HPTN
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Describing Levels of Uptake and Non-Uptake of Voluntary Medical Male Circumcision Services During HPTN 071 (PopART) Study, Zambia

Sakala E[1]; Phiri M[1], Ngwenya F[1]; Zulu J[2]; Mwanza M[3]; Macleod D[4]; Hayes R[4]; Ayles H[1, 4] on behalf of the HPTN 071 (PopART) Study Team

1.Zambia AIDS Related Tuberculosis (Zambart) **2.**Ministry of Health, Lusaka, **3.** Zambia HIV/AIDS Prevention, Care and Treatment (ZPCT), Lusaka, **4.** London School of Hygiene and Tropical Medicine, London, UK.

PopART HPTN 071

INTRODUCTION

- Sub-Saharan Africa is home to only 12% of the global population, yet accounts for 71% of the global burden of HIV infection (1). Zambia is one of the countries with a high HIV prevalence which is currently at 12.3% (2)
- Three randomized clinical trials (RCTs) conducted between 2005-2006 in Kenya, Uganda and South Africa showed that Voluntary Medical Male Circumcision (VMMC), can reduce transmission of HIV from female to male partners by approximately 60% (3)
- Zambia launched the VMMC campaign as one of the National key strategies for HIV prevention in 2009
- HPTN 071 (PopART) is a three-arm community-randomized trial in 12 communities in Zambia and 9 communities in South Africa evaluating the impact of a combination HIV prevention package, including universal HIV testing and treatment, on HIV incidence. In Zambia, the PopART intervention was delivered by Community HIV-care Providers (CHiPs) in 8 urban communities with high HIV prevalence through a door-to-door approach for 4 years and included information provision and referral for VMMC.
- We report the VMMC uptake by men who received the intervention in these eight Zambian intervention communities.

METHODS

- CHiPs visited every household to provide a comprehensive HIV prevention package which included information on VMMC and appropriate referral. Male participants aged 15 years and above who were not circumcised and not known to be HIV positive by CHiPs were offered referral to a clinic for VMMC.
- CHiPs attempted to revisit those referred one month later and assess whether they had visited the clinic and been circumcised. The data analyzed were collected from CHiPs records for male participants in the final year of the intervention (September, 2016 to December, 2017).

RESULTS

- During the period September 2016 to December 2017, 79,088 males aged 15+ participated in the PopART intervention in the eight Zambian communities. Of these 69,291 were not known to be HIV-positive and were willing to discuss circumcision with CHiPs.
  From this group, 37,228 participants reported not being circumcised and were therefore eligible for referral. Of these 9,797 (26.3%) participants accepted the CHiPs' offer of referral.
  Just over two-thirds (69.5%) of those who accepted referral were seen by CHiPs approximately one month later. Out of those followed up, 1,835 (27.0%) reported attending the clinic to which they had been referred and most of those 1,710 (93.2%) reported being circumcised.
  Overall, out of all those who accepted a CHiP referral, 17.5% were circumcised, which is 4.6% out of all those eligible. These estimates only included those confirmed (via a successful follow up) as being circumcised. If we assume those not followed up as having the same rate of VMMC uptake as those followed up our estimates would be 25.1% among those referred and 6.6% among those eligible.
- Uptake varied between communities, with the lowest uptake being 2.6% in community 11 compared with community 6, where 10.3% of all those eligible for referral reported being circumcised one month later.(Table 1)
- There was a clear age trend in uptake of VMMC, with younger eligible participants more likely to become circumcised than older eligible participants.

Figure 1: VMMC cascade among all males aged 15+ who consented to the PopART intervention in Zambia (September, 2016 to December, 2017)

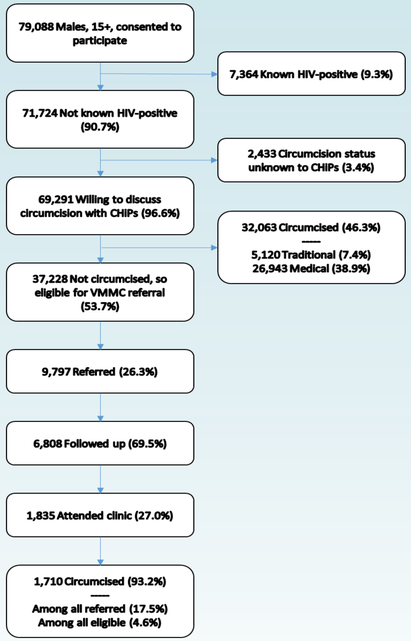

Table 1: Proportion of male participants who received VMMC among those eligible for referral

	Community	1	2	5	6	8	9	10	11	OVERALL
Age group	15-19	38/699 (5.4%)	18/347 (5.2%)	117/1,258 (9.3%)	88/625 (14.1%)	97/2,147 (4.5%)	93/1,773 (5.2%)	45/352 (12.8%)	20/255 (7.8%)	**516/7,456 (6.9%)**
	20-24	34/735 (4.6%)	21/344 (6.1%)	90/1,117 (8.1%)	83/501 (16.6%)	122/2,387 (5.1%)	93/1,730 (5.4%)	43/369 (11.7%)	12/380 (3.2%)	**498/7,563 (6.6%)**
	25-34	20/963 (2.1%)	19/439 (4.3%)	62/1,367 (4.5%)	73/657 (11.1%)	89/3,206 (2.8%)	70/2,127 (3.3%)	66/570 (11.6%)	14/559 (2.5%)	**413/9,888 (4.2%)**
	35-44	12/550 (2.2%)	3/294 (1.0%)	29/757 (3.8%)	34/480 (7.1%)	39/1,846 (2.1%)	41/1,253 (3.3%)	20/340 (5.9%)	5/401 (1.2%)	**183/5,921 (3.1%)**
	45+	5/750 (0.7%)	3/328 (0.9%)	16/1,018 (1.6%)	22/650 (3.4%)	17/1,750 (1.0%)	18/1,071 (1.7%)	17/405 (4.2%)	2/428 (0.5%)	**100/6,400 (1.6%)**
	ALL	**109/3,697 (2.9%)**	**64/1,752 (3.7%)**	**314/5,517 (5.7%)**	**300/2,913 (10.3%)**	**364/11,336 (3.2%)**	**315/7,954 (4.0%)**	**191/2,036 (9.4%)**	**53/2,023 (2.6%)**	**1,710/37,228 (4.6%)**

CONCLUSION

- Door to door information delivery and referral may contribute to uptake of VMMC, however only 4.6% of all participants who were eligible were confirmed to have been circumcised at the clinic.
- A large proportion of individuals (73.7%) who were eligible did not take up the offer of a referral, and of those referred and followed up, 73.0% of them had not attended the clinic within one month.
- The reasons for these gaps need to be well understood as they could compromise HIV prevention efforts.
- Variation between communities could be due to the fact that while services were expected to be provided daily, the reality was different with some communities providing services only on one day per week. Lack of actual service provision will deter individuals from seeking services.
- Intensification of health education campaigns on the benefits of VMMC and addressing barriers like pain (which was one potential barrier identified from qualitative research and by CHiPs during their households visits) could reduce this drop out.

Reference
1. Kharsany, The Open AIDS Journal, 2016. **10**: p. 34-48
2. The Zambia Population-Based HIV Impact Assessment (ZAMPHIA),2016. p 1
3. Ministry of Health, Zambia, 2016 p 1

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