

71. **MENTAL HEALTH CHALLENGES: ANXIETY AMONG MEDICAL STUDENTS - A CROSS-SECTIONAL ANALYTICAL STUDY**

Khalid Osman Mohamed<sup>1</sup>, Ahmed A Lemam Mohammed<sup>2</sup>, ElShimaa Ammar Zaki<sup>3</sup>, Sozan Mudather Soumit<sup>4</sup>, Wamda Ahmed Ali<sup>5</sup>, Asmaa Mohamed Abbas<sup>6</sup>.

<sup>1</sup> MBBS. University of Bahri, Khartoum, Sudan.

<sup>2</sup> MBBS. Gadarif Teaching Hospital, Gadarif, Sudan.

<sup>3</sup> Fifth-year Medical Student. Omdurman Islamic University, Omdurman, Sudan.

<sup>4</sup> MBBS. Police Teaching Hospital, Khartoum, Sudan.

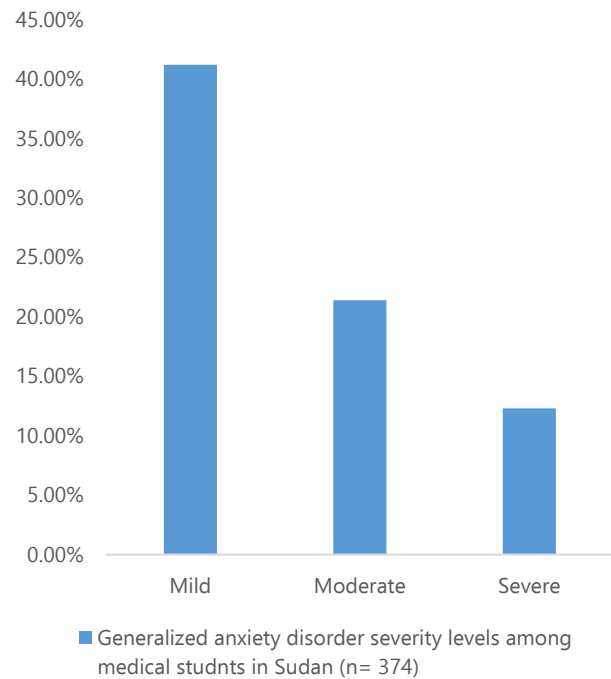
<sup>5</sup> Third-year Pharmacy Student. Omdurman Islamic University, Khartoum, Sudan.

<sup>6</sup> MBBS. Military Hospital, Omdurman, Sudan.

**BACKGROUND:** Generalized Anxiety Disorder (GAD) is characterized by consistent and excessive worry, significantly impacting daily functioning and academic performance. Medical students encounter various challenges during their academic years and clinical rotations that put them at a higher risk of developing anxiety. In addition, Sudan is currently experiencing a complex social and political environment characterized by political unrest and economic crises. These factors may further increase medical students' risk of developing GAD. Unfortunately, limited research has been conducted on GAD among medical students in Sudan. This study aimed to determine GAD prevalence, assess risk factors, and examine its impact on academic achievement and daily activities among Sudanese medical students. **METHODS:** A cross-sectional analytical study was done among undergraduate medical students at Omdurman Islamic University in Sudan from January to February 2023. A systematic random sampling technique was used to select 374 participants. Data were collected via an electronic self-administered questionnaire comprising two parts: sociodemographic information and the Generalized Anxiety Disorder Questionnaire (GAD-7), a validated tool for screening and assessing GAD severity. Descriptive statistics, t-tests, one-way ANOVA, and multivariate regression analysis were used to analyze the data. Effect sizes were measured using Cohen's d and eta-squared. The cut-off p-value for statistical significance was set at < 0.05. **RESULTS:** The prevalence of generalized anxiety disorder (GAD) was 33.7%, with severity levels of 41.2% for mild anxiety, 21.4% for moderate anxiety, and 12.3% for severe anxiety. The mean GAD score was significantly higher among female medical students ( $p < 0.001$ ) and those with chronic diseases ( $p = 0.034$ ). GAD significantly impacted daily activities among those who reported higher GAD scores ( $p < 0.001$ ). In multivariate regression analysis, medical students in the final year had almost 4.246 higher odds of having GAD [95% CI for AOR = 1.267, 14.221] ( $p = 0.019$ ). Females had 2.4 times higher odds of having GAD [95% CI for AOR = 1.458, 3.946] ( $p < 0.001$ ). **CONCLUSION:** The prevalence of generalized anxiety disorder (GAD) among Sudanese medical students is relatively high and has a detrimental impact on daily activities. Medical students in the final year have a higher risk of GAD, and significant associations were found between GAD and female sex, as well as chronic diseases. The high prevalence of GAD among medical students is concerning and highlights the urgent need for increased awareness, normalizing discussions about mental health issues, and providing resources and support to students struggling with anxiety. Universities should identify and offer medical students effective anxiety relief techniques and promote a wellness culture that encourages healthy routines such as regular exercise, sufficient rest,

and effective stress management. Future research should evaluate the effectiveness of different interventions in preventing and treating GAD among medical students and identify and address the barriers to accessing mental health care for medical students in Sudan.

**Figure.** Generalized Anxiety Disorder Severity Levels Among Medical Students in Sudan (n= 374).



**Key words:** Generalized Anxiety Disorder; Medical Students; Prevalence; Risk Factors (Source: MeSH-NLM).