

Opportunities to Improve AIDS Prevention Practice Among Men Who Have Sex with Men

Ron Stall, PhD, MPH

The systematic review by Herbst and colleagues¹ in this supplement to the *American Journal of Preventive Medicine* shows that theory-based AIDS prevention programs can reduce risk for HIV transmission among men who have sex with men (MSM) and so save lives. The literature summarized in the Herbst et al.^{2,3} review—supported by a set of independent meta-analyses—demonstrates that if the prevention efforts described in this review were given widespread use they could become important tools in the AIDS prevention armamentarium.

The achievements summarized in this review should be interpreted with reference to the state of the art of research on sexuality in general and MSM in particular at the start of the AIDS epidemic. During the earliest years of the epidemic it was commonplace to point out that the best data on the sexual practices of American MSM were found by reading the work of Kinsey and colleagues,⁴ published some 20 years prior to the start of the AIDS epidemic. Early calls for serious scientific research on gay male sexual practices that could serve as the basis for prevention responses to a rapidly growing and dangerous epidemic were met with palpable skepticism by high-level policymakers. Although many examples of the slow start for prevention research among MSM can be provided during the crucial early years of the American response to AIDS, to my mind the best example of the skepticism that greeted calls for a prevention science approach to the epidemic occurred during a meeting sponsored by the National Institutes of Health during the late 1980s. At that meeting a highly placed political appointee was invited to address a group of scientists who were presenting risk data on groups at high risk of HIV transmission. During his talk the political appointee described a recent trip that he had taken to Africa, during which he observed the mating habits of elephants. In an increasingly excited tone of voice, he described the struggle among male elephants for an available female that included the uprooting of trees during dominance displays and general mayhem, loud noises, and violent behavior all around. From that experience, he breathlessly concluded, it was clear to him that male sexual

behavior cannot be changed, and that sexuality research was pointless.

Prevention scientists in that room drew a different conclusion from that talk. They realized that not only were scientists faced with the struggles inherent in producing data on which an informed response to the AIDS epidemic could be launched, but must do so while hampered by “common sense” assumptions regarding sexuality and homosexuality held by highly placed gatekeepers.

Unfortunately, the political dynamic already evident at that early National Institutes of Health meeting has continued to disrupt HIV prevention and science among MSM to the current day. Initial skepticism regarding the value of research on risk reduction efforts among MSM grew to include Congressional restrictions on funding for AIDS prevention programs understood to promote homosexuality (the so-called “Helms amendment”), continued underfunding of HIV prevention efforts for MSM and other marginalized groups, continued aggressive funding of AIDS prevention strategies derived from a particular form of religious ideology that is useless for MSM (abstinence-until-marriage programs), as well as ongoing audits instigated by highly placed politicians of both community-based groups and scientists conducting prevention work among MSM. Future historians of the epidemic will conclude that the literature reviewed by Herbst and colleagues¹ is doubly impressive, having been produced in a hostile political and cultural context.

However impressive this body of research may be, we should continue to weigh strategies to further improve the effectiveness of AIDS prevention efforts among MSM. The first of the challenges to be met concerns that of simple access to effective prevention. It should be noted that most of the studies described in this review were tests primarily of concept, or efficacy trials. Their effectiveness in preventing new HIV infections must be further demonstrated by ramping up access to model prevention programs at the community level and through evaluation of these services. Barriers to the translation of model prevention programs so that they can be fielded by community-based organizations and health departments are numerous and complex.⁵ Continued work to ensure that the results of prevention trials are accurately communicated and shared with

From the Graduate School of Public Health, Pittsburgh, Pennsylvania
Address correspondence and reprint requests to: Ron Stall, PhD, MPH, Graduate School of Public Health, 111 Parran Hall, 130 DeSoto Street, Pittsburgh PA 15261. E-mail: rstall@pitt.edu.

MSM communities so that prevention advances can be faithfully reproduced is a first-order prevention need.

The second dimension regarding access concerns meeting the prevention needs of MSM at greatest risk of HIV infection. The bulk of prevention research done with MSM has been conducted among the general population of MSM, and has not been specifically defined to meet the needs of men at gravest risk for HIV transmission. Groups at highest risk for HIV transmission for which we have as yet no specifically defined interventions include African-American MSM, substance abusing MSM, and Hispanic men, among other identifiable groups. Clearly, research to create and test interventions specifically for these groups is a public health agenda of the highest priority. That said, HIV incidence rates in these groups are so high that a strategy of waiting for interventions with evidence of efficacy for MSM at highest risk to appear in the scientific literature is not tenable. Programs with evidence of efficacy among general populations of MSM should be modified so that they are culturally appropriate and may be welcoming to the highest risk groups of MSM. Ongoing process and uncontrolled outcome evaluations of these services can serve as a stopgap measure of intervention effectiveness until such time that interventions with proven efficacy are developed for these specific populations.⁶ It is to be hoped that the experience of modifying interventions across cultural lines in the United States will set the stage for translating interventions for use abroad, because MSM in many developing world settings are also at very high risk for HIV.^{7,8}

It is notable that the interventions reviewed by Herbst and colleagues¹ emphasize interventions that operate solely at the cognitive-behavioral level. This point raises the question of whether other mechanisms of prevention activity can be identified to complement and extend the advances already demonstrated within the behavioral literature. Several such candidate mechanisms hold attractive possibilities, and include such topics as microbicides, structural interventions, and improving access to HIV treatment among infected men. Promising advances are being made in the development of microbicides to prevent HIV transmission during sexual contact, which may prove effective during anal sex.⁹ The development of a rectal microbicide used in combination with proven behavioral interventions could be a powerful tool to prevent HIV infection among MSM. One example of structural interventions would be to train service providers to cross-treat interacting health issues that exist among MSM to jointly serve to drive HIV risk taking.¹⁰ Other structural interventions to improve the cultural context under which gay men live might gain empirical support by studying changes in health-taking behaviors among gay men who live in states that recognize male partnerships compared to gay men who live in states where

such unions have no legal protections. Finally, ongoing work to encourage MSM to access highly active antiretroviral therapy treatment if seropositive may also yield important primary prevention implications. Removing barriers to HIV testing and treatment for MSM is thus a promising HIV prevention structural intervention.

The agenda outlined here is ambitious, but the need is great. HIV prevention research among MSM for the foreseeable future will advance by building upon the pioneering work described by Herbst and colleagues,¹ especially to create interventions to meet the prevention needs of African-American MSM and other marginalized groups, by ensuring that MSM have access to HIV prevention, by identifying new mechanisms of intervention action, by removing structural impediments to gay men's health, and by translating advances so that they can be used within the rapidly evolving communities of MSM located in the developing world. Although a daunting list, the field has already taken on tough challenges under difficult circumstances and made important contributions to the fight against AIDS. Those of us who care about the health of gay men and other groups heavily affected by HIV/AIDS look forward to seeing continuing public health progress to promote health among MSM.

No financial conflict of interest was reported by the author of this paper.

References

1. Herbst J, Becker C, Mathew A, et al. The effectiveness of individual-, group-, and community-level HIV risk-reduction interventions for adult men who have sex with men: a systematic review. *Am J Prev Med* 2007;32(4):S38-S67.
2. Herbst J, Sherba R, Crepaz N, et al, the HIVAIDS Prevention Research Synthesis Team. A meta-analytic review of HIV behavioral interventions for reducing sexual risk behavior of men who have sex with men. *J AIDS* 2005;39:228-41.
3. Johnson W, Hedges L, Diaz R. Interventions to modify sexual risk behaviors for preventing HIV infection in men who have sex with men. In: *The Cochrane Library*. Chichester: John Wiley and Sons; 2004.
4. Kinsey AC, Pomeroy WR, Martin CE. *Sexual behavior in the human male*. Philadelphia PA: W.B. Saunders; 1948.
5. Collins C, Harshbarger C, Sawyer R, Hamdallah M. The diffusion of effective behavioral interventions project: development, implementation and lessons learned. *AIDS Educ Prevent* 2006;18(Suppl A):5-20.
6. Jones K, Gray P, Want G, Johnson W, Foust E, Dunbar E. Evaluation of a community-level peer-based HIV prevention intervention adapted for young Black men who have sex with men (MSM). Oral Presentation MOAC0103, XVI International AIDS Conference, 13-18 August, 2006, Toronto, Canada.
7. Van Griensven R, Thanprasertsuk S, Jommaroeng R, et al, and the Bangkok MSM Study Group. Evidence of a previously undocumented epidemic of HIV infection among men who have sex with men in Bangkok, Thailand. *AIDS* 2005;19:521-6.
8. Caceres D. HIV among gay and other men who have sex with men in Latin America and the Caribbean: a hidden epidemic? *AIDS* 2002;16:S23-33.
9. McGowan I. Microbicides: A new frontier in HIV prevention. *Biologicals* 2006;34:241-55.
10. Stall R, Mills T, Williamson J. Co-occurring psychosocial health problems among urban men who have sex with men are associated with increased vulnerability to the HIV/AIDS epidemic. *Am J Public Health* 2003;93: 939-42.