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Nurses' Knowledge, Use, and Ratings of EBP Implementation Strategies

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Purpose: Evidence-based practice (EBP) is widely recognized as the most effective approach to improving the quality and safety of patient care for optimal patient outcomes. A general definition of EBP supported by most health care professionals is that it is a process by which clinical decision making is shared between patients/families and providers and guided by the research evidence, provider expertise and patient values and preferences. Many EBP models and resources exist to guide the systematic process. However, the most challenging step in the process, the implementation phase, is often underappreciated and under-resourced leading to challenges with integration and sustainability of a practice change. Many studies have addressed nurses' understanding of EBP in general and their knowledge and confidence in the EBP process. Moreover, numerous studies have examined facilitators and barriers to EBP. While this science is informative, there is still much unknown about the implementation phase and what combination of strategies can support sustained implementation. The purpose of this study is to examine registered nurses' self-reported 1) knowledge of implementation models and implementation strategies known to facilitate EBP, 2) use of selected implementation strategies to integrate and sustain a practice change, and 3) ratings of the effectiveness of selected implementation strategies.

Methods: The study is guided by several frameworks or models that have focused on how to promote and expedite implementation of EBP in practice. These include the RE-AIM (Reach, Effectiveness, Adoption, Implementation, Maintenance) framework (Glasgow, Vogt, & Boles, 1999), PRISM (Practice, Robust Implementation and Sustainability Model; Feldstein & Glasgow, 2008), Implementation Guide (Cullen & Adams, 2012), Diffusion of Innovation Theory (Rogers, 2003), and the ERIC (Expert Recommendations for Implementing Change) Project (Powell et al., 2015). These models present phased approaches with multiple key targets for practice changes, as well as suggest specific implementation strategies and tools at each phase. For example, Powell et al. (2015) conducted a Delphi study with a panel of experts who identified 73 implementation strategies. Cullen et al. (2018) published a book on implementation strategies aligned with phases of implementation (creating awareness, building knowledge and commitment, promoting action and adoption, and pursuing integration and sustained use). They defined and described 63 strategies, a majority of which are supported with published evidence. These strategies can facilitate the process of EBP and lead to practice changes that are effective and sustained. Yet, what nurses know about the process of implementation and what strategies they believe can facilitate EBP is limited. Following IRB approval, 30 randomly selected hospitals across the United States will be invited to participate in the study. Using Qualtrics software, a survey will be electronically sent to chief nurse officers (CNO), inviting them to send the survey to their nursing point of care staff and nurse leaders. It is expected that the 30 hospitals will vary in bed size from 100-1000 beds, and employ 250-3000 staff nurses and nurse leaders. Expecting a 20% response rate, the proposed sample size will be 1500-4000. The survey includes: 1) demographics items; 2) questions about one's organizational EBP implementation process, EBP culture, EBP training offered, and EBP resources dedicated to the change process; and 3) a list of implementation strategies from Powell et al. and Cullen et al. For each implementation strategy, staff nurses and nurse leaders will be asked to use a Likert-type scale to rate their knowledge of the strategy, whether they have used the strategy and to what extent, and their rating of how effective the strategy is in facilitating the EBP change. Two reminder emails will be sent to CNOs, one week apart. Findings will be analyzed using descriptive and exploratory statistics.

Results: Findings will be reported by models used, knowledge of the select implementation strategies, most frequently used strategies, and ratings of perceived effectiveness. We will report perceptions of the EBP culture, resources and training provided by participant organization. Demographic data will be examined with exploration of associations and co-variables of participant responses.

Conclusion: Findings will guide future research in the study of implementation strategies that nurses use, effects of EBP implementation strategies on sustained practice change, and impact on patient outcomes.

Title:

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Keywords:

EBP implementation, Hospital practice changes and Nurse knowledge and use of implementation

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Abstract Summary:

This poster presents findings of a study that examined nurses' and nurse leaders' knowledge, use and ratings of published strategies known to influence successful implementation of evidence-based practices. A national sample from the United States was surveyed using an electronic survey.

Content Outline:

1. Introduction
 1. Overview of EBP, state of the science in hospitals
 2. Review of EBP Models, highlighting the implementation phase challenges
 3. Review of implementation strategies known to influence EBP success
2. Purpose
 1. Review study purpose
 2. Significance to nursing
3. Method
 1. Descriptive, exploratory design
 2. Sample and setting
 1. 30 randomly selected hospitals, varying bedsize and type of setting
 2. Recruitment of staff nurses and nurse leaders
 3. Survey
 1. Qualtrics
 2. Demographic
 3. Implementation knowledge, use and ratings of effectiveness
 4. Data Collection Procedures
 1. Survey invite sent to CNOs
 2. CNOs circulate to their RNs and nurse leaders
 3. Anonymous survey, submitted electronically
 5. Data analysis
4. Findings
 1. Demographics
 2. Review of EBP implementation models use
 3. Review of EBP culture, training and resources
 4. Review of nurses' self-reported
 1. Knowledge of EBP implementation strategies
 2. Use of EBP implementation strategies
 3. Ratings of effective EBP implementation strategies
 5. Present correlations between demographics and EBP implementation reported knowledge, use and effectiveness
5. Discussion

1. What findings mean for EBP implementation by nurses in hospitals
2. Clinical implications
3. Future research directions

First Primary Presenting Author

Primary Presenting Author

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Endowed Professor of Psychiatric Mental Health Nursing and Director for the Translational Research Core of the Fuld National Institute for EBP in Nursing & Healthcare

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Professional Experience: Dr. Tucker has substantial expertise in EBP. She has made contributions nationally and internationally in practice and research, has published widely and provides training and consultation related to EBP and implementation strategies to promote sustained integration of research into practice. Dr. Tucker is the author of the EBP Self-Efficacy Scale, used around the world.

Author Summary: Dr. Tucker joined Ohio State University (OSU) in 2017 as the Grayce Sills Endowed Professor in Psychiatric-Mental Health Nursing and Director for the Translation Research Core of the Fuld National Institute for EBP. She is a nurse scientist and national expert in behavioral interventions for at-risk families, and the promotion of EBP. Prior to joining OSU, she served for 15 years as director of research, EBP and quality for 2 different academic medical centers.

Second Secondary Presenting Author

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Professional Experience: Gallagher-Ford's clinical background in maternal child health and nursing administration spanned 30 years in which she served in a variety of roles ranging from bedside clinician to chief nursing officer where she gained extensive experience and expertise in teaching and implementing evidence-based practice in real world clinical settings.

Author Summary: Gallagher-Ford is senior director of the Helene Fuld Institute for EBP in Nursing and Healthcare at Ohio State University. She edits the column; "Implementing EBP in Real World Settings" in Worldviews. Her research/publications have had a major impact on the EBP body of knowledge including: National EBP Surveys of Nurses, Delphi Study establishing EBP competencies, lead author; the AJN EBP Series. She is a Fellow in the Nursing Academy and the National Academies of Practice.

Any relevant financial relationships? Yes

Relationship	Description of Potential Conflict
Royalty and Speakers Bureau	I co-authored a book on EBP for which I may receive royalties. I do keynote presentations for which I may receive honoraria.

Signed on 12/12/2017 by *Lynn Gallagher-Ford*

Third Author

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Professional Experience: I have created an evidence-based practice model (ARCC) in acute and community settings. As well, I have co-edited a book on EBP "Evidence-Based Practice in Nursing & Healthcare. A Guide to Best Practice and have published numerous articles on evidence-based practice. I have also co-edited a book on Intervention Research titled: Designing, Conducting, Analyzing and Funding Intervention Research. A Practical Guide for Success. I also co-edited a book on child and adolescent mental health entitled: A Practical Guide to Child and Adolescent Mental Health Screening, Early Intervention, and Health Promotion. I am editor to the journal, Worldviews on Evidence-based Nursing. In addition, I have led national and international initiatives in evidence-based practice. Improving practice and patient outcomes through the use of evidence is central to my work as a researcher, educator and practitioner.

Author Summary: Bernadette Mazurek Melnyk – recognized nationally/globally for her research-based and innovative approaches to a wide range of health care challenges – is Vice President for Health Promotion, University Chief Wellness Officer, and Professor and Dean of the College of Nursing at The Ohio State University. Also a professor of pediatrics and psychiatry at OSU's College of Medicine, Dr. Melnyk's expertise spans evidence-based practice, intervention research, child and adolescent mental health, and health and wellness.

Any relevant financial relationships? Yes

Relationship	Description of Potential Conflict
Consultant	Lecture nationally/internationally at universities and healthcare organizations on EBP, Health/Wellness, Child & Adolescent Mental Health, Intervention Research. Receive travel expenses and honoraria
Book - Intervention Research	I am co-editor of a book on Intervention Research. I receive honoraria.
Books on EBP	I am the co-editor of three books on Evidence-based Practice for which I receive honoraria.
Book on Mental Health	I am the co-editor of a book on Child/Adolescent Mental Health Screening, Early Intervention and Health Promotion for which I receive honoraria.
Journal Editor	I am the editor of Worldviews on Evidence-Based Nursing for which I receive an honorarium.
Business for workshop trainings at hospital	I am a part-owner of COPEforHOPE which does training workshops and disseminates the COPE Program for hospitals.
Business Consulting Company	I am co-owner of ARCC, LLC a consulting company that works with healthcare systems on improving quality of care through EBP

Business Cognitive-
based Skills-building
program

I am owner of COPE2THRIVE, a company that disseminates my
COPE Healthy Lifestyle and Mental Health Programs

Signed on 12/12/2017 by *Bernadette Melnyk*