LETTERS

PRESERVING HUMAN RIGHTS IN THE ERA OF ''TEST AND TREAT'' FOR HIV PREVENTION

The promising and biomedically grounded "test and treat" HIV prevention strategy has empowered a growing movement to desocialize the field of HIV prevention.[1,2] Mayer and Venkatesh provide a rigorous and balanced evaluation of this prevention approach,[3] which would involve universal, voluntary HIV screening and initiation of antiretroviral treatment for all persons infected with HIV. If empirically feasible, the "test and treat" strategy would vastly increase access to life-saving medications and would likely prevent HIV transmission on a wide scale. But scale-up of this biomedical intervention should not divert resources from other effective prevention efforts, particularly social and structural prevention strategies, harm reduction strategies, and community-strengthening initiatives. Confronting the global HIV/AIDS pandemic has laid bare the health and social disparities that disproportionately impact the most marginalized segments of society. While we remain hopeful about the "test and treat" approach, the potential of this strategy should not undermine the social and structural response to an epidemic driven by inequity.[3–6]

Freedom Riders Joseph Randall, James Farmer, Sidney Shanken, and John Harvard clasp hands before they join a protest to test segregated facilities in Tennessee. Photograph by Bettman. Printed with permission of Corbis.

Over the past three decades, social and structural prevention interventions have made significant inroads in addressing the political, economic, and social realities underlying HIV transmission. Empowerment strategies that promote agency, livelihood, and well-being actively engage the most vulnerable populations and address injustice and human suffering beyond the context of HIV/AIDS.[7–10] The danger of desocializing HIV prevention lies in losing this comprehensive human rights response.

Injection drug users, men who have sex with men, and individuals who engage in commercial sex work remain criminalized and condemned around the world. Rendering individuals who inject drugs less infectious by placing them on antiretroviral therapy is itself worthwhile, but addressing human rights violations such as undue detention, police harassment, and denial of access to addiction treatment and creating social and financial capital for rehabilitation are no less important. Similarly, using the "test and treat" strategy alone to reduce heterosexual transmission leaves unchallenged harmful gender disparities that limit women's capacity to negotiate equitable roles in their partnerships and in

Letters to the editor referring to a recent Journal article are encouraged up to 3 months after the article's appearance. By submitting a letter to the editor, the author gives permission for its publication in the Journal. Letters should not duplicate material being published or submitted elsewhere. The editors reserve the right to edit and abridge letters and to publish responses.

Text is limited to 400 words and 10 references. Submit online at www.editorialmanager.com/ajph for immediate Web posting, or at ajph.edmgr.com for later print publication. Online responses are automatically considered for print publication. Queries should be addressed to the Editor-in-Chief, Mary E. Northridge, PhD, MPH, at men6@nyu.edu.

society. In turn, inability to prevent other sexually transmitted infections, unintended pregnancies, and intimate partner violence can lead to significantly gendered morbidity. Treating these vulnerabilities as interconnected is ultimately critical to both HIV prevention and promotion of human rights, and unless the "test and treat" strategy is integrated with a more comprehensive response, it will fall short of meeting the needs of the most vulnerable populations.

HIV prevention's strength lies in its interdisciplinary nature; those working in research and outreach can engage a wide array of approaches—biomedical, behavioral, social, and structural—and harness their collective power. This capacity allows for a comprehensive human rights–oriented response to the HIV/AIDS epidemic that simultaneously seeks to preserve human life and human dignity. The strategies defining this new era of HIV prevention must preserve a human rights orientation and respond to the injustices that medicine and technology alone cannot resolve. ■

Jeannia J. Fu, ScB
Alexander R. Bazazi, BA
Frederick L. Altice, MD

About the Authors

All of the authors are with the Department of Internal Medicine, Section of Infectious Diseases, AIDS Program, Yale School of Medicine, New Haven, CT.

Correspondence should be sent to Jeannia J. Fu, ScB, Department of Internal Medicine, Yale School of Medicine, 135 College Street, Suite 323, New Haven, CT 06510-2283 (e-mail: JeanniaFu@gmail.com). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints/Eprints" link.

This letter was accepted October 14, 2010.
doi:10.2105/AJPH.2010.300050

Contributors

J.J. Fu conceptualized and drafted the letter, and A.R. Bazazi and F.L. Altice revised it critically for important intellectual content. All authors discussed and approved the letter.

References

1. Granich RM, Gilks CF, Dye C, De Cock KM, Williams BG. Universal voluntary HIV testing with immediate antiretroviral therapy as a strategy for elimination of HIV transmission: a mathematical model. *Lancet.* 2009;373(9657):48–57.

2. Dieffenbach CW, Fauci AS. Universal voluntary testing and treatment for prevention of HIV transmission. *JAMA.* 2009;301(22):2380–2382.

3. Mayer KH, Venkatesh KK. Antiretroviral therapy as HIV prevention: status and prospects. *Am J Public Health.* 2010;100(10):1867–1876.

4. Holtgrave DR. Potential and limitations of a 'test and treat' strategy as HIV prevention in the United States. *Int J Clin Pract.* 2010;64(6):678–681.

5. Gupta GR, Parkhurst JO, Ogden JA, Aggleton P, Mahal A. Structural approaches to HIV prevention. *Lancet.* 2008;372(9640):764–775.

6. Burns DN, Dieffenbach CW, Vermund SH. Rethinking prevention of HIV type 1 infection. *Clin Infect Dis.* 2010;51(6):725–731.

7. Swendeman D, Basu I, Das S, Jana S, Rotheram-Borus MJ. Empowering sex workers in India to reduce vulnerability to HIV and sexually transmitted diseases. *Soc Sci Med.* 2009;69(8):1157–1166.

8. Kim J, Ferrari G, Abramsky T, et al. Assessing the incremental effects of combining economic and health interventions: the IMAGE study in South Africa. *Bull World Health Organ.* 2009;87(11):824–832.

9. Blankenship KM, West BS, Kershaw TS, Biradavolu MR. Power, community mobilization, and condom use practices among female sex workers in Andhra Pradesh, India. *AIDS.* 2008;22(Suppl 5): S109–S116.

10. Williams JK, Ramamurthi HC, Manago C, Harawa NT. Learning from successful interventions: a culturally congruent HIV risk-reduction intervention for African American men who have sex with men and women. *Am J Public Health.* 2009;99(6):1008–1012.

MAYER AND VENKATESH RESPOND

We heartily endorse the call by Fu et al. to continue to explore and develop HIV prevention strategies that address the social and structural determinants of HIV transmission, and support their belief that vulnerable populations deserve specific attention. We had no intention in our review to suggest that expanding treatment should, as Fu et al. state, "divert resources from other effective prevention efforts." Rather, we strove to describe the emerging hope that strategic use of antiretroviral medications may help to substantially arrest the spread of HIV.[1] The growing interest in "Test and Treat" strategies accelerated with mathematical models projected that such an approach could halt HIV spread in the short term in hyperendemic areas, and potentially could lead to the end of the epidemic over decades.[2,3] The assumptions in the model have been buttressed by recent ecological data showing a link between treatment coverage, population viral load, and HIV incidence,[4] and by observational data which showed that in HIV discordant couples, if the infected partner was being treated, HIV transmission was decreased by 92%.[5] "Test and Treat" is primarily a biomedically driven strategy, but proven social, structural, and behavioral interventions also must be a part of an integrated approach to HIV prevention, and the ultimate success in arresting the epidemic will require the use of combination prevention packages that are culturally tailored to the factors that potentiate focal epidemics.[6,7]

"Test and Treat" is a mantra for an ambitious public health undertaking requiring considerable financial and health care workforce resources, and we agree that we cannot simply treat ourselves out of the epidemic without adequate consideration of broader contextual factors. Expanding HIV testing, linking socially marginalized individuals with treatment and ongoing care, and ensuring optimal adherence require careful ethnographic and behavioral inquiry, and invariably must address human rights. Although the US Public Health Service recommended expanded routine HIV testing in 2006, many at-risk Americans still have not been reached as a result of stigma and other structural barriers.[8] In addition, in an environment in which the idea that treatment equals prevention has become accepted wisdom, it is not yet understood whether some HIV-infected individuals who have started receiving antiretroviral therapy could increase sexual risk taking to a level that could mitigate the benefit of early treatment.[9] The potential community uptake of "Test and Treat" must be predicated on an integrated research agenda that addresses structural concerns, including the vulnerability of women, drug users, and sexual and gender minorities.

Because there are many operational issues that must be understood, several research groups, including the National Institutes of Health–funded HIV Prevention Trials Network (available at http://www.hptn.org), are currently assessing the feasibility of different approaches to enhance testing and linkage to care.[10] Historically, the most successful HIV prevention efforts have required multidisciplinary collaborations, which brought together behavioral and quantitative scientists, clinicians, community stakeholders, and public health officials, and so while the use of antiretroviral drugs for HIV prevention holds