

# DOES SEX INFLUENCE IN THE DELAY OF LINKAGE TO HAART IN HIV PATIENTS?

¿INFLUYE EL SEXO EN EL RETRASO DE LA VINCULACION AL PROGRAMA TARV EN LOS PACIENTES CON VIH?

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## Mr. Editor

The HIV epidemic is a global public health problem, affecting 36,9 million people in the world and is estimated to cause more than one million deaths per year. In Peru, a total of 120389 cases of HIV infection were reported in December 2018, according to the report of the Directorate General of Epidemiology, of which 43072 were in stage AIDS<sup>1</sup>.

The goal of antiretroviral therapy (ART) previously recognized as highly active antiretroviral therapy (HAAART) is to suppress the virus to undetectable levels so that immune function can be preserved or restored, achieving a reduction in mortality and an improvement in life quality. However, according to WHO, up to 2017, only 67% of infected people received ART<sup>2</sup>. Delayed links to this programme in patients with positive diagnosis of HIV infection contribute to the risk of spread of the disease, immunological deterioration, increased morbidity, as well as increased direct costs of medical treatment, with cumulative costs estimated to increase the longer a patient takes to start treatment.

Several studies found discordant results in terms of the male sex and its significance for the late onset of antiretroviral therapy (Table 1). Parrott et al<sup>3</sup>, Van der Kop et al<sup>4</sup>, Nedezuko et al<sup>5</sup>, obtained in their studies that the male sex was a risk factor for the late onset of antiretroviral therapy. Men would have the perception that starting HAAART would affect their masculinity, increase the visibility of their HIV status and put them at risk of external stigma such as rejection by their current partners, comrades, family members and community members. In addition, it is noted that men usually minimize their discomfort, shielding themselves from feeling sick, minimizing the early onset of antiretroviral therapy,<sup>5</sup> On the other hand, Turner et al<sup>6</sup> found no association.

Due to the discrepancy of the results regarding the male sex as a risk factor for the late onset of antiretroviral therapy and that the studies mentioned were carried out in other regions (Kenya, Ukraine, Malawi and United States), local studies are suggested since it is considered important to recognize whether the male sex is a risk factor because it is evident that the male group has a higher prevalence of HIV infection. According to Center for Epidemiology, Prevention and Diseases Control, in Peru until December 2018 the ratio according to sex was 3.7 men for a woman in the cases diagnosed with HIV infection and for AIDS cases 4,5 men for one woman<sup>1</sup>; and, in a study conducted in a hospital in Lima, it was found that the male sex had 17% more frequency of late diagnosis compared to the female and could indicate that men take longer to go to the health centers in search for attention<sup>6</sup>, this could mean a delay in linking up with the highly active antiretroviral therapy programme. It is pertinent to mention that other aspects may play an important role in the delay in linking to the HAAART programme, such as the structure of the health system, men as an economically active population tend to prioritize their work activities which together with a poor health system can lead to the delay in search and consequent link to the HAAART program.

Identification of the sociodemographic factors that influence the decisions of people with HIV infection to seek care and initiate treatment, will enable the design of effective public health interventions to increase the early onset of antiretroviral therapy in patients diagnosed with HIV infection.

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**Table 1.** Influence of the male sex in late start of the HAAART program according to previously published studies.

Authors	Sample	Country	Type of study	Effect of male gender on late onset
Turner et al.	3500	United States	Cohort	OR= 0,98 (IC 95% 0,56 – 1,72)
Parrott et al.	365	Malawi	Cohort	OR=2,30 (IC 95% 1,30-3,90)
Van der Kop et al.	775	Kenya	Transversal	OR=1,30 (IC 95% 0,93-1,82)
Nedezhuko et al	200	Ukraine	Transversal	OR= 1,2 (IC 95% 0,69 – 2,1)
OR: Odds Ratio				

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