Continual Improvement of an Evidence-based Practice Assignment

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Evidence-based practice is the integration of best research evidence with clinical expertise and patient values to facilitate clinical decision making (Sackett, Straus, Richardson, Rosenberg, & Hayes, 2000).

EBP enables clinicians to provide the highest quality of care to meet the multifaceted needs of patients through the use of best evidence just as inquiry-based learning is an approach or philosophy which teaches the knowledge, skills and attitudes for use of inquiry to explore the contextually rich environment and answer practice questions.

Changes in research content in graduate education have occurred with the moved to translating and integrating scholarship into practice (AACN Essential IV) and quality improvement and safety (AACN Essential III). These changes require improvements in assignments.
EBP and Graduate Education

- AACN – Essentials of Mater’s Education
  - Quality improvement and systems leadership, Quality improvement and safety, Translating and integrating scholarship into practice

- IOM, QSEN
  - Evidence-based practice
Within the Evidence-based Practice Competencies there are knowledge, skill, and attitude domains. At the graduate level, the knowledge and skills move beyond the location and summarization of current evidence and add the ability to evaluate cultures and structures within organizations and the skill of implementation and the design of systems to support best practice.
Model

- Nursing Implementation Science (van Achterberg, Schoonhoven & Grol, 2008)
  - Model for effective implementation (Grol & Wensing, 2005)
Model for Effective Implementation
(Grol & Wensing, 2005)

1. Research findings/guidelines
2. Matching problems identified or best practices
3. Describing specific change targets
4. Analysis of target group, current practice, & context
5. Development/selection of strategies
6. Development and execution of implementation plan
7. Continuous evaluation and adapting plan
EBP Steps (Melynk, Fineout-Overholt, 2005)

- 1. Ask the clinical question
- 2. Search for the best evidence
- 3. Critically appraise the evidence
- 4. Address the sufficiency of the evidence – to implement or not implement
- 5. Evaluate the outcome of evidence implementation
Project Background

- Graduate research class
- Characteristics of students
- Began as a research utilization project and evolved into an EBP project using an inquiry approach and the Grol & Wensing model
- Focus on implementation
Project Background

- Students identify practice interventions/issues they would like summarized in an EBP presentation.
- Usually related to their identified research phenomenon.
- Use EBP process to write a PICO question, search the evidence, and determine recommendation based on evidence.
- Use Grol & Wensing model for implementation.
Comparison of Graduate Level QSEN Competencies and Grol & Wensing Model

**QSEN (Cronenwett et al., 2009)**

- **Knowledge**: Analyze how the strength of available evidence influences the provision of care (assessment, diagnosis, treatment and evaluation)
- **Knowledge**: Evaluate organizational cultures and structures that promote evidence-based practice
- **Skill**: Develop guidelines for clinical decision making regarding departure from established protocols/standards of care
- **Skill**: Participate in designing systems that support evidence-based practice
- **Attitude**: Value the need for continuous improvement in clinical practice based on new knowledge

**Steps in Grol and Wensing Model (Achterberg, Schoonhoven and Grol, 2008)**

- **Research findings/guidelines**
- **Matching problems identified or best practice**
- **Describe specific change targets**
- **Analyze target group, current practice & context**
- **Develop/select strategies**
- **Develop and execute implementation plan**
- **Continuous evaluation and adaption of plan**
Example of PICO Questions

- For nursing students, does the use of humor therapy compared to not using humor therapy reduce anxiety in the clinical setting?

- In heart failure (HF) patients, does the use of telehome monitoring versus not using telehome monitoring increase adherence of self-care behaviors and reduce HF readmissions?
Outcomes

- Inquiry into problem/intervention
- Learning about EBP process
- Collaboration with target population
- Focus on outcomes
- Positive student feedback
**Utilizing Humor to Reduce Nursing Student Anxiety: An Evidence-Based Review**

**Kathy L. Gorski, RN, BSN Saginaw Valley State University**

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<td><strong>For nursing students, does the use of humor therapy compared to not using humor therapy reduce anxiety in the clinical setting?</strong></td>
<td>The initial search found 58 articles related to the use of humor in the educational setting. Many of the articles focused on the use of humor among other disciplines such as K-12 education students and psychology students. However, eleven of these articles were determined to be relevant to the use of humor therapy to decrease anxiety among nursing students in the clinical setting.</td>
<td>Based on the use of humor to reduce nursing student anxiety in the clinical setting, there is only fair evidence (strength C – consistent findings from levels VI or VII) to recommend its use, as mostly qualitative studies were conducted. Further quantitative research is necessary to support humor as an effective method to reduce nursing students’ anxiety. Many studies indicated the use of humor had many other positive effects such as improved concentration, ease of difficult situations, and an established rapport between student and instructor. It would therefore be beneficial to provide the intentional use of humor to promote some of these positive effects which may ultimately help to alleviate anxiety levels as well.</td>
<td>Implementation will occur over a fifteen week semester at Saginaw Valley State University’s baccalaureate nursing program. The department chairperson, lead faculty members, and clinical educators will be involved in establishing a protocol and guidelines that will include the use of nursing anecdotes which have been carefully chosen to be considerate of cultural sensitivities, that avoid negative humor, and avoid humor that may be offensive to emotional individuals. Approval to proceed with the protocol will be determined by the Nursing Program Undergraduate Committee with appreciation of any further input in optimization of the protocol or guidelines. Prior to each clinical session, clinical instructors will distribute humorous nursing anecdotes to students according to the pre-determined protocol and guidelines. Students will be given time to review the humorous nursing anecdotes, reflect and react accordingly among themselves as well as with the instructor. Upon successful implementation within this fifteen week semester, implementation into subsequent semesters, as well as within the other four practicum levels will follow.</td>
<td>A second Likert Scale tool will be utilized at the last clinical session to identify student’s attitudes toward the use of humor in the clinical setting – positive effects such as improved concentration, ease of difficult situations, student-instructor rapport, and anxiety levels will be measured. Results will be compared to the pre-clinical Likert scale to determine if the use of humor was effective in promoting positive effects as projected, which may have also assisted in reduced anxiety levels. Follow up meetings will be scheduled at the end of the fifteen week semester to disperse results and determine if further use of humor in subsequent semesters would be valuable. If so, clinical educators will ensure the consistent use of humor prior to each clinical session within each semester.</td>
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| **Background/Significance** | Nursing students are subjected to complex and technically demanding evaluations within the clinical setting, which can cause high levels of anxiety (Moses & Friedman, 1986). Experts claim that high levels of anxiety can impede concentration, memory, and problem-solving ability (Moscaritolo, 2009; Moses & Friedman, 1986). Therefore, high anxiety levels can affect students’ clinical performance, which can threaten their success in a clinical rotation (Moscaritolo, 2009). Humor can facilitate increased learning and attention span, reduce anxiety levels, improve performance and problem-solving ability, as well as build collaborative relationships between student and instructor (Chauvet & Hofmeyer, 2007). It would be important to explore the effects of humor on nursing students’ anxiety to promote better chances for success within the clinical setting. | **Assessment of Target Population**

The target population for implementing humor into the clinical environment is the clinical educators that provide instruction to first practicum level baccalaureate nursing students. These clinical educators hold various degrees from Bachelors of Science in Nursing to Masters Degree of Science in Nursing; all have taught at least four semesters of clinical education. Lead faculty members and the department chairperson would also be involved to ensure guidelines are being followed and to assist in monitoring to make certain students are not being offended. Students will be surveyed utilizing a Likert Scale tool to determine attitudes toward starting their first clinical rotation, as well as other factors such as attitude regarding difficult situations, perceived problem-solving ability, perceived student-instructor relationship, and anxiety level to establish a readiness and need to implement humor therapy. | **Implementation Strategies**

The department chairperson, lead faculty members, and clinical educators will meet monthly to ensure protocols and guidelines are being followed, and to re-evaluate if the use of humor remains appropriate, or if further changes are necessary. | **Evaluation Plan**

A second Likert Scale tool will be utilized at the last clinical session to identify student’s attitudes toward the use of humor in the clinical setting – positive effects such as improved concentration, ease of difficult situations, student-instructor rapport, and anxiety levels will be measured. Results will be compared to the pre-clinical Likert scale to determine if the use of humor was effective in promoting positive effects as projected, which may have also assisted in reduced anxiety levels. Follow up meetings will be scheduled at the end of the fifteen week semester to disperse results and determine if further use of humor in subsequent semesters would be valuable. If so, clinical educators will ensure the consistent use of humor prior to each clinical session within each semester. |

**Search Technique/Methods**

A literature search of databases was conducted through CINAHL, Medline, and Proquest utilizing a combination of the following keywords: Nurses, nursing students, humor, humour, laughter, clinical setting, anxiety, and learning.
The Use of Telehome Monitoring in Patients with Heart Failure: An Evidence-Based Review
Anne-Marie Wiggins, RN, Saginaw Valley State University

PICO Question
In heart failure (HF) patients, does the use of telehome monitoring versus not using telehome monitoring increase adherence of self-care behaviors and reduce HF readmissions.

Background/Significance
Heart failure continues to be the only heart-related problem to not decrease in incidence. HF is the leading cause of readmissions among Medicare beneficiaries. HF patients often experience deterioration in their health status with an increase in weight and symptoms over a period of days and weeks before seeking medical attention and requiring hospitalization. A system of frequent monitoring could alert clinicians to the early signs and symptoms of decompensation, providing the opportunity for intervention before patients become severely ill and require hospitalization (Chaudhry et al., 2007). Patients’ participation in performing and reporting weights, vital signs, and signs and symptoms of HF on a daily basis could increase adherence to self-care behaviors and management preventing readmissions.

Search Technique/Methods
A search of databases including CINAHL, Medline, Science Direct, Cochrane, Cochrane Central Register of Controlled Trials (CENTRAL), Google Scholar and Joanna Briggs was completed. The following combination of key words were used: CHF, heart failure, telemedicine, telecare, telehealth, telenursing, telemangement, telemonitoring, remote monitoring, self-care, self-care behaviors, self management, homecare, re-hospitalization, and readmission.

Assessment of Target Population
The target population for implementation of telemonitoring in the inpatient population are staff nurses, nurse managers, discharge planners, hospital administrators involved with quality of patient care (medical director and vice president of nursing), and physicians. Education of HF disease progression and findings from published evidence-based studies for use of telemonitoring must be provided Collaboration of the healthcare team is necessary to identify the population of HF patients requiring telemonitoring. Barriers to implementing telemonitoring must be identified.

Findings
The initial search found 18 articles, and after review, 13 were determined to be relevant to the use of telemonitoring in the home in improving adherence to self-care behaviors and reductions in readmissions for HF patients.

Recommendations
Based on the prevalence of re-hospitalizations in HF patients, there is strong evidence (strength A-consistent findings from levels Ia, Ila, and III to recommend telemonitoring for HF patients. Based on the studies, it is recommended that HF patients with either a New York Heart Association functional class of III-IV, or who have had two or more hospitalizations for HF in the previous year participate in telemonitoring. Several models of telemonitoring have been introduced in the studies but no one model has been documented to be more effective than the other. The choice of model should be based on resources and structure of the local health care service, the patient population and their needs, as well as the local infrastructure (Giordano et al., 2009).

Implementation Strategies
- The implementation will occur over a six month period.
- Knowledge of published evidence-based practices using telemonitoring will be shared with hospital administrators and medical boards.
- Staff nurses, discharge planners and nurse managers will receive education on HF disease progression, New York Heart Failure Association functional classes, and the potential benefits of home telemonitoring for increasing patient adherence to self-care behaviors and reducing HF readmissions.
- Hospital administration will meet with physicians to discuss the implementation of telemonitoring for HF patients upon discharge from the hospital.
- Available resources to provide telemonitoring will be identified (out-patient or hospital based heart failure clinics, homecare agencies, physician or advanced nurse practitioner offices)
- After education and is complete, home telemonitoring will be arranged for HF patients meeting criteria.
- Patient and families will be informed of post discharge telemonitoring and educated on the importance of compliance.
- A HF committee will be formed to discuss any ongoing or new barriers to implementation, arrange for post discharge follow up phone calls to patients, chart reviews, and reporting.

Evaluation Plan
- Data will be collected on all HF patients discharged with telehome monitoring.
- Follow up phone calls to patients with telehome monitoring will be made by an assigned committee member to assess any issues or concerns with the use of the technology.
- On a quarterly basis, charts reviews on patients assigned to home telemonitoring will audited for hospital readmissions.
- Findings will be reported to physicians and hospital administration. HF patients who continue to have frequent readmissions will be discussed with the patient’s cardiologist and primary care physician.
Feedback from Students

- “After doing this project it is easier for me to see how my research topic is related to my nursing practice.”
- “We are actually making some changes at our agency that came from the results of my project.”
- “This helped me understand the importance of critiquing the research and not just discussing the results.”
- “I think the most important thing I learned from this project is how to synthesize all the research related to a problem or intervention.”
References


