prior work.
- Alcohol use was associated with being at high risk of HIV acquisition.
- Nearly  $\frac{1}{4}$  had a partner who was positive/unknown status underscoring the importance of PrEP use and methods to improve partner testing in this population.



# Discussion

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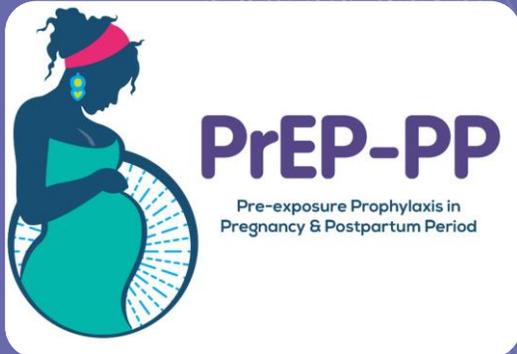
- EBIs to address alcohol use and other HIV risk behaviors during pregnancy in SA are needed.
- Additional modifiable HIV risk factors were also identified including partner HIV testing, PrEP offer, and counseling, testing for STIs and counseling around STI results disclosure (to reduce risk of reinfection).



# Future Directions

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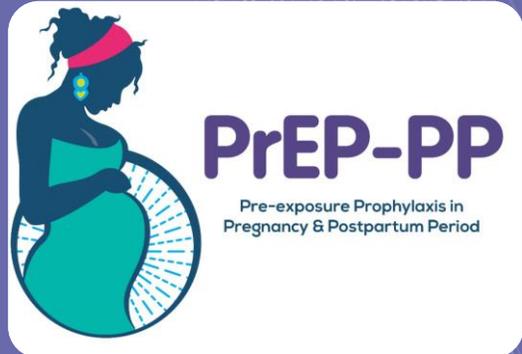
- Use of objective measures of alcohol use (e.g., PEth) as well as self-reported measures collected in real time (e.g., ecological momentary assessments) to reduce bias from recall and social desirability.
- Qualitative work exploring community norms and attitudes around alcohol use is needed to develop a culturally tailored intervention to address these issues in this population.



# Limitations

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- Cross sectional study
- Use of subjective alcohol use measures





**PrEP-PP**

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# Questions?

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