

## PHARMACOLOGICAL NON-ADHERENCE TO ANTIRRETROVIRALS AND THE CONSEQUENT INCREASE IN HIV VIRUS TRANSMISSION

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**Keywords:** HIV; Acquired Immunodeficiency Syndrome; Antiretrovirals; Medication Adherence.

## **INTRODUCTION**

National data on HIV indicators and clinical data monitoring indicate that 1.5 million people became newly infected with HIV in 2021. Regardless of knowledge about Acquired Immunodeficiency Syndrome (AIDS) and the lack of a cure, today it recognizes the advancement of treatment possibilities with the emergence of antiretroviral therapy (ART) and the consequent stabilization of the patient's condition, allowing, as long as they are correctly used, the reduction of the viral load and therefore the condition of undetectable load. However, even with progress in the use of ART, AIDS patients demonstrate physiological or psychological resistance to treatment adherence.

## **OBJECTIVE**

To describe the causes of non-adherence to antiretroviral medications and the consequence of increased HIV transmission.

## **METHOD**

This is an integrative literature review, using a bibliographic survey of selected articles. A search was carried out in two databases, which consist of: Scientific Electronic Library Online (SciELO), PubMed and Department of Chronic Conditions and Sexually Transmitted Infections (DCCI). The keywords "ANTIRRETROVIRAIS" AND "HIV" were used to search for articles, with 47 files found from the search. The inclusion criteria defined for the selection of articles consist of publications in Portuguese and English published in the last 3 years. Finally, 3 articles were selected to compose this work.

## **RESULT**

The emergence of ART made it possible for AIDS patients to reduce the morbidity and mortality of the disease with control possibilities, resulting in the stabilization of their clinical state, characterizing it as a chronic disease. Suppressing the viral load makes it possible to delay or prevent the onset of immunodeficiency and restore the functioning of the immune system, associated with benefits in the physical health of HIV-positive people. However, adherence to treatment is extremely important for the effectiveness of the medication, and when unsatisfactory it is associated with the development of viral resistance. Different factors are associated with adherence to ART, mainly sociodemographic and psychosocial characteristics, related to the disease itself, form of treatment and social support. Recent studies have already demonstrated that with adequate use of ART it is capable of maintaining viral suppression at adherence rates below 95%. When the viral load is undetectable in a patient carrying the virus, it is consequently non-transmissible. However, even with the use of ART, some patients still have unsuppressed virology. Virological failure is a result of pre-treatment or acquired drug resistance, and may also lack resistance when there is gastrointestinal malabsorption, drug interactions or inadequate drug levels due to non-adherence. The use of genotypic resistance testing involves direct sequencing of the viral genome, helping to guide initial therapy and select an optimal ART regimen after treatment failure.

## CONCLUSION

It is understood that patients using modern ART regimens are virologically suppressed, with non-adherence to treatment being a multidimensional challenge that must be considered when choosing the medication. Although virologic failure can be a clinically significant complication, advances

in treatment have expanded drug options for patients with resistance and exposure to multidrug-resistant viruses. This way, it is emphasized that ART benefits the patient to have a healthy life, reduces their viral load, making it non-transmissible and consequently reduces contamination rates, controlling the risk of new infections.

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