



Rolling out adult male circumcision services for HIV prevention in sub-Saharan Africa

KEY POINTS

- ◆ Adult male circumcision (AMC) is one of the most effective interventions in the prevention of heterosexually-acquired HIV in men, as demonstrated by three randomised controlled trials conducted in Africa, which all had similar 60% efficacy.
- ◆ Despite these findings and guidelines produced by WHO/UNAIDS, few countries in sub-Saharan Africa have provided large-scale AMC services. National authorities may face significant political, socio-cultural, economic and logistical challenges in rolling out AMC services.
- ◆ In South Africa, Tanzania, Swaziland and Ghana, the SRH&HIV Programme has been closely associated with the different stages of the process of “getting research into policy and practice” (GRIPP) regarding AMC services roll out.

Background

HIV/AIDS is one of the most important public health challenges facing sub-Saharan Africa, particularly in eastern and southern Africa, but also in West Africa. For example, with a national adult prevalence of 18%, nearly 6 million South Africans live with HIV, and about 1 million receive antiretroviral therapy, but 1500 people still become infected with the virus every day [1]. There is an urgent need for HIV preventive measures to be evaluated, and once found to be effective, to be implemented at large scale.

Research has shown that the HIV epidemic is most severe among African populations who do not practice male circumcision. The efficiency of adult male circumcision (AMC) in preventing female-to-male HIV infection has been demonstrated by three randomized controlled trials among men in Uganda, Kenya and South Africa. The results showed that this method has a protective effect of 58% [2,3]. These findings led the World Health Organization (WHO) and the Joint United Nations programme on AIDS (UNAIDS) to recommend that

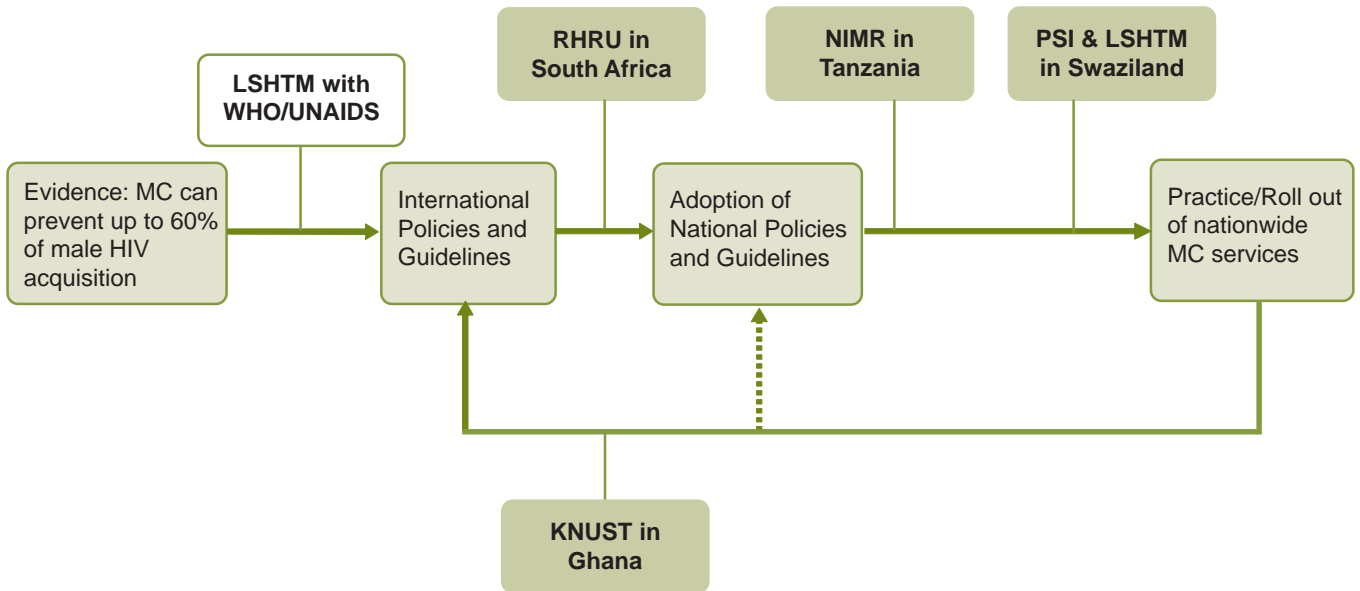
AMC should be part of a comprehensive HIV prevention package and embedded in national HIV prevention strategies. WHO/UNAIDS also recommend strengthening public health services and provision of AMC services at the lowest possible cost [4].

Involvement of Programme researchers in the GRIPP process

Through the examples of four countries which are at different stages of development and implementation of the AMC policy, we aim to highlight the role of researchers in shaping policy and practice within the ‘getting research into policy and practice’ (GRIPP) framework (Figure 1).

In South Africa, the Reproductive Health Research Unit (RHRU) has been instrumental in providing the international scientific evidence to the South African National AIDS Council (SANAC) and in brokering discussions with various stakeholders. Researchers helped maintain an ongoing dialogue between policy makers and traditional leaders in particular, in order to help SANAC agree on a

Figure 1. Position of the four African case studies in the GRIPP cycle for the roll out of male circumcision (MC) services



national strategy, whilst also amending the practice of traditional male circumcision.

In Tanzania, the National Institute for Medical Research (NIMR) in Mwanza has been closely associated with the process of developing a national programme and was commissioned to undertake a national situational analysis of the existence and acceptability of AMC services using the WHO model. The research found that AMC was highly accepted by the population, but that health services needed to be considerably strengthened in order to deliver a quality intervention.

Swaziland passed a National Policy on Adult Male Circumcision for HIV Prevention in 2009. Programme partner Population Services International (PSI) were contracted to support the integration and scale up of the minimum package of AMC services into the public, private and NGO health sectors in Swaziland. The goal of the programme was to establish multi-sectored provider networks for quality AMC services to reach 80% of the estimated 150,000 males aged 13-29 years in the country. In this case, researchers from PSI and the London School of Hygiene & Tropical Medicine (LSHTM) were asked to endorse their more traditional role of ‘evidence gatherers’

to assess the potential challenges at the user/practice interface level.

In Ghana, a traditionally circumcising country, the School of Medical Sciences at the Kwame Nkrumah University of Science & Technology (SMS-KNUST) in Kumasi and the LSHTM held a meeting under the auspices of WHO to discuss how Ghana has practised circumcision over the years with training for traditional circumcision providers in the field of infection prevention, in order to improve hygiene for this procedure.

At the international level, the role of LSHTM researchers was to participate in an advisory capacity for some of the trials, synthesize the evidence through meta-analyses, provide impact modelling and cost-effectiveness studies [2,5,6], and provide expert advice to WHO/UNAIDS in the development of the international guidelines and recommendations.

In summary, Programme researchers have been involved from evidence provision through all the stages of supporting the process of policy making and implementation. The four case studies highlight the challenges faced by these countries in the process of developing appropriate policies and guidelines for the roll out of AMC services.

From optimal trial conditions to the diverse reality of African settings: challenges for rolling out male circumcision services

Research studies usually provide above-average conditions for implementation of a new intervention, as they need to maximize the potential to demonstrate its *efficacy*. Trial conditions may thus differ vastly from real life situations and usually tend to over-estimate the *effectiveness* of the intervention as it would be scaled up. In the case of AMC, trial participants benefitted from intense counselling sessions and frequent follow-up to ensure maximum adherence to the intervention package, including its behavioural component. These ‘ideal’ conditions might be difficult to replicate in practice when planning the roll out of AMC services. This is the reason why local situational analyses of the feasibility, acceptability and replicability of key elements of the inter-vention package should be carried out prior to the roll out of AMC services.

The minimum package

The WHO/UNAIDS minimum package of interventions aims to provide safe AMC and to minimize subsequent risk taking. The minimum package should include HIV testing and counselling, treatment of sexually transmitted infections (STIs), promotion of safe sex practices and consistent condom use, and provision of male and female condoms [4]. The guidelines also recommend that AMC should be implemented by trained and certificated practitioners.

Common challenges for individuals

- ◆ Circumcising a sexually-active adult male population is much more challenging than circumcising newborns or infants. Indeed, resuming sexual activity before the total healing of the wound could increase the risk of HIV acquisition and jeopardize the purpose of this intervention. This is why the minimum package is necessary for the efficiency of AMC and to avoid any subsequent risk.
- ◆ There is a danger of ‘risk compensation’, if the benefits of AMC are not well understood. Newly circumcised men might increase high-risk sexual behaviours such as unprotected sex or having multiple sexual partners. Similarly, women may feel protected when they have sex with circumcised men and feel they need no longer insist on condom use.

- ◆ Within married couples, the issue of ‘trust’ can be an inhibitor to seeking additional protection, and this may affect the acceptability of AMC.
- ◆ Mandatory testing and the fear of discovering their HIV status was raised by both male and female participants in formative research conducted in Swaziland [7].

Poor public health infrastructure

The study led by the NIMR showed that, despite a high level of acceptability of AMC by populations and service providers, the difficulty will come from the poor conditions of public health services in this country [8]. This problem is also faced, in variable proportions, by South Africa and Swaziland.

Cultural sensitivities

In sub-Saharan Africa, the practice of male circumcision has strong cultural connotations. In South Africa, the dialogue between public health authorities and traditional leaders and healers was stalled over the issue of who should be licensed to practice AMC and how. NIMR in Tanzania also found that traditional practitioners played a key influencing role in the practices used in traditionally circumcising populations. NIMR successfully advocated that traditional practitioners should be involved in the development of the Tanzania national strategy.

In Swaziland, only very few focus group participants mentioned that “AMC was not Swazi” as a barrier to uptake of circumcision, which is encouraging.

Therefore, it appeared important to learn how countries where the majority of the male population is circumcised have reconciled the cultural practices with the need to provide medically safe services. LSHTM staff led a Gates Foundation-funded comprehensive review of current neonatal and child circumcision practices [9], and participated in a WHO-sponsored meeting in Ghana to learn from the experience of providing male circumcision services at scale (from young age). Scientists of SMS-KNUST brought their expertise in having developed training and supervision programmes with traditional circumcisers.

Successful strategies in developing and rolling out a national policy

- ◆ Involve all the stakeholders (including traditional practitioners) at all stages of the policy development process.
- ◆ Consult local populations to elicit possible barriers and motivations.
- ◆ Reconcile respect for traditional culture and values with the need for an efficient, safe and sustainable public health intervention.
- ◆ At the implementation stage, inform populations about AMC, its benefits and limitations, and make sure that women are equally informed about the indirect benefits for themselves.
- ◆ To balance the feasibility of intensive personal condom counselling (as was done during trials) with mass roll-out of the strategy, it is important to develop a mass media communication campaign emphasizing the critical role played by double protection (i.e. still using/promoting condoms) in enhancing the efficiency of AMC.

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