

Rehabilitation Center For Mental Disorders Using Therapeutic Architecture Approach

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ABSTRACT

Mental health is an aspect that is as important as physical health and needs to be paid attention to improve the quality of human life. Mental health conditions influence psychological, social and emotional well-being. In recent years, mental health has become an important topic to discuss because the prevalence of mental disorders in Indonesia is quite high. According to Riset Kesehatan Dasar, 2018 (Riskesdas) the prevalence of mental disorders, especially for those aged 15 years and over has increased. Unfortunately, only 2.6% accessed counseling services or facilities. Apart from healing through psychotherapy and biomedical rehabilitation, environmental factors also contribute to the success recovery of their mental health. This can be done by means of architectural design by integrating the natural environment and controlling other factors such as sound, color, sight and light to create a therapeutic environment that can help the patient's healing process. The researchers use the therapeutic architecture approach to the rehabilitation centre for mental disorders as a design method. Located in Bogor Regency with a special sloped site, the design illustrates implementation of therapeutic architecture, including the site plan, floor plan, building facade, landscape, and the interior.

Keywords: Mental Health, Rehabilitation Centre, Therapeutic Architecture

INTRODUCTION

Mental health is an important aspect compared to physical health in improving the quality and well-being of human life. Mental-health conditions not only affect a person's psychological, social, and emotional welfare, but also affect the individual's ability to develop optimally. In addition, the mental health conditions of the population also have a significant impact on national productivity, which, if not handled properly, could impede Indonesia's potential to become a developed country.

In recent years, mental health has become an important topic in Indonesia due to the high prevalence of mental disorders. Data from the World Health Organization (WHO) for Asia and the Pacific note that in 2018, about 3.7% of the Indonesian population suffered from mental disorders, equivalent to 9,162,886 people.

According to the Riset Kesehatan Dasar (Riskesdas) Survey in 2018, where the prevalence of mental disorder for the age of 15 and over has increased but only 2.6% accessed counseling services.

The methods of healing mental disorders include psychotherapy, biomedical therapy, art therapies, sports, religious, socio-therapeutic, and mindfulness. The physical environment is crucial to the healing process. The healing architecture must be able to restore the physical and psychological balance of the patient by providing an environment that can distract from the disease and be friendly to all users, including the patient, family, medical staff, and non-medical personnel (Purisari, 2016). Environmental factors also play an important role in recovery, which is known as therapeutic architecture, with the manipulation of elements such as sound, color, scenery, and light to create healing environments. Regarding to these performance requirements, the researchers found the site located in Bogor Regency with a special sloped site in 18.200 m².

Therefore, using a therapeutic architectural approach aims as a form of therapy to improve the health and well-being of the patient. These designs help control emotions and bring positive changes to a person's perception and mood through the aura of a space or building.

LITERATURE REVIEW

1. Mental Health

Mental health is a state or point of mental well-being in which humans have the ability to overcome life stresses that occur in their lives, live their lives well, and also contribute to their community. Emotional mental disorders can be recognized by a decline in carrying out individual functions in the public domain, family, education/work, and society/community. Professional treatment methods can be used to treat this disorder, namely by visiting a professional, using medication given by a professional, and doing psychotherapy.

2. Mental Disorder Rehabilitations

Rehabilitation is a series of activities for individuals to a level of independence, and a high quality of life. Mental disorder rehabilitation itself is aimed at physical and mental improvement of the individual through medical rehabilitation, social rehabilitation and educational rehabilitation.

The rehabilitation phase itself begins the process with:

1. Identification of problems (**Orientation**),
2. therapeutic activities (**Assertation**),
3. therapy activities using hand skills (**Occupation**),
4. the final phase, where the patient can perform pleasant activities and relaxation (**Recreation**).

3. Mental Disorder Rehabilitation Center

According to (Aisy & Anisa, 2020) a rehabilitation center for emotional mental

disorders is a facility that offers services for assessment, intervention, treatment and support that can be provided as an effort to recover people with mental disorders that cannot be met by ordinary health service facilities. In addition to the activities carried out in the rehabilitation center as a healing process for people with mental and emotional disorders, the environmental factors of the rehabilitation center also have an effect. Architecture can play a significant role in reducing stress by creating a calming, refreshing and aesthetic atmosphere.

This includes the use of natural materials, soft colors, and access to natural light and natural views (Osonwa & Chinwe, 2023). Therefore, it can be said that environmental factors play an important role and are fundamental in the design of a rehabilitation center.

METHODOLOGY

Therapeutic architecture is a principle to create a built environment by incorporating spatial elements into the design so that it affects human physiology and psychology so as to help in the healing process. The design method used is therapeutic architecture in this function is to provide a new view and impression for the community towards mental health facilities.

Three main principles are applied that are the basic concepts in the design of this Rehabilitation Center. Based on literature studies, the concept of design methods for this building consists of:

1. **Regeneration**, this building will be a place of holistic regeneration for patients by providing new and positive energy through environmental support, so that it can revive the spirit and give an opportunity to start again.
2. **Reconnection**, in order for patients to achieve regeneration, it is necessary to reconnect with themselves, others, and the surrounding environment, emphasizing the social and personal aspects of rehabilitation.
3. **Healing Space**, An important concept is by creating design interventions that can help and have a positive impact on the patient's physical and psychological well-being (Purisari & Sayekti, 2024).

RESULT & DISCUSSION

Based on the literature review and precedent studies that have been studied, there are several design criteria that were produced for the design of this Rehabilitation Center of Mental and Emotional Disorders, which are shown in the table below.

Tabel 1 Criteria Design. (Source: Researcher, 2024)

COMPONENTS	THEORY	DESIGN CRITERIA
Location	Location standards for mental health hospitals	Located in a safe area and having access to infrastructure, transportation, and utilities.

COMPONENTS	THEORY	DESIGN CRITERIA
Site plan	Standards of care for people with mental and mental disorders	The land area is 2 times the size of the building and does not have a high wall around it.
	Therapeutic Architecture	The building design considers the orientation of the sun and wind flow for natural lighting and ventilation, and includes water elements, therapeutic gardens, and natural and plant elements.
Space requirements	General requirements and needs of psychosocial rehabilitation rooms	has a hall/multipurpose room, classroom, workshop room, relational room, and auditorium room.
Safety Standards	Safety requirements for people with mental and mental disorders	<ul style="list-style-type: none"> - Avoid sharp shapes in the room. - Minimizes the use of fragile materials. - There is no blind spot area for officers.
Circulation	Therapeutic Architecture	Using a centralized circulation pattern.
Colour	Technical Guidelines for Medical Rehabilitation Room Hospital Buildings	Using calm/warm natural colors, and if bright that is not dazzling in some spaces.
	Therapeutic Architecture	
Material	Technical Guidelines for Medical Rehabilitation Room Hospital Buildings	non-porous, easy to clean, weatherproof, non-moldy, and uses natural materials.

Based on the design of the criteria that have been mentioned, it is implemented into a design that is seen in the form of a mass with the use of circular or curved shapes that aim to give the impression of centralized circulation for Improving social interaction in accordance with the theory of therapeutic architecture. In addition, the design of the tread has also been made according to the design criteria by using natural elements such as therapeutic gardens, water elements to maximize natural elements in the design. The implementation can be seen in the Image 1.

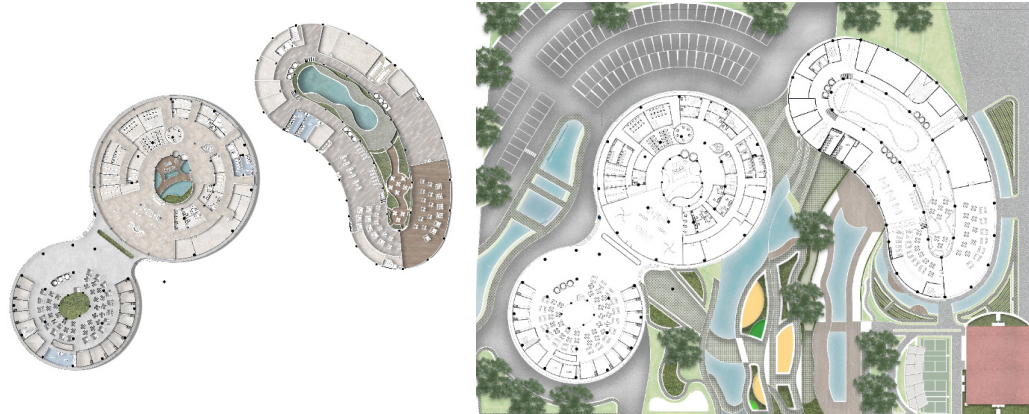


Image 1 Site plan and 1st Floor Plan. (Source: Researcher, 2024)

In the site plan figure below, by utilizing a contoured site, there are also facilities that can support the healing process from mental disorders in accordance with the literature review above such as sports facilities, play area, open spaces, parks, and farming areas with a lot of water elements. The environmental support contained in this building can be seen in the processing of the landscape and also the floor plan of the building where in the indoor central area of each building there is a green open space with the aim of providing a **regeneration** experience to building users.

Reconnection in this building is implemented through many public areas for user interaction, green open spaces that connect with nature, as well as open spaces in the interior to create connections with the surroundings. The implementation can be seen in the figure below.

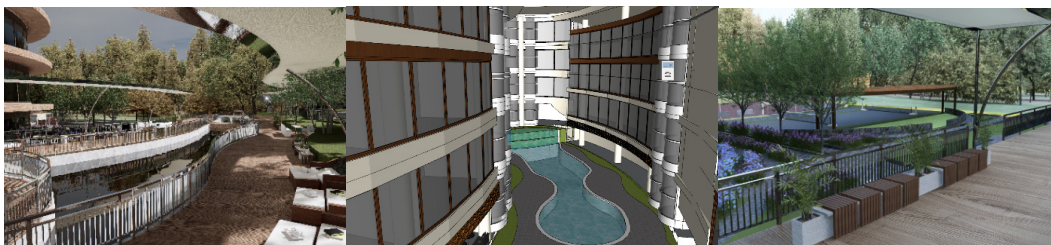


Image 2 Landscape and Interior Yard. (Source: Researcher)

The **healing space** are shown from the landscape, exterior, and interior of the building, using natural materials and elements is in accordance with the theory of therapeutic architecture.

Natural materials that are often used in this building are wood, stone, and also vegetation found on the walls and several areas of the room. In addition, this building also utilizes the use of natural energy such as ventilation and natural lighting obtained from the use of low-e glass materials and air vents in the building that can allow natural air to flow inside the building. Inside the interior of each patient room, there is also a window with a view of the surrounding natural environment that can help the patient's recovery process. This can be seen in

figures below.



Image 3 Interior and Healing Garden. (Source: Researcher)

CONCLUSION

It can be concluded that in order to respond to the high number of cases of mental health disorders in Indonesia, there needs to be a special health service center for mental disorder rehabilitation that is free of stigma. This can be achieved by creating an architectural environment that supports patient healing and well-being. A good physical environment can reduce psychological distress. This method is known as therapeutic architecture, which is designed to be part of therapy and improve the patient's health and healing, by creating a space that brings positive changes to a person's perception and mood that can be applied using three main concepts: regeneration, reconnection, and healing space. Therefore, the design of this mental disorder rehabilitation center has applied the concept of therapeutic architecture as a solution to create an environment that supports the healing of patients by reducing the bad stigma of society, so that their quality of life can be significantly improved.

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