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***Title of Project***

Horticultural Therapy in Dementia Care: Impact on Behavioral Symptoms

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***PI/Project Director***

Patricia Vuolo, MS, RN

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***Nursing Homes Involved***

Elant at Goshen Inc.

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***Description of Intervention***

This study replicated projects completed in other long-term care environments by offering a horticulture therapy program led by a horticultural therapist. A greenhouse was constructed to provide year-round gardening opportunities for residents with dementia. Horticulture therapy was held daily, with residents receiving group and/or individual therapy several times per week. Activities included planting, pressing flowers, making bird feeders, eating fruit, selling plants, and other forms of sensory/tactile stimulation.

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***Research Design***

Research Method – Single group design with repeated measures at baseline and during the intervention. It was hypothesized that horticultural therapy would be associated with a reduction in the frequency of the behavioral symptoms of agitation.

Sample – 53 residents with a primary diagnosis of Alzheimer's disease and/or other dementia-related disorders who displayed symptoms of agitation (as described in the Cohen-Mansfield Agitation Inventory – Short Form).

Measures – Weekly assessments were completed by staff for a period of 78 weeks using the Cohen Mansfield Agitation Inventory - Short Form (13 assessments at baseline and 65 during the intervention).

Analysis Approach – The highest frequency rating among items for three distinct classes of behaviors (physically aggressive, physically nonaggressive, verbal agitation) was documented weekly. These scores were summed across the baseline period, as well as the first 13 weeks of the intervention period (for which no data was missing). The means for these two periods were then compared via paired samples t-tests.

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***Results***

Though verbal agitation was unchanged, statistically significant reductions in physically aggressive and nonaggressive behaviors were evidenced in conjunction with the intervention ( $p \leq .05$ ). This suggests that horticulture therapy was at least partially successful in reducing the frequency of the behavioral symptoms of agitation – those of a physical (rather than verbal) nature.

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***Contact Information***

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