

Abstracts of the WCMSR

01. A POST-TRAUMATIC STRESS DISORDER AMONG EPILEPTIC PATIENTS IN CONFLICT-AFFLICTED REGIONS OF SUDAN: A CROSS-SECTIONAL STUDY.

Gafar M. Abdelnabi^{1,2}, Elalim Altayeb Abudurrahman^{1,2}, Nada Mohammed Saad Eltawil^{1,2}, Ayman Alaeldein Omer^{1,2}, Tabsira Ali Ibrahim Mohammed^{1,2}, Abdelrhaim Mohamed Abdelrhahim Ali Mohammed^{1,2}, Omnia Yousif Ali Attaalmnaan^{1,2}, Idris Mohamedali Idris^{1,2}

¹University Red Sea University, Port Sudan, Red Sea State, Sudan.

²Abou-aloloum Centre for Medical Education and Research, Port Sudan, Red Sea State, Sudan.

BACKGROUND: Epilepsy is a chronic neurological disorder that may be aggravated by psychological stress, particularly in conflict-affected settings. In Sudan, ongoing instability exposes many individuals with epilepsy to traumatic experiences; however, the burden of post-traumatic stress disorder (PTSD) among this population remains insufficiently understood. Clinical observations from conflict zones have indicated that PTSD symptoms are both common and disabling in patients with epilepsy, which prompted a formal assessment of the prevalence of PTSD and its association with sociodemographic and epilepsy-related factors among adults with epilepsy in these settings.

METHODS: A cross-sectional study was conducted among 395 adult patients with epilepsy. Data was collected using a structured questionnaire that included demographic characteristics, epilepsy history, and PTSD symptoms. PTSD severity was assessed using a standardized screening scale. Statistical analysis included descriptive statistics, Pearson correlation, and chi-square tests to evaluate the relationships between PTSD and the study variables.

RESULTS: More than half of the participants (54.7%) demonstrated high PTSD severity, while 43.5% had low severity, indicating that clinically significant PTSD symptoms were highly prevalent in this population. Higher PTSD scores were strongly associated with female sex, older age, certain occupations, and longer seizure duration (sex: $r = 0.74$, $p < 0.01$; age: $r = 0.83$, $p < 0.01$; occupation: $r = 0.87$, $p < 0.01$; seizure duration: $r = 0.79$, $p < 0.01$). These findings suggest that both social determinants and the chronic course of epilepsy may increase vulnerability to PTSD. Chi-square analysis also revealed significant associations between PTSD diagnosis and age group ($p = 0.005$), educational level ($p < 0.001$), type of residence ($p = 0.006$), and seizure severity ($p < 0.001$), highlighting the combined impact of sociodemographic disadvantage and more severe epilepsy on the risk of PTSD.

CONCLUSION: PTSD was highly prevalent among adults with epilepsy living in conflict zones in Sudan and was significantly associated with both demographic and seizure-related factors. These findings underscore the importance of integrating routine mental health screening and psychosocial support into epilepsy care to improve outcomes for this vulnerable population in humanitarian settings.

Key Words: Epilepsy, PTSD, Conflict, Sudan, Mental health, Seizure disorder