Evidence Based Practice

Bedside Nursing in Rehabilitation

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The benefits of bringing evidence-based practices to the bedside nurse are a frequent topic of discussion among those who work in hospitals and rehabilitation facilities. Bedside nurses are often confronted with a question about how to provide the best possible care for a patient. Many times they have an innovative approach that could positively affect patient outcomes, but they are unsure about how to proceed with making a change. The Career Advancement through Research and Evidence-Based Practice (CARES) Fellowship was developed by Carilion Clinic in southwest Virginia to encourage bedside nurses to investigate evidence-based practices that will lead to improved patient care outcomes.

The CARES Fellowship and Magnet Values

The American Nurses Credentialing Center’s Magnet Recognition Program Model is based on new knowledge, innovations, and improvements in practice. The CARES Fellowship at Carilion Clinic stems from these Magnet principles. In the fellowship, two bedside nurses are paired with a mentor who guides them in carrying out a research project. They work together to define their burning questions, understand the research process, carry out the institutional review board (IRB) application process, and implement the project. The goals of the fellowship are to increase the quality of patient care and improve patient outcomes. These goals are accomplished by providing bedside nurses with training in research and methods of obtaining evidence-based knowledge.

For a 6-month period, monthly training classes were held, covering such topics as formulating a question using the PICO format (Patient or Population, Intervention, Comparison, Outcome), conducting literature searches, tackling the IRB paperwork, collecting data, and performing data analysis. Team members also met weekly to put this knowledge into action.

Stroke Patients and Bladder Management: The Perfect Storm

Rehabilitation units have a large population of stroke patients, and many have bladder management problems. Evidence suggests that the greatest impact on urinary incontinence may be in the acute phase of rehabilitation after stroke (Thomas et al., 2009). Knowing that urinary incontinence is a significant predictor of nursing home placement (Luppa, Luck, Weyerer, Konig, & Riedel-Heller, 2009) gave us more reason to focus on bladder management. At our facility no standard orders for bladder management existed. For our CARES project we wanted to ensure that best practices in bladder management were being used for stroke patients.

We hit our first stumbling block while performing a literature search. We expected to find guidelines in place that addressed bladder management but found no specific guidelines. It was necessary to forge ahead and create our own pilot protocol, based on available evidence.

Using the best practices available, the bedside nurses of our research team developed an algorithm that addressed timed voiding, catheterizations, and bladder scanning. The algorithm
allowed nurses to adapt to changes in patient condition. Nurses collaborated with rehabilitation physicians to devise a bladder management protocol that would be beneficial to the patient. After IRB approval was obtained, staff education began.

All nursing and therapy staff members attended a mandatory 1-hour class. Topics included details of the pilot program, roles of nursing and therapy staff, basic anatomy and physiology of the urinary system, bladder scanning technique, and documentation.

Retrospective data on functional independence measure (FIM) scores were collected for the 6 months before and after the staff education was done. A chart audit tool was used post education on all stroke patients admitted. Tracking of bladder scanning, outputs, urinary catheterizations, and the toileting program were done. Ongoing feedback was provided to staff about maintaining the order of the algorithm.

Early on, we learned the value of staff buy-in. We created a program that recognized a bladder management champion each week and one shift each month for compliance with the bladder management algorithm. The staff began to call the pilot protocol “The Bladder Patrol” and voiced their appreciation for the new processes.

The Transitioning of Research into Daily Nursing Practice
During data analysis review, we noticed a need to slightly modify the bladder management protocol in order to achieve a better outcome in FIM efficiency. With these modifications, the protocol may be used in a wider range of rehabilitation patients. The education and implementation of the pilot protocol resulted in a positive culture change among the staff regarding the importance of bladder scanning and consistency with bladder management. Our collaboration with the Jefferson College of Health Sciences, which provided a DNP-prepared academician to assist us with our project, has proven invaluable as we move forward with our revised protocol. Through our association with the CARES Fellowship, we have shared our learning with others in posters and presentations in the local area and at statewide and national meetings.

Carilion Clinic is a Magnet facility that aspires to provide high-quality patient care rooted in evidence-based practice. Our participation in the CARES Fellowship has provided us an entry into the wide world of research, and we know firsthand that making changes, even subtle ones, can make a positive difference in patient outcomes.

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References

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