

#### HOSPITAL LANDSCAPE: DESIGN TO SUPPORT HEALING PROCESS

By

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#### Abstract

Hospital is an important public institution that provides health service. People came to the hospital to get treatment, to visit their family or friends, or working. The hospital landscape has a strong relationship with the people and the environment, especially in helping the healing process of patients. Thus, the development of the hospital should consider about he landscape from the early stage in line with the development of the building façade. Nowadays, landscape part is an importance element in the development of a hospital. The landscape of the hospital should be suitable to the users especially to the patients who need more attention rather than the healthy people. The landscape should provide simple outdoor recreation facilities that can be utilised by the users such as the patients, visitors and the hospital staff itself. A harmonious landscape that give stimulates the senses of the users can be done by make the suitable plant selections such as colorful and fragrant trees and by combining the hard and soft landscape elements, a harmonious hospital landscape can be achieved and it can support the healing process around the hospital area.

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# CHAPTER 1: INTRODUCTION

#### CHAPTER 1

#### 1.0 INTRODUCTION

The hospital landscape can be an important element in the development of hospital grounds because the landscape is used for different purposes by patients, visitors and staff. The hospital landscape can also help to speed up patients' healing process, to reduce staff stress from work and to create a resting area for visitors. The landscape for hospitals has started in the Middle Ages. The concept of restorative gardens in Europe had incorporated arcaded courtyards where residents could enjoy the degree of shelter, sun or shade they desired in a humanscale, enclosed setting (Cooper Marcus and Barnes, 1999, p. 11). Then the courtyard tradition in hospitals continued until the fourteenth and fifteenth centuries. In the seventeenth and eighteenth centuries the design of hospital landscape paid more intention to hygiene, fresh air and cross ventilation. By the end of the nineteenth century and in the first decades of the twentieth century, hospital designers found that the fresh air and sunlight regimen were seen as the keys to recovery, especially for tuberculosis treatment. However, the examples of these good hospital landscapes cannot be found after pressure from the insurance companies to minimize the hospitals against the provision of actual usable gardens or refurbished medical complexes. Then, the literature on hospital design which was published in the twentieth century has clarified the significance of outdoor spaces in medical environments. All the information about hospital landscape design that supports the healing process, will be discussed in this research paper.

#### 1.1 Research Background

There are a lot of hospital developments in our country. But most of the landscapes have an unclear concept except to enhance the development of the hospital's environment. But nowadays, the Government provides a policy that every new hospital development must have a landscape concept which is recognized as a "Hospital in a Garden". The overall landscape design for the development of the hospital should have a therapeutic approach following the guidelines from the Ministry of Health. In Appendix 1; 'Garispanduan Perlaksanaan Taman Terapeutik Kementerian Kesihatan Malaysia, Bahagian Perkembangan Perubatan KKM 1998', explains the mentioned basic policy requirements. Old hospitals are also involved in the policy but the work is done phase by phase. This research will focus on how to make the hospital landscapes a success in terms of their function as a healing source. The research will consider the elements that should be provided in a hospital landscape, which can cater for the needs of the patients, staff and visitors in fulfilling their time while in hospital.

#### 1.2 Problem Statements

Previously, the landscapes of the hospital grounds have had an ambiguous concept other than that of enhancing hospital buildings.

The landscape design in the hospital grounds does actually accelerate the healing process for the patients. At the same time, there are many

open spaces such as courtyards that can be utilised as treatment center which are not treated properly. In the current situation, the landscape of a hospital comes as a secondary development after the architectural design. Only during the past two to four years later, the importance of the hospital landscape been recognised by the government as a source of helping in the healing process.

#### 1.3 Goal

The goal of the research is to design landscape for hospitals as a source of improving health quality in the healing process not only for patients, but also for the benefit of visitors and hospital staff.

#### 1.4 Objectives

- To support the scientific medical treatment towards accelerating the healing process.
- To stress the significance of having outdoor spaces in hospital ground.
- To identify the elements that can stimulate the human senses which influence the healing process.

#### 1.5 Methodology

There are many methods needed for data collection. Among them are collecting primary and secondary (analysis) data in both Quantitative and Qualitative Research Design.

#### 1.5.1 Literature Review

The Literature Review is important to get the information about the researched topic. The sources are books, magazines, educational writing such as journals and paper cuttings.

### The Healing Landscape: Therapeutic Outdoor Environment by Martha M.Tyson.

This book is relevant to the topic because it gathers the design strategies and the design for the senses. Its also give examples of the gardens in healthcare settings which can have a therapeutic effect and horticultural therapy that can be done in an activity area. According to the author, the designer plays a role in designing the garden of the hospital for the users' benefits. The environment of the hospital should give opportunities to the users in terms of relaxation and conservation activities.

 Healing Garden: Therapeutic Benefits and Design Recommendations by Clare Cooper Marcus and Marni Barners.

This book is the major reference for my research because its contents are about the landscapes for hospitals that paid intention more to healing from the Middle Ages until the twentieth century. The authors discuss the theory and research and also state the design philosophy and design guidelines that can be used in designing hospital's outdoor spaces in the Malaysian context.

#### c. Healthcare Design by Sara O Marberry.

This book solves the design problem of healthcare by gathering information, which in the preliminary stage requires evaluating the site and the users' needs. The design for healthcare is determined by the site conditions, landscape features and architectural form. To design a therapeutic environment, this book is the right selection because it discusses the spaces that can be designed in the hospital area, which are significant to the users according to the design objectives. The design considers all aspects from the entrance, walkways,

hierarchy of open space, sunny places, outdoors furniture, working garden, gathering places and the view of the users themselves.

#### d. Easy Steps to Natural Healing by Rosalind Widdowson.

This book mentions the importance of natural healing in our daily health environment. The author also mentioned the natural healing practice by using breath, standing meditation and relaxing the mind which can be done in the outdoor space in the hospital grounds. The characteristics that help in healing process can be taken as guidelines to design a hospital landscape.

## e. Green Living. Practical Ways To Make Your Home Environment by Bernadette Valley.

This book informs us of the importance of being healthy by controlling simple bad habits that can have major effects on us such as hearing noise or breathing in smoky air. The suitable activities such as gardening can help to increase the quality of life. This book also states the guidelines for the garden such as plant selection which have an impact on people and which are suitable in the hospital area.

### f. Better Health through Natural Healing: How To Get Well Without Drugs or Surgery by Ross Trattler.

This book discusses the requirements for health and encourages the readers to has better health through natural healing by the nutrition that have been taken, proper drainage and the environment. But, only the topic that focused on the environment around that is relevant to this study.

#### g. Specialty Garden by Theodore James

This book is about the many kinds of specialty gardens, Chapter ten can be taken as a reference since it focuses on herbs gardens. It covers the use of herbs in healing. Most of the herbs were used for the medical purposes and for daily natural scenting before the advent of modern medicine.

#### h. A Garden Herbal by Anthony Gardiner

This book discusses the style and design of the herb garden, which can be implemented in residential areas or hospital landscapes. There are many types of herb gardens such as the kitchen herb garden, the medicinal herb garden, the aromatic garden, the formal garden the container herb garden and so forth. This book also provides examples of herb plants with their specifications to facilitate plant selection.

#### 1.5.2 Case Study

The site visits will be carried out at Putrajaya Hospital and Malacca Hospital. The reasons for choosing these hospitals are:

- Putrajaya Hospital incorporates the latest technology for medical institutions and the landscape perhaps incorporates the importance of the environment to support the medical treatment system in the healing process. The hospital landscape can also encourage the users to have a good quality of life.
- Malacca Hospital also has a landscape, which considers the environment that can help in the healing process. It has its own landscape department to manage the landscape for the whole hospital. The staff works together to create the landscape according to their own units.

#### 1.5.3 Data Collection

The data will be gathered through the literature review, observations, interviews and questionnaires with the main users of the hospital, which are the patients, staff and the visitors. The respondents are able to give their own perceptions of the current hospital landscape and their opinions for a suitable landscape for hospitals. The questionnaires are done to inquire as to the attitude and perceptions of hospital staff, patients and visitors towards the medical institution's landscape.

#### 1.5.4 Data Analysis

The analysis will be conducted once all the information about the research is gathered. The analysis is important to obtain the results of the research. Base on the result findings, new recommendations for guidelines can be evolved.

#### 1.6 Conclusion

This research will be a source of reference for building a healing landscape for hospitals. Compared to other countries, Malaysia is quite behind in terms of the development of the hospital landscape. For example, the United States of America and the United Kingdom are ahead in developing the landscape for hospitals where they have good examples of hospital landscapes such as St. George's Hospital and Hammersmith Hospital in London and St. Mary's Hospital in California. These hospitals have a well-planned landscape, which considers the landscape for the entrance until the small courtyards in the hospital. They also consider the users from all ages group in designing the landscape. These situations are different from our country because of the lack of exposure to awareness about the importance of landscapes for medical institutions on the part of the government. The awareness of the importance of the landscape for medical institutions has only arisen in these past five years.

This research will be conducted according to the methods that are used to collect data. The data will then be used to achieve the goal and the objectives of this research, which is to provide guidelines and to identify the characteristics of landscape design for hospitals that can benefit all users. This research will help to educate the public, to regard hospital landscape as one of the significant factors that can accelerate the healing process and encourage them to appreciate it.

### CHAPTER 2: LANDSCAPE DESIGN TO SUPPORT HEALING PROCESS

#### **CHAPTER 2**

#### 2.0 LANDSCAPE DESIGN TO SUPPORT THE HEALING PROCESS

Hospital landscape design helps to improve the quality of health. The hospital landscape should provide a variety of outdoor spaces according to the functional and emotional needs of the users. There are many spaces in the hospital area, which can be developed as gardens with certain purposes such as therapy gardens, rehabilitation gardens (herbs garden) and courtyards. According to Bryce Wittenborn, gardens can help counteract the negative stimuli and stress we experience before, during and after a hospital visit. The involvement of the patients and hospital staff in creating the garden, acts as one of the forms of occupational therapy. It will give patients the opportunity to play a constructive part in their own rehabilitation, and help improving the quality of the hospital environment.

#### 2.1 Introduction

The hospital is an important public institution providing scientific healing services. According to Joyce M.Hawkins and Robert Allen (1991), "a hospital is an institution providing medical and surgical treatment and nursing care for ill or injured people" (p. 689). There are many kinds of hospitals such as children's hospitals, specialist hospitals, psychiatric hospitals, day hospitals and general hospitals. A general hospital is a hospital that provides sufficient basic services for the population of the Health District.

The landscape of this hospital should not focus on the patients alone but also have a benefit for other users such as visitors and hospital staff. There are a lot of spaces in the hospital grounds that can be developed as gardens that can benefit the users' surroundings. Gardens can unite the various departments within a hospital through the use of common spaces. The common spaces can be a variety of outdoor spaces, according to the functional and emotional needs of the users.

The hospital landscape bears a concept of combined visual and psychological effects on the individual perceiver. The development of the open spaces on the hospital grounds should complement the total environment of the building. In hospital planning, the landscape becomes an important aspect to improve the quality of life. Accordingly, supportive gardens in healthcare facilities can potentially be an important complement to the healing effects of drugs and other modern medical technology, and help improve overall the quality of care.

#### 2.2 Healing Garden

The landscape is connected to people in a way that is uniquely healing in its essence. Many elements are contained in a garden, which are specific to culture, climate or time. In the hospital grounds, there are many outdoor spaces that can be developed as healing gardens especially designed for patients.