

# Dogs, Horses, and Wallabies - Oh My! Benefits and Challenges of Animal Therapy in Dementia Care

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**Abstract:** While the use of Animal Assisted Therapy (AAT) in health care is not new (Johnson et al., 2002; Odendaal, 2000), its place in the care for persons with dementia is now coming to the forefront (Sellers, 2006; Williams & Jenkins, 2008). Much of the current attention comes as providers seek new ways to improve care quality. To date, animal assisted therapy has been found effective in managing dementia care challenges including agitation (Williams & Jenkins, 2008), social interaction (Richeson, 2003), and nutritional intake (Edwards & Beck, 2002). Despite the growing body of literature on the effectiveness of AAT, little information is found on the practical challenges associated with implementing AAT in dementia care settings. The current case study examines 10 years of data regarding the implementation and practice of AAT in specialized dementia care. Animals are a key component of the Lakeview Ranch (LR) model which focuses on preventing (rather than treating) aggressive symptoms of dementia. Additional components include: a high staff to resident ratio (1:3), in-house full-time RN's, interdisciplinary teamwork, medication reviews, attention to residents' emotional needs, and specialized staff training. Since its inception, LR has been home to a variety of domestic, farm, and exotic animals. While numerous benefits have been documented, so have several logistical challenges, including: state regulations, availability & cost of trained therapists, and cost of animal care. Additional challenges documented in similar settings include concerns regarding attitudes (staff/family/resident), allergies, responsibility for care/cleanup, and the potential for zoonosis (animal born disease) (Simpson, 2003).

**Introduction:** Animal assisted therapy (AAT) is a key component of the Lakeview Ranch model of specialized care for persons with dementia-related behavioral challenges. Numerous benefits from AAT have been documented at Lakeview Ranch, including increasing resident's social interaction and communication and reducing their agitation and anxiety levels. Introducing effective Animal Assisted therapy, however, requires consideration of a number of challenges – including health issues, regulations, the attitude of staff members, program costs. In addition, as identified in the current study, there are important nuances to consider with regard to the type of animals and inter-species activities that are involved. The current study examines the lessons learned from ten years of providing animal assisted therapy in a specialized dementia care setting.

## **The Lakeview Ranch Model of Care:**

The Lakeview Ranch (LR) model focuses on the provision of specialized dementia care for persons with significant behavioral issues. The LR model stems from a grass-roots approach of adopting “the best of” various existing models of dementia care for persons with behavioral issues, while incorporating ideas from family and professional caregivers. The goal of the LR model is to address the specific individual needs of persons with dementia who exhibit behaviors that other care facilities are often unable to address or which are addressed via behavior-related medication use, psychiatric hospitalization, or discharge (“de-admittance”) to another facility. Key elements of the LR care model are a high staff to resident ratio (1:3), extensive medication reviews, individualized registered nurse coverage, and a nature-based setting which includes animal therapy and a strong focus on residents' emotional and spiritual needs. Additional attention is placed on support and training of staff, with the goal of decreasing the financial and emotional costs of staff turnover. Changes in staff perception of how dementia affects the resident and a switch from task oriented behavior to person centered behavior are critical to this process.

**Methods:** Data for the current study were collected over a period of 10 years, from 1999 to 2010. Data sources included (a) bi-monthly reports by the agency animal specialist; (b) 3 years of grant reports from an informal demonstration project at the agency pairing at-risk teens with AAT training (2003-2005); and (c) reflections from agency staff as documented in staff reports, exits interviews, etc). A qualitative analysis of the data was performed to identify recurring themes regarding the challenges and benefits of the AAT program at Lakeview Ranch.

**Sample:** Data from the current study reflects upon the experiences of the following populations:

**Agency Residents:** Agency records indicate that 145 residents participated in Animal Assisted Therapy at Lakeview Ranch from 1999-2010. The Ranch consists of two homes – each of which houses an average of 16 residents (or a total of 32 residents overall) at one time.

**Agency Staff:** Agency records indicate the presence of 420 staff members over the period of 10 years. Four staff members have worked specifically as AAT staff, including one Certified Animal Therapist from 2000 to 2005.

**At-Risk Teens:** From 2000-2005, 105 teens labeled “at risk” participated in a 12 week program overseen by a teen’s social worker and run by the LVR Certified Animal Therapist. Participants came to the Ranch 2-3 days a week for 12 weeks.

### **Procedures for AAT:**

Animal therapy is done one hour at a time at each of the two homes, for an average of 16 residents twice a week. During AAT, there is one animal specialist and 4 regular staff that are involved in each animal therapy session to assure safety and assist in individual participation with the residents. Animals are cleaned and brushed just prior to being brought in, the animal’s behavior is monitored closely and any animal being uncooperative is removed immediately. A minimum of 3 staff persons in addition to the animal specialist is present during AAT. Animal Therapy times have been set at each home dependent on when the residents are the most alert and active. At one home AAT is scheduled for 10:30am on Tuesdays and Thursdays and at the other at 1:30pm on Tuesdays and Thursdays as those residents who are further advanced are more awake right after lunch. During inclement weather when it is either not appropriate to use the trailer or it is so messy out that it would be difficult to keep the animal clean and dry in the house. During those times AAT is done with conducted with smaller barn animals, chickens etc. or the in-home animals (rabbits, dogs or birds).

**Findings:** A number of themes were identified as either a benefit or a challenge related to implementing and sustaining animal assisted therapy in specialized dementia care:

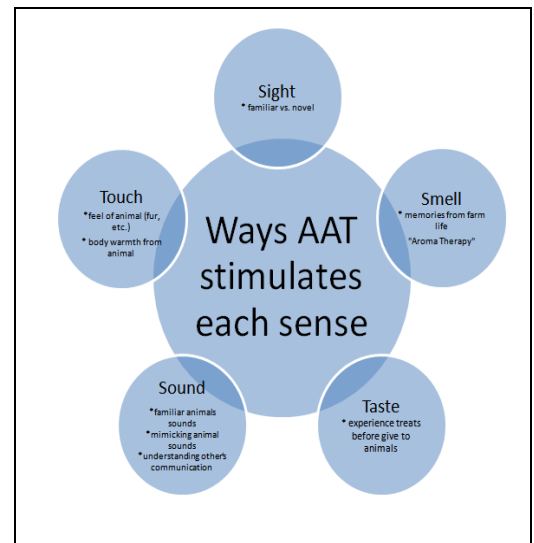
### **Benefits**

#### **Emotional Connections with Residents**

- *On-going: Inside the home animals (dogs, birds and rabbits)*
  - Residents who became harder to reach continued to respond to the animals by opening their eyes and often smiling and sometimes reaching out when approached by the animal
- *Family pets (n=6, over period of time) Visiting or in-residence*
  - Residents occasionally allowed to bring own dog as long as it is not aggressive
  - Can create familiarity and comfort for new resident while adjusting to new home.
- *Exotic Animals (e.g., mini horses, mini donkeys, alpacas, mini goats, chickens, pig, wallaby)*
  - The more unusual the animal, the more likely the connection with the resident (surprise factor)

#### **Sensory Stimulation (Affects all 5 senses)**

- *Touch*
  - Residents stimulated by the feel of the animal fur and stimulates use of hands/fingers
  - Different types of fur stimulate different types of activities (petting, brushing, etc.)
- *Sight*
  - Visual appeal of the usual (house pets) and unusual (farm and exotic animals)
- *Smell*
  - Reminds residents of farm life (e.g., barn animals, hay, manure)
  - Generates stories from the residents about past events or they just become very intent on being with the animal.
- Humor/common purpose: Anecdote: *One time a state surveyor showed up in the middle of animal therapy and one of the miniature horses answered nature’s call in the middle of the floor. The residents were commenting and holding their noses as staff cleaned up the “Aroma Therapy”.*
- *Sound*
  - Residents hear the noises the varying animals make and often will mimic the animal
  - Brings out nurturing behaviors in residents (e.g., responding to bleating of baby goats – and insisting that mother goat come along too).
- *Taste*
  - In addition to feeding the animals, a resident may want to taste the animal treat (many put things in their mouth – so learned to use treats that are OK for the resident to taste)
  - Comfort in sharing food with animal



## Physical Activity

- *Exercise*
  - Persons who may resist physical exercise or have difficulty with movement may throw a ball to the dog, brush the animals, or braid their hair/manes – can increase stretching by having animals gradually move away a bit
  - Dogs trained to retrieve a ball or other object that a resident can toss and then bringing it back only to about 2-3 feet from the resident they have to reach out to get the object back.
  - More willing to play kick the ball if the dog is retrieving.

## Behavior Modification

- *Reduction in Overall Anxiety*
  - Calming effect on agitated residents
- *Distraction from repetitive behavior*
- *Change the target of aggressive behavior*
- *Increase cooperation/participation*
  - Change from resistive to compliant with exercises, showers, etc.
  - Encourages participation in activities

## Socialization

- *Interaction with animal*
- *Interaction with AAT staff and other residents*
- *Verbal and non-verbal responses to animals*

## Challenges:

### Regulations

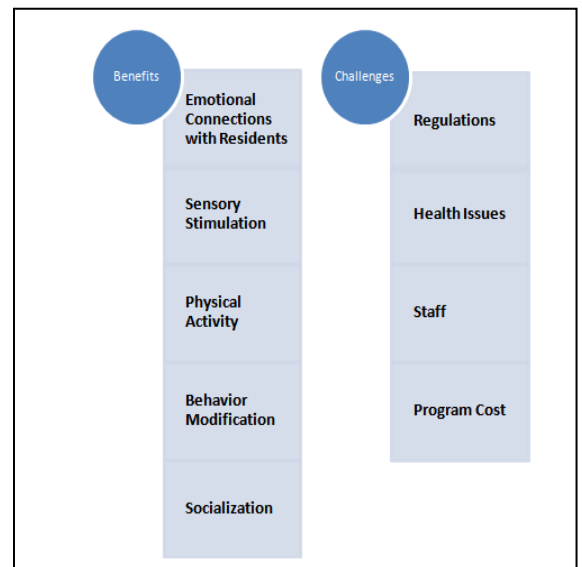
- *Facilities need to check with their local regulatory agencies regarding rules about animals.*
  - Lakeview Ranch operates with a MN Class F license which does not have specific regulations about animal therapy other than the need to have a clean environment and to use normal infection control
  - While not required by law, Lakeview Ranch maintains ongoing health checks and yearly health certificates by certified veterinarians.

### Health Issues

- *Allergies: Facilities need to consider animal allergy concerns for residents and staff*
  - Indoor cats were the only allergy issue identified at Lakeview Ranch (in both residents and staff). Cats at Lakeview Ranch now reside in the barn and are brought in to interact with the residents for short periods of time.
  - There have been no allergy issues noted with dogs, birds, fish or rabbits which live inside both Lakeview Ranch homes, however, facilities need to consider the possibility of such allergies
- *Hygiene Procedures*
  - Hand sanitize units are maintained throughout the house to help alleviate any lingering bacteria from the animals.
  - Care is taken to individually wash each residents hands immediately after contact with the barn animals

### Staff

- *Availability of Certified Animal Therapists*
  - Finding appropriately trained staff can be a challenge depending on the location of the facility. Lakeview Ranch employed a certified animal therapist for the first 5 years of operation.
  - The number of Certified Animal Therapists are limited in rural MN, however, and for the last 6 years has had to specially trained personnel that do animal therapy with the residents.
  - Many outreach and collaborative opportunities that are only available to certified animal therapists and employing one is recommended if available.
- *Buy In*
  - Prior to hiring, all potential staff persons are informed about our interactive animal therapy program and how they are expected to interact
  - Majority are supportive when (1) see the positive effects of our animal program on our residents and (2) realize that they do not have to do any of the cleaning of the animals
  - If they do not they are encouraged to find a more appropriate job for them (n=4)



## Program Cost

- *Built into fee structure*
  - Grant assisted with at-risk teen project
- *Food and Animal Care*
  - The cost of food, upkeep, veterinarian bills, etc was calculated at roughly \$23,000 per year
- *Cost of Certified Animal Therapists*
  - \$20 to \$25 per hour vs. aide used for therapy \$15 per hour

## Additional Factors to Consider

**Type of Animal** (type of interaction, novelty vs. familiarity)

- *Common Household pet (e.g., dog, cat, birds)*
- *Farm Animal (e.g., horse, cow, pig, sheep, goat)*
- *Exotic Animal (e.g., wallaby, miniature horses, peacock)*

**Type of Fur** (type of interaction, tactile experience, risk of allergy, novelty)

- *Soft*
- *Bristly*
- *Smooth*

**Type of Activity**

- *Stimulating*
- *Calming*

**Animal Residential Location** (level of familiarity, opportunity for contact, level of staff responsibility, novelty of bringing an “outside” animal in)

- *In house with residents*
- *On the grounds (e.g., in barn)*
- *Visiting from elsewhere*

## Family Member Feedback

- *Overall feedback is extremely positive*
  - Many families come specifically to visit when they know we are having animal therapy.
  - They also tend to bring children and grandchildren.
  - High turnout each year for our Annual Live Nativity in early Dec. with residents playing the roles of the holy family, angels and shepherds along with many grandchildren and we bring the mini donkeys, sheep and even the alpaca etc from the barn so we have an authentic representation, with the sights, sounds and smells of the real thing. Only problem has been overcrowding as last year we had over 100 family members.

## Zoning/Inspectors/Surveyors

- *Even though located in a rural areas, neighbors who were opposed to the facility complained about the presence of the animals once their other avenues of protest failed*
- *Health Department responded that the presence of animals was in their eyes a plus not a detriment.*

**Discussion:** The findings from the current 10 year study are consistent with findings from previous studies suggesting that animal assisted therapy can be effective in managing dementia care challenges including agitation (Williams & Jenkins, 2008), social interaction (Richeson, 2003), and nutritional intake (Edwards & Beck, 2002). Moreover, the current findings suggest additional benefits including positive sensory stimulation, increased communication, and increased physical activity. Benefits from the current program also extended beyond the residents to their families, as well as to unrelated at-risk teens who spent time with the residents and AAT-animals. Challenges of the program under study were limited, and centered primarily on the lack of available Certified Animal Therapists and the general tasks related to caring for animals in either family homes or farms. In addition to the benefits and challenges that were identified, some interesting findings suggest the need for additional research, particularly into the specific impact of different type of animals with regard to their fur type and level of novelty.

