

INVESTIGATING PHYSICAL ASPECTS OF VISUAL COMMUNICATION IN MENTAL HEALTH UNIT OF MALAYSIA

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Abstract

Physical aspects of healing environment play a big and essential role in hospital design for creating an effective healing environment. The existing public mental health hospital in Malaysia is selected as the main case study to be reviewed in term of evidence-based physical aspects of healing architecture. Investigation mainly on the visual communication affecting the mental health unit has been carried out with methods understanding the current level of design implementation in Malaysia healthcare buildings. Many researchers have proven that physical aspects like space, lighting, color, privacy and communication have very huge impact on circadian rhythm and sleeping quality of mental health patients. The paper concluded with discussion on the impact of visual communication and by reviewing the current Malaysia mental health unit whether it achieved a certain standard of healing environment in term of physical aspects mainly of visual communication. Final analysis has been concluded after combining both the data from correlation analysis and structured interviews. The relationship of visual communication and healing environment is discussed for further recommendation based on this research objectives.

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1 Introduction

Healing environment is the very important and relevant to mental illness recovery. Healing environment allows process of managing the illness and forming a new direction towards health. "Healing Architecture" is a continuous process that creates an environment which is both physically and mentally healthy. It is always difficult when comes to designing a mental healthcare facility in term of both psychological and functional aspects. Based on the data collected, it shows that most of the time designers tend to neglect while creating a healing environment to achieve the ultimate objectives. In hospital typology, in order to create ideal physical aspects is essential and equal to sustainable design. Ward design on visual aspects is being carried out with focus on healing environments for patients. Healing Architecture (Lawson, 2002) is the new adoption for applying continuous sense when creating a both physically and psychologically healthy atmosphere. All the appropriate aspects will definitely improve and contribute to ward patients' outcome physically such as highly reduced stress, increase in patients' satisfaction and shorter duration of stay in ward for the whole healing process (Ulrich et al., 2004).

2 Problem Statement

A treatment environment can be defined as a patient care environment that helps make it easier for patients to receive treatment from employees. Some people who provide services to people with mental illness feel that the built environment in which they receive services should resemble a "typical living" atmosphere. Unfortunately, patients from different backgrounds may have completely different views of the home environment. Therefore, a more realistic goal should be to create a non-threatening environment where patients feel relaxed and comfortable. To do this, the architect must work closely with hospital staff, patient groups, interior designers, and psychiatric hospital consultants, and refer to the Facility Guidelines Institute 2014 as the guidelines provided construction and design knowledge of hospitals with relevant facilities to find the appropriate elements combination. The mixed use of each hospital may be different, and sometimes individual

units in the facility may have different requirements, although for security reasons, each individual unit should have a unified function.

3 Research Question

The studies show that a proper design achieving all the physical aspects can be used for reducing the healing period required for mental health patients. Besides, visual communication will affect the physical comfort of users as well. Therefore, two (2) questions are being made for this hypothesis:

3.1 What are the physical aspects required for healing environment?

3.2 Which are the few physical aspects in term of visual communication that highly affect the healing process in mental health unit?

4 Purpose of the Study

Absence of certain physical aspects will not only reduce the healing duration for mental health patients, these will end up affect the ward users to feel uncomfortable by not achieving an ideal healing environment. For example, glare which caused visual comfort is always the main challenge in a hot climate country. In this research, we will outline and have better understanding of architectural studies on how the mental health unit design affect the overall environment and patients' recovery rate. Besides, there will be comparative analysis between case studies for data collection in order to generate a conclusion regarding healing environment.

5 Research Method

The main methodology used in this research study is qualitative methodology. Information will be collected through literature study with relevant case studies being reviewed. Comparative

analysis will be carried out to collect evidence-based data. The research will emphasize on: -

- i. Relationship between physical aspects and healing environment.
- ii. Outlining the physical aspects in term of visual communication for healing environment.
- iii. The comparative analysis between case studies in Malaysia in term of healing environment.
- iv. The ideal healing environment based on visual communication aspects.

For this research, qualitative interview will be targeting the mental health experts and relevant staff or users to collect evidence-based data for a review on the physical aspects required for a mental health unit based on the case studies scenarios.

6 Discussion

The second part of this research analysis starts by observation for the case studies involved. The researcher outlines the physical aspects mainly on visual communication from the basic information collected for the case studies. For this section, the data will be investigated to highlight the relevant physical aspects whether they are poor or good based on the physical factors by Malkin (1991).

6.1 Case Study 1 – Hospital Bahagia Ulu Kinta (Perak)

Hospital Bahagia Ulu Kinta is being selected as the main case study due to its building typology. Questionnaires were being carried out on staff and mental health patients through tele-conversation to obtain data for creating likert scale table of visual communication physical aspects in HBUK.

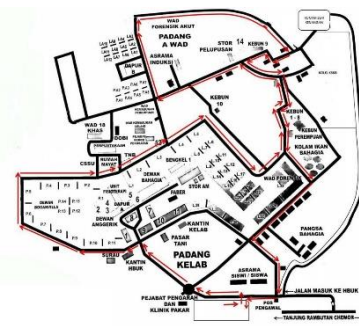


Figure 6.1 Hospital Bahagia, Ulu Kinta, Perak

(Source: Image by HBUK)













Response Set	1	2	3	4	5
	Very Poor	Poor	Fair	Good	Excellent
SPACE					
Location/Height					
Scale/Proportion					
Void Fraction					
LIGHTING					
Daylighting					
Artificial Lighting					
Glare Reduction					
MATERIAL					
Colour					
Texture					
Technology					
NATURE					
Flora					
Fauna					
Presence of Water Element					

Table 6.1 Likert Scale Table on Visual Physical Aspects (HBUK)

6.1.1 Space (Location/Height, Scale and Proportion, Void Fraction)

Hospital Bahagia Ulu Kinta is located at Perak, Malaysia. The location is rather rural with the site context mostly of nature which comprised of landscape and wild animals. The building height is lesser than 5 levels height which is ideal for its building typology as a mental healthcare facility. Most of the important healing spaces like wards and program areas are located at ground floor level.

For the aspect of scale and proportion, the overall look of building is pleasant with its low-rise volume. The spaces inside are all designed and built based on the minimal requirements of

habitable space. There is not any oversize corridor as this building was being proposed mainly as mental health facility.

The void fraction of HBUK is considered typical due to its historical building design. The material used for this building was rather outdated compared to our current modern era. Window or door opening size is only acceptable with the limitation of construction and technology in the olden days.



Figure 6.2 Surrounding Views of Hospital Bahagia, Ulu Kinta, Perak
(Source: Image by HBUK)

6.1.2 Lighting (Daylighting, Artificial Lighting, Glare Reduction)

Lighting is available in every space of HBUK as it is one of the most essential aspect for healing environment while making patients' program effective. As shown in the images provided, daylighting is excellent as it provides optimal lighting for patients' daily routine activities.

For artificial lighting, there is still room for improvement for HBUK to achieve a better healing environment. The light fittings used in HBUK are normal fluorescent lighting without the consideration of lighting colour affecting the mental patients' emotion.

Glare prevention or reduction is being considered in HBUK by providing shading elements and devices for lighting control. The landscape surrounding HBUK building blocks are acting as the supportive element in reducing lighting glare.



Figure 6.1 Corridors in between mental health blocks of Hospital Bahagia, Ulu Kinta, Perak
(Source: Video by HBUK)



Figure 6.4 Agrotherapy Ward of Hospital Bahagia, Ulu Kinta, Perak
(Source: Video by HBUK)

6.1.3 Material (Colour, Texture, Technology)

In term of material aspects, HBUK has very plain colour for interior space like ward. The building is not focusing on colour nor texture factors. The whole building is painted mostly with white colour walls except for some vibrant colour for the exterior of blocks.

Technology plays an important role in material of building affecting mental health of building users. HBUK was constructed and completed in year 1911 so the technology used for material was not up to date as there is no major refurbishment being made. HBUK has new built ward zone which is allocating forensic patients. Other than that, the other areas of site are all old buildings

for the past few ten years.



Figure 6.5 Interior of multiple-bed ward in Hospital Bahagia, Ulu Kinta, Perak

6.1.4 Nature (Flora, Fauna and Water Element)

For natural aspects in HBUK, all three factors: flora, fauna and water elements are having a very positive impact on patients' healing environment. With the site context full of greenery and special theme ward – agrotherapy ward, the site is basically full of landscaping which also bring in lot of wildlife. There are also ponds for fish farming as daily activities of mental patients in HBUK. This embrace the whole atmosphere of the healing architecture in HBUK.



Figure 6.6 Vegetation Farming in Hospital Bahagia, Ulu Kinta, Perak



Figure 6.7 Flora of Hospital Bahagia, Ulu Kinta, Perak



Figure 6.8 Egg Farming in Hospital Bahagia, Ulu Kinta, Perak



Figure 6.9 Fauna of Hospital Bahagia, Ulu Kinta, Perak



Figure 6.10 Fish farming pond in Hospital Bahagia, Ulu Kinta, Perak

6.2 Structured Interview Questions

A structured interview is conducted with the psychiatrists, psychologists, therapists, mental health nurses and mental health patients with different mental illness. The background of each respondent is as follow:

RESPONDENT 1 :

Local Psychiatrists, MSc (Utrecht), MPM (UM), MBBS (UM)

RESPONDENT 2 :

Local Psychologists, BACHELOR OF SOCIAL SCIENCE (HONS) *PSYCHOLOGY*

RESPONDENT 3 :

Local Therapists, BACHELOR OF SOCIAL SCIENCE (HONS) *PSYCHOLOGY*

RESPONDENT 4 :

Mental Health Nurses

RESPONDENT 5 :

Mental Health Patients (Depression, Anxiety, Stress)

Question and Respondent Sample

Question 1: What would you like to see in a mental health ward facility to focus on healing?

RESPONDENT X

“Based on my practical experience, mental patients will need a proper platform or appropriate environment for their healing process, besides guidance from relevant profession via communication and interaction. The first thing comes into my mind will be nature element as it helps calming down the mental ill patients by relieving stress and reducing the mental health disorder symptoms. Nature such as greenery, wildlife, water and even earth is always the

priority when comes to factor of healing process.”

7 Conclusion

As summary, the researcher has concluded that the mental healthcare in Malaysia has acquired a certain level of satisfaction in term of visual communication. The physical aspects are clearly defined and discussed in this research paper. Comparative analysis shown and proven that mental healthcare in Malaysia has consider about the physical aspects of healing process for mental health patients compared to the other two case studies.

Moreover, structured interviews are being carried out on respondent groups of professions and mental health related people. There are still room of improving for our mental health unit in Malaysia. It is also concluded with evidence that different mental illness will require different healing environment in term of visual aspects. There are variety of mental illness, thus the healing environment in term of aspects like materials and space will vary from a different scenario. For lighting, colour will be the key and factor for different kind of mental ill patients.

Recommendation for this research paper will be material as the upcoming aspect to look into as this will have high potential in term of healing different mental illness. The variable is infinite, when comes to different colour, texture and materials for different types of mental patients. Construction and material used for buildings in Malaysia should be updated, based on our current modern era technology.

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