

Healing Gardens



Seneca, SC

by Ken Koschnitzki, MD, MIA

The History of Healing Gardens

Restorative gardens first appeared in Europe around the Middle Ages. Hospitals and Monasteries for the sick and insane often incorporated courtyards which served as places for reflection, growing food and herbs for consumption and medicinal use, and growing flowers for use in ceremonies (Tyson, 3). The space was traditionally divided into quadrants by paths, and at the center stood a well or fountain. During the fourteenth and fifteenth centuries, the monasteries declined, existing facilities were overwhelmed, and the importance of the gardens declined. By the seventeenth and eighteenth centuries, the presence of scientific medicine brought about renewed interest in the usable spaces surrounding the hospital (Gerlach-Spriggs, 16).

Nancy Gerlach-Spriggs, in her book Restorative Gardens: The Healing Landscape, states that some of the renewed interest in outdoor spaces came from the new theories about spreading of infection by “noxious vapors”. The passage of infections by germs was beginning to be understood, and the lack of fresh air was felt to contribute to illness. This theory influenced hospital design by incorporating outdoor spaces between wards. It was not until the late eighteenth century, however, that gardens began being used for therapeutic purposes. At this time, mental hospitals began utilizing therapeutic gardens and horticultural therapy. Psychiatric institutions were planned with outdoor spaces planted to screen the patients from curious spectators. Landscaped areas provided comforting experiences. The patients participated in grounds maintenance, gardening and farming as part of their therapy (Epstein, 1998). A new mode of therapy known as Moral Treatment was developed by Dr. Phillippe Pinel and Quaker William Turke. In this therapy, well trained and supervised attendants who lived and worked among the patients created therapeutic relationships with them. In order to help improve the mental status of their patients, the designers of the buildings and grounds strived to create a home-like and restful environment. A part of the grounds were used for horticultural therapy. According to Gerlach-Spriggs, this treatment modality was so successful that the institutions were soon overwhelmed and became state run asylums (Grelach – Spriggs, 21).

Following World War II, hospitals were designed as multi-story buildings and the pavilion style buildings began to disappear. The emphasis was on convenience for the hospital staff rather than the comfort of the patient. Despite the decrease in outdoor spaces at this time, Occupational Therapists began utilizing more garden therapy in their work as a way to channel the wounded soldiers’ thoughts from those of destruction to those of creation (Gerlach – Spriggs, 29). This was the rise of modern horticultural therapy. Current hospital facilities have again lost

the garden to “high tech machines, drugs and medical specialization”, ignoring the special emotional needs of patients, families and staff, as well as the restorative nature of outdoor spaces (Cooper-Marcus, 15). Some facilities, however, have utilized horticultural therapy to work with veterans, the elderly, and various types of dementia. Hospices often utilize gardens for restorative and therapeutic effects (Epstein, 1998).

Theories about Nature’s Effects

Why is nature restorative? There are many theories regarding the effects nature has on human beings. In Clare Cooper Marcus’ book Healing Gardens, Rodger Ulrich writes in an article “Effects of Gardens on Health Outcome: Theory and Research”, that people learn to associate restoration with nature settings and associate stress with urban settings. As an example, people may find vacations in rural settings relaxing because as a society we were “taught” these landscapes were calming and restorative. Another theory is that the urban or built environment is overstimulating, causing increased stress in the body. Nature is less complex making it more restorative. Evolutionary theories contend that many cultures have the same positive responses to nature. Humans may be genetically inclined to respond to certain landscapes more positively because these environments were favorable for their survival (Cooper-Marcus, 50-51). Nancy Gerlach-Spriggs contends that our “response to nature is not purely cultural or learned, but arises from our collective psyche” (36).

Gardens have the ability to heal in many ways. The simple exposure to nature causes heart rate to decrease. Muscle tension and blood pressure also decrease. Rodger Ulrich explains, “it is justifiable to propose that gardens in healthcare situations are important stress-mitigating resources for patients and staff to the extent that they foster: a sense of control and access to privacy, social support, physical movement and exercise, and access to nature and other positive distractions”(Cooper-Marcus, 36). Ulrich explains in another article entitled “View through a Window May Influence Recovery from Surgery,” that patients who were able to view nature had a shorter hospital stay, lower analgesic use and fewer complaints during recovery (Gerlach-Spriggs, 35). Interviews done by Steven Verderber of hospitalized patients suggested that windows in patient’s rooms connected them with the outside world, easing their hospital stay (Gerlach-Spriggs, 35). Another study by Dr. Joanne Westphal, a practicing physician and landscape architect, evaluated the effects of exposure to a garden on Alzheimer’s patients. She found that patients who spent zero to five minutes in a garden per visit showed little if any effect on behavior, medication usage, pulse rate, blood pressure and weight change. Patients who spent

more than ten minutes in the garden per visit showed great improvements in all categories except medication usage, which remained the same (Westphal, 2002).

Types of Gardens

There are several varieties of gardens which have been introduced into the healthcare settings – contemplative gardens, restorative gardens, healing gardens, enabling gardens and therapeutic gardens. Contemplative gardens are generally meant to calm the mind and mend the spirit. Restorative gardens are places meant for the healthy as well as the sick. Nancy Gerlach-Spriggs states, “For the healthy, such gardens encourage sociability among companions, promote relaxation and contemplation for the solitary visitor, or create a sense of community among residents who live in quarters around the garden. For the sick of body or troubled in spirit, the same garden relaxes and soothes and thereby encourages the body and the mind to restore themselves” (Gerlach-Spriggs et al, 7). According to Rodger Ulrich, “a healing garden refers to a variety of garden features that have in common a consistent tendency to foster restoration from stress and have other positive influences on patients, visitors and staff or caregivers”(Marcus and Barnes, 30). An enabling garden allows people of all ages as well as abilities to be able to enjoy, work and interact with the garden despite their limitations. It is especially geared toward the elderly and handicapped. It is meant to allow the person to participate in the garden and in the gardening process despite his or her limitations. Therapeutic gardens, however, suggest treatment. “Therapeutic” implies an assessment and an understanding of a medical condition, its usual course and prognosis. Therefore, a therapeutic garden attempts to improve the medical environment in pursuit of the treatment of a medical condition (Gerlach–Spriggs, Weisen, 2002). With regards to therapeutic gardens, landscape architects must collaborate with health care professionals to define the role of the garden with respect to treatment. Will the garden help encourage post-operative patients to get up and walk? Can spending time in the garden decrease the amount of pain medications needed? Do patients need to be protected from infectious risk in the garden, or are there plants which should not be present in the garden? There needs to be interaction between the medical profession and landscape architect in order to obtain the best results for the patients (Gerlach-Spriggs, Weisen, 2002).

Goals

There are many goals to consider with healing gardens. The first consideration is to identify who is going to utilize the garden space and how are they going to use it. Spaces which will be used for therapy for patients need to be designed differently than those which will be used for relaxation. Gardens which are designed for the elderly should take into consideration how well the space can be negotiated, how comfortable it is, and safety considerations of the space.

Enabling gardens, which allow those with physical impairments to continue experiencing the joys of hands on gardening, require adjustments which allow the patients to be able to reach, touch and care for the plants easily. Being able to work among the plants allows these patients to improve their fine and gross motor skills, flexibility, balance, and eye/hand coordination according to Gene Rothert in his article Fun and Leisure: Home Enabling Garden Part I (2006). The paths must be able to accommodate wheelchairs and be able to allow them to turn easily. The grade should be level or very slight to provide security. Planters can be placed at elevated levels so that the gardener can care for the plants without having to bend over. Hanging baskets and vertical planters work well also. Specialized tools are available to these gardeners to allow them to reduce effort and increase independence while in the garden. Plant materials should be chosen carefully to not require intense labor, yet be stimulating (Rothert, 2006).

Gardens used for horticultural therapy, true therapeutic gardens, are somewhat different from enabling gardens. Enabling gardens are more for the enjoyment of gardening and to allow the patient or gardener to continue enjoy working in the garden. Therapeutic gardens, however, are used as an adjunct to improve a person's physical, mental and social well-being. In her book The Healing Landscape, Martha M. Tyson explains that if a garden is to be used for horticultural therapy, it should function and appear like a "working garden" (183). Working in the garden and growing plants for personal use provides moderate exercise and exposes the patient to the therapeutic benefits of nature. According to Tyson, patients with cognitive or sensory deficits benefit from the sensory interaction with plants (184).

Garden Features That Reduce Stress and Promote Wellness

Many studies have shown that nature scenes have the ability to decrease stress in human beings. Roger Ulrich in his paper Visual Landscapes and psychological well-being noted that urban scenes tended to bring about fear and sadness, where landscapes elicited friendliness, playfulness and elation (1979). In a study done by Gordon Orians and Judith Heerwagen, people prefer open distant views with scattered trees, water and paths suggesting ease of

movement (1992). The exposure to the outdoors has been shown to help the elderly, especially those with Alzheimer's to be more oriented to time as it improves their circadian rhythm.

Garden Features That May Have Negative Effects

Several features may have negative effects when they are encountered in the setting of the healing garden. Urban noise such as machinery, traffic, air conditioning units and loud voices all can be considered intrusive in the healing garden and may actually increase stress rather than decrease it, and may agitate an already stressed psychological state according to Cooper-Marcus and Barnes (1999). These sounds should be adequately screened from the garden using water, vegetation, or some other device. If unable to block these distractions, an alternate site should be considered.

Another feature that can have negative effects in the garden is sunlight. Although most people benefit from exposure to sunlight, some patients may have adverse reactions to it. Patients on certain medications may be very sensitive to the effects of sunlight, and for this reason, it is suggested that areas of shade or at least filtered sunlight be provided in the garden.

Abstract art features may have negative effects on patients as well. Evidence has shown that the viewer may project his or her current emotional state onto the abstract element. If the patient is feeling sad, depressed or anxious, these emotions may be projected onto the piece of art and the patient may become more stressful (Cooper-Marcus and Barnes, 1999).

Guidelines

There are several guidelines for the designing of healing and therapeutic gardens. This list is based on recommendations by Clare Cooper Marcus and Marni Barnes.

- 1) Lush, colorful plantings should be used which is varied and interesting to reinforce the image of a garden.
- 2) The use of flowering plants over many seasons in order to mark the seasons will help provide a sense of cyclical rhythm through the year. It is important for people to understand the changes in season, especially in areas where the climate does not change much.

- 3) Use trees with foliage which moves easily and creates noise even in slight breezes. Place the trees to create patterns of light and shadow, color and movement. This can help muffle some of the urban noise as well.
- 4) Use plants, birdbaths, feeders to attract birds and butterflies. Avoid plants which attract large numbers of bees for safety reasons.
- 5) Utilize a harmonious variety of plant textures, forms and colors. These attributes can be important for patients with limited eyesight and for tactile stimulation.
- 6) Utilize water if possible. Moving water is very soothing in sound as well as sight. It can create a psychological screen which can help the restoration process. Moving water is an excellent way to reduce outside noise. Still water can promote meditation and peacefulness. If using water, consider wind exposure.
- 7) Create a planting buffer between public garden spaces and private offices or patient rooms bordering the garden.
- 8) Provide meandering paths where possible to encourage strolling and observation of objects in the garden. Provide a variety of vistas, levels of shade and textures of planting.
- 9) Assure that paving materials are suitable for wheelchairs or gurneys. Make sure that the main paths are at least wide enough for patients in wheelchairs to pass each other.
- 10) Provide nighttime lighting so the garden can be utilized after dark. Use low path lights so light does not shine into patient rooms, nor does it create a glare into people's eyes.
- 11) Provide plenty of seating in the garden. Movable chairs or benches at right angles allow for social interaction. Place some seating at the entry of the garden for those with limited time (such as staff on a short break). Seating should be sturdy, have backs and arms, and be pleasing to the touch. Be careful of colors that might become hot in the sun.
- 12) Provide a variety of shelter and exposure so the garden may be utilized in all seasons. Provide shady areas for those sensitive to the sun, as well as for hot, bright days. Covered areas at the entrance to the garden may allow it to be used during a rainstorm.
- 13) Take advantage of natural views from the site.
- 14) Provide one or two memorable features by which people can remember the garden.

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