

For people with dementia, traditional pet therapy or animal assisted therapy has been shown to alleviate agitation and enhance individual well-being. However, there are difficulties with live animals in a long-term care setting. An option is the use of an animal companion (i.e., a robotic cat or dog, etc.) that can simulate life-like behaviours and allow residents to emotionally connect with their artificial friend.

Compiled by Editorial Staff

Robotherapy in dementia care

A pilot project using artificial reality in dementia care

Life as a resident in a long-term care facility, especially when complicated by a dementia, is often associated with emotions that are disruptive to social interactions. Care staff are challenged to find appropriate stimuli that can engage residents in therapeutic activities (Cohen-Mansfield, 2000; Orsulic-Jeras, et al., 2000; Libin & Cohen-Mansfield, 2001).

Animal assisted therapy

For residents with dementia, a number of approaches have been devised to provide engaging stimuli and activities that have therapeutic value. Research has demonstrated the “engaging” value of such simple pleasures as sewing, colouring, playing with toys, watching family videos and listening to music (Buettner, 1999; Cohen-Mansfield & Werner, 1997). Animal assisted therapy has also been used to alleviate agitation and desocialization.

Churchill et al. (1999) showed that the presence of a dog, in comparison to the control condition when the dog was not present, enhanced socialization (i.e., increased verbalization, smiling, touching, looking, etc.) in residents with dementia. Nevertheless, while traditional pet therapy has been shown to enhance individual well-being, there are situations where a substitute artificial companion, such as a robotic pet, may be a better choice.

Live pet problems

The presence of a live pet in the nursing home environment is associated with a number of limitations. Problems with real pets in a LTC environment include inadequate staff resources to care for a pet on a regular basis, allergic reactions to pets among residents and staff, pet behaviours that could injure residents, visitors and staff such as scratching, biting, and tripping people; plus, there

are concerns when disruptive behaviours from residents with dementia results in harm to the pet.

In 2002, an approach was introduced, called “robotherapy” (Libin & Libin, 2002). This approach emphasized certain advantages to using robotic pets as artificial companions for people with cognitive impairment and other social/behaviour problems.

Life-like and animated

Specifically, the advantages of the robotic approach are the highly imitative and life-like behaviour of the robotic pet. The sophistication of these robotic pets include the ability to model emotional states that are normally experienced by people, as well as alternative modes of communicating (i.e., tactile, auditory and visual sensory communication modes).

Several years ago, a study of the reactions to a robotic entertainment dog called AIBO,[®] showed that people