

Association of attitudes and beliefs towards antiretroviral therapy with HIV-seroprevalence in the general population of Kisumu, Kenya.

Abstract:

Since antiretroviral therapy (ART) became available in the developed world, the prevalence of unprotected sex and the incidence of sexually transmitted infections (STIs) and HIV have increased. We hypothesized that a similar phenomenon may be occurring in sub-Saharan Africa concomitant with the scale-up of HIV treatment. We conducted a general population-based survey in Kisumu, Kenya. Participants completed an interview that included demographics as well as ART-related attitudes and beliefs (AB) and then underwent HIV serological testing. Exploratory and confirmatory factor analyses of AB about ART indicated two factors: 1) ART-related risk compensation (increased sexual risk taking now that ART is available); and 2) a perception that HIV is more controllable now that ART is available. Logistic regression was used to determine associations of these factors with HIV-seroprevalence after controlling for age. 1,655 (90%) of 1,844 people aged 15-49 contacted, including 749 men and 906 women, consented to participate in the study. Most participants (n = 1164; 71%) had heard of ART. Of those who had heard of ART, 23% believed ART was a cure for HIV. ART-related risk compensation (Adjusted (A)OR = 1.45, 95% CI 1.16-1.81), and a belief that ART cures HIV (AOR = 2.14, 95% CI 1.22-3.76) were associated with an increased HIV seroprevalence in men but not women after controlling for age. In particular, ART-related risk compensation was associated with an increased HIV-seroprevalence in young (aged 15-24 years) men (OR = 1.56; 95% CI 1.12-2.19). ART-related risk compensation and a belief that ART cures HIV were associated with an increased HIV seroprevalence among men but not women. HIV prevention programs in sub-Saharan Africa that target the general population should include educational messages about ART and address the changing beliefs about HIV in the era of greater ART availability.