

## VMMC at ICASA 2013 – Abstracts

### Oral Sessions

#### **HIV and the Mozambican Mineworker Working in South Africa: The Undiagnosed, the Unprotected, and the Uncircumcised**

**Abstract Number:** ADS087

**Presenter:** Semá Baltazar, Cynthia

**Presenter Company:** National Institute of Health

#### **Track Topic**

Track C: Basic HIV Epidemiology - C6. HIV in most at risk populations (sex workers, MSM, prisoners, IDU, migrants)

**Background:** Approximately 34,000 Mozambicans migrate annually to and from South Africa to work in the mining sector. Mineworkers throughout the world are considered a population at high risk of HIV infection due to sexual risk behaviours associated with migratory work patterns. There is no information on HIV prevalence or associated risk factors for Mozambican mine workers that could guide prevention efforts for this population. We conducted the first Integrated Bio-Behavioral Survey (IBBS) in Mozambican mineworkers to meet this need.

**Methods:** Mineworkers were recruited using simplified Time-Location Sampling (TLS) between February and March 2012, at the border between Mozambique and South Africa. Demographic and behavioural data were collected through a standardized questionnaire and entered into netbooks. The prevalence of HIV was determined by testing dried blood spots with enzyme immunoassays. After assessing possible design effects due to temporal clustering, and finding that variance was similar to that of a simple random sample, unadjusted estimates and 95% confidence intervals (CI) were calculated. Unweighted logistic regression was used to detect associations with HIV.

**Results:** We recruited 430 mineworkers, of which 323 provided blood samples for HIV testing. Among mineworkers, 24.7% had sex partners in both countries in the 12 months prior to the survey and 80.7% did not use a condom at last sexual encounter. HIV prevalence was 22.3% (95% CI: 17.8-26.9%), and 74.6% of HIV positive workers were unaware of their serostatus. HIV prevalence was higher in miners from Maputo (27.4% [95% CI: 16.3-38.5%]) and Gaza (26.1% [95% CI: 18.7-33.6%]) than from Inhambane (14.6% [95% CI: 8.2-21.0%]). Two in three were circumcised (66.7%); the proportion circumcised was 96.1% in Inhambane; 57.8% in Maputo city and province, and 47.8% in Gaza. In multivariate analysis, uncircumcised workers had a 1.83 higher odds of having HIV (95% CI: 1.02-3.26) than circumcised men when controlling for age, religion, HIV testing and prior TB diagnosis.

**Conclusion:** This survey contributes to the small but growing body of literature regarding such key populations. Complex sexual networks, inconsistent condom use, and a high proportion of HIV-infected mineworkers unaware of their HIV status all increase the risk of HIV transmission. Results should be interpreted with caution due to possible refusal bias. HIV prevalence, associated risk factors, and access to prevention and healthcare services among Mozambican mineworkers should continue to be monitored. Combination strategies, including the promotion of male circumcision, should be strengthened in Mozambique, where mineworkers reside when not working in RSA.

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**Effectiveness of Community-based Learning Networks (CBLN) in Provision of Integrated HIV/AIDS and Reproductive Health Services to Cross Border Mobile Population Case Study of Busia District**

**Abstract Number:** ADS089

**Presenter:** Oketcho, John Francis

**Presenter Company:** Friends of Christ Revival Ministries (FOC-REV)

**Track Topic**

Track C: Basic HIV Epidemiology - C1. Natural history and molecular epidemiology of HIV

**Background:** Friends of Christ Revival Ministries (FOC-REV Ministries) is an indigenous Non Governmental Organization established in 1999 by a group of volunteers arising out of the crisis caused by HIV/AIDS and poverty in the rural communities. FOC-REV's mission is to "To promote delivery of quality and equitable health and socio-economic services to vulnerable groups and communities in Uganda.

**Methods:** FOC-REV, with support from IGAD-IRAPP through Uganda AIDS Commission, mobilizes cross-border mobile population and the host communities to access comprehensive HIV/AIDS prevention, care, treatment and social support services including HIV counselling and testing (HCT); health education; TB screening and referrals for treatment; safe male circumcision (SMC) through its outreaches; and the wellness centre targeting truck drivers at the border. The organization networks with other partners including civil society organizations (CSOs), unions of truck drivers, associations of commercial sex workers and health units operating within the hot spot. FOC-REV utilises church leaders, peer educators and peer clubs in the community to disseminate messages for prevention of HIV/ AIDS, testing and treatment. As a result, 30 home-based caregivers, 40 peer educators and 106 condom distributors were trained in peer education and HIV/AIDS prevention strategies and moonlight HIV counselling and testing by 2012.

**Results:** Between July 2012 and June 2013, 3,486 individuals were reached with HCT of which 465 were referred for different services. This included SMC, TB treatment, cotrimoxazole prophylaxis and other HIV related services in different health units, Busia Health Centre IV. 2,922 cross border mobile population (CBMPs), long distance truck drivers, boda-boda riders, commercial sex workers (CSW) and 8,420 youths and married/cohabiting couples were reached with ABC and AB interventions respectively in the hot spot area.

In promotion of community-based interventions for HIV prevention, TB detection and utilisation of related services in the hot spot, Busia Municipality FOC-REV focuses on the direct and indirect consequences of HIV/AIDS on the host communities.

Under community-based primary health care services, FOC-REV Ministries also promotes improvement of health conditions of communities, especially those affected and infected by HIV/AIDS through home-based care and support group in all the Wards of Busia Municipality. As a result, 940 people living with HIV/AIDS were provided with home-based care services.

**Lessons learnt:** Moonlight VCT offered from 4.0-10 pm at the wellness centre at the border point is accessible to truckers, CSWs and other cross border mobile populations. Use of peer educators in information dissemination, referrals and mobilisation is an effective way of reaching out to cross border mobile populations. Stakeholder dialogue meetings have helped in advocacy and community mobilisation.

**Recommendations:** Community HCT outreaches should be complemented by moonlight VCT. There should be harmonisation of protocols in testing, treatment and referral for cross border mobile populations. There should be involvement of community structures and local leadership to promote sustainability.

#### **References**

FOC-REV/IGAD Report 2012/2013

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### **Communication Interventions - SMC Motivators and Associated Factors**

**Abstract Number:** ADS113

**Presenter:** Busang, Lesego

**Presenter Company:** African Comprehensive HIV/AIDS Partnership

#### **Track Topic**

Track D: Communication, media and education: How do we educate and inform people? - D8 HIV and AIDS communication strategies

**Background:** Botswana's Safe Male Circumcision (SMC) target is to achieve public health benefits for 80% of males 0-49 years by 2016. With just two years remaining of the five years, achievement to date is below 20% of the target (385,000). Identification of critical factors motivating previously uncircumcised men to circumcise is vital. The country's short-term communication strategy (STCS) that had been implemented since 2009, was evaluated in September/October 2011 and formed the basis for this report.

**Methods:** As part of this evaluation, a quantitative cross-sectional study was conducted in seven Botswana health districts. Eligible men were recruited in households and public areas. The study included males aged 15 to 49 years randomly selected and agreeing to participate in the study through an informed consent process. Tabular analysis was conducted. Furthermore logistic regression was used

(alpha set at 0.05) to further interrogate data collected regarding factors associated with the decision to be circumcised.

### **Results:**

#### a) Reported motivators for getting circumcised

Men (32.6%) said they were motivated by friends/relatives to get circumcised, which was three times more than those indicating being motivated by other factors (9.8%) and health workers 8.9%. Radio (49.5%) and hearing from friends/relatives (35.1%) were the most common sources of information about SMC. However, neither of these sources was significantly associated with being circumcised:  $P=0.075$  for radio and  $P=0.958$  for friend/relative. Association between circumcision status and hearing/learning about SMC from Visits/Talks at Workplace and Health Worker were statistically significant ( $P<0.001$  and  $P=0.003$ ). Other statistically significant sources of knowledge were SMC pamphlet ( $P=0.018$ ), and bus/taxi advert ( $P=0.038$ ).

#### b) Determinants of circumcision status

Using regression analysis, key determinants of circumcision are a mix of socio-demographics, knowledge of key messages, source of knowledge on SMC, and levels of exposure to SMC messages/materials. From chart above levels of exposure to SMC materials are key factors for circumcision status, with those almost daily exposed to the client pamphlet exposure being more likely to be circumcised compared to those exposed to it more than once weekly (e.g. fortnightly, or monthly). Those exposed almost daily to car advert were more likely to be circumcised than those not.

The important socio-demographics are educational level (those with tertiary education being more likely to be circumcised) and economic activity (with those employed being more likely to be circumcised).

In terms of key messages, the following were found to be strong determinants of SMC status:

- \* Knowledge on HCT before SMC
- \* Penis appearance believed to be an SMC benefit
- \* Penis hygiene believed to be an SMC benefit

Lastly, men whose source of SMC information was the workplace talk/visit were more likely to be circumcised.

**Conclusions:** Visits/talks at workplace, health workers, SMC pamphlets and bus/taxi adverts significantly motivate men to get circumcised. Therefore, communication interventions should consider using these sources more for motivating action. Further in-depth analysis is required to control for possible confounders. Future communication strategies should strive to increase awareness and knowledge on SMC facts to dispel myths and concerns around SMC. Client's pamphlets combined with interpersonal communication should be used in scaling up knowledge and facts on SMC to reinforce messages on SMC. Other SMC benefits, such as hygiene, that have encouraged men to get circumcised, should be promoted. Mobile advertising (bus/taxi advert) should be considered as another model to scale up SMC.

### **References**

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**I Will Never Do It! An Analysis of the Acceptability of Male Circumcision in Swaziland Before 2015**

**Abstract Number:** ADS121

**Presenter:** Adams, Alfred

**Presenter Company:** University of Amsterdam

**Track Topic**

Track D: Individual Determinants of HIV-related Risk and Vulnerability - D1 Unsafe sexual practices

**Background:** This paper aimed to analyse the future acceptability of male circumcision (MC) after initial attempts to circumcise 80% of Swazi men aged 15-49 years were not successful. MC has been hailed as "evidence beyond reasonable doubt" by the WHO (2007) after three RCTs showed a relative risk reduction of about 55% from women to men (Auvert et al. 2005; Bailey et al. 2007; Gray et al. 2007). Because of this compelling evidence, 14 countries (including Swaziland) were targeted to increase MC uptake. Several initiatives have been implemented to increase uptake but the outcome has been poor. Only 8667 males were circumcised during a one-year vigorous circumcision campaign out of a targeted 150,000 in Swaziland. The Gates Foundation held a conference for demand creation for MC in Zambia in April 2013. The meeting aimed to come up with demand-side innovations to help circumcise the 80% target by 2015.

**Methods:** Qualitative techniques were used to collect data for seven weeks in Kwaluseni, Swaziland, a peri-urban area. The data collection contained seven focus group discussions, 17 in-depth interviews, and participant observation was carried out throughout the fieldwork period. Conveniently sampled participants were men aged 15-49 years and women above 18 years. Thematic content analysis was used for data analysis and themes were coded inductively.

**Results:** Overall, MC was negatively perceived, especially by older men. Quantitative studies report that barriers to MC uptake are fear of pain, concern about long healing periods, financial and opportunity cost, and fear of adverse events (Westercamp and Bailey 2006). In this study, men did not circumcise because they feared the loss of sexual sensitivity; futility of MC due to its partial effectiveness (circumcised men are still required to use condoms); irreversibility of the surgery; fear of the unknown such as future diseases that may affect those without a foreskin; tempering with nature (God's creation); and suspicions on free interventions from whites, among other reasons. Women had mixed views about MC. Positive perceptions were mostly because of better hygiene and aesthetics after circumcision. Negative perceptions were based on fear of partner promiscuity after MC and delayed ejaculation. Women were powerless in influencing their partners to be circumcised. In addition, women have relatively poor knowledge about MC. Adolescents viewed MC more positively than did their older

counterparts. Peer pressure from friends and schoolmates was a factor and MC campaigns in the country largely focus on schools. Adolescents claimed that girls like a circumcised penis better.

**Conclusions and recommendations:** It seems unlikely that any strategy would work to lure older men to circumcise. New non-surgical circumcision techniques such as the recently WHO approved Prepex may be futile attempts as men are not only concerned about the surgery but they are mostly concerned about MC as a whole. The findings in this study indicate that very few men are interested in ever being circumcised therefore MC should not be prioritised as a stand-alone intervention. More research should be conducted to assess the negative effects of MC such as loss of sexual sensitivity.

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Gray et al.2007 Male Circumcision for HIV Prevention in Men in Rakai, Uganda: A Randomised Trial. Lancet 369: 657-666

Westercamp and Bailey 2006 Acceptability of male circumcision

By Alfred Khehla Adams (MSc) and Assistant Professor Eileen Moyer (PhD)

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## **Effectiveness, Cost-Effectiveness and Return on Investment of Scaling Up VMMC in South Africa**

**Abstract Number:** ADS166

**Presenter:** Haacker, Markus

**Presenter Company:** World Bank

### **Track Topic**

Track E: Health Economics - E13.Impact evaluation of different models of health service delivery (cost effectiveness)

**Background:** Voluntary Medical Male Circumcision (VMMC) has become a cornerstone of the South African National Strategic Plan on HIV, STIs and TB. This role has been supported both by empirical evidence on the effectiveness of MMC in reducing female-to-male HIV transmission and by program-level simulations assessing the consequences of scaling up VMMC.

The study provides a simulated analysis of the cost-effectiveness of VMMC in South Africa, addressing, in particular, two aspects:

\* Differences in the cost-effectiveness of VMMC by age at circumcision. These differences are plausibly large, owing to changing sexual behaviour and the fact that males circumcised at a later age are (partially) protected for a shorter period.

\* Full analysis of cost-savings from VMMC, in total and over time.

**Method:** Methodologically, the study contains two building blocks:

\* The analysis of the effectiveness of VMMC has been conducted using the "ASSA 2008" demographic and epidemiological model developed by the Actuarial Society of South Africa (ASSA). For the current analysis, this model has been adapted to account explicitly for the effect of VMMC.

\* The estimates of the costs caused by an HIV infection are based on a disease progression model combined with a costing of the current National Strategic Plan.

**Results:** The analysis finds that as of 2010, one MMC results in about 0.2 HIV infections averted for males up to age 20. Of this, an expected 0.08 HIV infections averted for the individual circumcised, and the remainder accounted for by HIV infections among his sexual partners etc., and infants. For MMCs occurring at age 25, the expected impact is reduced to 0.14 HIV infections averted, for MMCs at age 30 (40), the expected impact is reduced to 0.07 (0.02). The decline in the effectiveness with age at circumcision reflects (a) reduced time horizon for individuals undergoing MMC at later age, (b) changing patterns of sexual activity (assumed to peak in late 20s for males), and (c) endogenous sample selection (high-risk individuals more likely to become infected at early ages).

With an estimated cost of US\$ 95 for adult MMCs, the cost per HIV infection averted comes out at about US\$ 500 for males undergoing MMC up to age 20, rising to US\$ 1,300 at age 30 or US\$ 3,800 at age 40. The cost per HIV infection averted for infant MMCs (unit cost: US\$ 30) comes out at US\$ 150.

The costs incurred over time by one HIV infection are estimated at about US\$ 8000. This implies that MMC is cost saving up to age 45. For MMCs conducted at ages 20 or 25, the financial savings per MMC exceed US\$ 1,000. While some of the savings are spread over very long periods, the costs are fully recovered after about 8 years for MMCs performed at ages 20 or 25.

**Conclusions:** Findings highlight importance of targeting young males especially, and provide direct estimates of the contribution of individual VMMC procedures performed to containing the financial costs of the national HIV/AIDS program.

#### **References**

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South African National AIDS Council (SANAC), 2011, "National Strategic Plan on HIV, STIs and TB 2012-2016" (Pretoria: SANAC).

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World Bank; World Bank; World Bank

### **Projecting the Impact and Cost of the KwaZulu-Natal Provincial Strategic Plan for HIV and AIDS, STIs and TB 2012-2016**

**Abstract Number:** ADS168

**Presenter:** Kripke, Katharine

**Presenter Company:** Futures Institute

#### **Track Topic**

Track E: Shared responsibility and global solidarity towards sustainable AIDS and health agenda - E8. Investing in HIV more strategically - use of applications of investment approach at country level

**Background:** The South Africa National Department of Health (NDoH) is improving its systems for HIV/AIDS strategic planning, budgeting, monitoring, and evaluation continuously. National and Provincial Strategic Plans (NSP and PSP) for HIV/AIDS, STIs, and TB have been developed for 2012-2016. In an effort to improve resource allocation for HIV/AIDS programs, the NDoH sought to conduct analyses at the provincial level, linking program implementation with cost and impact on HIV incidence and deaths. A pilot of this PEPFAR-supported analysis was conducted in KwaZulu Natal (KZN), the province with the highest HIV prevalence and maximum availability of data.

**Methods:** The Goals and AIDS Impact Model (AIM) modules within the Spectrum suite of modelling tools were employed to conduct the analysis. Necessary data to populate the model were collected from provincial HIV/AIDS programs, published reports, the District Health Information System, the Actuarial Society of South Africa 2008 model, the Costing Task Team, and the 2005 South African National HIV Prevalence, HIV Incidence, Behaviour and Communication Survey.

**Results:** The total projected need for fiscal year 2012/13 using the model was R4.9 billion, compared with R5.2 billion for the projected cost of implementing the PSP and R2.3 billion in the province's HIV/AIDS conditional grant budget request. Costs are projected to increase between 2013 and 2025 as the number of people requiring antiretroviral therapy (ART) continues to grow; costs grow further as programs are scaled up according to the targets set within the PSP. Over three quarters (76%) of the funds are needed for antiretroviral therapy, while the remainder is distributed among HIV testing and prevention activities. Scaling up to reach the targets set in the PSP would result in 600,000 infections averted, when compared with maintaining program coverage at 2011 levels. Scaling up condom promotion and female sex worker outreach are the two most cost-effective programs in terms of cost per infection averted, while scaling up medical male circumcision had a large impact for relatively low cost.

**Conclusions and recommendations:** KZN will need to plan to increase its HIV/AIDS budget in order to meet growing needs for ART between 2013 and 2025. The largest opportunity for cost savings is to bring down the cost of antiretroviral drugs. Prevention planners should emphasize scaling up male circumcision while maintaining condom promotion and sex worker outreach.

#### **References**

None cited.

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#### **Posters**

**Integrating Safe Male Circumcision with HIV Counseling and Testing for Young People in Resource Constrained Facilities in Uganda, A Case of FOC-REV Health Center III, Busia, Uganda**

**Abstract Number:** PB095

**Presenter:** Masui Lumumba, Musah

**Presenter Company:** Uganda Youth Coalition on Adolescent Sexual Reproductive Health and HIV/AIDS (CYSRA-Uganda)

**Track Topic**

Track C: Basic HIV Epidemiology - C1. Natural history and molecular epidemiology of HIV

**Background:** In 2009 globally, young people (15-24 years) accounted for 40% of new adult HIV infection and about 5 million (4300, 000-5900, 000) young people were living with HIV. Uganda is one of the countries with the highest young population and has recently had HIV prevalence rise from 6.4% to 7.3%. By the fact that young people are at highest risk of acquiring HIV, provision of male circumcision and counseling for HIV testing will help them have access to comprehensive HIV/AIDS prevention and care services.

**Methods:** At FOC-REV Health Center III a private not for profit Health Center, with support from the STAR-E a USIAD funded project, we offered Safe Male circumcision (SMC) and HIV counseling and testing (HCT) to young people (15-24) in the fishing communities. Young men were mobilized by community mobilizers for outreach clinics in hard to reach areas especially along landing sites of Majanji, Lumino and Busime sub-counties. They were also provided with counseling and testing of HIV including Education, information and communication on HIV/AIDS prevention, care and support.

NB. Routine offer of testing with "opt-out" approach was emphasized.

**Results:** Integration of SMC and HCT has enabled many young people access both services at the same time. From May-December 2012, 512 young men (15-24 years) turned up for the outreach SMC Clinics. All the 512 (100%) young men who turned up for SMC were counseled for HIV testing. Out of 512, 505 young men (98.6%) were counseled, consented and were provided with SMC, and 500 (97.65%) consented to be tested for HIV and received their results, 30 Clients tested positive i.e. 6% and 470 tested negative. Positive Clients were referred for HIV/AIDS care and treatment at FOC-REV ART Clinic and posttest club while the uninfected ones, were given specific preventive services.

**Conclusion:** Young people are a unique group and thus interventions that promote access to comprehensive HIV/AIDS prevention and care services at one stop Center are ideal especially in resource constrained settings. Lessons learned at FOC-REV Health Center, suggest that integration of Safe Male Circumcision and HIV Counseling and Testing services is a feasible intervention.

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**Scaling Up Voluntary Male Medical Circumcision While Responding to Demographics. Lessons from a Rural Hospital in East Central Uganda**

**Abstract Number:** PB109

**Presenter:** Ndifuna, Martin

**Presenter Company:** STAR-EC

## **Track Topic**

Track C: Basic HIV Epidemiology - C1. Natural history and molecular epidemiology of HIV

**Issues:** Over twenty million circumcisions are needed across 14 priority countries in Sub Saharan Africa; however, Uganda must contribute over 21% (4.3 million male circumcisions). The Uganda Statistical Abstract showed that 69.3% of Uganda's population was under 24 years of age with the (UAIS, 2011) showing an adolescent HIV prevalence of 2.1%. These figures make targeting this sub population with proven HIV prevention strategies very critical in rolling back the tide against HIV&AIDS. The Strengthening TB and HIV&AIDS Responses in East Central Uganda (STAR-EC) Program; a six-year district-based initiative funded by USAID in nine districts of East Central Uganda has focused VMMC for HIV prevention towards adolescent and adult men. STAR-EC has embarked on targeting these clients with VMMC services among other HIV prevention strategies such that they can stay HIV negative.

**Description:** STAR-EC supported Bugiri District Hospital to integrate VMMC services within the general health services through training health workers, establishing a weekly static clinic, adopting the MOVE model to enhance volumes, establishing weekly roving teams, Quality Assurance and Quality Improvement for VMMC. STAR-EC provided equipment, reusable and disposable surgical kits while intensifying demand creation campaigns, orientated 'foot soldiers ' to mobilize nearby communities. Within a period of 8 months (May-Dec 2012), seventy five percent (n=7,610) youth 15-24 years accessed VMMC minimum package of services out of 10,110 clients who had been served.

**Lessons learned:** VMMC services have attracted many young men; an opportunity to reach and link them to other HIV&AIDS services and STI services. Adopting VMMC by youth in addition to existing strategies will help these young men stay negative thereby facilitate the move towards ZERO NEW INFECTIONS.

**Next steps:** STAR-EC will intensify effort to scale up VMMC services to more health facilities in the region as she continues prioritizing high HIV prevalence areas for service delivery.

## **References**

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## **Caution in Interpreting Male Circumcision (MC) Prevalence Data in the Ethiopian Demographic and Health Survey 2011**

**Abstract Number:** PB162

**Presenter:** Daniel, Ephrem

**Presenter Company:** Jhpiego

## **Track Topic**

Track C: HIV/AIDS Surveillance and Monitoring and Evaluation - C20. Monitoring and evaluation of HIV/AIDS programs

**Background:** Ethiopia has a high MC prevalence, 93% by self-report according to the 2005 Ethiopia Demographic and Health (EDHS) Survey. However, there are regional variations; Gambela region has the

lowest MC rate (46%) and the highest adult male HIV prevalence of any region in Ethiopia (6.7% as compared to national average of 0.9%). Taking the data from EDHS 2005 into consideration, the Federal HIV/AIDS Prevention and Controlling Office included Voluntary Medical Male Circumcision (VMMC) as part of the HIV prevention strategy in 2009. Jhpiego, with PEPFAR funding from the CDC has provided technical assistance and implementation support to the VMMC program in Gambella since August 2009. To reach 80% MC prevalence, an estimated 40,000 men aged 15-49 need to be circumcised in Gambella according to modeling estimates.

According to 2007 Ethiopian National Census, the total population of Gambella region was 306,916 with more than 65 ethnic groups residing in the region. Three major indigenous ethnic groups are the Nuwer 143, 179 (46.7%), Anyiwak 64,929 (21.2%), Mejenger 12,277 (4%), other non-indigenous ethnic groups consists of 86,531 (28.2%). The proportion of urban residents was 25% whereas the remaining 75% resides in rural areas. EDHS 2011 reported an increase in MC prevalence rate to 76%, close to the 80% universal coverage goal. This abstract describes how EDHS sampling may not adequately represent Gambella's ethnic groups resulting in misinterpretation of the VMMC performance in the region.

**Method:** We conducted a secondary data analysis of EDHS 2011- the field data collection for EDHS was conducted from 27 December 2010 to 3 June 2011 by the CSA. We compared routine VMMC service data collected from Gambella region health facilities before the EDHS. We summarized and disaggregated the data by MC rate and ethnic group.

**Result:** Between October 2009 and January 2011, less than 2,000 adult men-- most of them from indigenous ethnic groups--were circumcised in Gambella region health facilities. This represents less than 5% of the initial estimated VMMC need in Gambella region. The total sample of Gambella men surveyed in EDHS 2011 was 940 which consist of 381 (40%) indigenous ethnic groups and 559 (60%) non-indigenous ethnic groups. Secondary data analysis revealed an MC rate of 12.3% (N=81) among Anyiwak, 6.8% (N=240) among Nuwer 1.7% (N=60), for Mejenger and 97.7% (N=559) among non-indigenous ethnic groups. It appears that the ethnic composition of the EDHS sample was not representative of the regional ethnic composition as shown in the Ethiopian Population and Housing Census which found that 72% of the population in Gambella is indigenous.

**Conclusions and recommendation:** Interpreting the result of self-reported MC prevalence from DHS surveys should take into consideration the representativeness of the sampled population in settings where MC prevalence varies widely by ethnic group. The reported increase in the regional MC rate of Gambella region may be the result of oversampling of non-indigenous ethnic groups who have very high baseline MC prevalence. The MC prevalence among indigenous ethnic groups in Gambella is still very low. So decisions that will be made on VMMC program of Gambella region by referring the EDHS 2011 need caution.

## References

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## **High Incidence Despite Increasing ART and Circumcision Coverage in Western Kenya: The Ndhiwa HIV Impact in Population Study**

**Abstract Number:** PB176

**Presenter:** Maman, David

**Presenter Company:** Epicentre

### **Track Topic**

Track C: HIV/AIDS Prevention Programmes - C32. New approaches for HIV prevention

**Introduction:** Recent findings suggest that reduction of HIV transmission is now achievable through scale-up of testing, prevention (including voluntary male circumcision) and ART treatment programs. However, essential data measuring directly incidence of HIV, population Viral Load and program coverage in sub-Saharan Africa are rare. Médecins Sans Frontières has launched a series of population studies in 3 districts in Kenya, Malawi and South Africa as a baseline for monitoring transmission over time.

**Methods:** The first study was conducted in Ndhiwa district, Nyanza, Kenya, between September and November 2012. Using a multistage cluster sampling method, we recruited all individuals aged 15 to 59 years living in 3,330 randomly selected households. Each individual who agreed to participate was interviewed and tested for HIV at home using a serial rapid testing algorithm. The participants tested positive were also measured for CD4 count, viral load (VL) and were classified either as recent or long term infected participants using two tests for recent infection (LAg and Biorad avidity assays). Of those found HIV Negative, Nucleic Acid Amplification was performed to detect acute cases.

**Results:** Of 6,795 household members eligible for the study, 6,091 (89.3%) agreed to participate and were tested for HIV (95% women and 83% men). The overall prevalence was higher for women 26.8% (95%CI 25.3-28.1) than for men 19.8% (95%CI 18.0 - 21.3). The instantaneous HIV incidence was estimated at 2.21% (95%CI 1.34-3.07) and 2.19% (95%CI 1.22-3.16) using the LAg and Biorad avidity tests, respectively. The incidence was higher for women 2.74% (95%CI 1.56-3.92) than for men 1.34% (95%CI 0.35-2.32).

Among the HIV positive participants, 60.5% (95%CI 57.9-63.0) were aware of their status, 40.6% (95%CI 38.1-43.2) were on ART and 23.2% (95%CI 21.1-25.5) had undetectable viral load. Of the negative male participants, 28.7% (95%CI 26.8-30.5) had been medically circumcised in the previous 5 years.

**Conclusion and recommendation:** The study found an HIV incidence of 2.2% in a random sample of adults in a rural district in Kenya using tests for recent infection. These findings suggest that more efforts to increase the proportion of circumcised men and to decrease the Viral Load in the population are urgently needed. The development of new strategies to reduce the risk of acquiring HIV for women remains a priority.

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**Perceptions of Male Circumcision as an HIV Prevention Strategy in Lesotho**

**Abstract Number:** PB178

**Presenter:** Zerbe, Allison

**Presenter Company:** ICAP, Columbia University

**Track Topic**

Track C: HIV/AIDS Prevention Programmes - C32. New approaches for HIV prevention

**Background:** Lesotho has one of the world's most severe HIV epidemics, with 23.3% adult HIV prevalence in 2011. HIV prevalence is significantly higher among circumcised men age 15-59 (20.6%) than among uncircumcised men in the same age group (16.1%). Many Basotho men are circumcised at traditional initiation schools, a symbolic rite of passage that does not involve complete foreskin removal. There has been little qualitative inquiry of MMC in Lesotho to assess its perceived acceptability for HIV prevention. To address this gap, our study explored perceptions of MMC among a sample of Basotho men and women.

**Methods:** Using convenience sampling, 200 pregnant and recent post-partum women and 30 male key informants were recruited in Mafetang and Molepolole in Lesotho between April-July 2011. Surveys, focus groups and in-depth interviews were used to explore knowledge and attitudes regarding HIV and prevention strategies, including male circumcision, as well as women's assessment of their partner's knowledge and attitudes regarding HIV and prevention strategies.

**Results:** Men and women were aware that male circumcision lowers one's risk for HIV. Men acknowledged that MMC may be medically preferable, but were concerned MMC would replace traditional circumcision at initiation schools, perceived as integral to Basotho men's transition into manhood and attainment of social status. Some men discussed the possibility of training traditional healers to perform medical circumcisions at initiation schools. Overall, attending initiation school was perceived to be of higher significance and to hold more value than undergoing MMC and being left out of a meaningful Basotho cultural institution. Women were more accepting of the idea of MMC, although many worried that men who were circumcised would no longer accept condom use.

**Conclusions:** This study highlights how deeply embedded Basotho cultural tradition may influence and create barriers to MMC as an HIV prevention strategy. More studies are needed to determine a feasible way to increase MMC while preserving Basotho cultural tradition and the possibility of working with traditional healers to implement MMC.

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**Evaluation of Safety and Efficacy of a Non-surgical PrePex Device for Male Circumcision in Nurses Safety Trial in Zimbabwe**

**Abstract Number:** PB180

**Presenter:** Tshimanga, Mufuta

**Presenter Company:** ZiCHIRe

**Track Topic**

Track C: HIV/AIDS Prevention Programmes - C32. New approaches for HIV prevention

**Background:** Ministry of Health and Child Welfare (MoHCW) of Zimbabwe is pursuing innovative approaches to increase uptake of Male circumcision (MC) services. The objective is to identify a faster and simpler way to increase access and accelerate Voluntary medical male circumcision (VMMC) program scale up. The PrePex device for non-surgical adult MC was investigated as a means to achieve this goal, by enabling task sharing of MC with nurses. The objective of this study was to assess the safety of the PrePex device in the hands of Registered General Nurses.

**Methods:** One arm, open label, prospective, cohort field study took place in April 2012 and recruitment was from 3 health facilities: ZNFPC Spilhaus center in Harare, Kadoma District Hospital and Mutare Provincial Hospital. A total of 603 healthy men aged 18years and above were recruited. All procedures were done by 16 Registered General nurses who went through a 5-day PrePex training course, and who did not have any previous experience with the PrePex device procedure but were already familiar with the VMMC surgical programme. The safety outcomes were measured by the rate of adverse events (AEs) and side effects.

**Results:** All 603 subjects were successfully circumcised by the trained nurses. There were only 4 AEs (0.6%) compared to the AE rate of 0.85% (N=590) reported on the Nurses safety study conducted in Rwanda (Mutabazi V. et al,). There were 30 (4.9%) side effects reported in this study compared with 76 (12.6%) side effects on the Safety nurses study in Rwanda. All side effects and AEs were resolved during the study and there were no serious adverse events.

**Conclusions:** The study findings have confirmed the safety of PrePex device in the hands of registered general nurses, and revalidated similar findings of the safety nurses study conducted in Rwanda in 2011. These findings have significant implications for VMMC scale up in Zimbabwe and other resource-limited settings, since nurses can easily perform device application and removal using the PrePex device,

thus enabling possible task shifting of MC procedure from doctors to nurses and improving MC service access.

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## **Peer Driven Sexual Risk Reduction in the Ugu District, South Africa: Lessons, Challenges and Opportunities**

**Abstract Number:** PB234

**Presenter:** Ngcobo, Phumelele

**Presenter Company:** AIDS Foundation of South Africa

### **Track Topic**

Track D: Individual Determinants of HIV-related Risk and Vulnerability - D1 Unsafe sexual practices

**Issues:** South Africa is faced with the largest HIV burden in the world and in its 5 year strategic plan to combat HIV/AIDS and TB has committed to promoting programmes aimed at changing risky behaviour especially among young people.

**Description:** The AIDS Foundation of South Africa (AFSA), funded by the Networking HIV/AIDS Community of South Africa (NACOSA) implemented an information, education and communication (IEC) programme in Ugu District, KwaZulu Natal. The programme built the capacity of 320 unemployed youths in rural to semi-urban communities to serve as behaviour change agents and mentors. Trained on supporting behaviour change and communicating health messages including accessing primary health services, Voluntary HIV Counselling and Testing (VHCT), Medical Male Circumcision (MMC), Prevention of Parent-To-Child Transmission (PPTCT) of HIV, tuberculosis testing, and the importance of presenting for CD4 screening, these youths, recognised as Youth Ambassadors remained fixed within their communities, providing constant and consistent IEC, establishing themselves as credible sources of much needed health information.

**Lessons learned:** Between April 2012 and March 2013 these ambassadors reached 78477 females and 48099 males with various messages. Questions raised by participants during individual and group sessions indicate a non inclusive approach to IEC holds potential to spread myths which could fuel the

epidemic. Especially of note is how females have been typically left out of MMC communication, and males have been typically left out of PPTCT communication. Although females were reached in greater numbers over the 12 month period, the use of draw cards such as soccer events in communities towards the end of the period demonstrated the value of combining health communication with community events of interest. Working with government departments and local clinics youth ambassadors established relationships which permitted them to establish informal referral networks and arrange for mobile clinic units to provide services at predetermined rally points.

**Next steps:** Peer driven programming holds promise for reaching hard to reach populations, especially youths, with consistent, regular messaging and support for behaviour change. Upscaling the youth ambassador model across the province of KwaZulu-Natal and South Africa will reduce risky sexual behaviour and the incidence of HIV.

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### **Motivating Health Workers through Recognition-- Jhpiego/Zambia August 2012 Voluntary Medical Male Circumcision (VMMC) Campaign Achieves Over Five Times More Than in Previous Years**

**Abstract Number:** PB352

**Presenter:** Nikisi, Joseph

**Presenter Company:** Jhpiego/Zambia - an affiliate of Johns Hopkins University

#### **Track Topic**

Track E: HIV and Health System Strengthening - E1.Leveraging the AIDS response to strengthen health systems and improve other health outcomes

**Issues:** With the rapid scale up of voluntary medical male circumcision (VMMC) in 14 focus countries, there has been a significant interest in ways to motivate health workers to commit more to the VMMC program. There is a dearth of literature on motivation models in expanding the scale up of VMMC programs in resource limited settings. An understanding of ways to motivate health workers involved in VMMC programs is of great importance in Zambia where HIV prevalence is 14.3%, male circumcision prevalence less than 20% and a human resource shortage so severe that the public sector operates at 50% of its human resource for health needs. Jhpiego Zambia investigates the influence of public recognition of health worker performance on the success of the August 2012 VMMC campaign.

**Description of interventions:** Jhpiego Zambia has been supporting the MOH to conduct annual VMMC campaigns each August since 2010, with an average achievement of 5000 clients circumcised per campaign. In August 2012 a total target of 16,000 clients to be circumcised was distributed among 20 Jhpiego-supported facilities. These facilities are distributed throughout Zambia.

A healthy competition was created between these sites by the promise that sites that achieved their targets would be recognized at a national VMMC advocacy forum called the National VMMC

Stakeholders meeting which would bring together the national, provincial and district leadership of the Ministry of Health, the US ambassador and donor agencies, traditional chiefs and all NGOs involved in VMMC in the country. This meeting was planned for a month after the campaign.

As the campaign progressed, information about sites making excellent progress was shared with other sites to encourage healthy competition.

**Lessons learned - conclusions and implications of the interventions:** At the end of the campaign season a total of 22, 546 VMMCs were achieved by the 20 sites. 60% (n=12) sites in 8 Provinces exceeded their targets. Of this category, 42% exceeded their target by over 100%. Among the other 40% (n=8) of sites that did not meet their target, half were from Eastern Province where culture has been a major hindrance to scale-up of VMMC.

**Next steps and recommendation:** Recognizing health worker performance can motivate them to show commitment to VMMC campaigns and help facilitate the scale up of VMMC

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## “Catching-up” through Improved Voluntary Medical Male Circumcision (VMMC) Campaigns: Lessons from Zambia

**Abstract Number:** PB362

**Presenter:** Nikisi, Joseph

**Presenter Company:** Jhpiego- An affiliate of Johns Hopkins University

### Track Topic

Track E: HIV and Health System Strengthening - E1.Leveraging the AIDS response to strengthen health systems and improve other health outcomes

**Issues:** Zambia has an HIV prevalence of 14.3% and Male Circumcision prevalence estimated at 17%.<sup>1</sup> As of 2012, approximately 290,000 men have been circumcised, leaving another 1,600,000 to be circumcised by 2015 in order to achieve the desired public health impact.<sup>2</sup> WHO/PEPFAR recommends that 80% of HIV negative males aged 15-49 years be circumcised to maximize the public health benefit in regard to HIV prevention.<sup>3</sup> There is therefore need for a dramatic scale-up in order for the country to achieve VMMC coverage of 80% among the targeted group by 2015.

Jhpiego, in collaboration with Ministry of Health (MOH), has been conducting semi-annual VMMC campaigns at MOH health facilities; these campaigns were designed to create demand and maximize volume while maintaining high-quality services in adherence to national and international standards using surgical and non-surgical efficiencies. This abstract describes how improving VMMC campaigns have increased access to and coverage of VMMC services over the last 3 years.

**Description of interventions:** During the first two VMMC campaigns in 2010 and 2011, various strategies were employed to increase MC coverage through demand generation, use of trained providers for HIV counseling and testing and the MC surgery, enhanced site supportive supervision, provision of adequate supplies and equipment and data management. In addition to the above strategies, the 2012 campaign added efficiencies such as a combination of service delivery models - outreach and static; the review of previous MC data to locate areas with high demand; introduction of pre-packed VMMC supplies and consumables kits; intensified advocacy via mass media and high level advocacy through traditional and political leaders and active MoH leadership.

**Lessons learned: conclusions and implications of the interventions:** Routine data from 2010 to 2012 was analyzed retrospectively; total numbers of clients circumcised were compared by the campaign modes that were used. Since 2009, 65,927 MCs had been conducted; of these 50% were done during VMMC campaign periods. During the August 2010 and 2011 campaigns, 5,493 and 5,283 VMMCs were conducted respectively, contributing about 20% towards the national targets for 2011. With improved campaign strategies, the number of MCs done in the 2012 August campaigns increased to 22,590, exceeding the target of 16,000 whilst contributing 36% towards the national figure for 2012. Over this period, <2% of clients had reported Adverse Events (AEs) and 74%-86% of clients had tested for HIV during VMMC-campaigns. Since 2010, a positive trend in the number of MCs done has been observed with contribution of approximately 28% to the national numbers while maintaining a low rate of AEs.

**Next steps and recommendations:** Rapidly scaling-up and increasing access to and coverage of VMMC services, requires continued use of more efficient campaigns with a variety of service delivery models. Key components of a successful campaign which will need to be sustained include a combination of a diverse demand creation strategy involving the media and traditional and political leader advocacy and MoH leadership and support.

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**From Evidence to Programming, Mass Mobile Safe Male Circumcision: Lessons from a Ugandan Rural Sites - A Case Study of TASO Uganda**

**Abstract Number:** PB370

**Presenter:** Nabiryo, Christine

**Presenter Company:** TASO

**Track Topic**

Track E: HIV and Health System Strengthening - E1.Leveraging the AIDS response to strengthen health systems and improve other health outcomes

**Issues:** Randomized clinical trials have proven that HIV transmission from females to males is reduced by 60% and more among circumcised males. The national target for Uganda by 2015 is to circumcise 4.2 million adult males, an unprecedented number requiring a pragmatic approach and effective models(s) to deliver this target. A case study of rural safe male circumcision (SMC) sites within TASO catchment area in 4 districts with population of over 2.2 million adult males aged 15- 49 years was undertaken for lessons towards SMC program roll out.

**Description:** Client mobilization was by community and political leaders, volunteers and through media. Non physician clinicians (clinical officers and nurses) carried out the majority of the circumcisions at community outreach camps. The SMC voluntary counselling and testing (VCT), adverse events (AE) management and follow up were done as per set national guidelines. Supervision of SMC teams was done by trained public and private health services providers. All clients were consented. Public health facilities were renovated and equipped to carry out SMC and public health facilities staff trained in SMC. SMC camps (in tents) were also set up for temporary services delivery at high volume sites. A total of 14,799 males were circumcised in 84 days spread over 4 months at 4 static sites and 11 SMC outreach camps. The AEs were mild and reversible. No deaths occurred and over 85% of circumcised men were between 13 and 25 years while 15% were between 26 and 49 years. The work rate was 148 - 672 (410) SMCs per day.

**Lessons learnt:** Focused partnerships and community mobilization are effective in community mobilization for SMC. There is sufficient demand for SMC services and willingness of the rural population for SMC uptake. However, prior community mobilization is necessary for volunteers' preparation and readiness at point of running SMC camps. Quality SMC can successfully be carried out by trained non Physician clinicians. Mass mobile SMC with private public partnership and task shifting were successful for SMC services scale up in rural Uganda.

Acknowledge CDC, MoH Uganda, District local governments, TASO staff and volunteers

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## **Men's Perceptions of Voluntary Medical Male Circumcision Quality and Accessibility in Nyanza Province, Kenya**

**Abstract Number:** PB542

**Presenter:** Lanham, Michele

**Presenter Company:** FHI 360

### **Track Topic**

Track C: HIV/AIDS Prevention Programmes - C28. Prevention programmes in institutional and community settings

**Background:** Voluntary Medical Male Circumcision (VMMC) services are currently being scaled up in several sub-Saharan African countries to reduce men's risk of HIV acquisition through vaginal sex. In 2008, the Government of Kenya (GoK) launched a national VMMC program, aiming to circumcise 860,000 men ages 15-49 by 2013. Currently, VMMC services are provided free-of-charge by both the GoK and non-governmental organizations. This study was conducted in 2011 among men ages 18 to 35 in Nyanza Province, Kenya, to assess perceptions of VMMC services, including whether factors related to health services were barriers to men seeking VMMC.

**Methods:** Semi-structured in-depth interviews (n = 22) were conducted with medically circumcised and uncircumcised men. They were asked their opinions of various aspects of VMMC service delivery, including HIV testing, sex of the provider, waiting for services with boys and overall service quality and accessibility. NVivo 9 was used for data coding and management. Inductive thematic coding and analysis was conducted through a standard iterative process.

**Results:** Overall, men said VMMC services were both easily accessible and of high quality. Specifically, men had a high level of awareness of how to access VMMC services--including where services are offered and that they are free of charge. They had positive feedback on locations, days/times, and wait times for VMMC services. The most common recommendation for improving access to services was adding more facilities and providers. Regarding service quality, the majority of participants reported that they thought VMMC service providers are knowledgeable, have good technical skills and provide good follow-up care for wound healing. A few noted that service quality could be improved by further training providers and improving pain management. The majority of participants said they think that VMMC providers maintain clients' privacy and confidentiality, though some thought this needed improvement. Men showed some concern over getting circumcised at a facility where providers or clients may be people they know. Other aspects of service delivery--including the sex of the provider, HIV testing, and waiting for services at the same time as boys--were not major concerns. In fact, men were overwhelmingly positive about getting HIV tested before VMMC, saying it was good to know your status. There were no major differences in circumcised and uncircumcised men's perceptions of VMMC health services.

**Conclusions:** These findings help explain Kenya's notable success in scaling up VMMC. Men's perceptions that VMMC services are high quality and easy to access have likely contributed to the high number of men seeking circumcision in Nyanza Province. The way services are delivered seems to be acceptable to men and does not deter them from seeking VMMC, though their concern that VMMC providers and other clients may be people they know should be explored further. Service access and

quality continue to be paramount to ensure that safe procedures are available to men who will benefit most. Ongoing support to the GoK will be essential to ensure that evidence-driven enhancements to services advance the important gains to date.

**Abstract Transparency Statement:** The data on service quality and access was previously presented at the NACC 2nd Biennial HIV/AIDS Conference in Nairobi, Kenya, in May 2013. The objective of the national meeting was to create a forum for sharing best practices on HIV/AIDS related programs in Kenya. Fewer than 50 people were in attendance when the presentation was made. The presentation did not include the data on sex of the provider, waiting at the same time as boys, going to VMMC services where providers or clients may be people that men know, and HIV testing. These are important data to present at a conference like ICASA because issues such as HIV testing and having to wait at the same time as boys are often cited in implementation discussions and the media as likely barriers to adult men becoming circumcised, which these data show are not the case. Additionally, these data illuminate potential reasons why Kenya has been so successful at scaling up VMMC, which will likely be of interest to other countries scaling up VMMC.

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### **Reaching Adolescents with Safe Male Circumcision Services: School Campaigns In Botswana**

**Abstract Number:** PB543

**Presenter:** Ronald, Wandira

**Presenter Company:** Jhpiego-Botswana

#### **Track Topic**

Track C: HIV/AIDS Prevention Programmes - C28. Prevention programmes in institutional and community settings

**Background:** Modelling studies indicate that to impact the HIV epidemic through Safe Male Circumcision (SMC/VMMC), 80% of HIV negative men in the population need to be circumcised rapidly. This translates into approximately 385,000 males aged 13-49 years to be circumcised by the year 2016 in Botswana, a high priority country given the high HIV (17.6%) and low male circumcision-MC (11.2%) prevalence in the general population.

The Ministry of Health (MOH) embarked on a nationwide effort to scale up SMC services in collaboration with donors and implementing partners. Whereas uptake by older men from the general population and workplaces remains low, school campaigns are attracting higher client numbers. An evaluation report of the Botswana SMC short-term communication strategy highlighted healing time as one of the barriers to getting circumcised (20.5%). Anecdotal field reports mention the six weeks abstinence for sexually active men as a key barrier, and loss of productivity through sick leave days post circumcision as a limiting factor for buy in from workplace authorities. We describe the school campaign strategy that targets young school going adolescents and its results in four health districts in Botswana.

**Methods:** We retrospectively analysed routine program data collected from four district SMC teams. We determined the number of clients who received SMC services during the school campaign periods relative to the total number served during the period of May 2012 through April 2013. We also assessed the age categories and HIV status of clients receiving SMC services in these districts in the same period.

**Results:** Three school campaigns each lasting 3 to 6 weeks, from the beginning to second last week of school holiday periods took place in the review period. A national level team comprising of MOH, donors and implementing partners oversaw the national level planning. District Health Management Teams which represent the MOH at district level led the campaign activities in the four health districts, supported by NGO partners (Jhpiego, PSI, Tebelopele), with funding from MOH and PEPFAR/CDC. Activities included planning meetings, identifying target schools, sensitization of school heads and teachers on SMC, consultations with parents, SMC education to students, bookings for SMC, the actual SMC service provision and post campaign evaluations. We reviewed data on a total of 6904 males circumcised between 1st May 2012 and 31st April 2013. 3874 (56%) of these were circumcised during 14 weeks of the three school campaigns, which accounted for 27% of work time over the review period. The clients seen in these campaigns were primarily in the age range of 10-19. All tested for HIV. 0.8% of them tested HIV positive.

**Conclusions:** The school campaigns were efficient in reaching high numbers of HIV negative adolescents who most likely would have been difficult to get into VMMC services as older (and probably more sexually active) working men, in a country setting of relatively lower MC uptake.

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### **Perceptions of a Soccer-based Intervention to Increase VMMC Uptake in Zimbabwe: A Qualitative Study**

**Abstract Number:** PB545

**Presenter:** DeCelles, Jeff

**Presenter Company:** Grassroot Soccer

#### **Track Topic**

Track C: HIV/AIDS Prevention Programmes - C28. Prevention programmes in institutional and community settings

**Background:** Three randomized controlled trials have shown that voluntary medical male circumcision (VMMC) reduces female-to-male transmission of HIV by 50-60%. Despite progress in supply scale-up, Zimbabwe is falling well short of its target of 80% VMMC coverage by 2015. In this context, Grassroot Soccer developed "Make the Cut" (MTC), a short, scalable intervention facilitated by circumcised "coaches" and targeting men over 18 years on soccer teams. MTC represents the first interpersonal VMMC promotion strategy in Africa to use soccer as an entry-point to generate demand for VMMC.

**Methods:** Qualitative data were collected to explore differences in uptake over 3-6 months among three sub-groups: (1) interventions facilitated by professional soccer players, (2) interventions facilitated by non-professional soccer players and (3) control. Thirty in-depth interviews (IDIs) were conducted: 10 with participants who remained uncircumcised following intervention, 10 with participants circumcised within 45 days post-intervention as determined by clinical registers, and 10 with coaches. Two focus group discussions (FGDs) were conducted with coaches. IDIs and FGDs were recorded, translated, and transcribed, and thematic analysis was performed by a four-person team. Observations were conducted at the training of coaches, interventions (N=29), and VMMC clinics.

**Results:** Preliminary findings suggest that the intervention offers a feasible and innovative approach towards VMMC promotion. Coaches highlighted higher acceptability of the intervention among younger than older men: "[Some men were] maybe ten to fifteen years older. It can be difficult for them to understand...They say, 'What can you tell us?'" HIV testing as a requirement in Zimbabwe prior to VMMC deterred many men (particularly those over age 25) from going for VMMC; for example, "Getting tested is a big deal...because there is no life...after being tested." Timing of intervention delivery shortly before Christmas was cited as a barrier for non-professional soccer players who wished to enjoy the holiday season, while professional soccer players appeared more likely to get circumcised over Christmas, during their off-season. Coaches and participants alike indicated that home-based follow-up and small incentives could play a role in improving uptake. Little difference was noted between delivery by professional and non-professional soccer players.

**Conclusions:** Building on these findings, Grassroot Soccer seeks to test a revised program (MTC+), targeting younger males (ages 14-19) and introducing a small soccer-related incentive as well as phone-based follow-up to the intervention. Positive results from the pilot could lead to scale-up of MTC+ in Zimbabwe and other high HIV-prevalence countries where VMMC coverage is low.

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### **Targeting Zero Un-Circumcision in Rural Nomadic Population of Karamoja in Uganda**

**Abstract Number:** PB550

**Presenter:** Otolok Tanga, Erasmus

**Presenter Company:** World Vision Uganda

#### **Track Topic**

Track C: HIV/AIDS Prevention Programmes - C29. Prevention programmes for immigrants, mobile and displaced populations

**Issue:** The benefits of male circumcision in the reduction on transmission of HIV is well documented, however, enrolling men for the procedure is often challenging especially in hard to reach and mobile nomadic populations. Karamoja sub-region is characterized as a hard to reach area, with a semi-nomadic

and non-circumcising community faced with a rising HIV prevalence from 3.1% to 5.3% in the last five years; and only 10% of the men are circumcised. There are also limited HIV services with gaps in human and material resources; poor infrastructure; long distance of health facility to the communities; and inadequate information and knowledge on the benefits of Voluntary Medical Male Circumcision (VMMC)

**Description:** The Supporting Public Sector workplaces to Expand Action and Responses to HIV (SPEAR) project with support from PEPFAR/USAID has been implementing VMMC in Karamoja sub-region through social mobilization and outreach services since March 2013. The intervention commenced with sub-regional review meetings held with the district leadership including the district health teams to discuss the identified gaps, possible solutions and understand the community norms. The communities were mobilized and informed about the availability and benefits of VMMC through Radio announcements and talk shows in English and Ngakaramajong; Banners and Posters placed in strategic areas in the districts; and on-site video-aids. The Local leaders, Village Health Teams and health workers mobilized clients for the Circumcision teams and HIV Counseling Testing teams, who conducted five-day outreach camps in Moroto and Napak districts. News of the services spread through word of mouth by those who had accessed the free services with daily increased access to the services. The VMMC services were provided through fixed, mobile and outreach strategies, all inclusive of health education talks, behavior change communication messages, condom distribution, counseling and testing, circumcision, pre-post operative counseling and care after circumcision according to Ministry of Health guidelines.

**Lessons learned:** During the outreach, a total of 1,423 (M=1303, F=120) individuals accessed counseling, testing and received their test results; 773 males were circumcised and 12 males reported mild adverse events; 105 (67 students and 35 adults) walked 16 kilometers to access the free HIV services. Forty one (M=34, F=7) tested positive and were counseled, initiated on Co-trimoxazole prophylaxis and referred for further care at Kangole Health Center IV and Moroto hospital. The long distance covered by some clients indicates the unmet demand and acceptability of HIV services among the Karamojong community and that future interventions will succeed. Collaboration, adaptation and social mobilization involving district leadership, health teams and elders, and nurturing linkages between health facilities and the community are vital for a successful program/VMMC outcome.

**Next steps:** SPEAR plans to scale up the implementation of comprehensive HIV prevention including VMMC and care packages to all the seven districts in Karamoja sub-region through fixed, mobile and outreach services; while ensuring the services are provided in close proximity to where clients live within the acceptable cultural context and full participation of community leaders.

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### **All co-authors**

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### **All co-authors affiliations**

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## **Cost Analysis of the PrePex Procedure Compared to Surgical Procedure**

**Abstract Number:** PB560

**Presenter:** Mutabazi, Vincent

**Presenter Company:** MoH - Rwanda Biomedical Centre

**Track Topic**

Track C: HIV/AIDS Prevention Programmes - C31. HIV prevention technologies

**Background:** Results from the Decision Makers' Program Planning Tool (DMPPT) models supported by the USAID Health Policy Initiative and UNAIDS, performed in 2011, suggest that scaling up adult voluntary medical male circumcision (VMMC) to reach 80% coverage in the 13 countries by 2015 would entail performing 20.34 million circumcisions between 2011 and 2015 and additional 8.42 million between 2016 and 2025. Such a scale-up would result in averting 3.36 million new HIV infections through 2025. In addition, while the model shows that this scale-up would cost a total of US\$2 billion between 2011 and 2025, it would result in net savings (due to averted treatment and care costs) amounting to US\$16.51 billion.

The same modeling suggest that cost of VMMC ranges from US\$65.85 to US\$95.15 per VMMC performed, based on a cost assessment of VMMC services aligned with the World Health Organization's considerations of models for optimizing volume and efficiencies.

The objective of this cost-analysis study was to provide an average unit cost and cost-analysis information related to performing male circumcision (MC) using either a surgical method or PrePex, and to determine how the use of PrePex might enhance the delivery of Rwanda national VMMC targets.

**Methods:** Prospective, randomized controlled trial in Rwanda in which the PrePex device was used for nonsurgical MC and the dorsal-slit method for surgical MC (144 and 73 subjects for PrePex and Surgical respectively). Subjects were healthy adult male volunteers aged 21--54 years. We have performed cost analysis for cost elements that may differ between the 2 methods, per each VMMC arm, by gathering data during the study course on the actual types and amounts of tools and materials used as well as the required infrastructure, the clinical human resource, costs related to treating adverse events and the cost of training. We have then gathered the actual cost of each element in each arm.

**Results:** The total circumcision cost per person, for surgical MC was found to be \$40US/VMMC, while the PrePex MC was found to be \$27US/VMMC with the current cost of \$20 per device, providing an overall cost saving of more than 36% (\$15) versus surgical VMMC.

**Conclusions:** Our findings suggest that PrePex MC has a lower cost than surgical MC per each VMMC procedure. The total difference we found suggest that PrePex in its current price can save up to 15\$ per VMMC, which represent about 36% reduction of VMMC procedure direct cost.

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**All co-authors**

Mutabazi, Vincent; Karema, C.; Bitega, J.P.; Ngeruka, L.M.; Mugabo, F.; Kaplan, S.

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## **Summary of Scientific Validation and Ongoing Use of PrePex Device for Non-Surgical Adult Male Circumcision in Rwanda**

**Abstract Number:** PB561

**Presenter:** Mutabazi, Vincent

**Presenter Company:** MoH - Rwanda Biomedical Centre

### **Track Topic**

Track C: HIV/AIDS Prevention Programmes - C31. HIV prevention technologies

**Background:** Clinical studies of the PrePex device for non-surgical MC were conducted using the WHO official Evaluation Framework of Adult Male Circumcision (MC) Devices. All studies were executed according to GCP guidelines. Clinical reports on all studies submitted to WHO, CDC/PEPFAR, UNAIDS and Gates Foundation.

Rwanda has completed the roadmap, scientifically validating the safety, efficacy, acceptability and superiority (over dorsal slit, on both measures of time and safety) of PrePex. Furthermore, the Ministry of Health has approved the device for use in Rwanda on March 2011 after culminating the RCT (Comparison), and in February 2012 WHO had approved the device for scaling up in Rwanda. This report provides a meta analysis of all safety results accumulated in the WHO qualification process and PrePex campaigns.

**Methods:** Data was gathered from 4 clinical studies and 3 local campaigns, from over 10 facilities, including active reporting of Adverse Events (AEs) and their classification.

**Results:** All AEs occurred up to day 8, treated and resolved, see following data:

On study CRCMT01 -- PrePex Safety & Efficacy study were recruited 105 subjects, there was 1 related AE.

On study RMC01 - Comparison study were recruited 144 subjects, there were 4 unrelated AEs.

On study RMC02 - Feasibility Study with Nurses were recruited 49 subjects, there was 1 unrelated AE.

On Study RMC03 - Safety and Efficacy by Nurses were recruited 590 subjects, there were 2 related AEs and 3 unrelated AEs.

On study RMC07 - Active 1,000 Subjects were recruited 1001 subjects, there were 7 related AEs.

On Byumba H&H campaign were recruited 1000 subjects, there were 7 related AEs.

On RMH campaign were recruited 1496 subjects, there were 4 related AEs.

On Rwanda Military Hospital Ongoing campaigns were recruited 1548 subjects, there were 4 related AEs.

The total number of subjects was 5933 with 25 related AEs and 8 unrelated AEs.

Over 90% of the 5,933 procedures were conducted by low cadre nurses.

**Conclusion:**

Studies confirmed that PrePex is safe when performed by physicians and when performed by nurses, with a related AE rate of 0.4%, offering a bloodless procedure that requires no needles (no injection of anaesthesia), no knives, no sutures, no sterile settings. Recent study also confirmed that the procedure is easy to train and can be conducted by minimally skilled, yet well trained nurses in a fast and effective manner.

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**Role of medical male circumcision in HIV prevention – a cross-sectional study of the perceptions and their impact on sexual behaviours of adults in Kayunga district, Uganda**

**Abstract Number:** PB563

**Presenter:** Mukama, Trasier

**Presenter Company:** Uganda Youth and Adolescents Health Forum

**Track Topic**

Track C: HIV/AIDS Prevention Programmes - C31. HIV prevention technologies

**Background:** Medical male circumcision is now part of a comprehensive approach to HIV prevention as recommended by the World Health Organisation. A major concern about the promotion of circumcision as an HIV prevention measure is the likelihood of risk compensation among those who choose to be circumcised. Men who undergo the procedure may feel less inhibited about engaging in risky sexual behaviour. This study assessed peoples' knowledge about medical male circumcision and their perceptions about the impact the procedure would have on the sexual behaviours of adults.

**Methods:** A cross-sectional study was carried out in Kayunga district in central Uganda. A total of 392 respondents were administered with a standardized questionnaire. In addition, 4 focus group discussions were conducted. Data was analysed using Epi Info 7.0 software. Univariate and bivariate analyses were carried out.

**Results:** The majority of respondents, 282 (97.5%) had heard about medical male circumcision (MMC), the main sources of information being radio 195 (34.2%) and health centres 141 (24.7%). A total of 39 (10.2%) respondents thought that MMC provided 100% protection against HIV acquisition whereas 127 (33.3%) said between 1-5 weeks is sufficient time between circumcision and sex resumption. The acceptability of MMC was high as 371 (97.1%) said they would circumcise their male children, 68 (80%) of uncircumcised males wished to undergo circumcision and 145 (95.4%) of females preferred to have their partner circumcised. A total of 89 (23.3%) respondents said that circumcision would compromise the use of condoms and this was associated with level of education ( $p=0.014$ ). The perception that circumcision increases the sexual drive of men was found to be associated with religion ( $p=0.031$ ) and circumcision status ( $p=0.004$ ). The perception that males were more likely to engage in risky sexual behaviours after circumcision was significantly associated with sex ( $p < 0.001$ ).

**Conclusion:** Although several perceptions about the likely increase in the number of sexual partners, abstinence among youths and compromised condom use exist in communities which could suggest likelihood of risk compensation, they may not be significant to offset the perceived benefits of circumcision.

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Uganda Youth and Adolescents Health Forum

**Piloting Implementation of Early Infant Male Circumcision Using Devices in Zimbabwe: Preliminary Findings**

**Abstract Number:** PB564

**Presenter:** Mavhu, Webster

**Presenter Company:** Centre for Sexual Health & HIV/AIDS Research Zimbabwe

**Track Topic**

Track C: HIV/AIDS Prevention Programmes - C32. New approaches for HIV prevention

**Background:** Early infant male circumcision (EIMC) is safer and easier than adult MC [1]. Further, EIMC may be more effective at preventing HIV acquisition than adult MC as the procedure is carried out long before the individual becomes sexually active, negating the risk associated with acquisition or transmission of HIV during the healing period [2]. We present preliminary findings on first 123 of the 150 babies recruited for a trial to assess the feasibility, safety, acceptability and cost of rolling out EIMC using devices in Zimbabwe.

**Methods:** Babies at a Harare clinic whose parents consented to EIMC were screened using study screening eligibility criteria. Those who met the study inclusion criteria were randomized to EIMC through either AccuCirc device or Mogen clamp, using a 2:1 allocation ratio. Baseline data were collected on participants. Service statistics and other quantitative data were double entered into a password-protected Access database. Range and consistency checks were performed. Data were analyzed using Stata 12.

**Results:** Despite intensive communication at the clinic with antenatal and post natal parents, only 13% of all eligible male infants whose parents were offered EIMC during these periods (N=947) enrolled in the trial. One hundred and twenty-three 6-11 day-old infants were circumcised between 9 January and 29 May 2013 (n=82 AccuCirc; n=41 Mogen clamp). The median gestational period, day of life, birth weight and body temperature was 40 weeks, 8.5 days, 3.2kg and 36.40C, respectively. This was similar by study arm. Of the 123 male infants, 22 (18%) were born to HIV positive mothers. There were no adverse events in either arm. Nearly all mothers (99.5%) reported great satisfaction with the outcome. Again, findings were similar by study arm. All mothers in either arm said they would recommend EIMC to other parents, and would circumcise their next newborn son.

**Conclusions and recommendations:** These preliminary findings suggest that it is feasible and safe to offer EIMC using devices in Zimbabwe. Despite the advantages of EIMC for HIV prevention, actual uptake remains low. Culturally appropriate demand-creation activities to promote EIMC need to be developed and intensified if universal coverage of EIMC is to be achieved in future.

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## Reaching Young Men with Prevention, Care and Treatment through Voluntary Medical Male Circumcision Services in a High Prevalence Province in South Africa

**Abstract Number:** PB565

**Presenter:** Searle, Catherine

**Presenter Company:** MatCH (Maternal, Adolescent & Child Health)

## Track Topic

Track C: HIV/AIDS Prevention Programmes - C32. New approaches for HIV prevention

**Background:** Medical male circumcision (MMC) is effective in reducing heterosexually acquired HIV in males by ~60% (1). UNAIDS/WHO recommend voluntary MMC (VMMC) as part of comprehensive HIV prevention in high HIV and low MMC prevalence areas. Public sector MMC services in KwaZulu-Natal commenced in June 2010. MatCH, with PEPFAR funding, has supported high volume VMMC sites and outreach services, conducting over 42,000 procedures to date. Rolling out high volume voluntary MMC has the potential to increase male uptake of HIV related services including counseling and testing (CT), screening for STI and access to care.

**Methods:** Routine data collected on males seeking VMMC services at high volume sites, outreach services and referred from primary health care (PHC) clinics between April 2012 and May 2013 was reviewed to determine the profile of clients seeking services and the uptake of services.

**Results:** During the study period 23,705 clients visited MatCH-supported sites for MMC services. Of these, 12,531 underwent HIV counselling on-site (53%), 79% of whom were less than 25 years old. 98% accepted HIV testing. Most (98%) were HIV negative, with very few infections in those below 25 years of age (under 1% among those aged 10-14, 15-19 and 2% of 20-24 years). 47% were screened off-site and referred for services; most (79%) were below 25 years. Overall 23,017 (99%) of males screened on-site or referred underwent MMC, 80% of whom were below 25 years. 97% of males circumcised were HIV negative. 268 males were referred for services for STI, CD4 counts or other conditions. Demand for services peaked in winter (3502 procedures in July) and dropped to 700 in January. On average nearly 1,800 procedures were performed monthly.

**Conclusions:** 80% of males accessing VMMC services are below 25 years old and nearly all (98%) were HIV negative. The vast majority of males screened underwent circumcision (99%), making this an effective strategy to reach young males prior to HIV infection in high prevalence settings. Just over half

of the clients came directly to the high volume site (53%) while the balance were pre-screened at primary health care clinics. Managing walk-in clients and screening on site requires a dedicated team of counselling staff. Working with primary health care clinics and schools to promote VMMC and to screen males for MMC eligibility increases efficiency at high volume sites as clients arrive pre-screened and can be pre-booked for services. This assists sites to plan service delivery and ensure capacity to deliver services. Programmatic interventions are required to manage the seasonal demand for services.

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### **Medical Male Circumcision Demonstration Model and Community Mobilization Kit**

**Abstract Number:** PB567

**Presenter:** Labouchere, Peter

**Presenter Company:** Bridges of Hope Training

#### **Track Topic**

Track C: HIV/AIDS Prevention Programmes - C32. New approaches for HIV prevention

**Issue:** In scaling up and rolling out Voluntary Medical Male Circumcision (MMC) programmes, there is a need for practical tools for clarifying, explaining and practicing the MMC procedure and also for explaining its health benefits in order to motivate men to access MMC services.

**Description:** A MMC demonstration model and a community mobilization kit have been developed to address this issue. The MMC model comprises a penis model base with a retractable foreskin sheath manufactured with different coloured elastic fabrics to represent inner and outer foreskin. This illustrates clearly how the sensitive inner foreskin is exposed during unprotected sex, and how circumcision can reduce but not eliminate the risk of HIV infection. The sheath can also be manipulated to illustrate both full and partial circumcision and explain the importance of full circumcision. The model is also used by some organisations including CHAPS for practicing the MMC procedure as part of the training process for medical practitioners. This model also forms part of a MMC Community Mobilization Kit, which includes a selection of participatory behaviour change communication activities for engaging people in discussions on this culturally sensitive topic, and motivating access of MMC services. It includes an adaptation of the Walking the Bridges activity (1) with the metaphor of a shield to represent the partial protection that circumcision offers against the 'HIV crocodile'.

**Lessons learnt:** Following some modifications based on feedback from trials with prototypes, the model is being widely used in South Africa by various organisations with very positive feedback including from

the MMC pioneer Dr. Dirk Taljaard, Chief Executive Officer, CHAPS: "This is definitely the best model I have seen for demonstrating and explaining medical male circumcision and its benefits."

**Next steps:** Continue to refine and expand the use of the MMC model and mobilization kit.

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#### **All co-authors**

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Bridges of Hope Training

### **The Voluntary Medical Male Circumcision Scale Up in Zambia: Successes, Challenges and Next Steps**

**Abstract Number:** PB573

**Presenter:** Kaonga, Albert

**Presenter Company:** Ministry of Community Development Mother & Child Health

#### **Track Topic**

Track C: HIV/AIDS Prevention Programmes - C32. New approaches for HIV prevention

**Issues:** Three large, randomized control trials have indicated that adult Voluntary Medical Male Circumcision (VMMC) reduces men's risk of HIV acquisition by at least 60%. In 2007, WHO recommended VMMC as an HIV prevention strategy. By end 2012 only 10% of 2016 VMMC targets were reached. Prequalification of MC devices & strategic documents have been developed for VMMC, but in order to scale-up, strong leadership & political will are needed.

**Description:** A national VMMC program was piloted in Zambia in 2007 & formally launched in 2009. It aims to circumcise 80% (n=1,864,396) of HIV-negative men (15-49 years) by end of 2015. Over 400,000 VMMCs have been performed to date, with 173,992 performed in all age groups in 2012 compared to 84,604 performed in 2011. Key factors behind the success of the Zambia National (VMMC) have been assessed.

**Lessons learned:** In 2009, strong political will included the 2009 launch of the National VMMC Programme as part of the Comprehensive HIV prevention strategy by the Ministry of Health. This included the launch of the National MC Strategy and Implementation Plan, 2010-2020 that defined the minimum service package, set targets and established the technical working group and subcommittees. VMMC was coordinated through recruitment of MOH national coordinator; the 2012 Country Operational Plan which provided 80% coverage district level annual targets, annual cost & funding-gap analysis & defined Ministry of Health (MOH) governance structures at all levels (1). Strong advocacy was achieved through 2012 launch of VMMC Communications & Advocacy Strategy. Advocacy efforts resulted in VMMC uptake by parliamentarians and House of Chiefs generating demand in traditionally non-circumcising tribes. Three parliamentarians & two chiefs became national VMMC champions. A mixed service delivery model was implemented to optimize volume & efficiency of services, e.g. dedicated service days; accessible locations; static & outreach services; efficient activity scheduling & client flow; task-shifting & VMMC commodity supply chain management. Despite successes, challenges

include: duplicated efforts, inefficient resource utilization, human resource shortages, VMMC commodity stock-outs & ineffective private sector engagement lack of private sector data.

**Next steps:** Zambia experiences display how strong program leadership, partner coordination, political will, advocacy, an efficient mix of service delivery models, dedicated national campaign months, as well as task shifting are integral to VMMC program scale-up. Next steps include integration of VMMC with other programs, e.g. reproductive health and cervical cancer screening & use of traditional ceremonies for demand creation; partner mapping to avoid duplication; use of VMMC devices; provider training; efforts to better improve quality assurance & better engagement of private sector.

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## **The Sustainability Plan: Early Lessons from the Integration of Early Infant Male Circumcision Services into Reproductive and Child Health Services in Iringa Region, Tanzania**

**Abstract Number:** PB575

**Presenter:** Mziray, Hawa

**Presenter Company:** Jhpiego Tanzania

### **Track Topic**

Track C: HIV/AIDS Prevention Programmes - C33 Integrating HIV prevention into reproductive health, care, support and treatment programmes

**Issues:** Iringa Region in Tanzania (HIV prevalence 9.1%) is scaling up VMMC services with technical and financial support from USAID's flagship MCHIP program through PEPFAR. More than 80,000 adult and adolescent VMMCs performed since 2009 have raised adult male circumcision (MC) prevalence from 29% to more than 60%. With a mature adult/adolescent program established, the Ministry of Health and Social Welfare (MOHSW) and MCHIP are now establishing integrated early infant male circumcision (EIMC) as a sustainable, long-term approach to maintaining gains in male circumcision prevalence. How to integrate EIMC into reproductive and child health (RCH) services is a challenge since it involves new departments and personnel. This abstract seeks to document the early Lessons learned from the initiation of integrated EIMC services.

**Description:** EIMC services using the Mogen clamp device are available in the MCH departments of four health facilities for infant boys between 24hrs and eight weeks of age. EIMC education for parents was integrated into routine RCH services including antenatal, maternity, immunization, and family planning clinics. Providers (mostly nurses and midwives) in those clinics were trained in EIMC and space for EIMC during MCH services was delineated; supplies and equipment provided by MCHIP. Mentorship and

quality assurance are conducted in partnership with the MOHSW. More than 200 EIMCs have been provided during the initial two months of the program.

**Lessons learned:** Sixty percent of training participants achieved competency; lower than what is typical in the VMMC program (80%). This may be because VMMC providers are typically trained in very high volume settings and have the opportunity to assist and be mentored on 20-25 circumcisions each vis-à-vis 4-5 clients each during the lower volume EIMC training. (Other possible reasons for this difference are being explored.) As a result, post-training supervision and mentorship has been enhanced for all EIMC providers who did not achieve competency during training. An additional challenge is that VMMC providers who provide services at fixed sites work during their overtime hours and are remunerated for extra hours, while EIMC providers provide services during their normal working hours. To compensate, EIMC providers have limited the number of infants they will circumcise per day (3-5) to fit their work schedules. Despite these limitations, mentored and supervised providers are improving with additional practice; parents are seeking EIMC at the pilot sites and community demand seems to be slowly rising with facility referrals and radio ads.

**Next steps:** Providers not achieving competency during training will be retested after two months of supervision and mentoring. The EIMC training package is being reviewed for potential enhancements; efforts to secure a larger number of clients will be made for future training. EIMC acceptability and sustainability are being studied as part of the Iringa pilot and additional Lessons learned will emerge from that study to inform scale up. Meanwhile, new providers will be trained from each site so that the pool of providers capable of providing EIMC can be expanded; and eventually proficient EIMC providers will be trained to mentor their colleagues on site.

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### **The Role of Small Grants in Enhancing and Aligning HIV Prevention Activities in Resource Constrained Rural Communities of Zululand District, KwaZulu-Natal**

**Abstract Number:** PB584

**Presenter:** Motsepe, Joseph

**Presenter Company:** Futures Group

#### **Track Topic**

Track D: Behavioural Interventions: How do we influence individual behaviour through one-to-one and group interventions? - D7 Community mobilisation for HIV prevention, treatment, care and support

**Issues:** In 2011, an estimated 5, 6 million people were living with HIV in South Africa, with an estimated number of new infections at 1.43%. There is need to halt and reduce any more new infections. Civil society involvement in this process is cardinal; however, many are in resource constrained settings. The adoption and provision of Small Grants to resource constrained communities towards HIV/AIDS prevention projects and programmes is an innovative idea.

**Description:** From October 2012, Futures Group through its USAID Sexual HIV Prevention Programme (SHIPP) initiated small grants for non-governmental organizations (NGOs), and community based organizations (CBOs) based in Zululand District (KwaZulu-Natal), within limited resource setting. The purpose of the small grants was to address gaps in priority HIV prevention programme areas and build community capacity for sustainability as identified by the district. They supported NGO's and CBO's to plan, coordinate, implement and monitor the HIV prevention programmes. The projects implemented through small grants addressed harmful traditional practices, HIV risk reduction amongst youth, adults, women and men.

**Lessons learned:** The Small Grants enabled communities to apply different strategies such as community dialogues, youth dialogues, life skills support, awareness campaigns, peer education, interventions in localized communities. The intervention activities undertaken through Small Grants contributed to promoting distribution of condoms in hard to reach areas. They contributed to HIV/AIDS prevention activities targeting gender issues and youth to increase uptake of HIV combination prevention services. HIV prevention interventions implemented through Small Grants increased efficiency in mobilizing communities towards voluntary medical male circumcision (VMMC), and HIV Counselling and Testing (HCT). Through small grants capacity of communities to address HIV risk reduction was strengthened thereby enabling adoption of positive healthy behaviours.

**Next steps:** HIV prevention intervention through Small Grants programmes should be promoted due to the exceptional results and low cost. The role of NGOs as technical and coordinating support structures needs to be increased and networking within the Districts AIDS Councils. There is a need for new platforms for information sharing capabilities amongst NGO's and CBO's to facilitate innovative programs geared towards producing measurable results on HIV/AIDS parameters.

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#### **All co-authors affiliations**

Futures Group; Futures Group; Futures Group; Futures Group

### **The CareWorks MMC Demand Creation Programme: A Comprehensive Strategic Approach**

**Abstract Number:** PB587

**Presenter:** Roets, Jaco

**Presenter Company:** CareWorks

#### **Track Topic**

Track D: Behavioural Interventions: How do we influence individual behaviour through one-to-one and group interventions? - D7 Community mobilisation for HIV prevention, treatment, care and support

Medical Male Circumcision (MMC) has been identified as a key component of any comprehensive strategy when confronting the HIV/AIDS pandemic. The CareWorks focus is on demand creation. Potential candidates are identified, informed about the long term health benefits associated with MMC and scheduled into a local clinic to undergo the procedure. MMC remains a culturally sensitive topic. Approaches to demand creation should be flexible and appropriate to the target audience. The CareWorks MMC protocol is able to sensitise, educate and mobilise effectively into MMC camps and measure the effectiveness of these interventions. Interactive training and mobilisation techniques are monitored using sophisticated IT together with proactive out bound call centre support. The call centre is able to schedule potential leads for an MMC procedure in all Provinces, and provide follow-up advice 48 hours after the procedure. The CareWorks strategy includes: community field mobilisation; partnership with corporate organisations; sophisticated cell phone technology and innovative advertising routes. CareWorks has identified five key lessons through field mobilisation. (1) Mobilisers were struggling to build rapport with potential MMC candidates. In response, a versatile MMC toolkit was developed in partnership with Bridges of Hope. This allowed mobilisers to initiate discussions around MMC with greater ease. The MMC tool kit includes: MMC brochures, a neon peak cap and name tag, a letter of introduction, MMC clinical information (including a Brothers for Life A-frame), intake registers, informed consent forms, business cards, a circumcision model and an interactive mobilisation game (Bridges of Hope). The MMC toolkit can be used in a variety of environments, be it an individual MMC discussion or a group interaction around MMC. The tool kit information has been translated into all South African languages although the interactive game speaks to community members regardless of educational background. (2) The CareWorks training approach was revised comprehensively, to include a focus on community mobilisation strategies, community outreach and audience identification. Experiential learning and practical on-the-ground training were used effectively to expose mobilisers to the complexities and challenges of fieldwork. (3) Initially many mobilisers worked in isolation. Consequently mobilisers were not supported, and in many cases not motivated to work. This strategy was revised, giving all mobilisers a defined space in a tight team-structure for further support, strategy and direction. Mobilisers work in teams of four, together with a team coordinator. This allowed mobilisers to learn from each other, share skills and strengths and create further momentum by working as a team. (4) CareWorks engaged in community mapping, allowing teams to identify spaces in the community where demand was greatest. Clearly defined targets allowed mobilisers to work towards a goal, increasing potential reach, impact and uptake of the MMC message. These targets included individual targets, team targets, Provincial targets and seasonal targets. (5) Tracking progress on a mobiliser and team level is critical. Mobilisers and teams receive continual feedback on their efforts, thanks to sophisticated IT systems. This allows underperforming areas to be identified, while also highlighting teams that are performing. Leads are categorised according to the level of interest that the potential client expressed (for example: "book me" or "I need more information"). These categories guide trained call centre agents in terms of the nature of discussion that they will have with the individual. CareWorks has developed other demand creation avenues. The HelloDoctor telemedicine and social media platform provides targeted health prevention content to mobile phones through interactive voice, video or SMS information. Initial invitations are profiled across specific users and geographical location. Thereafter all interaction is user driven. In this way targeted MMC conversations can be initiated within selected population groups, ultimately resulting in MMC referrals. MMC demand

creation is a dynamic field. Rest room posters are linked to a specific 'please call me' number, allowing the impact of the posters to be measured. Other advertising strategies include using public transport, such as branded commuter taxis. MMC is associated with many fears, myths and misconceptions, and the CareWorks protocol seeks to address this. The Bridge is an out bound call, generated from the CareWorks call centre in mother tongue. Mobilisers submit lead forms on a weekly basis to the call centre. The leads are categorised according to their interest level. The Bridge programme provides support and information to address the fears and obstacles associated with MMC. Bridge also allows direct contact with leads to confirm booking dates, clinic venues, availability of transport and other logistics. MMC clients are phoned post-procedure, to ensure good wound care and to prompt a follow-up examination. Demand creation for MMC is not a straightforward process. Mobilisation efforts need to be context specific, strategic, flexible and creative. Measuring demand creation is also critical, providing data that supports mobilisation strategies. Protocols are continuously refined in line with data and reporting feedback.

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CareWorks; CareWorks; Bridges of Hope

### **Sexual Prevention and Adolescents Attending Voluntary Medical Male Circumcision (VMMC) Services in Tanzania: A Golden Opportunity to Offer Adolescent-Targeted Services**

**Abstract Number:** PB612

**Presenter:** Hellar, Augustino

**Presenter Company:** Jhpiego Tanzania

#### **Track Topic**

Track D: Socio-cultural Factors and HIV: How does the social context influence behaviour? - D14 Young people and sexuality

**Background:** Fourteen countries in Eastern and Southern Africa are scaling up VMMC services among men aiming to prevent new HIV infections. In Tanzania, over 400000 men have been circumcised since 2009. USAID's flagship Maternal and Child Health Integrated Program (MCHIP) support the Ministry of Health and Social Welfare (MOHSW) to implement VMMC in Iringa, Tabora and Njombe regions where almost 80% of clients are aged 10-19 years. The 2011/12 Tanzania HIV/Malaria Indicator Survey estimates 18.7 years as the median age at sexual debut for men. Thus VMMC is an opportunity to reach adolescents with counselling to mitigate risky sexual behaviours. The analysis reviews self-reported sexual behaviours and HIV prevalence among adolescents attending VMMC services in the three regions of Tanzania.

**Methods:** MCHIP maintains a client-level database and periodically conducts secondary data analysis. The database was reviewed for the January 2011-December 2012 period. Frequencies were performed on self-reported questions including sexual behaviours for three months prior to circumcision and HIV status.

**Results:** Of the 118977 records found in the database during the review period, 39256 (33%) were aged 15-19. 37802 adolescents responded when asked whether they are sexually active and 5466(15%) reported being sexually active. Of those reporting to have ever had sex, 812 clients (15%) reported having had more than one sexual partner and 176 clients(3%) exchanged money for sex. 1446(27%) reported having unprotected sex with a regular partner while 422(8%) reported having unprotected sex with a non-regular partner in the three months before circumcision. The median number of sexual partners among 15-19 aged clients who reported to be sexually active was one, HIV prevalence was 0.51% and STI prevalence 0.40%.

**Conclusion and recommendations:** Although the review shows lower reports of sexual behaviour among adolescent males than national estimates, unprotected sex, sex in exchange for money and multiple sexual partners were reported. Self-reported sexual behaviours have limitations, but it is clear that reaching young people with sexual prevention counselling as part of VMMC services is a great opportunity. The low HIV prevalence even in high prevalence regions of Tanzania means that providing proper counselling services may have an impact in reducing the risk of HIV infection. VMMC program rollout should develop appropriate messaging for adolescents to maximize the HIV prevention.

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#### **All co-authors affiliations**

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#### **Reaching Out to the Most At Risk Populations (MARPS) in Our Communities. The AIDS Support Organization (TASO) Mbarara**

**Abstract Number:** PB709

**Presenter:** Kyogabirwe, Ziporah

**Presenter Company:** The AIDS Support Organisation (TASO)

#### **Track Topic**

Track E: HIV and Health System Strengthening - E1. Leveraging the AIDS response to strengthen health systems and improve other health outcomes

**Introduction:** According to the UNAIDS World AIDS Day Report 2012, in Uganda 7.2% adults in general population are infected and 35% of the Commercial sex workers are infected with HIV. The distribution of new infections by sources was 22% for commercial sex (UNGASS country report 2008)

Focusing on MARPS to prevent transmission of HIV is important since they are the vulnerable to acquire the infection. TASO Mbarara, came out with strategies to prevent HIV in MARPS in South Western Uganda.

**Methodology:** "Moon light clinics" are conducted regularly between 6:00 pm and 1:00 am or beyond depending on the turn up. This is aimed at targeting the key populations; commercial sex workers (CSW), their clients, the truck drivers, uniformed, motorcyclists (bodaboda), and youth out of school. Barracks, prisons are deliberately visited to reach out to the incarcerated and the uniformed. HIV prevention services offered are HIV testing, counseling, condom distributions, mobilization for Safe Male circumcision (SMC), Behavioral change communication (BCC), referrals.

**Results:** Between January and May 2013, a total of 22841 Key populations were reached out with BCC, 10513 were tested for HIV: 766 CSW, 111(15%) HIV Positive; 1393 truckers, 88(6%) were HIV positive; 1558 bodabodas , 96(6%) were HIV positive; 512 incarcerated , 62(12%) HIV positive; 958 uniformed, 38(4%) HIV positive and 5262 youth out of school, 247(4%) were HIV positive. 123728 condoms were distributed.

**Conclusion:** Deliberate strategies will promote HIV prevention, address stigma and discrimination among MARPS. These interventions contribute to the reduction in HIV incidence by 30 per cent by 2015, as stipulated in the Uganda National HIV Prevention Strategy 2011/12-2014/15.

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### **A Coordinated Approach to VMMC: Analysis of Implementation of the National Operational Plan for the Scale-up Of VMMC in Zambia**

**Abstract Number:** PB728

**Presenter:** Vandament, Lyndsey

**Presenter Company:** Clinton Health Access Initiative

#### **Track Topic**

Track E: Shared Responsibility and Global Solidarity towards Sustainable AIDS and Health Agenda - E7.Effective national leadership - indicators and benchmarks to measure progress to greater country ownership

**Background:** In 2012, Zambia rolled out the National Operational Plan for the Scale-up of Voluntary Medical Male Circumcision, 2012-2015. The development and launch of this plan was the government's response to the challenge that after four years of VMMC programming, only 83,285 VMMCs were conducted against a target of 2.5 million.

In 2011, multiple partners were implementing VMMC programs in Zambia, with weak linkages to government management systems in terms of planning, coordination, demand creation and service delivery at the national, provincial, and district levels. In 2011 and 2012, the government and partners collaboratively developed the operational plan to address these challenges. The plan provides clear

guidance for program governance, defines annual targets at district level, and outlines best practice service delivery across facility types with a focus on efficiency and effectiveness.

**Methods:** During April-June 2013, a qualitative assessment was performed in four provinces to evaluate the implementation of the operational plan at the provincial and district levels and identify remaining challenges to program scale-up. A field team, on behalf of the National VMMC Coordinator, held over 50 one-hour interviews with ministry staff, implementing partners, and traditional leaders.

**Results:** Three key coordination challenges emerged from this diagnostic work that the government is now working to address.

Communication challenges between the national, provincial and district health offices are impacting the dissemination of program information and guidance. DHOs have been asked to ensure VMMC coordinators are in place as per the operational plan, and are actively increasing two-way communication with the national team.

There are inconsistencies in terms of government collaboration and coordination with implementing partners. In response, the government is developing simple standardized guidance to PHOs and DHOs for NGO management that will include 1) calling for regular stakeholder coordination meetings; 2) reviewing partner service delivery plans to ensure optimal allocation of resources and limit the duplication of effort; and 3) requiring that partners actively report their data to DHOs (e.g., daily number of VMMCs performed by site).

In order to most efficiently build the provider base through future trainings, it is imperative that the government knows which VMMC providers have been trained and active. Of the 1,000 trained to date, only 50% were found to be active. This represents a mismatch of supply and demand. The government will work with the district offices to re-engage inactive providers, carefully vet the attendees of future trainings, and follow up with trained providers to ensure that the investment in their skills is being used for the program.

**Conclusions:** It is evident that the operational plan strengthened government ownership of the VMMC program in Zambia. However, provinces still face unique challenges based on their geography, cultural attitudes toward VMMC and the maturity of their programs. National coordination is moving towards tailoring support to the needs of individual provinces and empowering local leadership. The operational plan provided strong guidance, and this next phase is about ensuring its implementation, learning from the program's successes and challenges, and continually translating those learnings into improved programming.

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#### **All co-authors**

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#### **All co-authors affiliations**

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### **Expanding Coverage of Voluntary Medical Male Circumcision through the Private Sector in Namibia: Financing and Training**

**Abstract Number:** PB743

**Presenter:** Pereko, Dawn Dineo

**Presenter Company:** Abt Associates

**Track Topic**

Track E: Partnership in HIV - E14.Private-public, faith-based organizations and NGOs partnerships for prevention, treatment, care and support (service delivery, financing)

**Issues:** Given the evidence that voluntary medical male circumcision (VMMC) reduces the risk of acquiring HIV amongst men in heterosexual relationship by 60%, Namibia set a target to prevent 35,000 new adult HIV infections by 2015 by circumcising 80% of its adult males. The private health sector can play an important role in achieving Namibia's targets given its large infrastructure, human resources and robust health insurance industry. However, the private sector has been underutilized in the national VMMC response due to the high costs of VMMC being performed not as a HIV preventative benefit as well as the inability of private providers to access VMMC training.

**Description:** In 2011, the USAID-funded Strengthening Health Outcomes through the Private Sector (SHOPS) project, with independent actuaries, developed a VMMC tariff that could be used by the Namibian Association of Medical Aid Funds (NAMAF). Activity-Based-Costing (ABC) methodology was used to calculate and set the tariff, which is based on the WHO VMMC minimum package for HIV prevention. The goal of the tariff is to cover VMCC as an explicit HIV prevention benefit under Namibian health insurance schemes. This intervention was followed by strengthening private provider quality assurance and reporting on VMMC. By using approaches that blend self learning, online support and reduced face to face contact, SHOPS adapted MoHSS' two week training course to accommodate the needs of private sector providers: timing and flexibility. The lack of private sector reporting of essential service statistics impedes wider understanding of progress on VMMC goals. SHOPS created linkages between NAMAF and the MoHSS to facilitate the creation of a system for reporting the number of annual VMMCs performed in the private sector.

**Lessons learned:** The proposed tariff of \$208 USD was approved and adopted by 9/10 medical aid schemes. Given the development of this tariff, Namibia is the first country in the world to uniformly finance the provision of VMMC through the private health sector. In countries like Namibia where the private health care sector is relatively well developed, identifying the needs of the private sector and reasonably incentivizing has the potential to scale VMMC, which otherwise predominantly remains the role of constrained public health sectors. Reporting approaches in private sector do not always resemble those of public sector. Identifying a common interest and introducing degree of flexibility in variables selection will allow governments to get key data from the private sector. Finally, private sector providers' earnings are directly affected by the type, timing and mode of interventions such as training. An approach that accommodates the specific needs of private providers most effectively harnesses the potential and entrepreneurial quality of this sector to contribute to VMMC.

**Next steps:** The intervention is in its early stage, but so far has earned support from stakeholders in the private and public sector. Moving onto pilot implementation will afford further lessons to refine the cooperation between the sectors and create a model for expansion of VMMC through the private sector not only in Namibia but also in many other countries in ESA.

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**Spatial Mapping Results in a Successful Large-Scale Voluntary Medical Male Circumcision (VMMC) Campaign: Using GIS Data for Decision-Making Positively Impacts the VMMC Scale Up in Tanzania**

**Abstract Number:** PB759

**Presenter:** Hellar, Augustino

**Presenter Company:** Jhpiego

**Track Topic**

Track E: Monitoring and Evaluation - E17.HIV/AIDS data management information for monitoring and evaluation and evidence-informed decision making

**Background:** In 2010, the Government of Tanzania set a target of 80% male circumcision coverage by 2015; about 2.8 million circumcisions in eight priority regions. In Iringa region of Tanzania, where HIV prevalence was 15.7% and male circumcision prevalence was 29%, officials set a target of 264,990 voluntary medical male circumcisions (VMMCs).

Since 2010 VMMC services have been provided to more than 140,000 men through fixed and outreach sites in routine and campaign settings in Iringa region (which has since split into two regions -- Iringa and Njombe) by the Ministry of Health and Social Welfare (MOHSW) with technical and programmatic support from the USAID flagship Maternal and Child Health Integrated Program (MCHIP) with funding from PEPFAR. To reach 264,990 clients by 2015, remote rural sites need to be included in outreach services. In prior years, selection of outreach sites during campaign activities was determined based on recommendations by district officials and site assessments. For the 2012 "Winter Campaign" MCHIP also conducted an analysis of VMMC program data, in the context of population and health facility demographics, using geographic information systems (GIS) to optimize site selection.

**Methods:** Population data at the ward level from the Tanzania 2002 Census, projected for 2012, was overlaid with coordinates of the majority of health facilities in Iringa and Njombe inclusive of VMMC facility level data disaggregated by age. Using Quantum GIS (QGIS), these data were spatially analyzed to identify areas of Iringa and Njombe regions where there was a high concentration of potential clients for VMMC.

**Results:** The analysis showed that many previously unidentified VMMC service delivery sites -- particularly in large rural villages and clusters of villages with sizable populations -- had yet to be served by the VMMC program. Age disaggregated maps also illustrated that many older men remained to be circumcised in highly served areas across the two regions. The results from the mapping exercise informed site selection for the annual "Winter Campaign" held in June and July 2012. Sites were selected in areas that served catchment areas of 5,000 or more men aged 10-49 that had not been previously reached. Through this enhanced targeting the program was able to reach a total of 25,816 men in rural communities, as compared to 14,476 in the previous year.

**Conclusions and recommendations:** Spatial mapping improved site selection and decision making for the 2012 VMMC program in Iringa and Njombe regions; enabling the team to provide 25,816 VMMCs in rural communities in six weeks using 24 outreach sites. In scaling up VMMC programmatic activities, spatial analysis offers an innovative method to identify pockets of underserved communities. Since the 2012 campaign, spatial analysis has also been used to help better target VMMC demand creation activities based on age disaggregation. In the future, site selection should continue to be informed based on VMMC programmatic data and geographic variables. Adding additional files including information on infrastructure such as road access, electricity and water has the potential to make planning and implementation of outreach activities more effective.

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## **Non-Abstract-Driven Sessions**

### **HIV Prevention: Male Circumcision with A Nonsurgical Device Evaluation in Nurses Training Course Efficacy**

**Presenter:** Mutabazi, Vincent

**Presenter Company:** MoH - Rwanda Biomedical Centre

#### **Track Topic**

Track C: HIV/AIDS Prevention Programmes - C31. HIV prevention technologies

**Background:** As part of a comprehensive HIV prevention strategy, Rwanda has launched an ambitious Voluntary Medical Male Circumcision (VMMC) program to reach 2 million men in 2 years. The PrePex device for non-surgical adult male circumcision (MC) was investigated as a means to achieve this goal in a scalable way, by enabling task shifting of MC to nurses.

Our objective was to assess the efficacy of the PrePex training program for nurses.

**Methods:** One arm, open label, prospective, cohort field nurses study took place during Jul-Oct 2011 (clinicaltrials.gov: NCT01434628). The study was conducted at Rwanda Military Hospital, Kigali, Rwanda, and was approved by the Rwanda Ethic Committee. 590 healthy males aged 21-45 years were enrolled to the study. 10 nurses with no prior experience with the PrePex device and procedure were trained for 3 days. Training efficacy was measured by the following outcome measurements: (1) Theoretical exam grades before and after the course; (2) Clinical performance on subjects; (3) Analysis of AE rate was for

the first and last 100 subjects; (4) Procedure time comparison between the first and last 125 procedures; (5) procedure efficacy success (glans fully exposed).

Each outcome measurement had a pre-defined success criteria.

**Results:** (1) All 10 trainees passed the post training exam; (2) At training completion each team was evaluated by a PrePex expert on specific procedure skills. All teams passed the evaluation within 3-5 subjects tested; (3) The AE rate was acceptable and low at 0.51%, and it was the same for the first 100 subjects done post training as for the last 100 subjects in the study; (4) The procedure time of the first 125 procedures was reduced from time of 4.58 min to 2.51 min in the last 125 procedures; (5) Efficacy achieved for 100% of the cases.

**Conclusions:** The PrePex nurses training course effectiveness was validated for training nurses with no previous experience. The training course was approved and is now used to train new PrePex teams for scaling up MC for HIV prevention in all Sub Sahara Africa.

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### **Healing Time after Adult Male Circumcision Using the PrePex Device**

**Presenter:** Feldblum, Paul

**Presenter Company:** FHI 360

#### **Track Topic**

Track C: HIV/AIDS Prevention Programmes - C31. HIV prevention technologies

**Background:** The World Health Organization recently listed the PrePex device as pre-qualified for use in voluntary medical male circumcision (VMMC) programs. The inner ring and outer elastic ring of the single-use device create circumferential pressure on the foreskin that leads to necrosis over several days. The device is removed and the foreskin is excised on Day 7 post-placement.

**Methods:** We are conducting an implementation study of performance of the PrePex device in routine service delivery at sites in and near Kisumu, Kenya. Per WHO guidelines, we incorporated an intensive safety review of the first 50 of 425 men undergoing VMMC by the PrePex device, with more scheduled follow-up visits than in routine Kenyan services. We measured time to complete healing in days within this safety series. Complete healing was defined as having a dry wound without any scab. Safety and acceptability results will be reported later.

**Results:** 50 HIV-uninfected men ages 18-49 had PrePex placed. Three men were excluded from this analysis: 2 required surgical completion of MC after device displacement by attempted self-removal prior to scheduled removal; 1 reported by phone that he had had the device removed elsewhere, and never returned for follow-up. 47 men wore the device, had removals as planned, and are analyzed here. 20 of the 47 men (43%) were completely healed by Day 42 post-placement; 35 (74%) were healed by Day 49; 42 (89%) were healed by Day 56; the remaining 5 men took longer to heal. One man exited the

study before healing and was included and censored at his last visit, Day 50. Mean days to complete healing were 47.9 +/- 7.9 with median 49 (min 35, max 82).

**Conclusions:** In this safety case series, 43% of men undergoing VMMC using the PrePex device were fully healed by Day 42, and 11% were not yet healed by Day 56. Healing appears to take longer with the PrePex device than following surgical MC. These results, if confirmed in the larger PrePex series, will provide evidence for crafting accurate counseling messages and optimal follow-up schedules for men undergoing VMMC by PrePex in Kenya and elsewhere.

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### **Frequency and Factors Related to Adverse Events in 100,000 Voluntary Medical Male Circumcisions in Mozambique**

**Presenter:** Muquingue, Humberto

**Presenter Company:** Jhpiego

#### **Track Topic**

Track C: HIV/AIDS Prevention Programmes - C32. New approaches for HIV prevention

**Background:** The Mozambican Ministry of Health (MOH) plans to provide voluntary medical male circumcision (VMMC) to 2 million males aged 10 to 49 years by 2018 as part of a comprehensive HIV prevention strategy. In 2009, the MOH launched a VMMC program using basic and mid-level nurses as primary providers of VMMC surgery; the 100,000th client was circumcised in December 2012. The MOH used this milestone as an opportunity to analyse retrospectively VMMC safety through the adverse events (AE) profile (rate and severity) in order to identify potential contributing factors in moderate and severe, intra- and post-operative AEs and implement additional safety for VMMC clients and providers.

**Objectives:** i) Establish the AE profile (rate and severity) among 100,000 clients receiving VMMC surgery in Mozambique; ii) Identify contributing factors to moderate and severe AEs, such as demand, cadre of providers, or opening of new sites with new providers or inconsistent procedures.

**Methods:** Using definitions from the WHO manual for VMMC under local anaesthesia, AE data on 100,000 VMMC procedures were collected from daily registers at all 16 Jhpiego and PEPFAR/CDC supported sites in Maputo-City, Maputo-Province, Gaza and Sofala provinces of Mozambique. The intra-operative AE rate was calculated by dividing the number of AEs by the total number of procedures and the post-operative AE rate used clients who returned for follow-up as denominator. Time sequencing was applied to explore AE patterns. Events such as opening of a new facility, training new providers, seasonal increases in demand, and introduction of new surgical techniques and equipment were

checked against the pattern of AEs. Data were available for 98% and 92% of the 100,000 clients returning for the 48-hour and 1 week follow-ups, respectively.

**Results:** The post-operative AE rate was 0.45% for moderate and 0.07% for severe AEs in clients attending follow-up within 7 days of surgery. No intra-operative AEs were seen. The most common moderate and severe AEs were infection and bleeding, with combined rates of 0.02 and 0.08%, respectively. There was non-significant, positive association between the rates of post-operative AEs and the launch of VMMC services in a new site, with decreases recorded around the 3rd and 4th month of service delivery. After this period post-operative AEs would fluctuate at low levels without any relationship with demand increases or changes in cadre of provider. The exception to this pattern were peaks of post-operative AEs associated with introduction of diathermy for haemostasis in 3 facilities, with AE rates reaching as high as 7.7% ( $p < 0.01$ ), mostly due to infection. An analysis of these AEs showed provider errors in technique (excessive clotting time; large amount of tissue; wrong type of blood vessels), identified through routine supervision. AEs returned to previous rates after use of diathermy was suspended to provide additional training to providers.

**Conclusions and recommendations:** AEs in 16 facilities in Mozambique were very low and not significantly associated with the factors analyzed (demand, cadre of providers, opening of new sites) with the exception of the introduction of diathermy for haemostasis. Additional training is required for basic and medium-level providers to achieve proficiency in diathermy in Mozambique that relies heavily on task shifting due to scarcity of human resources for health.

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### **Parental Reasons for Non-adoption of Early Infant Male Circumcision for HIV Prevention: Qualitative Findings from Harare, Zimbabwe**

**Presenter:** Fernando, Shamiso

**Presenter Company:** Centre for Sexual Health & HIV/AIDS Research Zimbabwe

#### **Track Topic**

Track C: HIV/AIDS Prevention Programmes - C32. New approaches for HIV prevention

**Background:** Early infant male circumcision (EIMC) is easier, safer and cheaper than adult MC [1]. Further, EIMC may more effectively prevent HIV acquisition as the procedure is carried out before the individual becomes sexually active, negating the risk associated with acquisition or transmission of HIV during the healing period [2]. However, EIMC acceptability will affect uptake, roll-out and subsequent effectiveness in preventing HIV. It is therefore crucial to identify and address parental concerns that may

act as barriers for EIMC for HIV prevention. Addressing the barriers will likely improve uptake and maximize the intervention's benefits.

**Methods:** This qualitative study was ancillary to a trial that assessed the feasibility, safety, acceptability and cost of rolling out EIMC using devices in Zimbabwe. Parents of babies born at a Harare clinic were invited to participate. Between January and May 2013, nine in-depth interviews (IDIs) and four focus group discussions (FGDs) were held with parents who had either adopted EIMC for HIV prevention (n=2 IDIs and 2 FGDs with mothers; n=2 IDIs and 2 FGDs with fathers) or had declined to circumcise their newborn sons (n=3 IDIs and 2 FGDs with mothers; n=2 IDIs and 2 FGDs with fathers). In addition, short telephone surveys were conducted with a random sample of parents who had scheduled to bring their sons for EIMC but defaulted (n=95). This was in order to assess reasons for not bringing the infant for EIMC; short statements were handwritten. IDIs and FGDs were audio recorded. All data were transcribed, translated into English and coded using NVivo 10. Codes were grouped into themes and sub-themes using thematic analysis.

**Results:** Parental reasons for non-adoption of EIMC include fear of harm including death, fear of excessive bleeding, pain and penile injury; the newborn's penis was deemed 'too' fragile for the procedure. There were also strong concerns around the discarded foreskin with some parents fearing that it would be used for harmful traditional or Satanic rituals. Myths about MC in general (e.g. that it is a ploy to reduce the number of children that a man can procreate) also played a significant role. Some parents noted that MC in general and EIMC specifically, had never been practised in their clan and it was therefore not supposed to start with their newborn sons. A few parents stated that the baby should decide for himself when older. Several mothers who had delivered through caesarean section mentioned that they were still preoccupied with nursing their own wound and would therefore not be able to nurse an additional wound (from EIMC).

**Conclusions and recommendations:** The qualitative study enabled us to identify key barriers to EIMC uptake. Findings were used to derive recommendations which will inform the design of a demand-generation intervention for EIMC. Although barriers to EIMC are to some degree context specific, some of those identified in this study may apply in other settings across the region; they need to be addressed if uptake of EIMC for HIV prevention is to be widely adopted.

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## **Voluntary Medical Male Circumcision (VMMC) for Most At Risk Population Behind Bars: Experience from Uganda Prison Services**

**Presenter:** Otolok Tanga, Erasmus

**Presenter Company:** World Vision Uganda

### **Track Topic**

Track C: Basic HIV Epidemiology - C6. HIV in most at risk populations (sex workers, MSM, prisoners, IDU, migrants)

**Issue:** HIV prevalence in the prison communities is among the highest in Uganda. Approximately 11% of the prison inmates are infected with HIV and in some barracks the rate is much higher. Despite this high prevalence, HIV prevention interventions especially Voluntary Medical Male Circumcision (VMMC) has not been scaled up among prison inmates and workers due to a non-existing national policy. Limited VMMC services are provided for staff and their families in Murchison Bay Hospital located in one of largest prison barracks, with unmet need for circumcision in other prison communities in the country. Demand for VMMC among prisoners in Luzira prison is high, and when denied services, inmates resort to self-circumcising using unsterile instruments and razor blades. This posed real dilemma to management and the health workers faced with inadequate infrastructure, limitations in human resources, required skills and pharmaceutical supplies at the health facilities to provide quality VMMC services as defined by Ministry of health.

**Description:** Between October 2012 and May 2013, the Supporting Public sector workplaces to Expand Action and Responses to HIV and AIDS (SPEAR) funded by US President's Emergency plan for AIDS Relief (PEPFAR) through the United States Agency for International Development (USAID), supported Uganda Prisons Services to address the challenges of initiating and sustaining VMMC among the prison communities. The program focused on building the capacity of health workers; strengthening the supply chain of VMMC kits and other pharmaceuticals supplies mapping out large barracks for high volume VMMC services; identified health workers for training as surgical teams; and carried out 18 integrated circumcision campaigns in identified 13 prisons barracks through fixed, outreach and mobile sites. . Data on clients receiving VMMC services during the campaigns were collated and analyzed using Microsoft Excel.

**Lessons learned:** Eighteen VMMC campaigns were carried out by thirty three health workers trained for UPS in 13 prison barracks over eight months. A total of 5034 men were circumcised; 8,527 clients were counseled and tested for HIV of which 7553 of them were men; At total of 376 (M=311, F=65) individuals tested positive for HIV, and were screened for tuberculosis and initiated into care and treatment program. Success of VMMC programs within prison communities depend largely on; i) training of service providers, ii) cooperation of prisons management to dedicate space and staff; iii) ensuring functional supply chain system and creating demand for services. Flexibility, prompt response and adapting service delivery based on the needs of the prisons community can achieve a high number of circumcisions. Prisoners demand for VMMC is driven by the fact that being in prison away from their partners provides them ample time to heal without a temptation of having sex.

**Next steps:** SPEAR to continue advocacy, engaging management and staff of UPS to provide space, time and human resources to support scaling up VMMC services to the other 67 large prison barracks; through fixed, mobile and outreach services to meet the unmet demand among the prisons communities.

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