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A phenomenological study of nurse clinicians' participation in an evidence-based practice clinical research fellowship program

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A PHENOMENOLOGICAL STUDY OF NURSE CLINICIANS' PARTICIPATION IN

AN EVIDENCE-BASED PRACTICE CLINICAL RESEARCH FELLOWSHIP

PROGRAM

A dissertation submitted in partial satisfaction

of the requirement for the degree of

Doctor of Education in Organizational Leadership

by

Cheryl A. Hernandez

May 2009

Kent Rhodes, Ed.D.–Dissertation Chairperson

This dissertation, written by

Cheryl A. Hernandez

under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

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DEDICATION

This dissertation is dedicated to my father, Charles Edward Hernandez (1931–1980). His unconditional love empowered me, his fatherly pride elevated me, and his crazy, unabashed passion for life inspired me. I seemed to have inherited his insatiable thirst for knowledge, and it is with heartfelt love and pride that I complete this dissertation in his honor. I know he would be busting his buttons if he were here! This one's for you, Dad.

ACKNOWLEDGMENTS

First on the list to acknowledge is my biggest fan and cheerleader: my husband, Fred. Without his love, support, encouragement, and unwavering belief, the completion of this degree and dissertation would not have been possible. I thank you from the bottom of my heart, and I love you with ALL my heart (LTTWW). You and me…forever.

I would also like to acknowledge my children, Shelli, Ben, and Karin, for loving their mom no matter what, and for believing she is capable of ANYTHING (except cooking). I love you all more than words could ever describe. It's a beautiful blessing when your children grow up to be incredible adults who then become your friends.

My mother, Billie, and my brother, Eddie, showed me how to persevere through incredibly difficult and painful times, and the power of love and devotion. Thank you for not EVER having any doubt that there would someday be a Dr. Hernandez in the family! I love you both so very much.

And last, but certainly not least, I would like to acknowledge my dissertation team: Professors Rhodes, Leigh, and Bouldin. I feel like I had the Dream Team guiding me through dissertation—you were all absolutely incredible. I thank you for your scholarly contributions to this dissertation; I was so fortunate to have your wisdom, knowledge, and expertise at my disposal. I thank you for your belief in my doctoral capabilities, and for fostering my growth and development as a scholar. I have learned from the best, and have the absolute utmost respect and admiration for each of you. Thank you, thank you, thank you!

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ABSTRACT

Despite an abundance of scientific evidence to ensure nurse clinicians deliver the highest quality of care to achieve optimal outcomes for patients, barriers and challenges exist that prevent adoption of this evidence into routine clinical practice. Evidence-Based Practice Clinical Research Fellowship Programs (EBP CRFP) are designed and implemented to facilitate the adoption of scientific evidence into clinical nursing practice; however, these programs have not been adequately evaluated in terms of the impact of the program on participants, their clinical practice, and the organization. The purpose of this hermeneutical phenomenological study was to explore the lived experiences of nurse clinicians who have participated in the EBP CRFP at a 700 bed hospital in Southern California to explore what impact this program had on their professional lives.

This study utilized face to face interviews with six participants who graduated from the EBP CRFP in June of 2008. The data collected was analyzed utilizing a systematic process of data analysis that involved Epoche, phenomenological reduction, imaginative variation, and synthesis. Seven themes emerged from the data that connected the experiences of the all the participants and were categorized as: (a) increased confidence, (b) empowerment (c) commitment to practice development and improvement, (d) pursuit of knowledge, (e) ethical imperative for EBP, (f) excitement and enthusiasm for the EBP process, and (g) awareness of the burning clinical questions.

The findings of this study indicates that in addition to the benefits EBP is purported to have for nurse clinicians, there may also be universal outcomes positively impacting nurses who have graduated from an EBP CRFP. The study supports the need for further exploration and evaluation of these programs in terms of not only the

professional and personal impact upon the nurse, but the impact upon the patients and

organizations as well.

Chapter 1: Introduction

Opening Vignette

Imagine you have been in a terrible car accident and sustained multiple rib fractures from hitting your chest on the steering wheel. Breathing will become difficult and extremely painful; each breath feels like a knife in your chest. In the emergency room, a breathing tube is placed down your throat, through your windpipe, and into your lungs to facilitate breathing. This tube, a mere ¼ inch in diameter, will be attached to a machine known as ventilator, to supply oxygen and breathe for you. Your every breath depends entirely upon this tube delivering oxygen from the ventilator into your lungs.

Fluid accumulates in your lungs as a result of tissue damage from your rib fractures, and is pooling in your windpipe. The breathing tube impairs your ability to cough effectively, and the pain associated with coughing is unbearable; you must rely on your nurse to suction these secretions out of the tube. Your nurse comes to your bedside, and instills approximately one tablespoon of salt water (saline) down your breathing tube to flush the tube and liquefy your secretions before suctioning. She then inserts a 14-inch long catheter directly into your breathing tube and applies suction. Unfortunately, his catheter will not only remove the unwanted secretions, it will suck out all the air being delivered to you from the ventilator. A single pass at suctioning may last anywhere from 10 to 60 seconds, and is literally the equivalent of having your ventilator disconnected, thus depriving you of oxygen for the duration of the pass. Your nurse might make multiple passes through your tube before she is satisfied that she has successfully removed all the secretions. What about you, the patient, what do you experience during this procedure?

Research on this suctioning practice has found that not only is this procedure psychologically traumatizing, it has serious physiological consequences as well. Imagine having someone put a tablespoon of salt water directly into your windpipe and lungs; you begin to cough violently, choking as the solution enters your lungs. You begin to experience a sense of panic; you feel like you are drowning. Suctioning will also give you the sensation of suffocation as the catheter sucks the air from your breathing tube and your lungs. Your pain level rises sharply as the coughing aggravates your rib injuries, and your oxygen level drops dramatically as your nurse removes the secretions—and your oxygen. Intercranial pressure rises rapidly causing exertion of potentially dangerous pressure on your brain as your blood pressure begins to fall, effectively depriving your body's tissues of oxygen and nutrients. You are also more susceptible to pneumonia because of the potential introduction of bacteria (pathogens) into your lungs via your breathing tube during the saline flush. When your nurse has finished suctioning, your pain level has increased, and you are left to fear and dread your next episode of suctioning.

Normal saline installation is standard practice for many nurses; they faithfully perform this procedure for their patients as they were trained to do in nursing school. Do the benefits of suctioning this way outweigh the negative side effects and associated risks? Is this really the best practice your nurse has to offer? In the late 1990s, empirical studies found that normal saline installation prior to suctioning is not the best nursing practice. Based on the latest scientific research and evidence, best practice for suctioning is for your nurse to: (a) provide continuous intravenous sedation and pain medication to ease your anxiety and control your pain; (b) provide warm, humidified oxygen via the

ventilator to keep your secretions moist and easy to remove; (c) suction only when absolutely necessary to avoid potential pathogen introduction; (d) supply 100% oxygen for a full minute prior to suctioning to eliminate the feeling of suffocation and diminish the physiological effects of oxygen deprivation; (e) verbally prepare you for what you may experience during the procedure; and (f) provide therapeutic comfort, care, and reassurance throughout the procedure. This begs the question: why would any nurse not utilize the best practice based on the latest scientific evidence to provide care for his or her patients?

The Problem Statement

Despite an abundance of scientific evidence regarding nurse clinicians' delivery of the highest quality of care to achieve optimal outcomes for patients, multiple barriers and challenges exist that prevent adoption of this evidence into routine clinical practice. Evidence-Based Practice Clinical Research Fellowship Programs (EBP CRFP) are specifically designed and implemented to facilitate the adoption of scientific evidence into clinical nursing practice; however, these programs have not been adequately studied, evaluated, or explored in terms of the impact of the program on nurse clinicians, their clinical practices, or their organization.

Background for the Research Problem

On a daily basis, nurse practitioners, nurses, physicians, and other health care providers are faced with an array of important clinical decisions that can drastically impact the lives and well-being of patients. Health care providers must not only ascertain the correct clinical diagnosis for patients and initiate appropriate interventions to address the problems identified, they must provide professional guidance and support to patients

as well. Confounding these critical life-and-death decisions is the uncertainty and ambiguity found in health care. Which treatment is most effective to produce the best patient outcome? How are patients experiencing their illness? What will be the outcome of a diagnosis if left untreated? Fortunately for clinicians, practice based on research evidence can decrease the insecurity, confusion, and anxiety that patients and clinicians experience in the ever-spiraling complexity of health care. Unfortunately, with more than 1,500 new research articles published every day the challenge for clinicians to remain up to date has become a seemingly insurmountable task (Matter, 2006; Salmon, 2007).

Despite the vast amount of literature infused daily into the world of medicine (Cochrane, 1979; Gerrish et al., 2007; Matter, 2006; Salmon, 2007; Upton, 1999) there is a tremendous lag between the publication of research and its utilization (Cochrane, 1979). "It now takes an average of 17 years for new knowledge generated by randomized controlled trials to be incorporated into practice" (Institute of Medicine, 2001, p. 2). In an era known for an explosion of scientific knowledge as well as an alarming nursing shortage (American Association of Colleges of Nursing, 2006), there has never been a more urgent need for clinicians to translate research evidence into best clinical practice in a time-efficient manner (Melnyk & Fineout-Overholt, 2005a). Evidence-Based Practice (EBP) is a problem-solving approach to clinical practice that integrates the conscientious use of best evidence (i.e., the latest scientific research) in combination with a clinician's expertise as well as patient preferences and values to make decisions about the type of care that is provided.

The term EBP was originally coined in the early 1980's by the medical community as Evidence-Based Medicine (EBM; Cope, 2003), and was later adopted in

the late 1990s by the nursing community as Evidence-Based Nursing (Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996). The current emphasis in the health care community has been to join these two forces to promote EBP to optimize care and improve patient outcomes. Patients want to receive quality clinical care, and practitioners desire to provide that care. EBP is an approach that enables clinicians to provide the highest quality of care in meeting the multifaceted needs of their patients and families by integrating the three components essential to EBP: (a) utilization of the latest empirical evidence; (b) clinician expertise; and (c) patient preferences and values.

Incorporating EBP into clinical practice assures the use of best practices founded in research to provide "safe, effective, and efficient patient care" (Goolsby, 2004, p. 524) by minimizing clinical errors and optimizing nursing care. An EBP approach to patient care helps clinicians meet the universal goal of improving the quality of health care and is ultimately, "the difference between good and excellent care" (Hockenberry, Walden, & Brown, 2007, p. 222). When health care providers know how to find, critically appraise, and use the best evidence, and when patients are confident that their health care providers are using evidence-based care, optimal outcomes are more likely (Beasley & Mullally, 2007; Cochrane, 1979; Colyer & Kamath, 1999; Cope, 2003; Evers, 2001; Gerrish & Clayton, 2004; Leach, 2006; Melnyk, 2002; Milne, Krishnasamy, Johnson, & Aranda, 2007; Mock & McCorkel, 2003; Pipe, 2006; Salmon, 2007; Shorten & Wallace, 1997; Sleep, Page, & Tamblin, 2002).

Considerable time and attention has been devoted to developing and evaluating new clinical innovations. Unfortunately, it is estimated that nearly 25% of patients continue to receive treatments that are unnecessary or potentially harmful, while almost

40% of patients do not receive treatments of proven effectiveness (Grol & Grimshaw, 2003). Multiple barriers to research utilization have been comprehensively reported in the nursing literature and appear to fall within seven main categories: (a) Lack of knowledge/unfamiliarity with EBP (Alspach, 2006; Gerrish & Clayton, 2004; Gerrish et al., 2007; Leach, 2006; Melnyk, 2002; Ring, Coull, Howie, Murphy-Black, & Waterson, 2006; Salmon, 2007; Sleep, Page, & Tamblin, 2002; Wujcik, 2001; (b) Discomfort with the complexity of the research process (Alspach, 2006; Cooke et al, 2004; French, 1999; Gerrish & Clayton, 2004; Gerrish et al., 2007; Leach, 2006; Melnyk, 2002; Ring et al., 2006; Salmon, 2007; Sleep, Page, & Tamblin, 2002; Wujcik, 2001); (c) Lack of time (Alspach, 2006; Ferguson & Day, 2007; Gerrish & Clayton, 2004; Gerrish et al., 2007; Killeen & Barnfeather, 2005; Leach, 2006; Melnyk, 2002; Ring et al., 2006; Salmon, 2007; Sleep, Page, & Tamblin, 2002; Wujcik, 2001); (d) Little or no access to information services (Alspach, 2006; Cooke et al., 2004; Gerrish & Clayton, 2004; Gerrish et al., 2007; Ring et al., 2006; Salmon, 2007; Sleep et al., 2002; (e) Lack of organizational support/commitment (Cooke et al., 2004; Gerrish & Clayton, 2004; Leach, 2006; Melnyk, 2002; Ring et al., 2006; Salmon, 2007; Shorten & Wallace, 1997; Wurmser, 2007); (f) Low interest in EBP/skepticism of the process (Cooke et al., 2004; French, 1999; Salmon, 2007; Sleep et al., 2002); and (g) Limited authority or power to change actual practice (Cooke et al., 2004; French, 1999; Gerrish et al., 2007; Salmon, 2007).

While overcoming these barriers to research utilization is certainly a top priority in health care; the real challenge for health care organizations, and nursing in particular, is "to incorporate the need to prepare the workforce to deal with the growing body of

evidence and to consider how to facilitate the adoption of this evidence into routine clinical practice" (Milne et al., 2007, p. 1630). Many health care organizations have responded to this challenge by implementing EBP Clinical Research Fellowship Programs (CRFP) in their facilities in an effort to assist nurse clinicians' incorporation of research into their daily practice.

EBP CRFPs were created for health care organizations desiring to indoctrinate their nurses in the practices of EBP in an effort to facilitate a culture change. The aim of this type of program is to educate nurse clinicians about EBP and empower them to change their current nursing practice toward ones that embrace EBP. The ultimate goal of the EBP CRFP is to promote professional development while simultaneously infusing EBP into the organizational culture.

The Purpose Statement

Given the lack of research into EBP CRFPs in general, and their participants in particular, a phenomenological research approach is proposed to explore the impact of this type of program on the participants. The purpose of this hermeneutical phenomenological study is to explore the lived experiences of nurse clinicians who participated in an EBP CRFP at a large (700 bed) Southern California medical center to determine what impact this program had on their professional lives.

Research Questions

1. What is the lived experience of the nurse clinicians' participation in an EBP CRFP?

2. What impact does an EBP CRFP program have on the professional lives of participating nurse clinicians?

Key Terms and Operational Definitions

Barriers. These are the obstacles that hinder or prevent nurses from using research in everyday practice. Numerous studies have cited several factors identified as barriers to the use and implementation of EBP into nursing practice. Numerous common findings have emerged in the literature and will be listed and discussed further in the review of literature section.

Best research evidence. A term used to describe clinically relevant research, often from the basic sciences of medicine and especially from patient-centered clinical research.

Clinical expertise. A term used to describe the proficiency and professional judgment that practitioners acquire through professional education and clinical experience. This would be inclusive of pathophysiologic knowledge as well as intuition.

EBP. A problem-solving approach to clinical practice that integrates the conscientious use of best evidence in combination with a clinician's expertise as well as patient preferences and values to make decisions about the type of care that is provided (Melnyk & Fineout-Overholt, 2005b).

EBP Committee. This committee provides internal support to and between the subset of EBP specialty focus teams and coordinates external relationships and networks for the teams. Members actively direct and ensure general EBP awareness and education, and determine EBP tools and structure to allow for consistency among the EBP specialty focus teams. The membership is composed of team leaders from the key EBP specialty focus teams (Beyea & Slattery, 2006).

EBP CRFP. A comprehensive program designed specifically for nursing or other allied health care workers in an organization that wishes to indoctrinate its workers in the practices of EBP in an effort to facilitate a culture change. This type of program endeavors to increases nurse clinicians' ability and confidence to generate research questions that are meaningful to practice and then investigate them in a rigorous and timely manner. The program is purported to have benefits for nurse clinicians (in terms of building confidence, knowledge, and skills) as well as the organization (in terms of providing evidence-based care and increasing quality of care and patient safety; Beyea & Slattery, 2006).

EBP Specialty Focus Team. This group is started through natural networking (grassroots efforts) for support and problem solving and is composed of unit-based members who get involved in topics of interest as they arise, thus creating a stimulating work environment. The team holds interdepartmental meetings to encourage more proactive and effective use of every team member's expertise. It is recommended that each core service line formulate an EBP special focus team. This team is headed by a subject-matter expert who coordinates his or her specialty's EBP projects and membership.

EBP Steering Committee. A committee that oversees the EBP Committee, Nursing Policy and Procedures Committee, and the Nursing Research Committee. In addition, the committee obtains necessary resources and expertise, allocates resources to ensure productivity is maintained in all the committees, and provides positive administrative support and direction. This committee provides the organizational strategic and tactical alignment for the EBP efforts.

Internet technology databases. Electronic resources are the primary ways to search the literature to find relevant evidence to guide practice by accessing the Internet. Internet sources referred to herein include (but are not limited to) National Library of Medicine, Cochrane Library, National Guideline Clearinghouse, Joanna Briggs Institute, Netting the Evidence, Centre for Evidence-Based Medicine University Health Network, Centre for Health Evidence, Registered Nurses Association of Ontario, and nursing-specific, evidence-based Web resources such as University of Minnesota, Centre for Evidence-Based Nursing, McGill University Health Centre's Research and Clinical Resources of Evidence-Based Nursing, University of North Carolina Health Science Library, and the Academic Center for Evidence-Based Nursing.

Lived experience. Lived meanings describe those aspects of a situation as experienced by the person in it (Creswell, 2007), and the "lived experience" (p. 57) refers to the way a person experiences and understands his or her world as real and meaningful. Areas of possible descriptives for the nurse clinician's experience could include: (a) learning the research process, (b) learning the EBP process, (c) implementing an EBP project, (d) evaluating current practice, (e) changing current practice, (f) being a change agent in the organization, and (g) transforming professional practice.

Magnet Recognition Program. The Magnet Recognition Program was developed by the American Nurses Credentialing Center (ANCC) to recognize health care organizations that provide nursing excellence. The program also provides a vehicle for disseminating successful nursing practices and strategies. The magnet designation process includes the appraisal of qualitative factors in nursing. These factors, referred to as forces of magnetism, were first identified through research done in 1983. The full

expression of the forces embodies a professional environment guided by a strong visionary nursing leader who advocates and supports development and excellence in nursing practice. As a natural outcome of this, the program elevates the reputation and standards of the nursing profession. Recognizing quality patient care, nursing excellence, and innovations in professional nursing practice, the Magnet Recognition Program provides consumers with the ultimate benchmark to measure the quality of care that they can expect to receive (ANCC, 2005).

Nurse clinician. A professional nurse working independently to provide specialized nursing and medical treatment and care to a specific group of patients based on direct study and observation of these patients. Specifically, a registered nurse (RN) is a health care professional responsible for implementing the practice of nursing through the use of the nursing process (in concert with other health care professionals). In their work as advocates for the patient, RNs ensure that the patient receives appropriate and professional care utilizing the nursing process to assess, plan, implement, and evaluate nursing care of the sick and injured.

Nursing research: Involves systematic inquiry specifically designed to develop, refine, and extend nursing knowledge. As part of a clinical and professional discipline, nurses have a unique body of knowledge that addresses nursing practice, administration, and education. Nurse researchers examine problems of specific concern to nurses and the patients, families, and communities they serve.

Nurse Research Council: A committee that provides research direction, education, and implementation assistance to varying degrees for the organization, and is responsible for visibly fostering and mentoring the research process. The committee

caters to both internal and external sources of nursing research and provides a forum for nurses to discuss areas of interest, coordinate journal clubs, and receive information about EBP and nursing research. Committee membership should include associate, baccalaureate, master, and doctoral prepared nurses from representative clinical departments throughout the facility (Bayea & Slattery, 2006).

Patient preferences and values: A term used to describe the unique preferences, concerns, expectations, and values each patient brings to the clinical experience.

Professional impact: The nurse clinician's perception of the impact of the program upon his or her professional life as a nurse clinician. Areas to be considered, examined, and explored in the clinician's professional life include translation of learning into behavior through incorporation of EBP into practice, participation in EBP journal clubs, publication and presentation of personal EBP projects, teaching and sharing of EBP with colleagues, development of other EBP research projects, and employment benefits (tangible and intangible) derived from participation in the EBP CRFP. Data will be collected through interviews with EBP CRFP graduate nurses.

Research champion: These are individuals who can champion and promote EBP within their own departments. They should serve on the Nursing Research Council or EBP Specialty Focus Teams, and can be from any field in health care (e.g., doctors, physical therapy, respiratory therapy, librarian, nurse clinician, etc.). Their participation and involvement might be extremely helpful and bring energy and enthusiasm to the group.

Research utilization: This is a process that involves critical analysis and evaluation of relevant research, and how these findings fit into clinical practice in order

to improve practice and provide better outcomes for patients. Incorporating pertinent research findings into clinical practice and evaluating the changes' effectiveness, helps close the gap between research and practice (i.e., theory-practice gap; Beyea & Slattery, 2006).

Sigma Theta Tau: This is the honor society of nursing that exists to improve the health of people by increasing the scientific base of nursing research. The founders of this organization chose the society's name from the meaning of the Greek words Storge, Tharsos, and Time: love, courage and honor. The founders' vision for the society helped bring recognition to nursing as a science. In 1936, it became the first organization in the United States to fund nursing research; it is the second-largest nursing organization in the world (Sigma Theta Tau, 2006).

Nature of the Intervention

EBP CRFP first surfaced in the early 2000s as an educational program and tool to advance EBP in nursing practice (Malloch & Porter-O'Grady, 2006). The program was designed to introduce and immerse the nurse clinician in the EBP process through the development of knowledge and implementation of skills such as literature search and review, clinical problem and project identification, abstract and journal writing, and professional presentation. The goal of an EBP CRFP is to inform and educate frontline nurse clinicians in the practices of EBP in an effort to facilitate implementation of EBP into their professional practice.

This type of program endeavors to increases nurse clinicians' ability and confidence to generate research questions that are meaningful to practice and then investigate them in a rigorous and timely manner. The program is purported to have

benefits for nurse clinicians (i.e., building confidence, knowledge, and skills) as well as the organization (i.e., providing evidence-based care and increasing quality of care and patient safety). EBPC NRFPs are designed to effect a change not only in nurse clinician's professional practice, but ultimately in the organizational culture.

The EBP CRFP program involved in the proposed research study was developed by a nurse researcher for implementation at a large (700 bed) Southern California medical center. The program was designed to accept 8 to 12 applicants per year, and graduated the first group of nurses in June, 2008. The objective of the implementation of this EBP CRFP at this facility was to indoctrinate nurses in the practice of EBP to promote professional development while simultaneously infusing EBP into the organizational culture.

Importance of the Study

In 2000, the Department of Health declared, "The vision for nursing in the 21st century is for all nurses to seek out evidence and apply it in their everyday practice" (as cited in Beyea & Mullaly, 2007, p. 4). To realize this vision will require a paradigm shift in nursing practice and entail a cultural change in the nursing environment toward one that supports and values evidence-based care. Exploration of nurse clinicians' lived experiences in EBP CRFP (i.e., the impact of this program on their professional and personal life) is necessary to determine if these programs are, indeed, facilitating such a culture change. In addition to providing a greater understanding of the nurse clinician's journey into the world of EBP, the implications of this phenomenological study are widespread, spanning the entire spectrum in the profession of nursing from education (i.e., how best to introduce and educate nursing students) to development of professional

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practice (i.e., facilitating novice nurses to expert nurses), to the continual improvement of nursing practice (i.e., replacing traditional practice with EBP). There is also great potential for providing valuable insight into a potential use of EBP CRFP to help bridge the notable practice-theory gap in nursing.

The differences between practical and theoretical knowledge have long been misunderstood (Schön, 1987), and although known as singularly distinct components of professional practice, theory and practice are not mutually exclusive in the development of nursing practice and expertise. Implementation of EBP provides a professional work environment that engages and optimizes the practical, empirical, and theoretical foundations of nursing (Pipe, 2006).

Limitations of the Study

The use of interviews and questionnaire surveys require self-reporting measures that can be influenced by perceptions, expectations, and professional desirability biases. It is also difficult to ascertain the bias of respondents (i.e., the use of research as often or as rarely as they report). That is to say, issues of both honesty and self-awareness of the respondents should be taken into considerations as potential limitations of the study. However, participants' responses "should be judged not in terms of the accuracy of the participants' recall of the actual event but in terms of the accuracy of *how they felt or experienced or perceived the event at the time*" (Richards & Morse, 2007, p. 119). In addition, Creswell (2003) cites several other limitations of interviews:

- Provides "indirect" information filtered through the view of the interviewees;
- Provides information in a designated "place" rather than the natural setting;

- Researcher's presence may bias responses;

- People are not equally articulate and perceptive. (p. 186)

There was initially a concern regarding another potential limitation for this particular study, as participants were given the final transcripts of their interview to review, reflect, clarify, and modify their initial responses, and Herda (1999) advises to make "any changes the participants want to make in the text" (p. 98). This could potentially have altered significantly the original recollections of the participants to present themselves in a better light, and potentially embellish the original interview recollections. However, this did not prove to be an issue or limitation.

Another limitation associated with interviews is audio taping and transcribing the interview. Although the interview will be transcribed verbatim, the affective component of the interview might be lost in the transcript. This limitation will be addressed by jotting notes and recoding information on the interview protocol during the interview. The notes will be considered and incorporated into the final transcript to add affective value to the narrative text.

The limitations of this study are those of qualitative study designs in general in that the research findings might be subject to other interpretations. According to Polanyi (as cited in Seidman, 2006):

> As illuminating as in-depth interviews can be, as compelling as the stories are that they can tell and the themes they can highlight, we still have to bear in mind that Heisenberg's principles of indeterminacy pervades our work, as it does the work of physicists. (p. 130)

Therefore, one must allow for a "considerable tolerance of uncertainty" (p. 130) in the way results are reported in qualitative research. Other designs such as quantitative and mixed methods can be used to evaluate and explore the results further and in greater depth at some later time.

Assumptions of the Study

The following factors are noted to be potentially influential to the proposed research study:

1. The researcher's prior knowledge, experience, and practice of EBP as a nurse clinician. This factor will be mitigated through the use of bracketing. In the Epoche, or bracketing, the researcher "sets aside their experiences, as much as possible, to take a fresh perspective toward the phenomenon under examination" (Creswell, 2007, p. 60). Herda (1999) states, "Prejudice or bias becomes a necessary part of the act of interpretation, because we bring our background and being into the act" (p. 25). According to Moustakas (1994), in the Epoche, "we set aside our prejudgments, biases, and preconceived ideas about things" (p. 85). In an effort to address this influence and personal bias, the researcher's beliefs will be stated explicitly in Chapter Three under the Researcher's Beliefs section.

2. The researcher's belief that nursing is a science and an art, thus necessitating a qualitative (rather than quantitative) approach to research in order to capture the essence of nursing. Phenomenology has become an accepted research method for the human sciences; however, the researcher recognizes and

acknowledges the broad philosophical assumptions of phenomenological

research.

3. The accuracy or utility of the questions and/or questionnaire used during the

    interview process. The researcher's development of descriptions of the

    essence of the nurse clinician's lived experiences will be clustered to identify

    common themes and meanings.

4. The honesty of the participants in their responses to questions. However, the

    data collected are the individual's perception within the context of a universal

    phenomenon, and as such, that reality is "only perceived within the meaning

    of the experience of an individual" (Creswell, 2007, p. 59).

Summary

The research problem has been identified as the lack of empirical evidence to

support the use of EBP CRFPs, and the researcher calls for exploration and evaluation of

this type of program to determine the personal and professional impact of these programs

upon nurse clinicians as well as to identify the organizational benefits to the health care

facility. Chapter One provided background of the research problem, the purpose and

significance of the study, and proposed research questions for the study. The limitations

and assumptions of the study have been identified, and terminology related to the study

defined.

Chapter Two will provide a review of the relevant literature pertaining to the EBP

process, the implementation of EBP into nursing practice, barriers to this implementation

process, and frameworks and strategies identified to facilitate EBP implementation to

create an environment of EBP.

Chapter 2: Review of the Literature

Introduction

Clearly, the use of research in practice is not a new concept to nursing, as it can easily be traced back to the mother of nursing, Florence Nightingale. It appears that long before this practice became in vogue, Nightingale not only understood the nature of empirical research, but she also wrote about the importance of utilizing observational evidence, particularly with respect to pathogenic microorganisms discovered in the environment during the Crimean War in 1854. In her book, *Notes on Nursing*, Nightingale (1859) writes:

> In dwelling upon the vital importance of sound observation, it must never be lost sight of what observation is for. It is not for the sake of piling up miscellaneous information or curious facts, but for the sake of saving life and increasing health and comfort. (p. 103)

Undoubtedly, Nightingale was one of the first caregivers to identify the importance of the utilization of evidence in nursing care to improve patient outcomes.

More than a century later, the professional literature abounds with references to research utilization. In a concerted effort to incorporate the use of empirical evidence into professional practice, there has been a paradigm shift in nursing practice from one of pure tradition (i.e., doing things the way they have always been done) toward one of utilizing relevant research to provide optimal care and achieve better outcomes for patients. This noble nursing endeavor is called EBP.

Definitions of EBP

The term EBP originated from evidence-based medicine (EBM) in the early 1980s at the School of Health Sciences at McMaster University in Hamilton, Ontario, Canada, and was used to describe an approach to clinical learning (Cope, 2003). The first definition of EBM was developed by the EBM Working Group (1992) at McMaster: "Evidence-based medicine de-emphasizes intuition, unsystematic clinical experience, and pathophysiologic rationale as sufficient grounds for clinical decision-making and stresses the examination of evidence from clinical research" (p. 2420).

A more frequently used definition in the nursing literature was later developed by Sackett et al. (1996) at the Centre for Evidence-Based Medicine at the University of Oxford in England and defined EBM as, "the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients…evidence-based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research" (p. 71).

French (1999) makes a valiant attempt to further differentiate EBP from the older concepts of applied research (i.e., research utilization) in an effort to move toward a more scientific construct of the process. He argues that EBP must be universally defined and operationalized as a scientific construct if it is to have any utility at all. In his article, "The Development of Evidence-Based Nursing" (EBN), French endeavors to clarify the concept of EBP in terms of defining the process and its attributes in an effort to move EBP from merely academic rhetoric to an actual practice reality in nursing. After a thorough and conscientious analysis of the process, he offers the following definition of EBN: "The systematic interconnecting of scientifically generated evidence with the tacit

knowledge of the expert practitioner to achieve a change in a particular practice for the benefit of a well defined client/patient group" (p. 74).

The use of the terms EBM, EBN, and EBP appears to have led to confusion and discourse within the medical community, and in the late 1990s and early 2000s, the literature called for the need to clarify the terminology surrounding evidence-based care, which was the agreed to be the basic tenet of the process. Goolsby (2004) stated, "Basing clinical practice on the best available evidence is now the expected standard of care in medicine and nursing" (p. 520). Many researchers argued that it was no longer appropriate (or acceptable) to use the term EBM, as this implied the concept applied only to medicine, and conversely the term EBN, also wrongly implied that the concept only applied to nursing.

Within the past decade, EBP has become common vernacular within the National Health Service, and in a concerted effort to be more inclusive and address the entire health care team, the term EBP began to surface in the literature (Beyea & Slattery, 2006). In addition, the term EBP was once again redefined to include another critical component of its practice: patient preferences and values. EBP has evolved to incorporate not just research evidence and clinical expertise, but patient preferences and values were also identified as a critical link in guiding the practitioner in making clinical decisions about the health care of individual patients. Undoubtedly, the concept of EBP encompasses the entirety of health care professionals (i.e., doctors, nurses, respiratory therapists, etc.), but for the remainder of this paper, the term EBP will be used and referred to in the context of nursing only.

More recently, Melnyk and Fineout-Overholt (2005a) offered a more universally accepted definition of EBP as, "a problem solving approach to clinical practice that integrates the conscientious use of best evidence in combination with a clinician's expertise as well as patient preferences and values to make decisions about the type of care that is provided" (p. 7). Having finally reached a consensus with regard to an acceptable definition of EBP, researchers turned to the difficult task of clarifying the concepts and processes of EBP. Goolsby (2004) elaborated on the complexity of implementing EBP into nursing practice:

> Evidence-Based Practice (EBP) incorporates thinking critically, utilizing EBP tools (e.g., algorithms, clinical practice guidelines, and critically appraising topics); searching research-based evidence resources (i.e., published literature and electronic databases); evaluating and rating evidence (e.g., systematic reviews, meta-analyses, and rating schemes); and implementing change into clinical practice. (p. 520)

As Goolsby points out, integration of theory (i.e., relevant research findings) into professional practice would be no small undertaking. And although the literature is littered with information about the process and components necessary to practice EBP, there appears to have been little attempt to explain how these different worlds might be integrated.

For more than 3 decades, the profession of nursing has worked toward a culture of nursing research and EBP. "Nursing research has focused on barriers, facilitators, and variables related to research utilization. Decades of study have yielded reams of data, focused interventions in nursing education, and various models dedicated to guide

research practice" (Petter, 2005, p. 42). Nonetheless, the endpoint has been consistently the same: Nurses are not implementing the research into practice.

Impetus for Change in Practice

There are several factors that are currently driving the health care industry's impetus toward the integration of EBP into the nursing practice, but the most compelling arguments for change are economic forces, variability in care, and an ethical imperative that is central to the nursing profession.

Economic forces. The United States has the most expensive health care system in the world with per capita health expenditures far above those of any other nation (Bodenheimer, 2005). For several years, the United States health care costs have been growing at an exponential rate and above the overall rate of inflation in the economy. The per capita expenditures for total health care for 2004 were $6,280, more than double the $2,821 from 1990 (Orszag & Ellis, 2007). Hospital care contributed to more than a quarter of the total growth in national health care expenditures from 1994 to 2004.

The Center for Medicare and Medicaid Services initiatives of pay-for-performance have brought the need for improved outcomes under even greater scrutiny, as well as potentially affecting financial reimbursements. It is predicted that if Medicare and Medicaid costs continue to grow at the same rate as the past 40 years, "federal spending is expected to increase to 20% of the gross domestic product by 2050; this is approximately the share of the economy now accounted for by the federal government" (Orzag & Ellis, 2007, p. 1885).The continuous escalation of health care costs has left government and purchasers of health care "demanding accountability for effectiveness and efficiency in health care" (Salmond, 2007, p. 114). The Institute of Medicine (2001)

proposed that use of EBP would provide greater consistency of patient care, utilizing the most up-to-date and best research to obtain optimal outcomes, resulting in standardized care that is more cost effective, equitable, and of higher quality. EBP can offer the provision of ethical, safe, quality, cost-effective health care based on best evidence with patient preferences and clinical expertise taken into consideration.

Variability in care. "The U.S. health care delivery system does not provide consistent, high quality medical care to all people" (Institute of Medicine, 2001, p. 1). A range of strategies have been adopted to develop health care and to promote the achievement of EBP; however, "despite these advances, it is recognized internationally and within countries there is much variation between best evidence and actual healthcare practice" (Tolson, Booth, & Lowndes, 2008, p. 682). "A great chasm exists between the care that patients receive and the care that patients should be receiving. In other words, healthcare is not high quality and it is not safe" (Beitz, 2008, p. 10). "Healthcare harms patients too frequently and routinely fails to deliver its potential benefits" (Institute of Medicine, 2001, p. 1). Patients receiving research-based nursing interventions (i.e., EBP) can expect better outcomes than patients who receive standard or traditional nursing care (Cleary-Holdforth & Leufer, 2008). The failure of nurses to integrate EBP into their practices results in "care that is of lower quality, less effective, and more expensive" (Beyea & Slattery, 2006, p. 10).

Considerable time and attention has been devoted in research to developing and evaluating new clinical innovations to ensure high-quality patient care. Regrettably, it is estimated that nearly 25% of patients continue to receive treatments that are unnecessary or potentially harmful, while almost 40% of patients do not receive treatments of proven

effectiveness (Grol & Grimshaw, 2003).

The Joint Commission for Accreditation of Hospital Organizations (JCAHO) is the regulatory organization that surveys health care institutes to assure national standards, organizational goals, and outcomes are being met. Evaluations by JCAHO are founded on the concepts of EBP to ensure high quality, cost-effective care as the gold standard for all patients (Beyea & Slattery, 2006). The issues surrounding the failure to provide EBP to patients is so compelling that the United States Department of Health declared it of utmost priority in health care, urging all nurses to implement EBP into their everyday practice to eliminate the variability in care to ensure best practice for all patients (Beasley & Mullally, 2007).

Ethical imperative. Ethical issues and dilemmas are inherent in nursing practice. Professional nurses are constantly faced with challenges to make the right decisions and to take the right actions for their patients (i.e., the ethically appropriate course of action). As many nursing theorists have pointed out, "The very profession of nursing is an ethically grounded enterprise" (Liaschenko & Peter, 2004, p. 489). The ethical tradition of nursing is self-reflective, enduring, and distinctive, and the stated goals of the nursing profession are demonstrably ethical: to protect the patient from harm, to provide care that prevents complications, and to maintain a healing psychological environment for patients and families (Curtin, 1979; Levine, 1989).

Many nursing practices are based on experience, tradition, intuition, common sense, and untested theories (Fayland, 2008). With the proven and documented knowledge that EBP is a better, safer, and more ethical approach to nursing practice, nurses can no longer be complacent with current traditional nursing practice. Quite

simply, the implementation of EBP into nursing practice is the ethically appropriate course of action.

Implementation and Integration of EBP Into Practice

Integration of EBP into everyday nursing practice requires a culture change to establish an environment that supports and values evidence-based care, and many organizations struggle to find a framework to operationalize effectively this change. The literature supports the notion that nurses will be successful in implementing EBP strategies into practice in an accepting and nurturing environment (Melnyk, Fineout-Overholt, Stone, & Ackerman, 2000), and additionally, that an environment supported by EBP reduces variability in care. Such an environmental change requires a structure, or framework, for implementing practice changes in the clinical setting.

Hockenberry et al. (2007) describe the essential components for creating an environment that supports and values an evidence-based care environment as: (a) vision, (b) engagement; (c) integration, and (d) evaluation. The vision serves as the catalyst for change; engagement provides commitment to the process; integration confirms culture change; and evaluation is necessary to determine effectiveness of change. Recognizing the importance of creating this type of environment, Beasley and Mullally (2007) devote an entire chapter in their book to the development of an EBP culture and provide some fascinating real-life examples to inspire and motivate the reader.

Acknowledging the difficulties and complexities in facilitating organizational change, Gerrish and Clayton (2004) emphasize a critical need to develop further knowledge about the operational processes necessary to facilitate EBP, and advise that successful integration will involve research, development, and evaluation as a continual

and cyclical process. Several other researchers have endeavored to provide additional frameworks for implementing EBP into nursing practice (Beasley & Mullally, 2007; Beyea & Slattery, 2006; Cooke et al., 2004; Cope, 2003; Gerrish & Clayton, 2004; Goolsby, 2004; Hockenberry et al, 2007; Hudson, 2005; Malloch & Porter-O'Grady, 2006; Payne, 2002; Pipe, 2006). The commonality of all the studies reviewed was a need for a multifaceted approach to EBP integration.

A dynamic model identified in the literature that appears easily adaptable to change is provided by O'Donnell, Petersen, Hansen-Peters, and Nagy (2005). Their model's framework provides for "consistency in outcome measurement and allows planning for improvement based on the same standards, supporting the universal goal of improving the quality of nursing care" (p. 34). Another sound framework for building an environment of EBP is offered in Hudson's (2005) work. Her four-part framework clearly delineates a structure and scope of responsibility for integrating EBP into nursing practice. Components outlined are: (a) EBP Steering Committee, (b) EBP committee and special focus teams, (c) nursing policy and procedure committee, and (d) nursing research committee. Hudson elaborates on these components in detail to provide a comprehensive framework for facilitating culture change.

Payne (2002) describes an EBP model of care derived from a well-known nursing theorist, Martha Rogers. Based upon Rogers' Diffusion of Innovations Theory, Payne provides a framework for her personal journey toward successful implementation of EBP at a large, academic health care organization. This theory includes five stages (Schultz, 2007):

- Stage I - Knowledge: Exposure to the innovation.

- Stage II – Persuasion: Opinion about the proposed innovation is formed.

- Stage III – Decision: Practice change is piloted.

- Stage IV – Implementation: Adoption of innovation.

- Stage V - Confirmation: Sustainability of the practice change.

While these stages of change are presented in an enumerated fashion, progress between the stages can move back and forth, and do not necessarily need to proceed in a progressive, linear manner.

Schultz (2007) offers that either the Stetler Organizational Model or the Promoting Action on Research Implementation in Health Systems framework can be used to examine the "contextual and individual variable that impact the organizational implementation of evidence in practice" (p. 12). Additionally, Rosswurm and Larrabee's Model for EBP (as cited in Pipe, 2006) has also been used as a successful framework for translating evidence into practice and was found to be "relevant for other leadership processes, such as translating nursing theory into practice" (p. 238). Although not a model per se, Wurmser (2007) offers some practical and useful steps for nursing managers to facilitate the implementation of EBP in any organization:

- Step I: Start with a vision and follow a strategy. A compelling vision will attract others to its pursuit. Assessment of the organization's readiness and identification of any potential barriers are key in this step.

- Step II: Provide necessary and ongoing resources. From the assessment in Step I, provide the necessary resources to facilitate EBP.

- Step III: Consult and use EBP experts. There is a definite learning curve in EBP

and many experts are willing to work with organizations to help them through this process.

- Step IV: Create a panel. Assemble ambassadors or champions of EBP and send them to conferences or other educational programs to create EBP experts within the organization.

- Step V: Promote an environment that encourages clinical inquiry. Provide support, encouragement, and nurturing of the EBP process.

- Step VI: Celebrate successes. Reward and recognize nurses for participating and completing projects; this may be unit-based or organization-wide. Support nurses attending organizational, local, regional, or national meetings to disseminate results.

A more recent trend observed in the literature appears to be a focus on not merely development of an infrastructure, but on sustaining an organizational infrastructure to support the integration process. Titler & Everett (2006) provide a model for developing innovative programs that foster the learning of essential knowledge and skills to sustain an EBP culture. She identifies examples of such programs as internships for nurses, Advance Practice Institutes, and educational programs for managers that define their role in the EBP process.

Obviously, no one model appears to be the perfect fit for all nursing departments, and according to Beyea and Slattery (2006), "numerous models have been developed and used by experts in EBP in different clinical settings" (p. 56). They present four models to choose from in their EBP guide book: (a) Academic Center for EBP (ACE) Star Model of Knowledge Transformation, (b) The University of Colorado's Evidence-Based

Disciplinary Clinical Practice Model, (c) Rosswurm and Larabee's Model for Change to EBP, and (d) The Iowa Model of EBP. The authors offer that each of these approaches or components from one or more of the models might be custom fit into a facility setting. If no model is a perfect fit, the facility might elect to adapt or create its own.

There appears to be a hodgepodge of models, frameworks, guidelines, and the like to facilitate the implementation of EBP into nursing practice, and although often confusing and difficult to ascertain the best method of integration, the models reviewed appear to have undisputable practical utility. While there are clearly challenges to the implementation process, the benefits of implementing EBP are not to be denied.

Benefits to Nurse, Facility, and Patients

The organizational implementation of EBP into the nursing culture is one of the major tenets for achieving magnet status. Magnet status is an award given by the American Nurses' Credentialing Center (ANCC), an affiliate of the American Nurses Association, to hospitals that satisfy a specific set of criteria designed to measure the strength and quality of their nursing. Force Six of the Magnet Recognition Program, Quality of Care, involves providing evidence of educational activities to engage nurses in research and EBP. Better patient outcomes have consistently been linked with Magnet hospitals and the quality of the nursing care (Turkel, 2004).

A major tenet for achieving Magnet status is that the hospitals' nursing leaders value staff nurses, involve them in shaping research-based nursing practice, and encourage and reward them for advancing in nursing practice; the implementation of EBP fulfills this requisite. A facility that has been awarded magnet status is recognized in the literature as one where nursing delivers excellent patient outcomes, has a high level of

job satisfaction, low staff nurse turnover rates, and appropriate grievance resolution (ANCC, 2005; Turkel, 2007).

The EBP practices and framework for the Magnet Recognition Program (ANCC, 2005) are supported by a body of literature that suggests hospitals awarded Magnet status characteristically have a supportive and nurturing work environment in addition to improved patient outcomes and increased nursing satisfaction (Parran, 2004). Payne (2002) describes an EBP model of care implemented at a large, academic health care organization that reported excellence in nursing care as evidenced by a number of positive outcomes such as standardized nursing care for select practices, increased patient satisfaction, decreased costs, and improved staff recruitment and retention.

Implementation of EBP provides a professional work environment that engages and optimizes "the empirical and theoretical foundations of nursing that can advance patient health and safety" (Pipe, 2006, p. 234). The Association of Critical Care Nurses (as cited in Alspach, 2006) found that EBP not only provides the best available evidence to support nursing care for acute and critically ill patients and families, but has created a mechanism to establish nursing as a pivotal force in making health care decisions and ultimately improve patient outcomes (Payne, 2002). EBP results in positive patient outcomes, improved care, and controlled costs (Ritter, 2001) in addition to improving practice, increasing patient safety, and meeting regulatory and credentialing standards of the industry (Matter, 2006).

The professionalism, excitement, challenges, and change that an EBP culture brings has served as a catalyst for retention of the best and brightest nurses and to improve the quality of care (Schultz, 2006). Utilizing the EBP process encourages critical

thinking and professionalism, thus enabling practitioners to support practices that have been clearly proved to work, question those practices for which no evidence exists, and discard those that have been shown to do harm (Shorten & Wallace, 1997). In addition to enhancing the reputation of nursing research, EBP enables nurses to validate their practices and develop the nursing knowledge base (Hunter, 1998) necessary to facilitate the paradigm shift from practice based on tradition to practice based on integration of evidence, clinical expertise, and patient preferences and values.

The literature reviewed certainly points to a multitude of benefits derived from the implementation of EBP, not just in terms of in facility and staff, but more important, in terms of patient benefits. In today's complex health care system, patients are demanding safer, better, and more sophisticated health care, and it is the duty of health care providers to rise to this challenge.

Multidisciplinary EBP Efforts

EBP is core to all health care professional practice and all academic programs that prepare health care professionals. "Inter-professional collaboration is essential to deliver unified, cohesive, patient care, yet our work in EBP is often profession-specific, without exchange of theories, models or tools in a unified approach focusing on a specific patient outcome" (Newhouse, 2008, p. 414). Unfortunately, nursing is not the only practice struggling to bridge the research-practice gap in clinical practice.

Physicians. In the early 1980s, the medical community was the first to coin the term EBM to describe a research-based clinical approach to inquiry (Cope, 2003). Beginning in the early 1990s, the term EBM was used interchangeably with EBP, and the current trend is to use EBP so as to encompass all professions. Teaching the process of

EBP is considered an important objective of residency training so the physician will integrate this approach into patient care. "EBM teaching interventions have proven efficacious in structured educational exercises, but attempts to observe adherence to EBP in real-time behavior have been limited" (Tiburt, Mangrulkar, Goold, Siddiqui, & Carrese, 2008, p. 780).

   Physical therapists. "Evidence-Based Practice in rehabilitation has emerged as one of the more influential concepts in the past decade" (Miner, 2007, p. 1). The American Physical Therapy Association (APTA) Vision Statement for Physical Therapy (PT) for the year 2020 calls for "evidence-based services throughout the continuum of care [to] improve quality of life for society" (p. 1). The APTA emphasizes the provision of evidence-based practices through the utilization of research findings "towards the goal of providing the highest quality healthcare" (p. 1) to all patients. However, there is "limited research available" (p. 2) in regard to teaching EBP to physical therapists.

   Miner (2007) suggests five major approaches for teaching EBP to physical therapy students: (a) an active learning emphasis involving collaboration and discourse, (b) case or problem-centered learning, (c) modeling of EBP, (d) researched-based setting with emphasis upon literature critique, and (e) sequencing content through repetition of topics with extended experiences or simple to complex activities focused on EBP. An important factor contributing to Canadian physical therapists not using EBP resources is that they "are not aware of them, although awareness did not necessarily translate into use for everyone" (Judd, 2004, p. 75). A systematic review of interventions aimed at improving health care professionals' clinical behavior (i.e., utilizing EBP) concluded, "there are no magic bullets…multi-faceted strategies are needed" (p. 75). The study

suggests interactive workshops to teach critical appraisal skills and introduce physical therapists to EBP.

Traditional education programming for physical therapists is limited; however, the clinical setting offers a unique opportunity to apply EBP in an authentic context. Recently, academic educators have developed instructional strategies to each EBP, but fear that "clinical educators may not have the resources and methods to reinforce EBP in their teaching" (Sabus, 2008, p. 72).

Mental health care clinicians. In the United States, EBP is a matter of mental health policy. The President's New Freedom Commission on Mental Health recommended EBP as a corrective measure to the address the deficiencies of the public mental health system (Tannenbaum, 2008). Both the National Institute of Mental Health and a number of state mental health authorities have made the adoption of EBP a priority. "The Substance Abuse and Mental Health Services Administration, the federal agency charged with overseeing service delivery in the public mental health system, maintains a National Registry of Evidence-Based Practice Programs and Practices on its website" (p. 699).

The American Psychological Association (APA) recently approved a policy statement regarding EBP, acknowledging the importance of evidence-based approaches in clinical practice (Nelson, 2004).

> In the area of clinical child psychology, substantial evidence for the efficacy of numerous psychotherapeutic interventions has accumulated. Despite a general movement toward the adoption of treatments with research support [i.e., EBP], many mental health practitioners have resisted this change. (p. 2)

The findings of the study highlight "the importance of practitioner training, institutional

culture, and attitudes in facilitating the use of EBP" (p. 52). Nelson's study found that

classes "do not indoctrinate students to value treatment research, but rather provide

valuable exposure to EBP and help develop skills to employ these practices" (p. 54).

"Formal education in mental health arenas…falls short in promoting

EBP.…[P]sychopathology courses in graduate schools teach viewpoints other than the

most conventional and traditional" (McGuire, 2006, p. 40). McGuire suggests faculty

might actually be considered a potential barrier to EBP implementation. "The

implications of this study [on EBP in social work] begin with a need to do more of it" (p.

115).

Clinical social workers. EBP came into social work via the medical discipline,

and was first introduced by Gordon Guyatt from MacMaster University in Canada, and

"advanced by David Sackett only ten years ago" (as cited in Hamm, 2008, p. 2). "The

emergence of EBP has the profession of social work in some conflict" (p. 11), and "social

workers, in general, are not likely to be engaged in EBP" (McGuire, 2006, p. 112). It has

been argued that practice must be empirically or researched based and that practitioners

should treat clients based on interventions that have been documented in research (i.e.,

EBP); however, social work practitioners do not practice this way, nor have they been

trained to do so. As such, "the profession is in an identity transition in terms of practice"

(Hamm, 2008, p. 11).

Hamm's (2008) research indicated a need for EBP in the curricula for social

work, as well as research on the effectiveness of teaching EBP skills to social work

students and practitioners. Although there are evidence-based guidelines available to

social workers, Hamm reports, "No other studies were found in the field of social work that measure EBP use" (p. 101) among practitioners.

Paramedics. Both health care and Emergency Medical System (EMS) experts agree there is "little scientific evidence proving the effectiveness of the care that paramedics provide, or of the way that EMS leaders design or administrate their organizations" (Walker, 2007, p. iii). The practical application of EBP is a relatively untapped resource in Canadian EMS because "paramedics do not consider professional development a personal priority" (p. 124). "The challenge now is to facilitate a transformational change related to the use of research in the practice of evidence-based medicine (EBM) within the EMS that parallels the use of research in the rest of the healthcare community" (p. 1). Walker proposes the Paramedic Association of Canada introduce EBP into the EMS curricula to facilitate active engagement by paramedics in the research process to improve the quality and quantity of EMS research.

Speech pathologists. The Academy of Neurologic Communication Disorders and Sciences has examined the application of EBP in the field of medical speech-language pathology and has initiated the writing of EBP guidelines (Zipoli, 2004). Competence in EBP has been included in standards for clinical certification by the Council on Professional Standards in Speech-Language Pathology and Audiology of the American Speech-Language Hearing Association. EBP has been recognized by these professional organizations as an important part of their missions. However, "there seems to be a paucity of studies investigating EBP among speech-language pathologists" (p. 47).

Zipoli (2004) reported positive attitudes toward research and EBP, with only a modest correlation between attitudes and use of EBP. The gap might be partially

accounted for by a much-reported lack of professional time among speech pathologists. His recommendations include offering elective 1- or 2-day workshops, and calling for a certificate of clinical competency in EBP for all speech pathologists.

Schools and school nurses. There is a large body of "identified EBP intervention and early prevention programs that currently exist for schools to implement" (Powers, 2005, p. 12) ; however, schools are not utilizing them. A significant population of students remains at risk in spite of "the growing base of EBP that have proven effective in helping students achieve in schools" (Pierce, 2000, p. 2). The disconnect between current practices in schools and EBP in spite of academic, social, and emotional problems of students "provides incentive for studying the phenomenon in the hopes of identifying critical strategies for the gap" (Powers, 2005, p. 2).

Powers' (2005) findings indicated "an ongoing need for substantial efforts to make EBP a reality in schools" (p. 70), but does not suggest strategies to make this happen. Fostering EBP skills has not been a component of administrative training, nor has traditional school nurses received EBP education in their curricula. One study suggests a 1-day workshop be offered to school nurses and administrators to help "refine their critical appraisal skills in relation to published research findings that might inform the design and implementation of school-based health promotion and disease prevention programs" (Bernardo, Matthews, Kaufmann, & Yang, 2008, p. 463).

Clinical dieticians. Similar to nursing and medicine, dietetics is dynamic and ever-changing. "The dietetics profession, however, is still in its infancy stage for adopting the EBP model" (Byham-Gray, 2004, p. 6). Adoption of EBP has been driven by third-party payors such as the Centers for Medicaid and Medicare Services. For

dieticians to be an approved Medicare provider, they are required to follow evidence-based guidelines; however, "no investigations to date have evaluated the knowledge of dieticians regarding EBP" (p. 7) The impetus for research into the dieticians' EBP education and knowledge was the "startling realization that little of clinical practice in dietetics is evidence-based" (p. 153).

Research articles and publications might not be enough to stimulate a change in dietician's behavior. Results from Byham-Gray's (2004) study show that if "EBP concepts are not learned throughout the educational process, it will be unlikely those skills will be learned, acquired, or used in the field" (p. 150). She calls for the need to incorporate and mandate EBP as part of both undergraduate and graduate dietetic education.

Barriers to Implementation of EBP

The Institute of Medicine (2001) stated:

The importance of adequately preparing the workforce to make a smooth transition into a thoroughly revamped healthcare system cannot be underestimated. One approach is to redesign the way health professionals are trained to emphasize…[and place more] stress on teaching evidence-based practice. (p. 6)

Multiple strategies and interventions have been recommended in the literature to promote EBP for all health care professionals; however, the emphasis has been on the importance of identifying potential barriers to implementing EBP. The literature supports that whenever possible, barriers should be addressed, circumvented, or eliminated, thus increasing the chances of successful practice change implementation. The nursing

literature provides extensive information on perceived barriers nurses can expect to face as they endeavor to fulfill their duty to patients.

Gerrish and Clayton (2004) identify and frame barriers to EBP implementation within four dimensions: (a) the organization, (b) the way research is communicated, (c) the quality of the research, and (d) the nurse. The research reviewed points to lack of organizational commitment as a major barrier in EBP implementation (Cooke et al., 2004; Gerrish & Clayton, 2004; Melnyk et al., 2000; Ritter, 2001; Shorten & Wallace, 1997; Wurmser, 2007).

There is limited literature in the area of nurse education and EBP (Hancock & Easen, 2004); however, several studies have addressed the application of nursing research knowledge into practice. The early works of Cerveo (1985) asserts that the application of knowledge into practice is determined through the interaction of four sets of factors:

1. The motivation of the individual practitioner.

2. The nature of the environment/organization.

3. The nature, complexity, and acceptability of the knowledge and planned change.

4. The quality of the educational input. (p. 85)

It is felt that through the neglect of these factors, EBP appears "an incomplete model of the relationship between theory and professional practice and, as such, needs developing" (Hancock & Easen, 2004, p. 194). In an effort to address this theory-practice gap, Milne et al. (2007) provided a comprehensive overview of five factors that are likely to impact the successful translation of evidence into practice: (a) organizational context and culture,

(b) leadership styles, (c) personal beliefs and values, (d) skills and knowledge, and (e) available resources and attitudes of those receiving care.

Melnyk (2002) cites several reasons nurses are struggling to implement EBP into their practice—despite the numerous studies supporting substantially improved patient outcomes when health care is based on evidence: (a) lack of knowledge regarding evidence-based strategies, (b) misperceptions of or negative attitudes about research and evidence-based care, (c) lack of knowledge regarding how to search for and appraise evidence, (d) demanding patient workloads, (e) organizational constraints (e.g., lack of administrative support or incentives), (f) patient expectations (e.g., parents who demand antibiotics for their child's upper respiratory infection when they are not indicated), (g) fears about practicing differently than peers, and (h) overwhelming amounts of information in medical and nursing journals as well as textbooks.

There are several other studies that concur and have identified additional barriers to research utilization in nursing practice (Cook et al., 2004; Melnyk & Fineout-Overholt, 2006; Foster, 2004; French, 1999; Gerrish & Clayton, 2004; Lambert & Glacken, 2005; Melnyk, 2002; Milne et al., 2007; Prevost, 2005; Ritter, 2001; Shorten & Wallace, 1997; Titler & Everett, 2006). The list includes: (a) poor cooperation from colleagues, (b) negative attitudes toward research as well as nurses not believing the findings, (c) lack of interest in research, (d) poor research skills, and (e) lack of accessibility of research findings (i.e., resource access).

Sigma Theta Tau International, the honor society of nursing, conducted an online, electronic survey of active RNs in the United States to determine how many utilize and

understand the EBP process. According to Alspach (2006) the survey identified the following issues:

- 24% of RNs rated their comfort level with EBP process as low.

- RNs identified appraisal and analysis of research evidence as the steps that pose the greatest challenges.

- 66% of RNs identified the single largest obstacle in locating EBP information was not having the time at work to search or evaluate evidence; and 45% of RNs identified the second largest obstacle as literature that was written in a manner difficult to analyze or appraise.

- More than 1 in 4 RNs perceived the availability and accessibility of EBP resources to be inadequate.

- 8% of RNs describe their need for evidence as occurring "seldom;" 2% described the need as "never." (p. 12)

Milne et al. (2007) suggest that perhaps the biggest barriers to successful implementation and utilization of research evidence into practice are: (a) inadequate skills in critical appraisal, (b) lack of understanding of statistical analysis, (c) lack of time to access and implement research, (d) lack of authority or power to change practice, (e) lack of awareness of research findings, and (f) inadequate resources to implement research. Compounding these issues are the "healthcare culture, patient demands and fiscal restraints [that] can make it impossible for nurses to continually access, and critically review, research" (Shorten & Wallace, 1996, p. 23).

In their article, "Research to Practice: A Practical Program to Enhance the Use of Evidence-Based Practice at the Unit Level," Cooke et al. (2004) list several barriers to

implementing EBP into practice, with time constraints topping the list. Other barriers

include limited access to literature, lack of confidence in research utilization skills, lack

of interest, a work environment that does not value EBP, complexity of research

products, lack of credible research, and limited power to change practice based upon

findings.

In addressing the theory-practice gap of EBP, Upton (1999) reports that nurses

have been found rarely to take advantage of the knowledge derived from research

findings, and suggests, "the clinical environment in which patients are cared for ensures

that the values of practice dominate…[and that] research is viewed as removed from

practice" (p. 551). This is a glaring contradiction to the widespread belief within the

nursing education community that EBP is "the way of the future for nursing by

improving patient outcomes and the provision of best care" (Zietz & McCutcheon, 2003,

p. 273).

Wujcik (2001) suggests that perhaps the circulating myths regarding EBP have

created a chasm between theory and practice. Such myths include:

1. EBP is just research utilization renamed. While there is definitely an overlap

   between the two, EBP adds the component of clinical expertise and patient

   preferences and values, thus going beyond science.

2. EBP is only for doctorally prepared nurses. Wujcik (2001) contends,

   "Reviewing and analyzing the knowledge learned from evidence is only an

   academic exercise unless we apply it to patient care" (p. 2). Doctorally

   prepared nurse researchers are relying on clinical nurses to implement their

   evidence at the patients' bedside.

3. EBP takes too much time. Learning the EBP process is, indeed, time consuming at first; however, once the steps are mastered, EBP can "eliminate unnecessary and unproven steps, improve patient outcomes, and enhance patient quality of life" (Wujcik, 2001, p. 2).

If EBP is deemed to be the golden ticket in nursing, why is it not spreading like wildfire? The use of research in practice was initially limited by the amount of research findings upon which to base practice. However, that is no longer an issue. "The body of scientific nursing knowledge has grown exponentially due to the growing number of nurse scientists and concurrent increase in funding for nursing research" (Estrada, 2007, p. 14). Information technology has also added accessibility to data, broadening the capability to use increased sources of data for evidence upon which to base practice. However, despite these advances, nurses continue to base their practice on tradition, intuition, and habit (Gerrish & Clayton, 2004).

French (1999) proposes that there are various recurring features of nursing research that have stymied the implementation of EBP into practice. First and foremost, the research findings are often not produced in a usable form, and therefore, are unable to be implemented into practice. Other factors include not studying the problems of practitioners (i.e., lacking relevance to current practice) and the inability of researchers to persuade and convince others of the value of their findings. Another important barrier French noted was that nurses are not developing "the necessary programmes for the acceptance and introduction of innovation" (p. 72). "Failure to recognize the link between research and practice still exists and has been documented by teaching faculty for many years" (Meeker, Jones, & Flanagan, 2008, p. 376). Nurse educators are challenged to find

practical strategies for teaching EBP to nursing students, specifically with regard to research utilization, systematic searches of literature, critique and analysis of research, and the use of change/diffusion theory as it applies to the clinical practice setting. Killeen and Barnfather (2005) found that "when students are prepared and experience real-life change/innovation, they value EBP as an important dimension to their clinical practice" (p. 132). This certainly gives impetus to instilling the concepts of EBP into nursing education beginning at the undergraduate level.

Foster (2004) contends that educators face several other challenges in teaching EBP. She asserts that teachers often lack clarity about the context and outcomes of an EBP curriculum. This is, in part, caused by the failure of traditional nursing research texts to address several of the critical concepts and components of EBP. She details the limitations of traditional nursing research texts failure to:

1. Distinguish between a "research" question, designed to generate knowledge, and a "search" question, designed to gather knowledge.

2. Explain how much evidence is enough and how best to find it, including Web-based sources such as position papers from nationally recognized specialty organizations.

3. Describe how to synthesize evidence within and across research, clinical expertise, and patient values and preferences.

4. Address group process in gathering and synthesizing evidence.

5. Detail the change process and other elements of evidence implementation. (p. 75)

Matter (2006) found additional challenges in empowering nurses with the needed information technology (IT) tools to leverage an ever-growing clinical knowledge base. Much of the literature on promoting EBP stresses the importance of developing nurses' "skills to find and review research findings in order to then implement relevant findings into practice" (Gerrish & Clayton, 2004, p. 120). This is going to require significant time and IT skills training to enable the nurse to sort confidently and competently through the ever-growing body of research currently stored in Internet databases.

There are critical and dynamic relationships among practice, research, and theory of nursing and as such, present the challenge to develop educational curricula that addresses the issues inherent in a growing and maturing discipline. The goal of achieving EBP integration relies largely, although not exclusively, upon the educational preparation of nurses. The overall challenge for health care organizations is "to incorporate the need to prepare the workforce to deal with the growing body of evidence and to consider how to facilitate the adoption of this evidence into routine clinical practice" (Milne et al., 2007, p. 1630). Programs that develop an EBP clinical workforce are "a challenging, resource-intensive, and time-consuming activity but one that is nonetheless worthwhile" (Sleep, Page, & Tamblin, 2002, p.143).

Many health care organizations have responded to this challenge by implementing EBP CRFPs in their facilities. "Efforts to implement and sustain research-based practices improve markedly when staff nurses are involved with the research" (Gawlinski, 2008, p. 316). EBP CFPs develop staff nurses to answer pressing clinical practice issues (i.e., the burning clinical questions) by using research and other levels of evidence to change practice. This type of program educates and empowers nurses to challenge aspects of

their own practices, and by doing so, promote their own professional development while simultaneously infusing EBP into the organizational culture.

Deficiencies in the Literature

While there is an abundance of literature addressing the impact of EBP on the future of nursing, as well as identifying the barriers and challenges of implementing EBP into nursing practice, there appears to be little empirical attention to establishing the most effective ways of overcoming these barriers and translating research findings into practice. It appears the imperative to implement EBP has not been matched with the investment in researching the development of implementation support mechanisms; study after study fails to report detailed approaches to facilitate practice change.

Although a variety of strategies to facilitate the implementation of EBP into nursing practice have also been identified in the literature, there appears to be few studies reporting on the relationship between educational programs and the utilization of nursing research. "The current literature lacks effective techniques and strategies for facilitating partnerships between nurses and clinicians to teach EBP skills, yielding a constant challenge for nurse educators" (de Cordova et al., 2008, p. 242). Another critical component that appears to be lacking in the literature is a formal evaluation of EBP educational programs to determine the effectiveness of the process on achieving cultural change (i.e., turning learning into sustained behavioral change). With the exception of Milne et al. (2007), there is a deficiency of empirical examination of educational programs designed specifically for the implementation of EBP into practice (i.e., EBP CRFPs). Moreover, an extensive literature search failed to yield any qualitative data

whatsoever on the perceptions and experiences of nurse clinicians participating in EBP CRFPs.

EBP CRFPs

      EBP CRFPs are designed specifically for nursing or other allied health care workers in an organization that wishes to indoctrinate its workers in the practices of EBP in an effort to facilitate a culture change. This type of program endeavors to increase nurse clinicians' ability and confidence to generate research questions that are meaningful to practice and then investigate them in a rigorous and timely manner. The program is purported to have benefits for nurse clinicians (in terms of building confidence, knowledge, and skills) as well as the organization (in terms of providing evidence-based care and increasing quality of care and patient safety). However, there is a lack of empirical evidence to support such claims.

Summary

      This chapter provided an overview of EBP; its evolution in terms of defining the process; its benefits to nurses, facilities, and patients; potential barriers to implementation of EBP; and multiple frameworks to facilitate implementation into an organization's culture. The concept of an EBP CRFP was introduced as a potential strategy to establish an environment that supports and values evidence-based care. Because of a lack of empirical evidence in the literature to validate such a program, or to achieve an understanding of the nurse clinician's experience of participation in EBP CRFPs, a phenomenological study of the nurse clinician's lived experience and participation in an EBP CRFP is deemed necessary by the researcher. Chapter Three provides the

methodology for performing such a study on a large Southern California medical center's

EBP CRFP.

Chapter 3: Methods and Procedures

Objective

The purpose of this hermeneutical phenomenological study was to explore the lived experiences of nurse clinicians who participated in an EBP CRFP at a large Southern California medical center to develop a composite description (i.e., the essence) of this experience to determine what impact this program had on their professional lives. The focus of the study was on graduates of an EBP CRFP designed specifically for the nurse clinician at large Southern California medical center. The aim of this particular program is:

1. To educate participants in the evolution of EBP, the processes of EBP, and its importance to nursing.

2. To equip participants with the range of skills required to conduct secondary research (i.e., research utilization). The primary focus would be on finding existing evidence, utilizing critical appraisal and analysis skills, and developing decision-making processes necessary to guide movement of implementing practice changes researched to improve patient outcomes.

3. To help participants to identify barriers to research utilization as well as barriers to the EBP implementation process. The goal is facilitation of the development of a clinically relevant issue identified in the participant's unit or department and ultimately, a proposal for an EBP project to address this issue.

4. To equip participants with transferable written skills, presentation skills, and verbal skills for the ultimate goal of writing for publication and making an oral presentation.

5. To discuss strategies for cultivating and fostering an EBP environment (i.e., organizational culture change).

Highlights of the EBP CRFP curriculum were addressed in Chapter One under Nature of Intervention, and are presented in further detail in Appendix A.

Research Design and Rationale

A qualitative phenomenological study was proposed to explore the lived experiences of nurse clinicians' participation in an EBP CRFP. A longitudinal study of recent graduates of a large Southern California medical center's EBP CRFP began in January, 2009.

According to Manen (as cited in Creswell, 2007), hermeneutical phenomenological approach to research guides studies that are "oriented toward lived experience (phenomenology) and interpreting the 'texts' of life (hermeneutics)" (p. 59). "The semantic conception, worldview, or constructivist paradigm that is consistent with phenomenology" (Cohen, Kahn, & Steeves, 2000, p. 6) includes a variety of important assumptions: (a) theory should be based on interpretations, (b) subjectivity is valued, (c) context is important in explanations, (d) biases need to be articulated, and (e) ideas evolve and change over time.

Early use of hermeneutics as an interpretive paradigm is referenced in Aristotle's *Peri Hermeneias* in which he uses "the syntax of language as the basis for revealing the nature of things" (as cited in Herda, 1999, p. 45). In the Middle Ages, hermeneutics was utilized in the interpretation of texts by scholars, and throughout the centuries has moved "from a subsidiary of theology to a general term for the study of understanding" (p. 45). According to Kant (as cited in Herda, 1999), "the question of knowing is pivotal in the

study of understanding" (p. 45). Kant's work contributed greatly to the further development of hermeneutics in terms of linking understanding to thought and experience. In the late 18th century and early 19th century, researchers and scholars endeavored to ground hermeneutics directly to the concept of understanding and the "conditions for gleaming the meaning of a text and its various modes of interpretation" (p. 46). That is to say, the traditions and experiences of both the researcher and the research participants are equally important in the collaborative creation of meaning and understanding.

This particular qualitative methodology was chosen to focus on nurse clinicians' subjective view of participating in an EBP CRFP. The study was designed to be primarily an interpretive inquiry utilizing reflexivity in terms of the researcher's role, the reader's role, and the participants' roles. The ultimate goal of the study was to derive the meaning of the nurse clinicians' lived experience in an EBP CRFP, and although "no set format exists" (Creswell, 2007, p. 47) for writing qualitative studies, Creswell advances a constructivist/interpretivist format. This approach acknowledges that the researcher and the participants are actively involved in the interpretive process (i.e., their perspectives and interpretations of the experience) as knowledge and knowing is constructed through understanding and analysis of the phenomenon or experience.

The researcher utilized a more traditional approach, as a constructivist inquiry paradigm will "rely as much as possible on the participants' view of the situation" (Creswell, 2007, p. 20), thus enabling the researcher to frame participants' behavior and beliefs to identify emergent patterns and themes from their shared experiences to generate meaning. A phenomenological approach is ideally "well-suited" (Cohen et al., 2000, p. 4)

to nursing research, as the hermeneutic research model "influence[s] the shape of our society" (Herda, 1999, p. 34). In addition, this approach allows the nursing community "to examine the implications of this knowledge for [their] own lives and act accordingly" (p. 34).

A qualitative research methodological approach was selected mainly for three reasons. First, the use of EBP CRFP is a new and little-understood program, and as such, has not been adequately explored, examined, or evaluated. According to Cohen et al., (2000), phenomenological research is "an important method with which to begin when studying a new topic" (p. 3). The phenomenological approach seeks to determine "the underlying structures of an experience by interpreting the originally given descriptions of the situation in which the experience occurs" (Moustakas, 1994, p. 13). The first-order narratives utilized in phenomenological studies allow individuals tell their "stories about themselves and their own experiences" (Creswell, 2007, p. 119). The use of a phenomenological approach allowed exploration and discovery of the nurse clinicians' lived experiences and participation in EBP CRFPs to generate the meaning, or essence, of such their experience.

Second, according to Herda (1999), "successful personal relationships in our lives are of significant importance. However, we also need to develop ways in which we live out meaningful lives in our organizational institutions" (p. 1). A hermeutical phenomenological research approach was chosen to enable the exploration, and, potentially, development of ways for nurse clinician's to live out meaningful lives at their places of work.

Finally, a qualitative approach utilizes an emergent, rather than tightly prefigured design, thus potentially identifying areas of interest for future research. This qualitative research study was intended as exploratory, inductive research as opposed to confirmatory, deductive research.

Researcher's Beliefs

The freedom from suppositions is termed Epoche, a Greek word meaning "to stay away or abstain" (Moustakas, 1994, p. 26). According to Moustakas, in the Epoche, "we set aside our prejudgments, biases, and preconceived ideas about things" (p. 85). In Epoche, or bracketing, the researcher "sets aside their experiences, as much as possible, to take a fresh perspective toward the phenomenon under examination" (Creswell, 2007, p. 60). It is for this reason I reveal the following beliefs.

As a practicing nurse clinician for more than 27 years, I believe that nurses have the potential to make a difference each and every day in their practice through the care they provide to patients and their families. I also believe that patients deserve the best and safest care available to them, and that the nurse clinician plays a major role in assisting patients in making health care decisions. Life-and-death decisions are made every day by patients and their health care providers, and I believe that as professionals, nurse clinicians have a tremendous responsibility to their patients to utilize best practice standards to assure quality decisions and health care for all patients. These beliefs have provided the impetus for the study of EBP and how it affects nurse clinicians and their practice.

Personal experiences with EBP. The journey toward implementation of EBP into my professional practice began more than 4 years ago with enrollment in an EBP

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mentorship program at Arizona State University. This weeklong immersion program compelled me not only to incorporate EBP into my personal practice, but to advocate and educate other nurse clinicians regarding the practice of EBP. Since implementing EBP into my practice, I have felt empowered to take charge of my professional practice to provide the best possible care in accordance with the latest research available to each and every patient. I believe the benefits of EBP include increased research knowledge and application, increased satisfaction with professional practice and workplace environment, and increased patient outcomes and satisfaction.

My personal experiences with EBP have stimulated further interest in its study and given me a desire to explore the experiences of other nurse clinicians who have implemented EBP into their practices. The Epoche and bracketing (discussed in more detail later) enabled me to take a naïve and fresh look at EBP, EBP CRFPs, and the nurse clinicians experience from an unfettered stance.

Setting, Sample, and Participants

It is an imperative function of phenomenological research that the participants be members of a group that has experienced the phenomenon under investigation (Creswell, 2007; Moustakas, 1994). A census approach was used to acquire systematically information regarding nurses' experience with participation in a large Southern California medical center's EBP CRFP. All participants of this program are employed at the medical center, and the entire population of graduate participants that completed the full program was considered for inclusion in the study ($N = 11$). An E-mail (Appendix B) was sent to the 11 possible participants to explain both the nature and the purpose of the study and to ask them to schedule their first interview. Of the possible participants, 3 e-mailed back

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immediately to say they had not completed their research projects, nor had they attended all of the EBP CRFP classes; these 3 nurses were, therefore, excluded from the study.

Of the remaining 8 possible participants, 6 responded and agreed to interviews for this study; the remaining 2 never responded despite several follow-up e-mails. How many participants are enough for a qualitative study? Seidman (2006) speaks to two criteria to answer that question:

1. Sufficiency: Are there sufficient numbers to reflect the range of participants and sites that make up the populations so that others outside the sample might have a chance to connect to the experiences of those in it?

2. Saturation: Is there saturation of information? There is a point where the interviewer begins to hear the same information repeated. (p. 55)

In terms of sufficiency, the sample interviewed represented 75% of the census population, and although 100% would have been preferable, the sample size was considered sufficient. In terms of saturation, there was indeed a point at which the researcher began to hear the same information repeated in the interviews, thus reflecting saturation of the data. Therefore, according to Seidman's criteria, the final number of participants for this qualitative study ($N = 6$) was deemed enough for this qualitative study. The participants were identified as N-1 (Nurse 1) through N-6 (Nurse 6).

Human Subjects and Ethical Considerations

Approval for the research study was obtained from both the medical center's Institutional Review Board and Pepperdine University's Institutional Review Board prior to January, 2009. In addition, the researcher met with the Chief Nursing Officer of the facility as well as the EBP CRFP instructors to explain the study and its purpose. There

were no objections to the study, and full support and cooperation was given by all parties in December, 2008.

During the first meeting with the participants of the study, the purpose of the study as a purely voluntary act was presented to each participant. They were then presented with all the documents required for their approval, review, and signature: (a) Pepperdine and medical facility's Informed Consent to Participate in a Research Study (Appendix C and D, respectively), (b) Rights of Human Subjects in Medical Research, and (c) Authorization for the Use and Disclosure of Protected Health Information (Appendix E).

Participants were then assured that participation in the study presented minimal risks, and that anonymity would not be possible, as the researcher had direct contact with them. However, they were reassured that confidentiality would be maintained throughout the process, and that this would be facilitated by all participants receiving a participant ID code to assure complete confidentiality. Participants were informed that these participant ID numbers would be used in the final report to protect their anonymity, and that only the researcher would know their true identity and associated numeric participant ID number. Participants were also informed that a master copy of all participants, ID numbers, and consents would be kept in a locked drawer (to which only the researcher has a key), and all associated electronic data would only be available on the researcher's personal computer, which requires a password. The researcher informed all participants that all data and associated research information would be destroyed January 1, 2014.

In addition, participants were instructed that other than the opportunity to reflect upon their experience and contribute to a research study, there would be no direct

benefits to them as a result of participating in this study. The participants were assured

there were no anticipated potential or perceived psychological risks or side effects

associate with this study, and that the results of the study could not be used for any kind

of performance evaluation, disciplinary measure, or basis for subsequent employment

opportunities.

Data Collection Procedures

Interviewing is a basic mode of inquiry, and the intent of the researcher was to

understand the lived experience of other nurses in the EBP CRFP, and the meaning they

make of that experience. "At the very heart of what it means to be human is the ability of

people to symbolize their experience through language" (Seidman, 2006, p. 8). The

researcher believes the EBP fellows' experience and their stories are valuable and worthy

of being told. According to Herda (1999), "optimally, there are at least two conversations

with a participant" (p. 97), and, therefore, two interview sessions were scheduled with

each participant in the study. Seidman (2006) advises, "Anything shorter than 90 minutes

for the interview seems too short…there is, however, nothing magical or absolute about

this time frame" (p. 20). With this in mind, the first interview was scheduled for 90

minutes on a day and time of the participants choosing. The second interview was

scheduled for a week later to allow enough time for the participant to "mull over the

preceding interview, but not…lose the connection between the two" (p. 21).

The participant's first interview took place in a private and comfortable

conference room at the medical center. Upon greeting participants, they were

immediately thanked for coming and escorted into the room. Their comfort was assured

(i.e., satisfactory seating and room temperature) and each participant then received a

bottle of water and a note pad and pencil to write any notes, thoughts, etc. that arose during the interview. Once the privacy and security of the conference room was assured, all the necessary documents needed for approval to participate in the study were read aloud to the participants. After answering any questions they had regarding these documents (or the research study in general) to their full satisfaction, participants were asked for their signatures on all the necessary documents. Copies of all the signed documents were given to each participant.

After obtaining verbal permission to tape the interviews, a digital recorder was turned on and the interview commenced. The researcher used an icebreaker to open the interview (Moustakas, 1994) by saying: "I thought we'd start by having you tell me a little bit about yourself….What prompted you to become a nurse; Where did you get your education; When did you graduated from nursing school…things like that." The intent was to gather some demographic data from the participants in an informal conversational manner. If participants did not include demographical information needed for the study (Appendix F), they were asked directly for this information. Further dialogue with participants was facilitated through the use of an interview protocol utilizing seven open-ended questions (see Appendix G). Richards and Morse (2007) advise the interviewer to listen and let the participant tell the story uninterrupted, with only an occasional question for clarification. This semi-structured approach provided an opportunity for participants to speak freely about their experiences with minimal interruptions from the interviewer.

The researcher prepared well in advance of the interviews by reading and reviewing several texts on qualitative interviewing to get advice from the experts.

Seidman (2006) devoted an entire chapter to interview techniques and skills that was distilled to the following:

1. Listen more, talk less, and ask real questions.

   a. Avoid leading questions

   b. Ask open-ended questions

2. Follow up, but don't interrupt.

   a. Ask questions when you do not understand

   b. Ask to hear more about a subject

   c. Explore, don't probe

3. Ask participants to reconstruct, not to remember.

   a. Keep participants focused and ask for concrete details

   b. Don't take the ebbs and flow of interviewing too personally

Prior to each interview, the researcher reviewed these skills and techniques to reinforce them and keep them fresh in mind. The biggest anticipated challenge was for the researcher to keep the interruptions to a minimum; however, during the first interview the real challenge was found to be how to avoid excessive nodding or other nonverbal cues that might have inadvertently influenced how participants responded (Seidman, 2006). The researcher sought to make a conscious effort at all times to be aware of verbal and nonverbal communication throughout the interviews.

It was deemed critically important for the researcher to convey interest in each and every participant, and the story he or she had to share. Each participant was given undivided attention, with the researcher using body language (i.e., leaning forward to express interest) and maintaining eye contact at all times. Interruptions by the interviewer

were kept to a minimum, and were only necessary when asking exploring or clarifying questions during the interview.

At approximately 75 to 80 minutes into the participants' first interview, the conversation would naturally wind down. At this point, the researcher asked the interviewee: "Is there anything thing else you would like to share with me that you think I have neglected to ask you about with regards to EBP?" This question provided not only an opportunity for participants to share something they felt was important, but to also let them know the interview was coming to a close.

At the conclusion of the interview, the researcher allocated a 2-hour period for self-reflection. First, a hand-written thank-you note was written to the participant, and a $25 Starbucks gift card was enclosed along with a reminder card for their next interview date and time. The researcher would then find a private place to listen to the recording in its entirety, and log details such as the participant's facial expressions, body language, and any other visual images that are lost in audio recordings. Next, the researcher would write in a personal diary to reflect upon the interview experience (Creswell, 2003; Herda, 1999; Seidman, 2006). Were there any particular challenges? Did the questions elicit the in-depth and exploratory recollections? Where there any new insights or Ah-ha! moments? The researcher would also write a narrative reflection of her personal thoughts and feelings regarding the interview.

Creswell (2007), Herda (1999), Moustaka (1994), and Richards and Morse (2007) all suggest that a researcher's personal observations, notes, and reflections can enhance the text derived from the interviews. A personal journal is considered an important data source as "this document is the life-source of the data collection process for in it goes the

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hopes, fears, questions, ideas, humor, observations, and comments of the researcher"

(Herda, 1999, p. 98). The researcher found this part of the data collection process to be

not only extremely beneficial in the analysis process, but quite cathartic during the data

collection phase as well.

Within no more than 2 days of the initial interview, the researcher began to

transcribe the audio taped interview sessions into Microsoft Word on her personal home

computer. The researcher elected to transcribe the tapes personally, as "interviewers who

transcribe their own tapes come to know their interviews better" (Seidman, 2006, p. 115).

Herda (1999) also advises that it is better for researchers to transcribe taped conversations

themselves because "in hearing the conversation one lives through the conversation

experience again from a different perspective. Listening to one conversation brings to

bear nuances, further ideas, and the opportunity for reflection" (p. 98). The researcher

definitely found this to be true; there was a greater connection with the participants and

their stories, as well as better recall with a more intuitive sense of the interviews during

data analysis.

The down side to transcribing the tapes was that, initially, the researcher grossly

underestimated how much time this would entail. Seidman's (2006) warns, "Transcribing

interviews is time-consuming…normally taking from 4–6 hours to transcribe a 90 minute

tape" (p. 115). To err on the side of caution, the researcher allotted 6 hours for

transcription of the interviews. Unfortunately, the 90 minute interviews were taking 8 to

10 hours to transcribe verbatim (including the nonverbal signals such as coughs, laughs,

sighs, pauses, etc.). While this was somewhat frustrating, it did encourage the researcher

to stay on top of the transcription process because the participants were promised a copy of their first interview to review before the second scheduled interview.

Once the interview was transcribed, a hard copy was printed out for the researcher to read and review. Corrections were made along with annotations in the margin with a red pen. A blue highlighter was used to denote statements or passages that seemed to pop out and catch the researcher's attention, and a pink highlighter was used to note passages that needed clarification or further exploration. As the researcher was making judgments about what was significant (and what was not), she experienced what Marshall (as cited in Seidman, 2006) refers to and warns about as "the dark side of this process…when you lose confidence in your ability to sort out what is important…wonder if you are making it all up…and feel considerable doubt about what you are doing" (p. 117). As a doctoral candidate and novice researcher, uncertainty was ongoing and at times, anxiety was off the charts. However, this was, as Marshall says, "an anxiety you learn to live with" (p. 117), and move forward with confidence in your educated judgments.

After making any necessary corrections on the computer, a soft copy of the interview transcription was e-mailed to the participants to provide an opportunity for them to review and reflect upon the first interview before their second one. A basic premise of hermeneutic phenomenology is "that the driving force of human consciousness is to make sense of the experience" (Cohen et al., 2000, p. 59). After the participant's review and reflection, Herda (1999) recommends that any changes to the text be honored. The review and reflection component enabled the participants to validate their perceived experience, and there were no requests for changes by any of the participants.

The second interview was scheduled for 30 minutes no more than 1 week after the first. The purpose of this interview was to allow further investigation, exploration, and clarification of the participant's experience in an EBP CRFP. Prior to the second interview, the researcher listened to the first taped interview again, and reread all associated transcription notes and journal entries. The researcher came to this second interview with questions specifically designed to probe and further illuminate the participant's experience.

This second interview was conducted in much the same way as the first (i.e., private room, comfort, etc.). After obtaining verbal permission to tape the interview, the opening line was: "Thank you so much for allowing me this opportunity to ask just a few more questions regarding our previous interview. Before we start, do you have any questions for me?" This allowed an opportunity for the participants to clarify any questions or misrepresentations noted in the transcripts, and opened the door to begin further exploration to understand more fully their experiences, and receive the participants validation of accuracy as well. At the conclusion of this interview, each participant was given a hand-written thank you note with the second $25 Starbucks gift card enclosed. This follow-up interview was key in validating the researcher's marked sections of text as being of interest and import to the participants as well.

The same post-interview procedure was utilized with the exception of allocating 1 hour instead of 2 for review and reflection (because of the shorter duration of this second interview). The researcher found a quite place, listened to the tape in its entirety, took notes, and began writing in a journal again. This interview was also transcribed by the researcher within no more than 2 days of the interview, but this time the participants were

not provided with a copy of the transcript. It was felt unnecessary as the intent of the interview was to provide clarity and validation in person, and it would be redundant to have the participants review the transcription. The participants were advised of this at the time of their second interview, and were in agreement that a review of the second interview transcription would not be necessary. However, all of the participants did request to be informed of the results of the study, and were promised a copy of the final approved dissertation document.

Instrumentation

Having performed an extensive review of the literature, there appears to be a lack of empirical studies that address the nature of EBP CRFP, and in particular the effects of this type of program on nurse clinicians. The literature review also showed limited instruments for data collection in EBP; however, there was one study in 2007 that explored nurses' participation in an EBP CRFP. The primary author of this study, Dr. Donna Milne, was contacted via e-mail, and the researcher received permission to adapt the survey tool used in Milne's et al. (2007) study to create an interview protocol (Appendix G) for this study. The questions in the original tool were in a survey format, and given to nurse clinicians who participated in an EBP CRFP to gather data in seven areas: (a) experience of participating, (b) interest in further study, (c presentations to other professionals, (d written publications, (e) participation in other research, (f) teaching critical appraisal skills, and (g) use of appraisal skills in daily work. The tool used was pilot tested before use in the 2007 study; however, the author did not test for validity and reliability.

Although qualitative studies have been accepted "as relevant to, and congruent with the perspective and goals of nursing…they continue to be criticized for failing methodological rigor" (Sandelowski, 1986, p. 27). There are, however, strategies for the qualitative researcher to achieve rigor in qualitative studies.

"Auditability is achieved when the researcher leaves a clear decision trail concerning the study from its beginning to end" (Sandelowski, 1986, p. 34). Sandelowski advises, "Availability of research materials concerning all phases of a qualitative study is essential to the auditing process" (p. 35). This researcher has endeavored to leave a detailed and logical progression of the study from start to finish, and will ensure the availability of research materials concerning all phases of the study until January, 2014.

To ensure truth and applicability of a study, Sandelowski (1986) recommends the researcher: (a) ensures the representativeness of the data as a whole and of coding categories and examples used to reduce and present the data, (b) triangulates across data sources and data collection procedures to determine congruence of findings among them, and (c) obtains validation from the participants. All three strategies were employed by this researcher in an effort to achieve rigor in this study.

Analytical Techniques

The analysis phase in phenomenological studies is a process of preparing, organizing, and analyzing the data in a systematic fashion (Moustakas, 1994). The researcher organized and prepared the data for analysis by incorporating suggestions for data analysis by Moustakas, Herda (1999), and Seidman (2007). All three of these experts provided guidance at different stages of the analysis and enabled the researcher to utilize the most effective strategy for each step of data analysis.

The researcher began by transcribing, scanning material, sorting, and arranging the data into different types, depending on the sources of information. The biographic and demographic data was utilized to provide particulars of the sample selected, and is provided in a narrative descriptive of the participants (using participant ID numbers) to provide context for readers of the study. The interview data text was coded by giving quotations a number associated with the participant, the interview, the page number, and the line location where the phrase began. For example, participant 1 was coded as N-1, and for the first interview denoted as N-1.1, and the second interview as N-1.2. If a quotation used for this participant began on the fourth line of page seven during the second interview, it would be coded as N-1.2:7.4 for accessibility and traceability.

"It is difficult to separate the processes of gathering and analyzing data" (Seidman, 2006, p. 113). Even before the interview begins, researchers may begin to anticipate results on the basis of the literature review and preparation for the study. During the interview process, it is often difficult for researchers to: (a) not process what the participant is saying in order to keep the interview moving forward, and (b) not mentally review each interview in anticipation of the next. The researcher made a conscious effort to keep each interview separate from one another, and to avoid any in-depth analysis of the interview data until all the interviews were completed. Salient points and common threads did immerge early in the interview phase; however, the researcher kept an open mind and attitude and was careful not to attach meaning to any data before the analysis phase. Once all the interviews were completed, the researcher utilized a systematic process of data analysis that involves "Epoche, Phenomenological Reduction, Imaginative Variation, and Synthesis" (Moustakas, 1994, p. 84).

Epoche. Moustakas (1994) advises, "The first step in coming to know things" (p. 90) is Epoche. In the Epoche, "we set aside our prejudgments, biases, and preconceived ideas about things. We 'invalidate,' 'inhibit,' and 'disqualify' all commitments with reference to previous knowledge and experience" (p. 85). Moustakas claims that if practiced effectively, Epoche will disclose "the actual nature and essence of things…to reveal themselves to us and enable us to find a clearing and light to knowledge and truth" (p. 90). The researcher did not anticipate any preconceived meanings of this experience for the participants, but rather let their stories unfold and allowed meaning to emerge from the transcriptions.

Bracketing is also an essential component in phenomenological analysis (Creswell, 2007). The researcher endeavored to consider her own biases during the study by acknowledging as an EBP expert, she places a high value on this practice. However, the researcher did not assume other nurses held the same values or assumptions, and, therefore, did not attempt to formulate any conclusion regarding this study before analyzing the data. Bracketing and the Epoche were facilitated through reflection and journaling during the research process.

The researcher's own thoughts and feelings were placed in her personal journal in an attempt to keep any potential biases or prejudices in a place separate from the data. Through awareness and self-reflection, any assumptions or presuppositions were brought to the fore and filtered from data analysis. Epoche and bracketing enabled the researcher to take an unbiased look at the research data to capture the essence of the lived experiences of the EBP CRFP nurse clinicians (i.e., their unique experience and perception).

Phenomenological reduction. The task of phenomenological reduction is "that of describing in textural language just what one sees, not only in terms of the external object but also the internal act of consciousness, the experience as such, the rhythm and relationship between the phenomenon and self" (Moutstakas, 1994, p. 90). There are several steps involved in phenomenological reduction.

To begin, the researcher read and reviewed each of the transcripts at least four times to explicate "the essential nature of the phenomenon" (Moustakas, 1994, p. 91). Additionally, notes and journal entries were reviewed daily. This continual review of the data enabled the research to "look and describe; look again and describe; look again and describe" (p. 90) to pull out significant statements, develop themes, and place them within categories. This process also involved a period of reflection to derive themes from the meaning of the nurse clinician's experience.

The next step in phenomenological reduction is a process called "horizontilazation" (Moustakas, 1994, p. 95) in which the researcher recognizes each statement from the transcripts as having equal value. The researcher listed all statements (or phrases) relevant to the nurses' experience of participating in an EBP CRFP, and then sorted these statements into categories that contain statements of equal value (i.e., all rest on the same plane or horizon). This was facilitated by utilizing an Excel spreadsheet to organize the data into categories. Statements that did not repeat or overlap were categorized as "invariant horizons" (p. 122). Invariant horizons "point to the unique qualities of an experience" (p. 128) and are considered the "meaning units of the experience" (p. 122).

Seidman (2007) offers a comparative method for reducing data into meaning units that was helpful to the researcher when making and analyzing thematic connections. He advises researchers to organize excerpts (i.e., invariant horizons) into categories. These categories were not predetermined, but rather emerged out of the marked passages. The researcher then searched for connecting threads and patterns among the excerpts within the categories to develop themes. These themes were labeled with words or phrases that seemed to describe them and coded with their location in the transcript. The invariant meaning units were substantiated with direct quotes from transcripts as well as data retrieved from observations, notes, and journal entries, and then clustered into core themes.

These categories and themes were then reread, one by one, to sift out the ones that were compelling, and set aside those of less interest. According to Rowan (as cited in Seidman, 2007), at this point,

> …the researcher is in a "dialectical" process with the material. The participants have spoken, and now the interviewer is responding to their words, concentrating on his or her intuition and intellect on the process. What emerges is a synthesis of what the participant has said and how the researcher has responded. (p. 127)

Several common themes emerged from the data that connected the experiences of all the participants. The categories identified through this phenomenological reduction process were: (a) increased confidence, (b) empowerment (c) commitment to practice development and improvement, (d) pursuit of knowledge, (e) ethical imperative for EBP, (f) excitement and enthusiasm for the EBP process, and (g) awareness of the burning clinical questions.

Imaginative variation. Describing how something was experienced is the task of imaginative variation (Moustakas, 1994). This process enables the researcher to derive structural themes from the textural descriptions obtained in the phenomenological reduction process. There are four steps in the imaginative variation process:

1. Systematic varying of the possible structural meanings that underlie the textural meanings;

2. Recognizing the underlying themes or contexts that account for the emergence of the phenomenon;

3. Considering the universal structures that precipitate feelings and thoughts with reference to the phenomenon;

4. Searching for exemplifications that vividly illustrate the invariant structural themes and facilitate the development of structural descriptions of the phenomenon. (p. 99)

The researcher used these four steps to construct a structural description of the experiences as told by the participants of the study.

Synthesis and meaning. The seeds of interpretation began with the analysis process. "Researchers must ask themselves what they learned from doing the interviews, studying the transcripts, marking and labeling them, crafting profiles, and organizing categories of excerpts" (Seidman, 2006, p. 128). In the final phase of interpreting, the researcher asked herself: What meaning did I make of this work? One of the strengths of interviewing participants in research studies is that through the interviews, "we come to understand the details of a person's experience from their point of view. We can see how their individual experiences interact with powerful social and organizational forces that

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pervade the context in which they live and work" (Seidman, 2006, p. 113). The interviews allowed for a greater appreciation of each nurse's uniqueness of experience, yet enabled identification of the commonalities among their stories.

The final step of data analysis, synthesis, was the "intuitive integration of the fundamental textural and structural descriptions into a unified statement of the essences of the experience of the phenomenon as a whole" (Moustakas, 1994, p. 100). The researcher analyzed the textural and structural descriptions to compose a "universal description of the experience" (p. 122) that "presents a synthesis of the meanings and essences" (p. 100) of the nurses' experience of participating in the EBP CRFP. The synthesis phase concluded with examples of "learning experiences and fusion of horizons on the part of the participants that took place during the research process" (Herda, 1999, p. 99) and identification of areas for future research.

Summary

This chapter presented the methodology for the present study. The study objectives, research design, and rationale were outlined. The researcher provided information about the setting and sample as well as the participants' ethical considerations of participating in the study. Finally, instrumentation and analytical techniques were discussed in detail. Chapter Four will provide the findings of the study.

Chapter 4: Findings

Introduction

This chapter discusses the findings of the researcher's hermeneutical phenomenological study of six nurse clinicians' participation in an Evidence-Based Clinical Research Fellowship Program (EBP CRFP) at a 700 bed Southern California Medical Facility. The purpose of this study was to explore the lived experiences of nurse clinicians who have participated in an EBP CRFP to explore the following research questions:

1. What is the lived experience of the nurse clinicians' participation in an EBP CRFP?

2. What impact does an EBP CRFP program have on the professional lives of participating nurse clinicians?

This study utilized face to face interviews with six participants who graduated from the EBP CRFP in June of 2008. Data collected was analyzed utilizing the methodology as outlined in detail in Chapter Three. Seven themes emerged from the data that connected the experiences of the all the participants, and were categorized as: (a) increased confidence, (b) empowerment (c) commitment to practice development and improvement, (d) pursuit of knowledge, (e) ethical imperative for EBP, (f) excitement and enthusiasm for the EBP process, and (g) awareness of the burning clinical questions.

The first section of this chapter will provide an introduction and narrative description of each nurse participant. The second part of the chapter provides the results of the data analysis from the participants' interviews with verbatim quotations. The

researcher's observations, notes, reflection, and journaling provided further richness to the composite descriptions as well as the data analysis.

To protect the identity of the participants, the name of the facility has been changed and will herein be referred to as Traditional Medical Center (TMC). All six participants in this study completed the EBP CRFP at TMC, and graduated as EBP Fellows in June of 2008. Each nurse interviewed was given a participant ID number based on the order in which they were interviewed (i.e., the first nurse interviewed was given the ID number of N-1, the second nurse was N-2, etc.).

Description of Nurse Participants

All of the participants in the study were female with an average age of 44 years old. Each nurse interviewed had a specialty area in which she practiced, and held at least a BSN degree. One nurse already had her MSN while four nurses were enrolled in MSN programs, and one nurse expressed her goal as starting an MSN program within the year. All six participants work at TMC, and it is obvious as they spoke that they have a passion and enthusiasm for nursing and their practice.

The average number of years practicing as an RN for the participants was 28 years, and all claim to have received very little (i.e., a semester or less) research education and nothing related to EBP during their BSN programs. Of note is that at the time these particular nurses graduated from nursing school, EBP was still in its infancy as EBM (i.e., circa early 1980's).

Nurse participant 1. Participant N-1 is a 52-year-old Caucasian female Registered Nurse (RN) who has been practicing nursing for over 32 years. She has been working in the Neonatal Intensive Care Unit (NICU) at TMC for 23 years, and has specialty

certification as a Registered Nurse Credential Neonatal Intensive Care RN. This nurse

participant received her Associate Degree in Nursing (ADN) in 1977, and in 1988

returned to college to pursue her Bachelor of Science in Nursing (BSN). She is currently

enrolled in an online Master of Science (MSN) Nursing Program to receive her Clinical

Nurse Specialist (CNS) certification. She appears enthusiastic about her full time job as

in the NICU, and is quite proud of the nurses in her unit. "I think our nursing staff is

really great…I think we do good care, and the department itself does well financially"

(N-1, personal communication, January 2009).

      The NICU at TMC is one of the largest in Southern California with an average

census of approximately 70 babies and employment of approximately 200 staff nurses.

Nurse participant #1 did not begin her nursing career in the NICU, and passionately

relays the story of her journey to the unit she now calls home:

> I worked at Cedars-Sinai on a medical teaching floor, and then a step-down unit,
>
> and then I moved to the central coast, and I worked med-surg…and then into the
>
> labor-delivery post-partum area. We rotated through all of those:
>
> labor/delivery/post-partum/GYN nursery. And then I was the Charge Nurse in
>
> their nursery before I came back here. And then, I kind of knew when I was in the
>
> nursery that that was where I wanted to be. And every time we had a really sick
>
> baby and had to call San Francisco, and they would fly down and get them I'd
>
> think 'I want to be on the plane, I want to be going there!' So, I knew if I got back
>
> to a big city I would get my bachelors and I'd work in a NICU. So, that's what I
>
> did and that was 22 years ago! (N-1, personal communication, January 2009)

Nurse participant 2. Participant N-2 is a 62-year-old Irish-Mexican female who has been a full time employee at TMC for over three decades. She began her career as a Licensed Vocational Nurse (LVN) in 1975, and in 1980, went back to school to get her ADN and her RN licensure. She holds a BSN, and is currently pursuing her MSN, CNS. Although N-2 has worked in the Intensive Care Unit (ICU) at TMC for almost 26 years, she still reminisces about her "crazy days as an LVN. My first job was at a convalescent hospital, and I was the charge nurse and medication nurse for 72 patients. Talk about unsafe practice!" (N-2, personal communication, January 2009).

Participant N-2 "loves nursing and is proud to be an ICU nurse" (N-2, personal communication, January 2009). She vividly recalls experiencing a transformation at TMC regarding delivery of care to patients, and shared an amusing story that she claims was the impetus for this change:

> There's a funny story about when they still had nurse's aides, this is way back when we worked with nurse's aides, LVNs, and RNs. This one really well-meaning nursing assistant she said she went around [the unit], and she was going to clean everybody's false teeth. Well, she put everybody's dentures in the same bucket, and cleaned them all, and then you didn't know whose teeth were whose! That's about the time they [TMC] decided they wanted to be an all RN hospital—safer that way for patients, and their teeth! (N-2, personal communication, January 2009)

Nurse participant 3. Participant N-3 is a 51½-year-old Caucasian female who has been an RN for almost 28 years, and has worked at TMC in a variety of perioperative units for the entire 28 years. "I've been all over the hospital, but always attached to

surgical patients. You know, taking take of outpatient surgery, post-anesthesia care unit (PACU)... always kind of tied in with the surgical" (N-3, personal communication, 2009). She has never ventured far from perioperative units as she enjoys "the impact you get when a fairly well person is impacted by an acute health situation…like surgery. There's a lot of teaching and education that goes along with that for the family and all that they've been through." When speaking about her nursing education, N-3 eagerly shared the following:

> Well, actually I went to [a city college], and got my AS first…and waited to get into the [nursing] program, and I then guess you would say I am an ADN. End of story…or so you would think. Until I became an EBP Fellow, and got my intellect tickled a little bit, and realized I still wanted to be a student. So now I am in a Master of Science-RN program! (N-3, personal communication, January 2009)

Participant N-3 chooses to work only part time at TMC as she enjoys the flexibility this type of scheduling offers. "There was a lot of flexibility in my schedule that once I caught wind of the EBP, I had the luxury to attend the classes and do the work on the [EBP] project" (N-3, personal communication, January 2009). She has recently accepted a new position on the Surgical Services Unit at TMC where she is "available to do research for the staff's clinical questions" (N-3, personal communication, January 2009).

Nurse participant 4. Participant N-4 is a 47-year-old female Caucasian RN who has been practicing since 1985. She was initially involved in patient care as a nursing assistant while in high school, and after high school went to a community college where she received her ADN. Over the next 24 years, N-4 experienced a variety of different

specialty areas including pediatric hematology-oncology, cardiology, and PACU. She was also involved in frontier efforts in home health for Acquired Immune Deficiency Syndrome (AIDS) patients in the late 1980's where she specialized in peripherally inserted central catheters (PICC lines). Currently, she works part time at TMC in order to enable to devote more time to her post-graduate work in nursing. In May of 2008, she received her BSN, and is currently enrolled in an MSN CNS program.

Nurse participant 5. Participant N-5 is a 50-year-old female Caucasian who entered nursing school immediately upon graduation from high school. She received her BSN and started working at TMC in 1981. After having her first child, N-5 states:

I think I lasted six months [working with a baby], and then I was like I want to stay home! And so I said, "well, I'll take a year," and then I got pregnant again…and I thought "well, I'll stay home a year with this one." And I ended up staying home 11 years with the kids! (personal communication, February 2009)

When N-5 came back to work at TMC in 1997, she worked resource (in-house registry float pool) at TMC, and was placed in a variety of different clinical areas. "We worked *everywhere*—it was such a great experience because I felt like I learned a lot" (N-5, personal communication, February 2009). N-5 is currently working as a staff nurse part-time and a clinical nursing instructor at a local community college part-time. Although currently not enrolled in graduate school, her goal is to get her Masters of Nursing specializing in education.

Nurse participant 6. Participant N-6 is a 54-year-old female Caucasian RN who has worked at TMC for almost 10 years, but did not want her clinical specialty or nursing unit disclosed. She has been a nurse for just over 25 years, and holds a BSN and an MSN.

While she is "super excited to talk about the EBP Fellowship" (N-6, personal communication, February 2006), she is somewhat apprehensive about disclosing too much personal information about herself for fear of "recognition by the 'powers that be' within [TMC]" and any "repercussions if they don't like what I say—'cause I just say what I really feel, and sometimes that gets me in trouble" (N-6, personal communication, February 2009). Out of respect for N-6's request for limited personal information and disclosure, no further narrative description of this participant is given here.

Generating Findings from the Data

The nurse participants' stories were rich in detail and fascinating to hear, but needed to be viewed and sorted into statements that pertained strictly to the experience of the EBP CRFP. All statements that provided a broad description of the participants' experience were listed, and then labeled within thematic categories. There were numerous statements found to have equal value, or as described by Moustakas (1994), resting on the same horizon. Any statements within the horizontal outlines that did not repeat or overlap, were placed into a list of invariant horizons (Moustakas, 1994).

Determining the invariant horizons among the plethora of statements within the identified categories was something the researcher likened to panning for gold. The invariant horizons "point to the unique qualities of the experience" (p. 128), and as such, required sifting through mounds of data to identify the priceless nuggets that provided insight into the essence of the nurses' experience. Key words and phrases emerged that were repeated time and time again and became the labels generated by the researcher to describe the participants' universal experience: (a) increased confidence, (b) empowerment (c) commitment to practice development and improvement, (d) pursuit of

knowledge, (e) ethical imperative for EBP, (f) excitement and enthusiasm for the EBP

process, and (g) awareness of the burning clinical questions.

Emergent Themes

       Increased confidence. Each nurse participant interviewed expressed an increased

or newfound confidence in their role as an EBP Fellow. All of the participants believe the

EBP CRFP provided them with the knowledge, tools, and skills necessary for a

successful transition from traditional nursing practice to one of embracing EBP. The

nurse participants increased confidence was expressed in several ways: (a) knowledge

and skills related to EBP; (b) ability to implement a practice change in their unit; (c)

competence to discuss EBP with their peers and colleagues; (d) capability to present their

EBP projects at professional conferences; and, (e) desire to mentor others in EBP.

       All six nurse participants articulated their increased confidence following

completion of the EBP CRFP in different ways, but all used the phrase: 'increased

confidence.' Participant N-5 spoke of the impact this had on her nursing practice since

graduating in June 2008:

       All these different things I've been mulling over. I've been an educator, I've been

       staff, and now I'm a teacher, too. And when I came to EBP, it kind of all came

       together. Okay, this is how we can pull together all these different things I've

       heard about and read about, and wanting to do something about, but wasn't able

       to…or I didn't know how to…make that happen. You know, how to

       operationalize it. Now I have the tools to do that, to have it all make sense. [EBP]

gave me the ability and the confidence I needed to make that next step in my

practice. (N-5, personal communication, February 2009)

N-1 presented her EBP project at a national neonatalogy conference at the

University of Southern Florida in February 2009, and expressed surprise at her

confidence to present at a professional multidisciplinary conference:

I've always wanted to go to it…it's a big neonatal conference, and it's a lot about

the developmental piece. And I'm just doing a poster presentation…but I'm

pointing out one of the things that we learned was, you know, how to get all your

players together and on board even more. Yes, me…the plain ole nurse at a

national conference! (N-1, personal communication, January 2009)

N-1 also voiced surprise at her ability to speak as an EBP expert: "If you told me last year

that I would be standing in front of a bunch of people talking about MY research—I'd

have said, 'no way!'" (N-1, personal communication, February 2009).

A few of the participants expressed an increased confidence as an EBP Fellow in

supporting their nursing colleagues to find answers to clinical questions:

- I find it much easier now to volunteer to research something for a colleague who

  has question about how or what to do for their patients disease process or about

  the disease. (N-2, personal communication, January 2009)

- When I've learned something from my EBP research…like what works best and

  why, I confidently and excitedly share it with my peers and suggest it to

  physicians for patient care—it feels great to know that I can actually make a

  difference in practice. (N-5, personal communication, February 2009)

- I've had the opportunity to mentor other nurses as I work alongside the clinical educator. If a new clinical situation comes up, I now confidently research the literature, and help to provide answers to assist the educator in the development of staff education for various topics and truly feel that my contributions help other nurses improve patient care. (N-3, personal communication, January 2009)

- I'm not entirely clear about my future goals, but right now, I am a *hospital* nurse. And I feel strongly about helping other nurses in the hospital—to help them know they can make a difference. And now I feel confident to do so as the EBP Fellow. I've got the skills, and I've got the credibility as an EBP expert. (N-4, personal communication, January 2009)

- I'm much more comfortable not just speaking about research and the evidence, but actually teaching other nurses [about EBP]. And they listen because they know I've completed the Fellowship. I think it validates me as the expert, and gives me more confidence in myself and my ability to actually effect change in the hospital. (N-6, personal communication, February 2009)

- I believe that learning how to critically assess research literature has made me more able to research a clinical question and recommend changes in patient care practices. My grandmother, an Ivy League educated woman, always used to tell me that one did not need to know everything about a subject; rather, one must know where to go to find everything there was to know about a subject. EBP helped me to learn how to do that with confidence. (N-3, personal communication, January 2009)

- I'm equipped with the latest and greatest knowledge derived from evidence via

  research, and I'm confident providing care to my patients because I know it's

  based on the highest level of research. My confidence has definitely increased

  [since the EBP CRFP], because I am passing that knowledge onto peers and

  patients. (N-4, personal communication, January 2009)

N-4 also expressed that this increased confidence affected her personal life as well:

- This newfound confidence translates professionally as well as personally… for

  me. As a parent of 2 boys [18 and 6 years old]… EBP allows me to draw on

  research when making choices about my parenting skills and not simply rely on

  opinion. I will add, however, that I sometimes incorporate opinion from my own

  parents! (N-4, personal communication, January 2009)

  Empowerment. This particular topic was the most passionately expressed theme

by all the nurse participants. Many of the nurses became quite animated when speaking to

the fulfillment and excitement they experienced through the EBP CRFP, and the

empowerment associated with EBP. Every nurse participant interviewed stated they felt

empowered by participation in the EBP CRFP. Many nurses expressed an existing

passion for nursing, but felt that EBP opened up another dimension to their practice as

they felt empowered to effect change.

- To be empowered by a higher level of thinking is like receiving a gift. [EBP] has

  had a very profound effect on the manner in which I administer nursing to my

  patients. Not only has it given me a new way to approach problems, EBP has

  provided me with a whole new toolset on how to solve patient's problems and

  issues, and it is based on the highest level of research! It does not get any better

than this! (N-4, personal communication, January 2009)

- Even though I am working in an unofficial capacity right now, I feel very fulfilled as a nurse. My years of experience, combined with my education—and in particular EBP, has helped me contribute in a positive way I would have never expected. [EBP] has empowered me to make that contribution. (N-3, personal communication, January 2009)

- I feel like I have more autonomy and power in my practice because if I have [evidence] in my hand, and then I can say "Hey, I looked this up and here's the evidence." Do I feel okay with bringing new thoughts and literature to my peers and coworkers? Yes, definitely I feel empowered to do that! (N-2, personal communication, January 2009)

- I was so excited that we actually had an impact on our patients—simply by bringing the awareness of a better practice to our unit. It really feels amazing to have the ability to actually make a practice change—no matter how small…because, really, every little bit counts—just ask any patient! The power that we, as nurses, have through EBP is nothing short of amazing. Why would you not want to be part of that process?! (N-6, personal communication, February 2009)

Several participants also mentioned the phrase, 'just a nurse,' and expressed this as a grassroots level effort as a bedside nurse to make a difference in practice by promoting EBP:

- It has been a great learning process for me…not only myself critically looking at articles or whatever literature is out there, but to look at a bigger picture of how

you get something changed, how you get something done. [Other EBP Fellows] presented their projects, and to see the difference that you could make as a 'just a nurse.' like, that was a big eye-opener to like see that. [EBP] is like, very doable, and it does make a big difference, and we really should be doing something like that. It's very empowering to see what 'just a nurse' can do. (N-1, personal communication, January 2009)

- What struck me sitting there [in the conference] and these were staff nurses talking to us [about their EBP projects]. They were doing a PowerPoint and turning around and talking to us, and being so confident about their baseline data and levels of evidence. And to me, the fact that a 'staff nurse' had done this…you know, they weren't separated by that invisible ceiling between the bedside nurse and everyone above [i.e., nurse researchers, nurse administrators, etc.]. So that was very exciting…to me. And I joke around and say I am 'just a nurse,' but to me, that is what is so special about EBP. I think it's just about the greatest thing that could happen to nursing. It speaks to the power 'just a nurse' can have, and the difference they can make. (N-3, personal communication, January 2009)

- I thought, "I'm just the nurse." And I thought I'm not going to be able to—and I know it's what [EBP] is geared towards, but I had my doubts. And then I thought, 'this is the perfect opportunity.' Number one, I don't have the gestalt of all the information and the know-how that all of you [graduate prepared nurses] have— but as the EBP Fellow, I felt empowered. It's the grass roots—and this was my opportunity as 'just the nurse.' But [EBP] gave me a lot of ideas about where I wanted to see my practice go. It gave me a lot of ideas where I wanted to see my

unit to go, and nurses in the hospital as a whole. (N-4, personal communication,

January 2009)

A few participants mentioned EBP CRFP as a life changing experience as well as

empowering:

- When a person feels confidence… and is empowered by the way they perform at

  work, it cannot help but translate into a higher level of success—and an elevated

  sense of self worth. As a result of [EBP], I feel I'm a much better nurse… and a

  much better person… overall. (N-4, personal communication, January 2009)

- I think the Fellowship changed my life. It opened my eyes and changed my

  practice—I started to see things in a completely different light. I felt…well, I

  think the word is overused, but I felt empowered. But truly, I was empowered to

  take control of my practice—for my patients. (N-6, personal communication,

  February 2009)

- I think that EBP, and especially the Fellowship, opened up a whole other world

  for me. I really do believe that. It was a fantastic experience, it really—when you

  can see that you can make a difference in such a practical way at the bedside—it's

  empowering. It's *so* empowering! And the challenge is, and I keep telling the

  nurses: 'Let's look it up! What do you think the best practice is?' Let's get the

  dialogue going.

  Some nurses—they feel powerless—like it won't make a difference. Or

  they can't make a difference. And I'm like, oh yes you can! And that EBP

  Fellowship was living proof—we all made a difference! We have some nurses

  actually questioning doctors about practice—I mean in a respectful way—but it's

their patient and they want to know why. (N-5, personal communication, February

2009)

- It just seems like I already had this passion, but EBP just—*wow*! I mean it opened

    up a whole new world for me. I felt empowered by the process. (N-4, personal

    communication, January 2009)

One nurse participant mentioned the impact on her personal life as well as

professional life:

- I think when you get empowered by something, it kind of flows over into your

    everyday—your personal life. Because there's just this sense of, you know…we

    can do this. There is that hope and that positive energy that things *can* change. (N-

    5, personal communication, February 2009)

Commitment to practice development and improvement. Another universal theme

among the nurse participants was their commitment to continual development and

improvement of their nursing practice. All of the participants we not just interested in

further development of their practice for professional advancement, but with the overall

goal of improvement in practice to provide better patient care with improved outcomes

based on the principles of EBP.

A pervasive focus of all the nurse participants interviewed was their expressed

goal to improve outcomes for their patients. Their perceived obligation and duty to their

patients was a driving force for the nurses' commitment to continual practice

development and improvement. Each nurse had a very powerful story to share that

described a clinical practice issue that affected them both personally and professionally,

and compelled them into taking action for these patients. Many nurses described this as the impetus to questioning existing practice, and taking ownership of their own practice to improve outcomes:

- We narrowed it down to things that would be more of a nursing project, a nursing focus. Something that nursing could take on and change their practice and make a difference in the patient outcome." (N-1, personal communication, January 2009)

- Initially, after we had begun working on our EBP project for PACU, I remember talking to an anesthesiologist about administering ketorolac with an opiate for added pain relief… it was a difficult patient with poor pain management [in the PACU]. The anesthesiologist replied by asking, "What are you talking about?"

  I gave him a copy of an article that was evidence-based… a meta-analysis of several articles regarding the benefit of adding ketorolac to opiate administration for added bonus. He later read the article… and perhaps spoke with other clinicians, because he was completely sold on the theory, and to this day is one of the biggest proponents of prescribing ketorolac with opioids!

  Incidentally, many of our anesthesiologists now employ added pain relief by early administration of ketorolac in the operating room. I don't feel I can claim total credit for making this change; however, I would say that I may have been instrumental in practice change. (N-4, personal communication, January 2009)

- I find myself constantly saying, "well, let's look for the evidence for that." It's our responsibility as a nurse to advocate best practice for our patients—we've got to keep up [with EBP]. How can you do that unless you question practice? As nurses we have to commit to questioning practice, and I believe with all my heart

that if nurses were aware of EBP and how it affects outcomes, that they would be

doing that—one hundred percent—no question about it. It's what drew me to EBP

in the first place. (N-2, personal communication, January 2009)

- You know, I could be the greatest nurse in the world, working next to somebody

with five patients who just wants to keep them alive till they go home. And…just

the feeling…like that's all it is…a warm body to show up. And it makes such a

difference, I think, when somebody looks at their time with those patients as a

really important thing—and through thinking differently and approaching things

differently you commit to improving patient care. And improving your

practice…*for the patients.* (N-3, personal communication, January 2009)

- I think…um, my gut feeling tells me that's what it takes to be successful—

somebody who's in [the EBP CRFP] for the right reasons—a commitment to their

practice rather than marking off a tick, you know—and that's why I'm here.

Because you really need to have a passion about your practice, and be committed

to learning EBP. Once you understand [EBP], it's just what you *have* to do for

your patients.

   Recently, I've taught hourly rounding classes, which is evidence-based, and I

have also been able to find literature for clinical solutions and inform my peers

what evidence is out there. This is my commitment to practice improvement, not

only for myself, but for my peers as well our patients. (N-3, personal

communication, January 2009)

- So [the EBP Fellows] did do a lot in terms of practice change—or at least

awareness. I think we certainly raised awareness of pain and how to treat pain [in

the PACU]; I know that for sure. I think we also raised awareness with our

department heads [doctors] in Anesthesiology, too. (N-4, personal

communication, January 2009)

- I think that as nurses, we have an obligation to remain up to date with the latest

    evidence-based practices. There's always something new to learn, some new

    technology gizmo, new fangled monitors—whatever, and of course it makes sense

    that practice should—and does— change as well. Actually, I'd really like to see

    the nurses call for this as part of continued practice improvement. I feel it is our

    personal responsibility to continually develop our practice, and I'd love it if

    [nurses] were to recognize the need for EBP as part of this process. Every nurse

    has the responsibility to get [continuing education credits] to renew their license,

    and I think the [California State Board of Registered Nursing] should mandate

    EBP CEU's. And maybe patients should demand this as well. (N-6, personal

    communication, February 2009)

One participant interviewed shared a story how practice improvement often becomes

a personal issue as well as a professional issue:

- Obviously on oncology, we do have a more personal relationship with our

    patients. And we do a good job of staying professional, you can't help but…well,

    you fight this battle with your patient for years sometimes. And then it becomes

    personal. For example, the central line issue—and this is before the hospital

    started doing this, we started it on the oncology unit because we had a patient who

    came in and was really on death's door: newly diagnosed lymphoma. [She] went

    to ICU, got her chemotherapy, and was actually doing fairly well. Came back two

or three times more to get her chemo…and then had almost a miraculous

recovery. I mean, just doing amazingly well. And then she went home, and what

happened was she got a fever at home.

And we teach them: the first sign of fever, you call us. [She] got a fever, came

into the unit, and went immediately to the ICU. And then became septic and died.

And it was just…I mean…(unable to speak…crying). I'm sorry…we were all just

so devastated because she was doing *so* well. I mean, shoot! We're all like what

happened here?! It turns out it was a central line infection. And even the nurse

who had 20+ years experience—and I remember her asking the doctor, because

we were all standing around talking about it, and she said, 'You know I've been

giving her [central] line care—and did it right before she went home. Did I do

something?'

It was that personal ownership of her practice, and so we started talking and

asked, 'Well, what IS the best practice for line care? Are we really doing what

best practice says we should be doing?' And we looked it up—and we found out

we weren't. So, we changed our practice, and we have since really decreased our

central line infections. It was just not okay to have that happen to one more

person. (N-5, personal communication, 2009)

Pursuit of knowledge. Every nurse interviewed commented on their seemingly

endless thirst for knowledge and their constant quest to answer the 'why' in their nursing

practice. Several nurses felt their inquisitive nature attracted them to EBP as a means to

answer that burning clinical question (i.e., answer the 'why'). They felt the EBP CRFP

not only provided them with the tools they needed to answer clinically relevant problems,

but to help them formulate their questions into researchable problems. The Fellows reported that since completing the EBP CRFP, they felt more confident to take the evidence from their literature searches to implement into practice, and to encourage their peers to do so as well.

Many of the participants spoke to the importance of nurses questioning existing practice; to know why they are doing what they do (i.e., rationale for interventions). A large component of nursing education is based upon the nursing process (i.e., assessment, planning, intervention, and evaluation), and nursing students are taught to look for the rationale for each and every action they make. Critical thinking and reflection is fostered in nursing education, and it is quite possible that the participants' nursing education is partially responsible for the nurses' questioning what they do and always asking "why?"

- Why? Always the 'why?' And what about this? Nurses should—and some are—questioning practice…for their patients. I think it's that whole climate of *why*. That's really important. You don't just do to do—you want to know why. And from there you go with your critical thinking and you know what? If it doesn't seem like the 'why' makes a lot of sense…well, then you might want to question that practice! We'll ask physicians, "well, can you just explain to me why—what's the rationale?" And then the new nurses see [EBP] behavior modeled. (N-5, personal communication, February 2009)

- [EBP] education is so important because I could see how important it would be to get the correct information from current studies and to interpret it. You know, take the interpretation of it and put it into your practice. If you don't tell me why it's important…why should I change what I do? For me, just knowing me

personally, that would make a difference to me. If you said: "No I don't want you to use that, I want you to use this," then I would think, "Why?" So tell me why—give me the evidence! (N-1, personal communication, January 2009)

- I'm always asking "Why? Why? Why? Why? Why?" So I said, 'Well I wanted to do [EBP]." I wanted to learn all about it so I could answer those burning questions that always pop up in my practice. (N-2, personal communication, January 2009)

- I'm always on a quest…for knowledge... to learn. And on [my unit], several things that I've researched and come up with we'll put in our newsletter that goes out to staff—that we actually e-mail out. So, there's a lot of stuff in there, and we distill things down to bullet points, although we're careful not to take away all of the…the meat of matter. But, at the least I think it's important that people understand *why:* tell 'em why. You know, because then they are more likely to understand what they are doing and will think more critically think about their practice. (N-3, personal communication, January 2009)

A few participants claimed the EBP CRFP sparked their interest in pursuing post-graduate work to further enhance their practice:

- I'm not sure, sometimes I feel too old, but the DNP [Doctorate of Nursing Practice] program sounds interesting. That may be my next step. I seem to crave information and knowledge! The [EBP] Fellowship really got my mind stimulated. (N-2, personal communication, January 2009)

- I started back to school to advance my nursing education as a result of my EBP experience. I can't seem to get enough! I am definitely entertaining thoughts of higher education like a DNP. (N-4, personal communication, January 2009)

- There's always that little voice in my head asking, "why?" The more I know, the more I am intrigued to know even more—to delve further. Sometimes it's like I just can't get enough—and I even feel a little overwhelmed at times thinking, "What the heck is wrong with you?! Where does it end? Am I going to be in school for the rest of my life?!" But that's okay, it's just who I am. I *love* nursing and I *love* learning. EBP stimulates your mind and you *crave* knowledge! (N-6, personal communication, February 2009)

Two of the participants mentioned that in addition to their interest in knowledge and learning, that they felt a camaraderie with fellow nurses who also liked to learn:

- To be with other nurses who love to learn, who have the motivation—I loved that collegiality. You get that energy—that synergy going…it's exciting to see what other people are doing and to learn from them, too. (N-5, personal communication, February 2005)

- My interest in EBP began with being involved with the oncology nurses. Getting involved with the Oncology Nursing Society, where EBP was so strong—that's what really got me thinking along those lines, and then working with the other nurses who were constantly having that dialogue: "well, is this really the best way to do this?" We'd have a patient who had a negative outcome, and we'd go, "you know, there's just got to be a better way. What could we have done differently to keep this from happening again?"

When you love to learn, and you have a group of nurses who are just so

good at what they do—which they really do care—very caring and wanting to be

sure they are doing their very best, that stimulates learning as well. (N-5, personal

communication, February 2009)

Ethical imperative for EBP. Many of the nurse participants mentioned their duty

as a nurse is to do no harm, and as such, viewed utilizing practice that is not EBP as

negligent nursing practice. All of the participants felt that it was wrong to not incorporate

EBP into nursing practice, and speculated that if only nurses knew about EBP, they

would be compelled by a sense of duty to incorporate it into their practice. Each of the

participants expressed a moral imperative for nursing to inquire about their own practice,

to question existing interventions, and to research the best approach to practice for

optimizing outcomes.

- I honestly feel like it is wrong—I mean like *ethically* wrong—not to incorporate

  EBP in your practice. There's a better way out there, and you're NOT using it?! I

  mean, come on…that's like almost illegal or something. Seriously, it's like a no-

  brainer, here. I can't help but feel that once nurses actually get EBP, they will feel

  compelled to practice that way. That's what happened to me—frankly, it's just not

  an option. EBP—period. (N-6, personal communication, February 2009)

- I think [EBP] helped me to keep in my head the thought that inquiry is good, and

  that you should do that, and that it's okay to question. As a matter of fact, you

  MUST question—it is our duty as nurses. (N-2, personal communication, January

  2009)

- Whoever is at the bedside should have a clear understanding of why [the nursing intervention] is important and why we need to do it. So tell me why, and then once you have evidence that it is the best practice, then it becomes almost like your moral imperative to do the right thing. (N-1, personal communication, January 2009)

- Our EBP project was to use an occlusive plastic wrapping for a baby who is a very low birth weight at delivery, to help them maintain their temperature. And it actually had been recommended with Neonatal Resuscitation Program since 2005, but we weren't doing it. Shame on us! Our nurses have an ethical obligation to update their practice to provide the very best care for every baby. (N-1, personal communication, January 2009)

All of the nurse participants felt that clinical issues come up every day in practice that should be questioned and researched. Often, these issues present themselves as ethical concerns or dilemmas in the clinical area. Several nurses spoke to practice issues they have experienced that left them angered, disturbed, and ultimately, feeling guilty as they are left to wonder: am I contributing to the problem? Many nurse participants recalled ethical issues they encountered on their units that could have been averted by utilizing EBP.

- Oh my gosh! Just the other day I took care of an elderly women who had end stage respiratory disease and multiple co-morbidities, and was hospitalized for many days. Well, the primary physician and my assistant unit manager contacted the patients daughter and pursued end of life issues; I was totally left out of the decision making loop! This patient had no family close at hand; her daughter who

gave the DNR order was in Idaho. So who would be with [the patient] for her end

of life? Me—her nurse!

I did call the daughter and introduce myself over the phone, and confirmed

her approval of withdrawal of care. I assured her that comfort measures would be

liberal [for her mom] after extubation, and that I would let her know when her

mother passed. I was extremely frustrated with the people who did not advocate in

the best interest of the patient—*my* patient—and also did not include me in the

process. This caused me, personally, great moral distress and [presented an

ethical] dilemma because best practice [i.e., EBP] was NOT used for this patient

who could not advocate for herself. It is our duty to our patients to advocate for

them—especially when they are dying. (N-2, personal communication, January

2009)

- Prior to beginning our project in the PACU, it was fairly well known among the

  PACU nurses that…(clears throat) a certain anesthesiologist did not give his

  patients pain medication during surgery. We made numerous attempts at

  informing the head of the department regarding that anesthesiologist.

  In the PACU, the nurses had to make up for the lack of pain meds

  administered in the OR [by giving more pain meds], and placing the patient at risk

  for apnea and other consequences. This problem inadvertently set the PACU

  nurses up for poor outcomes… and increased the nurse's liability—not to mention

  the hospital's responsibility. Now we have an [EBP] education primer on opiate

  administration in the PACU, and the nurses feel more confident about

  approaching this anesthesiologist and discussing the evidence with him [to

administer opioids during surgery] and the favorable outcomes as a result of doing so…not to mention it was simply negligent, and questionable ethics, not to medicate. (N-4, personal communication, January 2009)

One nurse participant recalled witnessing a practice being taught at a hospital skills day that was not evidence-based:

- I was just at a skills lab where perineal care was being demonstrated for RNs and [personal care assistants]. The technique was being taught as a procedure, and I was tempted to ask about the evidence upon which the technique was based, but kept my mouth shut. The second part of the station was about [catheter-related urinary tract infections], and I know from my own research how EBP addresses this, which is duration of catheterization and stabilization of the catheter.

  Unfortunately, the new perineal catheter care we are being taught will soon debut in my department, and it is not evidence based. I felt that, ethically, this was just not right, and had to ask, "how did that happen?" and more importantly, "what am I going to do about this?" (N-3, personal communication, January 2009)

One of the participants spoke of an ethical issue that she is currently contemplating pursuing as an EBP project on her unit:

- We have a young [cystic fibrosis] patient population that gets on Dilaudid [for their pain] and become addicted…and cannot get off. They are in and out of the hospital quite a bit, and we have one now that when she gets discharged is actually going straight to a detox unit. They are so young, and of course, the nurses have a lot of guilt. There's got to be a better way to control their pain

without getting them addicted. And I have to believe—and this is what EBP has

taught me—there probably is! We are obligated to take ownership of our practice:

what can I do to make it better? That's really important…morally, ethically, and

professionally. (N-5, personal communication, February 2005)

Excitement and enthusiasm for the EBP process. Whether the nurse participants

were discussing their EBP pilot projects, their latest search of a clinically relevant

problem, the EBP CRFP, or anything related to the EBP process, they all used the word

'excited' repeatedly. They claim to have been drawn to EBP immediately upon hearing

about and understanding the potential impact of EBP implementation. Four of them

mentioned the first EBP conference they attended where Dr. Bernadette Melnyk, a

nationally renowned EBP expert and motivational speaker. Participant N-3 vividly recalls

her reaction to Dr. Melnyk's EBP presentation:

- *I loved it.* She got me…you know. She casted the hook, and I think I was the first
  fish biting on it. I was just mesmerized by the whole idea. Oh my gosh…I was
  mesmerized! Everything that came out of her mouth was just wonderful. Yes, and
  oh! I like that, you know. This is me—she's talking to *me*! (N-4, personal
  communication, January 2009)

Another nurse participant recalls her reaction to the same conference:

- I was at Bern's [Dr. Bernadette Melnyk] presentation, and I thought, 'Oh my
  God! This is *so* me! I have to do this!' And I hung on every single word she said.
  The excitement was so contagious! I couldn't wait to start the Fellowship—I was
  literally chomping at the bit to get going. I thought, 'I can't wait another minute—
  this needs to happen *now*.' And once I started the program and began my project,

my enthusiasm never waivered. It was exciting to be a part of the process to

actually make changes for the better—for our patients. Now, that's very cool! (N-

6, personal communication, February 2009)

Other participants spoke about the excitement of finding evidence and utilizing

EBP in their practice.

- I truly do love evidence…and the idea of evidence based practice. I think that will

  always be with me wherever I go, whatever role I'm playing…[EBP] is always

  going to be an exciting and important part of my nursing practice. (N-1, personal

  communication, January 2009)

- You know this fellowship program, it's really good, and I wanted to work on

  something important. I was excited to participate in EBP, and even more excited

  that I could make a difference for patients. (N-2, personal communication,

  January 2009)

- A lot of the house staff [in the ICU] are starting to use more evidence. You hear

  people say, "Well evidence shows…" and so that's exciting to see. I think [EBP]

  is sort of sparking everybody's interest—people are fascinated by the process. (N-

  2, personal communication, January 2009)

- I have the luxury of being on the [nursing] research committee so I can carry the

  [EBP] torch when allowed the time to do so. That excites me! (N-2, personal

  communication, January 2009)

- The one huge missing piece in the catheter-related urinary tract infection (CR-

  UTI) is taking ownership to get rid of the catheter. It's going to have to be a

  nurse. And I've got great articles on that because that is THE key independent

variable for decreasing CR-UTI's. Anyway, I did that literature review, I was able

to, on my own, to use what I learned in the EBP CRFP, read the literature, and

distill it down to products, techniques, etc., and came away with an EBP program

for decreasing catheter days based on algorithms. Now, that's exciting! (N-3,

personal communication, January 2009)

During the EBP CRFP, the nurse participants said they found it exciting to be

around other nurses who were also committed to practice improvement. They were with

like-minded nurses who saw the value in EBP, loved evidence, and wanted to make a

difference in their patient's care. Every nurse was enthusiastic about this process, and

vowed that their enthusiasm never waivered:

- You know, it's exciting to share your [EBP] knowledge and skills with other

  nurses. For example, the sepsis project. Almost half of our [oncology] patients

  transferred to ICU were septic. Nurses were recognizing this late, too late. We

  have such high risks patients. We did sepsis education—early recognition—which

  is literally every patient on our floor! But learning not to wait until their blood

  pressure bottomed out. That's *severe* sepsis—act earlier! Look at your signs and

  symptoms of early sepsis—and get on top of it. Our nurses have since decreased

  the amount of transfers to ICU for sepsis by 47%! Now that's an exciting way to

  practice! (N-5, personal communication, February 2009)

- Initially I felt like a walking billboard…I wanted everyone to hear about the

  awesome changes in the clinical setting with EBP!! I related everything I did in

  life to EBP! (N-4, personal communication, January 2009)

Burning clinical questions. Every nurse participant interviewed mentioned 'the burning clinical question' in their practice. While the nurse participants all felt the burning clinical question was the most issue facing them as nurse, only N-6 offered a passionate definition of the burning clinical question:

- When there is an issue you or your unit has, one that keeps resurfacing, and everyone keeps asking, "why?"—that is the burning clinical issue. It is important to everyone, especially the patient—and not another day should go by before you answer—it's the burning clinical question that needs answered *now*! (personal communication, February 2009)

Each participant was able to include their units' staff RNs in an EBP pilot project addressing a burning clinical issue for that particular unit, and spoke of burning clinical questions either they or their unit currently have, and the role they now play as an EBP Fellow in answering these questions:

- I personally have always been a 'why?' person, but I never really thought about it in terms of the larger group—the bigger picture: is anyone else asking why? Now as a[n EBP] Fellow, when trying to implement a practice change, it became obvious that's really important to look at. And I don't understand why, like even with this in-line suction thing, why that wasn't recognized as a really important issue by *everyone*. But it was not. (N-1, personal communication, January 2009)
- After the Fellowship, I was really gung-ho, and whenever something comes up in the unit, or someone questions practice, I say, "Oh, do you want to know why? Let's go look and see what we can find out." There is always a burning clinical question to answer. (N-2, personal communication, January 2009)

- My unit wanted to take a look at the PICC lines. Gosh, what's up with the PICCs
  [frequently clotting]? What can we do to take proper care of our PICCs? The
  PICC thing really spoke to me and Dee-Dee. Dee-Dee, who works the night shift,
  and they are all kind of on their own, and trying to trouble-shoot [the PICC lines].
  And we thought that this has got to be a universal problem…whether you are in
  peds or adults, you know, there's PICC lines, and there are issues with PICC
  lines, and so forth. So we really honed in on that as something that we saw as a
  real burning clinical practice issue on our unit and suspected that other units did
  as well. (N-3, personal communication, January 2009)

- I'm actually getting to do a lot of clinical problem solving now as the EBP
  Fellow. If you'd come up, you'd find we've had a spike in our urinary tract
  infections—and that came up during my nursing research class where I needed to
  do a literature review and write it up, so I chose that topic. And just came away
  with all kinds of great EBP knowledge about catheter associated urinary tract
  infections—which is really a burning clinical issue for all patient populations. (N-
  3, personal communication, January 2009)

- People will come to me and ask me stuff…patients, parents…there are always
  questions, and I'll say, "Just a second." I've referred more parents to NIH
  [National Institute of Health, U.S. Department of Health and Human Services]
  than I can count. I love them to try this website. I feel very strongly about people
  being informed. And I feel strongly—even more strongly, that they are informed
  correctly.

I refer patients, parents, nurses, countless people to NIH because I know

that querying the NIH database, it's gonna lock you into whatever it is you need.

It's a great resource that I also direct our staff to when looking to answer that

'burning clinical question' with the latest research. (N-4, personal

communication, January 2009)

- It just seems that things are always popping into my head. "I wonder what if…"

  or "maybe if we did it this way…"—stuff like that. There is always some sort of

  practice issue—that burning clinical question—that needs attention. And I think

  the Fellowship has taught me how to pay attention to these questions, because

  they *can* be answered. (N-6, personal communication, February 2009)

- The oncology unit had the highest rate of falls in the hospital. And again, it comes

  back to an individual patient. A young woman, and her platelets were like 4 or 5,

  and she fell. And she ended up in ICU with internal bleeding. [She] came back,

  did okay—but I mean it was horrible. She had bruises everywhere—just all over

  her body, and again…we've had falls before, but this shook everybody up.

  You think about elderly, confused people falling, but on oncology, a big

  part of it is young people 35, 40—people who aren't used to being sick. [They]

  get on chemo, on pain medication, and they're the ones who fall. And sometimes

  those falls are much worse. And so we said, "you know, we really need to start

  looking at this"—that was our burning clinical question: can we prevent these

  falls? (N-5, personal communication, February 2005)

  N-4 seemed excited about the fact that the other nurses in her unit seemed to catch

the "EBP fever" and was proud that "the PACU composed over 22 [EBP] questions… I

am privileged to work with such super inquisitive nurses! Woohoo!" (personal

communication, January 2009).

Additional Findings of Interest

The nurse participants' stories were both fascinating and enlightening, and

although the fore mentioned and discussed categories emerged as dominant themes, there

were often hints of other relevant data that correlated to the literature worth noting.

These themes were in the area of cost savings, attitudes, and barriers in regards to the

implementation of EBP.

Cost savings. The literature speaks to outcomes, but there are currently no studies

that validate outcomes for EBP in terms of the dollar value or return on investment for

the hospital. One of the nurses interviewed for the study, however, was able to project a

cost savings for the outcomes of her EBP pilot project.

Nurse participant N-5's EBP pilot project was on Hourly Rounding (also known

as Patient Comfort Rounds), and was initiated to reduce the number of patient falls in her

unit. The study took place over three months, and at the end of the study, her unit reduced

the number of falls to zero. An additional finding of her study was a reduction in pressure

ulcers and an increase in patient satisfaction. The cost analysis in her study predicated a

savings of over $100,000 per patient—just for the falls. Unfortunately, she did not

analyze the reduction in pressure ulcers or patient satisfaction in terms of dollars saved.

Attitudes. There was some data to suggest that nurses need to value practice

changes (i.e., EBP instead of traditional care), or they will not implement the change. N-5

also emphasized the importance of giving feedback to the nurses involved in the study:

"The feedback makes a big, big difference. It let's [the nurses] know that they *are*

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making a difference. Zero falls! That shows them the impact they have had on patients. Now the project is housewide!" (personal communication, February 2009).

While N-5 is excited that Patient Comfort Rounds has been initiated housewide, she is "a little concerned [the other nurses] don't have a reason—I hope that they buy into it… I mean, do they value it? Has it been a clinical issue for them?" (personal communication, February 2009). This speaks directly to Marwaha's (2004) concerns that if nurses do not value what is expected, the activity will not be implemented.

Barriers. Another heavily covered issue in the literature were the barriers, or perceived barriers, of EBP implementation. Although not directly asked about these barriers, each nurse alluded to some of the issues addressed in the literature. The nurse participants did not feel they encountered many barriers to implementing EBP, and in fact, felt they were provided with excellent theoretical knowledge and practical application as well as ample resources (librarian, library services, computer network, etc.) during the EBP CRFP. However, two of the most noted barriers addressed in the literature, lack of time and lack of managerial support, did surface during the nurse participant interviews.

Time is the number one cited barrier to EBP implementation in the literature, and all but one nurse participant validated this as a barrier to implementing EBP. Although all of the nurses have integrated EBP into their practice, they see that the typical bedside nurse does not have the time needed to devote to researching a clinical issue and critically appraising the evidence. Nor would a full time nurse have the flexibility to attend an EBP CRFP and implement their own pilot project. Not all the nurses in the EBP CRFP were granted the same relief time for their participation in the program, and some found it

difficult to keep up with work, school, the EBP CRFP, and family obligations.

One nurse participant declared time not to be an issue, but clarified she was referring to the practice of looking up the evidence or guidelines for best practice during her shift, not the EBP CRFP and pilot studies. She felt that every nurse has a computer at their fingertips on the unit, and are just a click away from finding an EBP clinical guideline for best practice. She did agree, however, that the EBP CRFP was a huge time commitment that she could not have undertaken if she were not part time.

All but one of the nurse participants cited lack of managerial support during their EBP CRFP. The research sites this as one of the major barriers to EBP implementation and suggests that a nurturing and supportive environment is necessary for successful implementation of EBP. The lack of support was reported in terms of time relief, not support of the EBP project; all of the nurses reported a positive relationship with their managers, and felt that their projects were valued by their managers.

Summary

This chapter provided a narrative description of the nurse participants interviewed for this study, and provided an articulation of the nurses' essence of their experience with a compilation of verbatim quotes to support the themes identified during the analysis of the data. Chapter Five will discuss these findings further, compare them to the available literature, and examine the implications and recommendations for future studies.

Chapter 5: Discussion of Findings

Introduction

While there is an abundance of literature addressing the impact of EBP on the

future of nursing, as well as identifying the barriers and challenges of implementing EBP

into nursing practice, minimal attention has been devoted in the nursing literature to

operationalizing EBP. There is an obvious deficiency of empirical attention directed

towards establishment of the most effective ways of overcoming these barriers and

translating research findings into practice. That is to say, ironically, there is currently no

evidenced-based practice for implementing EBP into nursing practice.

EBP CRFPs have been specifically designed and implemented to facilitate the

adoption of scientific evidence into clinical nursing practice; however, these programs

have not been adequately studied, evaluated, or explored in terms of the impact of the

program on nurse clinicians, their clinical practices, or their organization. King (1996)

advises that prior to further investment of time and resources to develop models or

initiatives that facilitate EBP, further understanding of staff nurses' perceptions of EBP is

crucial as their perceptions influence their behaviors and practice. Nurses' perceptions are

the representations of their reality and influence or guide their nursing practice.

"Perceptions give meanings to one's experience, represents one's image of reality and

influences one's behavior" (King, p. 24). This study was designed to explore the lived

experience of nurse clinicians who graduated from an EBP CRFP to generate the

meaning, or essence, of such an experience.

Seven themes emerged from the study that connected the experiences of the all

the participants, and were categorized as: (a) increased confidence, (b) empowerment (c)

commitment to practice development and improvement, (d) pursuit of knowledge, (e) ethical imperative for EBP, (f) excitement and enthusiasm for the EBP process, and (g) awareness of the burning clinical questions. This chapter will further discuss these findings, compare them to the available literature, and examine the implications and recommendations for future studies.

Nurse Participants

All of the participants in the study were female with an average age of 44 years old. Each nurse interviewed had a specialty area in which she practiced, and held at least a BSN degree. One nurse already had her MSN while four nurses were enrolled in MSN programs, and one nurse expressed her goal as starting an MSN program within the year. All six participants work at TMC, and it is obvious as they spoke that they have a passion and enthusiasm for nursing and their practice.

The majority of practicing nurses are graduates of diploma or associate degree programs with no education in, or experience with, research. They may not understand concepts of evidence-based practice, and are generally unaware of the importance of scientifically based support for their actions (Marciondo, 2006). Nurses with advanced education levels (i.e., BSN or higher) were reportedly exposed more to research courses, and as such, their confidence in changing practice was very high with 80% of nurses reporting they were confident in beginning to change practice (Blair, 2008). The average number of years practicing as an RN for the participants was 28 years, and all claim to have received very little (i.e., a semester or less) research education and nothing related to EBP during their BSN programs. Of note is that at the time these particular nurses

graduated from nursing school, EBP was still in its infancy as EBM (i.e., circa early 1980's).

The literature states that two barriers to EBP implementation are nurses' lack of knowledge/unfamiliarity with EBP (Alspach, 2006; Gerrish & Clayton, 2004; Gerrish et al., 2007; Leach, 2006; Melnyk, 2002; Ring et al., 2006; Salmon, 2007; Sleep, et al., 2002; Wujcik, 2001) and their discomfort with the complexity of the research process (Alspach, 2006; Cooke et al, 2004; French, 1999; Gerrish & Clayton, 2004; Gerrish et al., 2007; Leach, 2006; Melnyk, 2002; Ring et al., 1996; Salmon, 2007; Sleep et al., 2002; Wujcik, 2001). Although subject to interpretation of 'lack of knowledge/familiarity,' this study did not find this as a barrier to implementation. All six participants in this study actively pursued enrollment in an EBP CRFP seemingly in an effort to proactively address these barriers. This could indicate that lack of knowledge/familiarity may not truly be barriers to implementing EPB, but rather a matter of nurses simply not knowing there is an alternative to current practice. If you are not aware of something, is it truly a barrier?

Rather than citing 'lack of knowledge/unfamiliarity' as a barrier, the researcher would suggest that nurses are not implementing EBP due to a lack of awareness and exposure to EBP. Any discomfort with the complexity of the research process, was effectively eliminated through participation in an EBP CRFP.

Increased Confidence

"Historically, nurses have found research to be intimidating, have had regrettable research experience in school, and avoided participation in research (Dyson, 1997, p. 609). The data did not support this assertion, and as a matter of fact, the nurse

participants appear to have not been at all intimidated, and claim to have been drawn to EBP in order to allow them to research a clinically relevant issue.

While the literature does speak to EBP CRFPs designed to increase confidence in nurses' ability to utilize EBP skills, it does not speak to increased confidence from the actual implementation of EBP. Lack of confidence in knowledge and skills as a barrier to implementation is frequently cited in the literature (Gerrish & Clayton, 2004; Melnyk & Fineout-Overholt, 2005), and it appears the EBP CRFP has eliminated this particular barrier. Research does, however, uphold the need for more effective mentoring in EBP (Pierce, 2000).

Implications. The nurses' increased confidence has several implications for nursing. First and foremost, this confidence translates into successful implementation of EBP into nursing practice; the EBP CRFP provided the nurses with the necessary knowledge and skill set that enabled them to change their practice. Secondly, "the use of mentors as been identified… as an important facilitator for increasing use of EBP within healthcare organizations (Jeffers, Robinson, Luxner, & Redding, 2008, p. E8.), and the nurses' participation in the EBP CRFP increased their confidence to provide mentorship to their colleagues and peers. Mentorship in EBP contributes further to facilitate the paradigm shift needed in healthcare to a culture accepting and practicing EBP.

Lastly, the EBP CRFP not only impacts the Fellow's practice, but appears to have a ripple effect in the units where they work. All of the nurse participants expressed the desire and need to share their EBP knowledge with peers as well as patients. They also reported their status as an EBP Fellow in their units validated their expertise with their

peers, buoyed EBP interest in other nurses, and encouraged peers to question practice and

to pursue answers to questions about these practice issues. This lends further support to

the premise that if nurses are aware of EBP and the possibilities of better outcomes, they

are drawn to it.

Empowerment

The literature speaks to the impact of EBP "to empower nurses to form innovative

learning partnerships with colleagues to nourish wisdom, strengthen critical thinking,

integrate research knowledge, and celebrate contributions in leading best practice

(Soulkup & McCleish, 2008, p. 402). The data from this study wholly supports this

notion, and expands further upon a newly identified concept of 'just the nurse.'

Several of the participants revealed how empowering it felt to be able to effect

change as 'just the nurse.' While all the participants animatedly articulated their passion

and love for nursing, they also expressed surprise at their ability as staff nurses to utilize

research and to pilot their own EBP projects. Many felt that this was not something they

could, or would, ever do as 'just the nurse.' Dyson (1997) found that nurses had

"misconceptions that research was only meant to be accomplished by academicians and

that staff nurses were not supposed to participate in research" (p. 610). Farruggia (2003)

found that staff nurses who attended his EBP workshop reported the opposite to be true.

The study supports Dyson's and Farruggia's work, and further suggests that staff

nurses are in an excellent position to identify the 'burning clinical issue' as a significant

researchable problem. Additionally, as an EBP Fellow, the staff nurse is empowered to

carry that issue through the research process, and take ownership of the results. "Efforts

to implement and sustain research-based practices improve markedly when staff nurses are involved with the research" (Gawlinski, 2008, p. 316).

Implications. EBP CFPs develop staff nurses to answer pressing clinical practice issues (i.e., the burning clinical questions) by using research and other levels of evidence to change practice. EBP Fellows are not only educated in the process, but empowered to challenge aspects of their own practices, and by doing so, promote their own professional development while simultaneously infusing EBP into the organizational culture.

Empowerment also provides an increased self-worth with the potential to impact the nurse personally as well as professionally. Having the power to effect a practice change with improved outcomes for patients also creates meaningful work for nurses, thus increasing job satisfaction with a resultant potential increase in staff retention. EBP CRFPs provides for professional development of ways for nurse clinician's to live out meaningful lives at their places of work while positively impacting patient care (i.e., improved patient outcomes and satisfaction).

Commitment to Practice Development and Improvement

"Evidence-based practice requires the nurse to acquire a new set of research evaluation skills to augment, or possibly replace, approaches to interventions that have been based on tradition" (Bernardo et al., 2008, p. 463). As an EBP Fellow, the nurses were empowered to look at existing practice, question that, and to research the evidence to find the best practice for their patients. Each nurse suggested their drive for continual practice improvement began with their passion for nursing, but felt that as an EBP Fellow, they are enthusiastically committed to implementing EBP as a means to improve patient care and outcomes. In addition, they felt compelled to act as mentors to educate

others in the process to empower other nurses to take ownership of their practice and implement EBP.

The longer nurses are vested in a unit, the more likely they are to find evidence-based practice important for quality patient outcomes (Schofield, 2008). All of the nurses in the study have been in their specialized units for at least 10-30 years, and this could speak to one of the facets of their dedication, passion, and commitment to EBP. They are also now equipped with the knowledge and skills necessary; "these skills are the cornerstone of EBP and, if used effectively, will enhance patient care and outcomes" (Cleary-Holdforth, & Leufer, 2008, p. 42). The study supports this finding as well.

Implications. Clearly, the nurses in the study have a passion for nursing, and a commitment to continual practice improvement; however, the EBP Fellows felt they had their energy, enthusiasm, and passion for nursing rejuvinated through their participation in the EBP CRFP as they recognized their power to enhance patient care and outcomes. The education they received in this program provided them with not only the knowledge and skills, but the opportunity to take personal ownership of their practice to address a burning clinical issue to improve outcomes for their patients.

Pursuit for Knowledge

Each nurse participant expressed an innate inquisitive nature that seemed to draw them to EBP as a means to answer the omnipresent 'why?' of their nursing practice. The EBP CRFP provided not only a means, but the tools and skills necessary to answer the nurses' clinically relevant questions.

Many of the participants spoke to the importance of nurses questioning existing practice; to know why they are doing what they do (i.e., rationale for interventions). A

large component of nursing education is based upon the nursing process (i.e., assessment, planning, intervention, and evaluation), and nursing students are taught to look for the rationale for each and every action they make. Critical thinking and reflection is fostered in nursing education, and it is quite possible that the participants' nursing education is partially responsible for the nurses' questioning what they do and always asking 'why?'.

Many of the nurse participants felt the EBP CRP sparked their interest to pursue a post-graduate degree in nursing (if they were not already enrolled). Several of the nurses thought the EBP CRFP also gave them an advantage in their current post-graduate coursework in two ways: improved research skills and improved critical thinking skills. Over half of the nurse participants expressed an interest in pursuing their Doctorate in Nursing Practice.

Implications. This may be the proverbial chicken or the egg question: do nurses have an innate inquisitive nature about their practice, or has their education and training taught them to be that way? Nonetheless, it appears that the EBP CRFP provides an effective method for nurses to question practice, search for evidence to support practice change, and then implement change. If the EBP CRFP sparks or further incites nurses' pursuit of knowledge and ultimately, their pursuit of post-graduate education, this would contribute greatly to nursing by infusing more Master and Doctorate prepared nurses into the profession.

Ethical Imperative for EBP

There was a resounding cry among all the participants that EBP was an ethical imperative for nursing practice, and they were quite passionate about EBP implementation as a moral obligation and duty for all nurses. As an EBP Fellow, the

nurses found they had the knowledge to question practice and the courage to speak up on

behalf of their patients; it would be negligent if they did not. Through the EBP CRFP, the

nurse participants learned to listen to their heads and their hearts, and if something

doesn't feel right, to question that practice—no matter if it is a physician, peer, or other

healthcare providers. The patient always comes first, and all of the participants felt

strongly that they had an ethical imperative to act on behalf of their patients to assure best

practice and better outcomes for them.

The literature certainly documents that EBP is a better and safer approach to

nursing practice. There was not, however, any studies addressing the ethical imperative

of nurses to implement EBP; however providing better and safer care for all patients is

inherently an ethical issue. Professional nurses are constantly faced with challenges to

make the right decisions and to make the correct actions for their patients, and as such,

nursing is an ethically grounded profession (Liaschenko & Peter, 2004).

The failure of nurses to integrate EBP into their practices results in "care that is of

lower quality, less effective, and more expensive" (Beyea & Slattery, 2006, p. 10). With

nearly 25% of patients receiving treatments that are unnecessary or potentially harmful,

and almost 40% of patients not receiving treatments with proven effectiveness (Grol &

Grimshaw, 2003), there is a sense of urgency to address the ethical issue of variability in

patient care.

Implications. The tradition of nursing is self-reflective, enduring, and distinctive,

and the stated goals of the nursing profession are demonstrably ethical: to protect the

patient from harm, to provide care that prevents complications, and to maintain a healing

psychological environment for patients and families (Curtin, 1979; Levine, 1989). The

findings of this study suggests that nurses who have completed an EBP CRFP possess the knowledge, skills, and tools necessary to provide best practice, and now believe the implementation of EBP into nursing practice is an ethical imperative for all nurses. The EBP Fellows all emphatically stated that it is simply not acceptable, and perhaps even morally wrong, to be complacent with current traditional nursing practice.

EBP may not be the absolute answer, but what offers is the provision of ethical, safe, quality, cost-effective healthcare based on best evidence with patient preferences and clinical expertise taken into consideration (Institute of Medicine, 2001). It appears the EBP CRFP is an effective method for providing nurses with the means to implement EBP into nursing practice and to guide them in making ethically appropriate decisions regarding their patients' care, and to provide ethical, safe, quality, and cost-effective healthcare.

Excitement and Enthusiasm for the EBP Process

There was a contagious excitement among the nurse participants as they spoke about their EBP CRFP experience and the process of EBP in particular. The nurses all emphatically spoke of the excitement elicited throughout the auditorium during Dr. Melnyk's presentation stating they hung on her every word, and were absolutely mesmerized by what they heard at the conference. They felt Dr. Melnyk was speaking to them personally, calling them to take charge of their practice, and thus compelling them to sign up for the EBP CRFP at TMC immediately.

Several participants spoke to the synergistic effect of being around nurses who were involved in EBP as a means to impact practice change, and feeling camaraderie with them. They felt being with other nurses involved in the EBP CRFP helped them to

better understand research, further stimulated their interest in research, and helped to incorporate research into their nursing practice. There was nothing in the literature that suggested nurses' contagious excitement and enthusiasm regarding EBP, nor their nursing partnerships creating a synergistic effect in the process.

Implications. "The current literature lacks effective techniques and strategies for facilitating partnerships between nurses… to teach EBP skills" (de Cordova et al., 2008, p. 242). It appears as though the EBP CRFP is an effective strategy for not only facilitating partnerships among nurses implementing EBP, but to heighten enthusiasm for the process, and to create a synergistic effect among those involved in practice change.

Awareness of Burning Clinical Questions

"Every nurse with an open mind and an open heart sees things that might be done better or thinks about changes that will improve patient's care and outcomes" (Gawlinski, 2008, p. 325). This profile definitely fits every nurse interviewed for this study; they all professed to being fanatical about asking themselves on a daily basis: Can we do this better? Why are we doing things this way? What does the literature say? Is this really best practice for our patients? The nurse participants feel as the EBP expert in their units, they have also engendered this inquisitive nature of questioning practice among their peers as well.

Each participant was able to include their units' staff RNs in an EBP pilot project addressing a burning clinical issue for that particular unit. These issues were identified by the staff as a questionable practice that was, in all likelihood, not isolated to their unit, but perceived to be a universal problem for all nurses (and patients). Having their peers involved in the pilot projects not only educated other nurses about EBP, but proved the

efficacy and value of their EBP interventions to them as well. "If a nursing activity is perceived worthless or confusing, nurses will not implement it. If nurses know exactly what is expected and valued in a system, the activity will be implemented" (Marwaha, 2004, p. 18). The EBP Fellows were able to validate practice to their peers by utilizing EBP and including them in the process.

The literature shows that utilizing the EBP process encourages critical thinking and professionalism, thus enabling practitioners to support practices that have been clearly proved to work, to question those practices for which no evidence exists, and to discard those that have been shown to do harm (Shorten & Wallace, 1997). In addition to enhancing the reputation of nursing research, EBP enables nurses to validate their practices and develop the nursing knowledge base (Hunter, 1998) necessary to facilitate the paradigm shift.

The nurse participants relayed stories of how subsequent to the EBP pilot projects, their peers frequently approach them to ask about other clinical practice issues that need attention in their units. The EBP Fellows feel that their nurse colleagues have also caught the fever of EBP, and are attracted to the process because they know they can find an answer to their burning clinical issue in the research. It is not clear whether the burning clinical questions attract nurses to EBP in the first place, or if it is the EBP CRFP facilitated nurses' awareness of these issues and offered a practical approach to addressing them. There was no literature that provided insight into this conundrum.

Implications. It does not seem to matter whether the chicken or the egg came first; the real implication for nursing is that the EBP CRFP facilitates a practical, ethical, and patient-centered approach to nursing practice to provide better outcomes for patients. If

this program attracts nurses because they are looking to find answers to burning clinical questions, EBP education and awareness is fostered. If the EBP CRFP enables nurses to better identify the burning clinical issues, then EBP is still fostered. The true bottom line, however, is that the burning clinical issue is addressed, and EBP practice is implemented to provide the best care for patients.

Researcher's Personal Thoughts and Reflections

My curiosity and interest in this study was set in motion about three years ago when I first became aware of EBP. I had been a critical care nurse for over 25 years, had a BSN and an MSN, and prided myself on excellent nursing care; yet I had never been privy to the process of EBP until I stumbled upon an EBP conference. I have often wondered, how many more years would I have been practicing traditional nursing had I not received that EBP conference brochure in the mail?

Dr. Melnyk was the guest speaker at this conference, and much like the nurse participants interviewed, I recall the electricity in the room when she spoke. After hearing her speak, I firmly believed that anyone who heard her make the case for EBP could not possibly resist jumping on that EBP wagon with her! I couldn't help but wonder how many other nurses were still in the dark about EBP, and more importantly, why? How as a profession could nursing have this possibly let EBP slip through the educational cracks?

The literature repeatedly reports that nurses are not implementing EBP and continue to speculate about the barriers to implementation of EBP; but to date, no studies have been done to investigate the answer to this question from the staff nurses' perspective. Their perceptions are the representations of their reality and influence or guide their nursing practice. "Perceptions give meanings to one's experience, represents

one's image of reality and influences one's behavior" (King, 1996, p. 24). This was the impetus for my study.

Admittedly, it was difficult to maintain my 'poker face' as I interviewed the nurse participants and their stories unfolded: I understood their excitement, I knew of the passion with which they spoke, and I felt a kinship with them. Journaling helped me to keep my feelings in check and to keep my mind from jumping ahead and making any conclusions before all the data was in; however, one night as I was looking over my notes, it occurred to me that perhaps we are just not doing a good enough job of getting the information to the nurses.

While I was quite excited to see the positive outcomes of the study and the implications it has for successful implementation of EBP, I couldn't help but ask myself: of what value are EBP CRFPs if nurses are not availing themselves to them simply because they have not ever heard of EBP? When I shared these thoughts with a colleague, she remarked, 'you would have to be living under a rock not to have heard of EBP.' I am saddened to have to respectfully disagree with my colleague; unfortunately, EBP is simply not as pervasive a topic in nursing, much less in practice, as one may be inclined to think.

My mother and brother were in a serious car accident during the time I was writing Chapter Four of my dissertation, and while their injuries were not life-threatening, they developed worrisome complications, and I flew to St. Louis to be with them and help direct their care. During my weeklong stay at the Level II Trauma Center where my family was being treated, I witnessed several nurses performing outdated and

ineffective treatments and interventions on both my mother and my brother. I asked several of the nurses if their facility was making the push for EBP, and the answer was a resounding 'no.' Only one nurse, a new graduate from a BSN program, had even heard of EBP.

With the findings of this study, I am encouraged that there is, in fact, an effective way to facilitate implementation of EBP into nursing practice. Nevertheless, the real issue is how to get the concept of EBP to the nurses who need it (i.e., dissemination of information regarding EBP). I believe that one solution is to integrate EBP into nursing education, which is currently included in some BSN curricula, but not in a standardized fashion and certainly not universally. In addition, as recommended by N-6, perhaps the State licensure boards need to take action to ensure each nurse is educated in EBP. Not only do nurses owe it to themselves to incorporate EBP into practice, they owe it to their patients.

Recommendations for Future Research

1. Replication of this study in a different facility with a larger population is warranted to investigate whether the findings of this study were unique to the facility, the nurses, sample size, or other variables. While this study yielded some very powerful results, the sample was not random and cannot be generalize beyond the study sample. Geographical location may also impact a nurses' perception of EBP and EBP CRFPs.

2. Follow-up study with the nurse participants in this study to determine whether the findings and their feelings, emotions, enthusiasm, etc. change over time.

3. Formal evaluation study of EBP CRFPs to determine the effectiveness of the process on achieving cultural change (i.e., turning learning into sustained behavioral change).

4. Investigative study into curriculum of EBP CRFP to determine if a standardized approach is being utilized.

5. A cross-sectional national study regarding nurse clinicians' awareness of the concept of EBP.

6. A quantitative, deductive study utilizing a checklist or questionnaire based on the seven identified themes to assess the degree to which these traits are in place across various facilities.

Conclusion

The overall challenge for health care organizations, and nursing in particular, is how to best prepare nurses to access the ever-growing mounds of clinical evidence for incorporation into practice. While dependent on duplication and expansion of this study, it appears that EBP CRFPs may be an evidence-based solution (i.e., EBP) for successful implementation of EBP into nursing practice.

The findings of this study support the effectiveness of EBP CRFPs as a successful method to not only indoctrinate nurses in the practice of EBP and facilitate its implementation into practice, but to have reported additional positive outcomes associated with the participation in this type of program including, but not limited to: (a) increased confidence, (b) empowerment (c) commitment to practice development and improvement, (d) pursuit of knowledge, (e) ethical imperative for EBP, (f) excitement

and enthusiasm for the EBP process, and (g) awareness of the burning clinical questions. The study calls for further research, development, and evaluation as a continual and cyclical process to determine if these outcomes translate into sustained behavioral changes for nurses.

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██████████████ EBP Clinical Research Fellowship Program Curriculum

Objectives of the Program:

1. Facilitate understanding of research as evidence for practice

2. Foster critical appraisal skills

3. Develop strategies for implementation of change

4. Empower individuals to become change agents

5. Promote an evidence-based culture

Aim of the Program:

1. To educate participants in the evolution of EBP, the processes of EBP, and its importance to nursing.

2. To equip participants with the range of skills required to conduct secondary research (i.e., research utilization). The primary focus would be on finding existing evidence, utilizing critical appraisal and analysis skills, and decision-making processes necessary to guide movement of implementing practice changes researched to improve patient outcomes.

3. To help participants to identify barriers to research utilization as well as barriers to the EBP implementation process. Goal would be facilitation in the development of a clinically relevant issue identified at the participant's organization and ultimately, a proposal for an EBP project to address this issue.

4. To equip participants with transferable written skills, presentation skills, and verbal skills for the ultimate goal of writing for publication and making an oral presentation.

5. To discuss strategies for cultivating and fostering an EBP environment (i.e.,

    organizational culture change).

Program Outline:

Week 1

    I.   Introduction to Evidence-Based Practice

    II.   Database Searching Skills

Week 2

    I.   Critical Appraisal Skills

    II.   Systematic Reviews

    III.   Research Article Critique in group

Week 3

    I.   Statistics

    II.   Literature Searching

    III.   Independent Study Time

Week 4

    I.   Identify Research Projects

    II.   Presentation Skills

    III.   Journal Clubs

    IV.   Independent Study Time

Week 5

    I.   Ethics and Research Funding

    II.   Clinical Audit

    III.   Independent Study Time

Week 6

    I.   Writing Abstracts and Journal Manuscripts

    II.   Student Presentations on Project Proposals

    III.   Peer Evaluation & Feedback

Week 7

    I.   Independent Study Time

    II.   Tutorials & Self-directed Learning

    III.   Faculty Help & Support as Needed

Week 8

    I.   Writing Abstracts and Journal Manuscripts

    II.   Independent Study Time

    III.   Tutorials & Self-directed Learning

    IV.   Faculty Help & Support as Needed

Month 3

    I.   Independent Study Time to work on EBP Projects

    II.   Faculty Help & Support as Needed

Month 4

    I.   Independent Study Time to work on EBP Projects

    II.   Faculty Help & Support as Needed

Month 5

    I.   Independent Study Time to work on EBP Projects

    II.   Faculty Help & Support as Needed

Month 6

    I.   EBP Project Presentations

    II.   Peer Evaluation & Feedback

    III.   Journal Manuscript Writing: Submitting your EBP Project for Publication

Month 7

    I.   Final Presentations

    II.   Final Peer Evaluation & Feedback

    III.   Feedback on Journal Manuscripts

Month 8

    I.   LBMMC Presentation

    II.   Graduation from Program

APPENDIX B

E-Mail to Potential Participants

Dear EBP Fellow,

In partial fulfillment of my doctoral studies at Pepperdine University, I will begin conducting research for my dissertation study in January 2009. My study is titled: A Phenomenological Study of Nurse Clinicians' Participation in an Evidence-Based Practice Clinical Research Fellowship Program. The purpose of this study will be to explore the lived experiences of nurse clinicians who have participated in the EBP CRFP at Long Beach Memorial Medical Center to derive textual and structural descriptions in order to provide a composite description (i.e., the essence) of this experience. As a graduate of this program, I would like to ask for your participation.

You should be aware that you are free to decide not to participate or to withdraw at any time without affecting your relationship with the Nursing Research Council or ███ ████████ Medical Center. The study will not and cannot be used for any kind of performance evaluation, disciplinary measure, or basis for subsequent employment opportunities.

Your participation in this study will involve two hour long taped interview. This interview will be transcribed by myself and coded with Participant ID numbers to assure complete anonymity. No names will appear on the final report; the use of pseudonyms will protect your identity. Only I will know your identity, your associated numeric Participant ID number, and your pseudonyms. A master copy of this information and all data collected will be kept in a locked drawer and will be destroyed after five years.

Each study participant will receive a $50 gift certificate to Starbucks. There may not be any other direct benefits to you for participation in this study; however, potential benefits associated with your participation are reflective introspection about your experiences in EBP and the opportunity to participate in a research study.

I welcome the opportunity to discuss this study further with you and to answer any questions you may have regarding the study. Please call or e-mail me to set up a time to discuss this further or to set up your interview times (I am hoping to conduct all interviews in January of 2009).

I look forward to hearing from you soon!

Cheri Hernandez, RN, MSN, CCRN

Work phone: ████████████
Cell phone: ████████████
E-mail: ████████████████████████████████

APPENDIX C

Pepperdine University Informed Consent

Dear Participant,

The following information is provided for you to decide whether you wish to participate in the present study. You should be aware that you are free to decide not to participate or to withdraw at any time without affecting your relationship with the Evidence-Based Practice Steering Committee or ████████████████ Medical Center. The study will not and cannot be used for any kind of performance evaluation, disciplinary measure, or basis for subsequent employment opportunities.

The purpose of this study is be to explore the lived experiences of nurse clinicians who have participated in the EBP CRFP at ████████████████ Medical Center to derive textual and structural descriptions in order to provide a composite description (i.e., the essence) of this experience. Individuals involved in this study will be the nurses who have completed the ███████ Evidence-Based Practice Clinical Research Fellowship Program.

Data collection will involve two hour long taped interview. The interview will be transcribed by the researcher and coded with Participant ID numbers to assure complete anonymity. No names will appear on the final report; the use of pseudonyms will protect the identity of the participants. Only the researcher will know the identity of the participants, their associated numeric Participant ID number, and their pseudonyms. A master copy of the study participants, the ID numbers, pseudonyms, and all data collected will be kept in a locked drawer and will be destroyed after five years.

Do not hesitate to ask any questions about the study before participating or during the time you are participating. I would be happy to share my findings with you after the research is completed. However, your name will not be associated with the research findings in any way, and your identity as a participant will be known only to me.

There minimal risks and/or discomforts associated with this study. There may not be any direct benefits to you for participation in the study; however, potential benefits associated with your participation are reflective introspection about your experiences in EBP and the opportunity to participate in a research study.

Please sign this consent with full knowledge of the nature and purpose of the procedures. A copy of this consent form will be given to you to keep.

_____   _____
Participant   Cheri Hernandez, RN, MSN, (Principal Investigator)

_____   _____
Date   Date

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APPENDIX D

Facility Informed Consent Form

████████ Health Services Research Council
Institutional Review Board

████████████████ Medical Center

Informed Consent to Participate in a Research Study

Title: A Phenomenological Study of Nurse Clinicians' Participation in an Evidence-Based Practice Clinical Research Fellowship Program.

Principal Investigator:	Cheri Hernandez	**Phone #:**	████████
Contact Person:	Cheri Hernandez	**Phone #:**	████████

████ **Project Number: 505-09**

Purpose of the Study
Evidence-Based Practice Clinical Research Fellowship Programs (EBP CRFP) were designed to help nurses adopt the use of scientific evidence into clinical nursing practice; however, these programs have not been adequately evaluated in terms of the impact of the program on participants, their clinical practice, and the organization. The purpose of this study will be to explore your perception of your experience as a participant of ████████'s EBP CRFP to find what impact this program had on your professional and person life (i.e., the essence of your experience).

Describe Procedure
At your convenience, a meeting will be arranged to set up two (2) one-hour interviews. The first interview will take place at private and comfortable conference room at the medical center. At the start of the interview, you will be asked to sign the written consent form to participate in this study. The interview will then begin by obtaining your biographical information. The rest of the interview will consist of answering seven open-ended questions. The interview will be audio taped and conclude after one hour. This first conversation will then be transcribed by Cheri Hernandez and sent to you to provide an opportunity for review and reflection. The second one-hour interview will also take place at private and comfortable conference room at the medical center, and will allow further investigation, exploration, and clarification of your experience in the EBP CRFP. This interview will also be audio taped and transcribed at a later date by Cheri Hernandez.

Physical Requirements
You will be asked to sit and discuss your experience for two one hour session interviews.

Duration of the Study

At the conclusion of the second interview, you will not have any further commitments to the study. Cheri Hernandez will then proceed with the analysis of the data collected; this analysis is expected to take 2-3 months. The final write-up will be completed by June 1, 2009 thus bringing the study to a close.

Risks/Side Effects

There are no anticipated risks or side effects associated with this study.

Pregnancy Risks

Not applicable.

Potential Benefits

There may not be any direct benefits to you for your participation in the study other than the opportunity to reflect upon your experience and to contribute to a research study.

Alternatives

None, other than non-participation.

You have been given the opportunity to ask questions which have been answered to your satisfaction. You understand Cheri Hernandez will answer any questions that you might have in the future.

Costs and Payments

There will be no costs to you.

Physical Injury Statements

Any medical treatment that is required as a result of a physical injury related to this study, is not the financial responsibility of ███████████████ **Medical Center**

Compensation

You will be compensated with a $50 Starbucks Gift Card for your time if you are accepted for the study and finish both interviews. If for any reason you cannot finish the study, you will be compensated for your time during the study with a $25 Starbucks Gift Card. The Gift Cards will be awarded at the conclusion of your interviews.

Voluntary Participation/ Right to Withdrawal

You understand that your participation in this study is voluntary. You may decide not to participate or you may withdraw from the study at any time without consequence.

New Information/Significant New Data

Not applicable.

Confidentiality

You understand that any information about you obtained from this research will be kept confidential and your name will never be identified in any report or publication

unless you sign a release. You consent to the publication of study results so long as the information is anonymous and/or disguised so that identification cannot be made. You also understand that authorized representatives of ██████ Institutional Review Board (██████ Research Council) may examine your information, and there will be no breach of confidentiality.

IRB-FDA Clause

This proposal has been reviewed and approved by the ████████ Health Services Institutional Review Board (█████ Research Council), which serves as the IRB for ████████████████ Medical Center, which is composed of physicians and lay persons. If you have any questions about your rights as a research subject, or regarding a treatment related injury, or desire further information concerning the availability of compensation or medical treatment, you may contact ████████ ████████, MD, the Executive Director, Office of Research Administration, ████████ Health Services, at (████) ████████.

Cheri Hernandez has discussed this study with you. If you have any questions you can reach her at ████████████.

I certify that I have read the preceding or it has been read to me, that I understand its contents, and that any question I have pertaining to the preceding have been, or will be answered by Cheri Hernandez and that my permission is freely given. I have been given a copy of this consent form along with a copy of the "*Rights of Human Subjects in Medical Research,*" and I consent to participate in this study.

_____
Participant's Name

_____ _____ _____
Participant's Signature   Date   Time

_____ _____ _____
Witness to Participant's Signature   Date   Time

If the subject is a minor, or otherwise unable to sign, complete the following:

a)   Reason subject is unable to sign: _____

        _____

b)   _____   _____
        Name of Authorized Person   Date

        _____   _____
        Signature of Authorized Person   Time

_____   _____

Relationship and Basis of Authorization to Give Consent

APPENDIX E

Authorization to Use or Disclose Health Information that Identifies You for a Research Study

If you sign this document, you give permission to Cheri Hernandez at Pepperdine University to use or disclose (release) your health information that identifies you for the research study described below:

Title of the Study: A Phenomenological Study of Nurse Clinicians' Participation in an Evidence-Based Practice Clinical Research Fellowship Program.

Purpose of the Study: Evidence-Based Practice Clinical Research Fellowship Programs (EBP CRFP) were designed to help nurses adopt the use of scientific evidence into clinical nursing practice; however, these programs have not been adequately evaluated in terms of the impact of the program on participants, their clinical practice, and the organization. The purpose of this study will be to explore your perception of your experience as a participant of ███████'s EBP CRFP to find what impact this program had on your professional and person life (i.e., the essence of your experience).

The health information that we may use or disclose (release) for this research includes Biographical and demographical information such as age, gender, ethnicity, nursing education, year of licensure, clinical specialty, specialty certification, current area of practice, years of clinical experience, and prior work experience. The health information listed above may be used by and/or disclosed (released) to: Cheri Hernandez, Principle Investigator, and her Co-Investigators: Dr. Kent Rhodes, Dr. Doug Leigh, and Mr. Todd Bouldin.

███████████████ Medical Center and Pepperdine University are required by law to protect your health information. By signing this document, you authorize ███████████ and Pepperdine University to use and/or disclose (release) your health information for this research. Those persons who receive your health information may not be required by Federal privacy laws (such as the Privacy Rule) to protect it and may share your information with others without your permission, if permitted by laws governing them. Please note that ████████████████ and Pepperdine University may not condition (withhold or refuse) treating you on whether you sign this Authorization.

You may change your mind and revoke (take back) this Authorization at any time. Even if you revoke this Authorization, Cheri Hernandez may still use or disclose health information they already have obtained about you as necessary to maintain the integrity or reliability of the current research. To revoke this Authorization, you must write to: Cheri Hernandez, ████████████████████

No publication or public presentation about the research described above will reveal your identity without another authorization from you.

You are authorizing Cheri Hernandez to use and disclose your PHI for a period of two years after the study closure.

I will be given a signed copy of this authorization form for my records. I authorize use of my identifiable information as described in this form.

APPENDIX F

Biographical Data Sheet

Dialogue: I'd like to start by having you tell me a little bit about yourself.

- Where did you go to nursing school? Was type of program was that?

- When did you get your RN license?

- Do you have any specialty certification?

- What area do you currently work in? How long? Prior experience?

Age	
Gender (M/F)	
Ethnicity (White, Black/African American, Hispanic/Latino, Native American, Asian, Other)	
Nursing Education (Diploma, AA, BSN, MSN, PhD)	
Year of Licensure	
Clinical Specialty	
Specialty Certification	
Current Area of Practice	
Years of Clinical Experience	
Prior Work Experience	

Participant ID:

Interview Protocol Project: LBMMC EBP Clinical Research Fellowship Program

Time of Interview: **Date:**

Place:

Participant ID:

On reflection of your participation in this program:

1. Please tell me as much as possible about the details of your experience of participation in the EBP CRFP.

2. Now that you have completed the EBP CRFP, please share your thoughts with me about how you feel about pursuing a higher degree?

3. How do you feel about submitting and presenting an abstract of your EBP project at a conference? And if you have already presented at a conference, was it a local, national, or international conference, and can you share what this experience was like for you?

4. Please describe your feelings about preparing a publication relating to your EBP project for submission to a journal, and tell me about how you feel about this process.

5. Please tell me about any opportunities you have had to engage in any further research/evidence-based practice initiatives relating to, or spanning from, the knowledge and skills learned as part of the EBP CRFP (e.g., setting up a journal club, working as part of a team on developing evidence-based practice guidelines, etc.) and how you felt about this experience.

6. Please tell me about any opportunities you have had to teach critical appraisal skills to your colleagues, and relate your thoughts and feelings with regard to these opportunities.

7. Please tell me about any experiences you have had with regard to the application of the skills and knowledge learned in the EBP CRFP as they relate to your daily work, nursing practice, or any other areas you have found yourself utilizing this knowledge and skill set?

Adapted with permission from primary author from survey used Milne et al (2007)