

Background

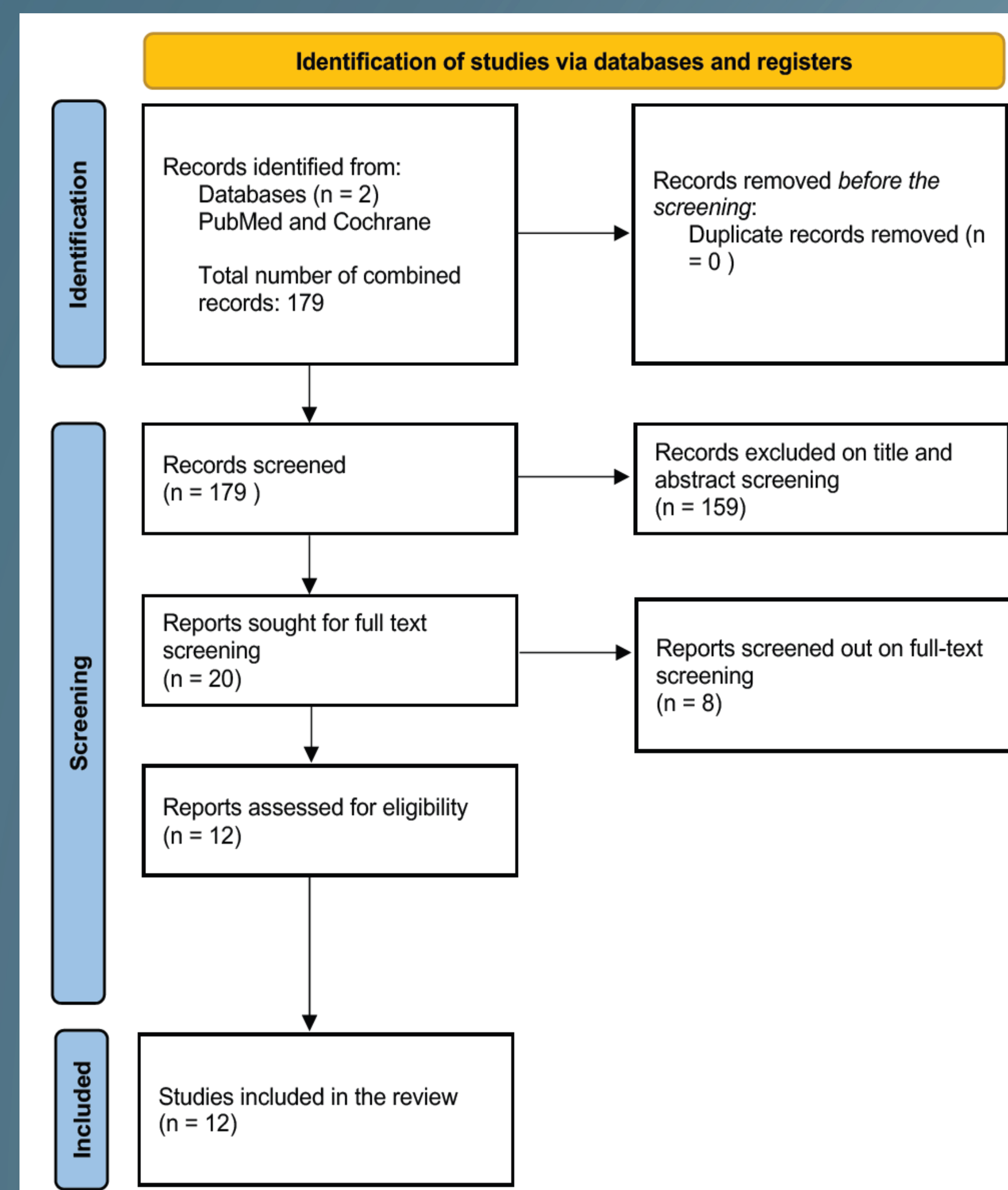
- Annually, around 16 million people suffer their first stroke, resulting in 5.7 million deaths and leaving 5 million individuals with significant mortality.
- Approximately 30% of stroke survivors develop neuropsychiatric symptoms, which is a significant predictor of poor outcomes.
- Studies suggest that delusional disorder, schizophrenia-like psychosis, and mood disorder with psychotic features were the most common clinical presentations of post-stroke psychosis.
- We aim to identify the clinical manifestations and management approaches of post-stroke psychosis to better guide clinical practice.

Method

- We performed a systematic review per PRISMA guidelines. The literature search was done on two databases, PubMed/Medline and Cochrane using the keywords “Stroke” AND “Psychosis” from January 2017 to March 2023.
- Our database search included original articles, including case reports, case series, and letters to editors. We excluded animal studies, studies not published in English, reviews, and metanalysis.
- Two reviewers independently extracted the following data from the retrieved articles: a) number of patients, b) demographics including age and gender, c) type of stroke, d) clinical presentation and e) features of psychosis, f) the time difference between the stroke and onset of psychosis, and g) the management of post-stroke psychosis.

Results

- After removing duplicates, our initial search yielded 179 articles
- We excluded 159 articles on title screening. Eight articles were excluded after abstract and full-text screening. A total of 12 articles were retrieved for qualitative review.
- Out of 12 articles, eight studies were case reports, 2 were case series, 1 was a letter to the editor, and 1 was a cross-sectional study.
- Our review comprised 73 patients ranging from 44 to 77 years old. Out of 73 patients, 28 are females, and 45 are males.



Results

- The most common presenting features of psychosis after stroke were persecutory delusions and auditory hallucinations, negative symptoms, and emotional lability.
- Post-stroke psychosis was associated with ischemic and hemorrhagic stroke and presented within a few days to 2 years after stroke.
- Second-generation antipsychotics were most commonly prescribed to manage post-stroke psychosis.

Discussion

- The pathophysiology of post-stroke psychosis is not fully understood.
- It is multifactorial, involving an interplay between neuroinflammation, neurodegeneration, neurotransmitter dysregulation, and structural and functional changes in the brain.

Conclusions

- We highlight the critical role of screening in stroke survivors for post-stroke psychosis up to at least two years after stroke, as the neuropsychiatric complications may manifest long after stroke.
- Clinicians should be vigilant about clinical features and management approaches for post-stroke psychosis to optimize patient care and improve outcomes.

References:

- Stangeland, H., Orgeta, V., & Bell, V. (2018). Poststroke psychosis: a systematic review. *Journal of neurology, neurosurgery, and psychiatry*, 89(8), 879–885.
- Ferreira MDC, Machado C, Santos B, Machado Á. Post-stroke psychosis: how long should we treat? *Trends Psychiatry Psychother.* 2017 Apr-Jun;39(2):144-146. doi: 10.1590/2237-6089-2015-0090. Epub 2017 Jun 12. PMID: 28614434..