**Healthcare Facility Design: Impact On Patients And Employees**

**Introduction**

In recent years, health care facilities have given attention to their architectural design, including their equipment and technology, and how it affects the safety of patients and employees. Healthcare facilities are required to have fundamental changes in their physical environments to address the serious safety issues in the hospital and problems of errors in the provision of health care. The facility design of a healthcare center has both positive and negative impacts on the patient’s and employees’ safety. The facility design provides the healthcare centers with a unique opportunity to use emerging and current evidence to improve their physical environment and improve the outcomes of both patients and nurses.

**Health care facility design-patients**

One of the design flaws that influence undesired outcomes for patients is the lack of windows at the hospitals. The windowless healthcare facilities have negative outcomes on the patients. The absence of windows in intensive or critical care results in patients having high rates of depression, delirium and anxiety (Lorenz & Dreher, 2011). Researchers believe that the lack of windows may worsen the outcomes of the patients by increasing the negative effects of lack of senses and reducing positive stimulation.

The design enhancements in healthcare facility design such as evidence-based design have improved patient’s outcomes. The evidence-based design features the physical space of a healthcare facility, including the total sensory environment of smell, touch, sound, and sight. The evidence-based design has impacted the safety, mood, and well-being of the patients. For instance, according to a study done by The Center for Health Design, evidence-based design resulted in the patient’s fall declining by around 75% in the Cardiac Critical Care Unit at Methodist Hospital in Indianapolis (Center for Health Design, 2008). The study also showed how The Barbara Ann Karmanos Cancer Institute in Detroit recorded a 30% fall in medical errors due to reorganized medical supplies and allocation for more space for medication rooms. The evidence in the article is overwhelming, showing how the facility design impacts the safety and health of the patients.

**Health care facility design-employees**

One of the design flaws that influence undesired outcomes for employees is a lack of interconnected settings in the healthcare workplace. The small working spaces at the hospital make it hard for the hospital staff to work without being distracted by patients and other staff members. However, it is possible to rectify this by developing interconnected settings at the workplace, which can be done by planning adjacencies and sightlines to afford visual proximity to coworkers and patients (Pati et al., 2015). The hospitals can also develop clear pass-throughs and multiple entries to support the movement of workers and workflows.

The design of a healthcare facility positively impacts the performance of nurses and hospital staff, especially on the safety and health issues. Researchers found out that there is a connection between the physical environment of a hospital (for example, bigger rooms for operations) and staff outcomes (for example, increased effectiveness in care delivery and reduced fatigue and stress) (Clancy, 2008). The efforts for facilities to improve staff outcomes can target the conditions for the nurses and other hospital employees to standardize locations of supplies and equipment, decrease distractions, and make sure that the employees have adequate work areas and space for documentation. When the evidence-based design is applied to the human health care field, it improves the performance of the employees by showing the need for simplification and standardization and the facilities.

The nurse leader plays a vital role in proposing an evidence-based re-design to improve the outcomes for both employees and patients. A few years ago, few clinical nurses were included in the discussions when designing a new healthcare clinic, new hospital, or a renovation project. Currently, the nurse leader provides insight into innovations and trends that can affect the wellbeing of the patients and staff at the facilities (Lorenz & Dreher, 2011). The nurse leaders influence the adoption of the evidence-based design because they have a better understanding of the safety challenges in employee well-being and patient care. The nurse leaders use the evidence –based design to develop, investigate, and evaluate designs that can be used to enhance the well-being and safety of the patients.

**Conclusion**

In conclusion, the physical environment of health facilities, which is designed by evidence-based design, affects the well-being and safety of both the patients and the staff. For instance, the efforts of the hospital to improve staff and patient’s outcomes care target conditions for the hospital management to use evidence-based designs to standardize locations for supplies and equipment, reduce distractions, and ensure enough work areas and documentation and operation space. The evidence shows that the healthcare environment has substantial effects on the safety and health of the patients, staff morale and effectiveness, and care efficiency.

**References**

Clancy, C. M. (2008). Designing for safety: Evidence-based design and hospitals. *American Journal of Medical Quality, 23*(1), 66–69.

Center for Health Design. (2008). *Definition of evidence-based design*. Retrieved February 14, 2017, from <http://healthdesign.org/aboutus/mission/EBD_definition.php>

Lorenz, S. G., & Dreher, H. M. (2011). Hospital room design and health outcomes of the aging adult. *Health Environments Research & Design*, 4, 23–35.

Pati, D., Harvey, T. E., Redden, P., Summers, B., & Pati, S. (2015). An empirical examination of the impacts of decentralized nursing unit design. *Health Environments Research & Design*, 8,56–70.