

# The efficacy of antipsychotic drug therapy for treating psychosis in individuals diagnosed with epilepsy.

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## Background

- Individuals with epilepsy are at risk of developing secondary psychoses, which can be classified as pre-ictal, ictal, interictal or postictal, depending on the temporal relationship between the psychotic episode and seizure activity.
- Antipsychotics are the main class of drug used in treatment of psychosis and schizophrenia, but are controversial when treating epileptic psychosis due to a lack of evidence for their efficacy and safety in patients with epilepsy.

## Objective

Our review was designed to comprehensively survey existing evidence in order to evaluate both the effectiveness and the complications of antipsychotic drug use when treating psychosis in individuals who have epilepsy.

### PICO statement:

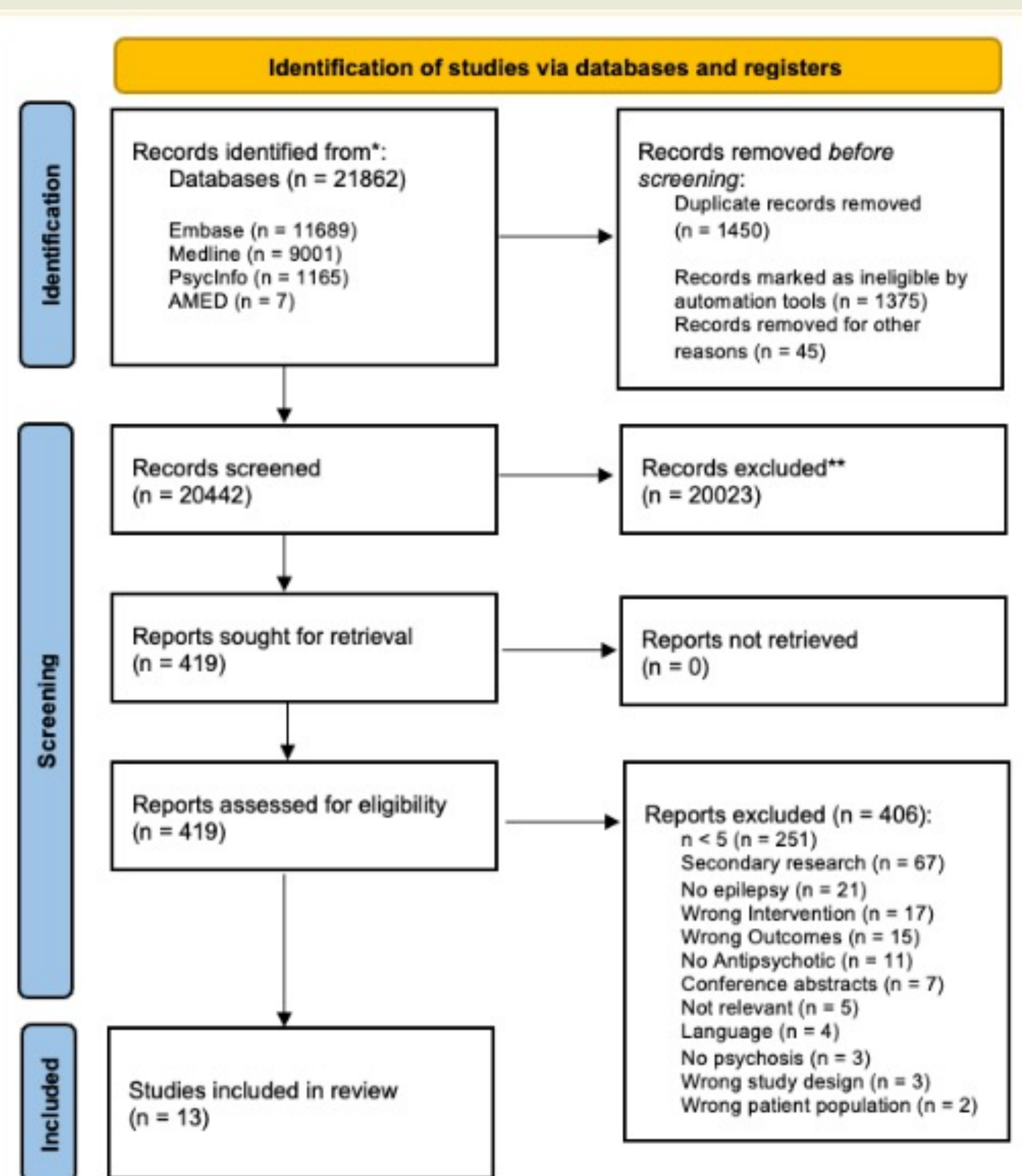
Population	Epilepsy AND Psychosis Any age, gender, ethnicity
Intervention	Antipsychotics (WHO/NCAA N05A listed)
Comparison	Placebo, treatment as usual, wait-list, other psychotic disorder
Outcome	Quality of Life, Psychosis severity, Seizure frequency, Duration of hospitalisation, Complications/Adverse events
Study	All study types in human participants with 5 participants or greater

## Results:

- Thirteen studies (4 case series and 9 cohort studies), with a total of 1180 participants were included in our systematic review.
- Of the 28 individuals reported in the case series, psychotic symptoms improved in all but 3 patients treated with antipsychotics.
- Seizure frequency was not observed to change.
- In a very small number of patients, some adverse effects were noted.
- Across the 9 cohort studies there were a total of 1152 participants.
- In 2 studies, antipsychotic use was associated with a longer duration of psychosis.
- In 4 studies, an improvement in psychotic symptoms following antipsychotic use was observed but non-APD results were not recorded for comparison.
- 3 studies reported similar results for APD and non-APD groups.
- When reported, seizure frequency was observed as a general trend to remain unchanged or decrease following APD treatment.

## Method and materials

- After designing a search strategy encompassing our inclusion criteria, we applied this to four databases, retrieving 21862 results.
- Following further title, abstract and full-text screening, we extracted data from only 13 of these studies for our review.
- The Joanna Briggs Risk of Bias tool was used to assess included studies for quality and reliability.
- Information was independently extracted by two authors using an a priori designed extraction template.
- Due to heterogeneity of information and paucity of relevant quantitative data, meta-analysis was not attempted and results were instead synthesised in a table.



## Discussion

- Our systematic review was rigorous and comprehensive.
- Its limitations can be largely attributed to the lack of high quality evidence of antipsychotic use in cases of epileptic psychosis.
- Available evidence suggests that APDs are safe to prescribe to patients with epileptic psychosis, as they do not appear to increase seizure risk.
- Further data from randomised controlled trials and well controlled cohort studies is urgently needed in order to draw more definitive conclusions.