Antiretroviral Therapy at Public Health Care Facilities in Brazil: HIV/AIDS Cohort-Brazil.

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INTRODUCTION: Results from the use of combination antiretroviral therapy (cART) in daily practice of health services remain relatively unknown in countries of low and middle-income, despite their accounting for around 90% of the AIDS epidemic worldwide. In order to minimize this limitation we developed the HIV/AIDS Cohort-Brazil, which has as main objective to analyse the effectiveness of the antiretroviral and the impact of that treatment on morbidity, quality of life and mortality of people HIV-infected in Brazil.

METHODS: Since 2003, the HIV/AIDS Cohort-Brazil project has been following 6109 HIV-infected adults receiving cART in 26 public health care facilities in Brazil, using as sources of information data from routine health services and self-reported quality of life questionnaires. When not otherwise available, data related to demographics, laboratory tests and mortality are obtained from national information systems. The main outcomes of interest are diseases related or unrelated to HIV; suppression of viral replication; adverse events; virological, clinical and immunological failures; change in the cART; and mortality.

RESULTS: When antiretroviral treatment was started, approximately 60% of the patients presented severe immunodeficiency (CD4$^+$T-cell counts of $\leq$ 200 cells/mm$^3$) or diseases related to HIV infection. In addition, in 1/3 of these cases, antiretroviral therapy was not started until more than six months after clinical follow-up had begun. The medications most often used in the various treatment regimens were efavirenz (in 59.7%), lopinavir/ritonavir (in 18.2%) and atazanavir/ritonavir (5.6%). Of the NRTI backbones prescribed, 86.2% contained zidovudine or lamivudine; tenofovir was used in 4.5%. By 36 months after the beginning of therapy, the initial regimen had been changed in 29.9% of the cases, translating to a probability of change for the period of 35.6%. The average duration of treatment prior to the change being 30.4 months.

CONCLUSIONS: Results from cART use, in the daily practice of health services, remain relatively unknown in countries of low- and middle-income and studies with the characteristics of Cohort-Brazil contribute to minimize these shortcomings, given its scope and a patient profile similar to that of the AIDS epidemic in the country.