Using Animals during Occupational Therapy to Improve Quality of Life

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BACKGROUND INFORMATION

- Integrating animals into occupational therapy intervention with individuals of various health conditions...
  - Enables meaningful occupations (Allen, Kellegrew, & Jaffe, 2000).
  - Improves quality of life (Camp, 2001).
- Incorporating animals into an OT intervention plan is unique and can be an alternative to traditional device. Research suggests the animals may be viewed as a form of assistive technology (Camp, 2001).
- Occupational therapy intervention incorporating animals may:
  - Increase participation in the community
  - Augment the individual’s independence
  - Positively impact the individual’s psychosocial functioning (Camp, 2001).

LITERATURE REVIEW PROCESS

1. Form Clinical Question
2. Search in Journal Databases
3. Scan abstracts and select relevant articles
4. In-depth reading and appraisal of articles
5. Identify themes and most significant research
6. Interpret research findings and clinical implications
7. Disseminate work to audience

DATABASE SEARCH TERMS AND STUDY INCLUSION

Search Terms
- Occupational Therapy and animals
- OT incorporating animals
- Animal-assisted therapy
- Pet ownership
- Therapy dog
- Hippotherapy
- Hippotherapy and wellbeing

Inclusion Criteria
- Published after 2005
- Peer reviewed
- Studies where intervention included use of animals
- Studies where outcomes contributed to quality of life
- Articles prior to 2005
- Studies on hippotherapy related exclusively to balance and/or body mechanics

Exclusion Criteria
- Articles on therapy
- Non-research articles
- Articles not related to occupational therapy
- Articles not relevant to the study

STUDY EVALUATION AND ANALYSIS

<table>
<thead>
<tr>
<th>Article</th>
<th>Level of Evidence</th>
<th>Population</th>
<th>Animal</th>
<th>Setting of Intervention</th>
<th>Outcomes Measured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ajenzman, et. al. (2006)</td>
<td>III</td>
<td>Children with Autism</td>
<td>Horses</td>
<td>Hippotherapy centers</td>
<td>S</td>
</tr>
<tr>
<td>Beck, et al. (2012)</td>
<td>III</td>
<td>Wounded military service members</td>
<td>Therapy Dogs</td>
<td>Warrior Transition Unit</td>
<td>O</td>
</tr>
<tr>
<td>Crowe, et al. (2014)</td>
<td>IV</td>
<td>Women with mobility challenges</td>
<td>Service dogs</td>
<td>Controlled setting and grocery store</td>
<td>S</td>
</tr>
<tr>
<td>Guerino, et al. (2015)</td>
<td>IV</td>
<td>Women who have been sexually abused</td>
<td>Horses</td>
<td>Hippotherapy center</td>
<td>S, SE</td>
</tr>
<tr>
<td>Lechner, et al. (2007)</td>
<td>II</td>
<td>People with spinal cord injury</td>
<td>Horses</td>
<td>Paraplegic center</td>
<td>E</td>
</tr>
<tr>
<td>Silkoher, et al. (2012)</td>
<td>III</td>
<td>Children with movement disorders</td>
<td>Horses</td>
<td>Not specified</td>
<td>O</td>
</tr>
<tr>
<td>Stalter, et al. (2012)</td>
<td>IV</td>
<td>People who are homeless</td>
<td>Pets</td>
<td>Free food venues &amp; emergency accommodations</td>
<td>S, E, R</td>
</tr>
<tr>
<td>Velde, et al. (2005)</td>
<td>V</td>
<td>Literature Review</td>
<td>Dogs, Pets</td>
<td>Long-term care &amp; psychiatric facilities, residential program for children with multiple disabilities, persons with HIV or AIDS, hospice</td>
<td>Q</td>
</tr>
</tbody>
</table>

OUTCOMES MEASURED

- SE: Self Esteem
- Q: Quality of Life
- R: Responsibility
- S: Social Participation
- E: Emotional Wellbeing
- O: Occupational Performance

THEMES DERIVED FROM EVIDENCE

- Occupational therapy uses animals in order to increase socialization for clients with varying conditions. (7/10 articles)
- Current practice involves bringing animals to clients in various settings. (4/10 articles)
- The research shows promise for using animals in occupational therapy intervention for individuals with autism or functional mobility challenges (3/10 articles)
- Participation in occupational therapy using animals contributes to increased feelings of self-esteem, emotional wellbeing, responsibility, and quality of life (7/10 articles)
- Pet ownership should be considered as a meaningful occupation during occupational therapy intervention (2/10 articles)

LEVELS OF EVIDENCE

I Systematic reviews, meta-analyses, randomized controlled trials
II Two groups, nonrandomized studies
III One group, nonrandomized
IV Descriptive studies that include analysis of outcomes
V Case reports and expert opinions that include narrative literature reviews and consensus statements

FUTURE RESEARCH

- Future research needs to investigate the potential for occupational therapy using animals in various settings with diverse populations.
- Higher level studies are needed to establish evidence-based practice for occupational therapy using animals.
- Occupational Therapists can use the evidence and their own clinical reasoning skills to determine the appropriateness of planning interventions involving the use of animals for clients.

Thank you to Samantha Kampmeier, OTS, and her therapy dog, Dutch Horse image courtesy of Njaj at FreeDigitalPhotos.net

References