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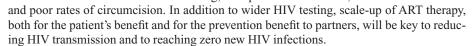
## **An AIDS-Free Generation?**

THE HIV PANDEMIC REMAINS A GREAT GLOBAL HEALTH CHALLENGE. WITH AN ESTIMATED 33.3 million people living with HIV today, is there really hope of achieving the vision of an AIDS-free generation? Optimists argue that strong political will and generous funding are the essential elements. But skeptics point to the deep-seated structural inadequacies in many health care systems, especially in Africa, where the need is greatest. However, both sides agree that a potential combination of therapeutic and prophylactic antiretroviral strategies brings the prospect of HIV control within reach. And this month, the International AIDS Conference in Washington, DC, "Turning the Tide Together," will attempt to galvanize concerted global action to focus the world's attention on this challenge.

Recent progress on the treatment and prevention of HIV infection has created a newfound sense of hope that the HIV epidemic can be overcome. AIDS mortality rates are

declining globally, primarily due to antiretroviral therapy (ART), and efforts to eliminate mother-to-child transmission are progressing well. Since the 2010 Vienna AIDS conference, five studies have demonstrated that ART, when used as prescribed, either to treat HIV-infected individuals (treatment for prevention) or as oral/topical pre-exposure prophylaxis (PrEP), effectively prevents the sexual transmission of HIV.\* These promising results have spurred the Joint United Nations Programme on HIV/AIDS to set a global target of "zero new HIV infections, zero discrimination and zero AIDS-related deaths" through universal access to effective HIV prevention, treatment, care, and support.

Knowledge of HIV status is the common gateway to both treatment and prevention. But many people remain unaware of their HIV status. Denial, stigma, and a lack of understanding of vulnerability and risk lead to low rates of HIV testing, suboptimal condom use,



Even with effective scale-up of HIV testing, treatment, and prevention, there is still the major problem of high HIV incidence in young African women. HIV incidence in countries such as South Africa and Zambia is high in young women, who are seldom able to ascertain the HIV and treatment status of their male partners. In this setting, much more than ART scale-up is needed. Oral and/or topical PrEP, the only HIV prevention technology that empowers women to control their risk of infection, is therefore essential to achieve an AIDS-free generation in Africa. The United States recently took the lead when the Centers for Disease Control and Prevention released guidance on the use of oral PrEP in men who have sex with men; likewise, a U.S. Food and Drug Administration Advisory Committee has supported the licensure of oral PrEP for men and women. In contrast, the World Health Organization (WHO) has been dragging its feet—it has not yet released any guidance on PrEP use, especially for young women at high risk, despite compelling evidence that PrEP is effective in preventing HIV. Withholding PrEP until formal regulatory approval has been obtained raises serious ethical concerns.† Although desirable, such approval is not essential for WHO guidance, as evidenced by other WHO guidelines (such as misoprostil for abortion or tranexamic acid for trauma) that have recommended off-label use of existing medicines.

To turn the tide on HIV, WHO needs to act now to provide the guidance that will enable countries to implement combination prevention programs that include PrEP in high-risk populations such as young women. And the global community must respond by continuing to expand their support to address the current resource and health system constraints on the implementation of ART and prophylaxis in the worst AIDS-affected countries.

— Salim S. Abdool Karim

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\*S. S. Abdool Karim, Q. Abdool Karim, Lancet 378, e23 (2011). †B. Haire, J. Kaldor, C. F. Jordens, Am. J. Bioeth. 12, 21 (2012).