

Prevalence of unsuppressed viraemia in HIV positive female sex workers on the daily single dose TDF/3TC/EFV tablet for 6 months: PSI-Zimbabwe sex worker cohort

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Background: Data on viral suppression and adherence patterns of anti-retroviral therapy (ART) naïve HIV positive female sex workers (FSWs) initiated on the Tenofovir/lamivudine/Efavirenz (TDF/3TC/EFV) fixed dose combination are scarce in Zimbabwe. The objectives of this study were to describe the prevalence of and factors associated with unsuppressed viraemia as well as the mean adherence of FSWs on the Efavirenz based fixed dose tablet after 6 months of treatment.

Methods: A retrospective record review was done on 77 FSWs who had been initiated on TDF/3TC/EFV and had a 6 months post initiation viral load test result at 2 FSW clinics in Gwanda and Bulawayo, Zimbabwe. Recruitment into the clinics was done between July 2013 and September 2015. Data on monthly adherence per pill count, 6 months viral load test result and

possible predictors of unsuppressed viraemia were collected.

Results: Prevalence of unsuppressed viraemia after 6 months on TDF/3TC/EFV FDC tablet was 7.78% (95%CI, 1.67-13.92 %) while viral suppression occurred in 92.22% (95%CI 83.8-97.1%). Based on the 35 patients with complete adherence data, the mean adherence was 99.69% (95%CI, 99.48%-99.91%). All 35 had adherence >95% classified as good. Only comorbidity (Adjusted OR 23.31, 95%CI 1.74-310.65, $p = 0.017$) and baseline CD4 count (Adjusted OR 0.9886; 95%CI 0.9774-0.9998, $p = 0.047$) showed independent associations with unsuppressed viraemia.

Conclusion: In the first 6 months on TDF/3TC/EFV, ART there is a low prevalence of unsuppressed viraemia, high viral suppression rates and high adherence rates in naïve HIV positive FSWs in our setting.