



KEY POINT SUMMARY

OBJECTIVES

The study set out to understand the link between nurse perceptions of visual access to nature and burnout.

Exploring the relationship between perceived visual access to nature and nurse burnout

Mihandoust, S., Pati, D., Lee, J., Roney, J., 2021 | HERD: Health Environments Research & Design Journal; Volume 14, Issue 3, Page(s) 258-273

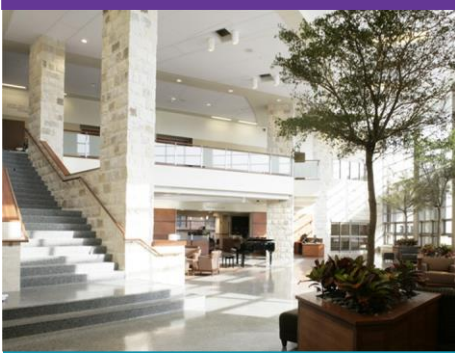
Key Concepts/Context

An abundance of research has been conducted on factors leading to burnout, the healing power of nature, and how stress affects and/or is affected by burnout in patients and families. However, little research has been done on the physical and visual connection to nature and nursing burnout. Results of this cross-sectional study point out the importance of nature views and how these views can be utilized as a meditation and relaxation technique.

Methods

Fifty-one female nurses who worked day shifts were recruited from a large tertiary care facility in Texas. Nurses were from six different units: a Medical Intensive Care Unit, a Cardiac Intensive Care Unit, a Step-Down Unit, a Cardiac Intervention Unit, a Heart Center, and an Emergency Department (ED). Two of the units had break areas with window access to nature and artwork of nature, two had no nature access but artwork, and two had neither.

Data was collected via questionnaire using two established instruments: the Maslach Burnout Inventory (MBI), and the NWI (revised Nursing Work Index). The MBI consists of 22 statements divided into three categories: emotional exhaustion (EE) or depletion of emotional resources, depersonalization or cynicism toward work (DP), and reduced personal accomplishment (PA). The NWI consisted of 57 items on organizational characteristics broken down into four categories: environmental design factors, workload factors, clinical unit, and personal factors. Demographic data collected included both workload and personal factors. Workload factors included hours worked since last day off, number of patients assigned, and tasks requiring assistance. Personal factors included age, level of education, role, years of experience, years at the present hospital, and pay range.



The Center for Health Design: Moving Healthcare Forward

The Center for Health Design advances best practices and empowers healthcare leaders with quality research that demonstrates the value of design to improve health outcomes, patient experience of care, and provider/staff satisfaction and performance.

Learn more at
www.healthdesign.org

Additionally, using a 12-hour shift as a reference point, participating nurses were asked about the following topics: (1) duration of perceived exposure to exterior views, (2) frequency of perceived exposure to exterior views, (3) perceived exterior view content (nature vs. non-nature view), (4) existence of artwork, and (5) perceived artwork content (nature vs. non-nature). Finally, nurses were asked about the environmental factors of lighting, acoustics, thermal, and ergonomic conditions.

Findings

After confirming reliability of the MBI and the NWI, demographic data was summarized using means and standard deviations for continuous variables and frequencies and percentages for categorical variables. Next, subsets of variables were analyzed to understand relationships between exposure to nature and MBI elements. During their shift, nurses reported the average Perceived Percentage of Outside Views at 15%, Perceived Frequency of Outside Views at 3.47%, Perceived Percentage of Nature at 15.6%, and Perceived Percentage of Nature in Artwork at 61%. Out of all six units, nurses working in the ED had the lowest perceived nature exposure. Secondly, results of the MBI were broken down by unit and by the three MBI subscales: EE, DP, PA. These were further examined by level of burnout: high, moderate, and low. Nurses in the ED also had the highest Exhaustion and Depersonalization scores, and the lowest Personal Accomplishment on the burnout scale. The authors found that overall nurses' Exhaustion scores rose as their organizational stressors increased and their perceived exposure to nature decreased. Additionally, it was noted that as environmental and organizational stressors increased and access to nature views decreased, the nurses felt more depersonalized; and that Perceived Percentage of Nature in Artwork (PPNA) had negative relationships with Emotional Exhaustion and Depersonalization, mild and moderate, respectively.

Limitations

This study was cross-sectional such that it represented one point in time at a single facility and participant perceptions could have been influenced by confounding factors. Additionally, the results lack generalizability because they reflect perceptions of nurses working on only six units. Data was not collected on perceived nature views in common areas or patient rooms. The perception of nature views was subjective and the data collected reflected only nurse perceptions of the nature views, not objective measures of exposure to nature views. Finally, the study was conducted in February and March which are typically overcast months for west Texas.



Design Implications

The authors surmised that nurse burnout could be reduced by adding access to nature views in unit breakrooms and providing as much access to outdoor nature as possible.

The Knowledge Repository is a collaborative effort with our partners

Academy of
Architecture for Health
an AIA Knowledge Community



Additional key point summaries provided by:

NIHD | Nursing Institute for
Healthcare Design
LEADERSHIP • EDUCATION • ADVOCACY

RESEARCH DESIGN
connections