

**Title:**

Influence Through Clinical Research Mentoring: Willing, But Am I Able?

**Kathleen Schell, PhD**

School of Nursing, University of Delaware, Newark, DE, USA

**Session Title:**

Strategies in Educational Partnerships

**Slot:**

H 23: Monday, 30 October 2017: 2:45 PM-3:30 PM

**Scheduled Time:**

2:45 PM

**Keywords:**

clinical setting, mentor-mentee relationship and research mentoring

**References:**

Branna, G. D., Dumsha, J. Z., & Yens, D. P. (2013). A research primer: Basic guidelines for the novice researcher. *J. American Osteopathic Association*, 113(7), 556-563.

Eller, L.S., Lev, E. L., & Feurer, A. (2014). Key components of an effective mentoring relationship: A qualitative study. *Nurse Education Today*, 34 (5), 815-820.

Green, J., & Jackson, D. (2014). Mentoring: Some cautionary notes for the nursing profession. *Contemporary Nurse*, 47(102), 79-87.

Kelly, K. P, Turner, A., & Speroni, K. G. (2013). National survey of hospital nursing research, part 2: Facilitators and hindrances. *JONA*, 43 (1), 18-23.

Pfund, C., Byars-Winston, A., Branchaw, J., Hurtado, S., & Eagan, K. (2016). Defining attributes and metrics of effective research mentoring relationships. *AIDS & Behavior*, 20, S238-S248.

White, E. (2012). Challenges that may arise when conducting real-life nursing research. *Nurse Researcher*, 19(4), 15-20.

Wilson, B., Kelly, L., Reifsnider, E., Pipe, T., & Brumfield (2013). Creative approaches to increasing hospitable-based nursing research. *JONA*, 43 (2), 80-88.

**Abstract Summary:**

You are a master's prepared nurse who has been asked to mentor a staff nurse with a relevant research study idea. Feeling unprepared? Learners will discuss essentials of a clinical research mentoring program from mentor qualifications and mentoring agreements to navigating common pitfalls of new investigators during research project evolution.

**Learning Activity:**

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
1. The learner will be able to discuss five components of a research mentoring agreement in the clinical setting	I. Components of Research Mentoring Agreement A. Mentor Qualifications 1. Educational preparation and research

	<p>coursework 2. Experience with proposal writing and conduct of research 3. Research vs. content expert 4. Interest, patience and time</p> <p>B. Expectations 1. Confidentiality and safe environment 2. Goals 3. Timeline 4. Meetings 5. Work to be accomplished C. Roles 1. Mentee 2. Mentor D. Self-Awareness 1. Speaking only for self 2. Speaking only of your experiences 3. Knowing what you don't know E. Measures of Success 1. For mentor 2. For mentee 3. For healthcare system</p>
<p>2. The learner will be able to describe the role of a research mentor in facilitating the development of a research proposal.</p>	<p>II. Role of Research Mentor During Research Proposal Preparation A. Problem Identification and Significance 1. Research vs PI vs EBP project 2. Interesting clinical problem vs. institution priority 3. Logical flow from background to RQ and study purpose B. Literature Appraisal 1. Library search skill development – librarian as team member 2. Quantity and quality of literature 3. Fine tuning of RQ based on literature appraisal C. Study Design 1. Choice of qualitative, quantitative, mixed methods 2. Adherence to institutional guidelines for proposal 3. Sampling –rationale for inclusion/exclusion criteria 4. Sample size considerations 5. Data collection instruments – match RQ 6. Importance of statistician – data analysis strategies 7. Realistic design based on time and resources D. Human Subjects Approval and Sampling 1. On-line human subjects research training 2. Use IRB template for proposal and informed consent 3. Mentee understanding of type of review 4. Mentor review prior to submission 5. Possibility of protocol revisions E. Budget and Resources 1. Internal resources (time, copies, storage space, etc.) 2. Notification of involved parties (admin, staff, MDs, etc.) 3. Support letters 4. Grants</p>
<p>3. The learner will explain five guidelines for supporting mentees during implementation of a research project.</p>	<p>III. Guidelines for Mentee Support during Study Implementation A. Data Collection Procedure 1. Step by step review of procedure 2. Practicing informed consent 3. Importance of interrater reliability 4. Data security – separate storage of consent and data B.</p>

	<p>Researcher/s and Staff Engagement While Maintaining Momentum</p> <p>1. Gaining access 2. Providing updates 3. Celebrating milestones 4. Showing appreciation</p> <p>C. Data Entry and Cleaning</p> <p>1. Training on data coding 2. Cleaning data 3. Missing data 4. Meeting with statistician</p> <p>D. Data Analysis and Implications</p> <p>1. Asking questions of statistician 2. Significant vs. non-significant results 3. Limitations and conclusions 4. Implications – internally, locally, nationally</p>
<p>4. The learner will propose at least two strategies for evaluating success of a research mentor-mentee relationship.</p>	<p>IV. Evaluating Success of Research Mentor-Mentee Relationship</p> <p>A. Translation and Dissemination</p> <p>1. Results – reporting to IRB, changing policies 2. Conference possibilities – think ahead 3. Writing for publication</p> <p>B. Transformation</p> <p>1. Challenges of research 2. Rewards of research 3. The mentoring chain</p>

**Abstract Text:**

The increase in hospitals seeking designation as Magnet or pursuing Magnet re-designation results in more nurses involved in research and evidence-based practice (Wilson, Kelly, Reifsnider, Pipe, & Brumfield, 2013). In a national survey of hospital nursing research (Kelly, Turner, Speroni, McLaughlin & Guzzetta, 2013), availability of research mentors was the top facilitator for Magnet and non-Magnet hospitals. Although one or two PhD-prepared nurse research facilitators may be part of the hospital infrastructure, there is limited time to mentor each fledgling staff nurse investigator or team. Identifying and inviting masters-prepared nurses to mentor is a logical approach to this growing institutional need. These nurse leaders typically have completed statistics, research and evidence-based practice coursework during their graduate education and may have conducted research with colleagues. However, many are not seasoned researchers and hesitate to become research mentors. They are willing but question their ability to do so.

The purpose of this session is to discuss essential elements of a research mentoring program in the clinical setting. Educating and supporting the prospective mentor is a crucial first step. Qualifications of research mentors and components of a mentoring agreement are delineated (Eller, Lev & Feurer, 2014). Mentors must know that the hospital's doctorally-prepared nurse research facilitator or academic nurse researchers are available to refresh knowledge and skills, offer resources and provide consultation as needed.

Research mentors assist the new investigator to select and appraise the best evidence to develop a relevant and realistic research question and then select a fitting methodology. This daunting step can squelch the novice's enthusiasm so building a research team of staff nurses/interdisciplinary colleagues can ease the burden. Medical librarians and statisticians are an integral part of the team (Brannan, Dumsha, & Yens, 2013). Ethics in human subject research must be emphasized. Maintaining appropriate role boundaries, particularly if conducting research on the novice investigator's own unit, should be discussed. Gaining access to prospective subjects includes frequent communication and negotiating with administrators and healthcare colleagues. Because new investigators often neglect to consider the human and financial resources required to conduct a study (Brannan et al., 2013; White, 2012), mentors can help develop contacts, timelines and suggestions for possible small grant applications.

Research mentors strive to minimize common pitfalls encountered by novices during study implementation. Inter-rater reliability checks and data collection practice runs help novice investigators to anticipate potential problems and formulate alternatives. Research mentors provide support but must be careful not to take over during challenges such as not meeting subject enrollment goals. Mentors learn to role model how to work with the statistician in order to appropriately answer the research question/s. Celebrating successes should be a routine part of mentor-mentee meetings. Evaluation of research product dissemination as well as psychosocial and career-related outcomes of clinical research mentoring is important for both mentor and mentee success (Eller et al., 2014; Green & Jackson, 2014; Pfund, Byars-Winston, Branchaw, Hurtado, & Eagan, 2016) as well as to advance the research mission of the institution.