Healing Architecture: To Improve Healthcare Environments

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Article Information	ABSTRACT
<i>Article history:</i> Received Jun 10, 2023 Accepted Dec 10, 2023	Over the past century, the concept of healing has significantly expanded, leading to significant advancements in medical facility architecture. A healing environment is a mental, physical, and spiritual state of equilibrium, reducing stress and anxiety levels. Anxiety levels among patients can be lowered in hospitals, and quick recovery times and shorter stays can all result from thoughtful design. Building design for a healing environment considers all senses, including sight, sound, touch, and smell. The primary focus of healthcare environment design today is on patients and their families, resulting in enhanced conditions for employees. To ensure the continued success of healthcare designs, designers must be aware of evidence supporting the impact of healing settings on patients, their families, and healthcare professionals. The concept of healing has grown substantially over the last century, resulting in significant improvements in the design of healthcare environments and a favorable effect on patients' healing processes. As a result, employees have realized the benefits of working in these enhanced conditions. To guarantee that the designs continue to be beneficial, individuals who plan and design healthcare spaces must be alert to any evidence that confirms the influence of healing
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1. INTRODUCTION

Florence Nightingale was the one who first invented the idea of the healing environment. According to her nursing theory, nurses should alter the environment to be therapeutic. The term "healing" is derived from the Anglo-Saxon word haelen, which meaning "to make whole." It can be seen as a state of balance between the mind, body, and soul. Healing and curing are two different things. (Which focuses more on solving issues, curing illness, and reducing symptoms). Even if a person is not cured, they can still be treated. For instance, people who have a chronic illness can learn to be at peace with it. On the other hand, a person might be healed but not cured. A common result of healing is a decrease in stress and anxiety, which has numerous beneficial effects on our bodies. It is now more vital than ever to rely on natural means, therapies, and remedies, which are being disregarded because of a lack of information among the general public, given the ever-increasing population and their indulgence in utilizing drugs to cure illness. Modern health facilities put a lot of emphasis on cosmetic improvements (to lessen stress and anxiety), but they also purposefully work to support patients' health and healing processes. An individual's outlook and demeanor might be positive. These types of settings are perfect for creating emotions because of the atmosphere of the environment, which influences people while they are there.

1. WHAT IS THE HEALING ENVIRONMENT?

A healing environment is defined as a supportive and therapeutic setting. A well-planned hospital setting may lessen stress and anxiety in patients, hasten healing, cut down on hospital stays, and lower the need for medication. Therapeutic environments can shorten hospital stays and enhance patient outcomes, which can help organizations control costs. Studies show that well-designed hospital environments may reduce stress and anxiety in patients, speed up healing, shorten hospital stays, reduce medication requirements, diminish pain, and improve patients' overall wellness.

2. ARCHITECTURE'S ROLE IN THE HEALING PROCESS.

Building design for a healing environment takes into account not just the physical area but also the sensations of sight, sound, touch, and scent. According to quotation from Le Corbusier, "Architecture is the masterly, correct and magnificent play of masses brought together in light." Light and colours are also crucial components of sensory design because of their visual influence. Through depth, shadows enhance the image of mass and volume.

Occasionally, the sense of vision provides a connection to other human senses. There is little question that our sense of taste and smell is influenced by our vision when we are hungry and look at a picture of a wonderful meal. Different reactions dependent on mood are formed as a result of the sensory balance this combination of senses creates. The meaning of a room will alter depending on its acoustical design from a space that hasn't been built and is thus filled with echo and sound reflection.

The comfort level of patients, their recovery and the length of their stay, medicine use, stress levels, and other health-related outcomes have all been attentively monitored and tried to be analyzed by architects and researchers for better design and planning of healthcare facilities. It may be possible to demonstrate how to create healthy environments and settings that help lower stress and anxiety levels and address patient comfort concerns by individually assessing and researching these metrics on patients of various ages.

2.1. OPEN SPACE

Numerous scientific studies have demonstrated the benefits of nature and exposure to the outdoors on patients' ability to relax and reduce stress and anxiety in a hospital environment. A study that was published in the American Journal of Alzheimer's Disease and Other Dementias found that playing recorded nature sounds on a regular basis could considerably lower the violent conduct of dementia patients in reaction to stressful situations. According to Professor Irving Biermann's research at the University of Southern California, viewing scenes that are universally recognized as being calming to the mind and eyes, such as lovely panoramas, sunsets, hill views, and groves of trees, activates brain nerve cells and causes the brain's natural painkillers to flow.

3. ROLE OF LIGHT IN TREATMENT

Light is essential to human life and daily activities, making living without it difficult to imagine. It gives us the ability to work. The impact of sunshine on health—both people's physically and psychologically-is profound. Access to natural light is one of the factors that most strongly influences a patient's healing. Visible light's influence on physiological responses, emotions, and visual needs occurs in indoor environments. It is essential that daylight be aggressively pursued in hospital architecture in order to create a healing atmosphere. Aside from being beneficial to both patients and staff, daylight should be addressed when constructing hospital lighting systems because it is free light. Effective day lighting will reduce the demand for artificial lighting, which will save energy and promote sustainability. Windows with different degrees of darkness tint should be standard in every hospital building. The tinted windows might not make the patients feel cut off from the outside world, but they might perceive the weather differently as a result. But it is undeniable that tinted windows help to reduce the brightness of the sun outside.

3.1 COLOR

Colors may have a significant impact on a patient's mental health; certain shades are meant to inspire movement, while others are meant to promote peaceful conduct. Colors, according to color therapy, have the ability to influence a number of aspects of our lives, including our emotions, mental health, mood, and level of energy. Seven chakras, or energy centers, each have a matching color. Color therapy was created as a result of the fact that colors have a predictable and defined effect on how our physiological behavior behaves.

Cooler tones, such as blues and greens, should be introduced and tempered with natural components. Yellow and red are considered to be "warm," making blue the greatest color choice for this area because it is "psychologically relaxing and is frequently rated as the most universally chosen color. "An optimistic feeling is connected to the green light. It is safe to use light,cool colors in medical settings because they promote a relaxing, comfortable atmosphere for patients.

3.2 MATERIAL

Materials that may alter the aural environment, move people about, increase or decrease comfort, and carry out a range of other functions are seen to have a direct influence on the environment. Think about the environmental and medical advantages of using natural materials in healing architecture. Buildings have a positive environmental impact that is enhanced by their harmony with and connection to nature. By designing self-sufficient places, "eco-cycle dwellings," or agricultural systems, architecture may live with nature. By using local resources, the community may participate in the construction process. Products made by hand from natural materials have a unique look and feel.

3.3ACOUSTICS

The negative effects of sound and noise are associated with more stressful patient conditions and slower recovery times. The majority of hospital noise sources, according to a study by Bayonet et al. (1995), located within the structure, where they have a great effect on patient comfort but little effect on their recovery. One of the most significant adverse effects of excessive noise is that it affects both quantity and quality of sleep. There will be outside noise, conversations with staff, therapy sessions, and other types of interruptions. Due to unequal staff intervention in patients, multi-bed wards with many patients are largely disturbed, leaving little time for naps.

To provide effective acoustics in healthcare design, ceilings must be sound-absorbing and reverberant lengths reduced to limit noise propagation and improve speech discrimination in patients.

LANGUAGE OF FORMS

- The impression one gets from a space is related to the form language used in architecture.
- The natural environment, for example, has soft edges but no right angles.
- The built environment, however, has an infinite number of right angles that we encounter every day.
- By imitating natural conditions in form, the architecture of a healing space can adopt some of these characteristics.
- In contrast to the fluidity of rectilinear spaces, which can make one feel confined and boxed in, organic spaces are fluid.
- Without right angles, the areas appear to be less dangerous and more soothing to the human eye.

4. CONCLUSION

It might be assumed that creating healing environments involves a great lot of thought and talent. People's environments have a big impact on their psychological and emotional health, and patients are especially susceptible to this. It takes much talent to maintain the right balance when using light, colour, texture, and materials in a design. Interior designers and architects believe that every design component should be viewed as a possible means of affecting the health and wellbeing of the patients. In order to heal and recover quicker nowadays, patients must be able to communicate with their spirituality. Over the past century, the idea of healing has undergone tremendous change, which has had a big impact on medical facility architecture. The patients and their families are primarily the focus of environmental design nowadays. Those who plan and design healthcare facilities must be aware of any evidence that supports the impact of healing environments on patients, their families, and healthcare professionals in order to ensure that the designs continue to be beneficial. The word "healing" comes from the Anglo-Saxon verb "haelen," which meaning "to make whole." It might be thought of as a condition of balance in the physical, mental, and spiritual spheres. Stress and anxiety often decline as a result of healing, which has a number of positive effects on our bodies. a supportive

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