spoken publicly of the need for HIV control, has met infected people, and has urged the corporate sector to respect the rights of infected employees. The success story in Tamil Nadu was partly due to successive chief ministers actively supporting HIV control. But a few success stories are not enough to reverse or even slow India's HIV epidemic. For this, at least 80% of vulnerable core transmitter groups need to be reached.[11] They must be mapped, identified, and enrolled into peer based interventions. Such mapping will require a reliable database, drawing from different kinds of surveys and surveillance systems. Better planning and funding at the national level and by the states with the highest HIV prevalence are needed to establish this database. States must show a stronger commitment to direct and fund HIV control programmes: they should look to countries like Thailand, where HIV was controlled through surveillance and targeted interventions.[12]

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The opinions expressed here are not necessarily those of the Indian government.

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How men's power over women fuels the HIV epidemic

It limits women's ability to control sexual interactions

In sub-Saharan Africa 12-13 women are infected by HIV for every 10 men, and the average rate of infection for teenage girls in some countries is five times higher than that for teenage boys.[1] Most of these infections occur through unprotected heterosexual interactions. Women are limited in their ability to control these interactions because of their low economic and social status and because of the power that men have over women's sexuality.

Most of the world's women are poor and most of the world's poor are women. Women make up almost two thirds of the world's illiterate people and are often denied property rights or access to credit. They earn 30-40% less than men for the same work, and most of those who are working are employed outside the formal sector in jobs characterised by income insecurity and poor working conditions.[2] Women's economic vulnerability and dependence on men increases their vulnerability to HIV by constraining their ability to negotiate the use of a condom, discuss fidelity with their partners, or leave risky relationships.

An example of this is a study of women on low income in long term relationships in Mumbai, India. The women believed that the economic consequences of leaving a relationship that they perceived to be risky were far worse than the health risks of staying in the relationship. They reported having very little economic leverage to bring about changes in their husbands' behaviour.[3]

In many countries the power imbalance in heterosexual interactions leads to a culture of silence that surrounds women's sexuality. This restricts women's access to information about their bodies and about sex, which in turn contributes to their inability to protect themselves from HIV infection. Rural women from South Africa and urban women from India reported not liking condoms because they feared that if the condom fell off inside the vagina it could get lost and perhaps travel to the throat or another part of the body.[3 4] In Latin America adolescent boys are more likely than girls to know how to use a condom properly and to recognise the symptoms of sexually transmitted infections.[5] In some cultures, such as in Brazil and Thailand, there is a powerful norm of virginity for unmarried women, which limits young girls' ability to ask for information about sex or condoms for fear that they will be thought to be sexually active.[6 7] The norm of virginity also puts young girls at risk of rape and sexual coercion in countries with a high prevalence of HIV because they are presumed to be free of infection and because of the myth that sex with a virgin can cleanse a man of infection.[8]

The most extreme manifestation of the unequal power balance between women and men is violence against women. In population based studies worldwide, 10% to over 50% of women report physical assault by an intimate partner, and one third to one half of physically abused women also report sexual coercion.[9] In studies in

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Papua New Guinea, Jamaica, and India women reported that bringing up the issue of condom use, with its inherent implication that one partner or the other has been unfaithful, can result in violence.[3 10 11]

To protect women from HIV infection we must find ways to empower them. This means implementing policies and programmes that increase women's access to education and information and to productive resources, such as land, income, and credit. It also means providing women with HIV prevention technologies that they themselves can control. One way to do this would be to make the female condom more readily available. Studies of women in long term relationships and in sex work in Costa Rica, Senegal, Mexico, and Indonesia found that women viewed the female condom as empowering.[12] It offered them a preventive alternative to the male condom, which depends for its use on male compliance. Another option is to invest in the development of microbicides, topical agents that women can apply intravaginally to protect themselves from HIV. There are promising signs that microbicides could be developed—some 60 different leads are currently being explored and several are poised to enter clinical effectiveness testing.[13]

We must also increase social support for women by facilitating their opportunities to meet in groups and organise, allowing them to draw strength from numbers and to derive practical solutions from each other. Simultaneously, we must promote sexual and family responsibility among young boys and men and enable them to examine the damaging effects of prevalent notions of masculinity and male power. Finally, we must recognise that violence against women is a gross violation of women's rights that has important implications for the health of women and communities.

If we are to contain the HIV epidemic we must tackle its root cause—gender inequality. It is this that is compromising the ability of women to protect themselves and promoting a cycle of illness and death that is threatening the future of households, communities, and entire nations.

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Governments as facilitators or obstacles in the HIV epidemic

If governments do not act, the epidemic will spread relentlessly

The current trajectory of the HIV/AIDS epidemic is unlikely to change quickly. Five million people will become infected each year despite decades of research that has discovered every preventable means of HIV transmission—via sex, intravenous drug use, blood transfusion, breast feeding, and perinatal transmission.[1] We could try to blame science for having failed to perform research that affects international public health. But the transition from successful clinical research to implementation of public health rests in the hands of governments.

Faced with a crisis of enormous proportions, how do we motivate governments to mount a vigorous public health response? Initially, in the early 1980s, the US government was slow to act, but with constant prodding by activists over $9.7bn is now spent annually for research, education, prevention, and treatment. New HIV infections in the United States have fallen from a peak of about 150 000/year in the 1980s to 40 000/year currently.[2] Here then is the first ingredient. Activism must be used to keep public health issues continuously in the political forefront.[3 4]

The second ingredient is government acknowledgement of the severity of the epidemic. Several developing countries are recognised for their successful public health response to HIV/AIDS. Thailand's ministry of health established a policy that all pregnant women should be provided with voluntary counselling and testing for HIV. Those who are positive are offered zidovudine; and infants born to HIV-infected mothers are given zidovudine, infant feeding formula, and clinical care.[5] Brazil provides zidovudine free of charge to HIV infected mothers and infants in public hospitals and combination antiretroviral treatment to HIV infected women, children, and men. Brazil also successfully challenged international drug pricing laws

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