nursing research network

The Value of Nurse Education and Residency Programs

Nurse Educational Preparation

- A 2001 survey of 754 employers of recent nursing graduates suggests that new nurses are unprepared for many routine practice functions (NCSBN, 2002).
- A cross-sectional analysis of Pennsylvania hospital surgery outcomes found that after adjusting for patient and hospital characteristics, nurse staffing, and experience and surgeon characteristics, each 10% increase in the proportion of nurses with a bachelor of nursing (BSN) degree was associated with a 5 percent decline in the risk of mortality and of failure to rescue (Aiken et al., 2003).
- A significant reduction in mortality was observed in a retrospective study of hospital discharge data in Ontario, Canada. A 10% increase in proportion of BSN nurses was associated with 9 fewer deaths per 1,000 discharged patients (a 0.9% mortality reduction) (Tourangeau et al., 2007).
- In a survey of self-reported competency of new nurse graduates in quality improvement measures, BSN nurses reported significantly higher levels of preparation than associate degree nurses (ADN) in measures including evidence-based practice, assessing gaps in practice, and research competencies such as data collection, analysis, and measurement. BSN nurses also reported greater preparation in the areas of "team work and collaboration" and "measuring resulting changes" (Kovner et al., 2010).
- A retrospective study of nearly 130,000 patients at 123 Veterans Health Administration hospitals found no association between mortality and the proportion of BSN-trained nurses (Sales et al., 2008).

Post-licensure Residencies

- Survey data shows that graduate nurses are often overwhelmed in the first year of employment by the demands of practice, particularly in the hospital setting, where an estimated 87.7% of newly licensed nurses work (Kovner et al., 2007).
- A survey of new nurses found that new nurses often report a lack of confidence, difficulty with work relationships, frustrations relating to the work environment, lack of time and guidance for developing organizational and priority-setting abilities, and overall high levels of stress. These factors likely contribute to the high turnover rate among new nurses, estimated at between 35% and 60% within the first year (Casey et al., 2004; Halfer and Grad, 2006).
- An evaluation of a 1-year post-baccalaureate nurse residency program developed by the University Health System Consortium and the American Association of Colleges of Nursing found improved communication and organization skills, as well as higher perceived levels of support and reduced stress in 12 sites around the country. The 12-month turnover rate among the first and second group of residents to graduate from the program was significantly lower (12% and 9%, respectively), than the average rate of 35-60% reported in the literature for hospitals without such a program (Krugman et al., 2006; Williams et al., 2007; Goode et al., 2009).

- An internal evaluation of a pilot program created to transition newly-licensed RNs through a six-month residency program found a turnover rate for participants at the end of the program of 14%, compared to 36% among the control group. Graduates of the program scored as well as their control counterparts on measures of clinical skills confidence, professional autonomy, and commitment to remain at the institution. The researchers estimated that the program benefits exceeded its cost by 67.3%, saving the hospital over half a million dollars in its first year (Beecroft et al., 2001).
- An analysis of data collected by the Versant[®] RN residency program found a strongly positive effect on nurse competencies, job satisfaction, self-confidence, group cohesion, and turnover intent at the end of a 18-week residency period. In hospitals where accurate comparisons were possible, dramatic reductions in turnover were observed. Actual 12-month turnover went from an average of 27% before the program to 7.1% after, resulting in estimated savings of millions of dollars at many hospitals (Ulrich et al., 2010; Versant, 2010).

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This evidence brief was produced by the Robert Wood Johnson Foundation Nursing Research Network to provide a summary of the evidence on key issues related to nursing policy and practice. For further information, please contact Lori Melichar at the Robert Wood Johnson Foundation Imelichar@rwjf.org.

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