Sigma's 30th International Nursing Research Congress

Building a Culture of Nursing Research: Advanced Practice Nursing Roles Offer Key Support

Agnes T. Black, MPH, BSN, RN

Professional Practice, Providence Health Care, Vancouver, BC, Canada Martha H. Mackay, PhD, MSN, RN, CCN(C)
Heart Centre, St. Paul's Hospital, Vancouver, BC, Canada
Leanne Heppell, DBA, MA, BSN
Providence Health Care, Vancouver, BC, Canada
Sandra Lauck, PhD, MSN, BA
Heart Centre, Providence Health Care, Vancouver, BC, Canada

Purpose:

There is abundant research showing that EBP improves patient safety, health outcomes and quality of care (Melnyk, Fineout-Overholt, Giggleman, & Choy, 2017). In recent years EBP and research utilization have become accepted responsibilities of point-of-care nurses (Andrew & Theiss, 2015; Pringle, 2007; Kelly, Turner, Speroni, McLaughlin, & Guzzetta, 2013). However, nurses report barriers to EBP and research (Squires, Estabrooks, Gustavsson, & Wallin, 2011; Chan et al., 2011; Chau, Lopez, & Thompson, 2008). A variety of interventions have been designed to create research opportunities, improve research engagement and enhance EBP (Chau et al., 2008; Wilson, Kelly, & Reifsnider, 2013; de Pedro-Gomez et al., 2012), including implementation of advanced practice nursing and nurse scientist positions (Chau et al., 2008; Leasure, Stirlen, & Thompson, 2008; Gerrish et al., 2011). Finding ways to overcome barriers and support nurses' engagement in research and EBP is a priority for most health care organizations. Our work has demonstrated that combining key personnel with supportive programs can result in a shift in workplace culture to one where nurses embrace research utilization, nurses' research knowledge and ability are increased, and increasing numbers of nurses are inspired to lead or participate in their own research projects.

In 2010, a grant-funded Nursing Research Facilitator position was created at the organization; this role was expanded and re-named in 2017 as the Director of Health Services & Clinical Research and Knowledge Translation (KT). The Director role is held by an advanced practice nurse who supports and leads research and knowledge translation activities throughout the organization, including a research training program. Since the mid-1990s, the healthcare organization has utilized clinical nurse specialists (CNSs) in an increasing number of programs within the organization; over 90% of programs now have a CNS. The CNS functions as a clinical leader and role model within their specialty's interdisciplinary team and promotes excellent patient outcomes by collaborating with other health care disciplines to develop effective clinical programs. Further, most CNSs hold adjunct faculty positions that enable them to incorporate research activities in their clinical role.

A university-appointed Professorship in Cardiovascular Nursing was created in 2017, jointly funded by academic and clinical stakeholders with the support of non-profit agencies. The goal is to foster a highly productive hub of research, education and practice to improve outcomes and health service delivery. The partnership between academic and clinical nursing is further strengthened by another nurse clinician scientist who actively engages with clinical staff regarding her program of research, as well as mentoring staff nurses' projects.

The research training program is coordinated by the Director, Research and KT, while CNSs in the organization are key to the success of the program by serving on the advisory committee and as mentors for 17 of the funded research projects to date. The Professor in Cardiovascular Nursing mentors numerous teams in the research training program, provides formal and informal research training, and serves as a role model for nurse-led research in the organization.

Methods:

We evaluated the short- and long-term impact of the research training program on all participants (pointof- care nurses and other clinicians, mentors who supported the teams), as well as on the culture within the organization. We conducted a survey to measure the impact of the program on participants' knowledge and attitudes regarding research, their clinical practice, their understanding of EBP, and their interest in advanced education and future research involvement. We conducted semi-structured interviews of participants, mentors and managers using open-ended questions to explore their overall experience with the program. Survey results were summarized using descriptive statistics; interviews were recorded, transcribed and themes were identified.

Results:

The research training program has enrolled 584 point-of-care staff who embarked on 95 funded research projects in their own clinical settings, leading to important patient care improvements. 364 RNs have participated in the program, leading nearly 50% of all funded projects (N=47), and 17 projects were mentored by CNSs. Survey results reveal a statistically significant increase in participants' research methods knowledge and practice (Black, Balneaves, Garossino, Puyat, & Qian, 2015), while qualitative findings show an increase in EBP and a shift in workplace culture to one that is more receptive to EBP and nurse-led research (Black et al., 2015). Participants reported examples of sustained practice changes, and heightened interest in both graduate education and future research engagement. Participants expressed appreciation for the opportunity to shape organizational programs and culture that this program offered them. In the first year of the Professorship, 12 national and international invitations to discuss the role and its contributions were received, 5 nurse-led teams were mentored to present research findings at various scientific meetings, and 3 nurse-led manuscripts have been submitted for peer review. In addition, processes were established to support academic teaching and create opportunities for students to benefit from mentorship in the clinical setting.

Conclusion:

Healthcare leaders strive to improve patient outcomes and it is widely accepted that EBP contributes to this. Nurse involvement in research supports EBP, and an organizational culture that supports nurses' involvement in research and EBP is critical. Successful models for nurse engagement in research are required. Our evaluation shows that combining key personnel with supportive programs can create a critical mass of expertise and result in a shift in workplace culture to one in which nurses at all levels embrace research utilization and a significant number of point-of-care nurses lead and participate in their own research.

Title:

Building a Culture of Nursing Research: Advanced Practice Nursing Roles Offer Key Support

Kevwords:

advanced practice nurses, evidence-based practice and nurse-led research

References:

Andrew, T. J. & Theiss, M. (2015). Combining evidence-based practice, learner-guided education and continuing education. The Journal of Continuing Education in Nursing, 46, 535-537.

Black, A. T., Balneaves, L. G., Garossino, C., Puyat, J. H., & Qian, H. (2015). Promoting evidence-based practice through a research training program for point-of-care clinicians. The Journal of Nursing Administration, 45, 14-20.

Chan, G. K., Barnason, S., Dakin, C. L., Gillespie, G., Kamienski, M. C., Stapleton, S., . . . Li, S. (2011). Barriers and perceived needs for understanding and using research among emergency nurses. Journal of Emergency Nursing, 37, 24-31.

Chau, J. P., Lopez, V., & Thompson, D. R. (2008). A survey of Hong Kong nurses' perceptions of barriers to and facilitators of research utilization. Research in Nursing and Health, 31, 640-649.

de Pedro-Gomez, J., Morales-Asencio, J. M., Bennasar-Veny, M., Artigues-Vives, G., Perelló-Campaner, C., & Gómez-Picard, P. (2012). Determining factors in evidence-based clinical practice among hospital and primary care nursing staff. Journal of Advanced Nursing, 68, 452-459.

Gerrish, K., Guillaume, L., Kirshbaum, M., McDonnell, A., Tod, A., & Nolan, M. (2011). Factors influencing the contribution of advanced practice nurses to promoting evidence-based practice among front-line nurses: Findings from a cross-sectional survey. Journal of Advanced Nursing, 67, 1079-1090.

Kelly, K. P., Turner, A., Speroni, K. G., McLaughlin, M. K., & Guzzetta, C. (2013). National survey of hospital nursing research, part 2: Facilitators and hindrances. Journal of Nursing Administration, 43, 18-23.

Leasure, A. R., Stirlen, J., & Thompson, C. (2008). Barriers and facilitators to the use of evidence-based best practices. Dimensions of Critical Care Nursing, 27, 74-82.

Melnyk, B., Fineout-Overholt, E., Giggleman, M., & Choy, K. (2017). A Test of the ARCC C Model improves implementation of evidence-vased practice, healthcare culture, and patient outcomes. Worldviews on Evidence-Based Nursing, 14, 5-9.

Pringle, D. (2007). Getting the right researcher into the right position: importance in healthcare organizations. Nursing Leadership, 20, 1-3.

Squires, J. E., Estabrooks, C. A., Gustavsson, P., & Wallin, L. (2011). Individual determinants of research utilization by nurses: A systematic review update. Implementation Science, 6, 1.

Wilson, B., Kelly, L., & Reifsnider, E. (2013). Creative approaches to increasing hospital-based nursing research. The Journal of Nursing Administration, 43, 80-88.

Abstract Summary:

We will describe the development of three advanced practice nurse positions to support a nursing research culture in our organization, and share evaluation results to demonstrate ways that these positions have led to an increase in the number of nurse-led research projects across the organization.

Content Outline:

- I. Introduction
- A. Example: Evidence-based practice (EBP) improves patient outcomes
- B. Example: A culture of nurse-led research can support EBP
- C. Example: Advanced practice nurses support developing and sustaining a culture of EBP and nurse-led research
- II. Body

- 1. Supporting point #1 -- Abundant research shows benefits of EBP on patient care
- 2. Supporting point #2 -- Nurses continue to report barriers to EBP

3.

- 4. Main Point #2 -- A culture of nurse-led research can support EBP
- 5. Supporting point #1 -- Our experience shows that a research capacity building program is effective in supporting increased numbers of nurses to engage in research
- 6. Supporting point #2 -- When nurses engage in research, this deepens their commitment to EBP as well
- 7. Supporting point #3 --Our evaluation shows increase in nurses' research knowledge and practice

8.

- Main Point #3 -- Advanced practice nurses support research engagement and help build a culture of EBP and nurse-led research
- 10. Supporting point #1 -- Advanced practice nurses are key to establishing the research capacity building program
- 11. Supporting point #2 -- Support from advanced practice nurses has led to an increase in number of nurse-led research projects
- 12. III. Conclusion
- 13. Example -- Healthcare leaders look for successful model to improve culture of EBP and research
- 14. Example -- Advanced Practice Nurses can create and support this culture of EBP and research
- 15. Example -- Combining key personnel with supportive programs can create a critical mass of expertise and result in a shift in workplace culture to one in which nurses at all levels embrace research utilization and a significant number of point-of-care nurses lead and participate in their own research.

First Primary Presenting Author

Primary Presenting Author

Agnes T. Black, MPH, BSN, RN

Providence Health Care

Professional Practice

Director, Health Services & Clinical Research and Knowledge Translation

Vancouver BC

Canada

Author Summary: Agnes is the Director, Health Service & Clinical Research and Knowledge Translation at Providence Health Care in Vancouver, BC, Canada. She leads several knowledge translation initiatives and the Practice-based Research Challenge. Aggie completed her BSN at the University of Washington, Seattle, and her Master of Public Health at Simon Fraser University. She is an adjunct professor at the UBC School of Nursing and Research Associate, Centre for Health Evaluation & Outcome Sciences (CHEOS)

Second Author
Martha H. Mackay, PhD, MSN, RN, CCN(C)
St. Paul's Hospital
Heart Centre
clinical nurse specialist
Vancouver BC
Canada

Author Summary: Dr. Mackay is a clinician-scientist and Clinical Nurse Specialist in Cardiology at St. Paul's Heart Centre and Clinical Associate Professor at UBC School of Nursing. She completed her initial nursing education at George Brown College and earned her PhD at UBC. Dr. Mackay's clinical focus is

on improving the care of patients with acute coronary syndrome and myocardial infarction. Her expertise and leadership in cardiovascular nursing is recognized nationally and has earned her several awards.

Third Author Leanne Heppell, DBA, MA, BSN Providence Health Care Chief Operating Officer, Chief Nursing Officer Vancouver BC Canada

Author Summary: Leanne Heppell is the Chief Operating Officer and Chief Nursing Officer at Providence Health Care in Vancouver, BC. Dr Heppell has over 25 years of progressive health leadership experience.

Fourth Author Sandra Lauck, PhD, MSN, BA Providence Health Care Heart Centre Professor, Cardiovascular Nursing Vancouver BC Canada

Author Summary: Dr Lauck holds the St. Paul's Hospital and Heart & Stroke Foundation Professorship in Cardiovascular Nursing at Providence Health Care in Vancouver, BC, and is also a Clinician Scientist and Clinical Assistant Professor at the University of British Columbia School of Nursing.