

## Comparative Efficacy of Interventions for Aggressive and Agitated Behaviors in Dementia: A Systematic Review and Network Meta-Analysis

### Summary

Both pharmacologic (e.g. antipsychotics, antidepressants) and nonpharmacologic (e.g. exercise, massage therapy) interventions are available for the treatment of neuropsychiatric symptoms in persons with dementia. However, research on the comparative efficacy of pharmacologic and nonpharmacologic interventions for treating neuropsychiatric symptoms in dementia has been limited. We found that, in persons with dementia, aggression and agitation should be treated using nonpharmacologic rather than pharmacologic interventions given their demonstrated efficacy and the potential harms associated with pharmacologic interventions.

### Implications

Greater emphasis should be placed on nonpharmacologic approaches for reducing aggression and agitation in persons with dementia. Persons with dementia, caregivers and clinicians should consider prioritizing nonpharmacologic over pharmacologic interventions for treating aggression and agitation. Policy-makers should consider instituting and promoting policies to facilitate the use of nonpharmacologic interventions.

**Reference:** Watt J, Goodarzi Z, Veroniki AA, et al. Comparative Efficacy of Interventions for Aggressive and Agitated Behaviors in Dementia: A Systematic Review and Network Meta-Analysis. *Annals of Internal Medicine*. 2019;171(9):633-642.

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### What is the current situation?

- Pharmacologic and nonpharmacologic interventions are available for the treatment of neuropsychiatric symptoms in persons with dementia.
- Despite the known potential for harm associated with pharmacologic interventions (e.g. falls, fractures, and mortality), they are frequently used for treating these symptoms.
- The comparative efficacy of pharmacologic and nonpharmacologic interventions for treating neuropsychiatric symptoms in dementia, including aggression and agitation, has been limited by a lack of head-to-head randomized controlled trials.

### What is the objective?

- To determine the comparative efficacy of pharmacologic and nonpharmacologic interventions for treating aggression and agitation in persons with dementia.
- To determine the best interventions for treating aggression and agitation in persons with dementia.

### How was the review conducted?

- MEDLINE, EMBASE, CENTRAL, CINAHL, and PsychINFO were searched for citations published in any language from inception until May 28, 2019.
- The grey literature, reference lists of included studies, and related systematic reviews were also searched.
- A MEDLINE search for all NMAs related to dementia care from inception until July 4, 2019 was conducted.

### What did the review find?

- There are nonpharmacologic interventions (e.g. massage therapy, multidisciplinary care plan) that can reduce symptoms of aggression and agitation in persons with dementia in lieu of pharmacologic interventions.
- Although there were efficacious pharmacologic interventions compared to placebo or usual care in subgroup analyses, some non-pharmacologic interventions in these subgroups demonstrated clinically significant effects compared to placebo or usual care.
- Nonpharmacologic interventions seemed to be more efficacious than pharmacologic interventions for reducing aggression and agitation in adults with dementia.
- Our findings have important implications for dementia care partners and persons with dementia: we should put greater emphasis on non-pharmacologic approaches for reducing symptoms of aggression and agitation in persons with dementia.