

Background

Effective HIV treatment has become widely (though not universally) available in the U.S. and other wealthy countries, extending the median post-infection life expectancy of people living with HIV/AIDS (PLWHA) from about 10 to 25 or more years. Discovering that one is HIV+, enrolling in treatment and support services and adhering to treatment and emotionally supportive strategies are all associated with reduced risk of spreading infection to others in addition to the direct benefits of longer and healthier life. The health care delivery systems to which PLWHA are necessarily linked for life can play a powerful role in prevention if the totality of the lives and needs of PLWHA are adequately addressed and if disparities in access and equitable treatment are overcome. There are major unresolved barriers to universal access to and utilization of treatment and support by PLWHA, even in the U.S.: only about 50% of all HIV+ people are in regular care, and a significant number of HIV+ people do not even know they are infected. This has prompted increased attention to the benefits and limitations of implementing routine HIV testing in health care settings to identify those with infection, counsel them about how to prevent transmission, and refer them to care, treatment, and support services. The 4.1 million new HIV infections occurring annually worldwide demand a multi-pronged approach to HIV prevention that includes testing in clinical settings; testing in community settings; HIV prevention for people with HIV in care; science-based comprehensive sexual education; and harm reduction strategies including condom distribution and syringe exchange.

HIV Treatment IS Prevention

There is compelling evidence to suggest that sustained treatment with highly active antiretroviral therapy reduces the likelihood of HIV being transmitted to an uninfected sexual partner by 80% or more. This is probably due to a combination of the direct effects of drug therapy in dramatically lowering the concentration of HIV in semen and vaginal fluid with the indirect effects of better health care in general and increased self responsibility for maintaining health and protecting others that are associated with being in care for HIV. This association is currently being tested in a clinical trial. For instance, having other sexually transmitted diseases (STDs) greatly increases the probability of transmitting or acquiring HIV; those in regular HIV care are likelier to have such STDs diagnosed and treated. However, such detection and treatment does not happen automatically as recent outbreaks of syphilis among PLWHA who were receiving regular care indicates. The HIV care provided must consistently meet high standards and must be accessible to populations living in poor areas and with limited resources. In fact, serious disparities currently exist in both access and quality.

Remaining in care and adhering to treatment regimens are critical to not only the individual's but the community's reaping the lifesaving and preventive benefits of treatment. Adhering to toxic regimens for years on end is difficult for any patient population, but especially so for those who are also burdened by high rates of mental illness, substance use or abuse, homelessness, poverty and social oppression by race, ethnicity, immigration status, sexual orientation, gender or gender identity, etc. Maintaining PLWHA in sustained care and support requires a comprehensive array of services, both medical and social, as well as the establishment of relationships of mutual trust and respect. One critical area where disparities persist is among incarcerated and recently post-incarcerated populations; as many as 25% of all PLWHA in the U.S. are under the control of the criminal justice system in any given year.

Testing as a Pathway

The Centers for Disease Control and Prevention (CDC) estimates that about 25% of PLWHA in the U.S. are unaware of their infection, having either never been tested or not received the results of their tests. Thus not only are more than 250,000 individuals not receiving the benefit of lifesaving therapy, but also their communities are not benefiting from the sharp reduction in HIV transmission risk that research shows follows becoming aware of one's status. One important study found that on average PLWHA aware of their status practice risky sex 68% less than do PLWHA unaware of their infection.

The CDC will soon release new recommendations calling for the routine HIV testing, at least once

annually in some subgroups, of people receiving services in traditional healthcare settings to decrease the proportion of PLWHA unaware of their infection. Adequate resources to support connecting people with HIV treatment and to ensure the availability of treatment are critical to the success of this initiative. However, testing in clinical settings is just one pathway for reducing the number of people that are unaware of their status, as it may miss some of the most at-risk groups of people, e.g., young African American men who have sex with men (MSM), who do not regularly access traditional health care settings. Community-based programs that reach these vulnerable populations are also critical if we are going to reach the spectrum of people affected by HIV disease.

HIV testing programs also provide critical opportunities to provide or refer people at higher risk for HIV to prevention counseling and services to reduce their risk for contracting HIV disease in the future. It is important for negative HIV test results, including those delivered in healthcare settings, to be accompanied by referrals to prevention counseling and services for people at higher risk for HIV disease to garner knowledge and skills to protect themselves and others.

A number of community-based strategies targeted at increasing testing and case finding have shown promising results and also need to be scaled up. Of particular promise are strategies based on using the social networks of people already in care for HIV to find others at high risk of being HIV+, getting them tested and enrolling them as appropriate in HIV care or intensive HIV prevention programs targeted to the particular pattern and context of risk behavior.

People with HIV Are Not Only Targets, but Necessary Partners in Prevention

A simple fact has only recently begun to inform the planning of HIV prevention interventions: every new HIV infection arises from a person who is already HIV+. Recent work estimates that perhaps 2/3 of new infections come from persons unaware of being infected. The remaining 1/3 come from persons aware of being HIV+ and thus reasonable targets for prevention interventions and support. Though published research on prevention interventions for positive people is still scant, there is enough to demonstrate that at least some interventions are effective. Observational research has also described a number of strategies that HIV+ persons adopt individually and/or through support networks to reduce their risk of infecting others. Evidence suggests that such strategies are having an effect in reducing HIV incidence, in at least some populations of gay men, for example.

Beyond being a target population for intervention, long term diagnosed HIV positive people are an untapped resource for HIV prevention, particularly for more recently diagnosed individuals who must learn how to adapt prevention strategies and integrate them with their HIV treatment and support. Having an intimate knowledge of both the context of risky behavior and the process of changing one's behavior and life outlook also affords many HIV+ people insight about how prevention programs aimed at HIV negative people might best be designed and implemented. Groups of PLWHA have been involved in designing and modeling for social marketing campaigns aiming to show at-risk uninfected men that "HIV is No Picnic" or "HIV is Not Fabulous." These campaigns have also aroused controversy within the community of PLWHA, with some arguing that they serve to stigmatize HIV people and thus deter testing or entry into care.

A close partnership with PLWHA can help policy makers rethink some strategies that may have an opposite effect from what was intended. For instance, a recent study indicated that state laws criminalizing certain behaviors by HIV+ persons may in fact be undermining public health efforts to control the spread of HIV.

Other Challenges Remaining

The success of integrating prevention and care depends upon ensuring that people at risk for and living with HIV have access to the prevention and health care services they need. Many societies, including the U.S., continue to fall short of extending health care as a right to all their members and providing adequate resources for comprehensive prevention strategies and programs.

The barriers to realizing this goal are not simply those of extending or rebuilding the healthcare infrastructure, though there certainly is plenty of need for that. But HIV infection continues to be a stigmatized disease that affects mainly people who also suffer from other stigma, whether as members of racial minorities, sexual minorities, immigrants, incarcerated populations or substance users. Stigma has many harmful effects, not least that it discourages access to testing and care, discourages the funding of adequate services and impairs the integration of PLWHA as accepted members of their communities living well and safely. Unless research shows the way and policy boldly follows in successful efforts to confront and overcome such stigma, and the social burdens with which it is associated, HIV transmission will continue to flourish.

