



## KEY POINT SUMMARY

### OBJECTIVES

The objective of this research was to examine the healing gardens in two hospitals in Malaysia and see if they conform to a 10-point checklist created on the basis of Ulrich's theory of supportive gardens.

## The Physical Attributes of Healing Garden for a Century Old Healthcare Premises

Ibrahim, F., Harun, W. M. W., Samad, M. H. A., & Kamaruddin, W. N. W. S. W. 2015 | *International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies*. Volume 6, Issue 2, Pages 47-59

### Key Concepts/Context

The authors refer to previous research that examined the positive effect of gardens on the health of hospitalized patients. Two hospitals in Malaysia that were built in the late 19th century had designed gardens in the premises. The researchers used observation and interviews to determine if the gardens conform to Roger Ulrich's benefit of supportive gardens. The study found that the two hospitals conform to most of the attributes listed by Ulrich with the exception of accessibility.

### Methods

The methodology for this study involved observations and open-ended interviews with patrons who visited the gardens in two hospitals (hospitals S and B) in Malaysia. The interview data was subject to content analysis.

### Findings

These were the findings with regard to the checklist:

- Opportunity for movement and exercise:
  - Hospital S has a setting facilitating outdoor physical activity and for contemplative walking. There is no scope to run and jog, for post-surgery exercise, or for children to run and play.
  - Hospital B has a setting facilitating contemplative walking, but it there is no provision for other outdoor activity, to run or jog, post-surgery exercise, or for children to run and play.
- Opportunity to make choices to seek privacy or experience sense of control:



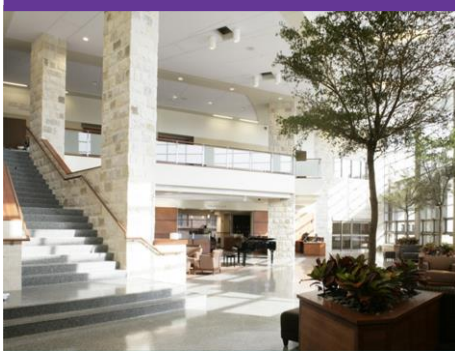
### DESIGN IMPLICATIONS

The study suggests that proximity to wards determined if the patients used the gardens. The findings also suggest a centrally located outdoor environment/garden can potentially be used by more patients. Further, hospital gardens should not have uneven surfaces, narrow paths, or steps which deter wheelchair-bound patients from using these outdoor environments. In places that experience hot weather, shady trees and gazebos are recommended.

- Both gardens had fixed seating for one or groups of persons - in the shade and in the sun.
- The walking routes in both gardens were short and not varied.
- Encourage people to gather together and experience social support:
  - Both gardens had gazebos for small groups to gather and chairs and tables for family and staff to sit down for meals.
  - Neither hospital garden had moveable seating.
- Encourage positive distraction with nature:
  - The gardens in both hospitals had a variety of plants in different colors, textures and shapes, trees with birds and views to the sky. Hospital B had a small pond with fish.
  - Hospital S did not have a water element in its garden.
- Visibility: The gardens of both hospitals were located between wards or between buildings. The gardens were visible to people passing in the corridors.
- Accessibility: Neither hospital garden was accessible to patients on wheelchairs because of narrow pathways, steps, and uneven surfaces.
- Familiarity: Visitors and staff use it frequently.
- Quietness: The gardens in both hospitals were located away from the noise of traffic and the machinery rooms.
- Comfort:
  - The garden in hospital S had big, shady trees that afforded comfort.
  - The garden in hospital B did not have tall shady trees, making the garden very hot during the mid-day.
- Unambiguously positive art: Neither garden exhibits any complex art other than the sculpture of a bridge in hospital S and a pond with fish in hospital B.

The findings from the interviews:

- Family and staff were the main people using the gardens. In hospital S patients of the ward that was close to the garden used it.
- The garden was used by people mainly as a break from the hospital and for a short rest or nap.
- The children playing in the garden were visitors and not patients.



The Center for Health Design:  
Moving Healthcare Forward

The Center for Health Design advances best practices and empowers healthcare leaders with quality research that demonstrates the value of design to improve health outcomes, patient experience of care, and provider/staff satisfaction and performance.

Learn more at  
[www.healthdesign.org](http://www.healthdesign.org)

- The pediatric ward was too far from the garden (in both hospitals) for the patients to use it.
- In hospital S the garden was located near a ward whose patients were unable to walk independently, deterring their access to the garden in spite of its nearness.
- The gazebos and the reflexology area in the garden of hospital S were very popular.

### Limitations

Limitations identified for this study are:

- The authors do not mention how many visitors/family and staff were interviewed.
- The findings of this study are not generalizable and may be more specific to the country and geographical region where the study was conducted.
- There is no reference to approval sought and/or received from an IRB or similar body.

The Knowledge Repository is provided with the funding support of:



Additional key point summaries provided by:



RESEARCH DESIGN  
connections