The patient with HIV who showed me the real challenge of HIV in Africa

By Prof. Salim Abdool Karim, South African Medical Research Council

"It was the summer of 1992. The hot African sun was beating down that morning as I attended to a queue of patients in a rural South African government clinic. Thandi*, a 21 year old Zulu woman, walked into my consulting room carrying her sick baby wrapped in a woollen blanket on her back. Baby Sipho* was only 16 months. He was pale, malnourished and had oral thrush. A rapid HIV test showed that baby Sipho was HIV positive."

Salim S. Abdool Karim, MD, PhD, is a clinical infectious diseases epidemiologist whose research interests include microbicides and vaccines to prevent HIV infection, as well as implementing antiretroviral therapy in resource-constrained settings. He has worked to prevent the proliferation of HIV for more than two decades and is a member of the Board of Directors for the Global Virus Network. He earned his doctoral degrees in South Africa and began his career working on AIDS prevention in KwaZulu-Natal, a province of South Africa that experiences some of the highest rates of HIV infection in the country.

The United Nations Programme on AIDS (UNAIDS) reported in a 2012 annual report that between 2005 and 2011, the number of people dying from AIDS-related causes in sub-Saharan Africa dropped from 18 million to 1.2 million. Great progress was also made on protecting children from HIV. ¹

Meanwhile, the proportion of women living with HIV has been increasing in the last 10 years. As the overall rate of HIV infection has decreased substantially, the rates of infection among women have increased— they now comprise 60% of people living with the disease. ²

"As I questioned Thandi about her HIV status, she explained that she has had only one lifetime partner, who she is planning on marrying soon. He is a migrant worker, who comes to visit her every few weeks. She has been faithful to him. She is in love with him and does not use condoms as she is trying to become pregnant. ‘How’, she asks, ‘can it be that I have HIV infection? I have never slept around?’ It turns out that this is a

common scenario in rural KwaZulu-Natal, South Africa. Young women in their teen years have about 8 times more HIV infection than their male counterparts.”

Societal norms regarding gender contribute substantially to this trend. Gender norms may discourage women from seeking information on HIV and from accessing medical services. The 2012 UNAIDS report states that in 26 out of the 31 countries experiencing epidemic-level rates of HIV infection, less than 50% of young women have comprehensive and accurate knowledge of HIV. Notably, young women lack knowledge concerning the effectiveness of condoms in preventing HIV transmission. Likewise, norms related to masculinity can encourage men to have more sexual partners and encourage older men to have sexual relations with much younger women. These parallel social forces contribute to higher infection rates among young women (15-24 years) compared to rates experienced by young men.

“The age differential in partnering patterns (young women sleeping with older men) in this part of the world is key to understanding why HIV is so severe in southern Africa. Young women bear the brunt of HIV infection in this setting. And none of the current ABC strategies, Abstinence, Be faithful and Condoms, are meaningful HIV prevention strategies for this vulnerable group of women. Thandi epitomised the central importance of young women in the HIV epidemic in Africa. It highlighted the urgent need to find a new technology that women can use to reduce their risk of HIV infection.”

One of GVN's strategies in achieving its goal to support international research and training is to convene expert groups to make recommendations on issues related to viral research, treatment, and preventative steps. This is critically important in order to address the female-specific problems of HIV infection in which medical expertise of the virus as well as social knowledge about the most susceptible individuals are necessary to fully understand the scope of potential solutions.

The GVN also works with a variety of organizations and experts in global health and science, including the World Health Organization, the national public health agencies and many in the private sector, to complement their efforts, further increasing international collaboration on critical diseases like HIV.

* Not her actual name.