

Therapeutic Horticulture in the Medical Social Work Setting in Singapore

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According to the American Horticultural Therapy Association, therapeutic horticulture is defined as a process in which plants and plant-related activities are used for participants to improve their well-being through active or passive involvement. Though goals do not have to be clinically defined and documented in a therapeutic horticulture programme, the leader needs to have training in the use of horticulture as a tool for human well-being. Other forms of horticultural programmes include social horticulture, which neither requires the presence of a therapist nor definition of treatment goals; and vocational horticulture, which aims to prepare individuals for work in the horticulture industry.

Therapeutic horticulture can be said to be a goal-oriented intervention used to achieve non-horticulture related outcomes. Thus, participants do not have to be trained in horticulture to experience its benefits. This makes it a practice that can be uniquely tailored to the needs of a person.

The exponential growth of therapeutic horticulture has gained significant recognition in the world today.¹ Although much literature can be found on the myriad of techniques and concepts supporting the different applications of this form of therapy, there is less published research regarding its practice in Singapore. The reason might be, that unlike its Western counterparts, therapeutic horticulture only became part of the scene in Singapore in recent years. Since the physical environment and culture in Singapore differ greatly from that of the West, it is useful to find out how differently Singaporeans respond to this treatment, and how it could be indigenised in our local context.

History on the Use of Therapeutic Horticulture

The belief in horticulture as a therapeutic means was documented since a long time ago. Simson & Straus (1998) suggested that therapeutic horticulture started in the early 1800s, when the understanding of a positive people-plant relationship led to it becoming an accepted treatment approach.² Dr. Benjamin Rush, the “Father of American Psychiatry” in the 19th century, was the first to document that working in gardens had positive effects on individuals with mental illness. Hospitals across the USA and Europe started to use horticultural activities for people with mental health conditions. Natural designs of therapeutic landscapes were also emphasised in hospitals to create a conducive environment for recovery.

In the early 1900s, horticulture became an important part of therapy and rehabilitation programming for hospitalised war veterans in World War II. This led to the acknowledgement of horticulture as a treatment tool in occupational therapy and hospital programming. Therapeutic horticulture also became a movement increasingly used for persons with physical disabilities.

Through research across medical, psychological and social disciplines, therapeutic horticulture brings medical doctors, allied health professionals, horticulturists and any other interested healthcare professionals together. Today, therapeutic horticulture is used in many contexts and across diverse cultures, including Singapore. For instance, research has shown that patients with a view of nature had shorter hospital stays, suffered fewer postsurgical complications and needed fewer doses of potent narcotic pain medication.³ Thus, the physiological-biological benefits of therapeutic horticulture consequently saw a wider range of therapeutic options made available to other diagnoses and psycho-emotional issues.

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The activities conducted during therapeutic horticulture also seem to be in tandem with the health-oriented goals highlighted in hospitals, such as restoring a person's health while improving social relationships.



Relevance and Usefulness of Therapeutic Horticulture in Medical Social Work

The relevance of therapeutic horticulture as a complementary social work intervention is substantiated by its biological and socio-emotional benefits. This is compatible with the social work philosophy of providing holistic care to promote well-being in the body, mind and soul. This can only be achieved through the involvement of professionals from a multitude of disciplines

Social work draws on a long tradition of providing care. Social work professionals strive to create a safe and supportive environment to facilitate the improvement of the quality of peoples' lives. The nature of therapeutic horticulture can help medical social workers to establish rapport in a 'sterile' and stressful hospital setting. The aesthetic beauty of plants may help patients divert their attention from their pain and suffering, which can help to improve their physical, psychological, and emotional states.

The goals of therapeutic horticulture activities are aligned with treatment goals, namely restoring patients' health. Patients, who frequently feel that they are in helpless situations over which they cannot control, can find meaningful recreation through horticulture which helps them pass time. Giving patients the choice of participating in these activities may reduce their feelings of helplessness and retain dignity. In addition, their private grieving process becomes a shared experience when relating to others in similar situations.

According to existing literature, Asians may be less receptive to seeking and receiving professional help for psycho-emotional issues due to 'face' issue. However, horticulture allows patients to gain deep insights on existential issues, externalise emotions and provide catharsis without having to engage in mainstream counselling. Not only does this help patients to find meanings in their lives, but it also has the potential of stirring up memories which are familiar and comforting.

1. Overview of the garden

Therapeutic Horticulture Programme at Tan Tock Seng Hospital

In light of the psychosocial benefits that horticulture confers, a community garden was officially set up at the Communicable Disease Centre of Tan Tock Seng Hospital in January 2016, in partnership with the National Parks Board (NParks). The latter provided advice on the design of the garden layout, choice of plants, and landscape management.

A total of five workshops have been conducted to date, involving people living with HIV, their family members, staff and volunteers of the hospital. The horticultural workshops aim to:

1. Create a positive community atmosphere and an opportunity for peer support; and
2. Help participants learn practical skills through gardening.

A person-centred care approach was adopted to ensure that the goals of each session could be achieved conclusively with no unresolved issues. The activities in the workshop included trellis building, composting, biodegradable pesticides, and making a terrarium. As suggested by Haller & Capra (2017), strategies were applied to meet the identified goals of social bonding and learning.⁴ For example, workshops were planned to include opportunities for group interaction, problem solving and sharing of tools and materials. Creativity is also incorporated as part of learning.

An evaluation of the implemented activities was conducted with the goal of enhancing this pilot project. Twenty-two anonymous participant responses were collected through questionnaires, to provide feedback on participants' experiences

of the group immediately after the workshop. The questionnaire was designed to have close-ended questions with ratings on a Likert scale so that responses may be standardised and a consistent scale of measurement may be obtained. Given the small sample size, the findings are not meant to be conclusive and generalised, but they are feedback from the participants for the purpose of improving future workshops. Information was also collected through participant observation by the medical social workers, and documented during and immediately after each workshop.

It was gathered that participants felt a sense of belonging to the group and acquired useful skills which are applicable for their own gardening activities. In addition, participants were observed to help one another during the workshops, with some taking the lead to show others how they may develop their skills. This suggests an increase in their sense of community and self-efficacy.

The table below presents the top three responses from the 22 participants.

In response to areas for improvement, participants shared that 1) they would like to have more gardening tools, and 2) they would like to grow more specific plant varieties.

Though the project is small in scale, it has increased awareness on the value of horticulture. In recognition of the ongoing efforts, the community garden won a bronze award in the biennial 'Community in Bloom' competition organised by NParks in 2016.

Top Three Responses	Number of positive responses (either agree or strongly agree)
Picked up practical skills through the workshop activities	22 (100%)
Felt that content covered was useful and applicable to them	21 (95.5%)
Could feel a sense of belonging to the group	20 (90.9%)



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Challenges and Future Directions for Therapeutic Horticulture in Singapore

With our fast-paced culture and ever-changing times, there is a need for a more concerted effort to continuously evaluate and improve the practice of therapeutic horticulture through evidence-based practice research and documentation of applied strategies. The outcomes of therapeutic horticulture should be documented as well, to give credibility to this form of therapeutic modality. Perhaps then, this can bring us a step closer to having a formal therapeutic horticulture programme in Singapore, giving rise to a recognised group of registered horticultural therapists. Subsequently, this may also provide a useful source of information on how therapeutic horticulture in our local setting can differ from other cultures.

At present, the lack of trained horticultural therapists and understanding of the practice in Singapore has influenced the delay in adoption of this form of therapy in the healthcare sector. However, with the sizable group of professionals and para-professionals from different fields currently interested in practising therapeutic horticulture, an analysis to gain a more in-depth understanding of its meaning to these practitioners would be useful. Such studies will be valuable in illuminating possible discrepancies in the practice of therapeutic horticulture across different settings and disciplines, as well as the possible consolidation of their standards.

Singapore will soon have an island-wide network of therapeutic gardens.⁵ The pilot was the Therapeutic Garden @HortPark for mental well-

being. In addition, a (first ever) vertical farm at Kembangan-Chai Chee Community Hub as part of the APSN Centre for Adults serving people with mild intellectual disability, and All Saints Nursing Home's 'Garden of Eden' have been implemented. Singapore's first hospital gardens designed by NParks are also in the pipeline, and is purpose built for the Woodlands Health Campus opening in 2022.⁶

At present, there is much available land within Tan Tock Seng Hospital which can be developed into a bigger 'community garden' in Health City Novena, complementing the 'Kampung Spirit' promoted in the hospital. Volunteers of the hospital, as well as staff volunteers from various departments, can be invited to adopt and develop a plot of land within a larger garden space. A similar concept may be seen at one of the largest community gardens in a private estate in Bukit Batok. This garden, started by the Eng Kong and Cheng Soon Neighbourhood Committee, allows applicants to ballot for one of the 90 plots for \$50 a year. All plots have been taken up so far with the support of residents, and even Bukit Timah Primary School, which adopted 3 of the plots.⁷

In conclusion, therapeutic horticulture, with its demonstrated ability to enrich a person's life physically, mentally, and socially, has the potential to feature more prominently in the care of different communities and patient populations in Singapore. Though social workers and other healthcare professionals may not be trained to function as horticultural therapists, they will deliver its associated benefits by integrating knowledge and skills from this discipline into our work. 

References

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