Engagement of Scholarly Inquiry for Frontline Clinicians: A literature Review

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Disclosure

- Mei Lin Chen-Lim, MSN, RN, CCRC, PhD Candidate
- Conflict of Interest: None
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Objectives

• What is known about the phenomenon of scholarly inquiry

• Current state of clinical nurses’ engagement in scholarly inquiry relevance to research and evidence-based practice

• Implications in education, practice, administration and research
Introduction

• The full potential of nursing practice includes scholarly inquiry

• High quality evidence-based care is an expectation

• Both scholarship and inquiry are essential to the foundation of nursing knowledge and practice

• Engagement of scholarly inquiry (SI) remains a struggle regardless of setting and level of practice
Purpose

• A review of the literature was conducted to explore the current state of scholarly inquiry in nursing and current state of clinical nurses’ engagement in research and evidence-based practice (EBP).
Methods

• **Concept Analysis**: Scholarly Inquiry using modified Walker & Avant (2011) strategy

• **Search Strategies for the literature review**:
  • **Key terms**: research, scholarly inquiry, evidence-base practice, clinical nurs*, and practice, engage*
  • **Online search databases**: Cumulative Index to Nursing and Allied Health Literature (CINAHL®), Medline, ProQuest, PsychInfo, Business Source Elite, and Academic Search Premiere.
    • Google and Google Scholar web search for sentinel guidelines or reports from national organizations.
    • Secondary search of reference lists from highly relevant articles
  • **Inclusion/exclusion**: post-undergraduate health care professionals; publications related to QI excluded
  • **Limitations**: English language, peer reviewed, research, human, academic journals, 1980-2017 for CINAHL; last 5 years for other search databases
A proposed definition of scholarly inquiry is defined as “research in a field of study that requires education, skills, and collaboration, using literature evidence to generate knowledge or its application for advancement of a profession or society.”

**Antecedents:**
- importance to profession and society
- questioning
- requires skills or education, knowledge, and expertise
- research collaboration

**Attributes:**
- Research
- Investigation
- project
- reasoning
- exploration
- in depth discussion
- collaboration
- analyze
- evidence-based

**Consequences:**

**Knowledge**
- acquisition and application of new knowledge
- adds to the professional knowledge base
- Educational
- improve student learning
- epistemology

**Profession/Discipline/Practice**
- advance professional practice
- translate research into practice

**Outcomes**
- conceptualization
- discussion
- intellectual output
- Publication
- improve health care outcome

- SI vs. research
- SI vs. inquiry
Literature Review Results

• A total of 174 articles were selected for full text review; **110 included in the literature synthesis.**
  • Articles spanned across the globe and settings from academia to patient care settings.

• Barriers and facilitators for EBP and research remain unchanged over the last decade except with increased acceptance EBP.

• The knowledge and understanding of the terms (SI, EBP, Research) continue to lag in clinical practice.

• Literature was synthesized into three key areas of focus:
  • Clinical nurses’ engagement of scholarly inquiry,
  • Organizational support of the engagement to scholarly inquiry,
  • State of the science.
Clinical Nurses’ Engagement of SI

<table>
<thead>
<tr>
<th>Readiness to engage</th>
<th>Ability to engage</th>
<th>Levels of engagement</th>
<th>Quality of the engagement</th>
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<tbody>
<tr>
<td>Improved over time</td>
<td>↓ EBP/research knowledge and skill</td>
<td>Improvement in nurses taking an active role</td>
<td>Few studies examine the quality of the engagement and maintaining the rigor of the work</td>
</tr>
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<td>↑ Improved attitudes, value, positiveness for EBP</td>
<td>↓ Low budget allocation for EBP from nurse leaders</td>
<td>Research - served from a study staff to a principal investigator role</td>
<td>Structure or frameworks that support the engagement of nurses in research and EBP exist but few have evidence of effectiveness and outcomes</td>
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<td>↑ Improved perceptions of research</td>
<td>↓ Sustainability - few opportunities to engage in research</td>
<td>EBP - served as team or lead members</td>
<td>Nurses who are engaged in scholarly inquiry were primarily had advanced education, practice, or positions with potentially flexible schedules</td>
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<td>↑ Desire to learn knowledge and skills</td>
<td>Nurse faculty reported difficulty engaging in EBP; barriers of time, heavy workload, and lack of commitment from their schools &gt;&gt; decreased confidence in the ability to teach and apply EBP</td>
<td>Mostly APNs or management</td>
<td></td>
</tr>
<tr>
<td>↓ Acquisition of skills and knowledge</td>
<td>Despite the barriers, nurses persisted with scholarly inquiry work</td>
<td>Magnet* designated hospitals have been reported to improve the engagement efforts</td>
<td></td>
</tr>
</tbody>
</table>

Melynyk, Fineout-Overholt, Gallagher-Ford, & Kaplan, 2012; Saunders and Vehviläinen-Julkunen (2016); Cline, Burger, Amankwah, Goldberg, & Ghazarian, 2019; Stavor, Zedreck-Gonzalez, & Hoffmann, 2017; Wonder, McNelis, Spurlock, Ironside, Lancaster, Davis, ... & Verwers, 2017; Malik, McKenna, & Griffiths, 2016; Hagan, 2018; Melnyk et al., 2016; Evans, Duggan, & Boldy, 2014; Siedlecki & Albert, 2017; Woodward, Webb, & Prowse, 2007; Hagan, 2018; McLaughlin et al., 2013; Melnyk et al., 2012; Friesen, Brady, Milligan, & Christensen, 2017; Helge-Hazleton, Kjerholt, Berthelsen, & Thomsen, 2016; McLaughlin et al., 2013; Lee, Johnson, Newhouse, & Warren, 2013; Melnyk et al., 2014; Melnyk, Fineout-Overholt, Giggielean, and Choy (2017); Evans, Duggan, & Boldy, 2014
Organizational Support: Multifaceted Organizational Strategies

- **Infrastructure**
  - Access to infrastructure; evidence accessible to all
  - Educational tactics
  - Committees/Councils: Research/EBP Council; Nursing Research Rounds; EBP Rounds; Journal Clubs
  - Leverage established networks and resources
  - Part of job expectation

- **Management**
  - Leadership support;
  - Nurse Manager involvement
  - Strategic priorities and relevant interest; institutional priority

- **Theory or Frameworks**
  - Clinical Governance Framework: Research & EBP
  - Benner’s Novice to Expert Framework
  - EBP competency for clinical practice setting
  - Roger’s Diffusion of Innovation
  - Sustainability Framework

Solomon et al., 2011; Scala et al., 2016; Kowalski et al., 2017; Straka et al., 2013; Day et al., 2017; Patterson et al., 2017; Fink et al., 2005; Hølge-Hazelton et al., 2016; Duffy, 2015

Waring et al., 2013; Zipp et al., 2016; Aasekjær et al., 2016; Scala et al., 2016; Solomon et al., 2011; Scala et al., 2016; Kowalski et al., 2017

Kinney et al., 2012; Fisher et al., 2016; Gardner et al., 2012; Hines et al., 2015; Straka et al., 2013; Day et al., 2017; Patterson et al., 2017; Fink et al., 2005; Hølge-Hazelton et al., 2016; Duffy, 2015
Education & Measures

- Educational Strategies
  - Didactic; structured education program
  - Interactive; active-learning based; online
- Experiential Learning

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<th>Tools to measure Engagement</th>
<th>Reference(s)</th>
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<tr>
<td>EBP beliefs and implementation scales [2 instruments]</td>
<td>Melnyk et al., 2008</td>
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<tr>
<td>EBP Process Quality Assessment (EPQA)</td>
<td>Lee et al., 2013</td>
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<td>EBP Questionnaire (EBPQ)</td>
<td>Upton et al., 2014</td>
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<td>Systematic review of instruments for measuring nurses’ knowledge, skills and attitudes for evidence-based practice</td>
<td>Leung et al., 2014</td>
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<td>EBP Competencies</td>
<td>Melnyk et al., 2014</td>
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<td>Evidence-Based practice knowledge assessment in nursing (EKAN)</td>
<td>Spurlock et al., 2015; Wonder et al., 2017</td>
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<tr>
<td>Revised Evidence-Based practice Attitude and utilization SurvEY (revised EBASE)</td>
<td>Terhorst et al., 2016</td>
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<td>Quick-EBP-VIK</td>
<td>Connor et al., 2017</td>
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<td>Health Science Evidence-Based Practice (HS-EBP) questionnaire</td>
<td>Fernández-Dominguez, et al., 2017</td>
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State of the Science

Non-Research

- Institutional programs
- Models/Frameworks
- Educational Programs
- Expert Opinions

Research-based

- Non-experimental; Descriptive Measurement tools
- Quasi-experimental Literature Review
- Qualitative
- Competencies for research and EBP

Knowledge Gap:
- Strategies to counter the barriers of time, self-motivation, and confidence have not been well evaluated;
- how does investment of faculty development impact student outcomes
- Clinical Nurses’ perspectives on SI
- intrinsic factors influencing scholarly inquiry
Implications

• Nursing Science and Research
  • Clarification of nurses’ understanding of the terms
  • Clinical Nurses’ perspectives of SI

• Nursing Practice
  • Factors that build more rewarding experiences consisted of research that was rooted in patient care or practice issues, and that nurses believed they were part of the team and played an integral role in the research
  • demonstrating value and service of nurses, improvement of healthcare outcomes by nurses
  • identify the leaders of EBP/research champions
  • Impact of time and work/life balance

• Nursing Education
  • knowledge translation interventions, research literacy,
  • quality and capacity of the educators and knowledge among practicing nurses

• Nursing Administration
  • cultural and strategic support remains lacking
  • value of the nurses’ and the clinical nurses’ role in EBP and research must be assessed among nurse leaders
In summary...

- Plethora of literature attentive to engagement of nurses in research or EBP

- Frontline clinicians engagement require multiple efforts from the education sector, the organization, and the nurses to be engaged in the experience.

- Barriers and facilitators for EBP and research remain unchanged over the last decade; Low priority of EBP¹

- Understanding of SI remains a knowledge gap among practicing nurses

- Clinical nurses engaged in research and EBP exist with continued reports of barriers and facilitators pertaining to engagement²

¹(Harding 2014)
²(Connor, Dwyer, & Oliveira, 2016; McLaughlin, Speroni, Kelly, Guzzetta, & Desale, 2013; Johantgen, Weiss, Lundmark, Newhouse, Haller, Unruh, & Shirey, 2017)
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Thank You!

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