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INPLASY

A systematic review of anxiety and depression in older adults with epilepsy

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ADMINISTRATIVE INFORMATION

Support - International League Against Epilepsy.

Review Stage at time of this submission - Other - Draft has been written, but will be edited based on feedback from other contributing authors prior to completion and publishing.

Conflicts of interest - Rohit Marawar has a speaker relationship with Neurelis; consultant relationships with Acadia and Xenon. Heather Angus-Leppan has grants from the NIHR, and Investigator Initiated grants from Angelini and UCB; unrelated to this work. No other conflicts to report.

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 25 August 2026 and was last updated on 25 August 2026.

INTRODUCTION

Review question / Objective To estimate the prevalence and incidence of depressive and anxiety disorders in older adults with epilepsy.

Rationale Evidence regarding the epidemiology of depression and anxiety in older adults with epilepsy is remarkably limited. Existing prevalence estimates vary widely, and no incidence data are available. Given the increasing population of older adults with epilepsy and the substantial impact of psychiatric comorbidity on quality of life and clinical outcomes, dedicated epidemiological studies are urgently needed to inform screening, prevention, and management strategies.

Condition being studied Epilepsy affects over 70 million people worldwide, with the highest prevalence of epilepsy in older adults. They are the fastest-growing global age group, and individuals with early-onset epilepsy are living longer. More than 50% of people with epilepsy have at least one other medical problem, with depression and anxiety being common psychiatric comorbidities. Despite the high incidence and prevalence of epilepsy in older adults, little is known about the burden of psychiatric comorbid disease in this population.

There is strong evidence of a bidirectional relationship between epilepsy and both depression and anxiety, making these psychiatric comorbidities particularly relevant to epilepsy care. It is known that depression and anxiety in older adults with epilepsy negatively affect the quality of life. Furthermore, these psychological factors can compound the existing burden of epilepsy and the unpredictability of seizures, which is already a stigmatized condition associated with limitations,

including loss of driving privileges, and discrimination. Critically, seizures, depression, and anxiety can all be managed using psychological and pharmacological interventions. Caring for an aging population will require a solid understanding of the distribution of psychiatric disorders in the older adult epilepsy population.

METHODS

Search strategy MEDLINE Search Strategy
((((epileps* [Title/Abstract] OR epilept*[Title/Abstract])) AND ((anxiety[Title/Abstract] OR anxiety disorder[Title/Abstract] OR (depression[Title/Abstract] OR depressive disorder[Title/Abstract])))) AND ((("cohort"[Title/Abstract] OR "longitudinal"[Title/Abstract] OR "observational"[Title/Abstract]))) NOT ((("trial"[Title/Abstract] OR "clinical trial"[Title/Abstract] OR "protocol"[Title/Abstract]))) NOT (("adolescent"[Title/Abstract] OR "pediatric"[Title/Abstract] OR "paediatric"[Title/Abstract] OR "child*"[Title/Abstract] OR "gestational"[Title/Abstract] OR “maternal"[Title/Abstract])).
Scopus Search Strategy
(TITLE-ABS (epilepsy*) OR TITLE-ABS (epileps*)) AND (TITLE-ABS (anxiety) OR TITLE-ABS (anxiety AND disorder) OR TITLE-ABS (depression) OR TITLE-ABS (depressive AND disorder)) AND (TITLE-ABS ("cohort") OR TITLE-ABS ("longitudinal") OR TITLE-ABS ("observational")) AND NOT (TITLE-ABS ("trial") OR TITLE-ABS ("clinical trial") OR TITLE-ABS ("protocol")) AND NOT (TITLE-ABS ("adolescent") OR TITLE-ABS ("pediatric") OR TITLE-ABS ("paediatric") OR TITLE-ABS ("child*") OR TITLE-ABS ("gestational") OR TITLE-ABS ("maternal")).

Participant or population We included articles with a main or subgroup population of older adults (defined as aged 60 and older) with a diagnosis of epilepsy or seizure disorder..

Intervention N/A.

Comparator N/A.

Study designs to be included Observational studies, single and multi-center studies including those collecting primary data, and studies utilizing secondary data (including medical claims databases, electronic medical records, and registries) were included. Data from nationwide studies and regional studies that appeared to be population-based were included. Nested case-control studies were included due to the potential availability of the original cohort’s epidemiological information.

Eligibility criteria Studies with a non-epilepsy patient population were excluded. were included. Case-control studies were excluded, since incidence and prevalence information cannot be derived. Reviews were excluded but used as a potential source of further studies. Studies in any language were included.

Information sources MEDLINE and Scopus databases.

Main outcome(s) The outcomes of interest were the prevalence or incidence of depression and anxiety disorders in adults with epilepsy over age 60.

Quality assessment / Risk of bias analysis Quality assessment of the included studies was conducted using the Joanna Briggs Institute Checklist for Prevalence Studies, a 9-question critical appraisal tool designed to assess methodological quality and determine the extent to which a study addressed risk of bias..

Strategy of data synthesis Data on study dates, design, sample size, and outcome prevalence were extracted into an Excel spreadsheet. Due to the limited data regarding depression and anxiety in older adults with epilepsy, meta-analysis was not possible.

Subgroup analysis N/A.

Sensitivity analysis N/A.

Country(ies) involved Cyprus, Malta, United Arab Emirates, United States of America, United Kingdom.

Keywords elderly; older age; older adults; aging; seizures; epilepsy; comorbidity; depression; anxiety disorders.

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