Abstract

Orients on our Orthopedic/Med-Surg department consistently stated a desire for more focused orthopedic core competency training during the orientation process. Following reviews of the literature, it was initially discovered that there is limited exposure to orthopedics in nursing school curriculums, and there is a need for a body of knowledge related to orthopedics. "Increase in overall nursing knowledge for orthopedic patients fosters interdisciplinary competence on the implementation of equipment and complications." In a study done by Ormini (2005), "the decrease in RN turnover rates one year post implementation of an Orthopedic Nurse Transition Program (ONTP) resulted in an overall drop from 22.6% to 7.7%", and now RN’s turnover rates significantly decreased to 11%.

The National Association of Orthopedic Nurses (NAON) states that "RN's basic clinical judgment and decision making on the nursing process, nursing theory, and research as well as specific orthopedic knowledge", (2002). Continuing Competence includes the application of knowledge and the decision-making, psychomotor, and interpersonal skills expected of the licensed nurse within a specific practice setting resulting in nursing care that contributes to the well-being of patients (North Carolina Board of Nursing, NCBN; 2013). Finally, Cone Health uses orientation pathways to build knowledge to specific specialty areas, and allows for preceptors to hold weekly conferences with nurse orients.

Methods

Study Design: This was an interventional study. It was designed by the investigators, whom include a committee of bedside nurses on the department. Self-perceptions of nursing job satisfaction, as well as orthopedic knowledge of study participants, were assessed pre and post implementation of the orthopedic core curriculum. The nurses in the study were provided two data collection tools, a Knowledge Evaluation and Employee Satisfaction Survey, to measure nursing knowledge and job satisfaction. These tools were based on existing tools along with a point scale. Informed consent was obtained from study participants prior to the start of the first orthopedic core class. Departmental quality indicators for pain, falls, pressure ulcer prevalence, and patient satisfaction were assessed at the beginning, every three months, and at the end of the study to determine if there were improvements in the quality of care.

Sample and Setting: The knowledge evaluation tool had a sample size of 13 participants pre and post implementation. The employee satisfaction survey had a sample size of 34 participants pre-implementation and 15 participants post-implementation. The duration of this study was from May 19, 2010 through October 5, 2011.

Knowledge Evaluation Results

T-Test Score for Knowledge Evaluation
Pre: 67.703 (average score)
Post: 76.184 (average score)
T= 3.129
P Value- 0.00290

Interpretation: There was a statistically significant increase in the average score for the Knowledge Evaluation from pre to post Orthopedic Core Curriculum implementation

Employee Satisfaction Results

- T-Test Score for Employee Satisfaction Survey
  Pre: 4.1795
  Post: 4.4196
  P= 0.009

Interpretation: There was a statistically significant improvement in the Employee Satisfaction Survey Score from Pre to Post Implementation of the Orthopedic Core Curriculum

Conclusion

Based on study results, introduction of an orthopedic core curriculum does improve nursing knowledge, job satisfaction, and quality indicators. It was concluded that the research study was a success with statistically improved scores detailed in the knowledge evaluation and employee satisfaction surveys. Pressure ulcer prevalence and the number of falls decreased post implementation of the core curriculum. Overall patient satisfaction improved and patient perception of pain decreased from pre to post implementation. This slight decrease may be attributed to nursing staff transitioning to new patient education processes and teaching methods related to pain management that were implemented as part of this study. As a result, patient satisfaction is noted as an area for ongoing opportunity, has promoted staff awareness and led to focused departmental initiatives related to patient satisfaction.

An increase in overall nursing knowledge fosters interdisciplinary teamwork and competency. This outline and training template could be used for future orthopedic new nurse hires and nursing school graduates. Mandatory continuing education, possibly via Competency Based Learning Modules, could be expanded to all nurses caring for orthopedic patients within the health system. This curriculum is viewed as also having great potential for yearly orthopedic nursing competency validation.

Tribe Aim Focus (Service, Quality, Cost):
- Service: to patients and staff through a specifically designed research study for improving care methods and satisfaction.
- Change and collaboration in teaching methods may facilitate improvement in quality indicators, patient care delivery and direct patient care outcomes.
- With improvement in nurse satisfaction and patient quality indicators, comes a possible decrease in turnover rates, orientation costs, hospital costs and length of stay.

Magnet Focus: Implementation of an orthopedic core curriculum promotes new knowledge, innovations, and improvements to nurse satisfaction and patient satisfaction, as well as quality indicator improvement.

References

http://www.mdnor.org/ (reference retrieved from website 2013)