Title: Mental health status of people living with HIV in Rwanda - a cross sectional study

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## **Background:**

While antiretroviral therapy (ART) has reduced mortality among people living with HIV (PLWH), mental health disorders are still an overlooked problem among many of these patients increasing the risk of medication non-adherence and viral non-suppression. However, only few studies have investigated this area in East African countries, and more evidence is needed to estimate the size of the problem.

## **Objective:**

This cross-sectional study is assessing and comparing the prevalence of depression, generalized anxiety disorder (GAD), and post-traumatic stress disorder (PTSD); their risk factors; and their effect on ART adherence and viral suppression in a cohort of Rwandan PLWH.

## Methods:

The study is a collaboration between Center for Global Health, Aarhus University and Rwanda Biomedical Centre. Participants were  $PLWH \ge 18$  years old enrolled from hospitals and health centers in Rwanda and selected randomly after stratification by gender and age to represent the general PLWH population of Rwanda.

The Mini International Neuropsychiatric Interview (MINI) was used to estimate the prevalence of depression, GAD and PTSD. Data on sociodemographics, viral load, ART adherence, and previous mental health disorders was collected at the time of the MINI and will be analysed using descriptive statistics and logistic regression.

# **Results:**

428 participants were included in the study. The majority were female (63.1%) with mean age 43.9 years. Participants were in general virally suppressed (96.9%) with high ART adherence (99.1%). The preliminary results show prevalences of depression, GAD and PTSD of 14.1%, 2.6%, and 5.7%. 15.6% of the participants report that the HIV diagnosis has affected their mental health, while 20.3% has experienced HIV stigma and discrimination.

### **Conclusion:**

The results indicate that the Rwandan HIV management is well-organized with the majority of PLWH being virally suppressed. However, mental health disorders among the PLWH are still a challenge also in an East-African context. Integrating mental health care with existing HIV treatment programmes is a necessary step to reduce the health inequality among PLWH.

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