

Abstracts of the WCMSR

01. A CROSS-SECTIONAL STUDY ON ATTENTION-DEFICIT/HYPERACTIVITY DISORDER SYMPTOMS AMONG MEDICAL STUDENTS IN RWANDA: ACADEMIC AND PSYCHIATRIC CORRELATES

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BACKGROUND: Attention-deficit hyperactivity disorder (ADHD) is a neurodevelopmental condition that often persists into adulthood, and it can be underdiagnosed. It correlates with poor academic performance and other comorbidities, including mood disorders, anxiety disorders, and behavioural addiction. However, evidence of ADHD symptoms is limited in Rwanda. This study aims to assess the prevalence of ADHD symptoms and their association with subjective academic performance and other psychiatric comorbidities among medical students in Rwanda.

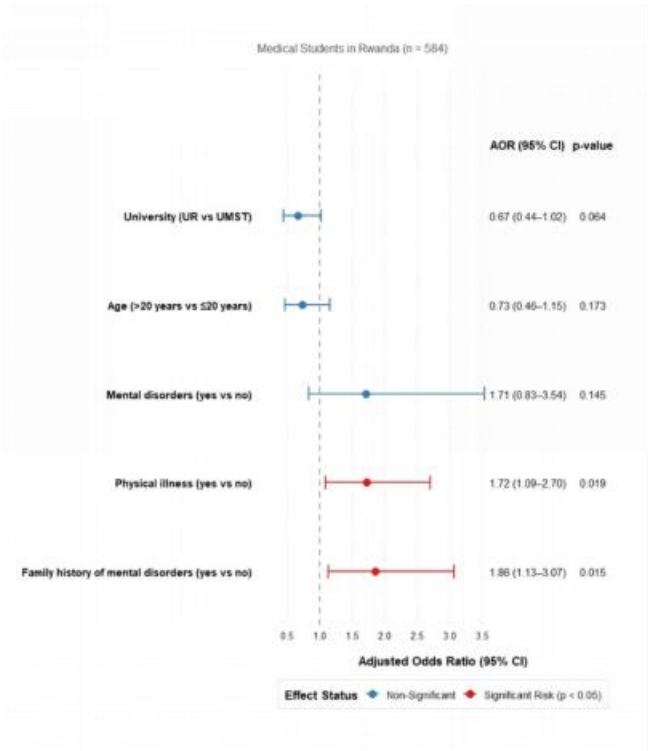
METHODS: An analytical cross-sectional study with STROBE checklist was conducted among adult medical students at the University of Medical Sciences and Technology and the University of Rwanda between September and October 2025. The sample size was determined using the single population proportion formula at a 95% confidence level and 5% margin of error, with an assumed proportion of 0.5 due to lack of prior estimates. This was adjusted for the finite study population. Data were collected using English and Kinyarwanda self-administered Questionnaires face to face and online. ADHD symptoms were assessed using the Adult ADHD Self-Report Scale (ASRS-v1.1). Strategies sampling was applied according to academic levels, and the data was collected conveniently from each according to proportion. Sociodemographic data, Academic performance, psychiatric, and physical health were analysed using the chi-square test. IBM SPSS Statistics version 23.

RESULTS: A total of 584 medical students participated in the study, with a response rate of 61.5%; 52.9% were male, and 47.1% were female. The mean age was 21.6 ± 1.7 years (range 17–29 years). The prevalence of probable ADHD symptoms was 21.4%. ADHD symptoms were more prevalent among students aged 20 years or younger ($p < .05$) and were significantly associated with poorer academic performance ($p < .001$). A significant association was also observed between ADHD symptoms and maladaptive daydreaming (48%, $p < .001$), as well as psychiatric comorbidities, particularly history of anxiety disorders (6.4%, $p < .05$). Logistic regression analysis identified physical illness (OR = 1.72, 95% CI: 1.09–2.70, $p = .019$) and family history of psychiatric illness (OR = 1.86, 95% CI: 1.13–3.07, $p = .015$) as independent predictors of ADHD symptoms.

CONCLUSION: ADHD symptoms were prevalent among younger medical students in Rwanda, and they were associated with poorer academic performance, maladaptive daydreaming, and psychiatric vulnerability, particularly anxiety spectrum disorders. These findings highlight the importance of early screening and accessible mental health support for medical students.

Key Words: Attention Deficit Hyperactivity Disorder, Attention Deficit Disorder, Mental Disorder, Academic Performance, Medical students.

Figure: Logistic Regression Analysis of Factors Associated with Probable ADHD Symptoms among Medical Students in Rwanda



Abbreviations: AOR = Adjusted Odds Ratio; CI = Confidence Interval; UMST = University of Medical Sciences and Technology; UR = University of Rwanda. Reference categories are UMST for university, ≤20 years for age, and “No” for history of psychiatric/mental illness, physical disease, and family history of mental illness. Data are presented as Adjusted Odds Ratios (AOR) with 95% Confidence Intervals (CI). Statistical significance was set at $p < 0.05$.