

Sigma Theta Tau International's 29th International Nursing Research Congress

Bridging the Gap: An Innovative Web-Based Approach for Evaluating EBP Readiness in Direct Care Nurses

Jamie K. Roney, DNP, RN-BC, CCRN-K
Nursing Administration, Covenant Health, Lubbock, TX, USA
JoAnn D. Long, PhD, RN, NEA-BC
Department of Nursing, Lubbock Christian University, Lubbock, TX, USA
Stacey L. Spradling, MSN RN-BC CCRN
Staffing Operations Department, Covenant Health System, Lubbock, TX, USA
Karen Baggerly, MSN, RN, NE-BC
Vice President for Nursing, Covenant Health System, Lubbock, TX, USA
Nikki L. Galaviz, BSN, RN, CCRN
Surgical Intensive Care, Covenant Health, Lubbock, TX, USA

Purpose:

The provision of universal and equitable access to safe and effective healthcare emphasized in *The 2012 World Health Report*, 'no health without research': *The endpoint needs to go beyond publication outputs*, has forwarded the global evidence-based practice (EBP) movement (Zachariah et al., 2011). Notably, Lindeman (1975) identified research utilization and quality improvement as nursing priorities over forty years ago. Yet, current literature suggests research findings may take seventeen years to reach practice integration (Morris et al., 2011). Notably another dilemma added to the challenge is approximately 80% of current nursing practice does not reflect evidence-based nursing decisions (Conner, Dwyer, and Oliveria, 2016). Peer reviewed literature report direct care nurses self-identify lack of resources, time, and critical appraisal skills to navigate current literature (Yoder et al., 2014). Proficient skills of direct care nurses to acquire and appraise existing studies can be the catalyst translating scientific knowledge to the bedside; however, an understanding of the baseline knowledge and readiness of front-line providers is limited. Organizations worldwide are challenged to overcome these self-reported barriers to implementing and adopting research findings into clinical nursing practice. The purpose of this research study was to determine the self-perceived online research and critical appraisal skills and the EBP readiness and knowledge of front-line nurses from three care facilities in the southwest United States.

Methods:

A cross-sectional exploratory descriptive design was used in this study. The Stevens EBP Readiness Inventory and EBP Knowledge Assessment questionnaires were used to assess direct care nurses' self-reported evidenced-based readiness and baseline EBP knowledge. Research skill was measured using four questions adapted from the Research Readiness Self-Assessment tool. Informed consent was obtained from (N=49) Registered Nurses volunteering to participate. The survey questionnaires were administered online to nurses volunteering to participate from 22 nursing units during a 3-week period in May 2017.

Results:

Demographic, descriptive, and frequency distributions were examined. Front-line nurses expressed the highest level of self-confidence in four questions pertaining to the area of use and implementation of clinical practice guidelines. The study data were analyzed using SPSS version 25. The highest area of perceived evidence-based practice readiness was ability to "deliver care using evidence-based clinical practice guidelines" with a mean 4.5, SD, 1.55; "use of agency-adopted clinical practice guidelines", mean, 4.29, SD, 1.60; "choose evidence-based approaches over routine as a base for own clinical decision making", mean 4.2, SD, 1.60; and "participate in evidence-based quality improvement processes

to evaluate outcomes of practice changes", mean, 4.02, SD, 1.49. In comparison, the lowest areas of self-confidence for evidence-based practice centered on a range of topics reflected in three questions reflecting the ability to assess the "major facets to be assessed when using clinical practice guidelines", mean, 2.77, SD, 1.18; "ability to identify statistics commonly used in evidence summaries", mean, 2.96, SD, 1.18; and "ability to conduct expert search strategies using pre-constructed strategies in major databases", mean, 2.67, SD, 1.21. The remaining 14 questions assessing evidence-based practice readiness ranged from a low mean score of 3.02 – 3.69, reflecting scores falling approximately half-way between having "very little" to having a "great deal" of evidence-based readiness.

Conclusion:

While front-line nurses reported high levels of self-confidence for using EBP to implement and deliver care using clinical practice guidelines, they also expressed lower knowledge and self-efficacy with use of more advanced EBP skills. Strengthening nurse online search skills was identified as the most important learning deficit in this sample of Registered Nurses. Limitations of this study included a voluntary and relatively small sample size and cross-sectional design. Findings from this study helped identify objective data to guide focused organizational education efforts to improve direct care nurses' use of EBP and research concepts necessary to integrate research into clinical practice.

Title:

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Keywords:

Direct care nurses, EBP and EBP barriers

References:

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Abstract Summary:

Healthcare organizations worldwide are challenged to engage the EBP skills of direct care nurses. A number of barriers to EBP utilization by nurses on the front line remain. This descriptive exploratory study reports the evidence-based readiness of registered nurses in three hospitals and identifies implications for nursing leadership and education.

Content Outline:

- I. Introduction and background to EBP in front-line nurses
 - A. Trends in EBP utilization among nurses globally
 - B. Barriers to EBP uptake in direct-care nurses
 - C. Approach to educating nurses on EBP
- II. Reliability, Validity, and Measurement of EBP skills
 - A. Stevens - ACE - EBP Readiness Inventory
 - B. Stevens - Evidence-based Knowledge Assessment
 - C. Research Readiness Self-Assessment
- III. Results of EBP Assessment
 - A. Descriptive findings from front line nurses in 3 acute care facilities
 - B. Narrative self-evaluation of perceived EBP needs
 - C. Future research directions and implications for nursing leadership and education

First Secondary Presenting Author

Corresponding Secondary Presenting Author

Jamie K. Roney, DNP, RN-BC, CCRN-K
Covenant Health
Nursing Administration
Sepsis & Research Coordinator
Lubbock TX
USA

Professional Experience: 2007-present -- Critical Care Educator/Texas Regional Sepsis & Research Coordinator, Cardiac Intensive Care Unit, Covenant Health, Lubbock, Texas 1997-2007 -- Clinical Educator, Cardiac Catheterization Lab, University Medical Center, Lubbock, Texas 1991-1994 -- Staff Licensed Vocational Nurse, Renal Telemetry/Cardiac Intensive Care Units, Methodist Hospital, Lubbock, Texas 1987-2010 -- Combat Field Medic, Practical Nurse, Nurse Corps Officer, United States Army

Reserves, Multiple Roles and Assignments Responsible for development and implementation of sepsis education and training materials for St. Joseph Health ministries (10 hospitals)(2012-present). Principal writer and presenter for over 30 international continuing education programs on various medical topics to multiple disciplines through TTUHSC Health.edu. Possess subspecialty certification as a CCRN with active national and local membership, Six Sigma greenbelt, and adjunct faculty at Lubbock Christian University in Department of Nursing Research and Development Numerous experiences available on request on Curriculum Vitae.

Author Summary: Hold American Nurses Credentialing Center certification in Nursing Professional Development and American Association of Critical Care Nursing Adult Critical Care. Completed a Nursing Education focused master's program. Serve currently on the nurse planning committees for American Critical Care Nurses Association's National Teaching Institute and Texas Public Health Association's Public Health Conference. Have presented internationally, nationally, locally, and at state level. Published author.

Second Secondary Presenting Author

Corresponding Secondary Presenting Author

JoAnn D. Long, PhD, RN, NEA-BC
Lubbock Christian University
Department of Nursing
Professor & Director of Nursing Research and Development
Lubbock TX
USA

Professional Experience: Currently serve as Director of Nursing Research & Development at Lubbock Christian University. Experience in teaching evidence-based practice and research and the development of online EBP teaching tools for nurses. Thirty-nine years of experience as a registered nurse. working in clinical, academic, and research positions.

Author Summary: This author is the Director of Nursing Research & Development at Lubbock Christian University. This individual has experience teaching evidence-based practice and research to nurses at the undergraduate and graduate levels. She is the co-author of an online EBP teaching tool used to assist faculty in teaching online search and critical appraisal skills to nurses.

Third Primary Presenting Author

Primary Presenting Author

Stacey L. Spradling, MSN RN-BC CCRN
Covenant Health System
Staffing Operations Department
Nursing Professional Development Specialist
Lubbock TX
USA

Professional Experience: Nursing Professional Development Specialist 2012-Present Staff Nurse 2006-2012 Currently serves as Nursing Educator for the Staffing Operations Department. Improves patient outcomes by leading and supervising others as change agents. Involved in the professional development of others through presentations, in services, providing CNE, and managing learning opportunities. Serves as a leader facilitating group processes, and problem solving while exhibiting creativity and flexibility. Incorporates evidenced based learning while evaluating safety, cost, effectiveness, availability, benefit, and impact to patient delivery.

Author Summary: Stacey has targeted her career to build a well-rounded, comprehensive foundation in

critical care after graduating in 2006. She has sought employment in different areas, including the Surgical Intensive Care Unit (SICU), organ donation and transplantation, and nursing education (NPDS), where she oversees the Staffing Operations Department. She promotes and teaches professional development of others while implementing evidenced based practices through the committees and initiatives she serves in.

Fourth Author

Karen Baggerly, MSN, RN, NE-BC
Covenant Health System
Vice President for Nursing
Chief Nursing Officer
Lubbock TX
USA

Professional Experience: Have served on multiple hospital committees and actively conducted performance improvement initiatives for nursing and hospital care. Presented at numerous conferences representing my employer's support for progressive, quality care for our patient populations. Have been an advocate for change to improve workplace issues for the nursing population within our hospital system. Completed numerous continuing education classes and remain highly active in improvement initiatives at our hospital system. 1976 – Present Covenant Health System Lubbock, Texas 2004 – Present Vice President/Chief Nursing Officer 2002 – 2003 Assistant Vice-President, Nursing Service 1987 – 2002 Director of Critical Care/Emergency Center Nursing 1983 – 1987 Assistant Director of Nursing, Critical Care 1980 – 1983 Nurse Manager, Surgical Intensive Care Unit 1979 – 1980 Charge Nurse, Surgical Intensive Care Unit 1976 – 1979 Staff Nurse, Intensive Care Units

Author Summary: Chief Nursing Officer supporting the development of the Research Academy collaborative. Acute care nurse executive approving and overseeing project. Key nurse leader in implementing research activity being presented.

Fifth Author

Nikki L. Galaviz, BSN, RN, CCRN
Covenant Health
Surgical Intensive Care
Nurse Professional Development Specialist
Lubbock TX
USA

Professional Experience: 2013-Present--Nurse Professional Development Specialist, Covenant Health, Surgical ICU, Lubbock, TX 2013-Present--Covenant Health Research Council Member, Lubbock, TX 2017--Co-investigator, EBR Tool Research Project Responsible for the ongoing education of critical care nursing staff on a 32-bed intensive care unit.

Author Summary: Nikki is the Nurse Professional Development Specialist for Surgical ICU at Covenant Health in Lubbock, Texas. She has a BSN from Texas Tech University and is currently working on obtaining a Masters degree in Nursing from Lubbock Christian University. She educates staff on many topics, including evidence-based practices and research. She, along with co-investigators, conducted a research project at Covenant Health to assess the readiness and knowledge of bedside nurses to integrate EBP into practice.