



HEALING ARCHITECTURE IN HOSPITAL DESIGNS

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Abstract

Healing architecture is the future of new super hospital design, research has proven that enhancing the hospital design to fit functions that reflect the everyday life would improve and promote fast recovery of patient and better work performance of hospital staffs. It is a critical factor in the healing process, privacy, minimal infection risk exposure, and the satisfaction of patients. It is therefore required of hospital designers, managers, and policymakers to know the influence of the hospital design characteristics on the cognitive and physical health of the patients cannot be overemphasized. This paper explores possibilities on how architecture can inform/improve health and provide spaces and events that can contribute to patients healing, fast recovery and wellbeing. Based on the political choice to hospitalize patients in single bed space this project solves the overall question “where do patients meet for social interaction and support”? Besides, can architecture play a superior role in healing? This provides some explanations for why health practice alone cannot be expected to lead healing but the introduction of design qualities (interaction between humans, buildings and the environment) for which research has found evidence of improved patient’s outcome from long applied Evidence-based design (EBD) and experienced architects in hospital designs. This research project adopt both the primary and secondary methods of sources of information which include interviews, case studies of existing entrepreneurship development centre’s with emphasis on planning principles, existing literature such as textbooks, publications, magazines, journals, thesis reports. To archive healing architecture, this project defines four main areas that should be included in the design for future spaces in hospitals; (functions that reflect the everyday life, importance of daylight in hospitals, materials and texture with homely effects and Details with interior design in proper scale).

1. INTRODUCTION

Healthcare facilities are designed to improve a hospital staff's ability to provide high quality care and efficiency, yet the power of the architecture itself to impact a patient's recovery time and the overall effectiveness of a facility tends to be ignored. The term "healing architecture" indicates that the built environment has the ability to improve patient's health and psychological well-being. Features such as bright rooms, access to natural daylight, big windows, local plant life and outdoor views can improve the healing process by giving patients a psychological and physical lift.

2. DEFINITION OF HEALING ARCHITECTURE

Healing architecture for healthcare facilities describes a physical setting that supports patients and families through the stresses that develop as a result of illness, hospitalization, medical visits, the healing process or bereavement. The concept implies that the physical healthcare environment can make a difference in how quickly patients recover or adapt to specific acute and chronic conditions.

3. PROJECT GOAL

The goal of all healing environments is to engage patients in the process of self-healing and recovery. As a result, these spaces are designed to be nurturing and therapeutic to reduce patient and family stress. In order to promote recovery, healing architecture aims to:

- Eliminate environmental stressors, such as noise, lack of privacy, poor air quality and glare.
- Connect patients to nature by providing outdoor views and other natural features, including interior gardens and water elements.
- Enhance the patient's feeling of being in control by offering options and choices – these may include privacy versus socialization, lighting level, type of music and quiet versus active waiting areas.

- Encourage opportunities for social support, such as providing appropriate seating in patient rooms, privacy for small groups and overnight accommodations in patient rooms.
- Provide positive distractions, such as interactive art, replaces, aquariums, internet connection, music, or soothing video or light installations suited to the healthcare setting.
- Inspire feelings of peace, hope, reflection and spiritual connection.

4. HISTORY OF HEALING ARCHITECTURE

Healing environments historically have often been places where nature itself was deemed to have a great impact on healing and recovery. These ideas have been expressed in a variety of ways throughout history. Buildings for healthcare and rehabilitation have often been located in peaceful, beautiful places with dramatic views of landscapes and bodies of water. Nurturing the land and working in fresh air has been a model for many mental hospitals. After the First World War it started to become clear that providing returning soldiers with activity in gardens and natural areas could help them deal with posttraumatic stress disorders resulting from harrowing war experiences, and since then the therapeutic potential of the natural world has been an interesting topic of research.

5. EVIDENCE-BASED DESIGN

The use of knowledge on psychologically supportive environments is defined as evidence-based design. Evidence based design, based on its medical equivalent, evidence based medicine refers to guiding design decisions by scientific evidence in order to promote health and well-being (Mchale). For example, use of the evidence-based design on healthcare environments might impact health related outcomes such as length of stay, pain, medication intake, stress, arousal, mood, or environmental assessments. These variables are all considered to be relevant outcome measures in assessing the effects of the physical healthcare environment, but most research in this field still needs to be discovered. One example of a subject tested in evidence based design is stress. Stress can result in more pain and slower wound healing, but it also impacts the immune system. Stress can many times be triggered from the environments we live in. The breadth of the many statistics that demonstrate how one can begin to design healthy environment, are convincing reasons to design spaces that reduce stress and address things like patients' needs for relaxation and comfort.

6. RESEARCH REVIEW (E.B.D)

The first research review was undertaken for the Center for Health Design (CHD) in 1998, and evaluates the impact of the physical environment on medical outcomes.


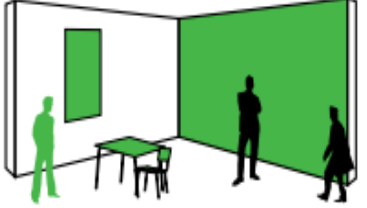
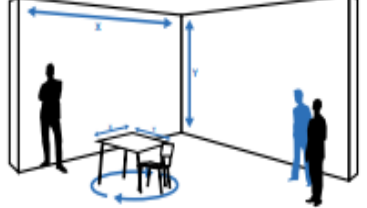
The research findings are summarized below

- Provide single-bed rooms in almost all situations. Adaptable-acuity single-bed rooms should be widely adopted. Single rooms have been shown to lower hospital-induced nosocomial infections, reduce room transfers and associated medical errors, greatly lessen noise, improve patient confidentiality and privacy, facilitate social support by families, improve staff communication to patients, and increase patients' overall satisfaction with health care.
- New hospitals should be much quieter to reduce stress and improve sleep and other outcomes. Noise levels will be substantially lowered by the following combination of environmental interventions: providing single-bed rooms, installing high-performance sound-absorbing ceilings, and eliminating noise sources (for example, using noiseless paging).
- Provide patients stress reducing views of nature and other positive distractions.
- Develop way-finding systems that allow users, and particularly outpatients and visitors, to find their way efficiently and with little stress.
- Improve ventilation through the use of improved filters, attention to appropriate pressurization, and special vigilance during construction.
- Improve lighting, especially access to natural lighting and full-spectrum lighting.

7. EVALUATE MODEL

Future hospitals are requiring new types of social spaces than those seen today. The design inspiration to these rooms are not necessarily found in the health care environment itself, but may be found from other inspirational references in order to visualize the substance of the parameters (functions, materials and textures, and details), defined in the figure below.

EVALUATION MODEL

FUNCTIONS	MATERIALS AND TEXTURES	DETAILS
 <p>What are the options for residence? <i>(Room types: Private, passive, social)</i></p> <p>What are the optional functions? <i>(Informal meetings, social interaction, dining, cooking, workout)</i></p> <p>Does the functions in the social space invite to participation? <i>(Are there obvious places to go for social interaction? Does it seem easy to join occurring activities? Do you feel welcome in the room?)</i></p>	 <p>List and short description of used materials, textures, furniture? <i>(Furniture, painted colors, artwork)</i></p> <p>How is the room characterized by materials and textures? <i>(Clinical, institutional or homely, and how is this achieved?)</i></p> <p>Are the use of materials and textures consistent and deliberate? <i>(Where are which the materials used? Does it tell a story? Does the material and texture give a tactile experience? Do you know how to act by the use of materials?)</i></p>	 <p>Scale and partition of the room? <i>(Room scale, space partitions, smaller spaces, optional seating arrangements)</i></p> <p>Furniture and distances? <i>(Size, orientation, sociofugal or sociopetal arrangements, options, moveable or fixed?)</i></p> <p>Other details? <i>(Room accessories, artwork, decorations, lightning)</i></p>

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