Whereas male circumcision (MC) had been performed largely for religious purposes before the late nineteenth century, the germ theory of disease led to the belief that removal of the foreskin, which produces smegma, would decrease the risk of infection. Lately, there has been evidence that MC provides some protection from sexually transmitted infections. A statistical analysis of 409 ethnic groups in Africa in the late 1980s demonstrated an association of MC with a decrease in HIV infection and in the early 1990s, traditional healers promoted MC in Africa for preventing sexually transmitted infections.

The shaft of the penis and outer foreskin contain stratified squamous epithelium, its keratinisation being thought to protect from HIV infection. The lack of keratinisation of the mucosal surface of the inner foreskin, containing Langerhans cells with HIV receptors, is likely to promote the acquisition of HIV by uncircumcised men specially with the foreskin being down the shaft of the penis during vaginal sex. Two other biological explanations relate to the presence of genital ulcers and tears in the foreskin. The role of postcoital penile hygiene beyond cleansing with water and soap by using an acidic medium, such as lime or lemon juice, is currently being investigated specially with the possible risk of an untoward outcome from inflammatory damage to HIV target cells.

Besides the biological plausibility and statistical association from observational studies, the protective effect of MC for HIV acquisition has lately been substantiated with more objective evidence from randomised clinical trials. With the finding in 2005 of a protective effect of MC of around 60% for the acquisition of HIV from the trial conducted in Orange Farm, South Africa with support from the Agence nationale de Recherches sur le Sida of France, the results of similar trials in Kisumu, Kenya and Rakai, Uganda supported by the National Institutes of Health of the United States, have been awaited with great interest: the announcement, on 13 December 2006, that the trials in Kenya and Uganda demonstrated protection of the order of 53% and 48% respectively now places the onus on policy makers who needed confirmation that the earlier findings were replicable before any intervention in service delivery.

As a surgical procedure that has long been performed by health personnel, religious authorities and traditional practitioners, MC should be as safe as possible: complications, such as haemorrhage and infection including HIV
transmission and tetanus with unsterilised instruments, can occur and be common when not performed properly. The availability of technical guidance, including procedures for informed consent, as well as surgical instruments, sterilisers and other supplies should be complemented by the training of service providers. Demand for MC is likely to increase and steps should be taken to ensure that appropriate services are available to avoid the situation whereby individuals become desperate and seek the procedure from unskilled practitioners working in unhygienic settings.

It is desirable that preventive health services be provided without user fees: all too often, this principle has not been applied for reproductive health services such as contraception. When MC clients pay a nominal fee for the procedure, the resulting funds could be used to subsidise other reproductive health services, specially for deprived individuals. With this unique opportunity for a reproductive health service targeting male involvement, a much talked about topic lacking a tangible product up to now, certain nongovernmental organisations may be interested to expand their services possibly through a franchising approach to address increased demand.

As half of new HIV infections occur in youth, the timing of MC is crucial: ideally, the procedure should be performed before sexual debut possibly as a rite of passage into adulthood or may be, as a neonatal procedure which is technically much easier and safer although it raises issues pertaining to consent and rights. As those randomised controlled trials did not include young adolescents, epidemiological purists could question the applicability of their results to a younger target group. Furthermore, the conditions that prevail during trials are different from those in routine service delivery and in this case, acceptors could possibly have a different profile. With likely sensational reporting regarding the benefits of MC with the false sense of protection of full immunity, as opposed to modest protection, individuals might consider MC as a substitute for subsequent condom use and other components of comprehensive prevention, thereby leading to disinhibition with risky behaviour undermining earlier acceptance of safe sexual practices. There-fore, there is an urgent need for operational research on the long-term follow-up of cohorts of individuals undergoing MC. Whereas the use of condoms is crucial for HIV prevention, there is the risk that any forceful promotion of MC would lead to replacement of condoms with sole reliance on the surgical procedure. Behaviour change communications should continue to emphasise the consistent and correct utilisation of condoms specially as the loss of integrity of the body, through a surgical procedure with its own complications, may not appealing to a substantial proportion of the population.

There are major ethical issues pertaining to any mass community-wide intervention and the surgical nature of MC services raises other questions. Limited resources have not enabled the incorporation of numerous well-proven interventions into reproductive health services and the diversion of resources to MC could be questioned. Analogies with vaccination and screening programmes, for issues such as consent and mass campaigns, face limitations regarding the irreversible nature of a surgical intervention with its implications for human rights and resources besides associated postoperative complications. By removing healthy tissue that compromises the integrity of the body, MC could be perceived as sexual mutilation through a simple analogy with female genital mutilation which should not only be condemned but possibly be associated with an increased risk of HIV transmission. The role of MC in the acquisition, as opposed to the transmission of HIV, has gender implications. Whereas the results of those trials focussed on the value on MC to prevent HIV acquisition by circumcised men, the risk to
their partners should also be considered: an ongoing trial in Uganda is expected to report on the corresponding risk of male-to-female transmission towards the end of 2007.

With the above ethical issues including human rights, resources and safety, policy makers will have to decide the extent to which MC should be promoted actively as opposed to mere service provision to meet spontaneous demand. With multifaceted values pertaining to culture, religion, tradition and even profession, MC is often controversial with its prophylactic mass intervention being contentious. Beyond substantial protection from sexually transmitted, including HIV, infections, MC also protects against penile cancers, balanitis and phimosis besides cervical carcinoma for female partners. MC initiatives should promote a rights, rather than mandatory, approach by emphasising integration within a package for comprehensive sexual health services that apply the lessons learned from contraceptive services through a voluntary and personal decision for informed choice from a range of safe and effective methods, specially the promotion of condoms for dual protection against unintended pregnancies and sexually transmitted infections including HIV.