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# The Influence of Personality on Adherence to ART

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#### ABSTRACT

Study aimed to assess the personality characteristics of HIV/AIDS in association with adherence to Antiretroviral Therapy (ART), conducted with 66 PLWHA on antiretroviral treatment. Evidence obtained in the study indicated that personality may influence individual's health by association with psychological mediators, which affect adherence behavior.

Key words: Personality; Psychological mediators; Treatment adherence; ART

# DESCRIPTION

Studies on personality commonly aim to verify whether personality characteristics differ with respect to an individual's sex, age, intelligence, temperament, social behavior, ethnicity, and culture [1,2]. The association between personality traits and health-related aspects has been observed in personality differences among patients with chronic diseases, including HIV/AIDS; in health risk behaviors; in predisposition to morbidity and immune system response; in lowered capacity for planning, persistence, and self-control, which may favor risk behavior for disease infection and transmission, as well as influencing adherence to treatment and disease control programs [3,4]. Considering HIV/AIDS, as with other chronic diseases, for treatment effects to be achieved, adherence to ART is fundamental. Non-adherence decreases clinical benefits and the effectiveness of health systems; it presents a threat to the individual and collective health [5]. Although non-adherence to treatment is a very common phenomenon, it is not always possible to identify a set of sociodemographic variables or personality characteristics that can predict accurately whether the patient will follow medical recommendations [6,7]. This research aimed do assess personality traits in PLWHA, considering general patterns of behavior and attitude, and to verify its association with the perceived social support, expectation of self-efficacy to follow Antiretroviral Treatment (ART) and the adherence by means of biological markers.

A clinical, exploratory, descriptive, and cross-sectional study was carried out in a specialized outpatient hospital in São Paulo, Brazil.

Socio-demographic variables, biological adherence markers, personality traits, perceived social support and self-efficacy expectations to follow ART were evaluated by means of a structured questionnaire, HumanGuide Test [8], Scale of Perceived Social Support in HIV (PSS-HIV) [9] and Scale of Self-efficacy Expectations of Adherence to Antiretroviral Treatment [10]. Medical records were reviewed. Descriptive and correlation data analysis were performed. Participants were 66 PLWHA, 22 women and 44 men (65.8%MSM), mean age 50 years (SD=12.19). Differences in personality characteristics were correlated to positive perceived social support such as sociability and optimism (r=0.393; p=0.001), ability to deal with changes (r= -0.284; p=0.024) and flexibility (r= -0.276; p=0.029). Positive correlation between scores indicative of good prognosis on the PSS-HIV with CD4+ T cell and viral load (X<sup>2</sup>(2)=9.721; p=0.008) were found. Low expectation of self-efficacy to follow ART correlated with dependence on social approval and recognition (r=-0.302;p=0.017). High expectations in the dimension Negative Emotional Experiences and Physical Conditions correlated with an increase in the CD4+ T cell count (r=0.286; p=0.023) and decrease of viral load (r= -0.305; p=0.015). High scores on sense of responsibility and care for life in general correlated with an increase in the CD4+ T cell count (r=0.297; p=0.019). No correlations were found between sociodemographic variables and self-report on adherence with perceived social support, expectation of self-efficacy and biological markers. Anova Post Hoc showed no significant differences in the mean scores of personality traits between genders, except for the dimension Imagination, higher in MSM (M=2.93) compared to women (M=0.24) (p=0.006).

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# CONCLUSION

Personality characteristics may influence the adherence to ART by affecting perceived social support and self-efficacy expectations to follow ART, which affects the adherence to ART, measured by CD4+ T cells and viral load. The understanding of the aspects that may contribute to improve health and quality of life should consider the integration of personality and health, as this integration may provide important clues to further investigation of the determinants of adherence, and offer relevant information to health professionals when approaching and treating patients with chronic diseases.

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# ETHICAL STATEMENT

Study approved by the Ethics Committee for Research with Human Beings (2.981.920). All participants signed the Informed Consent Form before the application of the research instruments. There is no financial relationship with ineligible companies to disclose or of any kind.

#### CONFLICT OF INTEREST

The authors declare no conflicts of interest regarding the publication of this paper.

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