Strategies for Scaling up HIV prevention among Adolescents: TASO Masaka Safe Male Circumcision Experience

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Abstract

Issue: Uganda has HIV prevalence of 7.3%; however HIV prevalence in Masaka is at 10%. TASO Masaka has 383 active adolescents in care. Men's uptake of Safe Male Circumcision is at 34% in the central area of Uganda including Masaka. Safe male circumcision (SMC) is one intervention for HIV prevention that targets male adolescents directly. SMC was conducted at the facility with one mobilizer doing mobilization. There was also limited community leadership involvement in the program. To improve adolescents' uptake of SMC services, TASO Masaka came up with strategies like training community linkage facilitators to mobilize adolescents for SMC, targeting schools, conducting dialogue meetings and setting up circumcision camps.

Description: 6 dialogue meetings were conducted in 6 districts to allow community participation. 2 linkage facilitators were trained in SMC and community mobilization. Targeting schools for sensitization and encouraging adolescents to seek consent from their parents. Offering free transport to facility and camping sites. Providing IEC through videos, flipcharts, fliers complemented by health talks and one to one counselling. Circumcised Peers were encouraged to do mobilization of their fellow peers. HCT and safe male circumcision services are provided to all eligible clients. Follow ups are done after 48 h, 7 days and 6 weeks. SMC telephone hotline was established for follow ups.

Lessons learnt: Dialogue meetings help program implementers to work in a coordinated manner with meaningful involvement of community leadership. A total of 20786 adolescents received HCT and circumcision (6/1/2014 to 17/12/2015) contributing to 85% of the total men circumcised.

Peer to peer mobilization has worked more with adolescents as compared to men. A school approach (221 schools) targeted many adolescents for mobilization and follow up services, 16628 adolescents were followed up in the review period. SMC camps bring services nearer to the community, a total of 1883 adolescents were circumcised in camps. 20786 Adolescents have tested for HIV, 100 treated sexually transmitted infections and receive risk reduction messages. The SMC hotline improved follow-ups, linkages and mobilization. Interventions that target a particular group for HIV prevention need a multidisciplinary approach.

Keywords: Safe male circumcision; Adolescent; HIV prevention


Background

Uganda's intensified HIV response in 2014 has resulted in increased uptake of HIV prevention, treatment and care services leading to continued reduction in number of new HIV infections among adults and children and AIDS related deaths to about 95,000, 52,000 and 31,000, respectively. Despite this, Uganda is still classified as a high burden country with high number of persons living with HIV which has continued to increase partly due to continued spread of HIV and increased longevity among persons living with HIV [1].

In terms of prevention, a package of combination interventions were implemented in the country resulting into; a) HCT being scaled up with eight millions people accessing services compared to seven million in 2013 b) There has been sustained expansion of the national eMTCT Programme with continued stewardship by the First Lady of the Republic of Uganda resulting into to about 95% (112,909 mothers) of pregnant HIV positive mothers accessing Anti-retroviral (ARV) drugs and a drastic reduction in the number of babies born HIV positive to about 5,200 by end of 2014. C) There has also been intensified condom programming with endorsement of comprehensive condom programming strategy and increase in number of condoms from 87 Million condoms in 2013 and to about 230 million condoms by the end of 2014. D) The country further intensified safe medical circumcisions by adoption of various methods including Prepex leading to about 87, 109 circumcision out of planned 1 million bring the total coverage of SMC to about 35% [1].

Despite the progress Uganda is still registering high level of new HIV infections yet interventions for primary HIV prevention,
specifically targeting risky behaviours and structural drivers, are still not conceptualized and delivered systematically which constrains quality, efficiency and coverage. There is limited funding for comprehensive Social and Behavioural Change Communication despite the low HIV/AIDS comprehensive knowledge. There is still lack of common technical programming guidelines for SBCC that would inform systematic monitoring and evaluation of such interventions. The non-functionality of the BCC Team in 2014 partly curtailed progress in this area. The country continued to experience stock outs of key items including test kits, STI drugs and other supplies. This negatively affects the expanded demand generation processes through leadership and other SBCC programmes. It is hoped that the Global Fund resources will narrow the gap.

The other challenge was passing of the Anti-Homosexuality Bill in February 2014 created a short-term that threatened to heavily affect the national response. Persistent human capacity gaps in terms of skills and numbers in implementing partner agencies was a major bottleneck. Staffing challenges at ACP/MoH delayed take off and timely implementation of key planned activities considering that the Ministry shoulders over 70% of the response. Similar capacity gaps at UAC also resulted in delayed activity implementation e.g. for the MOT study.

Uganda's HIV Prevalence

The two rounds of AIDS Indicator Survey show that HIV prevalence in the general population in Uganda increased from 6.4% in 2004/5 to 7.3% by 2011, this tally with the 2013 HIV estimates which show that HIV prevalence stabilized around 7.4% in 2012/2013. This however undermines the fact that the country that was well known for earlier interventions that drastically reduced the prevalence in the earlier years of the epidemic is seeing a reversal. However the stagnation of HIV prevalence could be partly due to the high coverage of ART program where the number of PLHIV enrolled on ART increased from about 300,000 in 2011 to about 750,896 in 2014 and the reduction in AIDS related deaths from 67,000 to 63,000 in 2010 and 2013 respectively. The 2014 HIV estimates has shown a further reduction in AIDS related deaths to about 31,000, to note that the estimates are lower mainly because the 2014 national population census came out with a 8% population lower than previously projected by UBOS and UNPD [1].

HIV Burden

Uganda is still classified as a high burden country with high number of persons living with HIV which has continued to increase. This is a result of continuing spread of HIV and increased longevity among persons living with HIV. The national projections based on Spectrum estimates indicate an increasing number of people living with HIV. 1.4 million in 2011 to 1.6 M in 2013 and to 1,500,000 in 2014 and high number of orphans due to AIDS of about one million. However, there is a window of hope as evidenced by reduction in number of new infections among the adults over the last five years from 160,000 in 2010 to 140,000 in 2013 and to 95,000 in 2014. Similarly the new infections among the children reduced from 31,000 in 2010 to 15,000 in 2013 and to 5200 in 2014. Other remarkable improvements have been witnessed in the reduction of annual AIDS related deaths from 67,000 to 63,000 in 2010 to 2013, respectively and to 31,000 in 2014 [1].

Key Drivers of the Epidemic

Uganda had noted a number of key drivers of the epidemic and these include, high risk sexual behaviours coupled with Low Knowledge of ones HIV sero-status. (Including early sexual debut, multiple sexual relationships, inconsistent condom use; and transactional sex, etc.), low individual level risk perception; Ones level of knowledge and understanding of HIV, and especially its relationship to perceived personal risk of HIV infection; and its influence on negative and stigmatizing attitudes towards persons living with HIV (PLHIV), high STI prevalence; low utilization of antenatal care (ANC) and delivery services, low uptake of SMC services leading to low prevalence of SMC; high numbers of HIV positive patients not on ART; Sexual and Gender based violence resulting from gender inequalities and Alcohol consumption – especially to levels of getting drunk; and closely associated with sexual activity and Poverty. Form these drivers especially early sexual debut among adolescents coupled by low up take of safe male circumcision TASO needed to scale u its services among these age groups [1].

High Adolescent Sexual Activity

The high sexual activity remains a risk factor for acquiring HIV in Uganda. Although previous surveys have shown sustained declining rates of adolescent sexual activity in Uganda, it remains a high risk especially in this era of increase in social media. There have been intensified efforts to target HIV prevention among adolescents through sex education and the youth HIV prevention campaigns. In addition the UN family in Uganda is supporting a programme to end AIDS among adolescents code named “ALL IN Initiatives that is harmony with PEPFAR initiative of DREAMS”.

The Ministry of Education and Sports was supported to undertake an in depth evaluation of Life Skills Sexuality Education (LSSSE) in upper primary schools in Uganda. The main objective of this study was to evaluate life-skills and sexuality education in upper primary school. As part of continued efforts for development of a sexuality education curriculum for secondary schools, there has been orientation of tutors/lecturers as Master trainers on Comprehensive Sexuality Education and a clear road map for introduction CSE in Teacher Training institutions was developed [1].

Male Circumcision in Uganda

Data from 2004-05 Uganda HIV/AIDS sero-behavioural survey shows that in some societies 24.9% of Ugandan men aged 15–59 years were circumcised [2]. There was almost no difference in circumcision by age group. The result also shows that male circumcision is more common among urban than rural men. It is much more common among men in Eastern region (54.7%) as well as in Kampala (37.8%) and east central region 34.7%. Less than (10%) of men in north central, north east and south western regions were circumcised. Male circumcision was highest among Muslim men (97%). Prevalence of male circumcision was lowest among Catholics (10%).

In Uganda HIV prevalence amongst adults between 15–49 years is estimated at 6.4% (Uganda Sero Survey 2004). The prevalence of HIV/ AIDS was higher among women than men, urban areas more affected than rural. There was enormous regional variation. The highest rates were in Kampala, north central and central regions at over (8%) while the rates were lowest in West Nile region at 2.3% and north eastern at 3.5%. The main route of HIV transmission in Uganda (>80%) is through heterosexual contacts [2].

A randomized trial conducted in Rakai Uganda in 2007, involving near 5,000 (equal numbers of circumcised and uncircumcised) men revealed that new infections among the circumcised men were 50% less compared to the uncircumcised. Two other randomized clinical trials of male circumcision conducted in South Africa and Kenya provided
similar compelling experimental evidence. On the basis of the Uganda, Kenya and South Africa studies, World Health Organization (WHO) and UNAIDS, issued new guidelines in 2007 that advise all countries to include male circumcision to the available package of HIV prevention interventions [3].

A situation analysis by MoH/FHI in 2008 revealed that health service infrastructure already exists in all districts and almost all perform medical circumcision (MC) procedures but need improvements to provide increased services and meet anticipated demand. More resources including staff capable of performing the circumcision procedure, better equipment, and enhanced facilities are needed to provide increased MC services. Additional personnel need to be trained to carry out the MC procedure. Although task shifting and the appropriate level of personnel to conduct MC were debatable, many perceived MC to be a minor procedure that could be performed by Clinical Officers or nurses with basic training [4].

Adolescents, SMC and HIV

Adolescence, or the second decade of life, is a period in which an individual undergoes major physical and psychological changes. Alongside this, there are enormous changes in social interactions and relationships. It is a phase in an individual's life rather than a fixed time period; a phase in which an individual is no longer a child but is not yet an adult [5]. Adolescence is a time of opportunity, but also one of risk. It presents a window of opportunity because actions could be taken during this period to set the stage for healthy adulthood and to reduce the likelihood of problems in the years that lie ahead (e.g. prevention of cardiovascular diseases of adulthood through the development of healthy eating and exercising habits). At the same time, it is a period of risk; a period when health problems that have serious immediate consequences can and do occur (such as deaths resulting from road traffic injuries, and sexually transmitted infections and unwanted pregnancies resulting from unprotected sexual activity); a period when problem behaviours which could have serious adverse effects on health in the future (such as tobacco smoking and alcohol consumption) are initiated. HIV prevalence in Masaka ranges from 7 to 10%. Men's uptake of Safe Male Circumcision as an HIV prevention services has been low, with a prevalence of 34% in the central area of Uganda including Masaka. Safe male circumcision is one intervention for HIV prevention that targets men directly [1].

It was noted by that half of the circumcised men had first sex before age 18 compared with 42% of uncircumcised men. Two-thirds of the circumcised men had four or more lifetime sexual partners compared with 56% of uncircumcised men. Thirty-eight percent of circumcised men engaged in higher-risk sex in the last 12 months before the survey compared with 30% of uncircumcised men. More than half of the respondents, whether circumcised or not, did not use condoms the last time they had higher-risk sex. Among the risky sex behaviors studied, only age at first sex and having higher-risk sex are associated with age at circumcision. With the exception of men circumcised at age 20+ years, more than half of all circumcised men had sex before age 18. Men circumcised between ages 10 and 14 had the highest percentage (48%) engaging in higher-risk sex, followed by men circumcised before age 10 (42%) [6]. Men circumcised at age 20 or older had the highest percentage (72%) with four or more lifetime sexual partners, while 4% engaged in transactional sex. Men circumcised between ages 15 and 19 had the highest proportion not using condoms during their last higher-risk sex (65%).

However earlier studies have shown that risk compensation can be minimized by counseling [7]. Still according to the Rakai study the researchers did not find evidence that men in the intervention group adopted higher sexual risk behaviours than did those in the control group. This could have been due to the intensive health education provided during the trial to minimize risk compensation [8]. To improve men's uptake of HIV testing, safe male Circumcision services and follow ups. TASO came up with a number of strategies to scale up Safe Male Circumcision. TASO Masaka started SMC activities in May 2013 with a number of strategies.

Safe Male Circumcision

Safe male circumcision is male circumcision performed by well-trained health professionals in properly equipped settings under hygienic conditions [9]. Randomized clinical trials, conducted in sub-Saharan Africa [8,10,11]; showed that male circumcision protects against HIV as well as reduces the incidence of other sexually transmitted infections (STIs), including genital ulcers, human papilloma virus (HPV), and chlamydia in female partners of men. These studies showed that circumcision reduced the risk of heterosexual HIV transmission from an infected woman to a circumcised man by more than 60%. Due to such evidence, in 2007 WHO/UNAIDS recommended the adoption of male circumcision as part of the comprehensive strategy to reduce heterosexually-acquired HIV infection in countries with high HIV prevalence and low levels of male circumcision [9].

Strategies for scaling up safe male circumcision in TASO Masaka

Given the background with the support of center for disease control and civil society fund TASO Masaka had to come up with strategies that reach out to adolescents with SMC Prevention package.

Dialogue meetings

Safe male circumcision dialogue meetings are conducted in the community before safe male circumcision is conducted in the area. The meetings involve most stake holders at the district level and these include the district health officer, the district village health team coordinator, HIV focal person, regional police commander, district education officer and secretary for health among others. The meetings help to zone out areas which need the service, allocate resources needed to facilitate the program, discuss follow up mechanism after circumcision and reporting mechanism for the outputs obtained in various districts. The district team also identifies key mobilizers, suitable health units were SMC will be conducted and identifying schools and other communities that require a service. The dialogue meetings opened up new districts enabling TASO Masaka reaching to three more districts with SMC services.

SMC community linkage facilitator

A linkage facilitator was trained in safe male circumcision sensitization and community mobilization. The facilitator links TASO to the community by mapping out schools and communities that need safe male circumcision. After mapping, the facilitator does mobilization of the community and sets appointment dates for sensitization. The community linkage facilitator and the SMC team visit the community and carry out sensitization. Upon getting consent from parents, the facilitator and the TASO driver transport clients to the facility or outreach camp for circumcision. On appointment dates for review the linkage facilitator mobilizes the SMC volunteers in the community for review either at the facility or in the community by medical and counseling teams. The SMC community facilitator in order to effect mobilization.
uses a mega phone, displays flip charts with SMC information and the hotline for community mobilization and follows up.

There is however contradictory results for outcomes of community mobilization, for example the Masaka trial in Uganda, in turn, found dissimilar results depending on intervention arm: incidence of active syphilis and prevalence of gonorrhea were significantly lower in one of the intervention arms than in the control group, while HSV-2 incidence was lower in the other intervention arm than in the control group [7]. Only the Stepping Stones programme was associated with a significantly lower HSV-2 incidence in comparison with controls. Hence, there is little evidence that CMI succeed in reducing numbers of HIV and/or STI cases among youth and general communities, with some success limited to the Stepping Stones programme and project Accept [12]. The present review has gathered evidence of the effectiveness of interventions with a CM component on biomedical, behavioural and social outcomes [13].

Another critical aspect of mobilization was peer to peer mobilization among adolescents reached out with messages for circumcision. This was mainly seen in schools and motorcycle riders. The rationale for employing social network analysis to understand the AIDS epidemic is strong. Whereas many infectious diseases are spread through casual contact and contagion, HIV transmission results from risk behaviors that involve close and often intimate contact. Hence, the transmission of HIV is structured by the social relationships within which these contacts are embedded [14-16]. An implication is that efforts to prevent the spread of HIV must take social networks into account. Social networks can play a dual role in the HIV epidemic. They serve as both the route of transmission for the virus and potentially, the route of transmission for HIV prevention information and services.

The school approach

The other role is to engage school leadership as a way of targeting schools for SMC. The linkage facilitator, counselors, and medical team sensitize students and encourage students to seek consent from their parents by taking consent documents to them. Parents who are interested sign consent documents and their children are transported to the center or camp for circumcision.

Targeting mainly students in schools has eased mobilization and follow-ups as they live within the same community. More still those who have healed also mobilize fellow students to come for SMC. Peer mobilizers are one of the promoters of SMC among schools.

The teachers play a big role in the follow up process by informing the SMC team of any challenges identified so that they can be addressed urgently. Behaviours advocated by external health professionals may not be feasible in contexts of poverty, political conflict and gender inequalities. As a result, there is a growing emphasis on the need for community involvement in the planning, implementation and ownership of interventions. Indeed, community mobilisation (CM) is now widely considered a “critical enabler” of an effective HIV/AIDS response [13].

For when networks are extensive, a network-based intervention can provide services to a correspondingly broad area. Hence, a factor that can aggravate the epidemic, geographically extensive networks can also increase the effectiveness of HIV prevention efforts. Other network features play an equally ambivalent role. For example, an abundance of cross-ethnic ties can facilitate the spread of the epidemic across group boundaries. Yet, cross-ethnic ties also increase the effectiveness of network-based interventions, by ensuring that even if the initial subjects from whom network recruitment began were not representative of injectors, cross-ethnic recruitment will quickly spread into other groups. Extensive ties across gender, age, drug preference and especially HIV status have a similarly ambivalent status, because they facilitate the spread across these boundaries of both the HIV epidemic and the provision of network-mediated HIV prevention services [17]. A school approach 221 schools were targeted and many adolescents for mobilization and follow up services, 16628) adolescents were followed up in the review period.

Providing free transportation for safe male circumcision clients

Most of the clients live in areas where service provision for HIV prevention programs is hampered by transport costs. To address transport challenges, a vehicle transports the SMC volunteers to the center or SMC camp for SMC services. At the center HIV Counseling and Testing is done, Pre-circumcision counseling, surgery and post circumcision counseling is done. After counseling the volunteers are transported back to their communities. Free transportation is also provided during follow ups especially if it is done at the facility.

Information education communication for behavior change

Providing information education and communication through videos, flipcharts for SMC is more appealing to youth. This is also complemented by health talks and one to one counseling. Knowledge is power. Knowing facts on the pros and cons of any intervention will have a long term positive influence. The counselors encourage youth with behavior change communication package including abstinence, condom use and being faithful for those who are in relationships. The other message emphasized is that safe male circumcision is not a cure for HIV but just part of comprehensive HIV prevention package.

Counseling should be an integral element of the MC intervention, and trained counselors should be made available in health facilities. Counselors should provide a clear explanation of how the MMC procedure is carried out and typical side effects of the procedure, address concerns about changes in sexual activity or performance following the procedure, and provide information about wound care during the healing period. Counselors should stress that MC provides only partial protection against HIV, and that maintenance of other risk reduction strategies is necessary [18].

The counseling offered aims at addressing also behavior disinhibition after SMC so that adolescents can continue. The counseling offered aims at addressing also behavior disinhibition after SMC so that adolescents can continue embracing comprehensive prevention approach of abstinence, condom use, being faithful among others. This sexual behavior disinhibition, which undermines the great strides Uganda has achieved in reducing its HIV prevalence, may be explained by the behavior risk compensation theory. Behavior risk compensation is an observed effect where people tend to adjust their behavior in response to the perceived level of risk, usually behaving less cautiously where they feel more protected and more cautiously where they feel a higher level of risk [6]. In the context where circumcision is viewed as a natural condom [19,20] against HIV transmission, there is a possibility of behavior risk compensation among circumcised men, leading them to engage in risky sexual behavior, including higher-risk sex with high-risk partners, non-condom use and multiple sexual partners [21,22]. The findings suggest a need to repackage the circumcision messages to account for the increased risky sexual behaviors among men who have been circumcised. Intensified, individual tailored counseling before and after SMC procedures may help to reduce these risky behaviors. Furthermore, qualitative research
should explore the reasons for circumcision and the drivers for risky sexual behavior.

**Safe male circumcision hotline**

The other strategy for strengthening information sharing is providing the SMC Hotline. Every circumcised client gets the hotline on the SMC client card. This is toll free which allows SMC volunteers to seek counseling and guidance information. The hotline helps clients and TASO SMC team to make informed choices and appropriate referrals can be made accordingly. The SMC hotline is also a tool for follow ups as clients who may not be accessed for reviews after a week can be contacted via telephone and they give self-reports concerning wound healing.

The hotline is also used during community mobilization as community members can make arrangements with TASSO SMC team on when circumcision services can be offered in their area.

**Post-operative follow-up services**

A team of doctors, nurses, counselors and a community mobilizer do follow ups one week after circumcision. SMC clients receive at least on follow up visit after circumcision to address any post-operative complications and offer continued post circumcision counseling about wound healing and behavior change. The follow ups are done after 48 h, 7 days and 6 weeks. The follow ups have improved on the confidence of families and schools to provide students for the service because they know that in case of any complication TASSO medical team will address it. The schools and families do not incur treatment costs for clients already circumcised as medication is offered free of charge.

**Collaborations with community health units**

Safe male circumcision camps have been conducted at government or private health units. This has enabled TASSO to provide safe male circumcision services to its clients in clean and safe environments using health unit theaters. This has enabled TASSO to reach out to communities who would have found difficulties in reaching TASSO at its premises. More still with the integration of TT vaccination in SMC in 2015 the health units have been instrumental in providing TT dozes and man power to conduct the vaccinations. The health units staffs also provide follow up services to clients near the health unit [23].

**Tetanus toxide vaccination before safe male circumcision**

Safe male circumcision has been done in clean environment and with emphasis on wound care; however cases were noted of tetanus among circumcised men in Uganda. As a result CDC and the ministry of health for Uganda have integrated tetanus toxide vaccination before circumcision. The vaccination has made the program to be even more safe and reliable to its clients [23].

**Lessons Learned**

A total of 20786 adolescents received HCT and circumcision (6/1/2014 to 17/12/2015 contributing to 85% of the total men circumcised.

The strategies have improved follow ups and a total of 16629 volunteers were followed up in the review period. This has helped us to increase community confidence in the services provided and also prevent side effects after surgery.

The SMC hotline helps schools, parents and TASSO team to easily attend to concerns in a timely manner and where necessary referrals are made appropriately. A total of 5011 were followed up through the hotline.

Dialogue meetings help program implementers to work well in communities in a coordinated manner that involves mapping of high burdened areas with low uptake of SMC services. The local leadership is also important in mobilization of communities for SMC. The dialogue meeting help to identify key stakeholders from various disciplines including education like district education officer these help in identifying schools and engaging leadership in schools to welcome SMC services. The district health officer is key to identifying health units were camps can be set and provides the necessary requirements at these units. The coordinator of village health teams also helps in mobilizing health teams at sub-county. The regional police commander deals with security and movement of vehicles during the camps and other legal issues that may arise in the community. The district data person is also involved to ensure proper reporting of out puts delivered in the district. 6 dialogue meetings were held in 6 districts, this lead to meaningful involvement of community leadership.

SMC outreach camps help to target areas which need services but do not get them as mainly they are concentrated in town centers. The outreach camps also offer high turn ups for the service as compared to facility based clients. The camps produced 75% of the total clients circumcised in this period as compared to 25% circumcised at the facility.

A combination of information Education and Communication materials including visual especially videos with HIV prevention information is more appealing to the adolescents as compared to only verbal or written information. A total of 40386 received behavior change messages for HIV prevention.

Collaboration with health unit staff strengthens partnerships and reduces organizational costs for some logistics required in providing SMC. The health unit's staff also provides follow ups to the circumcised men to ensure wound healing and improving community confidence.

**Conclusion**

A combination of strategies and team work is important to reach out a specific group with HIV prevention intervention.

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