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The Effects of Animal Assisted Interventions (AAI) on Adults with Dementia

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The Effects of Animal Assisted Interventions (AAI) on Adults with Dementia
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**Question:**
In patients with dementia age 65 and older, do animal assisted interventions compared to no animal assisted intervention affect dementia symptoms?

**Background:**
- Dementia is a deterioration in cognitive function (WHO, 2017).
- There are 50 million people diagnosed worldwide (WHO, 2017).
- Generally, there are three increasingly severe stages (WHO, 2017).
- It affects physical, psychological, social, and economic wellbeing.
- Dementia symptoms include memory loss, confusion, difficulty communicating, behavior changes, and agitation (Mayo Clinic, 2017).
- There is no cure, but non-pharmacological interventions, such as AAs can be used (WHO, 2017).
- The human animal bond plays a significant role in human health and wellbeing (AVMA, 2019).
- AAI is the utilization of animals in manners beneficial to humans (AVMA, 2019).
- AAI provides physical and psychosocial benefits.
- Dogs are the most frequently used animal in AAI.
- AAI has the potential to alleviate symptoms of dementia.

**Article**

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<thead>
<tr>
<th>Effect of Animal-Assisted Interventions on Depression, Agitation, and Quality of Life in Nursing Home Residents Suffering from Cognitive Impairment or Dementia: A Cluster Randomized Controlled Trial (Olsen et al., 2018).</th>
<th>Level II randomized controlled trial studying 51 participants from ten nursing homes in Norway. The study examined the effects of animal assisted activities on depression, agitation and quality of life in patients with dementia.</th>
<th>• The AAI group experienced improved depression and quality of life. • Significant effects were seen in patients with severe dementia. • Agitation was not affected in the AAI group or the control group.</th>
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<td>Effects of Dog-Assisted Intervention on Behavioral and Psychological Symptoms of Dementia (Nordgren &amp; Engström, 2014).</td>
<td>Level III controlled trial without randomization studying 33 participants from eight nursing homes in Sweden. The study evaluated the effects of a dog-assisted intervention (DAI) on behavioral and psychological symptoms of residents with dementia.</td>
<td>• The control group experienced a decrease in agitated behaviors, while other areas were unaffected. • Verbal agitation increased in the DAI group. • Behavioral and psychological symptoms decreased immediately after DAI, but not significantly. • There was no clear data to support or reject the beneficial effects of DAI.</td>
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<td>Effects of an Animal-Assisted Intervention on Social Behaviour, Emotions, and Behavioural and Psychological Symptoms in Nursing Home Residents with Dementia (Wesenberg et al., 2018).</td>
<td>Level IV Within Subject Design studying 17 participants from two nursing home facilities in Germany. The longitudinal study compared AAI to a control intervention of similar design to see the effects on social behavior, emotions, and behavioral/psychological symptoms in patients with dementia.</td>
<td>• After receiving AAI the participants had a significant increase in verbal communication, physical contact, upper body movements, and positive emotions. • There were no differences in behavioral or psychological symptoms for either category or time period.</td>
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<td>Animal-Assisted Intervention in Dementia Effects on Neuropsychiatric Symptoms and on Caregivers’ Distress Perceptions (Tournier, Vives, &amp; Postal, 2017).</td>
<td>Level IV pre-post prospective cohort study following 11 participants from one French Nursing home. The longitudinal examines how Animal-Assisted Therapy (AAT) effect patients with dementia over a five-month time period.</td>
<td>• There was a significant decrease in three distressing dementia symptoms (depression, aberrant movements and disinhibition). • Interactions with the dog decreased over time, but person-to-person interaction increased in its place. • There was also an increase in negative affect, positive affect, and participation.</td>
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**Results:**
- AAI alleviates many behavioral and psychological symptoms of dementia.
- Improvement was seen in depression, upper body movement, verbal communication, positive emotions, and disinhibition.
- Patients also experienced an increased quality of life.
- Additional research on AAI is needed to study other animal species and health care settings.

**Application to Nursing:**
- Nurse researchers can use the current research to design new studies and incorporate additional animals and settings.
- Due to the lack of related studies in the US, nurse researchers in the US can conduct similar studies in order to apply results to this country.
- Nurses in long-term care facilities can advocate for the implementation of AAI to provide the highest possible symptom relief.
- Nurses in all settings can use the information from these studies to encourage AAI as a non-pharmacological intervention for patients and families who may benefit.
- Further research can examine the long-term effects of AAI.