

Time for the chop



The world has been offered a rare chance to cut the risk of HIV, if only circumcision can be offered widely and safely.

Helen Pearson

The evidence is now overwhelming: circumcision can have a huge effect on the spread of HIV, cutting risks of infection in African men by about half. Now it's up to the World Health Organisation to decide whether they should advise certain countries to offer circumcision on a massive scale.

Such a move will be hard to implement, expensive and will face many cultural obstacles. But the rare chance to have a real impact on HIV should not be passed up.

Three trials of circumcision have now been cut short as in each case it became clear how much protection the operation provides against HIV. First, in 2005, a trial in South Africa was halted early when it was found that circumcision cut the risk of infection by 60%¹. And this Wednesday, large clinical trials in Uganda and Kenya were also stopped when researchers found that the circumcised men were so well shielded from HIV (with cuts in risk of 53% and 48% respectively) that it became unethical not to offer the practice to the other, uncircumcised group.

If we had a vaccine this good against HIV, people would be falling over themselves to use it.

The idea is all the more credible because biologists think they understand why circumcision works. Cells which are particularly susceptible to HIV cluster under the foreskin. No foreskin, no easy entryway to the body. According to one estimate, male circumcision could avert two million new infections and 300,000 deaths over the next ten years in sub-Saharan Africa². There are hints that the practice may help save women from infection too.

Mass surgery

But the science may have been the easy bit. The question now is whether it is possible to safely scale up the whole process and convince millions of African men to voluntarily sacrifice a shaving from the most precious part of their anatomy.

The mass-introduction of a surgical procedure is virtually unprecedented in public health, and is likely to be difficult. No one wants a repeat of India's disastrous mass sterilization campaign in the 1970s, in which people were strong-armed into sloppy procedures in the name of family planning.

Circumcision is a relatively routine surgical procedure, but skin is nevertheless cut and blood shed. It's not easy to offer clean, safe surgery in poor countries that often lack the equipment or trained personnel — and there are concerns that unqualified people will do the job, increasing risks from bleeding and infections.

Circumcision doesn't come cheaply either: estimates bounce between \$25 and \$500 per person, and that's on top of the investments for clinics and staff. What if some countries just shrug off the whole idea as too expensive or difficult? Support agencies must foot some of the bill and some, like the Global Fund, are already making encouraging noises that they would be willing to do so.

The procedure is also shrouded by cultural and religious practices that could be difficult to transcend.

Weighing the risks

Even so, men were reportedly lining up outside clinics after the results were released from the 2005 South African circumcision trial. Compared with the life-threatening hazard posed by HIV, the small risks of circumcision may seem acceptable. It would be of most use in eastern and southern Africa where circumcision is not widely practised, and where heterosexual sex is the main means by which the disease spreads.

One of the most acute concerns is that the whole thing could backfire: men who choose circumcision could throw other cautionary advice to the wind, believing they are immune to HIV. A small upswing in the numbers of sexual partners or drop in the use of condoms might easily outweigh the benefits of circumcision. Even if the current barrage of health education is ramped up even further, it's difficult to believe that this won't be a major problem.

But it would be tragic to shy away from circumcision just because of these concerns. The World Health Organisation and other public health bodies will review the evidence early next year and decide on policy recommendations.

Of course, if circumcision is really so great, you have to wonder why evolution hasn't rid us of this covering before. Perhaps it provided more useful armour in the time before we donned clothes. Now, swathed in underwear, it has become the kind of clammy crevice that viruses love to lurk in. Faced with HIV, it seems that a denuded penis could save many, many lives.

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References

1. Auvert B., *et al.* PLoS Medicine, 2. e298 (2005).
2. Williams B. G., *et al.* PLoS Medicine, 3. e262 (2006).