

Presentation Outline

- Analysis of program data to assess risk compensation – Zambia example
- Study of risk compensation following VMMC – Kenyan example
- Study on compensation for time to increase uptake of VMMC among older men
- Association between MC and incident syphilis among participants in the Partners PrEP trial

Assessing risk compensation post-voluntary medical male circumcision in Zambia

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Background & Objective

- Background: The MC RCTs did not report risk compensation among trial participants.
- Question remains about risk compensation in a program with national scale and less intensive counseling and follow-up
- Case study of Zambia where over 725,000 MCs have been done
- Objective: To assess the prevalence of risk compensation post-VMCMC
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Methods (1/2)

- Since 2010, Population Council has been annually following a representative cohort of men & women in Zambia.
- Information collected:
 - Demographics
 - VMMC knowledge, beliefs and attitudes
 - VMMC status and timing
 - Sexual behavior and experiences of STIs
 - Perceptions of HIV risk

Methods (2/2)

- To-date, the study has collected four rounds of data within a 36-month timeframe
 - Round 1 Nov 2010 to Apr 2011(n=2334)
 - Round 2 Sep 2011 to Dec 2011 (n=1968)
 - Round 3 Sep 2012 to Jan 2013 (n=1940)
 - Round 4 Oct 2013 to Feb 2014 (data not presented)
- Indicators assessing risk compensation
 - Sex with 2+ partner in last year
 - Unprotected sex
 - Sex after alcohol use
 - Experience of STI symptom in last year
 - Paid for sex in last year

Results – Risk Compensation

	IV GMM	Logit FE	Diff-Diff ATT
Sex w/2+ partners			
Circumcised	-1.2 (.67) [†]	.05 (.03) [†]	.05 (.05)
Unprotected sex			
Circumcised	-.85 (.57)	-.07 (.03)*	-.03 (.06)
Sex & alcohol use			
Circumcised	1.61 (1.06)	.02 (.03)	-.07 (.07)
STI symptom			
Circumcised	-.08 (.27)	.01 (.02)	-.06 (.03)*
Paid for Sex			
Circumcised	-1.39 (.65)*	.03 (.02)	.09 (.04)*

Note: models includes covariate controls

† p < .10; * P < .05

Risk Compensation following male circumcision: results from a two-year prospective cohort study of recently circumcised and uncircumcised men in Nyanza Province, Kenya.

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AIDS Behav, 2014 Sep; 18(9):1764-75.

Overview (1/2)

- Study conducted within the context of program rollout, starting in 2008
- Behaviors of 1,588 newly circumcised men and 1,589 age-matched controls assessed at baseline and months 6, 12, 18 and 24
- Perception of risk declined in circumcised men:
 - 30-14% in circumcised men
 - 24-21% in controls
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Overview (2/2)

- Sexual activity increased in both groups, mostly among younger participants (18-24 years)
- However, despite reduced risk perception and increased sexual activity among the youngest population, all specific risk behaviors (transactional sex, sex with casual partner, having multiple sex partners) decreased over time in both groups.
 - Reported condom use in last sex increased more among circumcised men (30 vs. 6%)

Conclusions

- Zambia:
 - No evidence of risk compensation in 2-years
 - MC men may be less risky than uncircumcised
- Kenya:
 - There was no evidence of risk compensation in men following MC over 2 years of follow up
 - MC men may be less risky than uncircumcised
- The KAIS 2012 also reported no risk compensation among circumcised men after 5 years of program scale-up

Conditional economic compensation to increase uptake of voluntary medical male circumcision: a randomized controlled trial

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Rationale

- VMMC rollout in Kenya highly successful, with MC prevalence increasing from 85% to 91.2% nationally between 2008-2012 (largest increase in 15-24 year olds).
 - Highest increase among the Luo ethnic community, from 16.1% to 46.7%
- However, only about 20% of eligible adult men aged ≥ 25 years have been circumcised among the Luo community since 2008
- Multiple studies have indicated that one of the key barriers older men cite is lost wages during and immediately after MC
 - Study addressed their question: *“What will my family eat when I go for circumcision”*

Objectives

- Study designed to:
 - Examine if compensating men for time would encourage older men to go for MC
 - Determine the value of compensation
 - Explore if compensating for time was deemed coercive by men and their sexual partners (*not addressed in this presentation*)

Methods

- The study was an RCT with 4 study arms:
 - Arm 1: \$ 15
 - Arm 2: \$ 8.75
 - Arm 3: \$2.50
 - Arm 4: Control (a bottle of soda)
- Window for getting circumcised:
 - 2 months, with no reminders

Results

- 1504 men enrolled; and within a 2-month window:
 - 9% got circumcised in Arm 1 (\$15);
 - AOR = 6.2 (95% CI 2.6-15.1)
 - 6.6% got circumcised in Arm 2 (\$8.75);
 - AOR = 4.3 (95% CI 1.7-10.7)
 - 1.9% got circumcised in Arm 3 (\$2.50);
 - AOR = 1.1 (95% CI 0.4-3.3)
 - 1.6% got circumcised in Arm 4 (control);
 - Reference

Policy considerations

- A 6.6-9% uptake in just 2 months, with no reminders, is significant compared to about 20% in 5 years, with intense sensitization and mobilization.
- Countries can consider the intervention for a limited duration, to mop up older men (reach 80% in the age bracket)
- Consider local daily wage in setting value of compensation
- The intervention is sustainable because:
 - When demand is met, service provision is optimal and cost goes down
 - Only those taking up the service are compensated
 - MC is a one off event
- Young girls who have sex with older men may benefit more

Male circumcision and the incidence of syphilis acquisition among male and female partners of HIV-1 serodiscordant heterosexual African couples: a prospective study

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Rationale, Objectives and Methods

- **Rationale:**

- There are limited data assessing the relationship between MC and risk of syphilis among HIV-infected men, and female partners of HIV-infected and –uninfected men

- **Objectives:**

- Assess the association between MC and incident syphilis among HIV-infected and -uninfected men and women enrolled in the Partners PrEP Study

- **Methods:**

- Analysis of prospective data covering 2.75 years of follow-up

Results:

- Data were obtained from 4,716 heterosexual serodiscordant couples
- 221 incident syphilis infections were observed (99 in women, 122 in men)
- Compared to uncircumcised men, circumcised men had a **42%** overall reduction in risk of acquiring syphilis, and:
 - A **62%** significant reduction among HIV-infected men
 - A **36%** non-significant reduction among HIV-uninfected men

Results 2

- Compared to female partners of uncircumcised men, partners of circumcised men had a **59%** reduction in risk of acquiring syphilis overall, and:
 - A **48%** reduction among HIV-infected women with circumcised male partners
 - A **75%** risk reduction among HIV-uninfected women with circumcised male partners

Conclusions

- Male circumcision was associated with a 42-62% decreased risk of incident syphilis in men, and a 48-75% decreased risk of incident syphilis in female partners of circumcised men
- Thus, MC confers protection beyond HIV to include protection against non-HIV STIs in women and HIV infected men.

Thank you....

*and hope the authors of other
studies will not kill me in case I
misrepresented them!!*
