

Pain Management in Older Adults with Dementia: A Selective Review

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Introduction

- Dementia affects over 47 million people globally, and this number is projected to exceed 100 million by 2050 with the majority occurring in patients over 65 years of age.¹
- Dementia is characterized by progressive neuro-degeneration resulting in cognitive decline.²
- Currently there is no cure for dementia
- Pain management in patients with dementia can be challenging.
- There is a lack of clear and evidence based guidelines regarding pain management strategies for this population.³

Materials and Methods

- Selective literature search conducted using Ovid, MEDLINE, Embase, and Cochrane Central Register of Controlled Trials.
- Studies were eligible if they included information regarding pain management strategy used and involved older adults (65+) with dementia.
- Limited to primary research articles.
- Search generated 1033 results that were screened by title and abstract.
- Articles deemed eligible after review of the title and abstract underwent full text review.
- For each systematic review identified, one reviewer examined the reference list to identify any potentially eligible studies.
- Figure 1 provides a summary of the process.
- Data extraction was completed by one author.

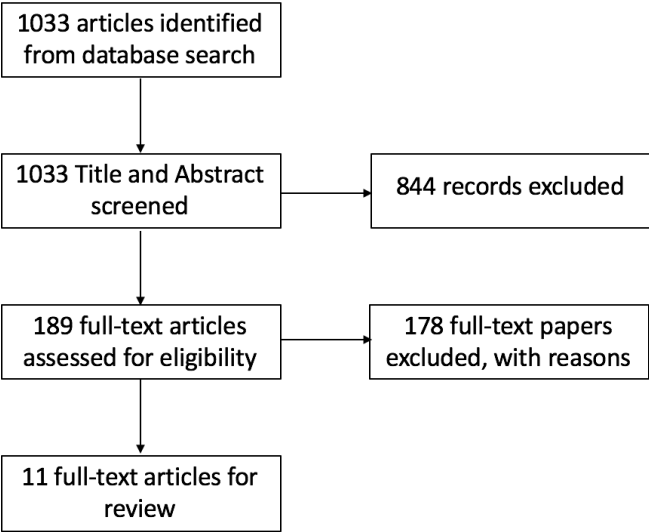


Figure 1. PRISMA Flow of Information Diagram

Results

- 1033 articles were generated by the search, 11 articles were identified from literature search and references of review articles.
 - 8 reported on pharmacological treatments of which 3 reported on stepped-treatment, 1 on opioids, and 4 on acetaminophen. 3 studies reported on non-pharmacological treatments.
- Pharmacological Treatment:**
- Evidence that pharmacological pain management strategies employing acetaminophen as a first line treatment or as part of a stepped care approach such as Serial Trial Intervention or Stepwise Protocol reduced pain and dementia-associated behavioural symptoms and improved activities of daily living (ADL).^{4 5 6}
 - Mixed or limited evidence supporting use of opioids to manage pain.
- Non-Pharmacological Treatment:**
- Our literature review found that non-pharmacological strategies such as the Namaste care program, music intervention, ear acupressure, and massage for people with dementia show some promise but current studies yield mixed or limited evidence for the population of interest.^{7 8 9}

Conclusions

- The diverse range of assessment scales limits the applicability of some of the findings in the review and demonstrates the need for a validated pain assessment tool for elderly individuals with dementia.
- There is a need for future research with well-designed larger cohort trials for people with dementia using standardized pain assessment tools in order to optimize guidelines for pain assessment and treatment.
- Current review emphasizes limited evidence for analgesic use in dementia patients (there were no trials using standard adjunctive therapy such as antidepressants and anticonvulsants).
- Some evidence shows promise for stepped approach using acetaminophen.
- The need for additional future research regarding pain management strategies is critical to evaluate the efficacy of other pharmacological and non-pharmacological pain management strategies to determine their effectiveness for managing pain.

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