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## INTERACTIVE SPACES IN WAITING AREA OF ONCOLOGY CENTRE

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**Abstract:** This research aims to explore the issues inferred by the topic, such as how interactive spaces in waiting area influences architecture or can be derived through architecture. Architecture is seen to be a medium to establish a dialogue among the groups by adhering to the need for self-health care, physical and psychological development, and interaction in terms of interactive spaces.

Waiting in a hospital is a condition of high stress for patients and their families, especially for the patients. The research has investigated the emotional experiences of patients and their families, recognizing the need for a comfortable environment, attention from the staff, information, and sharing emotions with others. Nature, which has shown restorative impacts according to a growing amount of evidence, could be a distinguished positive distraction in waiting areas. The study includes that patients in oncology centers cannot be parted away from their environment, so architecture can be involved in designing centers to give peace to their mind, soul, and body. The study also concluded that architecture is bound patients with nature whilst the understanding of the inner self and their senses enable them to become aware of their surroundings. Green spaces, gardens, landscape, music, worship area, play areas for children in waitings in architecture heal the patients more speedily.

**Keywords:** Interactive space, waiting area, healing, green spaces, oncology centre, positive distractions

### I. INTRODUCTION

Patients in a healthcare facility are often stressed and fearful about their health, their safety, and their isolation from normal social relationships. The complex environment of a typical Oncology Center adds further to the traumatic situation. Stress can suppress a cancer patient's immune system and dampen their emotional and spiritual resources, thus, hampering their recovery and healing. Waiting is commonplace among people seeking cancer treatments in Oncology Centers and has become a topical issue in the research and design of healthcare environments. Waiting happens nearly everywhere during cancer-related activities -from the identification of cancer and its diagnosis and treatment until anticipating a cancer disease outcome. Although the actual waiting time varies in different sorts of facilities, the waiting experience is usually fearful and even stressful for many patients and their companions. Therefore, it becomes critical to improve people's waiting experience, reduce negative effects of waiting by improving the attractiveness of waiting areas, and eventually facilitate healing.

Researchers have identified four key factors that can measurably improve patients outcomes if implemented in the design of a healthcare environment:

1. Reduce or eliminate environmental stressors such as noise, crowding, odor, contamination, etc.
2. Provide positive diversions for example, view of nature from the lobby, waiting and other high-stress areas; access to nature using healing gardens, chapel or meditation room artwork, music, and other activities or elements that allow for a sense of stimulation which can offer assistance sustain a patient's and guardians' sense of positive well-being.
3. Enable social support by implies spaces where patients can engage with others easily.
4. Offer a sense of control over the environment such as the amount of light, noise, visual content, capacity to find, etc.

Well-designed waiting spaces in Oncology Center provide valuable opportunities for psychological and emotional preparation that can support people and reduce anxiety of all ages through cancer experiences. Waiting rooms in Oncology Center can represent a shift in personal identity from "individual" to "patient". Such loss of identity is further aggravated by the suspension of dynamic commitment and relinquishment command throughout the sense of time, freedom to move about, and the environment. These factors have motivated the design of interactive spaces in waiting areas wherein children, youth and adults can maintain a sense of identity and control. For instance, warm hues, abundant lighting, nice furniture, and decorative artwork in a waiting room soothe people's feelings and improve their satisfaction of perceived care. Playing in the waiting room is considered by oncologists as an activity that helps the children to make better use of waiting time, decrease their nervousness and anxiety and improve their mood, as well

as enhance interactions and communication with oncologists during the clinical visit. Nature through windows results to heal patients. Having access to nature or even simply viewing nature through a window can effectively help patients in waiting areas to recover from mental fatigue. For patients stressed by cancer or illness, the flourishing natural scenes with blue and green hues induce a state of calm and positively affect their mood.

The present exploratory review aims to examine how children, young patients, adults and their families experience waiting during treatment in an Oncology Center. Waiting time in Oncology Center is a topic that has not yet been explored in the literature, but is nevertheless interesting for researchers. An Oncology Center stay can be very long because of waiting for test results or the completion of therapy. The waiting for children, adult and their accompanying adults' can be associated with boredom, fear of painful treatment or tests, or with concern for and anxiety about test outcomes. Therefore, the first aim of the study is to examine children, young patients and adults' emotional states and the families' perceptions of waiting; moreover, by a consideration of the literature mentioned earlier, the study intends to explore whether waiting times in Oncology Center can be used as an opportunity to express and elaborate emotions and to relate with others.

## II. BACKGROUND

50 years ago, social researchers who examined the impact of the climate on human behavior recognized that seating arrangements affected patient communications inside a psychiatric ward. More recently, the application of science to design has had a remarkable impact on cancer centers. Evidence-based design (EBD) uses scientific tools that utilize links between design and organizational outcomes and patient, family. Its principles support design decision-making to improve security, efficiency, and clinical results. A study by MacAllister identified spatial features that impact patient satisfaction scores: spaces for waiting and orientation, window openings, point of the first encounter, and nursing orientation in the waiting areas. Other than patient satisfaction, spatial elements have been connected to other outcomes connected to interaction spaces in waiting area design that include reduced injuries, fewer infections, less stress, and improved quality of waiting. Seven design strategies that contributed to healing in Oncology Center include (a) waitings, (b) window views of nature (c) east-facing windows, (d) acoustic ceiling tiles, (e) plants, (f) low noise-producing unit areas, and (g) calm, naturalistic, and domestic artwork or photographs.

Using the scientific model established in EBD, this study looks to understand interactive spaces through the exploration of the patient's and its guardian's perspective. There is little published research describing patients' and guardians' engagement with their environment or patient's view on the impact of the environment on healing through interactive spaces in waiting areas of the Oncology Center. A primary obstruction to healing is stress and the environment can affect one's stress. Specifically, Ulrich distinguished the psychological and behavioral manifestations of support that have been advanced and enhanced by design features. These supportive design features afford a sense of control, good interruption, and social commitment of the patient to further develop their well-being and level of stress. While this exploratory study isn't planned to further explore the theory of supportive design, it implies making to take an initial step in understanding the connection between the actual climate and the patient, the interaction of the patient with the climate, and the patient's view of how the spatial features inside the climate contribute or degrade the healing experience.

## III. METHODOLOGY

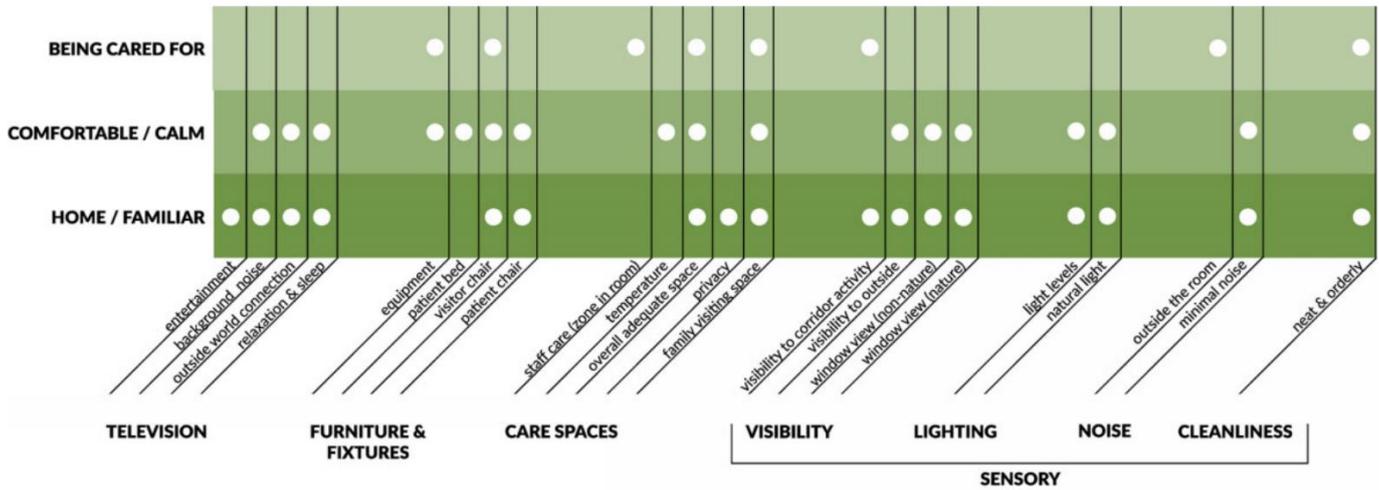
A multidisciplinary approach was implemented, one that integrated the subsequent methodological and design strategies:

1. Using quality function deployment to systematically establish and prioritize user and organizational design requirements for a child-friendly, adult-friendly waiting space.
2. Comparing existing procedures for positive distraction in healthcare waiting settings with concern to these user and organizational design requirements.
3. Directing the design of a novel interactive system for positive distraction under user/organizational requirements.
4. Using blended data elicitation (focus groups, and observational analyses) to assess the feasibility and acceptability of the interactive system with a sample of a child, youth, and parent users of the Oncology Center.

## IV. WINDOW VIEWS IN WAITING AREAS

Healing impacts are innate in nature. According to biophilic hypotheses, human beings are organically associated with nature. Having access to nature or even simply viewing nature through a window can viably offer people recovery from psychological fatigue. Butler & Steuerwald, revealed that individuals want windows and generally bigger windows are favored over smaller ones. In any case, such considerations are limited in healthcare situations: Existing considerations have mainly inspected sorts of window views in Oncology Centers situations whereas exceptionally few of them have centered on investigating the relationship between cancer-related results and the size of windows or the amount of natural views the windows managed. For example, in Ulrich's (1984) seminal study, patients and guardians viewed outside scenes from waitings through a standard window measured 1.83 m tall and 1.22 m wide.

Table-4.1 Healing experience enhancers related to experiential outcomes



**V. INTERACTIVE SPACES IN THE WAITING AREAS**

As described as an interactive space in terms of the physical qualities of the space, the emotions that the space evoked, the recognition of the space, its relationship to spiritual, nature or religious significance, and as a space where they felt cared for by attentive staff. Having adequate space and not feeling crowded or closed in were the most commonly specified physical attributes. Other physical attributes that were associated with interactive spaces included natural light, cleanliness, quiet, and privacy. An interactive space in terms of the positive sensations and feelings it evoked. An interactive space felt calm, relaxing, and soothing, a place where one felt comfortable and cozy.

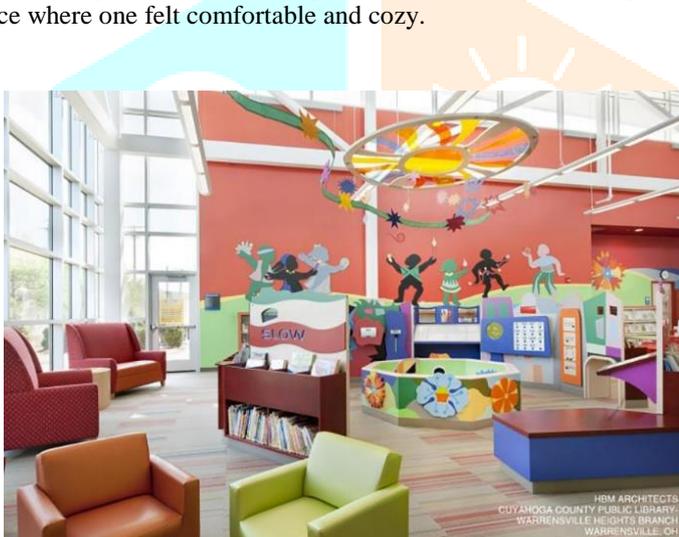


Fig. 5.1



Fig. 5.2

**VI. CONCLUSION**

The available evidence summarized in this research suggests that potential causal pathways leading to public health benefits of interactive spaces include psychological relaxation and stress reduction, improved social cohesion and psychological connection to the home area, safe framework benefits, and improved activity. Interactive space can also provide ecosystem services associated with reduced exposures to noise, air pollution, and excessive heat.

The proof for well-being benefits due to relaxation, stress reduction, and other psychological effects appears to be exceptionally reliable. Many studies have illustrated associations between greenery in close vicinity to home and health benefits suggesting that being in a green space can create health benefits regardless of the level of physical activity. These health benefits depend on the overall greenness of the oncology centre and can be provided by adequate urban planning mechanisms. The health benefits mediated by physical activity in green and interactive spaces depend on the availability of public green spaces suitable for active leisure and physical play. Interactive space can also contribute to the reduction of environmental and health inequalities by providing all population groups with equal opportunities to engage in and benefit from natural environments, and with equal biological services, such as buffering of air pollution and noise.

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