

# **Efficacy of Non-Pharmacological Interventions for Depressive Symptoms in Elderly People with Dementia: a Systematic Review**

*Siyeon Eren Park (1), Ji Soo Park (1), Sanny Wu (1), Josel Abigail Ambon (1), Alana Tang (1), Denisa Silvana Bordas (1), Claire Henderson (2)*

*1- Medical Student, King's College London Guy's Campus, Great Maze Pond, London, SE1 1UL, United Kingdom*

*2- Honorary Consultant Psychiatrist, South London and Maudsley NHS Foundation Trust, 18 De Crespigny Park, London, SE5 8AF, United Kingdom*


---

## **Abstract:**

**Introduction:** Depression is closely associated with dementia, both as part of the symptomatology secondary to the structural changes and as a risk factor for cognitive decline. In both cases, treating the depressive symptoms is crucial due to its clinical correlation with quality of life (QoL). However, current antidepressant therapies show limited efficacy in older adults, especially those with comorbid cognitive impairment. The rapidly growing elderly population with dementia deems it necessary to identify non-pharmacological interventions that are effective in improving depression and QoL of these individuals.

**Objective:** To characterize and assess the efficacy of non-pharmacological interventions for reducing depressive symptoms in elderly people with dementia.

**Method:** A systematic review was performed. A PubMed search identified 856 relevant studies between 2008-2023. Reviewers completed paired abstract



and full-text screening yielding 37 original randomized studies, and appraised the risk of bias using the Cochrane QUIPS tool.

**Results:** Overall, the majority of interventions showed positive effects of treating depression in dementia patients. Statistically significant improvements in depressive symptoms, alongside QoL, were reported in reminiscence therapy (4), animal therapy (4), creativity therapy (7), psychotherapy (7), and cognitive stimulation therapy (3). Benefits to depression and QoL were also seen in aromatherapy (1), leisure therapy (2), and exercise programs (4), though varied in efficacy. Outcomes of multi-modal intervention programs (5) are mixed, with outcomes favoring programs with components of exercise and cognitive intervention.

There is consensus of qualitative opinions regarding non-pharmacological interventions. The improvements in psychological wellbeing and current limited effectiveness of pharmacotherapies strongly support continued research for application of non-pharmacological interventions into clinical management.

**Conclusion:** Non-pharmacological interventions were found to be efficacious for improving depressive symptoms, QoL, and cognitive function to varying extents in dementia. Further research is warranted to support a standardized treatment regimen for clinical implementation.

**Key words:** *Dementia; Depression; Non-pharmacological intervention; Mild cognitive impairment*