



# The Role of Therapeutic Gardens in the Dementia Ward in a Teaching Hospital in Singapore

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## INTRODUCTION

The hospital has a 20 bedded dementia ward which is catered for the elderly with cognitive impairment exhibiting difficult to manage behavioral symptoms. The care team adopt a person-centered care (PCC) model for all the patients, in order to manage the behavioral symptoms in a restraint free environment.

The author's team explored the role of therapeutic gardens as potential therapy to keep the patients actively engaged during their stay. The availability of green spaces within an acute hospital ward is a novelty in the local setting. The therapeutic gardens are freely accessible to the patients, their next of kins and staff. The gardens aim to provide multisensory (sight, sound, touch, feel, smell) stimulation for the staff and patients alike. The authors believe that contact with nature, albeit brief, provides a short respite from everyday stress for all.

## AIMS

The study aims to evaluate the effectiveness of therapeutic gardens in an acute hospital setting as an additional therapy to the standard therapy available for patients with dementia, and their benefit on staff's mental well-being.

## METHODOLOGY

A qualitative approach explored the ward staffs' experience in using the gardens as a therapeutic modality for the elderly patients with dementia in the dementia ward.

Activities are organized on the balcony such as having their meals, music, art & craft, doll therapy, walking or passively admiring/talking about the various plants. More active therapies at the garden included watering, touching, smelling the flowers/herbs and reminiscing about their experiences with the plants and herbs in their past.



Therapeutic gardens outdoors with various tropical plants provide visual stimulation with various textures of the different plants, sense of smell from the flowers and herbs. There are also terrariums scattered in the ward.

The dementia ward has a wide range of therapies on offer to the patients based on their individual interests and cognitive abilities.

The therapeutic gardens are new additions to their usual activities.



In addition to the colorful plants, there are also MP3s with recording of nature's sound like waterfalls, dog barking, rooster clucking, birds chirping and cats meowing. The MP3 is turned on during these therapy sessions at the gardens. The sound of nature brings the patients back to their younger days of living in a village, which transforms the patients away from their hospital sick beds.

## DATA COLLECTION

Table 1. Survey form for the ward staff

1. Do you find the gardens in the ward helpful in reducing your stress level while you work? (Agree Vs Disagree)
2. Do you believe our patients benefited from the therapeutic gardens? (Agree Vs Disagree)
3. Do you think the patients' agitation and mood improved after spending time at the gardens? (Agree Vs Disagree)
4. What do you like about our gardens, including the miniature gardens?
5. Do you have any suggestions for the gardens so we can further improve your working experience and patients' experience in the ward?



## RESULTS

There were 37 responders for the survey. There were 3 themes which emerged from the thematic analysis from the staffs' perception of the therapeutic gardens in the dementia ward.

65% of staff felt that the therapeutic gardens were helpful in reducing their stress levels while they were working in the Dementia Ward.

Average time spent in the gardens outdoor was 30-45 minutes per session. Among the patients who participated, 95% gained benefit for being outdoors in contact with nature.

Staff reported 84% of the patients showed an improvement in their behavioral symptoms such as agitation and mood after the session at the gardens.

The patients and their caregivers/ next of kin felt the gardens reduced their stress levels while they were recovering in an acute hospital. Most felt gardens are refreshing in an acute hospital and all would like to see green spaces throughout the wards in the hospital.

### Theme 1- Beneficial contact with nature

- The staff reported "feeling refreshed" having 2 gardens for them to look at, while engaging their patients or going for a gentle stroll with their patients in the gardens.
- While the nursing staff served breakfast and afternoon teas at the gardens followed by activities for the patients, they too "had a break from the indoor hospital scenes", for "a short respite of fresh air; looking at the colorful and beautifully arranged plants".
- The nurses took pleasure looking and tending to the plants while the patients ate their meals.

### Theme 2- Reduction in stress level

- The staff commented it is "stress relieving having green spaces in the hospital ward".
- Having beautiful and colorful plants to look at while they were busy at work is relaxing, refreshing and made them happy.

### Theme 3- Better engagement and reduction in agitation

- While not all the patients were suitable to be wheeled outdoors for meals in the gardens, the patients who spent time in the gardens had better mood and their behavioral symptoms improved, especially reduction in agitation.
- The staff noted that the patients were "actively engaged in gardening activities", "patients felt more energetic", "actively conversing about the various plants and herbs".

### Theme 4 - Positive and encouraging feedback from patients and their caregivers

- Patients and their next of kin (>70%) felt that the gardens are refreshing for an acute ward setting, where greens are not commonly seen in a sterile hospital environment.
- >90% felt that their loved ones were privileged to stay in the dementia ward, where there are special attention to patient care and the gardens are so pleasant to look at.
- 60-70% felt that their loved ones' behavioural symptoms like agitation improved just by being outdoors at the gardens.
- >50% felt that the gardens provided a short respite from their sick beds or being in the ward.
- **All of the patients and their loved ones would like to see more therapeutic gardens in the other wards.**

## Positive Quotes:

- "We get to be in close contact with nature in a busy hospital environment."
- "The colorful plants are beautifully arranged and so pleasant to look at".
- "Gardens are so refreshing and inviting."
- "The plants are cute, colorful, pretty and captivating."
- "Very therapeutic work environment."
- "Very soothing to stare at."
- "Reduces stress levels, especially for the staff."
- "Looking at flowers and greens make me feel happy".
- "Patients were engaged in helping with watering the plants."
- "Patients felt livelier while they were in the ward looking after the flourishing plants."

## Negative Quotes:

- "The gardens do not help all patients, only some."
- "Gardens have no effect on me, it only attract mosquitoes."

## CONCLUSION

As the proportion of elderly patients continue to grow, the traditional model of task oriented care is not the ideal for the elderly patients with dementia where there are long periods of bed rest and inactivity. Therapies aiming to get patients engaged physically, cognitively and socially should be the norm in order to prevent risk of cognitive and functional decline during the hospital stay.

It is however challenging to plan activities and motivate patients to get out of bed. Gardening and nature are familiar to everyone and having a walk in the green spaces are relaxing and enjoyable. It is unusual to have gardens in the vicinity of an acute hospital ward, for various reasons. This pilot project is most encouraging, showing positive effects the gardens have on the staff and patients and their caregivers.