

Effective HIV Prevention Strategies for Key Populations

Chi-Tai Fang

Institute of Epidemiology and Preventive Medicine, College of Public Health, National Taiwan University, Taiwan

World Health Organization (WHO) recognizes five key population groups which are disproportionately affected by HIV: men having sex with men, people in prisons and other closed settings, people who inject drugs, sex workers, and transgender people. The disproportionate risks reflect both behaviors common among members of these populations, and the legal, social, structural, and other contextual factors that further increase their vulnerability. Transmission of HIV among these key populations drives the HIV epidemics. Countries are advised to prioritize their HIV responses to focus on key populations that are most vulnerable, experience the greatest burden of HIV and are currently underserved. To be effective, an HIV prevention strategy needs to adopt a comprehensive approach to reduce HIV risk behaviors, including condom, lubricant, needle syringe program, and opioid substitution therapy. HIV testing and counseling plays a key role in enabling people to know their HIV status and obtain medical care. HIV treatment as prevention (TasP) has revolutionized the science of HIV prevention. Early initiation of antiretroviral therapy reduces HIV transmission by 96% between sero-discordant couples. However, to maximize the potential of TasP, expansion of HIV testing to enhance early HIV diagnosis is required. Case management needs to be strengthened to improve the HIV cascade. Access to antiretroviral therapy should be expanded to all HIV-infected patients. For HIV-negative persons who are exposed to HIV, post-exposure antiretroviral chemoprophylaxis (PEP) offers protection. Recently, the PROUD trial and the IPERGAY trial demonstrate that pre-exposure prophylaxis (PrEP) reduces HIV risk by 86% in men having sex with men. PrEP is a promising strategy to break the chains of HIV transmission among this key population. Finally, an effective HIV prevention strategy requires more than providing programs, services, and antiretrovirals. It also requires systematic and structural changes that reduce the legal, social, cultural, and environmental barriers for vulnerable persons to access the information, prevention service, medical care, and treatment.