Natural light improves nurse satisfaction and performance, study finds

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If laughter is the best medicine, then more windows may very well be a cure for hospitals looking to improve nurse satisfaction and performance.

A new study by Cornell's Rana Zadeh, published in Health Environments Research and Design Journal, reveals that medical staff reported that their perception of their work environment was improved when they were exposed to windows, sunlight or views. Specifically, day-shift nurses in acute-care units who had exterior views of nature while working say they were more alert and had reduced stress.

Nurses who were exposed to daylight in the workplace experienced higher body temperatures and lower blood pressures, with four out of five nurses working in a unit with windows having significantly improved vital signs over their peers in windowless units. Better moods and other psychological factors were also cited among nurses who received daylight exposure during their shifts.

Natural light has also been found to increase alertness and cognitive performance better than electric lighting, according to the study. In fact, in the three-year period studied, a total of 23 medication errors were reported, with a 22% lower probability of errors in the ward with windows, according to the study.

Biological and psychological conditions aren't the only factors improved for nurses in the presence of a nature view or natural light. The study notes that communication among nurses in stations that offered daylight or windows was greatly improved, resulting in eight more instances of communication than among nurses in stations without windows. The study also revealed that nurses in stations with windows laughed roughly five times more frequently that nurses in window-less stations.

"Nurses save lives and deal with complications every day. It can be a very intense and stressful work environment, which is why humor and a good mood are integral to the nursing profession," Zadeh says. "As a nurse, it's an art to keep your smile, which helps ensure an excellent connection to patients. Designing affordable space that is conducive to the work is a smart way to bring positive mood—like laughter—into the workplace."

On the patient end, the study documented effects from increased window or daylight exposure ranging from decreased consumption of pain medication, a reduction in antidepressant effects of some medications, and shorter hospital stays. Nurses also recorded fewer complaints about their care in patients with a nature view out their window, according to the study.

Zadeh, assistant professor of design and environmental analysis, led the study. Co-authors included Mardelle Shepley, Texas A&M University; Cornell doctoral candidate Susan Sung Eun Chung; and Gary Williams, MSN, RN.