Sigma's 30th International Nursing Research Congress
Academic and Acute Care Institutions Partner to Impact Nursing Practice Through Increasing Translational Research Capacity

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Purpose: This descriptive study examined impact of partnership between academic nurse scientists, a research librarian, and hospital nurse leaders on capacity to translate, implement, and disseminate research findings. Researchers aimed to improve nurse use of evidence-based practice (EBP), research science, and quality improvement (QI) concepts for application by direct care nurses in translating research into practice.

Problem Statement: Nurses may lack confidence and skills to utilize, translate, implement, and disseminate research, EBP, and QI findings to guide clinical decision-making and overcome recognized barriers during nursing shifts when clinical questions arise.

Background: "Research" may daunt nurses working in complex hospital settings, thus leading to avoidance of research, EBP, and QI project participation. To assist nurses in adopting research into practice at academic and nonprofit hospitals, nursing research scientists from private and state funded universities established "Research Academy" (RA). Developed curriculum by two academic nurse scientists was presented by nurse scientists and hospital leaders enrolled in Doctor of Nursing Practice programs during a 1.5 hour session monthly in 2014-2015. Sessions focused on concepts essential to translate research into practice. Participants identified a research, EBP, or QI project to complete during the 12-month program. Enrollees conducted literature searches based on clinical questions to discover answers. Synthesis of literature findings informed project development. RA curriculum design and facilitators guided projects from planning, implementation, evaluation, to dissemination. Fifteen nurses voluntarily enrolled included junior faculty (n=4) and clinical nurses (n=11). Three (27.3%) clinical nurses completed RA. Practice changes, increased interest in RA, and change in culture were observed. Second cohort enrollment increased from 11 to 27. An increase interested participants from one hospital was demonstrated by enrollment increase from the first (n=4) to the third (n=19) cohort. RA facilitators collaborated to strengthen the RA experiential learning for cohort four through curriculum redesign from individual projects to a group project based on published barriers to EBP projects of time, skill, and resources. Role-modeling and a team approach were pivotal considerations in

curriculum modification. Notably, all RA cohort four direct care nurses represented night shift nurses.

Methods: RA curriculum design and participant recruitment strategies were modified for the fourth cohort. Participants were selected based on interests expressed during collaboration with acute care educators and managers. The fourth cohort continued to meet monthly from 2017-2018 for 1.5 hour scheduled sessions, however 4 to 6 hour work sessions were added for facilitated group work. Each session included learning research concepts facilitated through participant engagement strategies. Participants were not required to attend work sessions, hence allowing contribution to project outcomes based on time and schedule availability. A research question was strategically developed by RA facilitators, including a research librarian, for the fourth cohort to answer as a group. The cohort consisted of three baccalaureate prepared direct care nurses and four masters prepared nurses with varied levels of comfort, exposure, and skill to concepts presented in RA. All but two nurses were certified nurses in an area of nursing specialty. Nurses represented neonatal, critical care, palliative medicine, neurology, wound, resource pool, and diabetic focused clinicians. The research question was selected to represent a topic common to clinicians across practice settings and patient populations. The clinical question's applicability to all areas of practice was intended to engage interest in finding an answer. A search methodology of Integrated Research Review (IRR) was selected due to rigor and structure (Whittemore & Knafl, 2005). Evidence of literature was established through inter-rater reliability. No high level evidence was identified to answer the posed question, thus strategically challenging RA participants' identification of applicability to practice. Initial plans were for individual nurses to work with RA facilitators on different sections of an abstract. Participant feedback led to RA revision from a piece-meal approach to all nurses to meeting together for synthesis of findings, presentation development, writing an abstract, and local and national dissemination of findings. The Nursing Evidence-Based Practice Survey© was used to assess nursing perceptions and EBP culture in cohort four participants before and after twelve months of participation and project completion through dissemination (Titler, Hill, Matthews & Reed, 1999). The Evidence-Based Nursing Practice Self-Efficacy Scale© tool was used to measure RA cohort 4 participant self-reported confidence in EBP skills and measure impact of RA on EBP self-efficacy and EBP Skills (Tucker, Olson & Frusti, 2009).

Outcomes: RA participants in the fourth cohort developed skills through observation of role models applying research skill sets alongside them. The ability to establish inter-rater reliability was named by all participants as the "best" experience. Synthesis skills were developed through role-modeling use of a research grid and dividing key literature findings into significant categories. Practice changes based on evidence in reviewed literature were initiated through collaboration with key interdisciplinary stakeholders. Confidence and emergence of EBP leaders emerged. All direct care nurses presented practice recommendations to their peers through proper administrative authorization channels for practice change approvals.

Discussion: RA strengthened research capacity in nurses, to change culture, advance nursing practice, promote safety, and promote health and wellness. Nurses who completed RA have changed practice, state law, and raised interest in being change agents. Measurable outcomes were seen in completion of EBP, QI, and research

projects. A new approach led to observed and self-measured increased weighing of evidence, search, and synthesis skills. Every group of nurses possess different learning styles and baseline knowledge, therefore learning facilitators must remain responsive to the learning needs of each cohort as RA continues to empower nurses to translate evidence into practice.

Conclusions: Research capacity was increased by connecting hospitals and academic partners. The RA bridged gaps in research and practice. Identifying solutions and being responsive to individual learning needs represent continued priorities for increasing research capacity and translational research skill proficiency in direct care nurses.

Title:
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Keywords:
Academic Partnership, Research Capacity and Translational Research

References:
Beal, J. A. (2012). Academic-service partnerships in nursing: An integrative review. Nursing Research and Practice, Article ID 501564. doi:10.1155/2012/501564

Conner, B. T. (2014). Differentiating research, evidence-based practice, and quality improvement. *American Nurse Today, 9*(6), 26.

Cullen, L., Hanrahan, K., Farrington, M., DeBerg, J., Tucker, S., & Kleiber, C. (2018). *Evidence-based practice in action: Comprehensive strategies, tools, and tips from the University of Iowa Hospitals and Clinics.* Indianapolis, IN: Sigma Theta Tau International.

Hendricks, J., & Cope, V. (2017). Research is not a 'scary' word: Registered nurses and the barriers to research utilisation. *Nordic Journal of Nursing Research, 37*(1), 44–50. https://doi.org/10.1177/2057158516679581

Hill, J., Titler, M.G., & Mathews, G. (Unpublished). Research utilization activities: perceptions of nursing staff

Larkan, F., Uduma, O., Lawal, S. A., van Bavel, B., & Lawal, S. A. (2016). Developing a framework for successful research partnerships in global health. *Globalization & Health, 12*1-9. doi:10.1186/s12992-016-0152-1

Renolen, A., Høye, S., Hjälmhult, E., Danbolt, L.J., & Kirkevold, M, (2018). "Keeping on track"—Hospital nurses' struggles with maintaining workflow while seeking to integrate evidence-based practice into their daily work: A grounded theory study. *International Journal of Nursing Studies. 77*(1). 179-188, https://doi.org/10.1016/j.ijnurstu.2017.09.006

Shirey, M. R., Hauck, S. L., Embree, J. L., Kinner, T. J., Schaar, G. L., Phillips, L. A., & ... McCool, I. A. (2011). Showcasing Differences between Quality Improvement, Evidence-Based Practice, and Research. *Journal of Continuing Education in Nursing, 42*(2), 57-70. doi:10.3928/00220124-20100701-01

Titler, M.G., Hill, J., Matthews, G., & Reed, D. (1999, June). Development and validation of an instrument to measure barriers to research utilization. Poster presented at 16ᵗʰ Annual AHSR Annual Meeting, Chicago, IL.

Tucker, S. J., Olson, M. E. & Frusti, D. K. (2009). Evidence-based practice self-efficacy scale: Preliminary reliability and validity. *Clinical Nurse Specialist, 23*(4), 207-215. doi:10.1097/NUR.0b013e3181aae8c6

Warren, J.I., Montgomery, K.L. & Friedmann, E. (2016) Three-year pre–post analysis of EBP integration in a magnet-designated community hospital. *Worldviews on Evidence-Based Nursing. 13*(1). 50-58.

Whittemore, R. & Knafl, K. (2005). The integrative review: Updated methodology. *Journal of Advanced Nursing, 52*(5), 546-553. doi:10.1111/j.1365-2648.2005.03621.x

Yoder, L. H., Kirkley, D., McFall, D. C., Kirksey, K. M., StalBaum, A. L., & Sellers, D. (2014). Staff Nurses' Use of Research to Facilitate Evidence-Based Practice. *AJN American Journal of Nursing, 114*(9), 26-38. doi:10.1097/01.NAJ.0000453752.93269.43

Abstract Summary:
At the conclusion of this session the participants will be able to identify impact of partnership between academic and hospital nurses on research capacity to improve translational research proficiency at the point of care delivery by direct care nurses.

Content Outline:
1. Introduction to academic and acute care partnership
1. Discuss purpose of Research Academy curriculum
2. Describe outcome goals for Research Academy participants
3. Define nursing practice gap in knowledge addressed by RA facilitators of learning
2. Development of a collaborative and thoughtful approach to bridging the gap of research and practice
1. Describe curriculum design for Research Academy since inception to improve nurse capacity to meet outcome goals
2. Identify evidence findings supporting continued need to increase nurses' research capacity and closing the identified practice gap
3. Modification of Research Academy curriculum to meet learning needs of the fourth cohort
1. List methods used to meet the purpose of Research Academy
2. Specify measurement tools used to measure impact of Research Academy on nurses' perceptions, organizational culture rating, and self-reported confidence in evidence based practice
4. Conclusion
1. Evaluate outcomes of Research Academy based on participant survey results and observed results
2. Discuss implications of Research Academy curriculum impact on nursing practice
3. Identify future opportunities for Research Academy to impact research capacity and comfort level of direct care nurses
Topic Selection:

Improving Direct Care Nurse Translational Research Proficiency for Application at the Point-of-Care Delivery

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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.

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Author Summary: This author is the Director of Nursing Research & Development at Lubbock Christian University. This individual has experience teaching data science, evidence-based practice, research and statistics 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.