Abstract

With a global estimate of 2.5 million new infections of HIV occurring yearly, discovering novel methods to help stem the spread of the virus is critical. The use of antiretroviral chemoprophylaxis for preventing HIV after accidental or occupational exposure and in maternal to fetal transmission has become a widely accepted method to combat HIV. Based on this success, pre-exposure chemoprophylaxis (PrEP) is being explored in at-risk patient populations such as injecting drug users, female sex workers and men who have sex with men. This off-label and unmonitored use has created a need for education and intervention by pharmacists and other healthcare professionals. Pharmacists should educate themselves on PrEP and be prepared to counsel patients about their means of obtaining it (e.g. borrowing or sharing medications and ordering from disreputable Internet pharmacies). They should also be proactive about medication therapy management in these patients due to clinically important drug interactions with PrEP medications. Only one trial exploring the safety and efficacy of tenofovir as PrEP has been completed thus far. However, five ongoing trials are in various stages and two additional studies are scheduled for the near future. Unfortunately, studies in this arena have met with many challenges that have threatened to derail progress. Ethical controversy surrounding post-trial care of participants who seroconvert during studies, as well as concerns over emerging viral resistance and logistical site problems, have already halted several PrEP trials. Information about these early trials has already filtered down to affected individuals who are experimenting with this unproven therapy as an "evening before pill". The potential for PrEP is promising; however, more extensive trials are necessary to establish its safety and efficacy. Pharmacists are well-positioned to play a key role in helping patients make choices about PrEP, managing their therapy, and developing policy with an eye towards the future.

Keywords

Acquired immunodeficiency syndrome, chemoprevention, United States.