

# Mental illness remains a barrier to **HIV** treatment adherence in South Africa



Antiretroviral treatment, when taken consistently, can ensure that a person living with HIV can live a long and healthy life. Yet treatment adherence remains a challenge. Research has shown that mental health struggles can make taking medication challenging. How big a problem is this in South Africa? A team of HSRC researchers explored the extent of mental distress among people living with HIV and its impact on treatment adherence using the latest national data.

**By Andrea Teagle**

**A**lmost a third (31%) of people living with HIV (PLHIV) in South Africa are experiencing mild to severe mental distress, data from the 2017 national HIV survey SABSSM V show. This is likely to be significantly higher than rates of mental illness in the general population.

The link between mental health and HIV is well documented. According to the HSRC's Dr Edmore Marinda, who led the study, HIV can affect mental health directly and indirectly: HIV and associated opportunistic infections can directly affect the brain and nervous system; additionally, PLHIV may experience isolation and lack of support, as well as challenges accessing mental health services. HIV-related stigma, abuse and discrimination can also result in trauma.

"Mental illness levels have remained relatively high among PLHIV despite more widespread availability of antiretroviral treatment (ART) and possible reductions in stigma," Marinda says.

Photo: Bisams, Freepik

“More recently, the mental health burden has increased due to COVID-19, and the impact may be worse for some population groups such as PLHIV.”

What are the implications of mental health struggles for the treatment outcomes of PLHIV? Some studies have shown that mental illness can adversely affect adherence to treatment. However, in South Africa, the evidence for this association has not been so clear cut.

Using data from SABSSM V (2017), Marinda and his colleagues sought to tease out the relationship between mental health and adherence in South Africa. Included in the study were a total of 2155 participants aged 15 years or older (79% female) who were on ART.

### **Widespread distress**

Their study measured mental health issues using the Kessler scale, which asks respondents to respond to statements related to mood in the past month – such as, ‘how often have you felt hopeless?’ – with a scale of possible answers (‘often’ to ‘not at all’).

The team looked at the mental health scores across various demographics – for example, for men and women, for those with primary education as compared with secondary and tertiary education, people in rural areas and those in cities, and so on. Interestingly, they found that levels of mental health were comparable across different demographic groups. Approximately 8% of participants were found to be experiencing moderate mental distress and 10% severe distress. A further 13% were presenting with mild mental distress, according to the scale.

Then, Marinda and his team looked at which variables might be affecting adherence. For adherence to be measured, participants were asked if they had missed taking any of their antiretroviral pills in the past 30 days. They were also asked about how many they had missed.

They found that participants with severe mental distress were significantly more likely to have missed treatments. Alcohol use, geographic location and education were all independently associated with non-adherence, with people living in rural areas and people who drink heavily or hazardously more likely to report missing treatments. Reported non-adherence in the Western Cape was highest at 40%, and lowest in Limpopo (9%).

### **Accounting for other factors**

The study needed to account for the possibility that the impact of mental distress was due, or partly due, to other factors: For example, if alcohol disorders and mental distress occur together, it might seem that depression is driving treatment non-adherence when in fact it is alcohol consumption, or vice versa. So, they created an adjusted, multivariate model that included education, province, urban or rural location, and alcohol use.

Finally, they created a reduced model that excluded the factors that were no longer significant in the multivariate model, such as a rural or urban location. This reduced model found that severe mental distress still predicted treatment non-adherence, with individuals presenting with severe mental distress more than twice (2.19 times) as likely to miss treatments. There was no link between mild or moderate mental distress and treatment non-adherence.

People who drink heavily or hazardously comprised 8% of the participants. In the adjusted model, the team found that alcohol abuse also significantly affected treatment adherence, with high and hazardous drinkers four times and ten times more likely to default on treatment than non-drinkers, respectively. Viral suppression was significantly lower among heavy alcohol drinkers, a finding that the authors say points to sustained levels of poor adherence.

Surprisingly, having post-matric education also increased the likelihood of non-adherence. This finding is likely contextual: Marinda and colleagues write that individuals with higher education levels were likely to be employed and reported being busy, and thus often forgot to take their ART medication. A study in the Eastern Cape found, in contrast, that individuals with lower education levels were more likely to miss treatments – the underlying reason in that context was a lack of money to travel to treatment clinics.

The multivariate model also retained the link between province and adherence, with participants living in the Western Cape significantly more likely to report missing treatment.

The extent of mental distress, and the link between severe mental distress and missing treatment, points to the need for proper integration of HIV and mental healthcare services, the authors conclude. In addition to bettering the health outcomes for PLHIV, mental health screening and management are also critical for achieving higher rates of viral suppression and reducing the number of new infections.

**Researcher:** Edmore Marinda, a director in the HSRC’s Impact Centre

[emarinda@hsrc.ac.za](mailto:emarinda@hsrc.ac.za)

**Author:** Andrea Teagle, a science writer in the HSRC’s Impact Centre

[ateagle@hsrc.ac.za](mailto:ateagle@hsrc.ac.za)