Young People and HIV: A Call to Action

HIV is having a significant impact on young people, among whom the rate of new diagnoses is high and health disparities are more pronounced. Incidence is increasing among young gay and bisexual men, and, among Black males, the largest percentage of new infections occur among those aged between 13 and 24 years.

Youths are least likely to experience the health and prevention benefits of treatment. Nearly half of young people with HIV are not diagnosed; among those diagnosed, nearly a quarter are not linked to care, and three quarters are not virally suppressed.

Addressing this burden will require renewed efforts to implement effective prevention strategies across multiple sectors, including educational, social, policy, and health care systems that influence prevention knowledge, service use, and treatment options for youths. (*Am J Public Health*. 2016;106:402–405. doi: 10.2105/AJPH.2015.302979) Linda J. Koenig, PhD, Deborah Hoyer, MPH, David W. Purcell, JD, PhD, Stephanie Zaza, MD, MPH, and Jonathan Mermin, MD, MPH

oung people in the United States have never known a world without HIV. They have no memory of the challenging times when HIV was almost always fatal, before medical science developed effective treatment. Yet, today HIV is having a significant impact among the young. From 2010 to 2014, the highest rate of newly diagnosed infections was among individuals aged 20 to 29 years.¹ In 2010, an estimated 12 200 new infections (26% of all new infections) occurred among those aged 13 to 24 years,² an average of more than 1000 newly infected young people every month.

In the United States, the burden of HIV is greatest among sexual and racial/ethnic minority populations, and disparities are even more pronounced among the young. For example, African Americans, who make up approximately 12% of the population, account for 44% of new infections overall³ and 57% among youths.² Gay, bisexual, and other men who have sex with men (MSM), who represent only 2% of the population, account for 63% of new infections overall³ and nearly three quarters (72%) of those among youths.² More troubling, the impact on young MSM is growing. From 2008 to 2010, the number of new infections among MSM aged 13 to 24 years increased 22%.3 In fact, among Black males, the largest percentage of new HIV infections in 2010 occurred among those aged 13 to 24 years. This pattern was different from that observed in other gender and

racial/ethnic subgroups, wherein older age groups continued to account for the largest percentage of new infections.³

Domestic policies on HIV set prevention priorities and serve to guide government, community, and even individual decision making around prevention strategies. In July 2015, the White House updated for 2020 the National HIV/AIDS Strategy (NHAS) and, for the first time, formally recognized young people aged 13 to 24 years as a population at risk.⁴ In addition, the updated NHAS identified two national progress indicators focused on youths-the percentage of young gay and bisexual men who have engaged in HIV risk behaviors and the percentage of HIV-diagnosed youths who are virally suppressed⁴—further highlighting the urgency of addressing primary prevention and HIV health outcomes in this population. Also relevant to HIV prevention among young people is Healthy People 2020. A national strategy broadly guiding health improvement, Healthy People 2020 has identified "knowledge of HIV status" as a leading health

indicator.⁵ This indicator is particularly pertinent to youths given that they account for the largest percentage of HIVunaware individuals of any age group.

Knowing one's HIV status is critical for health and prevention because people who know they have HIV typically take steps to protect themselves and their partners, including starting antiretroviral therapy (ART), which helps to improve individual health and substantially lower the likelihood of transmission by suppressing the virus.⁶ An estimated 44% of youths with HIV do not know they are infected.⁷ Testing is the first step to knowing one's HIV status and accessing treatment. However, only 35% of young people aged 18 to 24 years² and 25% of sexually experienced high school students8 have ever had an HIV test. The proportion tested is lower among male than female youths, even though males in this age group make up the majority of newly infected individuals.²

Youths living with HIV are not getting the care they need. Of all people living with HIV,

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young people are least likely to be linked to and retained in clinical care.^{7,9} Only 78% of youths diagnosed with HIV infection have been linked to care within three months of their diagnosis.⁷ Youths living with HIV are also less likely to stay in care; among those diagnosed, only 52% are retained in care.⁷

Although ART is recommended for all people with HIV in the United States regardless of immune status or viral load,¹⁰ only 76% of young people aged 18 to 24 years who are in care have an ART prescription.¹¹ As a result, only 26% of youths aged 18 to 24 years with diagnosed HIV, and 16% of those living with HIV, have suppressed viral loads (defined as < 200 copies per mL),⁷ meaning that their infection is controlled at a level where they can stay healthy and active and that their risk of passing the virus to others is greatly reduced. It is estimated that those who do not know they have HIV account for about one third (30%) of all new HIV transmissions, and those who are diagnosed but not in care, as is the case with many youths, account for about 60% of new transmissions.¹² Thus, youths are least likely to be experiencing the health benefits of HIV treatment and the reductions in viral load that reduce HIV transmission.

Current epidemiological data demonstrate that young people are in need of a comprehensive system that supports them throughout their developmental years. Fully addressing the growing problem of HIV among youths will require an increased focus on both primary and secondary prevention and a committed response from multiple sectors within society, including the educational system, which must improve the way in which youths are taught about sexual risk and how to prevent sexually transmitted diseases; the policy, social, correctional, and community sectors, which must increase access to and use of prevention and treatment services; and the health care system, which must improve rates of diagnosis and treatment among youths.

PREVENTION EDUCATION

Schools are essential partners in the effort to reduce HIV risk among youths, and they serve multiple functions in supporting sexual health. The US education system has direct contact with more than 30 million adolescents aged 10 to 19 years each day¹³ and serves as an effective means to reach these young people with HIV prevention education. To be most effective, educational efforts should be accurate and developmentally appropriate, include information on effective prevention options, and provide the skill training young people need to protect themselves and their partners. In particular, specific educational messages need to reach young MSM, who account for more than two thirds of youths with HIV. School-based interventions have been found to be effective in developing several behaviors known to reduce the risk of HIV and other sexually transmitted diseases, including delaying first sexual intercourse and, among those already sexually active, reducing the number of sex partners, decreasing unprotected sex, and increasing condom use.^{14–20}

Parents are important partners in their children's health education, and several effective programs serve to promote communication between parents and their children around sexual health education.^{21–23} The Community Preventive Services Task Force, a group of experts who conduct rigorous and systematic reviews of the scientific literature to identify proven population health interventions, has reviewed programs designed to decrease sexual risk behaviors among adolescents and has found sufficient evidence to recommend group-based risk-reduction interventions in school and community settings.^{24,25}

Schools can also play an important role through identifying and referring students to clinical service providers and community-based resources considered both youth-friendly and welcoming to sexual minority adolescents. Among youths at highest risk, including young MSM, school-based education may need to be supplemented by risk-specific information and prevention options offered through culturally competent community-based services outside of the school setting and, where local services are not available, Web-based programs. As mental health and substance use problems commonly co-occur with HIV risk behavior, the role that schools play in identifying, counseling, and referring for treatment students in need of mental health services or drug abuse programs may further support HIV risk reduction.

Students who are contemplating sexual activity or who are already sexually active would benefit from increased access to sexual health services, including HIV testing. Some schools offer on-site services through school nurses or school-based health centers, and on-site screenings for sexually transmitted diseases have been shown to be costeffective.²⁶ High schools can enhance their HIV prevention activities by educating students about how and where to obtain affordable counseling, testing, and treatment and by establishing linkage or referral systems with local health centers and communitybased organizations.^{27–30}

Policies can support these educational efforts by promoting in schools an inclusive and safe environment for sexual minorities that reduces stigma and discrimination.^{31–33} Sexual minority youths are at increased risk for violence, victimization, and school-based threats.34 factors associated both with HIV risk behaviors³⁵ and with absenteeism and poorer academic performance.^{34,36} In this way, victimization likely relates to less favorable educational and economic outcomes and may be important in understanding the higher rates of HIV among those with lower incomes and educational attainment.37,38 Supportive school environments have been found to be protective for sexual minority youths.³⁹ For example, those who attend schools with a gay-straight alliance (a student-led club that supports sexual minority youths and works to reduce prejudice and harassment within the school) have more favorable educational and psychosocial outcomes (e.g., school experiences, grades, attendance, mental health) than do those in schools without such an alliance.40-42

HEALTH CARE

The health care system also plays an essential role in HIV prevention among youths. Young people have low rates of testing and high rates of undiagnosed HIV. Since 2006, Centers for Disease Control and Prevention guidelines have called for routine HIV screening as part

of medical care for all American adolescents and adults.⁴³ The American Academy of Pediatrics and other professional organizations have issued similar guidelines.⁴⁴ In May 2013, the Preventive Services Task Force issued a "grade A" recommendation for routine HIV screening of all people aged 15 to 65 years, with repeat screening for those at increased risk.45 This grade means not only that scientific evidence supports the substantial public health benefit of routine screening of individuals in this age group but that, under the Affordable Care Act (Pub L No. 111-148), many Americans (including youths) will be able to receive HIV testing with no outof-pocket costs.46 Greater awareness and uptake of these recommendations by health care providers who serve young people may help to more rapidly identify those who do not know they have HIV.

In the case of health care providers who care for youths, establishing a practice of routine screening independent of risk assessment can be particularly beneficial not only because young patients may not admit to sexual initiation, same-gender partners, or other risky behaviors but because this screening can provide an opening for providers to begin a conversation about sexual and reproductive health and help establish a pattern of HIV awareness, testing, and risk reduction early in life. All people need information about their personal risks for acquiring HIV as well as access to education regarding risk-reduction strategies. In addition, all people with HIV, including adolescents and young adults, should be offered ART as soon as possible after diagnosis given the health and prevention benefits of early treatment.^{10,47}

Sexually active MSM and male and female heterosexuals aged 18 years or older who are at substantial risk for acquiring HIV should be evaluated for and, if appropriate, offered preexposure prophylaxis (PrEP) in accordance with current guidelines.48 Any physician can provide PrEP care and should make this option available to his or her young patients. Data on the efficacy and safety of PrEP among youths younger than 18 years are currently insufficient, and risks and benefits for individuals in this age group should be weighed in the context of local laws and regulations on autonomy in health care decision making by minors. However, a recent US study showed that MSM aged 18 to 22 years were reasonably able to follow the PrEP regimen, although some young people may need additional adherence support.49

Although Americans' attitudes regarding homosexuality are changing, the stigma associated with being gay, lesbian, bisexual, or transgender remains formidable and is often a barrier to young MSM accessing prevention or treatment services. The American Academy of Pediatrics⁵⁰ and the Society for Adolescent Health and Medicine⁵¹ have issued professional guidelines for the provision of health services to sexual minority youths. These guidelines underscore the importance of creating the trusting and confidential environment necessary for young MSM to discuss sex, disclose risk behaviors, and learn about ways to protect themselves. Reducing barriers to sexual health services through establishment of office policies and procedures that are youth-friendly (i.e., convenient, affordable, and confidential to the full extent of state law) and ensuring that all office staff

interactions are respectful of cultural norms, diversity, and minority sexual orientations and identities are necessary to ensure that youths will make use of existing services and remain in care.

Also needed is case management by staff who vigorously help youths access mental health, substance abuse, housing, financial, and other social services necessary to address the comorbid social and developmental issues common among youths living with HIV. Familiarity with local resources is critical; provider referrals to community-based organizations can increase patients' access to additional youth-friendly and culturally competent services.

A CALL TO ACTION

Implementing these prevention strategies will require recognition of the risk that HIV poses to young people and the active engagement of those in the greatest position to improve their health outcomes. Without increased awareness and training, educators, parents, and even health care providers may be unable to offer the necessary information about safer sex practices and prevention options that young people, and particularly young MSM, so urgently need. Policies that promote safe and inclusive environments for sexual minority youths are essential. Without such policies, stigma and violence will continue to render young MSM vulnerable to the emotional and behavioral consequences of isolation and victimization, which can increase risk behavior, prevent youths from accessing prevention and health care services, and ultimately limit our ability to reach our national HIV prevention goals.

HIV prevention is not a onetime activity. To be most effective, prevention education should begin before a person becomes sexually active and continue throughout the life span to meet individuals' changing needs. Society has a special responsibility to its young people: to keep them safe and provide them with the tools they need to safeguard their health across their life span. Health policies such as the NHAS and Healthy People 2020 can establish the foundation, but school personnel, leaders of community organizations and health departments, families, and health care providers must be active participants in protecting our young people and helping them avoid a potentially fatal but ultimately preventable and treatable illness. AJPH

CONTRIBUTORS

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