

# **TRADITIONAL MALE CIRCUMCISION AMONG YOUNG PEOPLE**



**A public health perspective  
in the context of HIV  
prevention**

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Traditional male circumcision among young people : a public health perspective in the context of HIV prevention.

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## Abbreviations

<b>ABC</b>	Abstain, Be faithful, use a Condom
<b>AIDS</b>	Acute immunodeficiency syndrome
<b>CHAL</b>	Christian Health Association of Lesotho
<b>CHAZ</b>	Christian Health Association of Zambia
<b>DHS</b>	Demographic and health survey
<b>FBO</b>	Faith based organization
<b>FGD</b>	Focus group discussion
<b>HIV</b>	Human immunodeficiency virus
<b>IATT</b>	Interagency task team
<b>ICFEM</b>	Inter-Christian Fellowship Evangelical Mission
<b>MC</b>	Male circumcision
<b>MCK</b>	Methodist Church of Kenya
<b>MMC</b>	Medical male circumcision
<b>NGO</b>	Nongovernmental organization
<b>PCEA</b>	Presbyterian Church of East Africa
<b>PROMETRA</b>	Association for the Promotion of Traditional Medicine
<b>RCT</b>	Randomized controlled trial
<b>SRH</b>	Sexual and reproductive health
<b>STI</b>	Sexually transmitted infection
<b>THP</b>	Traditional health provider
<b>TM</b>	Traditional medicine
<b>TMC</b>	Traditional male circumcision
<b>UNAIDS</b>	Joint United Nations Programme on HIV and AIDS
<b>UNFPA</b>	United Nations Population Fund
<b>UNICEF</b>	United Nations Children's Fund
<b>WHO</b>	World Health Organization

# I Acknowledgements

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# 2 Executive summary

## Introduction

Male circumcision is increasingly being incorporated as a key component of comprehensive HIV prevention strategies in national responses to AIDS. Under the leadership of the World Health Organization (WHO), efforts are being made by UN bodies such as UNFPA, UNICEF, and the UNAIDS Secretariat, along with international NGOs and funding organizations, to assist countries in making evidence-based policy and programme decisions with a view to increasing the availability, accessibility and safety of male circumcision services for HIV prevention. Priority countries for the scale-up of male circumcision for HIV prevention have high HIV prevalence and low levels of male circumcision.

In many African societies, and among certain ethnic groups in other geographical regions, male circumcision is carried out for cultural reasons, as an initiation ritual and a rite of passage into manhood. In general the countries and communities where traditional male circumcision is performed are not those with high HIV prevalence and low levels of male circumcision. However, for a number of reasons, including concerns about the safety of the procedure carried out by providers without any formal training, traditional male circumcision is receiving increasing attention. Since most countries in sub-Saharan Africa practice traditional circumcision to some extent, it will be increasingly important for Ministries of Health to have a clear position on traditional male circumcision when rolling out male circumcision programmes for HIV prevention and developing related national policies, standards and guidelines.

In addition, there is growing interest in the opportunity that male circumcision programmes might provide for making contact with adolescents and young men, in order to move beyond HIV prevention and to include broader sexual and reproductive health and gender issues. Traditionally, an educational component is included in the cultural practices surrounding male circumcision as an initiation into manhood. Since they are often knowledgeable about the determinants affecting the lives of the adolescents in their communities, traditional circumcisers and other community members traditionally involved with the ritual of male circumcision may have the potential to contribute not only to HIV prevention but also to improving other aspects of young people's sexual and reproductive health.

## Scope of the review

The aim of this review is to assess the available literature on traditional male circumcision among adolescents,<sup>a</sup> defined as male circumcision for cultural (non-religious) reasons by a provider without any formal training. The review focuses mainly on East and Southern Africa. The following topics are addressed.

- The prevalence of traditional male circumcision, and the ages at which it is performed (Section 4.1).
- Traditional male circumcision as part of the larger context of initiation into manhood: how is circumcision performed, how much foreskin is removed, and what takes place before, during and after the male circumcision procedure? (Sections 4.2 and 5.2.3)
- Trends in traditional circumcision: what aspects of the practice are changing, including attitudes of young men and parents, and links with clinical practice? (Section 4.4)
- What are the problems associated with traditional male circumcision, including safety, and what are the consequences of particular practices around traditional male circumcision which may have implications for HIV prevention? (Sections 5 and 6)
- What attempts to work with traditional circumcisers are reported in the literature, including experiences from efforts to train traditional providers of male circumcision? What lessons have been learnt from programmes that have capitalized on traditional male circumcision practices as an entry point for addressing adolescents' sexual and reproductive health? (Section 7)

## Results

Data on the prevalence of traditional male circumcision are not generally available in the literature. However, estimates of the prevalence of traditional male circumcision have been made for some countries in sub-Saharan Africa and South-East Asia.

The age at which traditional male circumcision is performed varies by country and ethnicity. It ranges from 6 years in Indonesia and Senegal to 35 years in Zambia. The majority of males in East and Southern Africa are circumcised between the ages of 12 and 22 years, whereas those in West Africa are generally circumcised much earlier.

Three phases have been described for the ritual of male circumcision: preparation leading to the actual procedure, a period of seclusion, and reintegration of the initiates into their society. Male circumcision techniques vary markedly between ethnic groups, ranging from the making of a small incision in the prepuce to the complete removal of the foreskin. The period of seclusion constitutes the most significant part of the ritual in many communities. It is an "incubation period" for new attitudes, practices and behaviours among the initiates, rather than simply being a time of wound-healing.

The transmission of cultural knowledge, skills deemed necessary for the development of the initiates' personality, and education on sexual issues are all sometimes part of the teaching in initiation schools, although an educational component on sexual and reproductive health issues is not included in all cultures. Where they exist, messages on sexual education vary widely: the importance of sexual reserve and the inappropriateness of promiscuity after reintegration into society are emphasized in some cultures, whereas in other contexts boys are encouraged to have sex shortly after male circumcision, even before complete wound-healing, to prove their manhood. During this period spent "in the bush", boys often experience privations, bullying and humiliation.

Community involvement before, during and after traditional male circumcision is strong, different roles being given to a range of players comprising family members, teachers, traditional circumcisers and traditional carers. Traditional circumcisers are not the only people in contact with the initiates while they are in the circumcision school.

<sup>a</sup> Although this review focuses on *adolescents* (10–19 years), many of the issues raised are likely to be relevant to men in their early twenties, and consequently the terms *youth* (15–24 years) and *young people* (10–24 years) are sometimes used.

Cultural identity and the desire to continue ethnic traditions are the strongest determinants for continuing traditional male circumcision. In some societies, male circumcision as a rite of passage is of major importance to the social status of a man, essential to him becoming a full member of society. In some communities, an uncircumcised man remains a boy forever, whatever his age.

The acceptability of traditional male circumcision and the desire to continue the practice among community members in traditionally circumcising societies depends on a variety of factors, including rural vs. urban life, awareness of complications, cost of traditional vs. medical circumcision, accessibility of medical services, sociocultural norms and values, and perceptions of potentially harmful practices associated with the ritual (such as drug and alcohol consumption). Traditional male circumcision practices continue to be of great cultural importance in many societies, although in some traditionally circumcising communities trends towards a preference for medical male circumcision services<sup>b</sup> have been reported.

In many communities there is a high level of secrecy associated with ritual male circumcision, which is probably an important reason why complications associated with male circumcision practices, including long-term morbidity and death of initiates, have not been systematically assessed in most studies. A recent study carried out in Kenya reported complication rates of 35% after traditional male circumcision; wound infection and delayed wound-healing were the most common adverse events.

With regard to HIV prevention, several aspects of traditional male circumcision should be considered. First, the amount of foreskin removed during the procedure is important, since males who are partially circumcised or initiated through a simple incision in the prepuce are unlikely to benefit from the level of partial protection against HIV seen in the randomised controlled trials, even though culturally they may be considered to be circumcised. Secondly, certain cultural practices are likely to increase the risk of HIV transmission and may reverse the potential benefits of male circumcision in respect of HIV prevention, e.g. using one knife to circumcise several boys or encouraging sexual intercourse shortly after circumcision and before complete wound-healing. In addition, prolonged wound-healing, attributable to traditional ways of cutting the foreskin or complications after traditional male circumcision, has implications for HIV prevention, since vulnerability to contracting and/or transmitting HIV is potentially higher until the circumcision wounds are fully healed.

There appear to be relatively few initiatives to collaborate with traditional circumcisers in terms of training or regulation, with the exception of efforts in Ghana, Kenya, South Africa, and Zambia. Some programmes being implemented in Kenya and Lesotho are trying to combine medical male circumcision with an adapted version of the traditional rites-of-passage components surrounding the circumcision procedure. In addition, successes have been achieved through meetings with traditional circumcisers and communities in relation to overcoming the stigma associated with medical male circumcision in some traditionally circumcising communities. In general, however, the impact of these collaborative efforts has not been well documented or evaluated.

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<sup>b</sup> For the purposes of this report, "medical male circumcision" means male circumcision carried out in a clinical setting by a trained and supervised service provider with adequate equipment and facilities for performing it safely.



## Conclusions

Data on the prevalence of traditional male circumcision are currently inadequate and require further development. More detailed questions on male circumcision status have recently been included in some national Demographic and Health Surveys (DHSs), although obtaining data is likely to be hampered by the fact that a surprisingly high percentage of men are not clear about their circumcision status. Furthermore, there is no word for the specific surgical procedure of male circumcision in many of the local languages used by communities where male circumcision is carried out as a rite of passage. Asking men if they are “initiated” or if they are “men” does not necessarily provide a true reflection of the percentage of men who are circumcised. The picture is even more complicated because it is often assumed that where male circumcision is carried out for cultural reasons it is done by traditional providers without any formal training. However, in many of these communities, male circumcision is also carried out by service providers who have some health training but little or no specific training or supervision in male circumcision and inadequate equipment or facilities at their disposal for providing such services safely.

Traditional male circumcision continues to be an important practice in many African societies and constitutes one part of the ritual initiation into manhood. However, because of the high levels of secrecy associated with the ritual, detailed information about traditional male circumcision, in terms of similarities and differences between different ethnic groups, is generally not available in the literature.

Trends towards medical male circumcision have been observed in some traditionally circumcising communities in East and Southern Africa, implying that there is a readiness to use services provided through the formal health system and that such services are not in conflict with the culture. At the same time, however, in other traditionally circumcising communities it is clear that the idea of using medical services for traditional male circumcision currently remains unacceptable.

There is a need for systematic assessments of complications following traditional male circumcision. For such assessments to provide useful data, however, they need to review complication rates after traditional male circumcision, on the basis of a known denominator, such as the number of boys circumcised per circumcision season (currently, most studies provide only numerator data on hospital admissions). To do this accurately, systematic tracking of complication rates would require access to and collaboration with traditional initiation schools.

In terms of the broader issue of young people's sexual and reproductive health, the potential role of traditional circumcisers or other community members traditionally involved with the ritual around male circumcision, as sources of information and counselling on HIV/STI and sexual and reproductive health more generally, has yet to be explored in any depth. The impact of existing programmes that offer medical male circumcision services and an educational component have so far not been adequately evaluated.

## Recommendations

Despite the limitations of cross-sectional surveys on self-reported circumcision status, more detailed questions on male circumcision should be routinely added to the DHSs carried out in East and Southern African countries, such as has been done in the surveys in Burkina Faso and Mozambique. Gathering more accurate information on age at circumcision, the circumcision provider, reasons for circumcision and complications of circumcision would make an important contribution to national situational analyses and baseline assessments.

More detailed formative research on specific techniques used in traditional male circumcision and on the traditional practices surrounding the ritual of male circumcision, continues to be much needed. A range of practices exists, and it would be helpful to have a better understanding of what is similar and what is different across different ethnic groups.

Key questions that are important in terms of HIV prevention, and sexual and reproductive health more generally, relate to circumcision techniques, e.g. the instruments used, the amount of foreskin removed, postoperative wound care, and details about the information that is provided to the initiates before, during and after the procedure. The views of traditional circumcisers should be obtained, in particular relating to the potential for changing certain aspects of the practice so as to positively contribute to the health of the initiates. When researchers are obtaining information about traditional male circumcision it is important for them to frame their questions in a positive way and explain that they are not attempting to demystify a centuries-old practice or denigrate the associated culture.

Researchers should be encouraged to use the WHO standardized reporting format for any quantitative research on complication rates after traditional male circumcision in order to ensure better comparability between different study populations.

Based on the existing situation in different countries, the following collaborative efforts with traditional male circumcisers could be considered.

### 1. Increase dialogue and understanding

For many communities in Africa, male circumcision is not new. Traditional circumcisers have been carrying out male circumcision as part of an initiation ritual for centuries and they are providing services for many people. The lack of information on certain aspects of traditional male circumcision, a practice that is common and widespread, is attributable to many factors, not least a lack of dialogue between providers of health care in the formal and informal health sectors.<sup>c</sup> Initiating dialogue around the practice of traditional male circumcision in an inclusive and respectful way, through joint meetings with traditional male circumcisers and community meetings during the festivities associated with the ritual, is crucial to building trust and establishing a relationship with traditional circumcisers on which other interventions can be built.<sup>d</sup>

### 2. Improve the traditional practices

Better communication with traditional circumcisers could prepare the ground for collaborative efforts to formulate policies and regulations on standards of practice for traditional male circumcision, training for traditional circumcisers on circumcision techniques and general hygiene, and establishment of cross-referral systems between traditional circumcisers and health workers in the formal sector.

### 3. Increase the options for people who want male circumcision

Strengthening clinical male circumcision services, through the provision of affordable, accessible and safe circumcision by the formal health sector, provides an alternative to traditional male circumcision. This should include community education in order to increase awareness about different circumcision providers, so that young people and their parents can make informed choices about male circumcision.

c In addition to the benefits of male circumcision in the context of HIV, and for potentially improving the broader sexual and reproductive health of young people, male circumcision provides an opportunity to continue strengthening collaboration between traditional health practitioners and health workers in the formal sector.

d For a more general overview see: UNAIDS (2000) *Collaboration with traditional healers in HIV/AIDS prevention and care in sub-Saharan Africa - a literature review*, [http://data.unaids.org/Publications/IRC-pub011/JC299-TradHeal\\_en.pdf](http://data.unaids.org/Publications/IRC-pub011/JC299-TradHeal_en.pdf)

## 3 Introduction

### Rationale

HIV continues to be one of the major public health challenges worldwide. Sub-Saharan Africa remains the most seriously affected region, where AIDS is the leading cause of death among adults. Epidemics in the rest of the world are primarily concentrated, affecting key populations at higher risk of HIV exposure, such as men who have sex with men, injecting drug users and sex workers. However, in sub-Saharan African countries a generalized epidemic is being sustained, the primary route of transmission being through heterosexual contact and the majority of people living with HIV (60%) being women.<sup>1</sup>

Along with efforts to continuously increase access to treatment and care, the need for effective preventive strategies is a priority. Male circumcision is now recognized to be an important component of the comprehensive package for HIV prevention.<sup>2</sup> Three randomized controlled trials (RCTs), in Kenya, South Africa, and Uganda, have confirmed a partial protective effect of male circumcision in respect of female to male transmission of HIV.<sup>3-5</sup> Modelling studies indicate that the impact of male circumcision programmes will be greatest in countries, or regions of countries, where the prevalence of circumcision is low and HIV prevalence is high.<sup>6</sup>

The major focus for scaling up male circumcision services will therefore be those countries, or regions of countries, where the majority of the population is not currently circumcised.<sup>2</sup> However, in almost all of these countries there are some groups in the population who are being circumcised,<sup>7</sup> and most of this circumcision is carried out by traditional circumcisers. It will be important to review these traditional male circumcision practices as national strategies, standards and programmes are developed. Even in countries where the coverage of male circumcision is generally high, it will be important to ensure that the traditional practices are safe, and that they contribute maximally to the prevention of HIV transmission.

Acceptability studies in predominantly non-circumcising communities of East and Southern Africa indicate a high level of acceptance for male circumcision, provided that it is safe and not too costly.<sup>8</sup> However, as demand for male circumcision increases, concerns have been expressed that the limited capacity of the formal health sector might lead to any unmet demand for male circumcision being filled by unqualified practitioners. This could be counter-productive and result in unnecessary rates of adverse events.<sup>8</sup> It is therefore important to understand countries' experiences with traditional male circumcision, particularly in terms of safety and complications, and to synthesize the successes and challenges of regulating male circumcision practices, something that may be particularly important for preventing untrained and unlicensed circumcisers from entering the job market if the demand for male circumcision outstrips the supply.<sup>9</sup>

One of the key target groups for male circumcision will be adolescents.<sup>10</sup> This part of the population generally does not make much use of health services, and the contact with adolescent boys and young men at the time of male circumcision is a vital opportunity for improving their sexual and reproductive health (SRH) more generally. Imparting knowledge and skills on issues such as family planning and gender equality could add a much needed component to sexual and reproductive health services, until now frequently directed predominantly to females. Focusing on the sexual and reproductive health (SRH) of adolescent boys may in turn have important implications for reinforcing HIV prevention and preventing risk compensation following male circumcision.<sup>11</sup> This will be true both for male circumcision programmes that are developed in countries where there is low prevalence of male circumcision and high prevalence of HIV and in countries and communities where traditional male circumcision is a rite of passage, and where the procedure may increasingly be provided through medical facilities.

Sociocultural institutions within the traditional sector remain valued and respected in many societies. It may therefore be important to learn lessons from attempts to work with traditional providers of health care, since they remain “one abundant and relatively untapped resource for an expanded response to the AIDS epidemic”.<sup>12</sup> Often knowledgeable about certain determinants affecting the lives of the adolescents in their communities, they may have the potential to be partners for advocating and influencing behaviours in a culturally sensitive manner.

## Objectives

The aim of this review is to summarize available information about traditional male circumcision in order to inform the processes of developing policies and programmes to support the expansion of male circumcision services for HIV prevention. The review focused on published and unpublished literature on traditional male circumcision among adolescents (the age group of neonates and pre-adolescents will be the subject of a separate review). Traditional male circumcision was defined as male circumcision for cultural (non-religious) reasons, carried out by a provider without any formal training. The review focused primarily on East and Southern Africa, although some information has been incorporated from relevant studies from other regions. The following topics were included in the review:

- prevalence of traditional male circumcision and ages when traditional male circumcision is performed;
- the context of traditional male circumcision practices (what happens before, during and after the procedure), including the meanings and variations of the ritual;
- community involvement in traditional male circumcision and rules surrounding the ritual;
- trends in traditional male circumcision, including changes in the practice of male circumcision;
- problems and complications associated with traditional male circumcision;
- consequences of specific practices of traditional male circumcision in terms of their potential impact on HIV transmission and HIV prevention;
- lessons learnt from efforts to improve the quality and safety of traditional male circumcision through training and regulation;
- experiences from programmes for adolescent male circumcision that have capitalized on traditional circumcision practices carried out as a rite of passage and have used male circumcision as an entry point for adolescents' sexual and reproductive health at a traditional moment of “ripeness for change”.<sup>13</sup>

## Methodology

Primary studies and narrative reports on traditional male circumcision in the 10–24 years age group were included. The main focus of the review was East and Southern Africa, although some literature from other regions reporting on circumcision of adolescent boys by traditional providers was also included. Studies reporting on male circumcision provided through medical facilities were excluded, as were studies focusing on neonate and infant circumcision.

The search was carried out electronically, and initially included the following databases: PubMed, Web of Science, Popline and African Journals OnLine. Since no references were identified in African Healthline and African Index Medicus (AIM) using the search terms “traditional circumcision” or “traditional circumcisers”, these sources were excluded from the subsequent search. The following search terms were applied in Pubmed, Web of Science, Popline and African Journals OnLine: male circumcision AND traditional; traditional circumcisers; male circumcision AND anthropology; male circumcision AND complications; male circumcision AND history; male circumcision AND manhood/ masculinity/rite of passage. The search was carried out on 26–30/11/2007, although some more recent articles have subsequently been added.

Reports provided by key researchers as well as by members of the WHO/UNAIDS Working Group on Male Circumcision and the East and Southern Africa Interagency Task Team (IATT) on Male Circumcision were included. A search of all the reference lists of the articles identified during the initial search was also included as part of the review process.<sup>e</sup>

This report addresses traditional male circumcision in relation to its implications for HIV prevention. It does not address the subject of female circumcision in any way, since there are no health benefits from this form of initiation of girls and young women.<sup>14</sup>

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<sup>e</sup> Initially this study was designed as a global review of traditional male circumcision carried out for religious (mostly in neonates) and cultural reasons, with the intention of subsequently limiting the scope of the review to East and Southern Africa, where most of the males circumcised traditionally are adolescents. The search strategies applied were therefore not specifically adapted for the adolescent age group. However, as all the reference lists of the articles identified were hand-searched, it is considered unlikely that key published research has been missed.



## 4 Overview of traditional male circumcision in adolescents

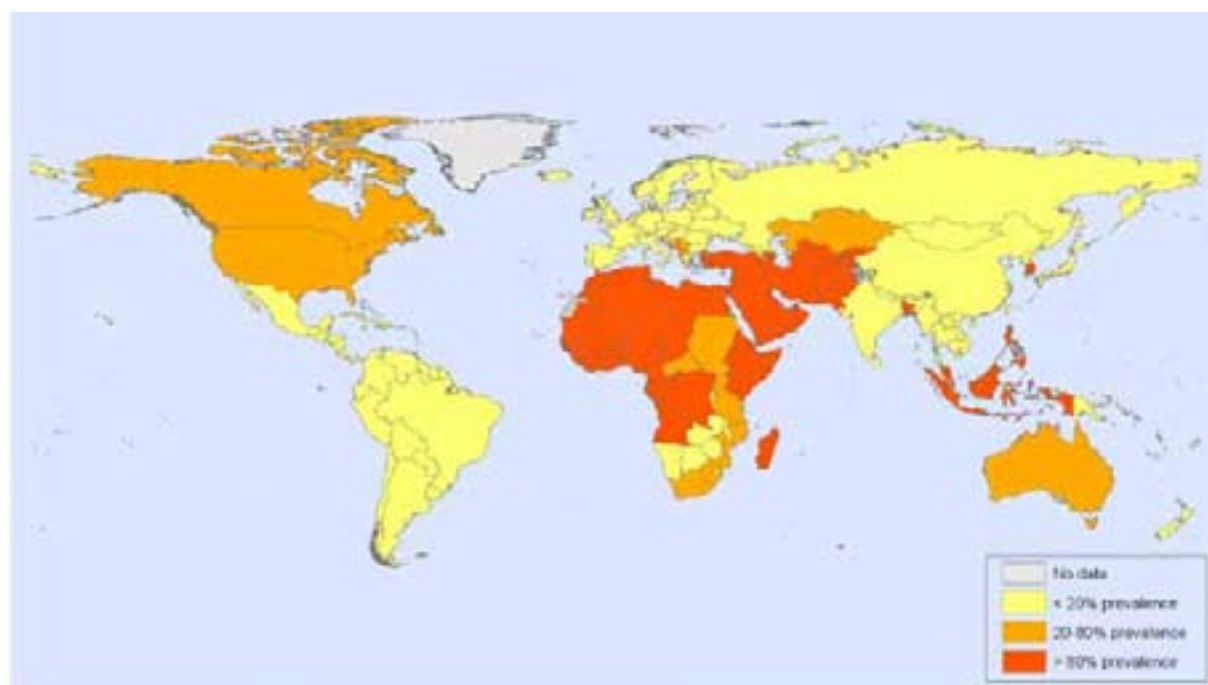
Male circumcision is one of the oldest and most widespread surgical procedures in the world. There have been references to male circumcision across diverse cultures and religions. Frequently carried out by traditional providers, male circumcision consists of the surgical removal of some part of the foreskin of the penis. The amount removed varies between ethnic groups.

In the context of the removal of the foreskin for religious and/or cultural reasons, there is an entire catalogue of meanings attached to the procedure. Although religion is the major determinant of male circumcision worldwide, male circumcision among adolescents is much more likely to be performed as a coming-of-age ritual. This is encountered in many African societies and in other ethnic groups, including Aboriginal tribes in Australia, the Aztecs and Mayans in the Americas, and the inhabitants of eastern Indonesia, the Philippines, and various Pacific Islands.

### 4.1 Prevalence of traditional male circumcision and age groups at which it is performed

Globally, it is estimated that 30% of all males above the age of 15 years are circumcised.<sup>15</sup> Male circumcision for religious and cultural reasons is a relatively common practice in sub-Saharan African countries, where 28 of 45<sup>f</sup> countries have a male circumcision prevalence exceeding 80%.<sup>7</sup> Data on the prevalence of male circumcision from various published sources are presented below (Fig. 1), classified according to the categories “low” (<20% = yellow), “intermediate” (20–80% = orange) and “high” (>80% = red).

Figure 1. Global map of male circumcision prevalence at country level, as of December 2006



<sup>f</sup> The age when male circumcision is carried out differs across the African continent. Circumcision during the neonatal period, infancy or early childhood is more common in West and North Africa, whereas male circumcision is mainly performed on adolescents or young men in countries, or regions of countries, in East and Southern Africa.

Weiss et al. have estimated the numbers of males circumcised for non-religious reasons in certain countries (Table 1)<sup>15</sup>

Table 1. Males circumcised for non-religious reasons

Countries by region	% adult males circumcised for non-religious reasons <sup>6, 7, 15</sup>	Number of adult males circumcised (millions)
<b>Sub-Saharan Africa</b>		
Madagascar	98%	3.7
Ethiopia	92%	10.6
Nigeria	90%	15.9
Democratic Republic of Congo	90%	13.1
Angola	90%	3.7
Ghana	85%	4
Kenya	83%	7.7
United Republic of Tanzania	58%	3.7
South Africa	35%	5.1
Uganda	14%	0.8
<b>South-East Asia / Oceania</b>		
Philippines	90%	24.6
Indonesia	85%	8.7
Australia	6%	1.4

These estimates have the following limitations.

- The statistics rely on self-reported data which might be unreliable in some settings.<sup>18-21</sup> In addition to inconsistencies reported by interviewees, clinicians may also have difficulties in ascertaining circumcision status.<sup>22,23</sup>
- Asking a man whether he is circumcised, as is done during DHSs, is likely to provide answers that reflect social desirability or even ignorance or misinformation about circumcision status. In addition, the responses are not likely to reflect significant differences in the circumcision techniques used: some techniques involve complete removal of the foreskin, whereas others consist of making a slit in the otherwise untouched prepuce.<sup>24</sup> If a man were to be circumcised by use of the latter technique, he would not be considered circumcised in clinical terms, but would report himself as being circumcised according to societal status and cultural meaning. There is no word for male circumcision as a stand-alone procedure in several local languages, but male circumcision is part of the meaning of “initiation”, “being a man” or “islamization”.<sup>25</sup>
- The data provide an overall national prevalence of male circumcision, which may mask significant differences in prevalence within the country concerned, particularly where this is related to traditional male circumcision linked to particular ethnic groups and/or religions. In Mozambique, for example, there is a “low” prevalence of circumcision in the north-west of the country and a “high” proportion of males circumcised in the north-east and in one province in the south, neither of which is reflected in the overall “intermediate” prevalence of 60%.<sup>26</sup>

Traditional male circumcision as a rite of passage is performed in pre-pubertal boys, adolescents or adults. The age of circumcision varies by country and ethnicity, ranging from 6 years (e.g. in Senegal<sup>27</sup> and Indonesia<sup>28</sup>) to 35 years (e.g. in Zambia<sup>10</sup>). The majority of boys in East and Southern Africa are circumcised between 12 and 22 years of age (Table 2). The wide age range is mainly attributable to the different periodicities of the “circumcision seasons” of respective tribes, e.g. every other year among the Bukusu in Kenya,<sup>29</sup> twice a year in South Africa,<sup>30</sup> every four or five years in Mozambique<sup>31</sup> and every four to six years among the Balante in Guinea-Bissau and Senegal,<sup>27</sup> broad age-band cohorts often go for circumcision at the same time.

Table 2. Age of circumcision by country

Countries by region	Age at circumcision (years)
<b>East Africa</b>	
Kenya	8–16; <sup>10</sup> 12–19; <sup>32</sup> 14 (mean age) <sup>29</sup>
Tanzania	~15–25 <sup>19</sup>
Uganda	18 (mean age) <sup>33</sup>
<b>Southern Africa</b>	
Botswana	13 (median age) <sup>34</sup>
Namibia	<2, 84% until age 13 <sup>35</sup>
Mozambique	10–16; <sup>31</sup> 15–24 <sup>26</sup>
South Africa	
Eastern Cape – Xhosa	15–25 <sup>9,36</sup>
Gauteng - Xhosa; Sotho; Tswana	22.8; 16.9; 18.2 (mean age) <sup>35</sup>
Gauteng (Xhosa, Sotho, Tswana)	17 (median age) <sup>22</sup>
Zambia	63%, 14–35 <sup>10</sup>
<b>West Africa</b>	
Burkina Faso	54%, <9; 23%, 10–14 <sup>16</sup>
Ghana	Mainly in neonates <sup>10</sup>
Senegal – Manding / Wolof	6–13 <sup>27</sup>
<b>Southeastern Asia</b>	
Indonesia - Javanese; Sundanese	11–12; 5–6 <sup>28</sup>
Philippines	42%, <10; 52%, 10–14 <sup>37</sup>

#### 4.1.1 Timing of traditional male circumcision

Bailey et al. reported an overall proportion of 47.7% of young men in his study in Kenya as having been sexually active before undergoing circumcision; the percentage was as high as 63.1% among those males circumcised by traditional providers. Sexual debut in the study sample was at a mean age of 14 to 15 years, with a younger mean age in the traditional group.<sup>29</sup>

In Uganda, mean age at sexual debut of (mostly traditionally) circumcised males was compared with mean age at first intercourse in males circumcised for religious reasons. Sexual debut occurred at 15.7 and 15.9 years respectively, the median ages at circumcision being 18 and 13 years.<sup>33</sup> Circumcision seasons in Uganda are reported to enhance sexual activity among adults as well as young Gisu men, who reportedly have their first intercourse during that time of the year.<sup>38</sup> Apart from the implications for the timing of HIV and STI prevention interventions in general,<sup>39</sup> the findings highlight the possibility that these adolescents may have contracted HIV or other sexually transmitted diseases before circumcision.

#### 4.1.2 Voluntariness and coercion

Because it is a strong cultural practice among traditionally circumcising groups, traditional male circumcision is usually not an optional procedure to be decided about on an individual basis. The timing of traditional male circumcision, on the other hand, is a matter for individual decision (whether or not the initiate feels ready to undergo male circumcision) or a family decision (e.g. certain family customs exist whereby sons are always circumcised at a certain age).<sup>40</sup>

As the Wolof in Senegal say: “every hero was helped”, referring to the mental preparation of the initiate by his family.<sup>27</sup>

In communities where the fabric of tribal society has become increasingly fragile and intergenerational support mechanisms are, for various reasons, no longer sustained, adolescent boys may face ritual circumcision without any encouragement or social support. Meanwhile, the media report appalling complications after male circumcision.<sup>9</sup> This has been found to result in reactive depression in some cases.<sup>41</sup> Forced male circumcision through the abduction of boys to initiation schools has been reported from Malawi,<sup>42</sup> South Africa,<sup>43</sup> Uganda<sup>33</sup> and Zambia.<sup>44</sup>

Conversely, there are reports of “uku balekela” (to escape into), meaning that initiates run away from home to be circumcised at an initiation school<sup>9, 36</sup> against the will or at least without the consent of their parents who, aware of the potential dangers of traditional circumcision, would not agree to having their sons circumcised traditionally.

There is some anecdotal evidence from South Africa that homosexual orientation may have a negative effect on a young person’s willingness to be circumcised in the context of initiation schools, and there has been anecdotal reporting of suicide in some cases.

South African legislation has attempted to confront these problems through the Application of Health Standards in Traditional Circumcision Act, 2001, which makes parental consent obligatory “in respect of a prospective initiate who is under 21 ‘or who has not acquired adulthood’”,<sup>9</sup> traditional male circumcision being illegal in anyone below the age of 16 years. A framework aiming to support specific provincial measures to enforce requirements for issues of consent (among others) was added through National Health Act No. 61 in 2004.

In addition to parental consent, some South African initiation schools require medical clearance for the initiate to be allowed to attend an initiation school<sup>45</sup> and have encouraged earlier referral of complications in order to start treatment as soon as possible.

## 4.2 Traditional male circumcision as a rite of passage into manhood

### 4.2.1 Meanings given to the ritual

The ritual of traditional male circumcision has significance at the individual and sociocultural levels.

#### → Individual level

Male circumcision is associated with cleanliness, reflected in common metaphors for circumcision, for example “to wash the hand” in the Wolof culture in Senegal.<sup>27</sup> In general, improved genital hygiene is something that is almost universally equated with male circumcision in both traditionally circumcising and non-circumcising communities in Africa.<sup>8,45</sup>

Indigenous African healers have promoted male circumcision as a protection against disease for centuries.<sup>46</sup> Beliefs in the protective effect of male circumcision against sexually transmitted infections (STIs) are fairly widespread, some studies reporting that people understand that, in circumcised men, tearing of the foreskin does not occur, which minimizes the risk of contracting STIs.<sup>42,45</sup> However, such associations are not universal. Studies from rural Nigeria, for example, do not report disease protection as a reason to be circumcised.<sup>47,48</sup>

The protective effect of male circumcision against HIV also appears to be part of some common beliefs. Among the Balante in Guinea-Bissau, circumcision is said to protect from a “terrible disease called Pusoonu”, its symptoms being similar to those of AIDS.<sup>27</sup> More recently, in Kenya, where results of the RCTs were widely discussed in the media, many Kenyan adults and their children became aware of the association between male circumcision and protection from HIV.<sup>49</sup> In Gauteng, South Africa, 29% of the predominantly traditionally circumcised respondents in one study believed that male circumcision provided protection against HIV. Unfortunately, this was shown to result in unsafe sex practices among this group of circumcised men.<sup>22</sup>

Respondents in various studies also reported beliefs about sexual performance. Circumcised men are said to enjoy sex more and also to give more pleasure to their partners. Enhanced sexual performance is a prominent belief in South Africa<sup>22</sup> and southern Nigeria.<sup>47, 48</sup> Together with aesthetic and hygienic reasons, this is said to be the main reason for women's preference for circumcised partners.<sup>22, 47, 48</sup>

#### → Sociocultural level

The social status accorded to male circumcision is of crucial significance in traditionally circumcising communities, because being circumcised is the only possible way of attaining manhood. In Xhosa culture, male development starts during the first six to seven years of life, when a boy is not yet able to distinguish right from wrong, and is thus not held responsible for any wrong that he might commit. Older boys are considered more capable of making informed judgements, although they are still not held fully responsible for their actions. It is only once they are circumcised that they are entitled to businesses, property or marriage, or to participate in other features of community life, such as feasts and beer-drinking ceremonies. Uncircumcised boys can have sexual relations with women, but are often rejected for being uncircumcised.<sup>30</sup> The social pressure to undergo circumcision puts uncircumcised boys at risk of ostracism. They are discriminated against in various ways, for example being given menial tasks, serving as "punching bags" for crimes committed in the community, and being called names.<sup>9</sup>

Similar societal structures are reported from Masai groups and the Bukusu in Kenya, where males become warriors ("morani" in Masai culture) once they are circumcised, and men are referred to as elders when their children have been circumcised.<sup>28, 31</sup> Male circumcision is considered essential for becoming a full member of society among the Meru in Kenya,<sup>13</sup> in Bendel State, Nigeria, and in rural Guinea-Bissau and Senegal.<sup>27, 48</sup>

Niang et al. highlight the importance of male circumcision as a way of reinforcing masculinity, as the prepuce is considered to represent femininity. In addition, male circumcision is seen as a means of balancing the life cycles of men and women, male circumcision being considered equivalent to the loss of virginity in women.<sup>27</sup> Most notably, however, male circumcision is perceived as "the source of new social relations"<sup>27</sup> among ethnic groups in rural Guinea-Bissau and Senegal, the bonds between men circumcised in the same group being considered closer than those to their parents.

Male circumcision is also of high social importance in relationships with women, who are reported as actively influencing men's decisions as to whether or not to be circumcised. In Lagarde's study in South Africa, 13.1% of traditionally circumcised men reported partner request as a reason for circumcision.<sup>22</sup> As for the traditionally circumcising Xhosa people, Crowley et al. state that "no self-respecting Xhosa girl would marry a Xhosa male unless he had submitted to the Umkhwetha (circumcision ritual)".<sup>50</sup>

Religious dimensions to male circumcision are indicated by Niang et al. Circumcising male adolescents and young men is done to show commitment to God and to offer a blood sacrifice to the ancestors and the earth.<sup>27</sup> A study from South Africa reports on beliefs that not being circumcised is a cause of misfortune.<sup>45</sup> On a philosophical level, male circumcision involves a symbolic relationship to dying, initiation rites representing "symbolic death, through pain and isolation from society, from which springs new life and rebirth as a new being, a man".<sup>51</sup>

Van Gennep classified male circumcision as a rite of passage into a three-stage process of transition: separation from normal society, followed by a period of transformation, and finally reintegration into a new social role.<sup>52</sup>

Different theories regarding the origins of circumcision are proposed by anthropologists. Some see its roots in the beginnings of cultivation and settlement around 15 000 years ago, gradually spreading to other communities. Others believe that there were independent origins in different cultures.<sup>53</sup>



Why the practice evolved is not clear. The fact that most tribal cultures assign “circumcision seasons” to the ritual could be interpreted as male circumcision originating from a fertility rite, developed as a sacrifice to the gods in exchange for a good harvest.<sup>53</sup> In the Bungoma District of Kenya, for example, circumcision takes place every other year after the main harvest.<sup>29</sup> Among the Balante in Guinea-Bissau and Senegal, circumcision ceremonies are held every four to six years; circumcision is performed in the rice fields, symbolizing reverence to their ancestors and Earth.<sup>27</sup> Other theories include male circumcision as being a religious rite of personal sacrifice and as a way of marking God's children from ungodly nations (or, in different contexts, marking slaves and defeated warriors after battles).<sup>54</sup> More recently, male circumcision was also a response to anti-masturbation hysteria of the late 1800s.<sup>53</sup>

## 4.2.2 Description of the ritual

Describing the main features of the ritual around traditional male circumcision, as it is variously practised, authors distinguish three phases: preparation leading to the actual procedure of male circumcision, followed by a period of seclusion and then the reintegration of the initiates into society.<sup>31,55</sup> The three-stage process of transition described by van Gennep starts with separation from society.<sup>52</sup> However, the preparation of the initiates seems to play an important role in some communities.

### 4.2.2.1 Preparation

The preparation of the initiates comprises physical, social and spiritual dimensions.

- **Physical:** the penis is prepared for circumcision in order to be able to retract the foreskin easily at the moment of circumcision. This might consist of massaging or opening the tissue covering the glans of the penis, by the boy himself or by his mother or grandmother.<sup>27</sup>
- **Social:** the initiate's family is responsible for preparing him for pain and other challenges that he may face during the circumcision procedure.<sup>27</sup> In some ethnic groups, animal sacrifice, e.g. slaughtering a bull, is also part of preparing for circumcision,<sup>28,29</sup> and in some tribes extensive feasts take place the night before circumcision.<sup>28,56</sup>
- **Spiritual:** the initiate is prepared by ritual baths for spiritual protection, as the period of circumcision is said to be one of great vulnerability to evil spirits. A symbolic renewal of family ties by visiting members of the extended family and announcing the coming event is meant to be similarly protective.<sup>27</sup> In Zambia, the “makishi”, representing the deceased ancestors who have returned to protect the boys and their communities, go from village to village to announce the event.<sup>56</sup> Among the Babukusu of Kenya, initiates used to be secluded for up to six months before circumcision.<sup>29</sup>

### 4.2.2.2 Circumcision

Initiates are usually circumcised before sunrise. How they endure the procedure is seen as reflecting their upbringing. In order not to be a disgrace to their families, they are expected to act stoically and tolerate the pain of this anaesthesia-free procedure without flinching.<sup>9,29</sup> Set phrases may be used shortly before or during the circumcision, which help to reduce the tension between the circumciser and the initiate, as well as helping the boy to know when to expect pain. Among the Serer in Senegal, the circumciser asks for forgiveness from the boy, who answers “I forgive you”.<sup>27</sup> Xhosa males in South Africa have to shout “I am a man” at the time of being cut.<sup>9,36</sup>

#### 4.2.2.3 Seclusion

The retreat/seclusion camp constitutes the most significant part of the ritual, in terms of time (varying from a few weeks to two months duration, for example in Zambia,<sup>56</sup> Senegal, Guinea-Bissau,<sup>27</sup> and South Africa<sup>9</sup>) and with regard to the sociocultural meanings and practices attached to the procedure.

Niang et al. refer to the time after circumcision spent in seclusion as an “incubation period” for new attitudes, practices and behaviours of the initiates,<sup>27</sup> critical for the transmission of cultural knowledge. In practice, this is more a school of hard knocks than a period of joy, the boys often experiencing privations, bullying and humiliation. This is likely to be a remnant of traditional practices when circumcision was closely linked to “toughening, training and initiation of male adolescents into warrior status”,<sup>31</sup> with challenges during the time of retreat reflecting ones that the boys would have to face in their future lives, the purpose of the retreat being to prepare them emotionally to be able to cope.<sup>9,27</sup>

Education on adolescent sexual and reproductive health can also be part of learning during the retreat<sup>27</sup> but this is not necessarily part of the ritual in all communities practising circumcision. In Zambia, for example, where the essence of traditional male circumcision is said to be the development of the boys’ character, sexual education is not included in the teaching following circumcision.<sup>56,57</sup> According to a traditional nurse interviewed for a South African case study, the educational aspect of the initiation rite has fallen away in 95% of the cases in Eastern Cape Province.<sup>9</sup> In Malawi, however, counselling on sexuality, genital hygiene and good behaviour reportedly takes place during the period of seclusion after circumcision.<sup>42</sup>

Various messages are transmitted during the period of seclusion.

- Sexual reserve and control<sup>27</sup> are encouraged in some settings; for example, initiates in Senegal and Guinea-Bissau are told that “if they resume sexual relations before waiting a long time, their foreskins will grow back again, and they will have to undergo a new, even more painful circumcision”.<sup>27</sup>
- Sexual education and guidance concerning marriage and relationships with women used to form part of the education “in the bush” in the Eastern Cape Region in South Africa<sup>9</sup>. Promiscuity is taught as something that “boys” do<sup>58</sup> (in contrast to “men”) and initiates are tutored by elders on sexual hygiene<sup>30</sup> and the ways of manhood.<sup>50</sup>
- Totally different messages are transmitted by peer education in other ethnic groups. For example, among the Kikuyu in central Kenya, newly circumcised boys are advised to prove their manhood by having sex shortly after the procedure. According to myths, early post-circumcision sex, “kwihura mbiro”, literally translated as “cleaning the soot”, enhances wound healing and prevents illness and death, and boys are encouraged by older males to have sexual intercourse within three months after circumcision.<sup>59</sup> Some of the 140 Meru boys interviewed for another Kenyan study expressed the belief that “if one does not have sex soon after circumcision, the penis will remain soft forever”.<sup>13</sup>

#### 4.2.2.4 Reintegration into society

Following the period of seclusion, reintegration into society is generally accompanied by festivities that welcome back the initiates. Among the Balante in Guinea-Bissau and Senegal, the process of reintegration takes six days and consists of activities such as ritual baths and being given a new name. However, in order to demonstrate their newly learnt resistance to sexual attraction, they are not allowed to have sex with their wives during the first six days.<sup>27</sup> Among the Bukusu in southern Kenya the end of the retreat is characterized by burning the sleeping mats and spending a night around a large fire, where young women join the initiates.<sup>31</sup>

### 4.2.3 Variations in the ritual

Although male circumcision is an integral part of the ritual of coming of age in some communities, separation in place or time may occur between the performance of male circumcision and the initiation period. A range of possible combinations has been recorded.

Male circumcision may be carried out in a clinical setting, with initiation being performed traditionally, either before or after circumcision. Anecdotal reports of this pattern are available for a group in Botswana, who go through the initiation ceremony at a traditional initiation school and are then brought to hospital in town for circumcision to be performed.<sup>31</sup> Of the participants in another study in Botswana, 51% felt that medical male circumcision should be linked to traditional initiation practices.<sup>34</sup> South Africa is said to be another country where arrangements are sometimes made for circumcision in hospital by a male nurse, with subsequent immediate return of the circumcised boys to the bush for the traditional initiation activities.<sup>9</sup> Interviews done through the radio and print media in South Africa suggest that there is considerable community support for medical male circumcision, as long as it is combined with traditional initiation.<sup>51</sup> Ngalande refers to the Yao in Malawi, who have their sons circumcised at health facilities; they then participate in traditional ceremonies in their communities.<sup>42</sup> Circumcision may be undertaken at an urban health centre, and initiation is carried out in the bush during a stay in the village some time later.<sup>27</sup>

Although in South Africa the preference is to conduct male circumcision at the same time as the initiation ritual, there are ways to integrate already circumcised men into the initiation ceremony by making a small cut into the person's chest, instead of circumcision.<sup>45</sup> Another review, reflecting practices in South Africa, reports that it is especially mothers who advocate for this kind of "fragmentation" of the ritual because they are afraid of the severe adverse effects associated with male circumcision performed by traditional providers.<sup>51</sup> Traditional fragmentation seems to be practised by the South African Sotho and Pedi tribes, among whom initiation occurs one to five years after traditional circumcision.<sup>31</sup>

Tanzania seems to be one of the few countries where male circumcision is carried out by traditional circumcisers on adolescent boys but is not followed by a period of seclusion.<sup>10</sup>

It is worth noting that the initiation of boys (and girls) is practised by East and Southern African groups who do not practise male circumcision. The Luo in Kenya, for example, remove the six lower front teeth of their children as a rite of passage. In Swaziland, initiation ceremonies were revived by King Sobhuza in the Twentieth Century, with age-related "regiments" (age-related groups by which society is traditionally structured) playing an increasingly important role in Swazi society.<sup>60</sup> In such societies it may be possible to use established societal structures as an entry point for improving adolescent male sexual and reproductive health, as well as introducing male circumcision, through liaising with these "regiments".

Traditional male circumcision practices may also be adapted to "modern life", as described by Bailey et al. for Bukusu families in Kenya, who try to schedule circumcision around the school calendar. Boys undergo the procedure during the winter break (July/August) and have their initiation ceremony during the Christmas holidays.<sup>29</sup>

### 4.3 Community involvement in traditional male circumcision

Community involvement before, during and after traditional male circumcision is strong, with different roles ascribed to different players, who include families, teachers, traditional circumcisers and traditional carers. Traditional circumcisers are not the only people in contact with initiates while they are at the circumcision school (Table 3).

Table 3. Community involvement in male circumcision

Who is involved	In which ways
Initiates	Expected to tolerate the procedure without showing any weakness <sup>27,29</sup> Expected to obey while at the circumcision lodge <sup>9</sup>
Fathers	<b>Nigeria:</b> Decision-makers regarding when to circumcise sons <sup>48</sup> <b>Kenya:</b> Pay reparations to circumcisers according to “misdoings” of sons while still boys; provide sons with rules of conduct after initiation <sup>31</sup>
Women 1. As mothers 2. As partners	1. Separation from mother is essential for symbolism of dying and rebirth <sup>27,61</sup> 2. Influential in the decision-making process of men for male circumcision <sup>22,45</sup>
Uncle/relatives	<b>Kenya:</b> Among the Bukusu, it is the maternal uncle of the initiate that provides a bull to be slaughtered on the day before circumcision <sup>29</sup>
Elders	<b>Eastern Cape, South Africa:</b> Consultation process before agreeing to take a boy for circumcision, advice on traditional circumciser, when to carry out the ritual etc. <sup>62</sup>
Master of circumcision (Senegal/Guinea-Bissau)	Selected from among the elders of a village to supervise the procedure <sup>27</sup>
<b>Traditional circumciser</b> <b>Eastern Cape, South Africa:</b> called “iingcibi”; role of traditional circumciser handed down from generation to generation <sup>9,36</sup> <b>Ghana:</b> “wanzam” <sup>10</sup> <b>Nigeria:</b> “olula” <b>Zambia:</b> “chikenzi” <sup>56</sup>	Carries out the circumcision, no medical training but likely to have had training from other traditional circumcisers
Traditional healer	<b>Eastern Cape, South Africa:</b> protects initiates and traditional circumciser from evil spirits; <sup>36</sup> supervises traditional circumciser or carries out circumcision himself <sup>51</sup> <b>Gauteng, South Africa:</b> used to attend emergencies post-circumcision (but this no longer happens) <sup>45</sup> <b>Zambia:</b> rubs protective medicine and clay on boys before circumcision <sup>56</sup>
<b>Traditional nurse/ teacher</b> <b>Eastern Cape, South Africa:</b> “ikhankata”, elected by community, <sup>63</sup> “izichwe” <sup>50</sup> <b>Senegal/Guinea-Bissau:</b> male and female “botal” <sup>27</sup> <b>Kenya:</b> male and female guardians	Responsible for postoperative wound care, diet, exercise and rest <sup>9</sup> Male botal: postoperative wound care, sexual education, transmission of masculine values <sup>27</sup> Female botal: food and water supply Consistent with traditional guardians in Senegal/Guinea-Bissau <sup>31</sup>
Lodge guardian / overseer <b>Tsonga (Mozambique):</b> boys circumcised in previous season <sup>31</sup>	Supervises initiates, serve instructors <sup>31</sup>

### 4.3.1 Secrecy

A high level of secrecy is associated with the ritual of male circumcision, not only making research into this centuries-old initiation ceremony very difficult<sup>51</sup> but also leading to a low level of knowledge about what exactly happens during initiation among community members, who are prohibited from discussing this topic. Talking about experiences in the bush camps to uncircumcised men or to women is taboo among the Xhosa in South Africa,<sup>9,30</sup> and this serves as a mechanism of control to distinguish traditionally circumcised men from those who are non-circumcised or medically circumcised.<sup>9</sup>

Access to the circumcision lodge is restricted to initiated persons. It is taboo to women among the Tsonga in Mozambique and the Nyaneka in southern Angola, although the Bukusu in Kenya reportedly involve female guardians at the seclusion huts.<sup>31</sup> Female “nurses” are also responsible for food and water supply in Senegal and Guinea-Bissau.<sup>27</sup>

Married women are excluded from all contact with initiates in Xhosa culture. This requirement persists even if there are complications after traditional circumcision that require hospital admission, when it is virtually impossible to guard the initiates from contact with the predominantly female nursing staff.<sup>51</sup> This is why Mayatula et al. hold that circumcision in hospital, performed by a male nurse with immediate transferral to the traditional cultural setting, guarantees the maintenance of the traditional rules of no contact with women better than traditional methods that might subsequently require hospital admission because of complications.<sup>51</sup>

## 4.4 Trends in acceptability of traditional male circumcision and changes of practice

Studies have been conducted to assess the acceptability of introducing male circumcision services in traditionally non-circumcising communities in Botswana, Kenya, Malawi, South Africa, Swaziland, Tanzania, Uganda, Zambia, and Zimbabwe.<sup>8</sup> Given the variety of ethnic groups practising traditional male circumcision and the general lack of research focusing specifically on attitudes towards it, it is difficult to know how relevant the findings of these studies are to the acceptability of traditional circumcision. However, the people interviewed were generally most concerned about pain, cost and safety, which might indicate that traditional circumcision would be less acceptable since pain is a key feature of traditional male circumcision and there is growing awareness about significant complications associated with traditional procedures.

In order to assess people's preferences for traditional male circumcision, studies have quantified differences across generations in the choices that people make between traditional and medical providers of circumcision, in order to assess how cultural practices change over time.<sup>47,48</sup> In a Nigerian study, 92% of the 280 adults interviewed were circumcised by a traditional circumciser, but they reported that only 62% of their 1417 children had undergone the procedure in a traditional way.<sup>48</sup> Similarly, a South African study asked 316 males aged 14–24 who were still to be circumcised if they would prefer to have the procedure done in a clinical or traditional setting; 146 (46%) wanted to be circumcised in a hospital or clinic.<sup>45</sup> Bailey et al. asked participants in their study in Kenya whether they would choose a different way of being circumcised, after having experienced either traditional (N=441) or clinical circumcision (N=557). Similar proportions of men in both groups (~15%) said that they would opt for the alternative provider, with only 0.8% in the traditional group and 0.2% in the medical group saying that they would not circumcise their sons; the overall conclusion for this specific tribal group was that it is not acceptable not to be circumcised (Table 4).<sup>29</sup>



Key determinants of adherence to traditional circumcision for cultural reasons described in the available literature include the following.

#### 4.4.1 Rural versus urban settings

This determinant was identified in studies from Senegal and Nigeria,<sup>27, 47</sup> although the authors did not explore other confounding variables such as level of education, accessibility of medical services, or the integrity of the sociocultural systems in the different settings. A study from South Africa that reported a low prevalence of traditional male circumcision in an urban setting explains this as being attributable to the fact that “traditional circumcision is rooted in the ancestral land. Should this cultural link be weakened, circumcision is either performed in a medical setting or not at all”.<sup>45</sup>

#### 4.4.2 Awareness of complications

Lack of awareness of complications has been reported to be a strong influencing factor for keeping to traditional practice,<sup>47, 64</sup> despite potentially severe adverse outcomes. For example, a South African study reported that 67 of 100 randomly selected subjects in the Eastern Cape, where there is much traditional male circumcision, said that they were not aware of any risks associated with the practice, despite evidence to the contrary.<sup>63</sup> However, there is clearly significant variation even within countries, since a sample from Gauteng Province, South Africa, showed quite different perceptions: 82.5% of 108 men (three quarters of whom had been circumcised traditionally) were aware of the risk of death during traditional male circumcision, and 67.6% were concerned about the possibility of becoming infected with HIV through traditional circumcision.<sup>22</sup>

Lack of awareness of possible complications as a determinant of adherence to traditional circumcision is questioned by a South African study, which reported that parents, although knowledgeable about complications of male circumcision performed by traditional circumcisers, did not have a say when it come to deciding about the circumcision of their adolescent children.<sup>45</sup> A recently published study reporting attitudes towards traditional male circumcision in the rural Eastern Cape Province, South Africa, indicated that as many as 70% of 192 participating initiates expected complications to occur after circumcision,<sup>65</sup> yet they still opted for traditional circumcision.

#### 4.4.3 Cost of circumcision

In Sudan and Nigeria the higher cost of accessing circumcision services through the formal health sector was an important reason for using traditional circumcisers.<sup>66, 67</sup> However, in South Africa, Kenya, Zambia and Malawi, people opted for medical circumcision to avoid the costs associated with the festivities related to traditional circumcision.<sup>29, 42, 44, 45</sup> Paying for male circumcision services at health facilities was not perceived as a barrier by the traditionally circumcising Lunda and Luvala in Zambia, as they had always been used to paying for having the procedure done by traditional circumcisers.<sup>44</sup>

#### 4.4.4 Accessibility of medical services

This was reported as being important by traditionally circumcising groups in Zambia.<sup>44</sup>

#### 4.4.5 Societal norms over time

These may partly explain regional variations between different ethnic groups. The origins of the tradition of circumcision in Africa are not known. Historically, out of the four language groups found in Africa (Afro-Asiatic, Nilo-Saharan, Niger-Kordofanian and Khoisan), male circumcision is universal today only among the North African Afro-Asiatic tribes. Bantu speakers are a subgroup of the Niger-Congo language and were traditionally circumcising, whereas their Western-Nilotic neighbours, the Luo, do not circumcise. The Masai, an Eastern Nilotic subgroup, also traditionally circumcise.<sup>31</sup> Indigenous Southern African tribes such as the Bushmen and Hottentots in Namibia are traditionally non-circumcising.<sup>68</sup>

The non-circumcising belt, a chain of countries in East and Southern Africa with low levels of male circumcision, comprising Uganda, Ruanda, Burundi, Tanzania, Zambia, Malawi, Zimbabwe, Swaziland, Botswana, Namibia, and the Natal Region in South Africa, seems best explained as a result of the abandonment of a practice that was previously common.<sup>31</sup> However, the reasons for abandoning traditional male circumcision differ: for most of the ethnic groups in Malawi, Zambia, and Zimbabwe the abandonment of male circumcision is said to date back to prehistoric times, whereas non-circumcising communities in southern Zimbabwe and parts of South Africa abandoned the practice much more recently. Thus in South Africa the Zulu leader, Shaka Zulu, commanded the abandonment of male circumcision in the early nineteenth century because it incapacitated men in times of war. In Botswana, male circumcision was stopped under the influence of Western missionaries, probably because of concerns about men gathering together and the possibility of uprisings.<sup>34</sup>

There are trends in traditionally circumcising countries such as Kenya, Nigeria, and South Africa towards opting for clinical male circumcision services in order to be modern.<sup>29, 45, 47</sup> Chagga men in Tanzania are also reported to opt for medical circumcision nowadays, typically getting circumcised with friends at a hospital when in their late teens.<sup>31</sup> Participants from traditionally circumcising communities in Lukobo's study in Zambia also expressed a preference for medical circumcision.<sup>44</sup> Similarly, one South African study reports respondents expressing the view that traditional male circumcision is "old-fashioned and not a practice for a modern man".<sup>45</sup>

In contrast, traditional male circumcision as a "coming of age" ceremony is still of great importance for some ethnic groups, including the Xhosa and Sotho in South Africa,<sup>51</sup> the Chope and Bitonga in Mozambique, the Lunda and Luvale in Zambia, the Tiv in Nigeria, and 40 out of the 43 ethnic groups in Kenya (the Kikuyu being a major one). For these groups, adherence to traditional male circumcision is likely to be motivated by the desire to continue ethnic traditions, something that was stated as being important by 43% of men in a south Nigerian study<sup>48</sup> and by 63.6% of 62 men circumcised in a traditional setting in South Africa.<sup>22</sup>

Belonging to an ethnic group that traditionally circumcises adolescent boys can even lead to forced circumcisions, e.g. among the Yao in Malawi, the Lunda and Luvale tribes in Zambia, and the Bagishu in Uganda.<sup>19, 33, 44</sup> Among the Xhosa in South Africa, boys face major social pressure to undergo the ritual,<sup>41</sup> uncircumcised boys suffering from bullying and beatings.<sup>50</sup> For Xhosa males, circumcision is a "cultural imperative",<sup>9</sup> an absolute condition for achieving manhood. Stigmatization, not only of uncircumcised boys but also of those circumcised in hospitals (particularly because of the use of anaesthesia and the avoidance of pain, which is considered to be a central aspect of the traditional ritual) limits the freedom of choice regarding circumcision among the Xhosa with regard to both whether to be circumcised and by whom.

#### 4.4.6 Extensive substance abuse

Extensive substance abuse involving alcohol and other drugs in the traditions of the circumcision bush camps in parts of Kenya have led to the perception of traditional male circumcision as being unhealthy and harmful.<sup>49</sup>

Table 4. Overview of studies on acceptability of traditional male circumcision

Country; Author; Year	Study population; Data collection methods	Ethnic composition; Circumcision status of participants	Outcome assessed	Findings relevant as to acceptability of traditional male circumcision
Botswana; Kebaabetswe; 2003	605 participants (mean age 29 years); Survey	29 different ethnic groups, 25% reportedly circumcised (median age at circumcision 13 years)	Acceptability of male circumcision in Botswana	59% of males circumcised: Culture and tradition = reason to circumcise; 51% of all participants preferring MMC (n = 542) want safe MC to be linked to traditional practices such as "bogwera"
Kenya; CMMB; 2007	Representatives of regional Faith-based organisations (FBOs) from Kenya, Lesotho, Malawi, Swaziland, Tanzania, Uganda, Zimbabwe, Zambia; Conference report	Not applicable	Role of FBOs in providing MC for HIV prevention and as entry point to adolescent sexual and reproductive health (ASRH)	Kenya: Stigma of MMC successfully reduced through some programmes, MMC hampered due to high importance of TMC in others; meetings with >2000 traditional circumcisers conducted Lesotho: Adolescents preferred initiation schools Zambia: Long-standing collaboration with traditional surgeons
Kenya; Brown; 2007	24 FBO programmes offering MC and sex education; Evaluation	Not applicable	Assessment of current MC teaching programmes of FBOs in Kenya	Some aspects of traditional teaching around TMC (male responsibility) still valued by modern Kenyan health youth educators, others (violence against women, early sexual activity) considered outdated
Kenya; Bailey; 2006	1007 boys (79.8% <15yrs, 20.2% >16yrs); Quantitative and qualitative study and clinical examination	Babukusu boys	Assessment of safety of MC; rates, types, severity and causes of adverse events	84.1% of boys circumcised by traditional provider (85.6% circumcised by medical provider) would not choose a different provider
South Africa; Peltzer; 2008	192 initiates, O.R.Tambo district, Eastern Cape (mean age 18.7 years; years of education 8.1 (mean)); Survey and clinical examination	Presumably Xhosa males, pre-post MC	Feasibility of safe TMC	72.9% "extremely satisfied" with body appearance post-circumcision, 18.8% quite satisfied
South Africa; Meel; 2005	100 males (10–65 years), Eastern Cape; Survey	Presumably Xhosa, circumcision status of study participants not assessed	Assessment of community perception of TMC	67% unaware of risks associated with TMC, 16% not sure about any risks; 63% in favour of traditional surgeons, 13% preferred medical practitioners, 24% had no opinion

Table 4. Continued

Country; Author; Year	Study population; Data collection methods	Ethnic composition; Circumcision status of participants	Outcome assessed	Findings relevant as to acceptability of traditional male circumcision
South Africa; Mogotlane; 2004	24 Xhosa initiates, 5 key informants; Qualitative study (FGDs and key informant interviews)	Xhosa	Causes of morbidity; mortality among traditionally circumcised Xhosa boys	41.6% of initiates did not inform their parents before enrolling at an initiation school; initiates (percentage not reported) not satisfied with condition of initiation school
South Africa; Rain-Taljaard; 2003	723 young men (14–24), 606 men (13–59); Qualitative and quantitative survey	Sotho, Tswana, Xhosa; Self-reported circumcision status 36%	Description of MC practices, assessment of acceptability	Reasons for MC at initiation schools: tradition, value of moral and ethical lessons; reasons against TMC: associated with humiliation, complications, expensive; most female respondents against TMC for their children because of complication rates
South Africa; Lagarde; 2003	784 participants, 61.5% males (mean age of males 21 years, of females 19 years); Survey	Sotho, Tswana, Xhosa, Zulu; self-reported circumcision status 22.4% (64.8% circumcised at initiation schools)	Prevalence of MC, associated factors and acceptability of MC for HIV prevention	Reasons for MC: 63.6% tradition, 15% medical, 13.1% partner request; 50.8% planned to become circumcised in the future; 68.5% of circumcised males thought pain bearable for an adult (46.3% thought it bearable for a child); 82.4% thought death and 67.6% thought HIV infection can result from TMC; MC proves manhood (72.2%), respect from peers (76.9%) and women (68.5%); old-fashioned (70.4%)
Zambia; Lukobo; 2007	~300 men and women (18–75 years); FGDs	Lunda, Luvale, Lamba, Tonga	Assessment of knowledge and beliefs about MC for HIV prevention, acceptability of MMC	Participants from Zambezi, where MC done by traditional providers, preferred MC to be done by medical practitioners

## 5 Complications associated with traditional male circumcision

Horrifying stories about the life-threatening outcomes of traditional male circumcision make the headlines in various countries every year.<sup>43</sup> WHO/UNAIDS have not yet explicitly taken a position or made recommendations on traditional male circumcision but have made it clear that safety of the procedure is of paramount importance.<sup>2</sup>

### 5.1 Prevalence of complications

Despite general public awareness, it is very difficult to assess the prevalence of complications of traditional male circumcision because the number of males traditionally circumcised is not known in most countries.<sup>50</sup> DHSs have included one question on male circumcision status (“Are you circumcised?”) in recent reports from 21 African countries. However, the data collected do not allow any conclusions to be made about the proportion of males traditionally circumcised. A more detailed set of questions, including coverage of age at circumcision, circumcision provider, reasons for circumcision and complications of circumcision, has been asked in Burkina Faso and Mozambique, and details were published in the report on Burkina Faso, where the prevalence rate of traditional male circumcision was 50%.<sup>16</sup>

Another difficulty in evaluating the safety of traditional male circumcision is the fragmentary documentation of complications.<sup>29, 69, 70</sup> For example, Israel, a country with universal neonatal circumcision, but also having considerable experience with adult male circumcision, has only recently passed legislation regulating the recording of complications associated with male circumcision.<sup>71</sup> In traditional African societies, which frequently operate in the absence of official written records, self-reported data are often the only source of information.<sup>9</sup>

Not surprisingly, very few studies systematically report on complication rates of traditional male circumcision among adolescents, the only study specifically designed for this purpose being in Kenya, where complications of clinical vs. traditional male circumcision were assessed.<sup>29</sup> The findings were alarming both for complication rates after traditional circumcision (35%) and for those after clinical circumcision performed by people without adequate training, materials or supervision (as high as 17%<sup>27</sup> versus 1.7% in the Kisumu trial<sup>5</sup>). A review of hospital records of admissions for complications following traditional circumcision in the Eastern Cape, South Africa, found a complication rate of 2.7% among 10 609 initiates in June 2005, with no difference in fatality rates between legal and illegal initiation schools.<sup>30</sup>

### 5.2 Etiology of complications

#### 5.2.1 Age-group-related

One of the reasons why there are higher rates of complications of male circumcision in adolescence/adulthood as compared to neonatal circumcision relates to the age-related changes of the foreskin in males, including the physiological development of the prepuce. From an embryological point of view the mucosa of the glans penis and the inner layer of the prepuce are fused, and separate gradually over the years.<sup>72</sup> Only 4% of neonates have a fully retractable foreskin.<sup>73</sup> While non-separation of the prepuce is not uncommon in children and teenagers, full separation of the glans and prepuce is present in 95% of adolescents by the age of 17 years.<sup>72, 74</sup> With age, vascularization of the foreskin also increases, the lamina propria being a highly vascularized tissue.<sup>72</sup> This explains the haemorrhagic complications that occur with MC in adolescents as opposed to the reduced relative risk in neonates, in whom the prepuce is still poorly supplied with blood.



### 5.2.2 Circumciser-related

Traditional male circumcision in young people is most commonly performed as a rite of passage into manhood by traditional circumcisers without any formal training.<sup>9,51</sup> Most of the countries where male circumcision is traditionally carried out do not have a national policy on health standards relating to traditional male circumcision. There are therefore no processes for training, certification or supervision.

However, experience in South Africa indicates that effective implementation of the legislation regulating traditional male circumcision practices is difficult,<sup>30</sup> despite it having been in place since 2001 with the aim of controlling hygienic standards and defining a code of conduct for traditional circumcisers. On the other hand, a study from the Comoros (a country without a policy on male circumcision) showed a strong impact of training workshops aimed at developing basic surgical skills one month ahead of the circumcision season, on complication rates of male circumcision done traditionally by surgical aides or nurses.<sup>75</sup>

A lack of formalized training can, in some cases, be outweighed by experience, as shown in an Iranian study where complication rates of male circumcision were assessed according to the medical qualifications of the circumcisers. Highest complication rates were found among paramedical persons, followed by general practitioners and paediatricians, and not, as might be expected, among traditional circumcisers.<sup>64</sup> These findings contrast with those of a Turkish study which assessed the incidence of complications performed by unlicensed traditional circumcisers under non-sterile conditions and compared this with complication rates from male circumcision carried out in hospital by urologists: the complication rates were 85% for the out-of-hospital group and 2.5% for the in-hospital group.<sup>76</sup> However, the complication rates reported in these studies refer to childhood circumcision and may not be fully applicable to circumcision among adolescents. Bailey's study in Kenya also demonstrates very clearly how the outcome of the procedure varies with a range of factors. For example, delayed wound-healing, both in those circumcised traditionally and those circumcised medically by untrained and unsupervised health workers, was much higher than had been anticipated on the basis of the findings of the RCT of male circumcision carried out in Kisumu, where 99% of over 1000 participants were fully healed at thirty days.<sup>77</sup>

In general, little is known about traditional systems of training for circumcisers operating on adolescents. Bailey et al. report that the traditional circumciser of the Bukusu in Kenya is usually accompanied by an assistant who will become a circumciser in the future.<sup>29</sup> Being a traditional circumciser for the Xhosa people in South Africa is a role handed down from generation to generation.<sup>9</sup>

Traditional circumcisers are most commonly blacksmiths/shoemakers in Guinea-Bissau,<sup>27</sup> village elders in Kenya,<sup>29</sup> village doctors or traditional birth attendants in Nigeria,<sup>47</sup> and village doctors in Zambia.<sup>56</sup>

Traditional control mechanisms, which aim to maintain standards among traditional circumcisers (e.g. not to use the same blade for several boys, to have the necessary experience before carrying out the procedure, and not to consume alcohol during the circumcision session<sup>30</sup>), seem to have lost their efficacy in some settings. Whereas traditional circumcisers used to be overseen by the elders of a community, it is said to have become easy to claim to be a traditional circumciser.<sup>9</sup> In the past few years, increased concerns have been expressed about the emergence of young, inexperienced, bogus traditional circumcisers. Rather than trying to do their job well, they are primarily interested in making money in the name of tradition and, more importantly, in risking the lives of young people. Promoting male circumcision in communities where the practice is not traditional might have the undesirable effect of creating job opportunities for such fraudulent people.<sup>9,30,43</sup>

### 5.2.3 Method-related

Studies have been conducted in countries where traditional circumcision is prevalent, e.g. Kenya, on the feasibility of carrying out male circumcision in medical facilities in resource-poor settings.<sup>77,78</sup> Krieger et al. concluded that by using techniques employing equipment available locally (e.g. not using electrocautery, since this is not available in all clinical settings in resource-poor settings) it is possible to have complication rates that are no higher than those reported from developed countries.<sup>77</sup> However, Mattson et al. concluded that none of the participating health facilities in their survey of resource-poor settings had the necessary instruments and supplies to perform the procedure safely.<sup>78</sup>

In rural areas where there is very limited access to formal health services, people will continue to rely on traditional providers.<sup>66</sup> There have been few assessments in such settings to determine if supplying traditional circumcisers with surgical instruments (e.g. sterile blades, dressing materials and surgical gloves), in conjunction with training, could potentially reduce complications such as severe wound infections, which may be related to the variety of non-sterile instruments and dressing materials that are used (sea shells,<sup>15</sup> razor blades,<sup>47</sup> household knives,<sup>37</sup> scissors,<sup>47</sup> glass fragments, self-made devices,<sup>79</sup> eucalyptus leaves,<sup>68</sup> warm milk, fresh cow's urine or mildewed dung<sup>28</sup>).

Even within geographically confined areas there is great variability in traditional operation methods, giving different results on the completeness of removal of the prepuce (and therefore having variable protective effects against HIV).<sup>24</sup>

The usual procedure, modified in the context of different rituals, is as follows.

- **Preparation**
  - » of the penile skin: usually by washing the penis in cold water;
  - » of instruments used for circumcision: this varies, and may include the use of boiling water; hot water and soap, cold water; or no cleaning;<sup>47</sup>
  - » of the traditional circumciser: in general no information is available, although in the one study where this is described there was no hand disinfection/washing.<sup>36</sup>
- **Application of different circumcision techniques resulting in:**
  - » complete removal of the foreskin;<sup>48,50</sup>
  - » retention of parts of the foreskin, e.g. the tag of foreskin that is left after male circumcision using the so-called buttonhole technique, traditionally used by the Masai;<sup>28</sup>
  - » an untouched prepuce, except for a small incision, reported for Lesotho.<sup>80</sup>

Although limiting the removal of foreskin is associated with a decreased risk of excessive bleeding, it is also likely to be associated with decreased protection from HIV.

- **Wound care**

Various materials are used for wound coverage in order to enhance haemostasis (e.g. ashes of burned wood, smoke from a fire made with eucalyptus leaves, herbs<sup>36</sup>) and prevent infection (e.g. penicillin powder, herbal materials,<sup>63</sup> fresh cow's urine, mildewed dung<sup>28</sup>); bandages consist of animal hides or leaves.<sup>36</sup> There is no routine of suturing the wound.

Anaesthesia is not used for traditional male circumcision, as an ability to deal with pain and the preparedness to undergo suffering are regarded as important components of the coming-of-age ceremony.<sup>29,36</sup>

### 5.3 Types of complications

Various kinds of adverse events following traditional male circumcision have been reported. However, there is very little published literature available. There are also limitations in the literature, particularly for comparative purposes, because definitions of reported adverse events are not standardized.<sup>70</sup> “Bleeding”, for example, is listed as a complication following traditional male circumcision by all authors. However, criteria for reporting haemorrhage are not consistently defined. While one study includes mild, moderate and severe bleeding within the category “serious haemorrhage” (only 10% of the cases in this study had profuse bleeding),<sup>79</sup> others do not report bleeding unless it requires the administration of intravenous fluids<sup>29</sup> or when it is so severe that it is not manageable by pressure bandage and requires suturing.<sup>76</sup> This lack of standardization may be one factor that explains the great variability in the reported frequency of adverse events.

Reports on complications also differ regarding the time frame of adverse events, i.e. whether they are early or late complications. Although most of the studies referred to in this review were of sufficiently long duration to record long-term sequelae of traditional male circumcision,<sup>64,76</sup> not all of them report on longer-term complications.

Self-reported data may be affected by poor recollection of minor complications and may be influenced by different levels and expectations of health-seeking behaviour. In some cultural contexts, death, the most serious negative outcome following circumcision, may be accepted as a sign that the initiate was not meant to achieve manhood.<sup>50,81</sup> In such settings it is imaginable that complications compatible with life may not be taken very seriously. Furthermore, most self-reported data on traditional male circumcision are not based on representative samples.

Muula et al. carried out a systematic review of complications of male circumcision, although most of the studies included in the review reported on male circumcision carried out by medical personnel. In virtually all of the studies the majority of complications were of minor clinical significance.<sup>70</sup>

With traditional male circumcision, adverse events are often reported at higher levels of severity and frequency. Lifelong damage and even death may be attributed to the practice.<sup>15,29</sup> However, in a sample of 24 directly observed circumcisions in adolescents in Kenya (12 by health workers who lacked training and supervision, and 12 by traditional circumcisers), the medical circumcisions did not result in appreciably fewer adverse events than the traditional ones, and the severity of adverse events was similar in both groups. Alarming, delayed wound-healing was reported for both groups (none of the subjects had fully healed 30 days after the operation), although delayed healing in the traditional group was more pronounced (twice as likely not to have healed at 62 days). Serious sequelae in the traditional groups were persistent swelling, extensive scarring and loss of erectile function.<sup>29</sup> Self-reported data from a South African study also indicate similarities between medical and traditional circumcision in respect of healing time.<sup>22</sup>

Table 5. Overview of most common acute adverse effects of traditional male circumcision in adolescents

Potential acute adverse events associated with traditional methods of MC	
Acute adverse events	Possibly resulting in
Excessive bleeding Dehydration Septicaemia Tetanus	Death
Wound infection Haematoma formation Deep cutting Gross oedema	Delayed wound-healing
Gangrene	Loss of penis
Lacerations of penile/scrotal skin Injury to the glans (partial/complete amputation)	Mutilation
Pain	Psychological trauma

Table 6. Potential sequelae resulting from traditional methods of circumcision

Mild	Severe
Incomplete circumcision	Problems with urinating caused by fibrosis
Excessive removal of the foreskin	Loss of penile sensitivity
Unsatisfactory cosmetic outcome	Loss of erectile function
Mild torsion of the penis	Pronounced torsion of the penis

Adverse events/late complications of traditional circumcision that are listed in the scientific literature are based on hospital records or are self-reported (Table 7).

Table 7. Complication rates according to type of complication

Hospital records	Self-reported
Excessive bleeding (0% Bailey; 1.6% Magoha; 45.5% Oezdemir; 23.8% Atikeler)	Excessive bleeding (45–52% Verit; 1.6% Myers; 26.3% Lagarde)
Serious wound infection (42% Bailey; 26% Magoha; 17.7% Oezdemir; 14.25% Atikeler; 100% Crowley)	Serious wound infection (8–17% Verit; 0.08% Myers; 4.2% Lagarde)
Septicaemia (2% Magoha; 67% Crowley)	
Complete/partial amputation (10% Magoha; 1% Oezdemir; 0% Yegane; 75% Crowley)	Complete/partial amputation (0.08% Meissner; 1.6% Sidley; 6.3% Lagarde)
Death (0.2% Meissner; 2% Magoha; 1.4% Atikeler; 9% Crowley)	Death (4.5% Sidley; 0.001% Myers)
Foreskin remaining (11.6% Bailey; 3.6% Yegane; 11.79% Atikeler)	

The figures from hospital records refer to the frequency of adverse events per number of hospital admissions for complications following traditional circumcision, and thus do not represent complication rates on a population level. Sample sizes range from 45 patients admitted for complications post-circumcision<sup>50</sup> to more than 3000 schoolboys examined by physicians outside the hospital for late complications of male circumcision.<sup>64</sup>

For some of the adverse events, the following explanatory models were provided.

- High risk of haemorrhage attributable to the fact that sutures were not used. The hypothesis also exists in South Africa that excessive bleeding is caused by intake of alcohol (for pain relief) by Xhosa and Sotho initiates before the operation.<sup>51</sup>
- Dehydration is one of the main causes of mortality, often in conjunction with septicaemia, usually the result of liquid restriction following the circumcision as a further test of the initiates' toughness.<sup>48</sup> The origin of this practice, nowadays illegal in South Africa, presumably lies in an attempt to limit urination, which is painful during this early postoperative stage.<sup>9</sup>
- Delayed healing secondary to very deep and extensive cutting, which cuts off the blood supply to the coronal sulcus.<sup>29</sup>
- Gangrene resulting from tight bandages that constrict blood circulation (traditionally believed to enhance wound healing).<sup>50,51</sup>
- Keloid scarring/granuloma formation, which may be exacerbated by the use of penicillin powder for wound care.<sup>29,64</sup>

A concerning aspect of male circumcision which is unrelated to the surgical procedure itself is the use of violence to reinforce the teaching that is carried out during the period of seclusion.<sup>9</sup> Beatings with a leather whip are said to be common amongst the Xhosa of the Ciskei, and occasionally this may be sufficiently severe to give rise to crush syndrome, with renal failure.<sup>50</sup> Apart from these life-threatening effects, physical punishment as a way of reinforcing instruction may influence adolescents' ideas about what it is like to be a man, promoting social norms of masculinity that result in an increased inclination towards violent behaviour, with repercussions on women's and men's sexual health.<sup>58,82</sup>

Another "risk factor" in traditional male circumcision is the mass circumcisions conducted by some ethnic groups in Africa and the Eastern Mediterranean Region. Although there are no studies from Africa or for traditional circumcisers, a study in Turkey showed a complication rate of 15.7% in boys medically circumcised using a mass circumcision strategy, compared with 3.8% among boys who were circumcised individually. It was concluded that even in a hospital setting, it was difficult to provide enough sterile equipment and conditions for a safe mass circumcision.<sup>79</sup>



Table 8: Overview of studies on complications of traditional male circumcision

Country; Authors; Year	Study population; Data collection methods	Outcome assessed	Findings relevant as to safety of TMC
Kenya; Bailey; 2006	1007 boys, mostly aged between 10 and 16, 44.2% circumcised traditionally; Interviews, direct observation, clinical examination	Assessment of safety of MC; rates, types, severity and causes of adverse events	Complication rates: 35% (traditionally circumcised), 17.7% (medically circumcised)
Kenya, Nigeria; Magoha; 1999	50 patients (age not specified), 80% circumcised by traditional provider (7 individually, 33 mass circumcised); Prospective study on hospital admissions after TMC	Assessment of MC practices and complications	Complication rates based on 50 cases admitted, 7/50 (14%), loss of penis;glans through gangrene;amputation
Philippines; Lee; 2006	114 Filipino men, low-income to middle-income population, Catholic, 68.4% circumcised by traditional provider; Survey (Sampling through snowball technique)	Assessment of men's experience of ritual circumcision and reasons for MC	59.6% recalled wound infection post MC, 64.5% pain
South Africa;Peltzer; 2008	192 initiates (mean age 18.7) examined at day 14 after TMC; Quantitative study, clinical examination	Feasibility of safe TMC	Complication rates per adverse outcome: mild delayed wound healing 20.8%; mild wound infection 16.2%; mild pain 10.5%; incomplete circumcision 10.4%
South Africa; Meissner; 2006	Hospital admission records related to 10 609 initiations done in 2005; Review of health data from Department of Health, Eastern Cape	Assessment of extent of botched circumcisions during 2001–2005	Mortality rate in 2005 ~0.2%, causes of death
South Africa; Lagarde; 2003	482 men, age 19–29, self-reported circumcision status 22.4%, 64.8% circumcised at initiation schools; Survey	Prevalence of MC, associated factors and acceptability of MC for HIV prevention	Complication rates per adverse outcome: severe pain 42.6%, mild pain 34.3%, bleeding 26.3%, penile injury 6.3%, local infection 4.2%. Adverse outcomes per setting: pain 60.5% (clinical) vs. 85.7% (traditional); any complication 25% (clinical) vs. 47.6% (traditional), no difference in reported healing time (median 3 weeks) according to setting
South Africa; Mogotlane; 2004	24 initiates, 5 key informants; Qualitative study	Causes of morbidity; mortality among traditionally circumcised Xhosa boys	Type of complications: "evil spirits", pain, infection
South Africa; Crowley; 1990	45 males, mean age 21.5yrs, mean time after TMC 18 days, with septic circumcision admitted to urological department; Retrospective study	Non-quantitative review of complications after TMC	Type of complications reported: Penile injury (93.3%)!mostly caused by inadequate dressings (too tight for too long), severe dysuria, mortality (9%)
Turkey; Oezdemir; 1997	220 patients, 85% circumcised by traditional provider, age not specified (children;adolescents); Retrospective and prospective analysis over 10 years	Comparison of serious complications between MC within and outside medical institutions	Complication rates per adverse outcome (serious bleeding 45.5% vs. 2.2% (MMC), serious infection 17.7% vs. 1.3% (MMC), ischaemia;necrosis 9% versus not reported (MMC), urinary retention 3.6% vs. 0.3% (MMC))

## 6 Consequences with regard to HIV of particular practices around traditional male circumcision

The recent focus on male circumcision as a medical intervention to reduce the transmission of HIV could give a boost to traditional practices and practitioners. They may feel that there is now wider recognition of the value of this practice that they have been carrying out for centuries, and that the men who have already been circumcised by them are protected against the acquisition of HIV. However, male circumcision as a rite of passage into manhood has not been designed for the purpose of HIV prevention, and there are certain aspects of the practice that could undermine the potential benefits of male circumcision for HIV prevention, or even put people at increased risk of contracting HIV.

### 6.1 Traditional operation techniques

With regard to HIV prevention, two aspects of traditional surgical methods are of concern.

#### 6.1.1 The amount of foreskin removed through traditional male circumcision and techniques that prolong wound-healing

Traditional male circumcision is not a standardized procedure. There are many traditional circumcision techniques and the amount of foreskin removed varies widely. This has implications for HIV prevention, as only the complete removal of the foreskin is likely to provide effective partial protection.

The Balante in Guinea-Bissau, for example, distinguish between “small” and “large” circumcision, the former meaning an incision in the foreskin, and the latter meaning the complete removal of the prepuce.<sup>27</sup> Techniques used traditionally that result in incomplete or limited removal of the foreskin have been reported from Kenya<sup>24</sup> and Lesotho.<sup>80</sup>

Excessive removal of the foreskin, on the other hand, as well as deep cutting, as reported for traditional male circumcision among the Bukusu in Kenya, can lead to delayed wound-healing. No subject was found to be fully healed by 30 days post-circumcision in the Kenyan study by Bailey et al., and 24.1% of young men had still not healed by a median of 47 days after traditional circumcision.<sup>29</sup> In men who have been recently circumcised the protective effect of male circumcision is likely to be undermined if sex is resumed before complete wound-healing.<sup>2,3</sup>

#### 6.1.2 Multiple use of instruments used for cutting

Regarding the instruments used by traditional circumcisers, there are differences even within specific ethnic groups. In some cases traditional circumcisers use a single blade to circumcise all the boys<sup>31,36,51,59</sup> and in others they use one knife per child.<sup>31,56</sup>

In addition to the possibility of higher complication rates when mass circumcisions are carried out, there is concern about the potential for HIV transmission in the context of mass circumcisions when one blade is used for several boys, some of whom may have had sexual intercourse before the procedure and may already be HIV-positive.<sup>9,36,83,84</sup>

## 6.2 Cultural practices associated with traditional male circumcision and age at circumcision

Questions of culture are delicate, and, when cultural practices are being assessed, generalizations often hide as much as they elucidate.

One prominent factor affecting young people's behaviour after traditional male circumcision, potentially having repercussions for HIV transmission, is the custom of having sex "with a lady who has an experience of having sex with a number of men" ("kwihura mbiro").<sup>85</sup> The women concerned, who provide proof of manhood to the adolescents, may be more likely to be HIV-positive, and therefore the men are more likely to become infected if their circumcision wound is not fully healed. Of 42 males interviewed in Murang'a District, Kenya, 47.6% reported yielding to peer pressure and being involved in sexual activity soon after circumcision, 26% within three months or less of being circumcised.<sup>59</sup> Of the 445 males circumcised traditionally and followed up by Bailey's study in Bungoma district, 6.3% had had sex by a median of 48 days after circumcision.<sup>29</sup> A significant proportion of the respondents in the study by Lagarde in South Africa reported sexual activity during the wound-healing time.<sup>22</sup> The resumption of sexual activity before full healing of the wound is of concern for the health of both the men who have been circumcised (especially regarding their susceptibility to HIV infection) and their sexual partners if the men are HIV-positive.

The results of a recent trial assessing HIV transmission by circumcised men to their female partners was stopped due to the smaller than expected numbers of serodiscordant couples enrolled. Although the trial was unable to determine whether there is a direct HIV benefit for women, a tendency for increased HIV infection in female partners of HIV-positive men at 6 months post-circumcision was found, although this was not statistically significant.<sup>86</sup> It was suggested that this was mostly attributable to the resumption of sexual activity, primarily by cohabiting couples, before the "certified healing time" (i.e. before complete wound healing had been confirmed by medical personnel). There are no data in the literature reviewed on whether the end of the traditional period of seclusion coincides with full healing of the wounds of initiates.

Regarding the effectiveness of traditional circumcision for the prevention of HIV, the fact that it is performed after sexual debut in some tribes compromises the potential benefits.<sup>33</sup>

## 7 Experiences from adolescent male circumcision programmes

Promoting the uptake of male circumcision services among adolescents, a group of the population with whom health services generally have little contact, provides an opportunity not only to reinforce HIV prevention messages but also to contribute to adolescent boys' sexual and reproductive health, and even to adolescent health more widely.

Consensus exists that male circumcision service delivery needs to be more than the "removal of the foreskin", and should be promoted within a basic package of services, including HIV testing and counselling, active exclusion of symptomatic STIs and treatment where required, provision and promotion of male and female condoms, and counselling on risk reduction and safer sex.<sup>10</sup>

An augmented package of interventions to be implemented with male circumcision services has also been suggested,<sup>80</sup> including the following.

1. **Information** on a range of related topics including genital anatomy and physiology, hygiene, male circumcision, risk reduction, sex, sexuality and pleasure, safe sex, STIs, contraception and service availability.
2. **Skills**, including those related to gender norms, healthy relationships, respecting women, practising the 'ABC' of HIV prevention, avoiding alcohol and substance abuse, and strengthening health-seeking behaviours.

This augmented package of male circumcision services focuses on additional public health issues of importance to male adolescents, such as gender-based violence, gender socialization and sexual and reproductive health. However, the benefits of implementing this expanded package have yet to be evaluated.

### 7.1 Expected outcomes and strategies

Both the basic and the augmented packages that could be implemented at the time of male circumcision of adolescents aim at least to provide safe circumcision with no risk compensation regarding attitudes and behaviours, including condom use. Different strategies have been explored in East and Southern African countries, where male circumcision is the norm and is mainly carried out by traditional providers.

One approach has been to attract adolescents (and their parents) towards male circumcision carried out in medical facilities, by offering a low-cost, low-risk and low-pain alternative to the traditional procedure, and, at the same time, maintaining the sociocultural values attached to the coming-of-age ritual. This is done by keeping the boys for one to three weeks post-circumcision for instruction on health, adolescence-specific topics, religion, culture and society.<sup>49</sup> Another approach has focused on strengthened collaboration with the traditional sector by carrying out training for traditional circumcisers and traditional nurses.<sup>65</sup>

## 7.2 Selected examples

### 7.2.1 Initiatives of collaboration

#### 7.2.1.1 South Africa

→ “Isiko loluntu” [*rite of passage*] in the Makana District, Eastern Cape.<sup>9</sup>

This initiative was developed by members of the local Department of Health, working with traditional nurses and circumcisers operating in the district. It has achieved a very effective regulation of traditional circumcision, no circumcision-related deaths having been recorded in the district since its inception. Moreover, by way of partnership between the government and traditional circumcisers, sexual education, including HIV/STI, and teaching on issues of sexual safety and responsibility, have been added to the traditional content of teaching in the initiation schools.

The coordinating body of “Isiko loluntu” adopted a structure of self-regulation for the association. Traditional circumcisers and nurses in the district have to be registered, and unauthorized personnel are reported to the health authorities. There are sanctions in place for members who do not comply with rules on alcohol consumption during circumcision seasons, fixed-pricing structures or performance of the circumcision. Training and workshops, mainly on HIV awareness, are provided by the members of “Isiko loluntu”.<sup>9</sup>

→ “Impilo ya Bantu” [*health of the people*], Eastern Cape Province.<sup>65</sup>

This community outreach organization was founded by Dr Xola Kanta and colleagues, who have trained more than 300 traditional circumcisers and traditional nurses. The five-day training includes modules on the anatomy and physiology of male sex organs, safe circumcision, infection control, HIV/STI, postoperative care, management of common complications, nutrition and fluid management, and sexual health education, among others (the training manual, comprising eight sections, was written by Dr Kanta<sup>87</sup>). Traditional circumcisers and nurses were also provided with a surgical kit, containing surgical blades, scalpel handles, latex hand gloves and sterilization instruments.

A study assessing the impact of training on the safety of circumcision in a sample of 192 initiates attending initiation schools run by these trained traditional circumcisers and nurses, found that 85% of the initiates interviewed after circumcision reported the use of gloves by the traditional circumcisers when performing circumcision, 69% reported the use of gloves by the traditional nurses when caring for them, 53% had been circumcised with the traditional *assegai*, and 47% had been circumcised with a surgical blade or knife.<sup>65</sup> However, there were relatively high rates of complications of moderate clinical significance (20.8% mild delayed wound-healing on postoperative day 14; 16.2% mild wound infection). It was concluded that a five-day training for traditional circumcisers and traditional nurses was “not sufficient”, and that further training was needed both for the surgical procedure and for the promotion of cognitive, attitudinal and behavioural changes among the traditional circumcisers.<sup>65</sup>

A shortcoming of both of these initiatives was the absence of a monitoring and evaluation component to record changes in the initiates’ attitudes and behaviours after they had received sexual and reproductive health education in the initiation schools.



### 7.2.1.2 Zambia

#### → CHAZ-MC programme

The Christian Health Association of Zambia (CHAZ) does not explicitly exist to provide HIV prevention interventions. However, from the brief description in the literature, it appears that there has been interaction with traditional circumcision, with no circumcision-related surgeons since the late 1980s in the North Western Province, targeting AIDS education and infection control.<sup>10</sup>

### 7.2.1.3 Ghana

#### → PROMETRA and the Ministry of Health

The association for the Promotion of Traditional Medicine (PROMETRA), Ghana, has carried out training for traditional healers, traditional birth attendants and traditional circumcisers.<sup>86</sup>

## 7.2.2 Programmes combining medical circumcision in hospitals with an adapted “modern” version of the traditional seclusion period

### 7.2.2.1 Kenya

#### → Adolescent male circumcision programmes carried out by faith based organizations (FBOs)

Of the estimated 300 000 boys circumcised in 2006 in Kenya, around 12 000 (4%) participated in faith-based organizations' male circumcision programmes.<sup>49</sup> More than 30 different adolescent circumcision programmes were identified, and information was collected on 24 of them. Although more than half of the 24 programmes reviewed (58%) served fewer than 100 boys annually, 33% served several hundred and 8% served over 1000 per year.<sup>49</sup>

A common feature of most of these programmes is a major teaching component following hospital circumcision (usually about one week of education on health, life skills, and religious and cultural issues). This is done in keeping with the traditionally circumcising communities' expectations of behavioural change at the time of circumcision, and the desire of the adolescent boys to be taught.<sup>13,88,89</sup> In keeping with accepted traditions, these programmes adhere to male-only care throughout the operation and the period of instruction.<sup>13,80</sup>

Table 8 provides an overview on the Chogoria Hospital's programme, the oldest in Kenya, and those of the Inter-Christian Fellowship Evangelical Mission (ICFEM), the Presbyterian Church of East Africa (PCEA), and the Lay Training Centre Programme. The latter two were selected for review because they served more than 1000 boys in 2006.

Table 9. Adolescent male circumcision programmes in Kenya (adapted from Brown's report on teaching activities in Kenya for 2006<sup>49</sup>)

Programme		Topics taught			
Sponsoring organization; province, district (ethnic groups)	Teachers and teaching materials	Health component	Adolescent development component	Religious component	Culture and society
PCEA Chogoria Hospital; Eastern province, Meru South (Meru, few Embu and Kikuyu)	Church leaders Chiefs Local leaders Peer counsellors  20-page booklet: "Climbing to Manhood", covers some of the topics	Good mental health Malaria STIs HIV (available services, opportunistic infections) Substance abuse and alcohol	Changes and choices Relationships with parents, friends, girls Stress and stress management	Christian maturity What does it mean to be a Christian man?	Violence What does it mean to be a traditional man? Requirements of the law Community expectations Meru traditions
MCK Kaaga Synod Men's Fellowship; Eastern province, Meru Central (Meru, some Kikuyu, Luo, Luhya)	Trained counsellors Pastors Local leaders Meru elders Medical personnel  No teaching materials available	Health issues	Abstinence	Christian maturity	Responsible manhood Meru tradition
ICFEM; Western province, Bungoma (Luhya)	Health workers Respected community leaders and elders Church leaders	HIV STDs		Biblical principles Character Spiritual life	Community responsibility
PCEA Lay Training Centre, Kikuyu (Surgery at PCEA Kikuyu Hospital); Central province, Kiambu (Kikuyu)	Pastors Teachers Clinical Officers Counsellors Specialists  20-page manual covers most of the topics Boys and girls are taught	Emphasis on chemical dependence Female reproductive system Human sexuality STDs HIV	Life skills Adjustment in secondary school Home as a school Stress Self-esteem Pornography in schools Girls Relationships with parents, girls	Spiritual initiation  Christian integrity	What is a rite of passage? African traditional values Leadership formation Female abuse Adulthood Manhood Womanhood Lesbianism

What impact did these programmes have?

→ **Climbing into Manhood Programme at Chogoria Hospital**

Education methods during the seven-day period of seclusion on the hospital grounds included the use of peer group discussions, videos, educational board games, youth magazines and an evaluation meeting with those who had participated in the planning and teaching. Eight months after completion of the first programme, a post-intervention discussion was attended by 24 of the 50 young men who had been invited through random selection from the circumcision register. Increased knowledge about HIV and sexually transmitted infections, and improved self-efficacy in resisting peer pressure compared to baseline were reported. A recent study assessing the evidence for the effectiveness of programmes engaging men and boys in sexual and reproductive health graded the level of impact of the Chogoria Programme as “medium” (attitude change but no behaviour change), with unclear overall effectiveness.<sup>90</sup> No long-term evaluation is available.

→ **Methodist Church of Kenya (MCK) Kaaga Synod Programme**

The “period of seclusion” spans 21 days in this programme. Because of a lack of funds there has been no follow-up on attitude or behaviour change after male circumcision. However, anecdotal reports on the programme are instructive regarding the stigma that may be associated with medical male circumcision when this is done under anaesthesia. In the past, in traditionally circumcising communities, those who had undergone the procedure in a traditional setting tended to stigmatize those who had been medically circumcised. However, within the MCK programme area there are now more men circumcised by medical providers, and this has led to a significant decrease of stigmatization of those circumcised in health facilities.<sup>80</sup>

→ **Inter-Christian Fellowship Evangelical Mission (ICFEM)**

Since its inception in 2002, no evaluation studies have been published on the ICFEM project. Reportedly, ICFEM is increasingly trying to link with the public health services for the performance of male circumcision, in order to create a more sustainable and continuous service.<sup>80</sup> Meetings were organized with over 2000 traditional male circumcisers, 600 of whom eventually endorsed the idea of male circumcision being carried out in hospitals and became part of the referral system while retaining their cultural support. Loss of income is said to have been the major reason for traditional circumcisers wanting to adhere to the practice.<sup>80</sup> Another success is a spillover from the non-circumcising Teso communities in the neighbouring districts, leading to the provision of male circumcision for members of this traditionally non-circumcising community.<sup>80</sup>

→ **PCEA Lay Training Centre Programme**

No evaluation studies on this programme have yet been published.

None of the programmes described above appear to have offered HIV testing to the adolescents circumcised.

Evidence from interventions in other contexts focusing on changing attitudes and behaviours among adolescents, in terms of HIV/STI prevention and decreasing gender-based violence, by addressing gender norms, show the potential of consistent behavioural change through educational sessions. Such interventions should comprise 10–16 educational group sessions of 2.5 hours if they are to be effective.<sup>90,91</sup> Moreover, integrated programmes using more than one educational strategy, e.g. group education and/or community campaigns and/or mass media campaigns and/or individual counselling, have been shown to be more effective than those focusing on a single educational strategy.<sup>90</sup> As to the teaching content, knowledge-only transmission reportedly has little impact on attitudes and behaviour, whereas participatory sessions, connected to real life as well as skill-building activities were reported to be effective.<sup>90</sup>

#### 7.2.2.2 Lesotho

##### → CHAL-MC Programme

The Christian Health Association of Lesotho (CHAL) offers male circumcision services, including messages on broader adolescent sexual and reproductive health, but not in the context of a post-circumcision period of instruction. Local traditions constitute a major barrier to the successful implementation of clinical male circumcision. Whereas cultural practices play a minor role in urban areas, adolescents' adherence to traditional initiation schools in rural areas makes it difficult for alternative programmes to generate demand. Moreover, the traditional technique of male circumcision consists of an incision in the foreskin. This makes it difficult to promote male circumcision when this is defined as the complete removal of the foreskin, which is necessary for protection against HIV.<sup>80</sup>

## 8 Conclusions

Male circumcision, a centuries-old ritual in the context of culture and religion, provides partial protection for males against contracting a comparatively new infection, HIV.<sup>3-5</sup> The focus of public health interventions to introduce male circumcision as part of a comprehensive strategy for HIV prevention has been on safe and effective medical male circumcision. However, in most African countries where there are currently high rates of male circumcision, this is mostly carried out by traditional circumcisers without any formal training. The role and safety of traditional circumcision will therefore have to be addressed and included in the development of national policies focusing on HIV prevention and male circumcision.

The data on the prevalence of traditional male circumcision remain inadequate. Questions on male circumcision status have only recently been included in national DHSs. However, data collection on male circumcision is likely to be hampered by the fact that a high percentage of men do not know their own circumcision status and, in many cultures, by there being no word for the specific surgical procedure of male circumcision outside the context of a rite of passage to becoming “initiated” or “a man”.

There are no set age limits for male circumcision as a rite of passage into manhood, although the majority of males are circumcised when aged between 12 and 22 years, sometimes after sexual debut. Traditional male circumcision continues to be an important practice in many African societies, but constitutes only one part of ritual initiation into manhood. The high level of secrecy surrounding the ritual means that detailed information on traditional male circumcision in different ethnic groups is mostly absent from the literature.

Trends towards medical circumcision have been observed in some traditionally circumcising East and Southern African communities, implying that reconsideration of traditional practices is taking place and that there is a readiness to opt for circumcision services provided through the formal health system if they are safe, low cost and do not infringe cultural expectations. However, in other traditionally circumcising groups it seems clear that communities are less willing at present to accept medical circumcision in the place of traditional practice.

Considering the variations of practices of different ethnic groups in East and Southern Africa, and the different ways that traditionally circumcising and non-circumcising communities coexist, relate to or, more frequently, ignore each other, there is a need for a country-by-country approach to further explore traditional male circumcision. There is little evidence as to how certain circumcision techniques create higher or lower rates of complications following traditional male circumcision. Expectations also vary widely: traditional circumcisers in Kayunga District, Uganda, report that they are surrounded by community members holding sticks and stones who are prepared to kill the circumciser if he makes a mistake during the operation,<sup>40</sup> whereas circumcision-related deaths are accepted as fate in other cultural contexts.<sup>81</sup>

Concerns about the effectiveness of traditional male circumcision in the context of HIV prevention relate to the following points:

- Different circumcision techniques, resulting in considerable variations in the amount of foreskin removed through traditional male circumcision; the partial protective effect seen in the randomised controlled trials is only likely with complete removal of the foreskin.
- Cultural practices such as mass circumcisions with one cutting instrument for all participating boys, or the practice of having sex shortly after circumcision at a time when the wound is not fully healed.
- Traditional male circumcision is often carried out after sexual debut, when young men may have already been exposed to sexually transmitted diseases, including HIV.



Few examples were identified of attempts to work with traditional circumcisers. Engaging with traditional providers of health care is frequently treated with reserve among medical health professionals who question the motivation, validity and integrity of traditional practices and practitioners. This may be partly because of the absence of regulatory bodies and standards governing traditional practices in most of Africa. Alternatively, it may be because of difficulties in implementing and monitoring existing legislation, which makes it easy for “fly-by-night” providers to involve themselves in and profit from these practices, while damaging the reputation of traditional providers of health care in general.<sup>92</sup>

There is very little information on the backgrounds and the traditional systems of training and monitoring of providers of traditional circumcision. There is also very little information on the existence of traditional circumcisers' associations, or on successes or limitations of cooperation with traditional circumcisers at the local, district or national levels.

The potential role of traditional circumcisers or other community members traditionally involved with the ritual around male circumcision, as counsellors on HIV and other sexual and reproductive health-related issues, has not yet been fully explored. There have also been insufficient efforts to evaluate group education for adolescents on HIV/STIs and sexual and reproductive health issues in the context of the traditional period of seclusion following male circumcision.

Involving civil society, community leaders and traditional circumcisers through consultations on traditional male circumcision will be important for informing decisions on whether and how to work with traditional circumcisers and other community members involved with such circumcision in countries or regions of countries. At the district level, mobilization meetings of all stakeholders involved with male circumcision in traditional settings should be held in order to bring together representatives of the formal and traditional health sectors. Defining common objectives and initiating trustful relationships will be vital for the successful exchange of information at community level.<sup>3,93</sup>

## 9 Recommendations

Despite the limitations of self-reported circumcision status, more detailed questions, such as those asked through DHSs in Burkina Faso and Mozambique, should be routinely included in DHS surveys. Gathering more accurate information on age at circumcision, circumcision provider, reasons for circumcision and complications of circumcision will serve as important starting points for a more in-depth situational analysis.

More detailed formative research on specific traditional operation techniques, as well as traditional practices surrounding the ritual of male circumcision, can only be done on a country-by-country or even district-by-district basis. Considering the variety of different practices that exists, research should focus on creating a good understanding of what is common across different ethnic groups and what is different, and on specific details relevant to HIV prevention (and possibly broader sexual and reproductive health issues), making it clear that the research is not attempting to demystify either a centuries-old practice or the culture associated with it.

Research should be guided by a respectful dialogue with traditional leaders. At the same time as aiming to better understand the specifics of certain communities, it should also attempt to explore the conditions under which cultural leaders would be ready to promote change of practices, such as circumcising children at a younger age (before sexual debut) or conducting male circumcision at health facilities with initiation implemented in the traditional way.

Answers to the following key questions are considered essential with regard to HIV and other sexual and reproductive health issues of young people.

### → Which techniques are traditionally used for cutting?

What instruments are used for traditional male circumcision, for how many boys, and how are they sterilized? This has implications for general hygiene and the risk of transmission of HIV through the practice.

Is there an association between certain operation techniques and rates of complications after traditional male circumcision? How effective are certain traditional operation techniques in respect of HIV prevention? This is likely to be influenced by the age when the boys are circumcised (before or after sexual debut), the amount of foreskin that is removed, and the advice they are given on sexual activity following circumcision.

There is also a need to better understand who are the “traditional circumcisers”, since there is often a mix of people providing circumcision in communities, ranging from genuine traditional circumcisers to health workers without specific training, facilities or supervision, to quacks motivated by monetary gain.

### → Who is responsible for the after-care of initiates at circumcision schools?

Most of the complications following circumcision are assumed to be caused by a lack of knowledge about wound care and the management of postoperative complications such as septicaemia and dehydration (the latter more often being related to what happens during the period of seclusion than to the operation itself).

### → What information is provided to the initiates?

How prominent is the educational component during the period of seclusion among different traditionally circumcising groups, what information/messages are provided to the initiates, and would cultural leaders and traditional circumcisers embrace the integration of teaching on HIV and sexual and reproductive health after circumcision? Who among those community members traditionally involved in the ritual (traditional teachers, traditional circumcisers, traditional nurses, elders, etc.) could most appropriately be assigned to this task?

### → Attitudes of traditional circumcisers

What do cultural leaders and traditional circumcisers think about the importance of retaining the traditional way of performing the ritual vs. the potential benefits for their communities of changing aspects of the practice, e.g. by providing the operation in medical facilities to decrease complications, or stopping the practice of having sex shortly after circumcision in order to decrease the likelihood of HIV acquisition or transmission?

### → Assessing complications

It is necessary to obtain better estimates of immediate and long-term rates of complications following circumcision. A standard reporting format should be developed and used for any quantitative research on complication rates after traditional male circumcision in order to ensure better comparability between different study populations (the Sample Male Circumcision Adverse Event Form proposed in the WHO/UNAIDS/Jhpiego Surgical Manual for Male Circumcision<sup>94</sup> could provide a good basis for this purpose).

Based on the different “scenarios” that exist between and even within countries, different levels of collaboration will be feasible and can be considered for policy recommendations on a country-by-country basis.

## 1. Increase dialogue and understanding

To many communities in Africa, male circumcision is not new. Traditional circumcisers have been carrying out male circumcision as part of an initiation ritual for centuries and are providing services for many people. The lack of information on certain aspects of traditional male circumcision, a practice that is common and widespread, is often attributable to a lack of dialogue between providers of health care in the formal and informal sectors. Initiating dialogue on the practice of traditional male circumcision in an inclusive and respectful way, through joint meetings of all stakeholders involved with male circumcision, both traditional and medical, including meetings during the opening festivities for the ritual, will likely be important for building trust and establishing a relationship with traditional providers.

In addition to the benefits of male circumcision in the context of HIV prevention, and for potentially improving broader sexual and reproductive health of young people, male circumcision provides an opportunity to continue reducing the gap between traditional health practitioners and health workers in the formal sector.

Experience in the adolescent male circumcision programmes of FBOs demonstrates the potential of well-functioning and socioculturally sensitive medical male circumcision programmes to create demand for medical male circumcision by populations that practice traditional circumcision. However, as of 2006, only 4% of the boys who were circumcised in Kenya were circumcised through such programmes. Since there is limited capacity in the formal sector to meet the existing demand for male circumcision in traditionally circumcising communities, it will be necessary to develop innovative approaches and effective communication with the traditional circumcisers who are already close to and accepted by these communities.

## 2. Improve practices through training, collaboration and regulation

Increased communication efforts will help to prepare the ground for collaborative initiatives on the level of policy formulation and regulations on standards of practice, as well as training to adapt operation techniques, general hygiene procedures and the establishment of cross-referral systems between traditional circumcisers and health workers in the formal sector. These could include feedback mechanisms on the status (early versus late presentation) of patients admitted to health centres or hospitals for complications after circumcision, patients referred for traditional initiation and wound care after medical male circumcision, and the provision of supplies through health centres for traditional male circumcision, e.g. gloves and blades.

Different levels of collaboration are conceivable and have been realized in the following settings

- a) Training of traditional circumcisers in general hygiene and infection control.
- b) More in-depth training of traditional circumcisers on hygiene, infection control, HIV prevention, anatomy, safe operation techniques, wound care after circumcision, and existing national regulations on male circumcision. With this approach it is important to assess the key elements for effectively training traditional circumcisers/nurses, such as the duration of training, supportive supervision, the evaluation of training materials and the involvement of the community (e.g. by involving traditional leaders in advocating for the use of sterile instruments and hygiene practices by traditional circumcisers).<sup>65</sup>
- c) The rationale of training traditional circumcisers involves not only improving the safety of traditional circumcision but also capitalizing on traditional practices so as to reach out to male adolescents with messages on HIV prevention and broader sexual and reproductive health education. In this context, involving the community will be crucial to identifying who, in addition to the traditional circumciser himself, can be involved in providing information to the initiates, i.e. who are the most appropriate people to facilitate interactive sessions that go beyond imparting, in a one-directional way, what it takes to be a man. Guidance should be developed on evidence-based approaches to using traditional male circumcision as an entry point for adolescent sexual and reproductive health.

Collaborative initiatives should take into consideration different national legal frameworks. South Africa is one of the few countries with legislation that has been specifically designed to regulate the practice of traditional male circumcision.<sup>9</sup> However, in line with the Strategy for African Countries on Promoting the Role of Traditional Medicine in Health Systems, adopted by the WHO Regional Committee for Africa in 2000, guidelines for the formulation and implementation of national traditional medicine policies have been developed and adopted by 23 African countries since 2001, a legal framework has been adopted by 18 countries, and a Code of Ethics for Traditional Health Practitioners has been adopted by 13 countries.<sup>95</sup> As traditional male circumcisers are effectively a subspecialty of traditional providers of health care, lessons learnt from working with traditional healers more generally<sup>93</sup> could provide information on how to proceed. This could include: building on other experiences of working with traditional providers of health care when developing national strategies for scaling up male circumcision for HIV prevention; being able to identify genuine traditional health practitioners; and training and creating systems of cross-referral between traditional and formal health services.<sup>96</sup>

Low literacy levels among traditional health practitioners should not be seen as an obstacle to training on health issues. For example PROMETRA, an organization for the promotion of traditional medicine, has developed a curriculum to provide training on HIV for people who are not literate.<sup>97</sup>

Depending on the level of attempted collaboration with traditional circumcisers and existing national policies, guidelines for traditional circumcisers should be developed. A starting point could be an agreement on minimum standards of care,<sup>98,99</sup> which might initiate the process of working jointly with representatives of both the formal and traditional sectors towards guidelines for the training, certification and accreditation of traditional circumcisers.

The formation of traditional circumcisers' associations could be useful in the process of determining the level of partnership between medical and traditional practitioners, in order to ensure that any agreement reached with traditional circumcisers is transparent and achieved through participation.

### 3. Strengthen health systems in order to provide access to people who want medical male circumcision

The strengthening of medical male circumcision services through the provision of affordable, accessible and safe circumcision by the formal health sector provides an alternative to traditional male circumcision. As such services are developed it will be important to include community education and awareness creation so that parents and adolescents are able to make informed choices about which services to access for male circumcision.

It will be important to explore and understand the context-specific decision-making processes that lead to a young man's or boy's choice of circumcision providers. Clearly, in some communities it is the father who takes the decision about the (traditional) circumcision of his child.<sup>48</sup> Parental consent is obligatory for males aged under 21 in South Africa. However, it is also true that boys or young men not living in intact families, or not able to cope with peer pressure associated with the status of being a not-yet-circumcised "boy", do take the decision themselves about when to be circumcised, and by whom.<sup>9,36</sup>

Although excluded from the actual performance of traditional male circumcision and the surrounding practices, women are affected by male circumcision as both sexual partners and as mothers.<sup>100</sup> They play a major role in decision-making processes, whether indirectly through their perceived preference for circumcised men or directly by requesting their partners to become circumcised.<sup>22,30,47,48,50</sup> Women as mothers, although often not traditionally a key influence on decisions taken by their "grown-up" adolescent children,<sup>45</sup> may have their children circumcised "secretly" at a medical facility at a younger age, to fulfil the requirement of tradition and at the same time to ensure that the procedure is done safely.<sup>101</sup>

Providing freedom of choice for male circumcision is thus not only a matter of strengthening health services in the formal sector but also of developing well-tailored information campaigns which can reach decision-makers at the community and family levels.

Where male circumcision is traditionally performed the number of untrained traditional circumcisers is high. It will be a significant challenge to reach out to them with any intervention aimed at improving the safety of traditional circumcision, let alone introducing teaching components on adolescent sexual and reproductive health issues. However, the same is also true for health workers in the formal system who have not yet been trained in performing male circumcision and may not have the capacity for taking on yet another task, given the severe shortage of human resources in this sector.

While the major challenge in terms of HIV prevention is to increase young men's access to male circumcision services in those countries and communities where these are currently not available, consideration has to be given to increasing medical male circumcision services where traditional circumcisers currently work. This is important for improving safety, for strengthening male circumcision as HIV prevention, and for responding to what is a growing preference in a number of traditionally circumcising communities in East and Southern Africa.

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