

LETTER TO THE EDITOR**TO THE EDITOR****Screening for Anxiety and Depression in Epilepsy****Keywords:** Epilepsy, Psychiatry

We read with interest the article by Lane et al¹ on the prevalence of major depressive episode (MDE) and generalized anxiety disorder (GAD) in adults presenting with a first seizure. The authors are to be commended for highlighting this important issue and for contributing further data confirming the close relation between epilepsy and psychiatric disorders. The results showed increased prevalence of MDE as measured by evaluation of symptoms using the Neurological Disorders Depression Inventory for Epilepsy (NDDI-E) in patients with new-onset epilepsy or newly diagnosed epilepsy compared to those with a first seizure, and compared to controls. However, no statistical relation was found with prevalence of severe anxiety symptoms evaluated using the Generalized Anxiety Disorder item questionnaire (GAD-7). Both of these tools have good to excellent psychometric properties, are now well established for screening for comorbid MDE and GAD in people with epilepsy, have been validated in a variety of languages,² and are recommended by the International League Against Epilepsy Commission in Neuropsychiatry for widespread use.³

While the cut-off used for the NDDI-E used in the present study was 15 in keeping with previously published works, the authors however report using 14 (out of a possible total of 21) as a cut-off score for the GAD-7, which seems relatively high; in addition, the reason for choosing this cut-off does not seem clearly explained. The original study of the GAD-7 scale by Spitzer et al⁴ conducted in a general (non-epileptic) population provided data for a variety of possible cut-off points, and concluded that “a score of 10 or greater on the GAD-7 represents a reasonable cut point for identifying cases of GAD”. According to Spitzer’s data, using a cut-off of 14 (as chosen here by Lane et al) would provide a specificity of 92% but a sensitivity of only 56%. This means that a large number of patients with anxiety would risk being undetected by this tool using this cut-off. In our validation study of the French GAD-7 in patients with epilepsy recruited from a tertiary center, a cut-off of 7 was chosen as optimal, based on a sensitivity of 96% and a specificity of 76%. This was in line with previous studies of GAD-7 in patients with epilepsy.⁵ Clearly any such screening tool must balance the risk of false positives with the risk of missing true positives. It can be argued that in this context, not missing cases is more important than possible over-detection, and that a “trade-off” favoring higher sensitivity should be preferred.⁶ In any case it should be remembered that the NDDI-E and GAD-7 are not diagnostic but merely screening tools; elevated scores indicate that psychiatric evaluation should be considered. As the authors stated, a screening strategy should be associated with “appropriate management of these disorders”. It thus may be the case that re-analyzing the present data with a lower GAD-7 cut-off would help detect a higher number of true positive cases of GAD, which could clearly impact on the results and the conclusions reached by the authors.

In conclusion, we fully agree with the authors that “screening for psychiatric disorders at the first presentation of unprovoked seizure provides valuable information that may help determine the course of a patient’s illness”. The NDDI-E and GAD-7 are short and validated tools, easily added to the clinician’s “screening toolkit”. These questionnaires show good concordance with other screening instruments and are correlated with instruments measuring antiepileptic drug effects and quality of life in epilepsy.⁷ However, it should be emphasized that anxiety appears to have been relatively neglected as an important psychiatric comorbidity in patients with epilepsy⁸ and, especially when associated with comorbid MDE, has a strong association with poorer quality of life as measured using GAD-7.⁷ Thus, efficient detection of both MDE but also GAD in epilepsy, including from disease onset as investigated here, is therefore essential, and requires using optimal cut-off for screening tools, within a context of an adequate system of care management.

DISCLOSURES

The authors have nothing to disclose.

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