National Institute of Technology Rourkela

Registration Seminar

Seminar Title : Functional Efficiency of Emergency Department and its Relationship with Occupational Fatigue of Nurses

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Venue : Seminar Room, Department of Planning and Architecture

Date and Time : 20 Sep 2024 (4:15 p.m.)

Abstract

: Despite healthcare advancements, many Southeast Asian Countries lack developed emergency care systems, having the world's second-highest emergency burden. India's healthcare system, which includes 60,621 government hospitals in both rural and urban areas, has experienced inconsistent development in emergency care, falling short of mandated standards, resulting in overcrowding and inefficient patient care. Emergency Departments (EDs) suffer from high and unpredictable workloads, leading to occupational fatigue, stress, and burnout among staff with nurses being the most affected due to their direct and continuous patient care. They develop symptoms like dizziness, headaches, anxiety, depression, and sleep disorders leading to occupational fatigue. This compromises ED functional efficiency and safety, increasing medication errors and injuries, which are further exacerbated by poorly designed built environment attributes. Despite these challenges, a notable gap exists in research examining the impact of built environment attributes on the functional efficiency of EDs, particularly in developing countries. Although there has been extensive research on the role of the physical environment in affecting patients' health outcomes, limited healthcare studies focus on the role of hospital built environment's impact on nurses. Therefore, this research aims to bridge the gap by investigating the relationship between ED efficiency through its built environment attributes and the occupational fatique level of nurses. To address this, the research proposal carried out extensive literature reviews and a pilot study involving focus group surveys of 4 EDs in a tertiary care hospital in India with 54 nurses to identify various attributes of the built environment and dimensions of Occupational Fatigue experienced by nurses in India. These identified attributes and dimensions will significantly help healthcare architects, planners, hospital managers, and policymakers to enhance the efficiency, safety, and standard of emergency care while optimizing staff's working environment, reducing their occupational fatigue levels, and ultimately improving patient care at EDs in India.