

Introducing robotic pets into care settings: An exploratory study

RESEARCH
SUMMARY

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Robotic pets can help to reduce anxiety and agitation for residents with mild-to-moderate dementia living in care settings. Despite their increasing popularity in recent years, relatively little research has explored robotic pet therapy in care settings.

PURPOSE: to address gaps in knowledge by working with a recreation therapy team immersed in a long-term care setting to investigate practical considerations when introducing robotic pets into their programming.

DATA COLLECTION

A series of group interviews with members of a recreation team located in a care facility were conducted over a six month time period, as they introduced robotic pets into their therapeutic programming. Observations of how residents responded to this new therapeutic intervention were also conducted.

DATA ANALYSIS

Data were interpreted collaboratively with the team of practitioners. Evolving perspectives around the benefits and challenges of the therapeutic intervention were explored. Findings were synthesized and shared for further refinement via an interactive workshop.

RESULTANT RECOMMENDATIONS

Pre-intervention:

- (i) Clarify therapeutic expectations of the intervention,
- (ii) Identify prospective residents to work with,
- (iii) Become familiar with devices,
- (iv) Discuss practice approaches with all team members,
- (v) Discuss intervention with families of residents.

Intervention delivery:

- (i) Determine an appropriate approach:
 - group versus individual interactions,
 - social versus solitary settings,
 - supervised or unsupervised time with the robotic pet.
- (ii) Consider environmental factors influencing effectiveness:
 - presence of other residents, care staff, and visitors,
 - time of day programming takes place,
 - competing activities and stimuli, etc.
- (iii) Assess residents' mood, interest, and receptiveness to adapt approach as needed via imaginative and responsive interactions.

Post-intervention & sustainability:

- (i) Device maintenance for fur degradation via cleaning protocols, battery replacement, and general wear.
- (ii) Investment in multiple devices to enable both group and individualized approaches.
- (iii) Feasibility based on staff capacity, reinforcement by employees and family, and facility leadership support.
- (iv) Family engagement and support for the program.

DISCUSSION & CONCLUSION

Practitioners had very positive views on working with robotic pets, tailoring interactive approaches to residents' evolving needs, and adapting to caregiving and behavioral challenges. However, the feasibility of programming must be considered. Practitioners must have the capacity to personalize their approach for individual residents, and have access to the tools required (e.g., multiple devices, cleansers, and batteries).



This study offers evidence-informed insights that may help to optimize the therapeutic impact of robotic pets as an affordable, accessible non-pharmacological intervention for people living with mild-to-moderate dementia in care settings.

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