



# Predictors of male circumcision uptake during the Botswana Combination Prevention Project (BCPP) mobilization

Tafireyi Marukutira<sup>1</sup>, Lisa Block<sup>2</sup>, Lisa A. Mills<sup>1</sup>, Jan Moore<sup>3</sup>, Pam Bachanas<sup>3</sup>, Tracey Schissler<sup>4</sup>, Roselyn Mosha<sup>4</sup>, Naomi Bock<sup>3</sup>, Onneile Komotere<sup>4</sup>, Kutlwano Mukokomani<sup>5</sup>, Thebeyame Diswai<sup>4</sup>, Stephanie M. Davis<sup>3</sup>

1: US Centers for Disease Control and Prevention, Gaborone, Botswana, 2: Intellectual Concepts, 3: US Centers for Disease Control and Prevention, Atlanta, GA, USA, 4: Jhpiego, Botswana, 5: Botswana-Harvard AIDS Institute Partnership



## Introduction

- Male circumcision (MC) is a proven HIV prevention intervention, however, uptake has been low in some countries, including Botswana.
- Better characterization of men who accept versus reject MC could inform demand creation efforts, but information on men who reject MC is rarely available.
- The Ya Tsie Botswana Prevention Project (BCPP) collected population-level data on demographics and HIV risk factors and offered free MC, allowing comparison of those who did and did not accept MC.

## Methods

- BCPP, a pair-matched community-randomized trial, enrolled 16-49 year old citizen residents of 30 communities randomized to receive either standard-of-care services or additional HIV prevention interventions including mobile HIV testing and MC, between October 2013 and February 2016.
- During the 6-8 week MC surge in each of the 15 intervention communities, MC was offered in tents or a mobile clinic.
- All male study participants aged 16-49 years with an HIV-negative test or unknown status who reported being uncircumcised were offered linkage to MC by peer escort, phone-based and in-person mobilization, appointments, reminder calls, and transport.
- Circumcision was verified from the medical records
- Demographic and risk factors were compared between those who did and did not undergo MC using chi-squared testing.

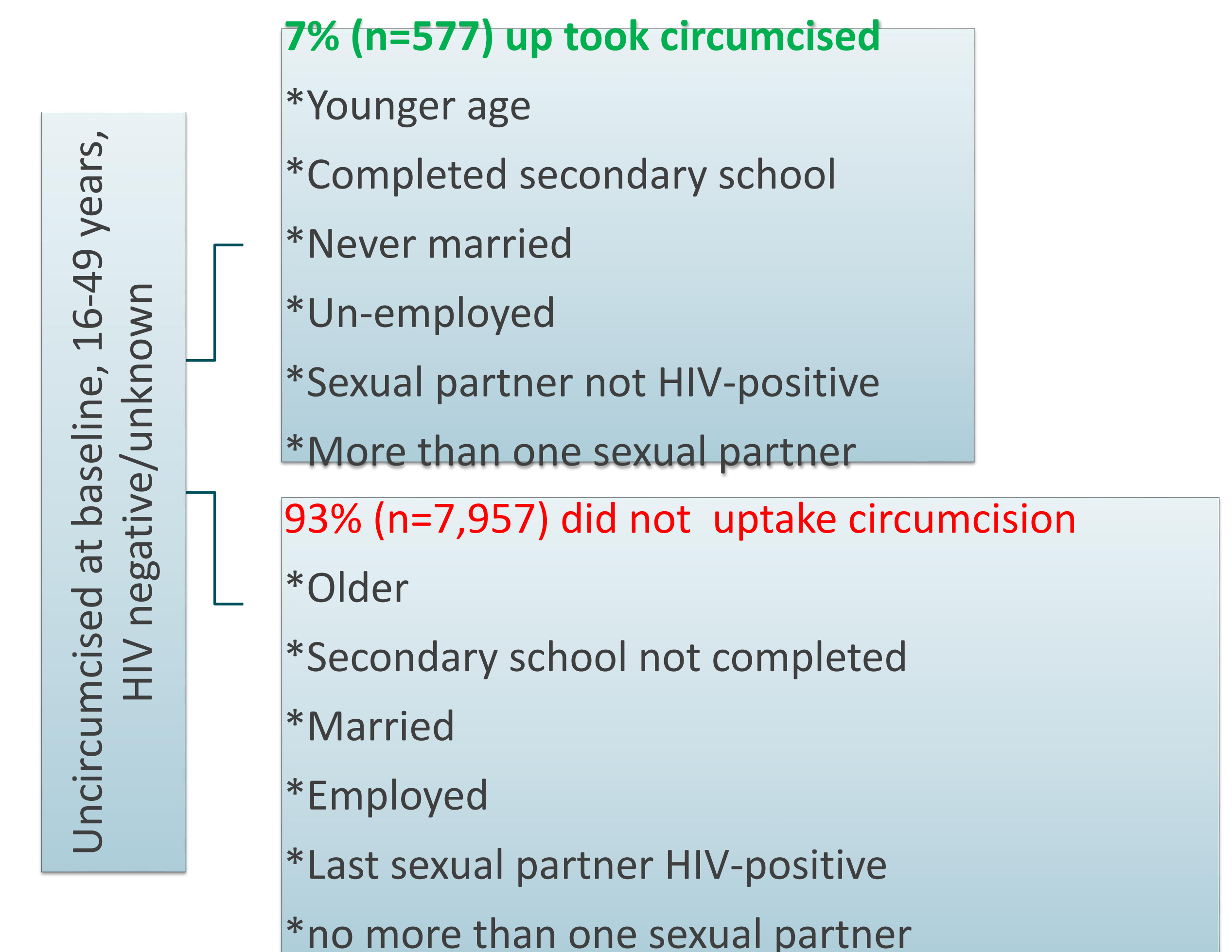
## Results

- Of 15,970 eligible men (16-49 years), 8,534 (53%) reported being uncircumcised. Of these, 577 (7%) underwent MC during the surge.
- Men who did not get MC were substantially older and more likely to be employed and ever married (Table 1).
- They had a statistically higher but similar likelihood of reporting two or more sex partners in the past year.
- They were substantially more likely to believe their recent partner was HIV-positive (15% vs. 5%).

**Table 1: Demographic and risk factors of men undergoing or not undergoing MC**

Demographic and risk factors	Underwent MC (n=577)	Did not undergo MC (n=7957)	p value
Mean age in years (standard deviation)	25 (8%)	29 (9%)	<.001
Completed secondary school	473 (82%)	6252 (79%)	.09
Never married	534 (93%)	6521 (83%)	<.001
Employed	183 (32%)	3231 (45%)	<.001
Reported last sexual partner HIV-positive*	17/354 (5%)	816/5250 (16%)	<.001
>1 sexual partner in past 12 months	45 (8%)	469 (7%)	<.001

\*Among those with at least one sexual partner in the past 12 months  
Note: Missing observations excluded



## Conclusions

- Which men could be targeted by a MC program to serve remaining uncircumcised men?
  - Older men, sexually active men (average 29years)
  - Married
  - Employed
  - Reporting HIV-positive partner (high risk so can derive greatest protection benefit from MC, yet less likely to seek it)
- Male circumcision programs could improve outreach to men with HIV-positive partners due to their high risk, while also reaching out to the general population.
- Characterizing and addressing unique barriers to MC for employed and older men may also improve general uptake.

## Acknowledgements

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