Mind the Gap: Nursing Research in Education and Practice

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Objectives

- Describe aspects of a hospital culture that can facilitate research;
- Discuss the gap between nursing education and practice;
- Discuss research aimed at accelerating practice readiness;
- Discuss opportunities for nursing faculty and clinicians to work together to close the education/practice gap.

A funny thing happened on my way to retirement…

Outside looking in ---

Inside looking out
What aspects of a hospital culture can facilitate research?
To Heal
To Teach
To Discover

Healthy eating. No sugar drinks!

Farmer’s Market

Free exercise classes
Making Research Happen

- Patients benefit when nurses make decisions based on evidence;
- Unfortunately, tradition and ritual remain the primary methods used by nurses to make patient care decisions,
- When reviewing the history of nursing research over the past 20 years, the same barriers are identified repeatedly – lack of knowledge, resources, time, and lack of mentors;
- No studies were found that examined factors that promote the conduct of research by practicing nurses.

Barriers, Barriers, Barriers

- We’ve looked at barriers for 20 years — we’re probably ready to move beyond that;
- It’s time to look at factors that are important in promoting research and evidence-based practice;
- While eliminating barriers is useful, we have found that it is insufficient for developing a research and evidence-based practice culture.

*When you come to a roadblock, take a detour.*

Barbara Bush
Living Research from Inside Looking Out

In 2004, the Department of Nursing Research and Innovation was separated from other departments to stand alone, in an effort to increase attention and support for nursing research and to actively create a culture of inquiry among nurses.

Who We Are –

- Department of Nursing Research and Innovation
- 7 doctorally prepared nurse researchers
- Provide guidance and support to clinicians for research projects
- Facilitate evidence-based nursing practices
- Each nurse researcher has specific institutes for providing research mentorship and consulting services
- Each nurse researcher has her/his own focused program of research
- PRN nurse researchers
- Graduate nursing students

Our Vision

The strategic plan for nursing research was built around one overarching goal:
To provide individuals and groups with nursing research expertise, guidance, and information they need to execute research responsibilities exceptionally.

Senior Nurse Researchers

- Mentor
- Consultant
- Researcher
- Writer
- Team Member
Trust the Team

- Recognize that there is more than 1 way to do something, and that it’s OK;
- Allow for creative freedom;
- Allow team members to function independently;
- Encourage team to work together;
- Common qualifications, skills, and values of team members facilitate a collegial, rather than a competitive environment.

Clinical nursing research is important because it answers questions that nurses at the bedside need to have answered;
- Quality clinical research has the potential to improve outcomes and advance the profession;
- It is important that team members share a common vision and believe in engaging clinical nurses in the generation and use of knowledge to improve nursing practice.

Research & Evidence-Based Practice Council:

- Main campus nurses meet monthly to discuss research issues, current progress in Council-initiated research projects, offer advice for research growth, etc.
- Assist with annual Research Conference
- Assist with review of research abstracts and NURF award applications

- The Department has templates, guidelines, checklists and algorithms electronically available.
- We use students and temporary workers to help create study databases and retrieve review literature so nurses can focus on aspects of research that cannot be completed by others.
- Nurse researcher mentors provide guidance in every aspect of research process, including determining feasibility of a proposed project, multidisciplinary collaboration, editorial support (proposals, abstracts, posters and manuscripts), grant and IRB application, instrument development and statistical analysis.
Who are the nurse investigators that conduct nursing research?

We encourage any nurses who have research questions, an idea for a research study, or an innovative process or device to come forward and pursue their ideas.

Staff nurses, nursing management, clinical specialists, nurse educators, or practitioners and ancillary team members can all be involved. Often the most important ideas for research are those generated by clinicians who provide direct patient care. We encourage collaborative research practices and use the wide array of clinical experts within our system to aid us in the process of gaining and generating new knowledge.

How do nurses get “time” to conduct nursing research?

• Stepping away from bedside practice to conduct research can be time consuming. The Nursing Research Fund (NURF) Award provides small grant funding to aid in research processes.
• Nurses can apply for funding two times per year and proposals are reviewed and scored by a review team. Once approved for funding, nurses can use funds to allow part-time RNs to provide patient care while they engage in nursing research activities.

Outcomes

• Results from studies conducted by our nurses have led to changes in practice, revision of protocols to improve patient outcomes, and new knowledge about phenomena important to our patient-centered model of nursing practice.

• Nursing research has fostered an environment of inquiry that is slowly becoming self-governing.

Comments from nurse researchers:

Actively participating in a nursing research project has been exciting and rewarding. My nursing research mentor provided me with endless support and direction in initiating and following through with this study. I’m looking forward to presenting my results at a national conference, publishing my findings and then translating the new evidence into practice.

Participation in nursing research is such an important part of the care we give as nurses. It aids in developing best practices based on scientific evidence. We are closest to the patients we care for; it is up to us as nurse clinicians to get involved in ensuring evidence-based practices.
Preparation - Practice Gap

- New graduate nurses constitute over 10% of nursing staff for a typical hospital;
- 90% of faculty believe their nursing students are fully prepared to provide safe and effective care;
- In contrast, 90% of hospital-based educators are questioning the practice readiness of new nurse graduates.
  (Nurse Executive Center, 2008)

What competencies are lacking?

- It is critical to identify specific nursing competencies that constitute the “preparation-practice gap” and to implement educational interventions to bridge the gap.
- Nurse Executive Center (2008) surveyed over 400 experts from nursing schools regarding emphasis placed on each of 36 competencies. Survey also included over 3500 hospital-based nursing leaders, who were asked to rate their level of satisfaction with new graduate proficiency on each of the 36 competencies.

Nurse Executive Center recommended prioritizing most important competencies to address.

Six general areas of inquiry were identified:
  Clinical Knowledge, Communication, Technical Skills, Professionalism, Management of Responsibilities, and Critical Thinking.

Category of critical thinking was reflected in some of the proficiencies ranked as lowest by nurse leaders in the hospitals.
New graduate nurses come prepared with extensive knowledge but often lack the ability to apply this knowledge and use it to critically analyze and synthesize patient information.

Nursing care provided without critical thinking is demonstrated by strictly following physician orders, regardless of circumstance and patient condition.

This care does not anticipate changes in condition or evaluate the patient’s response to care. The patient is then merely a recipient of tasks, not care.

Cleveland Clinic Research to Accelerate Practice Readiness

- Clinic hires over 1000 new graduate nurses annually;
- Currently, after orientation, 70% of inexperienced ICU nurses fail to demonstrate competencies in identifying and managing common patient problems. This problem has potential impact on patient safety and institutional costs;
- Use Problem Based Development System (PBDS) for both assessment and development of new nurse employees;
- 37% of newly hired nurses rated as Does Not Meet Expectations.

Problem Based Development System (PBDS)

PBDS assessment includes the six specific competencies that the Nurse Executive Center (2008) identified as essential for safe and effective nursing practice:

1) recognition of changes in patient status;
2) ability to anticipate risk;
3) interpretation of assessment data;
4) decision making based on the nursing process;
5) recognition of when to ask for assistance; and
6) recognition of unsafe practices by self and others.

Evaluating the Use of Simulation to Improve Critical Thinking Competencies and Perceived Self-Confidence of New Graduate Nurses in ICU

- Funded by National Council of State Boards of Nursing (NCSBN) - $161,700
- Mixed methods study with randomized clinical trial and phenomenological approach to qualitative data
- Approximately 50 new graduate nurses who identified ICU as preferred unit randomly assigned to experimental and control group
- Six ICUs
- Both groups assessed with PBDS and Casey-Fink instruments before and after the orientation program
Six simulated patient care scenarios were created to immerse nurses in decision-making related to 1) patient problem identification, 2) level of urgency, and 3) managing patient care problems.

Scenarios focused on competencies identified through prior research as deficient in new nurse graduates: Diabetes; Respiratory problems; Acute renal failure; Hypovolemia/shock; and Myocardial Infarction; Critical thinking.

Experimental program included all components of the standard orientation program with the addition of a week-long educational program featuring the 6 patient simulation scenarios.

Tentative Quantitative Findings

- Sample size small; only 26 nurses in each group.
- Findings not complete but preliminary findings show no statistically significant difference between groups in critical thinking competencies or self confidence.
- Baseline measurements showed experimental group had more fears about moving from student to RN role.
- Subjective perceptions of staff were that simulation activities were not as important as implementation of new approach to teaching.

Tentative Qualitative Findings

Learning through Questioning:

- My manager and my clinical instructor would pull me into the office and quiz me on things which scared the living begebees out of me because I was never sure I was going to have the right answer. The first time that I did it, it was horrible. I wasn’t putting things together…But then the second time I went in…I went through all of that too but what else could be causing her mental status changes and I put it together.. so I was excited.

- I wasn’t lucky enough to have a preceptor that really asked me questions. Like why are you doing this, like, you know, what could happen if you did this.. Nobody really asked me those questions… Being new, I felt like I needed guidance to even think of questions to ask… Yea, I ask questions but sometimes I might not be asking the right questions.
Putting Together a Patient Picture

It was clear from nurses’ responses that one important outcome of the Immersion experience was that they learned to put together pieces of their former learning to understand the patient problem in a new way. Nurses talked about how they learned to think differently as a result of the scenarios they experienced during the Immersion, learning to apply their previous knowledge in new situations.

Putting Together a Patient Picture

• I was just focused in on accomplishing tasks as opposed to critically thinking through the whole picture… I think back to that day and I’m like, gosh darn it, why did I, how could you not see what was going on?

• I felt like that was probably the first time that I, maybe not the first time but… I felt like I put everything together that I had learned in nursing school and I applied it to a patient.

Feeling Safe: Keeping Patients Safe

“Safety” was an important concept for the nurses. They did not talk about “expertise” or “competence” but often talked about how they learned to ensure safety for their patients.

• I felt safe. Like I knew how to, if I had a problem, who to call to fix it or you know, or an idea of what they would want but I still wasn’t putting together trends, I wasn’t looking at, ‘know, oh, this lady’s H/H I dropping, you know, and her chest tube output is high, what do we think is going on?’

• I just felt like I got it, like I don’t know, it was just like this “ah” moment.

Sense of Self as Knowledge Worker – Knowing what is not Known

Nurses spoke about how the Immersion experience gave them self-confidence to recognize their patient’s needs and intervene appropriately or know when to seek help if they encountered some problem they did not know.

• I felt more confident in identifying what issues were going on with my patient and how I could respond to them and if I hadn’t known the answer, I would have known to ask, that this was not right and I needed to get something done.

• I can recognize when things are going wrong and if I don’t know the answer, I know to ask questions. I try to go back to that process, you know, if I get stuck.
Immersion in Residency Program--Creating a Culture of Safety and Success

• Immersion Program (IP) is 4-day immersive experience for newly hired nurses that provides an innovative methodology for developing critical thinking;
• Developed to support nurses who received the lowest rating (Does Not Meet Expectations) on PBDS baseline assessment;
• Goal to strengthen culture of safety for patients by accelerating practice readiness for newly hired nurses who were not yet assessed as competent to recognize patient problems and intervene appropriately;
• Respects knowledge each individual brings and helps create bridge between acontextual information and real-life clinical application.

How does IP work?

• Creates immersive community with cohort of 5 nurses to 2 instructors to build confidence and competence in a non-threatening, supportive atmosphere;
• Combines facilitated small group case study/problem identification discussion, low-fidelity simulation, and clinical experiences to help nurses “connect the dots” between patient history, clinical presentation, physical assessment, and clinical data in order to anticipate and/or recognize a change in a patient’s condition;
• Uses Socratic thinking approach to teaching to guide nurses in “thinking like a nurse”.

Readers Theatre -- Stepping into the Life of a Family Experiencing Alzheimer’s

• Model of relationship-based care – 3 key relationships: patients and families, colleagues, and self;
• Clinical instructors noted young nurses seemed uncomfortable with older adults, particularly those with behavior changes due to dementia;
• Implemented a simulated relationship-building experience that engaged nurses in a docudrama of families caring for older adults with Alzheimer’s.

• Docudrama, Six Characters in Search of an Answer, integrated into orientation for 10 cohort groups;
• Each cohort group of 5 nurse residents and clinical instructor met together to read and discuss the play. Each person read the part of one character;
• Discussion afterward was rich with nurses’ reflections on how it felt to read the part of their character;
• Nurses’ comments suggested that as they immersed themselves in the experiences of the characters, they gained insight into what it is like to live with dementia, what it is like to be a caregiver for someone with dementia, and what it is like to be old.
Outcomes

• Prior to program implementation, approximately 30% of nurses rated as Does Not Meet Expectations (inability to recognize a patient problem) rated in same category after 12 weeks orientation. After IP implementation, re-assessments dramatically decreased and have remained at 0 percent for the last year.

• IP helping to create culture of success for at-risk nurses who might be terminated without an early intervention program to help them succeed.

• Nurse managers comment that some of their best nurses are ones who initially were assessed at the lowest levels of practice readiness.

Collaboration between Clinical and Academic Environments

Mind the Gap!

Clinical Environment: Access to patient data and health care resources; data analysis resources

Academic Environment: PhD researchers; Grantsmanship; Graduate students

Collaboration to close education/practice gap

• IP addresses education/practice gap in a new way -- by sharing a feasible, cost-effective model with hospital administrators and faculty in nursing programs to enhance practice readiness for newly hired nurses;

• Hospitals in Chicago and Florida have requested consultation about ways to adapt IP for their needs;

• Faculty at Case Western Reserve University participated in a pilot IP aimed at nursing faculty development;

• Data from IP have been shared with faculty at Deans’ Round Table, a Magnet-honored group that represents nursing faculty from northeast Ohio colleges and universities;

• Seeking collaborative funding to adapt IP for faculty development and student enrichment.

Creative Collaboration

• At its simplest level, the term creative means “bringing into being something that was not there before.”

• Faculty and clinicians need to find creative ways to share resources to collaborate on research.

• Faculty and clinicians together can help to examine issues using different lenses: the lens of a scientist, a sociologist, a psychologist, an artist.

• Creative collaboration can help to close the education/practice gap.
Creating a Culture of Success

• How many new nurses have we lost to the profession because they were judged too soon?
• We need to stop placing blame on schools for not preparing students for practice.
• We need to stop blaming clinical institutions for failing to assure effective orientation programs to support new nursing hires.
• We need to create a collaborative teaching and research environment to create a culture of both safety and success.

To Heal - To Teach - To Discover

With an ultimate goal of healing, collaboration between academic and clinical institutions can guide discovery of effective teaching strategies to foster both the critical and creative thinking needed for nurses in today’s fast paced, highly technical health care environment.

QUESTIONS?

COMMENTS?

References