Abstract

BACKGROUND Sub-Saharan Africa constitutes 65% of the global Human Immunodeficiency Virus and acquired immunodeficiency syndrome (HIV/AIDS) burden. Sixty percent of those infected are women. Contraceptives are very important in helping women make their reproductive health choices, the most commonly used in our set up being depomedroxyprogesterone (DMPA, which has been associated with increased viral loads in plasma and lower genital tract though contentious. Few studies have been done in this regard, however, no human studies have been done to compare HIV-1 plasma and lower genital tract viral loads in DMPA users with viral loads of those not on DMPA. Furthermore, since HSV-2 is a known risk factor for HIV, information on the effect of HSV-2 seropositivity on plasma and lower genital tract in relation to DMPA use is needed. Objectives To determine the effects of DMPA on both plasma and lower genital tract HIV 1 viral loads in seropositive ART naïve women attending a comprehensive care centre (CCC) in Kisumu, Kenya, and to examine the impact of HSV-2 seropositivity on the viral load concentrations.. Study design This was a case control study. Study area This study was done using done using stored plasma and cervicovaginal lavage fluid samples obtained from participants in a previous study conducted in Kisumu, Kenya. The samples were transported to the University of Nairobi Institute of Tropical and Infectious Diseases (UNITID) laboratory for analysis. Study population Twenty one healthy cases of HIV-1 positive ART naïve women on DMPA and twenty one controls of healthy HIV-1 positive ART naïve women not on DMPA.