The Evidence-Based Practice and Nursing Research Curriculum

An innovative teaching plan to get bedside nurses engaged in Evidence-Based Practice

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Background

- The use of evidence to make clinical decisions is a professional expectation and responsibility
- A review of literature documents the autonomy and significance nurses feel when they contribute to optimal patient outcomes through EBP
- A hospital assessment in 2007 by Magnet appraisers confirmed that many of our nurses had limited skills in the use of the EBP process
- Nurses lacked proficiency in formulating clinical question, finding and interpreting studies, synthesizing findings as a basis for intervention, leading practice changes or implementing nurse-driven research

The EBP and Nursing Research Curriculum

- A strategic teaching plan to engage our staff nurses to practice evidence-based care was developed
- The curriculum was trialed on a 8-bed general care unit and a 9-bed technology dependent intensive care unit
- Training began in November 2007 and completed in December 2008
- The Evidence Based Practice and Nursing Research Curriculum was based on work of Melnyk & Fineout-Overholt in EBP in Nursing and Healthcare: A Guide to Best Practice (2005) and Burns and Grove's The Practice of Nursing Research: Conduct, Critique, and Utilization (2005)
- Curriculum also influenced by a regional conference on EBP and Nursing Research entitled Evidence-Based Practice Toolbox for Bedside Nurses (2007)

Curriculum Objectives

- Introduce nursing staff to the relationship that exists between EBP and Nursing Research
- Demonstrate the nurses' role in improving the quality of care through EBP
- Assist nurses to become familiar with the research process
- Present skill building opportunities for nurses to practice EBP
- Motivate bedside nurses to practice EBP
- Encourage bedside nurses to implement nurse-driven research projects

Assumptions

Nurses who participate in this curriculum will be equipped with the ability and skills to:

1. Ask questions about treatments and care
2. Acquire and Appraise the evidence to support or refute traditional practices
3. Apply best practice
4. Assess the effectiveness of the evidence as it applies to nursing practice

Strategic Teaching Plan

- Poster Inservice on EBP and Nursing Research
- Eleven "Snack and Learn" sessions
- Four feedback sessions
- Recruitment of EBP unit champions
- Display EBP quote of the week
- Provide staff access to sessions online 24/7

Innovative Methodology

This teaching plan is offered:

- As a curriculum with multiple sessions
- Using a concise format
- Multiple times on various shifts, including "off" shifts
- As an optional and voluntary educational opportunity
- In the clinical setting

Session Topics

- Five steps of EBP
- Asking the burning clinical question in PICO format
- Qualitative vs. Quantitative Research; levels of evidence; databases and EBP websites
- Critically appraising knowledge
- Critically appraising quantitative research
- Critically appraising qualitative research
- Exploring various databases available at Children's
- Generating evidence through quantitative research
- Generating evidence through qualitative research
- Generating evidence through outcomes management
- Writing a successful grant and disseminating evidence

Outcomes

- The increased number of PICO questions placed in the PICO box and improved staff participation during these sessions indicated increased clinical interest in promoting practice supported by evidence.
- Qualitative data documented nurses' perception that with the appropriate training, leadership support, and access to resources they can successfully practice evidence-based care.

Outcomes

- Nursing Administration, Clinical Research, and Professional Development Department encouraged the use of the curriculum in other units throughout the hospital.
- To date, clinical questions in the PICO format continue to be generated on the unit
- Continued participation indicates staff comfort level with asking questions that have an impact on their practice and reflect a growing culture of clinical inquiry.

Examples of PICO Questions

- When giving platelets, does giving them over the infusion pump have the same benefit as giving them by gravity?
- For infants, is PR Tylenol more effective than PO Tylenol in reducing temperature?
- In the pediatric population, is heparin more effective than saline in keeping a PIV patent?
- For breastfed babies, how long can breast milk be kept frozen before it is considered unsafe?
- In children, what is the most reliable extremity to take a non-invasive BP?

Information Sharing

- CHOA's TEACH group July 2008
- Emory's Conference September 2008
- CHOA's Conference October 2008
- Connecticut's Children's Conference October 2008
- CHOA's Golden Apple Award Fall 2008
- CHOA's Patient Safety & Quality Fair March 2009
- CHOA's Pediatric Research Center Opening May 2009
- CHOA's General Pediatric Care Symposium in May 2009
- CHOA's Nursing Research Symposium in May 2010
- CHOP's Conference in July 2010
- EBP and Nursing Research Conference in October 2010

Discussion

- EBP competent nurses are empowered by their organization to act as agents of change in improving patient outcomes.
- If nurses have access to the appropriate resources and training, they will be inspired to ask questions, acquire and critically appraise evidence, and generate new evidence for clinical decision making.