Scientists at AIDS meeting urge HIV prevention for long-term couples in Africa

By David Brown
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HIV continues to spread among couples in long-term relationships in sub-Saharan Africa because health authorities focus instead on the risks posed by casual sexual encounters, especially in young people. As a result, few HIV-prevention strategies have been devised for this overlooked population.

Those are among the conclusions reached by scientists presenting research at the 17th Conference on Retroviruses and Opportunistic Infections, the annual mid-winter AIDS meeting in the United States. The failure to recognize how much HIV-transmission has occurred over decades in seemingly low-risk couples is "tragic," said epidemiologist Rebecca Bunnell of the Centers for Disease Control and Prevention, who worked in Uganda and Kenya for 14 years.

"It undoubtedly has resulted in millions of deaths and has produced millions of orphans," she told the more than 4,000 researchers gathered here.

Only as HIV testing has become more common in Africa in the past few years have health authorities come to appreciate the vast number of "discordant couples," in which one partner is HIV-positive and the other isn't.

For example, in the East African nation of Kenya, about 1 in 10 couples is affected by HIV. In 40 percent of those couples, both partners are infected. But in 60 percent -- about 340,000 couples -- only one partner is.

The likelihood that an infected person will pass the virus to a partner depends on many things. The risk decreases if the man is circumcised. Female-to-male transmission is less likely than male to female. In many cases, the infected partner in a discordant couple became infected before the current relationship or marriage began, and many HIV-affected couples remain discordant for years.

The problem is that most people do not know their HIV status. In particular, many people in stable relationships have never gone for testing because they perceive themselves to be at low risk for becoming infected.

A 2007 study that tested the blood of a representative sample of 16,000 Kenyans between the ages of 15 and 64 found that only 15 percent of infected people knew they had the virus. The fraction of HIV-affected couples in which partners know each other's status is even lower -- only 9 percent. In co-habiting couples, use of condoms, which could greatly lower the risk of transmitting the virus, is very low -- about 5 percent.

The consequence is that many of the continent's new infections occur among long-standing couples (albeit sometimes with the virus being introduced through an outside liaison). In Uganda, 65 percent of recent infections occur in married people. Furthermore, when one partner in an HIV-affected couple dies, that often opens new chances that the virus will be passed to others. In Zimbabwe, 8 to 17 percent of new HIV infections are attributed to the sexual activity of widows or widowers.
Prevention campaigns that focus on couples and partner testing -- with a counselor present when the status of each is revealed -- are one strategy for addressing this problem. But that, in turn, could become a new impediment to testing, some experts say.

"The message has to be very carefully crafted," said Wafaa El-Sadr, an AIDS researcher at Columbia University who helps run prevention programs in 14 African countries. "You want to encourage people to come as couples, but you never want to turn anybody away just because they come alone."