

The Effectiveness of Animal-Facilitated Therapy in the Treatment of the Elderly Experiencing Signs and Symptoms of Depression and/or Anxiety: An Integrative Literature Review

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Background

Attention to the Elderly:

- Those living to 60 years and older is increasing exponentially
-Expected to double between 2005-2020 by 12%-22%^{1,2}
- Health care expenses exceed the rest of the population
-Nearly 4x greater²
- Particularly vulnerable to inadequate mental health treatment

Addressing Depression and Anxiety:

- Physiologic and circumstantial situations increase risk
- Comorbidity of both depression and anxiety- 50%-90%
- Depression—accounts for up to 70% of late-life suicides
- Anxiety—associated with greater rates of mortality and morbidity^{1,2,3,4}

Pet Therapy Alternative:

- Pharmacological treatment can be flawed (e.g. polypharmacy, adverse effects)
- Misdiagnosed, under-treated—common^{1,2,3,4,5,6}
- Loneliness largely contributes to depression and anxiety^{1,3,4}
- Animals can fill this void

Research Questions

1. What are the effects of pet therapy on those experiencing signs and symptoms of depression and anxiety?
2. Why is pet therapy still lagging in validated studies, despite its increase in use over the years?

Conceptual Framework- Holistic Model



Methods

Data Bases: Cumulative Index of Nursing and Allied Health (CINAHL), PsycINFO, ProQuest-Nursing Allied Health Source, PubMed

Number of Studies Used for Final Review: 11

Inclusion criteria: Primary studies, English, peer-reviewed journals, published between 2006 – 2017, primary intervention of the study- pet therapy, 65years and older, quantitative studies- measurement scale for depression, anxiety, or loneliness with statistical analysis

Exclusion criteria: Intervention subjects were not mammals (e.g. robots), pet therapy only briefly mentioned

Data Tables

Table 1

Number of Quantitative Articles Using a Measurement Tool to Quantify Specific Outcomes of the Intervention

	Depression	Anxiety	QOL	Loneliness
Total	10	3	3	1*
Improved	7*	1*	1*	1
Worsened or Stayed the Same	2	2	2*	0
Contradicting Results	1	0	0	0

Note. Articles classified as “contradicting,” referred to those describing findings in which two or more statistical measurements found opposing results. * = Statistically significant results were found in the article(s) results. Of the two articles discussing QOL, one article’s results were statistically significant and another article was not.

Table 2

Number of Qualitative Articles Discussing Specific Outcome Characteristics of the Intervention

	Improved mood	Calm	Memory recall	Increased socialization
Total	6	1	3	3

Table 3

Limitations Across Studies

	Small sample size	Lack control group	RCT design	Subjective scale	Post-intervention follow up
Total number of studies	11	4	2	7	1

Results

Research Question One:

- Majority showed improvement in depression scores
- Anxiety and QOL scores did not show improvement
- Improvement in loneliness
- Overall increase in mood (e.g., feeling happy, joyous)
- Socialization improved
- Recall of pleasant memories

Research Question Two:

- Small sample size
- Subjective scales
- Lack of follow-up
- Lack of randomized controlled trials

Discussion

- Positive effects found, but poor validity remains

Problematic to Pet Therapy Research:

- Quantitative studies rank higher within evidence hierarchy
- Most abundant research will be found in qualitative studies
- Statistical significance remains poor in this field of research

Nursing Implications

- Important catalysts for advocating change
- Greatest interactions with patients-reveal powerful input
- Florence Nightingale’s view
-Wellness = harmony between body mind and spirit

Future Studies

- Consensus among researchers
-Study designs and efficacy of pet therapy interventions
- Validity of evidence may then be taken more seriously

References

1. Halter, M. J. (2014). *Varcarolis' foundations of psychiatric mental health nursing: a clinical approach*, 7th ed. / St. Louis, Mo.: Elsevier/Saunders
2. World Health Organization. (2016). Mental Health and Older Adults. Retrieved from <http://www.who.int/mediacentre/factsheets/fs351/en/>
3. Centers for Disease Control and Prevention. (2012). *Mental Health and Chronic Disease*. Retrieved from <http://www.cdc.gov/mentalhealth/infographic/mental-health-and-chronic-disease.pdf>
4. D'Arrigo, C. (2013). Finesse required to treat anxiety in the elderly. *ACP Internist* and American College of Physicians. Retrieved from <https://academic.oup.com/ajcp/article/41/10/1000/1000000>
5. Byers, A. L., Yaffe, K., Covinsky, K. E., Friedman, M. B., & Bruce, M. L. (2010). High occurrence of mood and anxiety disorders among older adults: The National Comorbidity Survey Replication. *Arch Gen Psychiatry*, 67(5), 489-96. doi: 10.1001/archgenpsychiatry.2010.35.
6. Cairney, J., McCabe, L., Veldhuizen, S., Corna, L. M., Streiner, D., & Herrmann, N. (2007). Epidemiology of Social Phobia in Later Life. *The American Journal of Geriatric Psychiatry*, 15(3), 224-233. doi: 10.1097/01.JGP.0000235702.77245.46