Is a Parasite to Blame for High HIV Rates in African Women?

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A widespread parasitic disease may be responsible for the disproportionate rates of HIV among African women, according to a theory developed by a group of Norwegian gynecologists, The New York Times reports. Called schistosomiasis, the disease is a consequence of parasitic worms Africans encounter in river water, often when they are washing clothes or obtaining water.

An estimated 200 million Africans carry the disease, which in women leads to sores in the vagina that may facilitate transmission of HIV. In addition, the worms and eggs in the sores attract CD4 cells; the increased presence of the immune cells would in theory give HIV a better chance of infecting the body.

Research conducted in South Africa and Zimbabwe has demonstrated that women with damaged vaginal tissue as a consequence of schistosomiasis have a three-fold greater chance of acquiring HIV when compared with their peers who do not carry the parasite. However, there is far from definitive proof that schistosomiasis leads to an increased HIV risk among women. Skeptics point out African regions where the parasite is rare and HIV rates are high and other areas where the parasite is rife but HIV rates are lower. Such general arguments, however, were also levied in the early days of the now-proven theory that male circumcision lowers female-to-male transmission of HIV. (Some cling to such arguments to this day.)

Killing the worms is inexpensive—generic drugs go for as little as 8 cents a pill. The Norwegian researchers are currently studying whether the drugs can heal the damaged vaginal tissue in a cohort of young South African women.

However, the search for an answer definitive enough to attract major international funding is stymied by the fact that conducting an ethical randomized controlled trial is not possible: It would mean denying one group of infant girls deworming drugs over a period of two decades while another received treatment.

To read the New York Times story, click here.