CONNECTION



Exploring mental health among rural youth: Insights from SAPRIN data

By Audrey Moyo December 2025



Audrey Moyo presenting at a conference

Ms Audrey Moyo is a PhD student currently studying towards a PhD in Epidemiology at the University of Stellenbosch. She shares a milestone in her research journey, a recently published paper in *BMC Public Health* titled: "Prevalence and correlates of common mental disorders among adolescents and young adults in rural South Africa: analysis of household survey data informed by lived experience experts."

This study was part of the *Positive Minds Study*, funded under the 2022 Mental Health Data Prize by Wellcome Trust-UK in partnership with Social Finance. I served as the co-principal investigator alongside Dr Darshini Govindasamy (SAMRC-HSRU; SAMRC-WITS PRICELESS-SA), who was the senior principal investigator. Working with the Youth Health Economics team at the SAMRC (HSRU), I received training on human centred design thinking, an iterative process of working with community advisory boards, lived experience experts, fieldstaff and scientists to co-design research questions and interpret data together. That experience sparked my PhD in Epidemiology at Stellenbosch University, where I continue to explore mental health among young people using multiple datasets, with SAPRIN as the primary source, and working alongside lived experience experts and data teams. This recently published paper marks an important milestone in that journey.

Funded by the Department of Science, Technology & Innovation (DSTI)
Hosted by the South African Medical Research Council (SAMRC)





Common mental disorders (CMDs) often emerge during adolescence but are frequently diagnosed in adulthood. Understanding their burden and drivers in rural settings is critical for designing community-based interventions that address mental health needs early. In this study, we examined the prevalence and correlates of CMDs, specifically depressive symptoms and anxiety, among adolescents and young adults aged 15–24 in rural South Africa. Using SAPRIN household survey data and incorporating insights from lived experience experts, we aimed to ensure the findings reflect real-world challenges.

The analysis included 11,346 adolescents and young adults from three SAPRIN Health and Demographic Surveillance System (HDSS) nodes: Agincourt (Bushbuckridge District, Mpumalanga), DIMAMO (Capricorn District, Limpopo), and AHRI (uMkhanyakude District, KwaZulu-Natal). We conducted secondary analysis using the SAPRIN Mental Health Data Prize 2022 datasets. Importantly, we engaged 17 young people with lived experience of mental health challenges in participatory workshops to inform variable selection and interpretation of findings. In addition, as part of the Youth Health Economics community of practice, we presented findings at several scientific and community workshops for reflection and feedback.

Our results showed that 9% of the participants reported at least one CMD, with 8.5% reporting depressive symptoms and 7.5% reported anxiety symptoms. Becoming a young parent and not being the child of the household head emerged as key correlates of CMDs, highlighting the important role of family structure in shaping mental health outcomes among young people.

Results from our work was showcased at the *World Congress of Epidemiology 2024*, an international platform for advancing epidemiological research. Locally, it received recognition at the *SA-ACAPAP 2024* Conference, where it won the Best Student Poster Presentation Award for innovation driven by community voices, a proud moment for the Youth Health Economics team.

I would like to acknowledge SAPRIN's critical role in enabling this research. SAPRIN provided access to datasets from their rural HDSS nodes, making large-scale analysis possible. Their previous data manager, Dr Linda Maoyi, offered invaluable support by addressing data queries and setting up meetings to clarify technical issues. This collaboration was essential to the success of the study.

This paper forms part of my PhD journey, where I will further explore mental health and cardiovascular health among young adults using SAPRIN and other open access datasets. My next steps involve applying advanced statistical and machine learning methods to analyse secondary data and uncover deeper insights into the intersection of mental and cardiovascular health.

I would like to express my appreciation to my PhD supervisors, Dr Darshini Govindasamy (SAMRC-HSRU; SAMRC/WITS PRICELESS SA), Assoc Prof Innocent Maposa (Stellenbosch University), and Assoc Prof Theresa Munyombwe (University of Leeds), for their guidance and support. I am also grateful to my co-authors, Prof Peter Nyasulu (Stellenbosch University), Prof Arvin Bhana (SAMRC-HSRU), Lovemore Sigwadhi (Stellenbosch University), Stanley Carries (SAMRC-HSRU), Nokwanda Sithole (SAMRC-HSRU), Reuben Moyo (Stellenbosch University), Assoc Prof Eugene Lee Davids (University of Pretoria), whose collaboration and contributions were integral to the success of this research.

The paper can be accessed via this link https://link.springer.com/article/10.1186/s12889-025-23890-y

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