

ABSTRACT

BACKGROUND:

HIV disproportionately affects African-Caribbean women in Canada but the frequency and distribution of sexually transmitted infections in this community have not been previously studied.

METHODS:

We recruited women based on HIV status through a Toronto community health centre. Participants completed a socio-behavioural questionnaire using Audio Computer Assisted Self-Interview (ACASI) and provided blood for syphilis, HIV, hepatitis B and C, herpes simplex virus type 1 (HSV-1), herpes simplex virus type 2 (HSV-2), and human cytomegalovirus (CMV) serology, urine for chlamydia and gonorrhoea molecular testing and vaginal secretions for bacterial vaginosis (BV) and human papillomavirus (HPV). Differences in prevalence were assessed for statistical significance using chi-square.

RESULTS:

We recruited 126 HIV-positive and 291 HIV-negative women, with a median age of 40 and 31 years, respectively ($p < 0.001$). Active HBV infection and lifetime exposure to HBV infection were more common in HIV-positive women (4.8% vs. 0.34%, $p = 0.004$; and 47.6% vs. 21.2%, $p < 0.0001$), as was a self-reported history of HBV vaccination (66.1% vs. 44.0%, $p = 0.0001$). Classical STIs were rare in both groups; BV prevalence was low and did not vary by HIV status. HSV-2 infection was markedly more frequent in HIV-positive (86.3%) than HIV-negative (46.6%) women ($p < 0.0001$). Vaginal HPV infection was also more common in HIV-positive than in HIV-negative women (50.8% vs. 22.6%, $p < 0.0001$) as was infection with high-risk oncogenic HPV types (48.4% vs. 17.3%, $p < 0.0001$).

CONCLUSIONS:

Classical STIs were infrequent in this clinic-based population of African-Caribbean women in Toronto. However, HSV-2 prevalence was higher than that reported in previous studies in the general Canadian population and was strongly associated with HIV infection, as was infection with hepatitis B and HPV.