

NUMAT TECHNICAL BRIEFS

Scaling Up Male Circumcision for HIV Prevention in a Non-Circumcising Community

INTRODUCTION

The World Health Organization (WHO) recommends that voluntary medical male circumcision (VMMC) become a component of a comprehensive package of HIV prevention services for men. This is based on findings from randomized controlled trials conducted in sub-Saharan Africa that found up to 60% protection against HIV infection associated with the intervention^{i,ii,iii,iv}. In September 2010, the Ugandan Ministry of Health (MOH) launched its VMMC policy paving way for the roll out of this important HIV prevention intervention. A 2005/2006 survey conducted by the MOH indicated that in Northern Uganda only 2.4% of males aged 15-49 were circumcised – making Northern Uganda the region with the lowest circumcision rate in the country. This was within the back drop of Northern Uganda having one of the country's highest HIV prevalence rates. Despite the low circumcision level, no cultural barriers against male circumcision were identified. Experiences from both Uganda and other countries suggest that major obstacles to the uptake of male circumcision include fear of pain, fear of a prolonged healing process, associated expenses and income lost during surgery and healing. Any male circumcision strategy for Northern Uganda needed to consider these factors.



Selected surgeons attending at SMC activities in Rakai during their orientation.

The Northern Uganda Malaria, AIDS and TB Programme (NUMAT), a six year USAID-funded program, had the overall goal of increasing access to and utilization of quality malaria, HIV & AIDS, tuberculosis prevention, treatment, care, and support services in 15 districts of North Central Uganda. In its Programme Year 5 – given the evidence supporting VMMC intervention within HIV prevention – USAID tasked NUMAT to roll it out to the 15 districts of Northern Uganda. In preparation for this activity, NUMAT's team held wide ranging consultations with the MOH Safe Male Circumcision (SMC) Task Force, the technical team at JSI/Boston and with researchers at Rakai Health Sciences Project (RHSP). Six months into PY5, PEPFAR provided additional clarifications on donor expectations of the VMMC implementers. There was a need to accelerate the pace and coverage of male circumcision; focusing initially on males of reproductive age, if the intervention was to effectively reduce new HIV infections by up to 25% by 2016. This required circumcising up to 540,000 men in Northern Uganda. In response to these recommendations, the project planned to scale up circumcision services to 26,000 men between August 2011 and March 2012. NUMAT's VMMC scale up plan was to be carried out through existing public health systems using a combination of routine and special VMMC camps held at hospitals and health centers as well as outreach camps held at remote lower level health centers and congregate settings such as tertiary institutions and prisons. While routine circumcision activities at the VMMC sites were to be conducted by "in house" surgical teams, the VMMC outreach camps, mainly conducted over the weekends or during special holidays, were arranged and facilitated by NUMAT in conjunction with specialist surgeons and other health workers who had some time to spare.

THE INTERVENTION

Initial Planning for VMMC

NUMAT pursued an elaborate communication strategy to engage all VMMC stakeholders. It was necessary to prepare the population for this new intervention - one that was not in keeping with local tradition. Plans were made to employ local resource persons from the inception of the rollout. They would be involved in mobilization and sensitization efforts, in conducting needs assessments and in training and mentoring new VMMC surgeons from the lower level health units. The MOH had not yet launched a training curriculum but recommended that, in the interim, we adopt the RHSP training curriculum and implementation guide already piloted in lower level health facilities in

South Western Uganda. The RHSP curriculum was designed for scaling up VMMC in resource limited settings and was therefore suitable for Northern Ugandan health facilities that were challenged with poor infrastructure, limitations in human resources, drugs, supplies and equipment.

In November 2010 a team of 11 specialist surgeons from Gulu and Lira Regional Referral Hospitals and from Apac District Hospital, with support from NUMAT, made a two-day orientation visit to RHSP in Western Uganda. They learned about the science that led to the identification of VMMC as an HIV prevention intervention and were appraised on recommended VMMC surgical techniques as well as vital prerequisites including HIV counseling and testing, good operating theatre practice, infection control, and comprehensive HIV behavioral prevention.

The surgeons returned to conduct a field assessment of lower level health facilities in Northern Uganda. They assessed gaps in infrastructure, equipment and supply, and human resources that would deter VMMC scale up and identified those that could most rapidly be supported to become VMMC centers. It was recognized that while hospitals had equipment and infrastructure that could support VMMC surgical activities, 88% of the lower level health centers had non-functional theatres and obsolete or damaged equipment requiring replacement or repair. While hospitals had health workers already involved in surgery, the health centers in the regions had theatre and anesthetic assistants that were recruited but deployed elsewhere within their respective health units to carry out non-surgical duties.

The rapid scale up of VMMC would also be challenged by limited availability of essential drugs, equipment, and consumables for surgery. VMMC supplies were typically sourced from multiple suppliers making the procurement and supply process slow and tedious. Some of the vital surgical requirements that would render the procedure painless and quickly healing, for example, long acting local anesthetic, bupivacaine and absorbable suture material were not easily accessible on the local pharmaceutical market.

On the basis of these findings NUMAT held meetings with respective district local governments in an effort to address the infrastructure, equipment and supply gaps. NUMAT made to provide essential theatre consumables and supplies for VMMC. The project also supplied disposable VMMC kits that consisted of sterile materials, drapes, infection control supplies materials and instruments that would make mass circumcisions possible without the need for re-sterilization and instrument preparation. The availability of disposable kits would also make VMMC more accessible in more remote settings. The project was also supported by the donor, USAID that worked to ease the red tape associated with accessing essential VMMC drugs and supplies not readily available through recognized channels.

Communication Strategy

The support of key stakeholders in the region was enlisted as a critical step before the planned roll out of VMMC. NUMAT's technical team capitalized on existing working relationships to determine the community's response to VMMC. Ongoing interactions between NUMAT's technical team, politicians and opinion leaders in the community were also used as forums for disseminating findings of VMMC research and preparing the community for the planned rollout of VMMC as a new HIV prevention intervention. Issues and concerns raised during these interactions provided guidance for two sub-regional meetings focusing on VMMC. The objective of the meetings that brought together district health teams, surgeons working in

the regional and district hospitals and community based opinion leaders was primarily to sensitize them as key stakeholders on the importance of VMMC as a novel HIV biomedical prevention method but also to garner their support for the NUMAT led rollout of VMMC for Northern Uganda.

The USAID-funded Health Communications Partnership (HCP) collaborated with NUMAT to target the general population with VMMC messages. Radio talk shows provided information promoting VMMC and dispelling myths about the procedure. Radio announcements mobilized men to access VMMC services at camps and outreaches that were soon to take place at major hospitals and later through lower level units. The talk shows and announcements remained a continued resource for mobilization and sensitization even after VMMC began in earnest. Community volunteers, often members of the village health teams were employed to augment the mobilization efforts. They were also an important resource in promoting compliance to the post operative VMMC requirements that included abstinence for a period followed by condom use for proper wound healing and thickening of the penile skin to occur. This was a prerequisite for the circumcised penis to become an effective barrier against HIV. Messages that targeted women were also designed after it was recognized that female involvement was critical for the success of VMMC process. The women were encouraged to promote the uptake of VMMC among the men folk, access couple counseling and testing during VMMC camps, and support the six-month healing process after VMMC. Women were also mobilized to access cervical screening, a service that NUMAT run alongside the VMMC static site and outreach camps.



Gulu University students at SMC surgical camp.

The Roll out

In December 2010, NUMAT rolled out the first VMMC camp at Lira Regional Referral Hospital. A team of trainers from RHSP worked alongside the local specialist surgeons to conduct a ten day training. The trainees were involved in a VMMC camp as part of a practicum during the last three days of the training. Twenty-four health workers from eight lower level health facilities, four district hospitals and two regional hospitals were trained during the ten day event. The teams were composed of clinical officers, theatre attendants and nurse counselors. Most of the clinical officers had no prior experience in surgery and had to conduct at least 20 circumcisions during supervision before receiving MoH certification. During the camp 175 men, 13 years old and above were counseled, tested for HIV and circumcised, with only one adverse event, which was easily remedied. Follow up of the clients was offered at day seven after surgery. The response to this first camp was overwhelming: about 200 men who

registered for the procedure had to be rescheduled for a later opportunity, due to limitations in time and planned resources.

Three weeks later, a second training workshop and VMMC camp for health workers from another nine health facilities took place at the second regional referral hospital in the region at Gulu. During the event, 28 health workers were trained and 171 males were circumcised. Five adverse events including three cases of post-operative bleeding were recorded and remedied. As part of mobilization the surgeons visited the nearby Gulu University and had discussions with the students encouraging them to access the service. Radio talk shows on male medical circumcision were also conducted to sensitize the community about VMMC and inform them about the camp.

One month later, the local specialist surgeons and NUMAT's technical teams conducted a series of mentorship visits to selected VMMC sites. These visits were planned to coincide with the first distribution of VMMC drugs, equipment and supplies to the sites. NUMAT's medicines logistician worked with the mentors to design tools for a VMMC supply chain. The tools made it possible for VMMC teams to monitor and control consumption, quantify and order surgical supplies. Simple stock cards and log books were designed for this purpose.

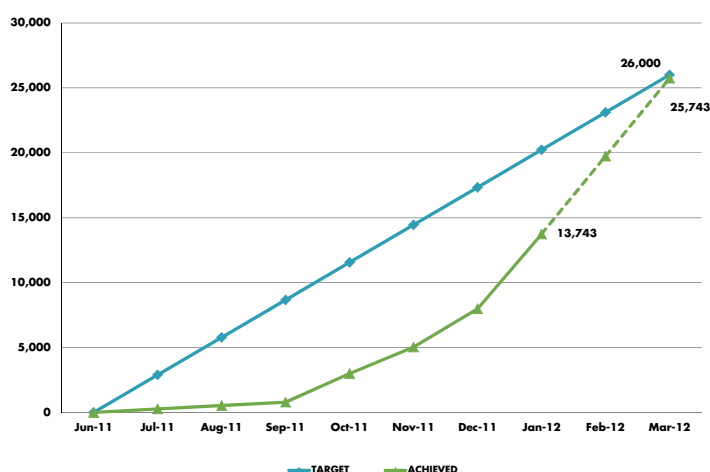
In October 2011, NUMAT expanded its VMMC technical team and by then had also received its first batch of disposable VMMC kits. All the selected VMMC sites were supported to conduct weekly circumcision activities while at least three high volume camps were conducted on a weekly basis at VMMC sites. In addition, VMMC at institutional settings commenced with the first congregate camp conducted at Gulu University for three days with 195 men circumcised. It was at this camp that the first integration of cervical screening took place. Follow up for the men circumcised was provided by the college nurse with support from the NUMAT technical team on appointed dates.

The Cervical Cancer Screening and Couples HCT Initiative

As VMMC was scaled up, the need to involve women in the activity was underscored. Proper wound healing and keratinization of penile skin post-operatively is a prime requirement for circumcision to be an effective HIV prevention measure. There was need to enhance female involvement in ensuring compliance to this post-operative requirement given that recent research evidence suggested that majority of sexually active men defaulting on such requirements were those in stable relationships. On the other hand, communities we interacted with variously expressed the need to provide integrated services, addressing the health needs of both men and women. In response, NUMAT drew parallels from the relationship between cervical cancer and male circumcision to design camps that addressed the needs of both gender. NUMAT liaised with specialists from regional referral hospitals and from Reproductive Health Uganda to provide cervical cancer counseling and screening at a convenient point at the VMMC grounds. In addition, the population was encouraged to come in for couples HIV counseling and testing during which they were sensitized on the advantages of male circumcision for both gender. The men then continued into an STI screening process before accessing circumcision while women moved into their own area for STI and cervical screening. Clinical staff used the visual inspection with acetic acid (VIA) technique for the cervical screening. Women that stained positive for suspicious lesions were then counseled and referred for PAP smear tests, biopsies and further management.

RESULTS

By end of January 2011, NUMAT has provided circumcision services to 4,409 men through routine circumcisions and 9,334 through camps and outreaches, making a total of 13,743 individuals circumcised. To date, 74 health workers have been trained and 21 health facilities are engaged in this circumcision activity. The surgery had been associated with 69 adverse events (0.5% of all cases) which compares favorably with outcomes of circumcision surgery elsewhere. The clients that suffered these events have all recovered after being provided appropriate care. The pace of circumcision has increased from less than 2,000 per month to the present 4,500-5,000 per month, which is in line with the attainment of the set target (see graph).



LESSONS LEARNED

- There does not appear to be significant cultural resistance to MC in Northern Uganda. More concern is related to complications and financial implications related to VMMC surgery. There is a need to emphasize high quality VMMC services that should include careful counseling and follow up care.
- In the few areas where resistance to VMMC appears to have a cultural undertone the engagement of local opinion leaders has been important in promoting the acceptability of the procedure. Under these circumstances, the participation of the MOH and specialist surgeons in community sensitization and mobilization is critical.
- In some instances resistance to VMMC has been counteracted by unique interventions. In Pader District, there is an outstanding example of a district leader that volunteered to act as role model. He underwent VMMC and on the same day participating in a talk show on the local radio station to emphasize how painless and safe the procedure was.
- The availability of MC kits has made the coverage and pace of VMMC surgery possible in resource limited primary health care (PHC).
- Specialist surgeons were generally unavailable for VMMC activities but often responded to requests to manage adverse reactions, participate in mentorship and technical review meetings. The bulk of the VMMC work so far was conducted by nurses, student doctors and selected trained clinical officers.

- Through service integration, VMMC had shown the potential of strengthening the health system at PHC level. On the other hand, integration has benefited VMMC by enhancing its acceptability as an important service provided by the public health system.
- As a result of NUMAT's activities, the demand for cervical screening services has increased and gaps in definitive management for suspected and confirmed cervical cancer for rural populations have gained prominence. The service has also drawn attention to the need to sensitize and provide women folk with clean water and support for hygiene and sanitation services.
- The integration of cervical screening to VMMC has had a multiplier effect, increasing the number of men accessing VMMC and adhering to post operative requirements. It has also promoted cervical cancer and STI screening as important components of reproductive health services.

CHALLENGES

- Maintenance of a stable surgical team is challenged by high turnover and by other conflicting needs for human resources at the health facilities. NUMAT has liaised with the medical school at Gulu to provide additional surgeons to support those from the health centers and hospitals. Task shifting and sharing has been exploited to a greater degree with nurses taking on a larger role in conducting VMMC surgery and patient follow up. However the National Nurses Council is yet to give formal permission for nurses to perform surgery.
- The Uganda SMC Task force insists on using a circumcision approach that requires additional instruments to those in the VMMC disposable kits. There is therefore still need for sterilization or reusable instruments.
- A number of partners also supporting VMMC in this region are using different models to provide incentives for health workers. It was recognized that partners providing direct cash payments to health workers as incentive was demotivating others not involved in VMMC and creating disquiet in other health units involved in the VMMC roll out but were not benefiting from similar emoluments.

- Circumcision of infants, younger males and HIV positive individuals is not provided for by PEPFAR funding at present. VMMC is creating demand for circumcision for young males as well. Currently, these children are referred to specialist surgeons who are not always available to provide the service.

CONCLUSIONS

Our experience shows that it is possible to scale up VMMC interventions within the existing health sector and to make it acceptable in a non-circumcising community. The main reasons for the positive outcomes recorded so far are a comprehensive sensitization and communication approach and the integration with other services – namely cervical cancer screening – to enhance female involvement.

It was important for partners promoting VMMC in the region to work in collaboration with the MOH to ensure that all adhere to the same incentive structure for health workers in the public health system. However, there is still the need for greater involvement of national and local political leadership in understanding and promoting VMMC. The pace and coverage of VMMC will benefit from the National Nurses Council permitting nurses to offer VMMC surgery. For the future, newer less expensive modes of circumcision need to be urgently explored to meet the need and demand for the procedure.

ⁱ Auvert B, Taljaard D, Lagarde E, Sobngwi-Tambekou J, Sitta R, Puren A. Randomized, controlled intervention trial of male circumcision for reduction of HIV infection risk: the ANRS 1265 Trial. *PLoS Med* 2005;2:e298

ⁱⁱ Bailey RC, Moses S, Parker CB, et al. Male circumcision for HIV prevention in young men in Kisumu, Kenya: a randomized controlled trial. *Lancet* 2007;369:643–56

ⁱⁱⁱ Gray RH, Kigozi G, Serwadda D, et al. Male circumcision for HIV prevention in men in Rakai, Uganda: a randomized trial. *Lancet* 2007;369:657–66

^{iv} World Health Organisation. Male Circumcision: Global Trends and Determinants of Prevalence, Safety and Acceptability. Geneva: WHO and Joint United Nations Programme on HIV/ AIDS, 2007 UNAIDS/07.29E/JC1320E

NUMAT is a six-year, USAID-funded project designed to expand access to and utilization of HIV, tuberculosis, and malaria prevention, treatment, and care, and support activities in conflict-affected districts of Northern Uganda.

Over the course of the project, NUMAT has expanded the geographic coverage and populations served through strengthening local government responses, expanding the role of communities in planning implementation and monitoring activities, and building upon existing networks.

Northern Uganda Malaria, AIDS, & Tuberculosis Programme

Lwani House
Plot 2, Elisabeth Road
Laroo Division
Gulu, Uganda
Tel: 256.372.260.051
www.numat.jsi.com



USAID
FROM THE AMERICAN PEOPLE



JSI Research & Training Institute, Inc.

NUMAT is funded by the United States Agency for International Development (USAID) and implemented by JSI Research & Training Institute, Inc. in partnership with AIDS Information Centre (AIC), World Vision, local governments, and civil society partners.

The information provided in this document is not official U.S. Government information. The content is the responsibility of NUMAT and does not necessarily reflect the views of the United States Government.