

The International AIDS Conference that I had the good fortune to attend in July in Durban was a fascinating, inspiring and hugely informative affair. It will be impossible to talk about all that was said so I have picked on some major issues that were generally discussed.

Not a one-Size Fits All scenario

Those fighting the epidemic face a devastating combination of problems:

- * Every year, around the world, nearly 2 million people, 60% of them girls and young women, become newly infected with the virus, despite prevention efforts.
- * In developing countries, HIV is becoming resistant to the drugs used to treat people and keep them well, which means they will increasingly need other drugs that are currently unaffordable.
- * Donor countries are cutting back on funding.

Globally, 38 million people are living with HIV, 17 million of whom are now on drugs that stop them transmitting the virus to others. But the rise in infections appears inexorable.

Putting all those testing positive onto treatment immediately

- South Africa is moving to Test and Treat – all those who test positive for HIV will be offered ARVs immediately. A local trial of this in KwaZulu-Natal found however that only half of those diagnosed as positive actually went to the clinic to get treatment. Another trial in KZN found that the rate of infection did not drop between those immediately put on ARVs and those initiated only when their CD4 count was below 350. Sex in the cities was an issue. People were travelling away from home into Durban and Johannesburg a lot more than expected, and having sex there.

Many people do not want to take medication until they become ill. Professor Piot believes that drugs will not stop Aids and that cultural change, which is far harder to bring about, will be necessary.

High infection rate among young women between 15 and 24 years of age.

Young girls and women between 15 and 24 are being infected by older men. The researchers felt that more must be done to target the sugar daddies or "blessers" - the older, working men who give gifts and money to impoverished young girls in exchange for sex. About 60% of new cases are women. "It is horrendous. In our setting, a 15-year-old girl today has an 80% chance of being infected in her lifetime," he says. At antenatal clinics where pregnant women are all tested for HIV, half are positive.

Surveys carried out in South African schools to determine the issues facing 14- to 20-year-olds found that a third of girls said a girl does not have the right to ask a boy to stop kissing her. A quarter of the boys said they had "sexually forced" someone. A fifth of the girls said they were sexually active and most of those had been forced into sexual activity at some point.

Of the girls among the 3,000 students surveyed in three provinces over two years, 15% said they had been pregnant - which equates to 70% saying they are sexually active. Nearly half the young people - 46% - said a young couple who went public about one of them becoming HIV positive would be openly judged and 4% thought they would be physically harmed. "This indicates the fear-filled environment South African young people are still growing up in when it comes to HIV," says the report. "Fear keeps people silent and silence feeds everyone's risk for HIV and for not getting the care and support they require to address HIV infection."

Although the roll-out of ARVs in 2004 has had a substantial effect on survival, age-specific HIV-prevalence stands out as a clear explanation for the lack of progress in reducing the overall disease

burden. Understanding the disease and its transmission drivers for this group is thus seen as central to the design of additional interventions targeted specifically at teenagers and young women.

The government has launched a campaign telling young girls not to sleep with older men. But the real problem is that men are not being tested. The increase in the HIV infection rate among young women is inextricably linked to poverty, violence and cultural norms that promote intergenerational sex.

Vaccines and super drugs

A vaccine is still a long way off. Pre-exposure prophylaxis works for the partners of people with HIV in the global north. Taking an antiretroviral drug guards them against infection. But that looks very hard to implement for young women in Africa who barely own their own bodies and could face accusations of either having HIV or being a prostitute.

"The greatest possibility for ending Aids is a vaccine," said Bill Gates, but cautioned that even if a successful vaccine were found immediately, it would still take time before it could be offered to the public. "Besides a vaccine, the super-long-acting drugs are super-interesting for prevention and treatment," he said.

Trials of long-acting injectable ARVs (cabotegravir and rilpivirine) given once every four to six months had shown to be as safe and effective as oral ARVs. Drug companies were also looking at long-acting ARV implants.

Keeping young people from being infected

Professor Peter Piot, the first head of UNAids and director of the London School of Hygiene & Tropical Medicine, says the biggest challenge is keeping people from being infected. "Sex happens in a context. It is about power. Southern African girls and young women are infected by men who are much older than themselves. It's about poverty. It's also about a culture of machismo. "

Bill Gates, whose foundation has invested heavily in combatting HIV, warned "If we only do as well as we have been doing, the number of people with HIV will go up even beyond its previous peak. We have to do an incredible amount to reduce the incidence of the number of people getting the infection. New ways of thinking about treatment and prevention are essential."

Gates said the number of young people at risk in Africa is set to rise markedly. In a few decades, 40% of the world's youth will live on the continent. "The largest generation in history is entering an age where they are most at risk. In 1990, there were 94 million people between the ages of 15 and 24. Already, that number has doubled. By 2030, [there will be] more than 280 million young people. The vulnerable age group will be three times as large in 2030 as it was back in 1990," he said.

The power of fear and stigma

Fear, shame and stigma keep many young people unaware of their status. Yet in South Africa, each week 2000 young women and girls aged from 15 to 24 are infected with HIV. This infection rate is a massive two and a half times that of males of the same age.

A poll conducted by UNICEF shows that almost seventy percent of the 52,000 young people they surveyed in 16 countries said they did not want to be tested for HIV, both because they were afraid of an HIV-positive result and because they were worried about social stigma. Adolescents now make up about 65 per cent of new infections worldwide.

The South African Stigma Index Survey, carried out in 2014, found that 36 percent of people living with HIV had experienced "some form of external stigma and discrimination", while 43 percent had experienced internal stigma, something the department of health described as "unanticipated" and "high". Internalised stigma was experienced in the form of guilt (29%), shame (28%) and self-blame (30%). Almost 90 percent of respondents would remain friends with a person who was known to be HIV positive, while 16 percent said they would be embarrassed to be seen with a person known to have HIV.

Adherence Clubs

Government wants to 'decant' stable patients into community support such as adherence clubs. "Adherence clubs are for patients who are responding to treatment, and are healthy," explains MSF's Vivian Cox. "The results have been overwhelmingly good. More patients in adherence clubs stay on treatment and have lower viral loads [the amount of HIV in someone's blood]."

Every three months in Eshowe an adherence club meets where a lay counsellor employed by the aid organisation Doctors Without Borders (MSF) will weigh them, check their blood pressure and give them a supply of antiretroviral drugs that will last until their next meeting. According to results from a 2007 MSF pilot study of adherence clubs in Khayelitsha in the Western Cape, 97% of the patients in the clubs remained in treatment after a year, compared with 85% of patients who were not part of a club.

The national health department's deputy director general for HIV, Yogan Pillay, says the expected huge increase in numbers when test and treat is started will only be possible if the department is able to move patients who adhere well to their medicine "out of clinics", so that doctors and nurses can concentrate on patients on treatment.

"We are 'decanting' stable patients. These are patients who are virally suppressed - in other words, those who have undetectable viral loads at 12 months [of treatment]," Pillay says. "Those people don't need to see a health provider more than once a year."

Decanting includes getting patients who do not have to be seen by a doctor more than once a year to collect their treatment from a location outside a clinic to which the health department will courier it. Patients will also be encouraged to join support groups such as the MSF's clubs to ensure that they continue to adhere to their treatment.
