

Is Male Circumcision the Key to Stopping the AIDS Epidemic?

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The U.S. is in the midst of a five-year, \$15 billion commitment to fight AIDS in developing countries. Despite that support, and billions of dollars from other sources, the AIDS pandemic continues to blaze. Roughly 4.3 million people were newly infected with HIV last year alone, and an effective vaccine remains a distant dream.

A radical new method to prevent the disease would offer hope to millions—and some believe that method has been found. Three large medical studies recently showed that male circumcision is a potent HIV preventative for men. That has raised a controversial question: Should U.S. taxpayer money be spent to circumcise men overseas? CFR Senior Fellow for Global Health Laurie Garrett posed this question to U.S. Global AIDS Coordinator Mark Dybul and New York City Health Commissioner Thomas Frieden before an audience of roughly 100 health and business leaders at the Council.

What ensued was, said Garrett, “a most unusual foreign policy discussion.” It was also a very serious one. Ambassador Dybul announced publicly for the first time that the U.S. would commit an initial \$15 million in unearmarked funds to scale up circumcision services in developing countries that request the assistance. The U.S. response comes on the heels of an official statement from the World Health Organization and the UN’s AIDS agency recommending circumcision as a way to prevent HIV infections in heterosexual men.

Hope for a Grave International Problem

An estimated 39 million people are living with HIV, around 60% of them in sub-Saharan Africa. In some countries there, nearly four out of every ten adults are infected. Around 25 million people have already died from AIDS. “You’ve got a generation left without parents, teachers, and no one to create an economy,” said Dybul. “You don’t have any peacekeepers to keep the peace.” Without better methods to combat the disease, large swaths of the world could suffer economic and military consequences. “The cost of death is basically the destruction of a society,” said Dybul.

A potential new weapon in the AIDS prevention arsenal has wide appeal, even at home. “We continue to lose close to 1500 people a year from AIDS” in New York City, Commissioner Frieden said. He called for insurance companies to cover circumcision for men wishing to reduce their HIV risk.

A Medical Mystery

A curious observation in the late 1980s brought circumcision into the cross-hairs of HIV researchers. Some African tribes had much higher rates of HIV infection than others. What

set them apart were their dramatically different rates of circumcision. Where men were regularly circumcised, HIV rates were low, and vice versa.

The foreskin is prone to tiny abrasions during intercourse, and its inner surface has high concentration of cells susceptible to HIV infections. It made sense, biologically, that its removal could account for the lower HIV rates in populations regularly practicing circumcision. Still, cultural differences involving everything from sexual practices to women's entrepreneurship also existed between the societies. Because these factors, too, might have affected the spread of HIV, three independent groups of scientists launched rigorous studies of circumcision's effects in Uganda, Kenya and South Africa. They randomly assigned over ten thousand volunteers in total to either be circumcised, or remain uncircumcised for the duration of the study. The researchers then documented how many men in each group acquired HIV infection.

The plan was to follow the men for about two years. However, before the trials were over, it became clear that circumcision was dramatically protective—it prevented five to six out of every ten expected infections. Safety boards monitoring the studies halted each of the experiments early on ethics grounds so that men in the control groups could have access to the procedure.

Not a Panacea

Describing their results in a medical journal, one of the research teams likened circumcision's degree of protection to a "vaccine of high efficacy." Mainstream media outlets, including the New York Times Sunday Magazine, propagated the vaccine analogy, even suggesting that widespread circumcision might lead to "herd immunity," a vaccine-like benefit to an entire community.

At the Council, Dybul disputed this characterization. "The notion that this is like a vaccine I have to say is just patently wrong. It's not." He pointed to evidence from public health modeling studies. These predict that while circumcision may reduce HIV risk by 60% for an individual, its effects on the rate of HIV in societies will be considerably more modest as circumcision is scaled up over a period of years. For example, universal circumcision coverage in sub-Saharan Africa could prevent 5.7 million new cases of HIV infection and 3 million deaths over 20 years.

Benefits will be slimmer if a significant proportion of men decline the procedure. In studies across sub-Saharan Africa, between 29% and 87% of uncircumcised men said they would be willing to undergo circumcision if it protected against HIV. How men will respond when they are actually offered the knife remains to be seen. In Swaziland, where HIV rates are among the highest in the world, some health facilities have been kept open on weekends for "Circumcision Saturdays." Media have reported that a hundred men a day were being turned away for lack of enough medical staff to perform the circumcisions. However, Dybul said he had heard just the opposite—that turnout has recently been low for circumcisions. "They're doing 20 a Saturday now. They were expecting hundreds a Saturday," he said. "Where we're making it available, people aren't rushing to it."

A Cultural Practice

However, until now, Dybul's program *hasn't* been making it available. After one U.S.-supported non-profit group, Family Life Association of Swaziland, began providing the procedure in its clinic last year, the agency's funding was not renewed. The clinic has raised the price of its circumcisions in order to continue providing them, but that has led to a drop in demand, according to agency representatives. U.S. officials said they stopped financing the program because they needed to review scientific evidence on circumcision and await guidance from international agencies such as the WHO and UNAIDS. That guidance, which endorsed circumcision, came this February, but the U.S. is still treading gingerly. Its new \$15 million in support for circumcision scale-up is contingent on developing countries and the WHO taking the lead in designing programs.

Part of the reason U.S. officials may be reticent to tout circumcision, and some men may hesitate to undergo it, is the procedure's role as a distinguishing religious, cultural, and tribal practice. "How would Hindus in India respond to an intervention that is really a demarcation between being a Muslim and being a Hindu?" Garrett asked. An analogous question could be posed in Nigeria, where HIV rates are dramatically higher in the predominantly Christian south than in the mostly Muslim north. "You're walking right into a potent religious tension. Is that a place where we have any business?" Garrett asked.

Dybul said it was. "Public health is a difficult thing. Foreign policy is a difficult thing. Your choice is either to engage or let people get infected," he said. "If you follow the evidence you can go and you can change people's practices." Some religious groups have already given up cherished traditions, such as polygamy, with much less evidence that doing so could decrease the risk of spreading HIV.

Frieden was less sanguine about the prospect that many of the adult men in New York at high risk for HIV would undergo circumcision. The potential benefit of circumcision for men who have sex with men remains unproven. The three circumcision experiments analyzed only HIV's transmission from women to men. Furthermore, AIDS is "the most disparate, the most unequal of all health conditions in New York City," said Frieden. "The risk of dying from AIDS is six times as high if you're black than if you're white, or if you're poor than if you're rich." If it appeared that white policymakers were foisting circumcision on poor men of color, "you would face really significant problems of distrust of the health care system, distrust of recommendations that come from public health," he said. "It wouldn't be easy. You're dealing with obviously a very sensitive area."

Avoiding Harm

An even bigger danger than reluctance to undergo circumcision might be excessive enthusiasm for it. Circumcised men might engage in more risky sexual behaviors if they mistakenly believe they're fully protected against HIV. "You could actually override the benefits of your circumcision if behavior changes," said Dybul. However, this wasn't the case in the three large circumcision experiments, which included counseling for men in both circumcision and control groups. Only one of the studies found that circumcised men

slightly increased their number of sexual contacts—even so circumcision proved robustly protective.

More concerning, perhaps, was that some circumcised men failed to refrain from sexual intercourse during the recommended healing period post-surgery. This might have put them and their partners at *increased* risk of acquiring and transmitting HIV. Circumcision itself also has risks, including bleeding, infection and penile damage, and it is more complicated to perform on adults than on infants.

These dangers highlight the need for well-trained providers to carry out the operations, but Africa currently has few of them. Audience member Adrienne Germain of the International Women’s Health Coalition worried that a focus on improving circumcision services for African men might rob funding from prevention initiatives that empower African women to protect themselves from HIV. “Why, when the prevention resources in (the President’s Plan for AIDS Relief) are such a tiny amount,” she asked Dybul, “would you choose to go down this road?”

Dybul said he intended to “work with Congress to shift the percentages” of AIDS funding devoted to prevention should new approaches like circumcision prove more expensive. He said circumcisions cost an average of \$40-\$50 each. “That’s a fairly cost-effective means, particularly if you’re targeting the highest risk people.”

The Circumcision Agenda

Dybul said the U.S. will indeed focus its support for circumcision on men who engage in risky sexual behaviors in high prevalence areas. “If you get to the people who are at high risk, you’ll have a much greater impact,” said Dybul. In places with higher HIV prevalence, fewer circumcisions are needed to prevent each potential new infection.

Still, he said, “it’s not going to turn the epidemic around. It’s going to be additive to everything else we’re doing.” Expanding circumcision services for infants, which may meet with wider acceptance than adult circumcision, is also being considered.

Including circumcision as part of U.S. foreign policy “is something we need to do,” Dybul said, despite the risks and cultural complications. “This isn’t going to solve our problems, but it will help, it will help. And so we need to do it and we are going to do it.”

Frieden agreed. “Clearly this is not going to make HIV go away,” he said, but “we have to go where the data takes us. If things are proven to work, we have to figure out a way to scale them up.” After all, circumcision is only the latest of countless intimate, sensitive conundrums that the AIDS pandemic has posed to government officials and societies.