



# MENTAL HEALTH AND ANTIRETROVIRAL TREATMENT ADHERENCE AMONG ADOLESCENTS LIVING WITH HIV

## EVIDENCE ON RISK PATHWAYS AND PROTECTIVE FACTORS

### KEY MESSAGES

- Adolescents living with HIV are likely to experience mental health challenges, interfering with their ability to adhere to antiretroviral treatment (ART).
- Bullying and stigmatisation impact on the mental health and ART adherence of adolescents living with HIV.
- Social support and caregiver-adolescent relationships can protect against some of these negative effects, and more broadly lead to better mental health.
- Integrating mental health support into HIV care and intervening at the individual family, community, and health facility level, is a critical step in promoting better adolescent adherence and wellbeing.

### STUDY COHORT

- Study design:** A Longitudinal study of 1176 adolescents (10-19 years) who initiated ART at one of the 53 public healthcare facilities in the Eastern Cape, South Africa.
- Timeline:** Between 2014 and 2017, participants were interviewed at baseline and 18-month follow-up, with responses linked to medical records.
- Participants:** In total, 90% of all study-eligible adolescents were interviewed. Of those surveyed, 54% were female, 23% lived in rural locations, and 26% acquired HIV during adolescence.
- Methods:** Questionnaires included measures on ART adherence, mental health, and factors potentially linked to ART adherence and mental health such as social support, attendance of support groups, and adolescent-caregiver relationships. We conducted analyses to look at the relationship between these factors, mental health and ART adherence.

### BACKGROUND

Good mental health and psychosocial wellbeing is especially important for adolescents during their transition to adulthood. It can support resilience, help initiate healthy behaviours, and shape long-term positive health outcomes. Mental health is influenced by a range of biological, social, psychological, and cultural factors, all of which may contribute to an adolescent's ability to function independently and contribute positively to society.

Adolescents living with HIV are more likely to experience mental health challenges compared to their peers who do not have HIV. Moreover, adolescents and youth also have lower rates of adherence to ART and retention in HIV care and higher rates of HIV-related deaths compared to other age groups.

It is important to understand risk factors that may link poor mental health and poor ART adherence among adolescents and to identify factors that can support their treatment adherence, even in the face of mental health challenges. Exploring these factors can shed light on how mental health and HIV treatment outcomes are linked and guide the development of more effective interventions to support adolescents living with HIV.

This brief presents combined findings from several published analyses using data from a longitudinal community-traced study of adolescents who initiated ART in South Africa. We draw from these analyses, and from evidence of promising interventions in low- and middle- income countries, to provide key programming considerations.

### LOCATION

Eastern Cape,  
South Africa





## KEY DEFINITIONS

**Social support** refers to emotional and practical support from family, friends and others, that is available when needed.

**Support groups** refer broadly to health facility-based groups designed to support adolescents living with HIV and/or any individuals living with HIV. They are often facilitated by external partners or local NGOs.

**Caregivers** refer to any adults who are primarily responsible for the care of adolescents, including biological parents, grandparents, other relatives, or neighbours.

**Positive caregiving/parenting** refers to practices such as offering praise, positive feedback and reinforcement for good behaviour.

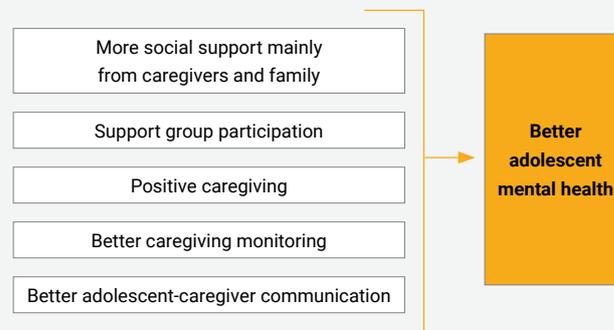
**Caregiver monitoring** refers to specific, articulated expectations for adolescents' behaviour, and actions for keeping track of adolescents and ensuring their safety, also commonly referred to as supervision.

- In turn, adolescents who experience internalised stigma and worse mental health are more likely to interrupt their HIV treatment and engagement in clinic care. This interruption in care poses risks to adolescents' health and disease progression.

### 2) Better caregiver-adolescent relationships and more social support are protective factors for good mental health and ART adherence among adolescents living with HIV.

- On average, adolescents had better mental health if they: participated in a support group linked to a health facility; reported having more social support (either from a caregiver or another family member); experienced more positive caregiving; better caregiver monitoring; and better communication with their caregivers (Figure 2).

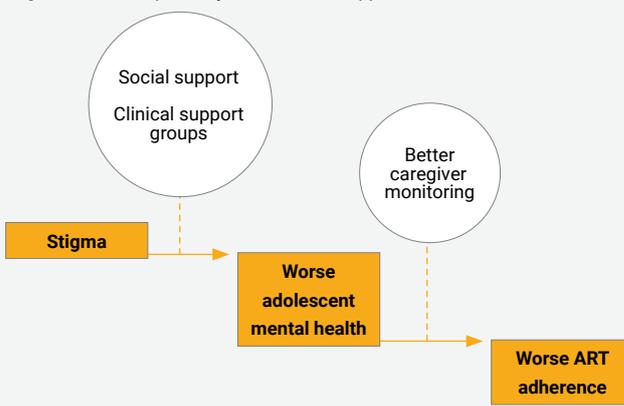
Figure 2: Direct positive effects of better caregiver-adolescent relationship and social support on mental health.



- Some of these protective factors may also interrupt pathways between stressors (stigma and bullying) and outcomes (worse mental health and treatment adherence). We found that many adolescents living with HIV experienced stigma and mental health distress however, this distress was less severe if they reported more social support and attended a support group. Adolescents living with HIV with both these support resources were particularly resilient to poor mental health.

- In another analysis we found that adolescents who had symptoms of anxiety and depression were much less likely to take their ART consistently. But this negative impact was less severe if they reported better caregiver monitoring (Figure 3).

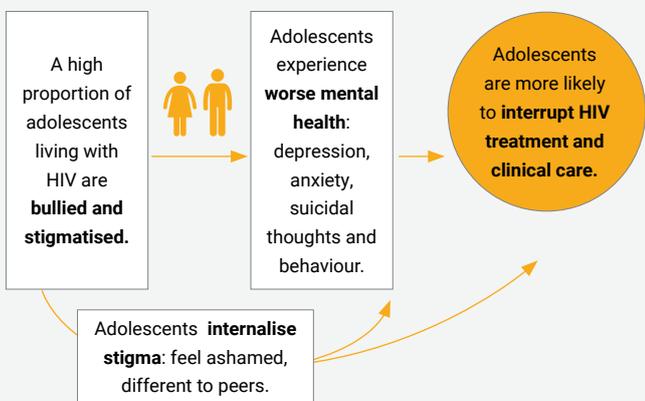
Figure 3: Indirect pathways from social support to ART adherence.



## FINDINGS

### 1) Being bullied and/or stigmatised is associated with worse mental health and ART adherence among adolescents living with HIV (Figure 1).

Figure 1: Pathways from bullying victimisation and stigmatisation to ART adherence.



- Many adolescents living with HIV experience bullying and are stigmatised because of their HIV status or the HIV status of their family members. At baseline, about 2 in 3 adolescents reported bullying and 1 in 3 reported experiences of HIV-related stigma.
- Adolescents who are bullied or stigmatised may start to internalise stigma. For example, they may feel ashamed or start to believe that they are different to their peers due to their HIV status.
- Both the experience of being bullied and/or stigmatised, and internalising this stigma, are associated with worse adolescent mental health over time. Adolescents experiencing bullying and/or stigma are more likely to report symptoms of depression, anxiety, and suicidal thoughts and behaviours.





“..this is a very tough situation. It’s giving me depression.”

(20 yrs, Male)

### WHAT DOES THIS MEAN FOR PRACTICE?

- ➔ Provision of **mental health support is integral to HIV care**. Health services and systems should go beyond clinical management of HIV and address the psychosocial and mental health of adolescents.
- ➔ Indicators of mental health and stigma **should be regularly included in reporting**.
- ➔ **Anti-bullying programs and programs to reduce community-level stigma** related to HIV are important as mental health preventative efforts for adolescents living in HIV-endemic regions.
- ➔ Health providers should consider ways to **identify adolescents who are experiencing bullying, internalised stigma, and/or mental health symptoms**, as they may be at higher risk of treatment interruption. For example, providers can ask specific questions to determine whether adolescents have experienced physical harm from other teens, whether they have been made fun of or excluded, or whether they feel safe at school.
- ➔ **Linking adolescents** to more specialised mental health services through facility-specific or locally-tailored referral networks may be important in certain cases.
- ➔ **Engaging caregivers** in community-based programming and HIV services is essential to improving monitoring and positive support for adolescents at home. In addition, strengthening caregivers’ capacity and skills to support adolescents living with HIV in meeting their mental health needs may be required.
- ➔ HIV care and services should also **link adolescents to support groups** that provide psychosocial support and information, mitigate the effect of stigma and support adolescent treatment adherence. In some cases, this may include peer-based support, shown to be effective, for example, in the Zvandiri CATS model in Zimbabwe.
- ➔ **Remote, COVID-responsive options for supporting adolescents living with HIV** are essential. It is important to consider expanding virtual mental health platforms or implementing hybrid strategies to enable more remote engagement across settings.

### REFERENCES

Casale M et al. Journal of Acquired Immune Deficiency Syndrome, 2021, 86(4):436-44. doi: 10.1097/QAI.0000000000002574  
 Shenderovich Y et al. BMC Public Health, 2021, 21:172 https://doi.org/10.21203/rs.3.rs-62974/v2  
 Boyes M et al. Journal of affective disorders, 2020, 276:418-23. https://doi.org/10.1016/j.jad.2020.07.101  
 Pantelic M et al. Journal of the International AIDS Society 2020, 23:e25488. https://doi.org/10.1002/jia2.25488  
 Casale M et al. Journal of affective disorders, 2019, 245:82-90. https://doi.org/10.1016/j.jad.2018.10.102  
 Boyes M et al. AIDS Care, 2019,31(1):95-104. https://doi.org/10.1080/09540121.2018.1524121

### FUNDERS AND PARTNERS

