The application of healing space concept in holistic care facilities: a brief guideline for design

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Abstract. Increased levels of density in cities frequently have various negative impacts if not handled properly. By providing a means that has a comprehensive health management starting from the body, mind and spirit, which contributes to the recovery of health and illness, becomes one solution that can be done to improve the level of health and also as a means of promoting health, preventing disease and helping to improve aware of the disease in our lives. The link between health and the surrounding environment can be proven in a dimension that integrates visual, auditory, olfactory, kinaesthetic, vestibular and proprioception sensations win the form of room quality that can support the health process indirectly. This paper aims to discuss the importance of applying a quality space based on the healing space principle by examining the literature review. The result is a brief design guideline for holistic care centre with healing spaces concept.

Keywords. Holistic Healthcare, Healing Space, Design Guidelines

1. Introduction

Urbanization is continuing at a rapid pace with more people than ever living in cities, especially in Indonesian Cities. The percentage of population who lives in urban areas are increasing, from 42% in 2010 to 53.3% in 2015 and predicted to 62% in 2030 [1]. Whereas on the other hand, cities in Indonesia do not experience significant expansion in terms of its areas, that will lead to the increasing number of density level. Increasing the density level in cities often gives a various of negative impacts if not handled properly, from the traffic impact, lack of green areas and natural outdoor environment, increasing the air pollution, lack of facilities provision, social conflict regarding the limited space, and so on, which may be detrimental to health – both in physical health and mental health [2, 3]. Health is the experience of physical and psychological well-being. Good health and poor health do not occur as a dichotomy, but as a continuum. The absence of disease or disability is neither enough nor necessary to produce a state of good health [4]. Therefore, the United Nation suggest in the development of sustainable human settlements depend on the creation of a better environment for human health and well-being, which will improve the living conditions of people and decrease disparities in the quality of their lives. The design of the built environment is recognized as having an impact on people's well-being and behaviour and, thereby, on people's health [5].

As noted above, health is the experience of physical and psychological well-being, therefore all dimensions of human beings – physical dimensions, emotional dimensions, social dimensions, and spiritual dimensions – should become a conscious effort to achieve healthy life, which called the
holistic healthcare. This holistic health becomes an indivisibility part of one to another to achieve good quality of life – if physical health is suboptimal, some research proves that psychological health also cannot be optimal, and vice versa [6]. Therefore, it needs to provide holistic healthcare facilities to accommodate the psychological health as well as the physical health.

The health level on the area depends on the qualities of the place itself. In recent years, researchers discuss in methodological and theoretical innovation to examine the relationship between health and place [7]. They discuss about context-composition accounts for health, including the very significant body on neighbourhood, town or regional or country. Whereas, the argumentation that the health level of the area based on the economics, social and physical environment [8]. Another research defines factors that influence the health and human healing process, where the environmental factors are the biggest contributors by 40 percent and the medical factors only play 10 percent of the health and healing process. The genetic factors contribute 20 percent and 30 percent comes from other factors [9]. The physical environment itself associated with the physical and mental health, cognitive performance, and behaviour of its users, as shown in numerous studies. Mental health can be assess with the perception of the environment through all of human sense [10]. In the existing epidemiological literature, two aspects of the physical environment have been predominantly examined in relation to people's health, cognition, and behaviour: air pollution and greenspace [11].

This study aims to formulate design guidelines for holistic healthcare facilities with a healing space approach. The method used in this study by examining the literature review related to objectives and then discussed with descriptive qualitative methods. The output in the form of guidance on the space quality needed in a health facility holistic healing space with consideration to be used as a guide in the design. The development of the principle of designing holistic healthcare facilities with healing space will further improve the quality of public health more thoroughly.

2. Literature Review

2.1. Holistic Healthcare Facilities
Holistic healthcare is complete or total patient health that considers the physical, emotional, social, economic, and spiritual needs of the person, his or her response to illness and the effect of the illness on the ability to meet self-care units [6]. Holistic Health is an approach to life. Rather than focusing on illness or specific parts of the body, this ancient approach to health considers the whole person and how he or she interacts with his or her environment [12, 13].

This holistic healthcare takes the wholeness of human being: the body, mind and spirit which contributes to the health and illness recovery. The holistic healthcare practitioners promote health, prevent illness and help raise awareness of disease in our lives rather than merely managing symptoms. Attention in the health sector often emphasizes physical health and ignoring other aspects, which makes the wholeness health level unbalanced. Therefore, in the context of urban life, facilities for improving mental health need for residents.

Holistic health development facilities require by doing some complementary or alternative therapy to achieve the whole health. These therapeutic facilities not only reduce or prevent physical illness, but also can improve mental health for its users. This facility provides several alternative treatments such as herbal medicine, acupuncture, homeopathy, and so on. Manual healing therapies such as chiropractic, osteopathic/craniosacral, energy therapy and bodywork therapy. Other alternative therapy facilities are those related to mind and body therapies such as meditation / relaxation, biofeedback, hypnotherapy, yoga and Tai Chi. All these facilities are also equipped with aromatherapy, vitamins and minerals, and other supplements. As note above, this therapy brings the wholeness to mind body and spirit. For the examples, homeopathic can cure anxiety, muscular aches and pains, asthma, sinusitis, allergies, headaches, digestive problems, and cardiovascular problems. Yoga therapy believes that can cure the headache, asthma, back pain, insomnia, body balance and increase the concentration of mind [14].
2.2. Healing Spaces
In decades, many researchers studied the relation between health and place where the whole health by physically and mentally depends on its place conditions where research studied on the neighbourhood effect in many levels such the town, city or country to the health of its residents [7]. The relationship between health of patients, families and others healthcare supporting, with the surrounding environment is formulated in optimum healing environments (OHE). As the wellness required the holistic approach of mind, body and soul the OHE framework was designed to elevate healing and health creation to be as important as disease identification and cure. There are several dimensions of OHE: internal dimension, interpersonal dimension, behaviour dimension and the external dimension as shown in figure 1. [15].

![Figure 1. Optimum Healing Environment](image)

The intent behind the work of external environment is to create a positive physical environment that cohesively supports the mind, body, and spirit to find peace, rest, and vitality. Healing spaces is defined as the incorporate evidence-based design and healing principles to optimize and improve the quality of care, outcomes and experiences of patients and staff [15]. Healing space use positive physical design to enhance the individual innate healing potential. The concept of Healing spaces are spaces that evoke a sense of cohesion of the mind, body, and spirit. They support healing intention and foster healing relationships by consider the ambient qualities of the space to evoke the positive aura to heal, which includes the careful consideration of light quality, sounds, air quality, and temperature.

Physical elements and built environment play the important role of healing spaces. Previous study verified that the ability to integrate nature through gardens or views to gardens has been shown to reduce stress and improve the cohesion of mind, body, and spirit. Modern environmental psychology has found that the natural environment has a restorative benefit for human health in fostering recovery from mental fatigue [3].

The integration of most of the senses – visual, auditory, olfactory, kinaesthetic, even vestibular and proprioception – will helps complete the highest potential of an environment to allow for healing to emerge [16, 17]. The role of architecture and built environment can facilitate healing by careful consideration on the space ambience. The environment cannot directly cure disease, but by presenting a natural environment in architecture and the built environment, can increase positive feelings: comfortable, pleasant and relaxation, which in turn will help the health process holistically [18]. There are several principles of Healing Space in Architecture:

a) Home like Environment.
Home like environment can reduce patient’s and emotional distress, in addition the home like environment provide to leisure activity opportunities which give the feelings of comfort and relaxation. The home like environment also give the feelings of control and security.

b) Access to view and nature
Access to view and nature or provide plants in indoor spaces can decrease the stress level and increase their positive, hopeful and supportive thought. Access to nature are also believe can reduce the anxiety and fatigue and can improve the quality of life.

c) Light
Direct sunlight can give warm feelings which can reduce stress and anxiety and improving the quality of life.

d) Noise Control
Noise control can reduce stress.

e) Barrier free environment
Barrier free design which accommodate user kinaesthetic requirement can improve the independency and autonomy. Barrier free design also can improve the social relationship.

f) Room Layout
Room layout required for reducing stress and improving the quality of life.

3. Discussion
The Holistic Healthcare service facility needs to provide alternative treatment and therapeutic activities as previously discussed. In addition, these holistic healthcare facilities also require other facilities such as public facilities - reception, waiting areas, lounges and retail areas - service facilities, support facilities, as well as the management office of the facilities.

Public facilities such as lobby, receptionists and waiting rooms are the areas where social interaction can be enhanced in this facility, therefore the public facilities need to be designed with a barrier-free environment. In addition, the public facility is also a place where the user of the facility waits from the agreed therapy schedule so it needs to provide a comfortable quality space to reduce the level of depression when waiting by presenting a home like environment design, letting natural light into the building and also providing access to view and nature.

Figure 2. Interior lobby and public area. Open to nature and barrier free design to enhance the social bonds to users

Treatment zones such as reiki therapy facilities, acupuncture, consultation rooms - both individually and in groups - chiropractic therapy rooms, homeopathy, massage facilities are the main zones in this holistic healing facility. Implementation of this therapy is done individually, so that requires a private room layout for each therapy. These therapy rooms need to be designed with a home like environment approach, to reduce stress and pain from these therapies, and noise pollution needs to be limited. In addition, the characteristics of this space need to present the existence of natural elements as part of the quality of space - even though the natural elements can be part of the room interior due to the nature of space are private and must be closed as shown in figure 3. In addition, the treatment zone also has communal areas such as physical sports such as a fitness center, yoga exercise, and others. Spaces for this activity require barrier free design making it easier for physical movement and have access to views and nature also the natural lighting to reduce stress and increase comfort.
Management rooms must also be considered. The management of this holistic health facility – although not a patient or who needs health improvement – but this holistic facility needs to be designed thoroughly, for all users in the building. Therefore, management spaces must be designed with a good room layout to be able to improve work better, besides it is possible to have access to nature and good natural lighting. Thus, this holistic health facility is not only a facility to overcome health problems but also a facility to maintain the health of its users.

Table 1. The Implementation of Healing Space in Holistic Healthcare Facilities

| Facilities          | Home Like Environment | Access to View and Nature | Natural Light | Noise Control | Barrier Free Design | Room Layout | Notes                                                                 |
|---------------------|-----------------------|---------------------------|---------------|---------------|---------------------|-------------|-----------------------------------------------------------------------|
| Lobby               | √                     | √                         | √             | √             | √                   | √           | Lobby as the main area of the building requires a calming atmosphere such as giving a good view and good circulation |
| Receptionist        | √                     | √                         | √             | √             | √                   | √           |                                                                        |
| Waiting Room        | √                     | √                         | √             | √             | √                   | √           |                                                                        |
| Lounge              | √                     | √                         | √             | √             | √                   | √           |                                                                        |
| Auditorium          | √                     |                           | √             | √             | √                   | √           |                                                                        |
| Consultation Room   | √                     | √                         | √             | √             | √                   | √           | Therapy room is the main function in this Holistic Healthcare facility. In general, these spaces need noise restrictions. |
| Reiki Therapy       | √                     | √                         | √             | √             | √                   | √           | There are therapy spaces that are individual or communal. Individual therapy spaces need to be designed in a closed manner, so that the relationship with nature is made by placing natural elements in the interior of the room. Whereas communal therapy spaces such as fitness rooms, yoga therapy and Tai Chi can be placed outside the room or in buildings that have a direct relationship with nature so that it will improve the quality of wellness. |
| Chiropractic Therapy| √                     | √                         | √             | √             | √                   | √           |                                                                        |
| Acupuncture Therapy | √                     | √                         | √             | √             | √                   | √           |                                                                        |
| Massage Therapy     | √                     | √                         | √             | √             | √                   | √           |                                                                        |
| Homeopathy Therapy  | √                     | √                         | √             | √             | √                   | √           |                                                                        |
| Fitness Room        | √                     | √                         | √             | √             | √                   | √           |                                                                        |
| Yoga Therapy        | √                     | √                         | √             | √             | √                   | √           |                                                                        |
| Tai Chi             | √                     | √                         | √             | √             | √                   | √           |                                                                        |

| Supporting Area     | √                     | √                         | √             | √             | √                   | √           | In addition to meeting functional requirements, the management room also needs to be designed by providing access to view and nature and natural light. |

| Service Area        | √                     |                           |               |               |                     | √           |                                                                        |
Overall, building designs also need to be connected to nature. Therefore, the building façade also needs to use natural elements such as natural stones and vines. In addition, the building is also divided into small parts so that it can present nature around the building, which will provide positive stimuli into the building. The use of the water element will stimulate the sense of hearing, plants elements will stimulate the sense of smell so that the level of health to be achieved is holistic.

![Building design that close to nature to enhance the environment stimuli around the buildings.](image)

**Figure 4.** Building design that close to nature to enhance the environment stimuli around the buildings.

### 4. Conclusion

The holistic healthcare is important to support the whole wellness of human being, not just physical but mind and soul are also considered by providing the complementary therapy as discussed above. This holistic healthcare needs to design by considered the neighbourhood environmental which give the positive stimuli to the room ambience. There are six components of healing space – home like environment, access to nature and views, natural sun light, noise control, barrier free design and room layout – that need to consider in formulate the design guidelines. The implementation of healing space concept in holistic healthcare facilities as discussed in table 1. The design guidelines help the architect to design the holistic healthcare facilities to accommodate the whole wellness of human being. Further research is required to discover furthermore about the relationship between the environmental elements with human sense in order to give the positive stimuli in the whole wellness of human being.

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