



Adherence to antiretroviral therapy and viral suppression among Unicamp Day Hospital patients: seeking UNAIDS 90-90-90 goal.

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Abstract

A cross-sectional study in patients with HIV/AIDS followed up at HC-Unicamp showed 82.7% of sustained use of antiretroviral therapy and 86.7% of viral suppression, which are close to the UNAIDS goal to control the epidemic. Depression, being a woman and drug use were associated with nonadherence to treatment and diabetic patients had higher percentages of viral suppression.

Key words: HIV, antiretroviral therapy, viral suppression.

Introduction

In 2014, UNAIDS proposed the 90-90-90 goal to end the AIDS epidemic by 2030 (1). This goal aims that by 2020, 90% of all people living with HIV will know their HIV status, 90% of the ones with diagnosed HIV infection will receive sustained antiretroviral therapy (ART) and 90% of all people receiving ART will have viral suppression (Figure 1). In that year, Brazil scored 87-55-50, respectively. In 2016, in the state of São Paulo there were 58% of patients undergoing ART and 53% with viral suppression.

This study aims to estimate the percentage of adherence to treatment and viral suppression of patients followed up in 2016 at the HIV/AIDS Outpatient Clinic at UNICAMP, an important regional reference center in Campinas, one of the largest cities in São Paulo. In addition, we will analyze the sociodemographic, epidemiological, clinical and laboratorial profiles of these patients.

Results and Discussion

A total of 350 randomized medical records of patients followed up in the outpatient clinic in 2016 have been assessed, 95% confidence level ($z=1.96$) and 5% sampling error. After 11 medical records discarded, we analyzed **339 medical records**. The sustained ART was identified in 278 patients (**82.7%**) and viral suppression was found in 293 patients (**86.7%**). Viral suppression was defined as <50 viral copies per mL of blood in the last documented laboratorial exam.

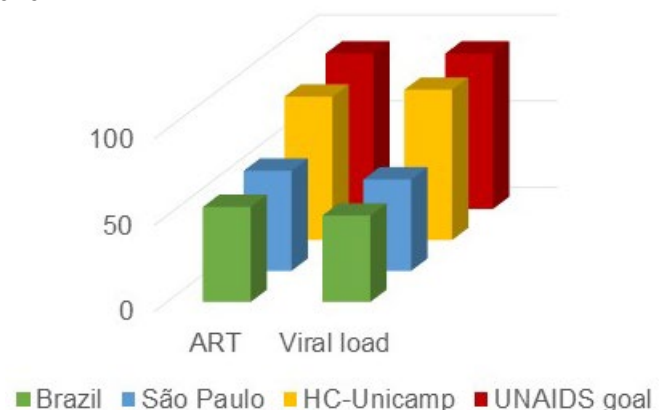
Regarding the **Sustained ART**, statistically positive association was found with **male gender** ($p=0.01$), **non-use of drugs** ($p=0.012$), **absence of depression** ($p=0.006$) and **last CD4 count >500 cells/mm³** ($p<0.001$).

Regarding the **Undetectable Viral Load**, statistically positive association was found with **presence of diabetes mellitus** ($p=0.045$) and **last CD4 count >500 cells/mm³** ($p<0.001$).

The other demographic variables (age, years of schooling and city of origin), epidemiological variables (category of exposure and sexual orientation), background morbidities (smoking and alcohol use), and clinical characteristics (presence of other comorbidities, sexually transmitted infections, hypertension, dyslipidemia and intercurrent clinical events in the last 12 months) had no association with both ART use and viral load (VL).

These results refer only to patients who attended the health service in 2016 and do not represent the whole number of individuals with HIV infection in the region.

Figure 1. Comparison of the percentages of ART and viral load in Brazil, São Paulo, HC-Unicamp and UNAIDS goal, 2016.



Conclusions

The percentages of ART use and viral suppression at HC-Unicamp are considerably larger than the national average (55-50%) and the state of São Paulo (58-53%) almost reaching 90% as recommended by UNAIDS.

Among men, sustained ART is more frequent, as well as in patients without depression. Nonadherence to treatment is associated with drug use. Viral suppression was greater in diabetic patients, probably due to the chronic follow-up of this disease, which facilitates clinical control. As expected, CD4 count >500 cells/mm³ is associated with both sustained ART and viral suppression.

The identification of patients with higher probability of nonadherence to treatment and thus no viral suppression may direct the actions of prevention, active pursuit of non-adherents and better disease control.

Acknowledgement

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1. The Joint United Nations Programme on HIV/AIDS. 90-90-90 An ambitious treatment target to help end the AIDS epidemic. 2014; JC2684. [Internet]. Available from: http://www.unaids.org/sites/default/files/media_asset/90-90-90_en_0.pdf