Physical Work Environment in Hospitals Affects Nurses’ Job Satisfaction, With Implications for Patient Outcomes, Health Care Costs

Study finds architecture, interior design, and other physical aspects of their work environments can enhance early-career nurses’ job satisfaction.

Job satisfaction is an important predictor of registered nurses’ (RNs) job turnover, patient satisfaction, and nurse-sensitive patient outcomes (including pressure ulcers and falls), which can result in higher health care costs and penalties for hospitals that receive Medicare and Medicaid payments. Numerous studies have been conducted to assess nurses’ job satisfaction, asking about nurse-physician relationships, opportunities for promotion, autonomy, and similar issues, but very few have addressed the impact of the physical work environment on RNs’ job satisfaction.

Now, a new study conducted by the Robert Wood Johnson Foundation’s RN Work Project finds that a physical work environment that facilitates RNs’ efficiency, teamwork, and interprofessional communication is related to higher job satisfaction. Maja Djukic, PhD, RN, assistant professor at the College of Nursing, New York University, led the research team.

The study, in the current issue of Research in Nursing & Health, revealed that while physical environment had no direct influence on job satisfaction, it did have a significant indirect influence because the environment affected whether nurses could complete tasks without interruptions, communicate easily with other nurses and physicians, and/or do their jobs efficiently.

The research team conducted a nationwide survey of RNs to examine the relationship between RNs’ physical work environment and job satisfaction. They found that RNs who gave their physical work environments higher ratings were also more likely to report better workgroup cohesion, nurse-physician relations, workload, and other factors associated with job satisfaction.

The team was also led by Christine Kovner, PhD, RN, FAAN, professor at the College of Nursing, New York University, and Carol Brewer, PhD, RN, FAAN, professor at the School of Nursing, University at Buffalo. It included Farida Fatehi, BDS, MS, who was a research analyst at the College of Dentistry, New York University, at the time the study was conducted; and William Greene, PhD, Robert Stanksy and Toyota Motor Corporation professor of economics at the New York University Stern School of Business.
“Clearly, the physical work environment can affect nurses’ ability to do their jobs effectively and efficiently,” said Djukic. “The right environment facilitates nurses’ work, which increases their job satisfaction, which in turn reduces turnover. All of those improve patient outcomes. When investing in facilities’ construction or remodeling, health care leaders should look at features that enhance workgroup cohesion, nurse-physician relations, and other factors that affect job satisfaction. Those investments will pay off in the long run.”

The researchers measured job satisfaction in terms of procedural justice, autonomy, nurse-physician relationships, distributive justice, opportunities for promotion, workgroup cohesion, and variety in one’s job. Physical environment was assessed based on the architectural, ambient, and design features of the workspace, including crowdedness, ventilation, lighting, arrangement of furniture, colors and decorations, aesthetic appearance, and the need for remodeling.

“This study supports our previous findings, which indicate that investing in improving nurses’ work environments is extremely worthwhile,” said Kovner. “We’d suggest that future studies delve into which aspects of the physical work environment best support the factors that enhance nurses’ job satisfaction.”

The study is based on a 98-question survey of 1,141 RNs, which is part of RN Work Project, a nationwide, 10-year longitudinal survey of RNs begun in 2006 by Kovner and Brewer, and supported by a grant from the Robert Wood Johnson Foundation. Nurses surveyed were licensed for the first time by exam between August 1, 2004, and July 31, 2005, in 34 states and the District of Columbia.