Janforum

The therapeutic aspects of gardens and gardening: an aspect of total patient care

INTRODUCTION

Standard reference books on occupational therapy give the impression that gardening is limited to hoeing, raking and hedge clipping and that it is an activity of particular relevance only to younger patients. But gardening is not limited to these kinds of activities. There is a great range of activities within gardening. The therapeutic potential of gardening can and should be exploited as a means of assessment and as a treatment strategy. However, it is important that the therapist has some knowledge and skill about gardening if it is to be taught to others and produce an acceptable end result. A cavalier approach to other crafts may suffice to guarantee success, but, in my view, gardening is not one single technique or skill. It is a mixture of skills and science.

Therapeutic value of gardening

When using an activity such as gardening as a means of treatment for a particular condition, the therapist seeks to make use of actions or responses that will improve the patient’s particular condition. These can be physical, intellectual or psychosocial but it is the benefit gained from the action or response that it is important, not the end product. Nevertheless, the joy of achievement includes an acceptable end product and this factor should never be ignored. In gardening, the end product, whether pot plants or a well-tended flower bed or vegetable plot, can also be used as a means of treatment. The benefits of a garden are not confined to the work it provides but extend to the interest it may stimulate in patients who are unable to participate physically in gardening activities. This is especially true of residents in long-stay institutions where the often boring ward environment can be overcome to some extent by introducing pot plants or groups of plants into the ward or in the patients’ sitting room. An easily adaptable garden can be used as a treatment area to help overcome the problems associated with an impoverished environment.

Plants can stimulate all of the senses, memory, interest and conversation. The well-being of any person depends on a level of stimulation being maintained. Denial or lack of stimulation can result in disturbing behaviour or poverty of thought and action. Gardening offers such a wide variety of activities that almost any patient’s interests can be aroused and the desired action or response can be achieved. As with any activity, not all patients will be interested in or respond to plants or gardening. It is a mistake to assume that everyone has an affinity with nature and not everyone wishes to own or tend a garden. On the whole, gardening as a hobby or interest tends to be confined to the middle-aged and elderly, but children also respond well to growing and caring for plants and gardening sessions can be very useful to them. However, their interest tends to wain and get lost during young adulthood, though it may reappear in later years when they acquire a garden of their own.

PHYSICALLY HANDICAPPED PEOPLE

Gardening with physically handicapped people can be considered as a means of assessment, a means of treatment, and a means of rehabilitation.

Assessment

A garden can be used to assess a patient’s ability to climb steps, slopes and ramps if these are included in the design of the garden. Walking on smooth, uneven surfaces, and bending,
lifting and carrying abilities can also be assessed. If the patient is in a wheelchair, his ability to manoeuvre it and carry out gardening from it can also be assessed. Similarly, patients who use walking aids can be assessed in the same way. Gardening provides many opportunities to assess hand function when the patient is handling gardening tools and plants as well as an opportunity to assess eye coordination.

Just as it is realistic to assess patients in a kitchen, bedroom or bathroom, if they have a garden of their own they should also be assessed in a garden before discharge home. For many physically handicapped patients may have a garden of their own and wish to continue gardening. By making an assessment before discharge problems can be identified and solutions found.

A garden can provide work of a realistic nature in which to assess the ability to return to work. A gardening unit run on commercial lines can also provide the normal stresses of the work place and the patient’s ability to cope with stresses and pressures of work can be accurately judged. Speed, accuracy, the ability to work to a required standard, timekeeping and responsibility can also easily be assessed in such a setting. For the patient who has been away from work for a long period of time it also reintroduces him to a work routine.

Treatment

To maintain or improve the function of upper limbs, especially if the limb is weak or grip is poor, activities such as potting or pricking out can be used. The range of movement can be increased by moving the materials further away from the patient, and removing plants from pots involves pronation and supination of the hands. These two activities can be carried out whilst seated or standing and can be used to re-educate the patient in sitting-balance, weight transference and standing-balance.

Hand-eye coordination and finger movement can be improved, especially with pricking out, if a neat acceptable end product is to be gained. It should be noted that plants are easily damaged if handled roughly or in the wrong way.

If a realistic time and standards are set for either task they are ideal for retaining normal work habits. If an increase of power is possible and needed, patients can graduate to heavier work such as hoeing, raking and cultivating flowers or vegetables. Raking can be graded from light raking among plants to the heavier work of removing moss from a lawn. Digging or forking over ground is the next grade of heavy work, as is turning over a compost heap or mixing potting soil.

The use of the wheelbarrow is excellent exercise both for upper and lower limbs because it increases body coordination and improves walking. This activity can be graded simply by increasing the load in the barrow. Planting involves a great deal of bending, working with hand tools, walking and carrying. More than one patient can be involved and in this way each can be given the activity that is more beneficial to them whilst working in a group.

The sharing of an activity can, in fact, extend to any of the tasks in the garden. A patient who has good functional ability in his upper limbs but requires practice in walking can fetch and carry for a patient who is chairbound or who needs treatment only for his upper limbs. A group with mixed abilities and disabilities can share many advantages by working together to their mutual advantage and they can cooperate and solve problems for themselves and others. Observing for themselves how others have overcome problems and benefited from treatment serves as a means of encouragement and motivation. There is the added element of socialization. Where short-stay and long-term care patients are mixed together the long-term care patients could benefit from the stimulus of meeting new faces and mixing with different people.

Hand weeding among plants can be used in treatment where dexterity and increase of strength are required, as in removing dead flowers or foliage from plants, either in parks or in the garden. Tying up plants at various levels involves different actions, from bending down to stretching up to tie in plants growing on a trellis or wall. Careful analysis of the actions and positions needed to perform the actions is called for. When increasing the range of movement of the upper limbs is called for, stretching to tie up plants might be ideal but it does involve a static-shoulder joint whilst tying the knot and if this is contraindicated then another
activity that better meets the needs of the patient will have to be used.

Rehabilitation

Activities used as treatment have a double or added value if they can be carried on as a hobby after discharge. Also, if the patients' interest is gained, they are much more likely to put extra effort into it and their treatment will benefit as a result. If the patient wishes to continue gardening after return home but has a residual disability which he feels may inhibit or seriously restrict gardening activities then appropriate advice and practice can be given. The patient can be advised on and given practice in the use of suitable tools or different techniques. Many tasks such as weeding, hoeing, raking, planting and pruning can be carried out from the seated position. Advice can be given on labour-saving methods of controlling weeds by using various weed killers or ground cover plants. The more severely handicapped patients can be encouraged to continue with the hobby of gardening by teaching them indoor or outdoor benchwork. They may need help to gather materials together or they can continue to plant and grow plants in pots or containers or on benches.

There is a social aspect to gardening available in the form of gardening clubs and shows, and courses on gardening are sometimes available. Patients can be encouraged to join or attend these when they share this interest with others. The courses also provide an opportunity for an exchange of views and ideas as well as a way of possibly getting answers to gardening problems.

PSYCHIATRIC PATIENTS

The use of gardening in the care of psychiatric patients has a long history. Both gardening and farming, in the past, were considered to be useful and worthwhile areas of work for psychiatric patients. Gardening was considered a useful means of keeping patients occupied and out of the wards rather than as a method of treatment geared to their particular needs. But caring for plants and being responsible for their well-being does have a beneficial effect and anyone feels a sense of pride when they produce good quality vegetables or flowers. Since gardening is a group activity, especially in a hospital, gardening can be used as a means to assess how patients communicate with and relate and respond to others. The ability to understand verbal directions as well as attitudes towards authority can also be assessed and treated within the setting of a garden, greenhouse or potting shed.

If responsibility is given to an individual patient for a particular task such as watering plants in the greenhouse, different facets of the personality of the patient can be assessed and then treated if deemed necessary. As plants do not require the same amount of watering each day or week, it demands a degree of initiative and adaptability on the part of the person responsible for watering them to decide how much water to give and when. It also demands motivation and responsibility if they are to carry out the task efficiently and if the plants are to thrive.

There is a fair degree of frustration in learning many of the tasks associated with gardening and tasks such as raking the seed bed to leave it level and smooth take considerable skill. Many of the tasks require not only physical skill but also the ability to work to a high standard. Tolerance to criticism is therefore needed and this tolerance can also be assessed.

If a project or task is made a group responsibility then qualities of leadership and decision making and the ability to share decision making and to function as part of the group as well as relationships with others can be assessed, discussed and worked on, especially if the group comes together at the end of the activity to discuss how it went or what happened.

Stimulation of all the senses is available in the garden, particularly visual stimulation. There is also a mixture of texture, scent and sound in gardens to stimulate other senses. These stimulations can trigger off memories and prove beneficial especially to elderly long-stay patients. To be able to get out and be physically and emotionally stimulated has obvious advantages. The produce from a garden can provide patients with the material and opportunity to develop other skills. Vegetables and fruit can be used in cooking sessions. Flowers can be used in floral sessions to decorate wards and departments in the hospital. Many of the flowers and
grasses growing in a garden can be dried and used in other creative sessions at a later date. Alternatively, the produce of the garden can be sold, thus involving patients in social, numeral, clerical and business skills. The social aspect of gardening can be extended by organizing trips to visit private or public gardens, greenhouses or nature trails. Visits to flower shows can also be organized and patients can be encouraged to exhibit their own products.

The garden is not only a place of work, it is somewhere where one can just sit and relax. This is not only of benefit to those who enjoy the garden but also adds to the pleasure of those who have worked to create and maintain it. For we all have a need to be appreciated and to get some reward for our labours. Gardens should therefore have sheltered areas with seats provided. Poorly motivated patients, if they can be persuaded to go and sit in the garden, may well have their interests sufficiently aroused so that they can be persuaded to join others in garden work. Gardens are not just a place for plants. A small aviary for birds can also be added to bestow added interest, colour and sound. The aviary can be used as a focal point to draw other people into the garden. The work of caring for the birds can provide an extra dimension to the work in the garden. If a pool can be incorporated into the design of the garden, so much the better, especially if running water in the form of a waterfall or fountain is added as this provides added sources of stimulation. The combination of running water and ornamental fish holds a fascination for most people and a great deal of pleasure and stimulation and tranquility can be obtained from such a combination. If the garden is large enough other activities can take place within it such as bowls or ball games. Recreation is an important element in the lives of patients. What better place to have reality-orientated sessions than in the garden or with living plants? These provide a plentiful supply of materials to stimulate discussion.

MENTALLY HANDICAPPED PEOPLE

Gardening can be taught not only as a skill in its own right but also as a means of teaching other life skills. If the aim of the treatment is to use up or provide an outlet for surplus energy then forking, cultivating, digging or moving soil or compost in barrels can be used to great advantage. Clearing a plot of ground to prepare it for digging or cutting back plants that have flowered or gathering leaves can all be considered, and a task chosen to match the physical ability of the individual. Any of these tasks also helps to build muscles and promote physical health.

Gardening can provide opportunities for teaching counting skills, for example by counting the number of plants required to plant a row or bed of plants. The seasons of the year can obviously be taught in this setting and an appreciation given of the different kinds of weather. There is a wealth of colour in a flower garden and this can be put to good use by teaching the recognition and naming of colours.

A garden can make an ideal classroom in which to teach a great many of the skills and knowledge in everyday life. If the opportunities offered are recognized they can be exploited to the full. Passage of time, birth, life and death are obvious features in the natural setting of the garden and can therefore provide opportunities for rich experience and understanding among mentally handicapped people.

If the aims are well formulated and the tasks or activities carefully analysed then it should be possible to exploit and use to full advantage each activity available in a garden for the benefit of mentally handicapped people. The social aspects of gardening referred to above in the discussion of the contribution to the care of psychiatric patients holds true for mentally handicapped people also. A garden can also provide situations for them to practise previously learned social skills.

All activities can be broken down and the different tasks easily graded. This provides opportunities for different ability groups some of whom can accomplish a complete task or part of a task. Even those who are also severely physically handicapped can participate in gardening projects as gardening involves such a wide variety of activities. They may manage to complete a small part of a task; then they could be encouraged to direct others (verbally or non-verbally) to help in the completion of the task.
The simple pleasures associated with gardening can mean a lot to mentally handicapped people, both adults and children, who may spend a great deal of their time indoors, often in a hospital ward. The opportunity to feel the rain, to smell plants, grass and soil (especially after rain), to listen to the birds or to touch and feel the different textures can be of great benefit to them and can be exploited as a teaching and experiencing situation.

The opportunities offered by gardening as a means of employment for mentally handicapped people provide a way of enabling them to achieve more independence and self-sufficiency. Although many crops grown by commercial methods today require little labour, there are a great many that require a lot of intensive labour. These can provide ideal work opportunities for mentally handicapped people where they can find a rewarding form of employment both socially and financially.

Every individual has a basic desire to feel needed and to make a contribution of value to society. Gardening provides an opportunity for all of this as the activities are easy to grade and a niche can be found for most people. Even a task that appears mundane or boring to some can be most rewarding to others of less ability. If the task is carefully matched to the level of ability, it can provide a sense of achievement, satisfaction and a sense of personal worth to any individual worker.

Gardening, therefore, provides unique social, physical, educational, and therapeutic opportunities, especially in the care of physically and mentally handicapped people and in the care of those suffering from mental illness. It can provide a unique contribution to their total care.

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