

568. A Comparison of Single versus Multiple-Tablet Regimens in HIV-Infected People Initiating Antiretroviral Therapy

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Background: The once-daily single-tablet regimen (STR) containing efavirenz, tenofovir and lamivudine is the first choice for HIV-infected people initiating antiretroviral therapy (ART) in Brazil and few studies have examined its influence on treatment and health-related characteristics compared to multiple-tablet regimens (MTR).

Objectives: To evaluate the differences of antiretroviral therapy as a STR and MTR regarding treatment and health-related characteristics.

Methods: Baseline evaluation of a cohort of 184 HIV-infected adults (79% male, mean age 35.9) with six or less months of ART under care in a reference hospital in Belo Horizonte, Brazil. Recruitment occurred between Sep/2015 and Aug/2016, and data were obtained through face-to-face interviews. Quality of life (QoL), symptoms of anxiety and depression, health state and adherence were assessed through self-report using validated instruments. A 40-item instrument to be validated during the cohort was used to assess perceived barriers with ART. The regimen used was collected from the Brazilian ART delivery database system (SICLOM). STR and MTR users were compared through non-parametric tests using Stata v.14.

Results: A slightly lower proportion of STR versus MTR patients were non-adherent (54% vs 57%) and had adverse effects (85% vs. 88%), anxiety symptoms (36% vs. 41%) and depression symptoms (27% vs. 31%), though the statistical difference was not significant ($p > 0.05$). The STR group showed a higher QoL in the independence domain ($p < 0.01$) (WHOQoLHIV-bref) and a better self-perception of health ($p < 0.05$) (EQ5D VAS) than MTR group. The MTR group had twice the odds of having difficulties with the treatment ($p < 0.05$). The perceived barriers associated with MTR were “incorporate ART into

work routine” ($p < 0.05$), “swallow the pills” ($p = 0.05$) and “social isolation ($p < 0.01$)”.

Conclusions: All the characteristics analyzed in this study tended to be better for patients using STR. Although adherence was not significantly higher in STR group, patients reporting difficulties with treatment had twice the odds of being non-adherent. The results indicate that single-tablet regimens may help patients in the management of ART, reflecting in aspects of daily life activities and self-perception of health.

569. Adherence to Brazilian HIV-AIDS Treatment Guidelines: A 3-Year Retrospective Analysis of Dispensing Data

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Background: Brazilian HIV/AIDS therapeutic guidelines are reviewed regularly to provide updated guidance on antiretroviral treatment of people living with HIV. Antiretroviral regimens are highly effective for managing disease and preventing HIV dissemination. Thus, to evaluate the appropriateness of their use is crucial.

Objectives: Describe the profile of dispensing of antiretroviral regimens and the adherence to Brazilian therapeutic guidelines for HIV treatment in adults.

Methods: Retrospective analysis of dispensing data of antiretroviral drugs from HIV/AIDS public referral centres in Minas Gerais state, Brazil. Data from the Medication Logistics Control System from 2014 to 2016 were reviewed. Antiretroviral regimens were classified into five categories according to 2014/2015 Brazilian guidelines: first line regimen – FLR, second line regimen – SLR, salvage therapy – ST, other regimens – OR and non-recommended regimen – NRR.

Results: A total of 917,754 antiretroviral regimens (equivalent to 696 different combinations and 42,302 patients) were dispensed: 60.3% FLR, 16.9% SLR, 3.2% ST, 19.3% OR and 0.3% NRR, being FLR, SLR and ST in accordance with the guidelines. FLR and SLR included most frequently combinations of tenofovir (or zidovudine) + lamivudine + efavirenz

(90.1%), and tenofovir (or zidovudine) + lamivudine + boosted-atazanavir (87.1%), respectively. Raltegravir and boosted-darunavir were the most frequent drugs used in ST (89.3%). Roughly 67% (193/289 combinations) of the OR comprised tenofovir (or zidovudine) + lamivudine + unboosted-lovinapir combinations. NRR included tenofovir + didanosine associations (43.6%), which could lead to pancreatitis and lactic acidosis. Virologic effectiveness of darunavir- or saquinavir-based regimens would be prevented in 22.6% of NRR as these antiretroviral drugs were contained in unboosted preparations.

Conclusions: While demonstrating high agreement with the national guidelines, the findings also showed a considerable rate of OR and NRR. This highlights the need for increased vigilance of dispensing of antiretroviral drugs in order to provide better clinical outcomes.

570. Assessment of Prescribing Ceftriaxone Sodium in Afghanistan's Secondary and Tertiary Hospitals

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Background: Irrational medicine use is a major problem at all levels of the health care system in Afghanistan. A first step to promote rational medicine use in developing countries is assessing medicine use patterns using globally recognized indicators. Ceftriaxone sodium is the cephalosporin most prescribed for infective conditions in Afghanistan's secondary and tertiary referral hospitals.

Objectives: A study to assess prescribing patterns of ceftriaxone sodium was conducted in the inpatient departments of two tertiary referral hospitals and three secondary hospitals in the country.

Methods: A cross-sectional descriptive and quantitative study was conducted between October 2014 and April 2015 at two tertiary referral hospitals in Kabul and three secondary provincial hospitals. The study sought to determine prescribing patterns of ceftriaxone sodium for inpatients. In each hospital, researchers randomly selected files of patients prescribed ceftriaxone in 2013 or 2014. Researchers selected 20 files for each year at each hospital, total: 200 files

Results: The study found a high proportion of irrational ceftriaxone sodium use in the five selected hospitals during 2013 and 2014. On average, only 45% of 2013 patient files and 41% of 2014 patient files included a diagnosis that matched the ANF indication for ceftriaxone, but proportion varied from 25% to 80% in 2013 and from 10% to 75% in 2014 according to the hospital, figure. An average of 1% of patients received ceftriaxone sodium in spite of having a contraindication to the medicine. While this percentage is small, it should be zero. In this sample, the average number per patient of medicines prescribed concurrently with ceftriaxone sodium was 7.0 in 2013 and 6.6 in 2014. Discrepancy with contraindications varied from 0% to 18% according to the hospital. Dose and frequency adherence were near 95%.

Conclusions: Based on the study sample, more than half of ceftriaxone sodium prescriptions in Afghanistan's secondary and tertiary hospitals are unnecessary. Polypharmacy also is high. Prescribing of ceftriaxone sodium at the hospital level needs to be managed according to the clinical guidelines and national formulary manual. Strict medicine monitoring should be performed in hospitals and treatment guidelines must be regularly revised. Furthermore, we have to study how variation observed between our hospitals could be explained by antibiotics policies implemented.

571. Dispensings of Influenza Antiviral Medications in the Sentinel System as a Source of Data for Influenza Surveillance

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Background: Numerous data sources are used to monitor annual influenza activity. We examined whether claims data in the Sentinel System for dispensings of influenza antiviral drugs might serve as an additional source of influenza surveillance data.

Objectives: Calculate the rate of incident influenza antiviral drug use over multiple influenza seasons in Sentinel and compare trends to routine surveillance data.

Methods: We identified outpatient pharmacy dispensings of oseltamivir (capsule and powder forms