A Survey of Nurses' Practice of, Attitudes Toward, and Knowledge/skills in EBP

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You are braver than you believe, and stronger than you seem, and smarter than you think.

— Winnie the Pooh
LEARNING OBJECTIVES:

- Identify the barriers and ways to support EBP competency.
- Describe the patterns of adopting and implementation of EBP.
- Discuss ways to facilitate the uptake of EBP by educational initiatives.
STUDY PERSONNEL

Kathleen M. Williamson, PhD, RN = Study Coordinator (Midwestern State University)

Donna Agnew, BSN, RN = Principal Investigator (Reading Hospital)

Alexandra Short, MSLS, AHIP = Sub-Investigator (Reading Hospital)

Debra Stavarski, PhD, RN = Sub-Investigator (Reading Hospital)

Janelle Muckle = Graduate student Support Personnel (Midwestern State University)
COLLABORATION

IRB approval by the University and Healthcare System
LITERATURE REVIEW:

- Research still identifies inconsistencies in EBP adoption and implementation in the workplace
  (Heiwe et al., 2011; Jennings & Loan, 2001; Penz & Bassendowski, 2006; Pravikoff et al., 2005)

- Research suggests that nurses may struggle to implement EBP
  (Heiwe et al., 2011; Jennings & Loan, 2001; Melnyk et al., 2014)
LITERATURE REVIEW:

• They have developed EBP competence through their studies, in-services and practice environment (Maben, Latter & Macleod Clark, 2006)

• The lack of confidence, misperceptions and resistance from colleagues and leadership/management contribute to workplaces not embracing the EBP process (Linton & Prasun, 2013; Melnyk et al., 2012)
LITERATURE REVIEW

Little research (if any) on EBP practice, knowledge and skills and attitudes of nurses.
The Merging of Science and Art: EBP within a Context of Caring Results in the Highest Quality of Patient Care

Context of Caring

Research Evidence & Evidence-based Theories

Clinical Expertise & Evidence from assessment of the patient’s history & condition & healthcare resources

Patient Preferences and Values

Clinical Decision-making

Quality Patient Outcomes

Provider and System Outcomes

EBP Organizational Culture & Environment

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Clinical inquiry

Formulate a Searchable, Answerable Question (PICOT)

Search for the Best Evidence

Rapid Critical Appraisal, Evaluation, and Synthesis of Evidence

Integrate the Evidence With Clinical Expertise and Patient Preference(s)

Generate Evidence Internal: OM, QI External: Research

Evaluate the Outcomes based on Evidence

EBP PROCESS

Disseminate the Outcome(s)

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PURPOSE OF STUDY:

Investigate nurses’ perceptions of their practice of EBP, attitudes towards clinical effectiveness of EBP and knowledge/skills associated with EBP
RESEARCH QUESTIONS:

❖ What are the nurses’ patterns for adopting and implementing EBP

❖ What are the nurses’ barriers and facilitators of fostering EBP?
RESEARCH DESIGN

✧ Descriptive, comparative, self-study survey: quantitative and qualitative data were collected

✧ Online survey

✧ Evidence-based Practice Questionnaire (EBPQ) (Upton & Upton, 2005 & 2006), open-ended questions and demographic questionnaire.
INSTRUMENT

EBPQ

Measures:

• Knowledge,
• Attitude &
• Skills

Permission to use tool developed by: Dominic and Penney Upton, 2006

🌟 Previously reported a Cronbach’s α of 0.87
🌟 For this study Cronbach’s α 0.95 and subscales ranges 0.70 to 0.95
SAMPLE

✓ 1500 nurses from all hospitals in the healthcare system
✓ 292 returned useable surveys
✓ Online link was located on the healthcare system’s Intranet site
✓ Offsite access was available also via link provided
METHODOLOGY

- Sample recruited by emails
- Survey was anonymous
- 10 - 15 minutes to complete the survey
- Follow up emails sent out to maximize participation rate
- Data analysis: descriptive statistics, correlations for comparisons across settings, content analysis from the qualitative data.
RESPONSE RATE:

✓ 437 survey’s collected = 29%
✓ 290 completed the EBPQ survey = 19%
✓ 277 - 421 responses to the open-ended questions = 18% - 28%
QUANTITATIVE DATA: RESULTS
QUANTITATIVE DATA

Staff Nurses 75% (n=328)

Job Title Breakdown
OTHER: WRITE IN

Other (please specify):
- Adjunct Instructor
- ANM
- Assistant Nurse Manager
- Asst. Nurse Manager
- Care Navigator
- Central Venous Access Nurse
- Clinical Adjunct
- Clinical Adjunct Instructor
- Clinical Nurse Specialist
- Director
- DON/QI Coordinator
- Education
- Faculty
- Going into 5th Year as RN
- House Supervisor
- Infection Preventionist
- Instructor
- Nurse Educator
- Nurse Faculty
- Nursing Educator
- Nursing Instructor
- Oncology Research RN
- Registered Nurse
- Assessment Coordinator
- Research Nurse
- RNAC
- Safety/Quality
- Supervisor
HIGHEST EDUCATION

- BSN = 38.2% (n=167)
- ADN = 15.1% (n=66)
- Diploma = 27.7% (n=121)
- MSN = 13.7% (n=60)

Highest educational qualifications to date:
- Nursing Diploma
- Associate's Degree in Nursing
- Bachelor's Degree in Nursing
- Master's Degree in Nursing
- Doctorate in Nursing Practice
- PhD in Nursing
- Other
SUPPORTED IN ROLE AS EBP PRACTITIONER

Yes = 49.7% (n=217)

No = 23.6% (n=103)

Missing: 117
EBPQ - Attitude
Participants who are in a MANAGEMENT POSITION and hold an ADVANCED DEGREE had a higher median rank than STAFF NURSES.

This indicated that there is a significant difference between staff nurses and those in a management position and those that hold an advanced degree in practice, attitude, skills and total score on the EBPQ.
### EBPQ TOTAL SCORES

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>F</th>
<th>p-value</th>
<th>Post Hoc (p&lt;0.05)</th>
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<tbody>
<tr>
<td><strong>Role</strong></td>
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<tr>
<td></td>
<td>Staff Nurse</td>
<td>182</td>
<td>109.25</td>
<td>23.925</td>
<td>8.905</td>
<td>&lt;0.001</td>
<td>Staff vs. Manager/Director and Staff vs. Practice</td>
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<td>Manager/Director</td>
<td>24</td>
<td>125.75</td>
<td>19.225</td>
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<td>Practice Nurse</td>
<td>34</td>
<td>122.62</td>
<td>21.766</td>
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<td><strong>Education Recode</strong></td>
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<tr>
<td>Diploma</td>
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<td>59</td>
<td>106.03</td>
<td>24.64</td>
<td>7.950</td>
<td>&lt;0.001</td>
<td>Diploma, Associate, Bachelors vs. Masters/Doctorate</td>
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<td>Associate</td>
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<td>33</td>
<td>111.09</td>
<td>23.20</td>
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<tr>
<td>Bachelors</td>
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<td>107</td>
<td>112.08</td>
<td>23.41</td>
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<td>Masters/Doctorate</td>
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<td>48</td>
<td>127.31</td>
<td>20.83</td>
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</table>
QUALITATIVE DATA: RESULTS
BARRIERS TO BEING AN EBP PRACTITIONER

Organizational Challenges

Time Constraints

Knowledge Deficit

Other

Challenges in Research

Costs
BARRIERS TO APPLYING EBP IN PRACTICE

Organizational Challenges

Time constraints

Other

Education

Access
FACTORS TO HELP UTILIZE EBP IN NURSING

- Support
- Education/Training
- Access to Resources
- Other
- Time
- Confidence in Data
SUPPORT DESIRED AS AN EVIDENCE BASED PRACTITIONER

- Organizational Support
- More Time
- Educational Opportunities
- Other
- Access to Resources
SUCCESS IN APPLYING EBP

Improved Patient Care

Organizational Development

Other

Educational Advances
THEMES IDENTIFIED

BARRIERS FOR THE EBP PROCESS
- Resources
- Knowledge
- Time
- Staffing
- Workload
- Rules and Regulations

FACILITATORS FOR THE EBP PROCESS
- Experience
- Knowledge
- Resources
- Time
- Support
LIMITATIONS

- Survey
- Low response rate = 19%
- Unable to generalize quantitative findings
- Data from only one healthcare system
- System culture

STRENGTHS

- Qualitative data
- Saturation of concepts
- Consistency of themes
- Peer checking
- Rich descriptions
- Positive attitude of nurses toward EBP
ORGANIZATIONAL IMPLICATIONS

- Identify areas of focus to ensure nurses learning needs are met by educational programming

- Identify ways to support nurses, nurse educators, and nurse leaders in their role
ORGANIZATIONAL IMPLICATIONS

- Enhancing the work environment
- Develop a culture of inquiry
- Utilizing the EBP process to establish best practices
NURSING IMPLICATIONS

✓ Education on the EBP Process
✓ Staying up-to-date
✓ EBP projects
✓ Sharing/disseminating information
Questions/Comments

Thank you!

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