Title: Young people, men, and those with mental health issues, may struggle with taking their HIV medication daily

Scientists found that young people, men, and those with mental health issues, may struggle more with taking their HIV medication daily and getting the best treatment results compared to older adults, women, and people without mental health problems.

South Africa has 7.5 million people who are living with HIV. But thanks to effective HIV treatment (antiretroviral therapy or ART), their lives have been greatly improved. ART works by stopping HIV from multiplying and reduces the amount of virus in the body to very low levels. But people living with HIV need to take their ART medication every day as prescribed by the doctor to suppress the virus to very low levels. This is important because when HIV is suppressed, people living with HIV don’t fall sick and can live long and healthy lives. Moreover, when the virus is suppressed the risk of transmitting HIV to sexual partners or children is greatly reduces.

. Moreover, when HIV is suppressed to such low levels that it can no longer be detected anymore with laboratory tests (what doctors may call undetectable viral load), people living with HIV cannot transmit the virus to their sexual partners

reduces the chances of transmitting the virus to others. Strict adherence to ART meaning taking medication every day as prescribed by the doctor is crucial of the long-term effectiveness of ART to help keep the levels of the virus suppressed.

researchers have found that mental health diagnoses, younger age, and sex are associated with unfavourable adherence patterns and viral non-suppression. The study was conducted on a cohort of privately insured adolescents and adults who were living with HIV and who were receiving antiretroviral therapy (ART) through a private healthcare program.

The study, published in the journal AIDS and Behavior, found that among participants with depression and anxiety, the increase in the risk of adverse HIV treatment outcomes was modest. In contrast, participants with serious mental disorders, substance use disorders, and organic mental disorders were at substantially higher risk of non-adherence and viral non-suppression than those without mental health diagnoses. Adolescents and young adults with and without mental health diagnoses had low viral suppression rates, whereas older adults generally had high suppression rates, even those with mental health diagnoses. Middle-aged males were at higher risk of non-adherence and viral non-suppression than females of the same age.

The study highlighted the large burden of mental illness among adolescents and young adults living with HIV in South Africa and underlined the need to strengthen mental health care in HIV treatment programs. Over a median follow-up of 3.5 years, 38% of participants enrolled in the study were diagnosed with a mental disorder; 20% with depression; and 26% with anxiety. The low proportion of participants diagnosed with substance use disorders likely reflects the under-ascertainment of prevalent alcohol and substance use disorders.

The study confirms and extends previous findings on the associations between mental health and substance use conditions and HIV treatment outcomes. The results showed that less prevalent yet more serious mental disorders, such as bipolar disorder or schizophrenia, are more strongly associated with non-adherence than common mental disorders. Substance use disorders were also strongly associated with non-adherence and non-suppressed viral load, suggesting a need for expanding harm reduction programs and adherence interventions.

The study found that adolescents and young adults had poorer HIV treatment outcomes than older adults. Only about 40-60% of participants younger than 25 years had continuously high adherence. The risk of continuous non-adherence was highest among young adults aged 20-24 years, peaking at 33% among young males with mental health diagnoses. Poor HIV treatment outcomes among adolescents and young adults highlight the need for interventions for improving care outcomes in this age group.

Males older than age 35 were at higher risk of viral non-suppression when compared with contemporaneous females. This result aligns with previous studies reporting poorer HIV outcomes among males than females. Sex disparities within HIV outcomes have been attributed to male health care-seeking behaviour arising from harmful masculine norms, higher rates of harmful alcohol and substance use leading to poor ART adherence, and the gendered nature of health services creating health care barriers for males.

The study has a large sample size, allowing for disaggregated analyses of common and less prevalent serious mental disorders by sex and age, and the availability of mental health diagnoses from primary, secondary, and tertiary care. The use of an objective validated adherence measure, the longitudinal study design, and the novel analytic methods used to examine longitudinal adherence patterns are also strengths of the study.

The study suggests the need for psychosocial interventions for improving HIV treatment outcomes—particularly for adolescents and young adults—and strengthening mental health care support in HIV treatment programs. Patients with mental illnesses established on ART and adherent to their medication require equal access to differentiated ART delivery models. The results also suggest the need for routine screening for mental health and substance use disorders and shifting mental health counselling from specialised to non-specialised health workers or trained laypersons as promising approaches for integrating mental health services in primary care HIV care programs in low- and middle-income countries.

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