Even without engaging in risky behaviors, young girls and women who live in South Africa have a 1-in-3 chance of contracting HIV.

Audrey Pettifor, PhD, assistant professor of epidemiology at UNC Gillings School of Global Public Health, launched a study in March 2011 to examine the factor known to have the greatest impact on reducing HIV infection risk – education. Pettifor partners with University of the Witwatersrand researchers Catherine MacPhail, PhD, and Kathleen Kahn, MD, PhD.

“We know young girls who finish high school are four times less likely to become infected with HIV than those who don’t complete school,” Pettifor says. “Condom use and number of partners simply don’t explain the high levels of HIV infection we observe in young South African women.”

To keep girls in school, Pettifor and her team will randomize 2,900 young women and their parents/guardians to receive a monthly cash transfer, based on whether they attend school 80 percent of the time over the next three years. Then, they will determine whether girls receiving the cash transfers are less likely than girls in the control group to become infected with HIV.

The study, funded by the National Institute of Mental Health and the National Institutes of Health’s (NIH) HIV Prevention Trials Network, also will measure HSV-2 (genital herpes), sexual behavior, mental health, school outcomes, socio-economic status and other key social factors. It is referred to locally as Swa Koteka, which means “it is possible” in the native language, Shangaan.

Educating girls is only half the battle, however, Pettifor says. Cultural norms that impinge upon a woman’s right to resist sex or insist on condom use also have to change if young women’s HIV risk is to be decreased. Therefore, half of the young women’s villages also will be randomized to receive an intervention focused on changing negative gender norms and HIV risk among men ages 18 to 35. The team partners with a local non-governmental organization, Sonke Gender Justice, which aims to challenge and reshape negative gender norms in South Africa.

Pettifor also directs two NIH-funded pilot projects in Lilongwe, Malawi, to help those with acute HIV infection (AHI) lessen the likelihood of transmission. AHI is a highly infectious phase of the disease.

One of Pettifor’s projects, co-led with Amy Corneli, PhD, of FHI,* will compare the effect of four intensive counseling sessions in the first two weeks after AHI diagnosis to standard counseling in reducing transmission risk to partners.

In the second project, co-led with Bill Miller, MD, PhD, UNC associate professor of epidemiology and medicine, Pettifor’s team will compare effects of three interventions – antiretroviral treatment for the first 12 weeks after infection, in combination with intensive counseling sessions; intensive counseling alone; and standard counseling.

“This is a behavior change intervention through which we’re asking people to change behavior for a defined and short period of time,” Pettifor says. “If we get them through this really risky time, then we can talk about a longer-range risk reduction plan.”

*Formerly known as Family Health International

– Whitney L.J. Howell

Swa Koteka

*It is possible’ to prevent HIV

This high school is located in South Africa’s Cunningmore A Village, one of 24 villages in which Swa Koteka will recruit study participants.