

Alcohol Use and Sexual Risk Behavior in Young Women in Rural South Africa

Washington DC, June 2022

Manuela Bullo

Mentor: Audrey Pettifor



HPTN

HIV Prevention
Trials Network

ANNUAL MEETING

2022

- HPTN 068: Phase III research study to determine whether providing cash transfers to young women and their household, conditional on school attendance, reduced young women's risk of acquiring HIV. Between **March 2011 and December 2012** 2533YW that were enrolled in high-school in Rural South Africa were included.
- Alcohol use increases high-risk sex behavior and is popular among young people
 - Female adolescents in South Africa present extremely high risk of HIV acquisition and high risk of alcohol use
 - Young women (aged 15–24 years) account for 26% of new HIV infections in the region

Project Objectives/Aims

Aim 1

To assess the association of alcohol use and HIV incidence in a cohort of school age female adolescents in rural South Africa

Aim 2

To describe alcohol use patterns and identify those that increase the risk of engaging in risky sexual behavior

Aim 3

To explore the association between male sex partner's drinking behavior and women's alcohol use

Project Objectives/Aims

Aim 1

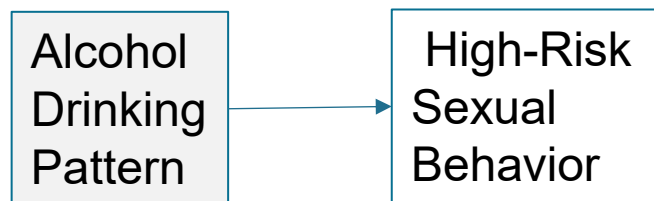
Cox Proportional Hazards Model



Adjusted by age and school attendance

Aim 2

Logistic Regression Model



Ever
At alcohol serving venue
Partner gives alcohol
They buy alcohol
Heavy drinking

Inconsistent condom use
Partner > 5 years older
Transactional sex
High at sex
Multiple partners

Aim 3

Cross sectional analysis





1 **Crude HR: 1.60**
(95%CI: 1.09, 2.62)

Adjusted HR: 1.39
(95%CI: 0.88, 2.14)



2

	Crude OR	95% CI		aOR	95% CI
Alcohol (ref = 0)	3.45	2.97 - 4.00	Alcohol (ref = 0)	3.06	2.53 - 3.72
Going to Shabeen (ref = 0)	7.21	5.96 - 8.73	Going to Shabeen (ref = 0)	2.49	1.41 - 4.37
High attendance (ref = 0)	0.38	0.31 - 0.47	High attendance (ref = 0)	0.54	0.43 - 0.67
Age	1.44	1.41 - 1.48	Age	1.4	1.36 - 1.45



3 **Crude RD: 0.21**
(95%CI: 0.16, 0.25)

Adjusted RD: 0.13
(95%CI: 0.08, 0.18)

- While there seems to be an association between alcohol use and HIV infection, this difference was not shown to be significant in the adjusted model. Probably regarding to sample size.
- Drinking alcohol, receiving alcohol from partner, and going to alcohol serving venues seem to be associated to high-risk sexual behavior.
- When partners drink alcohol, young women have higher risk to drink alcohol too.

- Moving beyond this study, alcohol use in YW could be a target for HIV prevention interventions.
- These interventions should address not only the YW behavior, but also take into consideration their context, the places where they go and their partners among other things

Thank you

mbullo@hivramos.org.ar

manuelabullo@uca.edu.ar



/HIVptn

Acknowledgments

- Overall support for the HIV Prevention Trials Network (HPTN) is provided by the National Institute of Allergy and Infectious Diseases (NIAID), Office of the Director (OD), National Institutes of Health (NIH), National Institute on Drug Abuse (NIDA), the National Institute of Mental Health (NIMH), and the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (NICHD) under Award Numbers UM1AI068619-15 (HPTN Leadership and Operations Center), UM1AI068617-15 (HPTN Statistical and Data Management Center), and UM1AI068613-15 (HPTN Laboratory Center).
- Thank you to Marcelo Losso for introducing me to the program and supporting me while in it, to Audrey Pettifor for mentoring me, to Marie Stoner for generously providing her insight and support and Maryam Warsi for her statistical work and for getting involved in the project
- The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.