

Horticultural Therapy: A Humanistic Approach for Residents with Dementia

s a treatment method for long term care residents, horticulture therapy is a valid – and increasingly popular – intervention. Its positive effect on the elderly, including those who suffer from various forms of dementia, is borne out by both anecdotal and empirical evidence. Through the use of "living" materials – flowering plants, fruits, vegetables and herbs – horticultural therapy stimulates thought, exercises the body and encourages an awareness of the external environment. Moreover, the elderly who have benefited from this type of therapy report a renewed desire to live, decreased anxiety or stress and improved self-esteem.



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Horticultural therapy is no doubt successful because of its client-centred approach. Known as "Rogerian Therapy," any type of humanistic programming encourages the person to help him/herself. Treatment goals are established for each individual—unique to their own needs and capabilities. In horticultural therapy classes, assessments and treat—

ments are conducted in a natural environment: either an indoor sunroom, conservatory or plant area, or outdoors near raised garden beds. The horticultural therapist assumes the dual role of therapist and horticulturalist.

The horticultural therapist will have a number of objectives geared toward improving the quality of life for residents with dementia. Typical objectives include:

- determining the level at which each resident is functioning;
- providing a non-threatening area to enhance emotional well-being and reduce anxiety/stress levels;
- building self-esteem and a sense of accomplishment;
- stimulating intellect by providing a variety of plants and activities;

- improving overall physical functioning;
- encouraging socialization;
- promoting collegiality and a sense of belonging;
- enhancing a sense of reality by validating such things as the season and time of year;
- minimizing the effects of dementia by providing release from depression and pain;

Dried flower design done by a

former client.

- providing an outlet for creativity and imagination; and
- creating a pleasurable experience.

The Hallmarks of Horticultural Therapy

There is something magical and curative about the powers of nature as seen in the growth of a plant. Flowers perpetuate themselves with their seeds, constantly repeating the cycle. Nature is forgiving: if a plant dies, another can be grown in its place.

Environment

Natural light is an important ingredient in an effective therapeutic program. Elderly people require three times the amount of light for sight, depth perception and overall health and safety. In addition to these physical needs, the elderly also respond positively to natural light; studies have shown that light affects body rhythms and vitamin D levels.

In addition to the physical benefits of gardening, there are countless social and emotional benefits. As a character-builder, gardening improves self-esteem and restores confidence. As a memory-enhancer, it stimulates memories of former gardens and old skills. As a social activity, it provides an avenue for socialization and interaction.

Indoors, choose an area that receives a lot of natural outdoor light. A sunroom or conservatory creates the illusion that one is outside, yet the residents will feel safe in an enclosed area – and this, in turn, will help to reduce their anxiety level. The fragrant, moist air of a conservatory or



greenhouse stimulates the olfactory senses, which lead to the limbic system, the largest emotional part of the brain. This alters depression and stimulates memory. Warm sunlight increases sense of comfort. The nighttime environment – with its rich green colours, comforting fragrance and moist air – provides a different dimension altogether.

With their wide variety of colours, scents and textures, outdoor gardens create a plethora of sensations, which stimulate mind and body. Raised beds make it easier for those with physical limitations to garden from a sitting or standing position, as well as provide a good range of movement.

Physical Functioning

Bending, weeding, planting: as an activity, the act of gardening increases upper and lower body strength and range of motion, encourages mobility, enhances circulation and cardiovascular ability, builds endurance and strength, and improves co-ordination. Before you begin your horticultural therapy program, you should evaluate each resident's physical capabilities and establish individual regimens that will restore, improve, maintain or prevent muscle deterioration. For those with physical limitations, you can adapt tools as well as garden beds and patio areas. Design horticultural tasks to suit each resident that will develop fine motor skills such as eye/hand coordination.

Cognitive Functioning

Horticulture can play a major role in determining the cognitive level at which a resident is functioning. Using simple or complex procedural testing methods, residents can be evaluated on their ability to understand, concentrate, retain and interpret information. Through plant propagating, the therapist can determine a resident's ability to follow instructions.

The garden or greenhouse environment can set the tone for comprehension and realization. Working with seasonal plants helps residents validate the time of year and master the environment. The wide variety of plant shapes,



Therapeutic gardens.

sizes and colours help people with dementia "code" and perceive their environment (for example, yellow tulips planted outside a door can help a resident locate the entrance to the facility). Plants also provide an excellent source of visual, taste and touch stimuli. In addition, projects based around gardening and horticulture provide an awareness of time and seasonal events. During the winter, residents can plan their garden and select the plants they would like to grow. In spring and summer, they can plant seeds, transplant flowers and maintain the gardens.

Emotional Well-being

Gardens and other horticultural areas are positive, non-threatening environments. Use this to your advantage and encourage your residents to share their feelings and emotions through group and individual interactions. Projects and activities such as cutting flowers, drying herbs and making wreaths help residents improve skill levels, self-esteem and confidence. Tasks such as pruning, smashing pots and hoeing provide an outlet for anger and aggression. Classes in flower design and arranging offer opportunities for creativity and imagination. The simple act of working with plants develops a sense of nurturing. And, all types of tasks and projects provide structure and activity to help alleviate depression and alter negative feelings.

Social Functioning

A horticultural therapy program is an excellent way for a therapist to build a good rapport with the resident as there is little or no direct confrontation. The therapist is able to rate the resident's social functioning level: Does the resident isolate him/herself and work independently? Is the resident exhibiting socially appropriate behaviour? Can the resident work with other group members? In sharing materials and tools in a group setting, members are able to interact with each other.

Volunteers: The Key to a Successful Horticultural Therapy Program

Behind every successful horticultural therapy program is a strong volunteer component. Current economic constraints preclude staff from performing all the tasks they would like to achieve. Volunteers offering their time and talents offset this shortfall. They can be relied on to:

- take residents to program areas;
- help residents with activities;
- inspire residents to become more involved in an activity;

- provide scheduling and organizational assistance;
- build rapport with residents and help to set the tone for a positive experience; and
- perform individual tasks that residents find difficulty with (for example, picking wildflowers for pressing).

Guidelines for Successful Programming

How successful you are at developing a horticultural therapy program that improves the quality of life of residents with dementia hinges on how well the program addresses residents' physical and mental needs and capabilities. Horticultural therapists have the knowledge to develop activities that can evaluate concentration and retention levels. Through guided, step-by-step procedures such as planting bulbs, designing a terrarium or pressing flowers, the therapist can assess short- and long-term memory, as well as cognitive and physical strengths and weaknesses.

In any program, it is important to not exceed a resident's tolerance level.

Keeping the activity simple, using action words, speaking clearly, being aware of auditory or visual impairment and adapt-

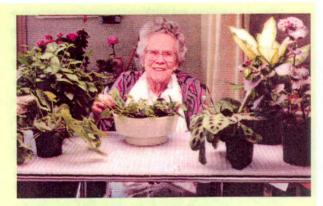
ing the equipment or environment for those with physical limitations will optimize your results.

Residents will feel renewed self-worth if they are able to complete a project that is meaningful for them and the facility. Improved self-esteem alters an individual's thought processes, improves attention span and reduces agitation.

Projects and activities that are fun to do will contribute to the non-threatening experience. If they help to provide a sense of reality by connecting to a seasonal event and promote a range of motion and muscle strength, so much the better. Successful projects include drying herbs, pressing or arranging flowers, transplanting, mixing soil,

Tips for Success

- Promote structure and resident/staff/volunteer commitment by establishing a set time for your program.
- Outline program goals with the resident to encourage better participation and reduce anxiety.
- Place residents in small groups to enable them to work at their own pace, thus increasing therapeutic success.
- Use a subtle approach when teaching as this leads to greater interpersonal interaction.
- Listen intently. A trusting relationship develops through a sincere, caring manner and honest, open communication. Always give praise when a task has been successfully completed. Provide short-term projects for residents who will benefit from instant gratification.
- Watch for subtle changes in mood, appearance or attitude. Also know that some medications will produce negative side effects or reactions (for example, residents on neuroleptics will react to sunlight).
- Include quiet or non-responsive residents in group ses-
- Be open to suggestions from a resident who wishes to do something different.
- To alleviate boredom, make your session as interesting as you can and develop projects or activities that are challenging but not beyond a resident's ability.



Working with plants.

- Provide aprons to protect clothing.
- Encourage direct participation and tailor activities to individual capabilities and needs.
- Establish a good rapport with staff to ensure residents are dressed and nourished before the program begins.
- Enrich the program with volunteer support.
- Keep a record of the most successful activities and plants
- Inject interest in and add dimension to your program by holding field trips to botanical gardens, parks and horticultural shows, showing films or inviting guest lecturers.
- Provide music, aroma and colour to stimulate residents.

cutting flowers, washing pots, planting bulbs, picking vegetables, and planting seeds and cuttings.

Remember, the key to any successful program is to relax, be yourself, enjoy your residents and have fun! LTC

Therapeutic Plants

Plants can be used to develop or improve physical or cognitive skills, maximize function and independence, and encourage positive interaction with the external environment. In a horticultural therapy program, select plants that:

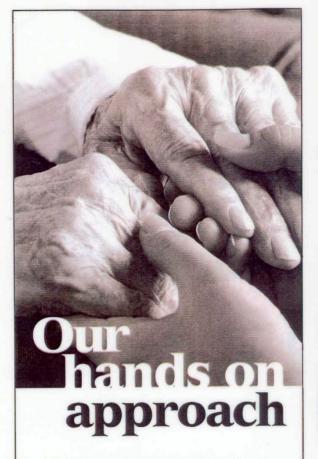
- are non-poisonous;
- are multi-dimensional and -functional (use whole plants for cooking and crafts; the parts of a plant for different activities [for example, use dried lavender flowers in potpourri, the stems in design classes and the leaves to make herbs]);
- have distinctive colours, shapes and textures;
- are easy to propagate and grow under a range of conditions;
- provide sensory stimulation;
- stimulate memory and creativity, and provide clients with meaningful activity.

The following 10 plants meet these criteria:

- Calamondin Orange (dwarf orange tree);
- Pelargonium Clorinda (scented geranium);
- Lavendula (lavender);
- Coleus (coleus);
- Chlorophytum Comosum (spider plant);
- Menthe (mint);
- Viola Tri-colour var. Hortense (pansy);
- Tradescantia;
- Succulents (many varieties); and
- Saintpaulia (African violets).



Solarium/greenhouse - a therapeutic environment where clients experience a plethora of sights, sounds and fragrance.



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