

Nursing Practice Change: An Interpretive Description Study of Nurses Working in Qatar

by

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Defining the Process of Nursing Practice Change: An Interpretive Description Study of  
Nurses Working in Qatar

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### **Abstract**

Clinical nursing practice is on the cusp of significant and unrelenting change amid globalization, austerity measures and technological advancements as the world moves out of the industrial age into the knowledge age. With advances in technology, theory and research, the potential changes to future nursing practice are unlimited. Understanding the process nurses undertake to change their practice in light of these predicted trends is critical if outcomes for patients are to be safe and effective. Yet, there was a paucity of published research that investigates the process of nursing practice change. Thus, the purpose of this study was to describe the process registered nurses undertake to change their clinical practice. The study used an interpretive description methodology and involved interviewing 15 registered nurses with various backgrounds and experience in Doha, Qatar. Data were analyzed using constant comparison methods, simultaneous data collection and analysis, and intensive memoing. The findings revealed an overall theme of 'easing the dis-ease', in addition to three sub-themes: disruption, actioning and stabilizing. The study provides important insights into how nurses change their clinical practice. A significant contribution of this study is the role of the individual in changing nursing practice.

## Table of Contents

Supervisory Committee .....	ii
Abstract .....	iii
Table of Contents .....	iv
Chapter 1: Introduction .....	1
Future Trends Influencing Nursing Practice .....	2
Technology.....	2
Interdisciplinary care. ....	3
Nursing workforce. ....	4
Changing client/patient profile. ....	5
Variation in skill mix.....	5
Practice movements. ....	6
Statement of the Problem.....	7
Purpose of the Study .....	7
Research Question .....	8
Definition of Terms.....	8
Importance of the Study.....	8
Chapter 2: Literature Review and Considerations of the Study’s Context and Culture ...	11
Literature Review.....	11
Nursing Theory (see Table 1 – Appendix A) .....	14

Knowledge Utilization (see Table 2 – Appendix B) .....	20
Quality Improvement (see Table 3 – Appendix C) .....	26
Syntheses of Literature .....	29
Chapter 3: Methodology .....	33
Locating Myself.....	35
Statement of Study Context and Culture .....	37
Language.....	40
The Research Design .....	42
Setting .....	42
Recruitment and sampling procedures.....	42
Data collection and analysis techniques. ....	46
Rigor and credibility. ....	53
Ethics and informed consent.....	56
Limitations of the study. ....	56
Chapter 4: Presentation of Study Findings .....	60
Disrupting Knowledge .....	61
Disrupting practice knowledge. ....	62
Disrupting personal knowledge. ....	67
Actioning.....	71
Positional actioning.....	72

Educational actioning.....	75
Relational actioning. ....	78
Stabilization .....	80
Conclusion .....	83
Chapter 5: Discussion.....	86
Practice Change: Individual, Organizational or Both.....	86
Change Theories: Similarities and Differences Among Theories and Findings.....	91
The Influence of Context and Culture .....	95
Future Studies .....	98
Unique Findings and Practice Implications .....	100
Conclusion .....	102
References.....	104
Appendix A: Table 1 – Theory Findings.....	130
Appendix B: Table 2 – Knowledge Utilization Findings.....	135
Appendix C: Table 3 – Quality Improvement Findings.....	138
Appendix D: Participant Consent Form.....	141
Appendix E: Semi-structured Interview Questions .....	144
Appendix F: Certificate of Renewed Approval .....	145

## Chapter 1: Introduction

On a global scale, clinical nursing practice is undergoing significant and unrelenting change amid globalization, austerity measures and technological advancements as the world moves out of the industrial age into the knowledge age. International organizations such as the Institute of Medicine (2011) and the International Council of Nurses (2018) have produced documents projecting that significant changes will be experienced worldwide. To help identify and plan for these anticipated changes, countries like Canada (Canadian Nurses Association, 2008) and Qatar (Hamad Medical Corporation, 2015; Ministry of Public Health, 2018) have developed their own documents.

This study focused on Registered Nurses (RN) in Doha, Qatar, a rapidly developing country that is undergoing substantial change in an effort to modernize its healthcare system (Cannaby et al., 2017). Qatar's *National Health Strategy 2018 – 2022* (Ministry of Public Health, 2018) was created to guide the ongoing development of the healthcare system and identified five system-wide areas for improvement including integrated model of high quality care and service delivery, enhanced health promotion and disease prevention, enhanced health protection, health in all policies, and effective system of governance and leadership. Hamad Medical Corporation (2015), who is the largest provider of healthcare in Qatar, produced the *Nursing and Midwifery Strategy 2015-2018* to identify five necessary changes to ensure nursing practice fit with the National Health Strategy by “providing the best evidence-based compassionate care with the right staff educated to the right standards in the right structure actively participating in and leading research as part of the academic health system” (p. 7). Most recently, the nursing leadership at Hamad Medical Corporation implemented a Nursing Systems Framework that included six overall themes of professionalism, education, structure, quality of nursing care, and

academic health system, and communication implemented through 34 interventions (Cannaby et al., 2017). These three documents are intended to guide changes within the healthcare system in a coordinated effort. The magnitude and speed with which these changes are occurring are apt to affect every nurse working in the State of Qatar.

As healthcare systems in Qatar and around the world experience transformations, nursing practice will need to undergo substantial changes to accommodate them. Understanding the process that nurses embark on to change their practice can inform strategies to facilitate change in a safe and effective manner. The link between practice and factors that influence change has been well established (Baird & Miller, 2015; Chew, 2014; Murray, Magill, & Pinfold, 2012) and the literature is replete with discussion about barriers and facilitators to evidence-based practice (EBP), research utilization (RU), quality improvement (QI) and theory-based practice (TBP). The success of approaches to change practice differs and may benefit from our better understanding of the individuals involved with the practice change. Although there have been many successful studies to change nursing practice, the focus of these studies has not been on individual change. By better understanding the process that individual nurses go through to incorporate the changes, we may learn how we can improve our success when it comes to changing practice.

### **Future Trends Influencing Nursing Practice**

In the following section, I highlight the major trends identified in the literature that are predicted to have an influence on nursing practice.

#### **Technology.**

One of the most far-reaching trends that may influence nursing practice is technology (Velmurugan, 2017). Advances such as nanotechnology, robotics, telehealth and electronic health

records will require nurses to change the way they think and practice. When it comes to nursing with nanotechnology, nurses may have to implement practice changes to accommodate anything from the science-fiction like delivery of nano-sized robots into a patient's body to target a specific organ, to teaching patients how to use nano-sized computers to measure things like blood pressure or glucose levels to improve self-care via telehealth (Staggers, McCasky, Brazelton, & Kennedy, 2008).

Technology may also impact the management and integration of health information in nursing practice through what is known as nursing informatics. Nursing informatics is defined as the integration of "nursing science, computer science, and information science to manage and communicate data, information, knowledge, and wisdom into nursing practice (American Nurses Association, 2014, p. 65). The nursing informatics movement has, and will continue to have, a determinable influence on nursing practice to ensure that nurses have the best information and evidence to support nursing care (CNA, 2018; Velmurugan, 2017). Specifically, in the State of Qatar, optimal use of medical technology and information technology are part of the National Health Strategy (2018). Initiatives such as Electronic Health Records, Health Outcomes for Better Information and Care (HOBIC) and the Nursing Minimum Data Set contribute large amounts of patient data to facilitate the development of individualized care plans, to evaluate the outcomes of nursing practice and to permit analysis of aggregated data for planning nursing and health services to meet population needs.

### **Interdisciplinary care.**

Along with technology, interdisciplinary care continues to have an influence on nursing practice change. Since 2008, organizations such as the World Health Organization (WHO) (2016), Canadian Nurses Association/Canadian Health Services Research Foundation

(CAN/CHSRF) (Browne, Birch, & Thabane, 2012), International Council of Nurses (ICN) (2008) and Hamad Medical Corporation (2015) have called for a shift towards healthcare that is delivered by interdisciplinary teams (Institutes of Medicine, 2015). Interdisciplinary healthcare teams manage care from the same perspective as opposed to multidisciplinary healthcare teams in which each team member approaches care from their specific discipline (Jessup, 2007). Thus, an interdisciplinary approach means that instead of nurses working solely from their disciplinary perspective, they must consider the perspectives of *all* team members in a method that goes beyond collaboration to achieve complete integration of all perspectives.

### **Nursing workforce.**

The latest statistics from the Canadian Institute for Health Information (CIHI) (2017) show that the number of new nursing graduates is decreasing, while the number of experienced RNs retiring is increasing. In 2013, there were more than 24 000 internationally educated RNs working in Canada (Canadian Institutes for Health Information, 2014) and this number may increase as employers try to address the decreasing supply of RNs. Li, Nie, and Li (2014) argue that there is a shortage of RNs worldwide along with a strong pattern of nurses who graduate in developing countries and then immigrate to developed countries with the largest source of migrant RNs coming from the Philippines (Li, Nie, & Li, 2014).

Qatar is a developing country that recruits the majority of its workforce from outside the country, including in the healthcare field, thus the majority of its RNs come from abroad (Ministry of Development, Planning, and Statistics, 2017). The nursing workforce in the State of Qatar is dominated by expatriate nurses, namely from the Philippines and India. The population of Qatar is rapidly growing, resulting in an increasing need for skilled and educated nurses (Hamad Medical Corporation, 2015). Currently in Qatar, the ratio of RNs to the general public is

1 to 173 (Ministry of Development, Planning, and Statistics, 2017) as compared to 1 to 127 in Canada (Canadian Nurses Association, 2012). The background education and training of the expatriate nurses working in Qatar varies depending on their country of origin, even among those who hold the same degree. Consequently, educating new nurses, building on the education of experienced nurses and increasing the number of nurses with graduate degrees were all strategies part of the *Nursing and Midwifery Strategy 2015-2018* (Hamad Medical Corporation, 2015) and the Nursing Systems Framework (Cannaby et al., 2017).

### **Changing client/patient profile.**

In Canada, there is an expected shift of patients receiving care in a hospital setting to receiving care in a community setting (Canadian Home Care Association, 2016). Only those patients requiring the highest intensity care will be cared for in the hospitals, while patients who would have previously been admitted to the hospital for acute care needs will be cared for in the community. These changes in patient profiles will demand a shift in nursing practice both in the hospital and in the community. Although this phenomenon is not something currently experienced in the State of Qatar, the *National Health Strategy 2018 - 2022* (Ministry of Public Health, 2018) identified the need for a significant redesign of the healthcare system, including expanding home and community care, to provide for the changing needs of its client population. Currently the national health system in Qatar is still largely an acute hospital-based system.

### **Variation in skill mix.**

In a world of fiscal restraints and workforce shortages, the skill mix of healthcare teams providing care to patients has changed. With the introduction of Licensed Practical Nurses (LPNs) and unlicensed health care workers (HCWs), the ratio of RNs to patients has increased (Schluter, Seaton, & Chaboyer, 2011). This increasing ratio denotes a practice change as RNs

have been drawn further and further away from direct patient care into an increasingly ambiguous role (ICN, 2008). Although initially relegated to long-term care homes in Canada, the use of LPNs and HCWs is increasing in the majority of healthcare fields. Learning how to delegate tasks safely to lesser-trained staff requires nurses to adjust their practice (CNA, 2008). Schluter, Seaton and Chaboyer (2011) interviewed nurses to identify how their nursing practice had changed when faced with increased patient acuity coupled with the use of HCWs. In this study, nurses expressed the complexity of taking on the role of safeguarding their patients while being required to delegate some aspects of nursing care to lesser qualified members of the healthcare team.

In Qatar, the Hamad Medical Corporation is also changing the variation in skill mix. While not introducing the role of LPNs, they are introducing nursing roles with a higher degree of skill such as clinical nurse specialists (CNSs) and midwives (Hamad Medical Corporation, 2015). Both the *National Health Strategy 2018 - 2022* (Ministry of Public Health, 2018) and the *Nursing and Midwifery Strategy 2015-2018* (Hamad Medical Corporation, 2015) stress the importance of having the right skill mix to provide care. As the healthcare needs in Qatar grow, the skill mix requirements may demand other nursing roles and licenses. Adjusting nursing practice to incorporate these other roles and licenses may be challenging for nurses who have only worked with other RNs.

### **Practice movements.**

As the Government of Qatar takes steps, including the recruitment of international leaders from the developed world, to transform its current healthcare system into the world-class system it desires, it is likely that practice movements such as evidence-based practice, quality improvement and patient safety will play an increasingly dominant role. An overarching concept

to connect these movements is practice change, a change that may be challenging for nurses who base their practice on tradition (Eizenberg, 2010). If a nurse is to claim that their practice is based on any of the previously mentioned movements then reflecting on how new knowledge is incorporated into practice could facilitate the ability to articulate and share this experience with others. Sharing the process used to incorporate changes into practice may help to increase the success of planned change as local adaptations are shared and collaborated among colleagues.

In summary, the aforementioned trends describe potential changes that could influence clinical nursing practice in the future. Understanding how nurses change their practice will provide important information to inform strategies that support the changes nurses may experience as predicted trends become a reality. Such knowledge may also help healthcare system planners to ensure adequate supports and strategies are in place to facilitate successful practice change. Furthermore, understanding how nurses change their practice may better inform strategies to help researchers translate findings into nursing practice change.

### **Statement of the Problem**

Given the current and future trends in healthcare delivery both globally and in Qatar, a study exploring the issue of nursing practice change is timely. Insight gained from identifying the process individual nurses undertake to successfully change their practice may improve patient outcomes by providing a framework for planning change in healthcare settings. Findings from this study may also inform the design of interventions and measures aimed at evaluating nursing practice change.

### **Purpose of the Study**

This study describes the process RNs undertake to change their clinical practice. Specifically, this study describes the: (1) process undertaken by individual RNs when changing

their nursing practice, (2) factors that initiate clinical practice change, (3) factors that mediate clinical practice change and (4) factors that are necessary for clinical practice change. This study took place in the State of Qatar where I was living and working during my dissertation.

### **Research Question**

The overall research question was:

1. What is the process RNs undertake to change their practice?

Secondary questions included:

1. What initiates nursing practice change?
2. What are the factors that mediate nursing practice change?
3. What are the factors that help sustain practice change?

### **Definition of Terms**

Nursing practice change is defined in this study as an individual nurse's change or shift in knowledge, attitude or skills resulting in some change in behaviour.

### **Importance of the Study**

The need to incorporate evidence into practice is important and the more we understand the process of practice change, the better we can incorporate evidence. Understanding the process will support individual nurses by helping them to understand how to start and maintain practice change. It will also help leaders who plan practice change in healthcare organizations to ensure they engage in useful approaches to build efficacy among individual nurses. As the most populous discipline, nursing has the potential to have a significant influence on the success of future changes. Consequently, understanding the practice change process will support health services administrators and leaders plan practice change for the largest discipline. My intention in this study was to describe the process of individual nursing practice change.

For practicing nurses, there is an expectation to engage in evidence-based or evidence-informed practice (Eizenberg, 2010). The concept of translating evidence-based knowledge into practice has been the focus of much research, yet we know very little about the process that individual RNs go through to translate new knowledge into clinical practice (Graham & Tetroe, 2007). While the study of knowledge translation has made inroads into understanding barriers and facilitators of practice change, the mechanisms of how nurses transfer new knowledge into practice have been neglected (Aita, Richer, & Heon, 2007). Although evidence-based practice has been shown to have a positive influence on patient outcomes, it is not readily incorporated into nursing practice (Sciarra, 2011). Evidence-based practice requires nurses to integrate new knowledge both cognitively and behaviourally (Sandelowski, 1997), and while there are various models tailored towards helping nurses incorporate evidence, the implementation of evidence-based nursing practice is not without its struggles (Matthew-Maich, Ploeg, Jack, & Dobbins, 2010; Sidani et al., 2016). The ultimate goal of knowledge translation is to improve patient outcomes, however, new research is unlikely to impact patient outcomes unless it is put into practice (Graham & Tetroe, 2007). Presumably, the incorporation of research knowledge into clinical practice will require practice change but we do not fully understand the process nurses use to change their practice. If we better understood this process of nursing practice change, perhaps research knowledge could be incorporated into that process.

This study describes an overall interpretive process that I have labeled: easing the dis-ease. Easing the dis-ease is comprised of three main themes: disrupting, actioning and stabilizing. The organization of this dissertation is as follows. In Chapter 2, I review the literature in which nursing practice change is actualized. Three categories of nursing theory, knowledge utilization, and quality improvement emerged from the literature while undertaking the review.

Chapter 2 also highlights significant aspects of the culture and context of the Middle East. In Chapter 3, I introduce my study approach, interpretive description, and provide a description of each research element including sampling, data collection and analysis, memos, rigour, and limitations. In Chapter 4, I share my interpretations of the participants' descriptions of their practice change. I organized my interpretations into a main theme of easing the dis-ease with three distinct phases: disrupting, actioning and stabilizing. Finally, in Chapter 5, I discuss how my interpretations compare to the nursing practice change literature and provide suggestions for future studies and practical implications for application of the findings in both the Middle East and the developed world.

## **Chapter 2: Literature Review and Considerations of the Study's Context and Culture**

### **Literature Review**

Nursing is the largest professional group in healthcare and changes to nursing practice may have significant impacts on the rest of the healthcare system. There is an interdependence between individual change and organizational change and yet, the entirety of literature showcasing nursing practice change is focused on change at the group or organizational level rather than the individual level. Evidence suggests that incorporating change is challenging for direct care nurses (Deitrick, Baker, Paxton, Flores, & Swavely; 2012) and thus may account for some of the challenges that individuals trying to create change in clinical nursing practice face. There is evidence to suggest that having the right environment, including transformational leadership, access to resources and positive staff attitudes, may increase the success of organizational efforts to create change (Fennel, 2013; Gifford et al., 2018; Goldsack, Bergey, Mascioli, & Cunningham, 2015). However, our understanding of how individual nurses successfully change their practice is deficient and a lack of understanding may minimize the positive outcomes of structured change processes. Copnell and Bruni (2006) argue that the voice of the clinical nurse in practice change is silenced because nurses are viewed as targets of intervention. When nurses do express their experience firsthand, they often adopt the language of those studying the change by saying that change is desirable, rational and progressive. Furthermore, Breimaier, Halfens and Lohrmann (2015) suggest that much of the implementation science research focuses on interdisciplinary or medical disciplines and fails to isolate the changes in nursing practice. Lastly, as will be shown later in this chapter, change efforts in recent years focus on organizational level change, implying a belief that “implementation is not an individual endeavor” (Castiglione and Ritchie, 2012, p. 7). This focus on change at an

organizational level without the inclusion of the individual practitioners, has rendered the voice of the nurse involved with the change silent.

The purpose of this review is to synthesize the literature on what is currently known about nursing practice change. The literature review was guided by Whittmore and Knafl's (2005) integrative review processes, seeking to understand how practice change has been brought about. Rather than looking at the effect size or effectiveness of interventions, my review sought to uncover different attempts to change nursing practice and integrate the similarities so that I could understand the areas in need of further research. The articles included in this section of the literature review came from the Cumulative Index of Nursing and Allied Health Literature (CINAHL) database and span 2000 to 2018. All reviewed articles were published in English. Search terms included major subject headings such as 'nursing practice', 'change', 'nursing theory', 'improvement', 'implementation', 'utilization', 'evidence-based', 'evidence-informed', 'knowledge transfer' and 'clinical practice guideline implementation'. Criteria included studies showing a change in how direct care nursing was practiced.

Exclusion criteria focused on excluding studies that did not address the outcome of the nursing practice change, such as a conceptual application, or studies in which the attempted change was unsuccessful since my intention was to how study nurses successfully changed their practice. Furthermore, the change in nursing practice needed to be described separately from other disciplines in interdisciplinary studies. An example of an excluded study published in a nursing practice journal is Best et al's., (2011) study of a standardized order set to treat febrile neutropenia in which the interventions and outcome measures were exclusively interdisciplinary, yet the authors concluded the article with recommendations to nursing practice. Two studies from Turkey were also excluded (Erci, Sezgin, & Kacmaz, 2004; Nazik & Eryilmaz, 2013)

because the interventions were undertaken by external research teams, not the practicing nurses, and while the patient outcomes improved, there was zero effect on nursing practice. Further exclusion criteria included pilot studies and studies with outcome measures of perception, education or satisfaction without a description of the applied practice change. The final exclusion criteria included models or frameworks that did not allow for individual use such as the Iowa Model of Evidence-Based Practice in which the first step is to form a team.

Literature searches using the terms “nursing practice” and “change” with the limits of research, peer reviewed and English resulted in 1,275 articles. As I was reviewing the literature in which the authors shared their attempts to change nursing practice, I noticed that it grouped into three distinct categories using nursing theory, knowledge utilization theory/frameworks or general quality improvement approaches to change practice. Once those three categories were confirmed, I went back to search the literature and added these terms or their derivatives to further generate studies. This yielded a final result of 19 studies that used nursing theory to change practice (see Table 1), 16 studies that used knowledge utilization frameworks to change practice (see Table 2) and 23 studies that used quality improvement approaches to change practice (See Table 3) for a total of 58 articles that I included in this review. The nursing theory section of the review includes articles that present an application of nursing theory, or part of a nursing theory, resulting in improved nursing practice. The knowledge utilization section includes articles that apply knowledge utilization, knowledge transfer/translation, research utilization and evidence-based practice models/frameworks, resulting in improved nursing practice. The quality improvement section includes articles that describe patient flow, nursing care planning and medication practices. For those reading this literature review who have expert knowledge in nursing theory, knowledge utilization theory or quality improvement techniques, it

is important to remember that the purpose of this review was not to determine the effectiveness of these approaches in changing nurse practice but instead, to capture how nursing practice change is actualized in the literature.

For each of the three categories (nursing theories, knowledge utilization frameworks and quality improvement processes), I summarize the findings presented in Tables 1 (Appendix A), 2 (Appendix B), and 3 (Appendix C), followed by my discussion of what I interpret this literature means for nursing practice change. I begin by exploring the usefulness of nursing theories to explicate the effectiveness of theory-based practice to change clinical practice. Subsequently, I review the literature using knowledge utilization theories or frameworks to actualize nursing practice change and the usefulness of these theories in changing clinical practice. Lastly, I review how quality improvement practices have been used to change clinical nursing practice. I end the chapter with a synthesis of the major findings from the three categories.

### **Nursing Theory (see Table 1 – Appendix A)**

The majority of these studies were descriptive designs set in North America, used Watson's Theory of Human Caring, and were initiated by organizational leadership with a key contact person or change agent who was familiar with the theory and worked closely with organizational leadership and practicing nurses during implementation. The most common outcomes were measures of improved patient and nurse experience or satisfaction measured through pre/post surveys. All of the included articles had positive outcomes thus supporting the claim that some change in nursing practice may come from implementing nursing theory. It may be that theories offered delimitations for the discipline of nursing and guided approaches to patient care by assisting nurses in deciding what, how and why to provide care (Fawcett, 2005). Furthermore, the models may provide a clear goal of idealized nursing practice and the theories

connect with those who were trying to improve their practice by undertaking a change. Perhaps using even parts of a theory provides common language and goals for those participating in the change.

Another observation was the partial application of, or combination of, nursing theories. Wimpenny (2002) refers to this as a surrogate model that “is a functional version of the theoretical model” (p. 351). Some of the authors describe using aspects of two or more theories to create their own nursing model (Flanagan, 2009; Kerfoot, 2006). Due to this fragmented approach, it is difficult to conclude whether it is the application of nursing theory in its entirety or particular aspects of those theories that led to changes in nursing practice.

Another finding from this set of literature was that regardless of the methodology used to study nursing practice change, the majority of outcome measures were focused on those who received the nursing care or those who employed the nurses. Outcomes were measured at both the patient and unit level to improve patient safety, prevent falls or medication error and improve compliance with external measures such as accreditation. Some authors (Delmas et al., 2016; Desmond, 2014; Endo, Miyahara, Suzuki, & Ohmasa, 2005; Flanagan, 2009; Norman, Rossillo, & Skelton, 2016; Ozan, Okumus, & Lash, 2015; Pipe, 2007; Radtke, 2013; Scheidenhelm & Reitz, 2017; Simpson, Yeung, Kwan, & Wah, 2006; Tonges & Ray, 2011) did claim improved nurse experience or satisfaction used an external accreditation organization for which the data was gathered using surveys or Likert scale measures. These measures could have been further supported by asking the nurses involved to describe the source of their improved satisfaction in an effort to separate the effect of increased resources that often accompanied the changes. If we better understood the source of the nurses’ improved satisfaction, it could be more fully explored,

including asking how the nurses incorporated the changes into their practice that led to the improved satisfaction.

Regardless of the setting, the theory used or the outcomes measured, it seems that implementing a nursing theory may, in all probability, have some positive effect on nursing practice. This was true for studies within North America and abroad, including three studies conducted in the Middle East (Mohammadpour, Sharghi, Khosravan, Alami, & Akhond, 2015; Ozan, Okumus, & Lash, 2015; Tektas & Cam, 2017). Curiously, the countries outside of North America did not discuss local adaptations of nursing theories, nor did the literature focus on theories from different cultures. One available option is the Crescent of Care (Lovering, 2012), a nursing model based on Islam that was developed in the Middle East to provide care to Arab Muslim patients. This model puts the patient and family at the center with an emphasis on spiritual care in addition to psychosocial, cultural, interpersonal and clinical care. This multi-faceted care is delivered within the spiritual, cultural and professional values. Perhaps engaging with a nursing model that reflects the values and beliefs of the culture in which nursing is practiced could lead to even more effective practice change.

### ***Discussion of nursing theory literature.***

For nurses wanting to change their practice, nursing theory provides a definition of nursing (McCrae, 2011), a conceptual reference for clinical practice (McCurry, Revell, & Roy, 2009) and differentiates nursing from other disciplines (Dobratz, 2009; Fawcett, 2003) – all of which are important when identifying boundaries in an interdisciplinary context. By helping nurses communicate who they are and what they do amongst their own discipline and others, theories provide a sense of coherence and unity (Cody & Fawcett, 2003). Mars and Lowry (2006) suggest that nurses may practice without the guidance of a theory, but to practice ‘very

well' they need to study "nursing theories intensely" (p. 45). Furthermore, Kerfoot et al. (2006) indicates that theory-less practice may result in the 'loudest voice' guiding care, causing erratic practice patterns. Therefore, nurses wanting to improve their practice, or managers desiring to improve others' practices, may seek out nursing theory to highlight needed changes and outline potential steps to implement the change.

In the literature I reviewed, there was a strong organizational focus demonstrating the impact of theory implementation at a unit, hospital or system level. This reflects the current understanding of the influence of context on clinical nursing practice (Kitson, 2008) and the belief that if we create better systems for nurses to work in then their practice will improve. Changing the environment to improve nursing practice by creating therapeutic space was described in a number of these articles (Drenkard, 2008; Flanagan, 2009; Norman, Rossillo, Skelton, 2016) in addition to restructuring nurses' work on a unit level (Drenkard, 2008; Gomes, Hash, Orsolini, Watkins, & Mazzoccoli, 2016; Radtke, 2013; Scheidenhelm & Reitz, 2017; Tonges & Ray, 2011). What was not addressed was the process nurses used to incorporate and capitalize on these changes.

Within these articles, there was a description of preparation for change and the outcomes of the planned change with little to no description of the process of change itself. Understanding the process nurses undertake to change their practice may help to identify variances in how change is approached by individual nurses. It could also help to identify commonalities that may strengthen the success of organizations' efforts to create change as successful processes for individuals are incorporated into the change plan. It may also help us understand the variations in outcome success. Although three of the articles (Bent et al., 2005; Radtke, 2013; Scheidenhelm & Reitz, 2017) made passing reference to Lewin's Theory of Planned Change (Burns, 2004), the

authors shared little about how the theory was engaged to enact the change. Interestingly, the literature was replete with descriptions of preparing for change, had passable descriptions of follow-up after change, but was silent when it came to the actual process individual nurses involved with the change undertook to begin and sustain practice change. Authors described the steps nursing administration or leadership took to prepare for the incorporation of theory into nursing practice in addition to identifying facilitators and barrier dynamics. The outcomes described post-implementation focus on patient quantitative and qualitative measures rather than change to nursing practice. Understandably, patient outcomes may improve with a change in nursing practice, however, there may be changes to nursing practice that do not directly translate into improved patient satisfaction or length of stay.

Of the articles reviewed, all were a description of how aspects or parts of theories were put into operation through changes in clinical practice, but significant involvement of the direct care nurses in a role beyond implementers of change was rare. Importantly, the direct care nurses who actually changed their practice were involved peripherally in the decision to change and the planning involved. The direct care nurses were not involved as significant decision makers regarding changes to their practice. The exception was if they were the staff representative on the planning committees which were overwhelmingly comprised of leadership, administrators and researchers. Asking the participating nurses about how they incorporated the theory, either partially or in its entirety, into their practice and how, or if, that made a difference to their practice was not a priority of these studies. Much of the qualitative data collection that focused on the participants explored *what* aspects of their practice changed rather than *how* they changed it.

Despite extensive searching, locating literature that addressed individual nurses' shift in knowledge, attitude or skills resulting in behaviour change after the implementation of a nursing theory proved fruitless. Through my literature review, I was unsuccessful in locating an article that shared the process individual nurses undertake to incorporate nursing theory into their practice. Perhaps this is because the intent of the research was not to explore how nurses changed their practice, rather the focus was on how the change effected their practice. For example, Flanagan (2009) used a qualitative approach to investigate the nurses' experience with theory-based care and asked specifically about how the participants' practice changed but did not ask how these changes were incorporated. The focus was on the outcome after the change rather than how the change occurred. Delmas et al., (2016) asked many questions of the participating nurses about their satisfaction with the implemented interventions and the outcomes but did not share how the nurses incorporated these changes into their practice. Those who read this literature can gather useful techniques to plan, implement and evaluate change on a group level but there is a lack of information about how the participating individuals enact the changes in their daily practice.

This literature also openly accepted the term "implemented" as though it is something the reader should understand that occurred without description. The bulk of the literature is very detailed with the preparation prior to change being implemented such as the formation of a committee or the education sessions delivered to the nurses, and the outcome of change which is often measured at a unit or organizational level. Despite knowing that direct care nurses are involved and are the actual delivery mechanism for change, the focus is on the preparation leading up to the change and the outcomes measured to show that change has occurred. There is a void in the middle that should investigate how the participating direct-care nurses incorporated

the change. This is not limited to quantitative studies that measure changes in nursing practice through indirect measures of falls prevention or patient satisfaction. Endo, Miyahara, Suzuki and Ohmasa (2005) had participant nurses journal their experiences and stated that their data was analyzed to “discern and illustrate the process of transforming feature of the practice experience” (p. 140), yet the outcomes they reported were all after the change had occurred. In other words, they failed to explain how the change occurred and instead the findings focused on the result of the implementation of the nursing theory into practice.

I found myself wanting to hear from a nurse involved in the study about how she incorporated the theory more so than how her practice changed post facto. It is possible that nurses’ perceptions about how they changed their practice were elicited, but these responses were not documented in the studies I reviewed. Understanding how these nurses incorporated the change could help us develop our methods currently used to change practice and increase the effectiveness. Understanding if the change was incorporated incrementally and slowly or if she embraced the new practice in its entirety, or some variation thereof, could potentially inform how we plan and prepare for nursing practice change. Studies are needed to better understand how nurses change their practice and the supports that are needed to facilitate success.

### **Knowledge Utilization (see Table 2 – Appendix B)**

The second set of literature reviewed related to nursing practice change is knowledge utilization. It is important to note that knowledge utilization, translation, transfer and evidence/research-based/informed are terms used to describe ways to support nurses (and other healthcare professionals) to inform their practice using verifiable information. Furthermore, this set of literature includes models, frameworks, and theories which will be referred to as guiding structure for the purpose of this dissertation. The “knowledge utilization movement” has become

synonymous with change (Copnell & Bruni, 2006) and its objective is to urge nurses (and other health professionals) to make decisions and act on reputable information (Estabrooks, Thompson, Lovely, & Hofmeyer, 2006). *Acting* on the new knowledge is critical to this movement because the acquiring of new knowledge does not necessarily equate to change.

Of the 16 articles reviewed, the majority were based in North America and used a quasi-experimental design. The Promoting Action on Research Implementation in Health Services (PARIHS) Model was the most frequently used. Ten of the studies included a change agent/knowledge broker to assist with the change process and took place in acute care facilities. Unlike the nursing theory literature, the driving force for the change in seven of the studies came from external researchers collaborating with local hospital leaders to create change, and the measurable outcomes were focused on nursing tasks, such as pain management, rather than overall experience or satisfaction.

Similar to the use of nursing theory, working with a knowledge utilization (KU) guiding structure seems to provide a positive result when attempting to change nursing practice. The recognition of the complexity involved in the attempts to facilitate a change in nursing practice is significant. Authors such as Doran et al., (2009) reported using the KU guiding structures as context for the study to identify the research question and the study variables but do not share if and how the guiding structure was used in the actual implementation of the change. In other studies, such as Bonkowski, De Gagne, Cade and Bulla (2018), only the project coordinator used the KU guiding structure, in this case, the knowledge-to-action framework, to identify the problem and generate a solution with no indication of whether or not the participating nurses were aware of the KU guiding structure or how or if they used the it to incorporate the change into their personal practice. The researchers used and adapted the guiding structure to their local

environments or used the models to address specific challenges. Thus, it appears as though, even if the guiding structures were minimally used, such as in the planning stage or by the change agent involved in the study, they were useful for facilitating change in nursing practice.

Those engaging in the KU guiding structures to improve practice also followed an overall process similar to those using nursing theory. The process begins with the individuals in leadership positions identifying a problem such as decreased patient satisfaction scores (Bonkowski, De Gagne, Cade, & Bulla, 2018). They then form a team, identify a key contact person/change agent and develop a plan. From here, they go on to educate the staff, implement the change and finally, take follow-up measures. In addition to this generalized process, one study (Doran et al., 2010) reference Diffusion of Innovations (2003) but do not share how the change theory was used to help with the practice change. Direct care nurses are often involved as members of the planning committee or as the target of the planned change, but not as the instigators of change, nor the leaders of change. Engaging the practicing nurses is recognized as important as evidenced by their inclusion in the change process, however, the identification of a practice in need of change appears to come from those further removed from the bedside (e.g., those in leadership positions).

The majority of articles used a quasi-experimental approach that reflects the empirical foundation of the knowledge utilization movement and the difficulty of using a true experimental design in the clinical setting. For the most part, the setting for the quasi-experimental studies was acute care thus reflecting where the majority of nursing care is still provided. However, not all of the studies took place in the hospitals thus supporting the broad application of the KU frameworks. Unlike the nursing theory literature, many of the outcomes measured in this literature are direct measures of nursing care, such as pain management or pressure ulcer

prevention. However, these outcomes are amalgamated to a unit or organizational level thus prohibiting the understanding of what changes were taking place on an individual practitioner level.

***Discussion of knowledge utilization literature.***

Knowledge utilization has been studied at the individual, unit and organizational level (Thompson, Estabrooks, & Degner, 2006) but I was not able to locate a study exploring the connection between knowledge utilization and changes in individual nursing practice. Personal knowledge transfer is defined by Davies, Wong and Laschinger (2011) as an individual process that involves applying newly acquired knowledge in practice or applying old knowledge in a new situation. Prior to a change in behaviour, it is proposed that a cognitive shift results from the processing of the newly acquired knowledge (Estabrooks, Thompson, Lovely, & Hofmeyer, 2006). Notably, there has been a significant amount of research focusing on changing physician behaviour in practice (see Godin et al. 2008; Overton, McCalister, Kelly, & MacVicar, 2009; Greenlaugh, 2018), yet insufficient understanding exists regarding how nurses choose and implement new knowledge into practice (Asselin, 2001; Schaffer, Sandau, & Diedrick, 2012). Aita, Richer and Heon (2007) put forth the notion that knowledge transfer involves both cognitive and interpersonal process, yet 10 years later there is limited investigation into these mechanisms used by nurses to transfer new knowledge into their practice.

While the KU literature suggests that using a KU guiding structure to facilitate a change in nursing practice has some potential, much of the current focus in this literature is on organizational change. The Stetler Model of Research Utilization and the Ottawa Model of Research Use (OMRU) allow for individual use and can be used by individuals to change their nursing practice using research evidence. Both have been studied and shown to facilitate nursing

practice changes. In fact, they seem to show great promise when it comes to facilitating practice change (Bishop, 2007; Graham & Logan, 2004; Hanson & Ashley, 1994; Hogan & Logan, 2004; Logan, Harrison, Graham, Dunn, Bissonnette, 1999; McGuire et al., 1994), yet despite my considerable searching, finding only one article using the Stetler Model of Research Utilization and two using the OMRU proved disappointing as these models seem to have lost appeal to researchers overtime. Simultaneously, the PARIHS model became increasingly used, as did other KU models/frameworks that focused on environmental and organizational factors. Perhaps this reflects the emphasis of studying nursing practice change on an aggregate level without the inclusion of studying change on an individual level. It was the PARIHS framework that has the two specific organizational requirements of context and facilitation model in addition to the strength of the evidence, which I found to be used most frequently. Similar to the use of nursing theory to change practice, understanding how and/or if the participant engaged with the KU models/frameworks in a meaningful way to facilitate change in practice may strengthen the KU models/frameworks by providing feedback about what works or does not work for individual nurses and also help develop a deeper understanding of how KU models/frameworks facilitate change on an individual basis.

Regardless of an extensive search of the literature, there was a dearth of studies that specifically focused on gaining a better understanding of using KU models/frameworks to facilitate nursing practice change at the individual level. For example, Santo and Choquette (2013) included the direct care nurses in all aspects of their study, and collected both qualitative and quantitative data, yet they did not ask the nurses directly how they changed their nursing practice to determine the effect of the KU model/framework. Similar to the literature in the nursing theory section, the focus remained on the outcomes of the change rather than how the

individual nurses incorporated these changes into their everyday practice. One of the authors using the PARIHS model recently acknowledged the importance of studying KU at an individual level, recognizing individual variation among participants, particularly in regards to the choice to adhere to the new practice or revert back to the original practice (Mekki et al., 2017). This follows the argument by Rycroft-Malone et al., (2013) to include individuals as an important element when implementing evidence into practice in addition to context and facilitation as this would suggest the importance of both an individual element in addition to the organizational elements. It is clear that both individual and organizational/contextual factors require consideration, recognizing that both individual and contextual factors are influential when changing clinical practice.

Although the knowledge utilization movement does not limit the definition of knowledge to the product of research, none of the KU papers I reviewed included the goal of changing nursing practice using non-research-based knowledge. Still, evidence suggests that nurses use many types of knowledge in their practice (Estabrooks et al., 2005; Prowse & Lyne, 2000; Renolen & Hjalhmhut, 2015). Renolen and Hjalhmhut's (2015) found that nurses wanted to determine the trustworthiness of different types of knowledge available and resorted to contextualizing and balancing many types of knowledge to provide patient care. This suggests that practicing nurses desire some method of evaluating all types of knowledge used in healthcare but may not have been given the model to do so. Other types of knowledge such as those suggested by Carper (1978), have not been studied with the same level of intensity. It is possible that the effectiveness of KU models could vary depending on the type of knowledge used to create the change.

Although the use of research-based knowledge is a goal for the healthcare systems in the Middle East, particularly in Qatar, the use of research-based knowledge is a fairly new concept, especially as it pertains to nursing. As suggested by Cannaby et al., (2017) nursing practice has largely been based on traditional knowledge passed down via the education system and through mentors in the clinical setting. In an effort to become a modernized healthcare system, the nurses are encouraged to move away from practice knowledge based in tradition and move towards practice knowledge based on research. Perhaps the lack of KU studies from Qatar is a reflection of a transitioning healthcare system that is still in its infancy and is not yet ready for KU studies.

Lastly, locating a study attempting to change nursing practice through the use of KU model/frameworks in the Middle East proved unprofitable. In Qatar, Abdul Qadar and King (2015) wrote a theoretical article about the application of best practice guidelines for colorectal cancer from a nursing perspective, however, I was unable to locate any literature demonstrating the actual application of the guideline. Although there is a strong push for evidence-based practice in the Middle East, the movement does not have the maturity it does in developed nations.

### **Quality Improvement (see Table 3 – Appendix C)**

Similar to both the theory and KU literature, the majority of articles reviewed were based in North America. However, unlike the previous sections, the bulk of these studies used a non-specified quality improvement approach. Moreover, the driving force behind the improvement projects was overwhelmingly initiated by organizational leadership to comply with best practice and/or accreditation standards. Similar to the KU literature, the outcome measures in this study were focused on nursing tasks or processes, such as intravenous catheterizations, rather than experience or satisfaction or those involved in the change. Using a quality improvement

approach appears to have generated change in nursing practice to various degrees. The quality improvement literature suggests that using a framework such as problem identification, planning, implementation and evaluation has potential for changing nursing practice. This set of literature reveals that implementing one nursing practice change at a time results in more successful uptake than implementing a whole program with multiple outcome measures, although both have some degree of success.

All of the articles reviewed mentioned organizational leadership as either drivers or supporters of the change, and most identified a change agent as a key contact person for staff to clarify questions and reinforce implementation. Most of the studies took place in an acute care and used prospective and descriptive designs. The outcomes of the studies were largely focused on patient measures collect through surveys or questionnaires amalgamated to unit or organizational levels to compare with industry benchmarks and best practices as defined by external agencies that either funded or accredited the organization. The qualitative evaluations for the studies assessed nurses' experiences and satisfaction with the new practice using a pretest/posttest design but did not investigate how the nurses incorporated the change into their routine practice.

#### ***Discussion of quality improvement literature.***

Organizational leadership was mentioned in all of the articles I reviewed as either initiators, drivers or supporters of the change. In three articles (Evans, Grunawalt, McClish, Wood, & Friese, 2012; Jarman, 2009; Shafer & Aziz, 2013) direct care nurses were listed as initiators of change however, the leadership had already committed to changing nursing practice in their organization, and they invited the direct care nurses to choose which aspect of their practice they wanted to change. Similar to the nursing theory and knowledge utilization

literature, the planning and outcome phases of the projects were well described while the actualization of the change is absent. There is no description of how the nurses involved in the quality improvement projects incorporated the changes. Understanding the individual variances regarding incorporating the practice change may help to build on our comprehension of what works on an individual basis and perhaps increase the level of success with the multiple improvement projects being attempted in healthcare systems. Differentiating the change process on an individual level from an aggregate level may highlight new areas of critical importance that can facilitate changes in a safe and more effective manner.

From the volume of literature actualizing nursing practice change, it is evident that quality improvement is used more frequently in clinical practice than formalized nursing theories or knowledge utilization approaches. Quality improvement is a process similar to research in that it requires a question, objectives, intervention and evaluation but it focuses on the improvement of processes that are already in place at a unit or local level with the intent to improve outcomes (Dang & Dearholt, 2018; Granger, 2018). Quality improvement projects rarely require approval from an institutional review board as there is minimal risk to human participants. At some institutions, quality improvement projects may be submitted to a review board but will receive an exemption, whereas others do not submit their projects to review boards but receive approval from organizational leadership. In the articles I reviewed for this section, there is no consistency regarding board approval but all of the authors claim to have undertaken a quality improvement project. It is my experience that more quality improvement projects take place in healthcare settings than research projects, so the opportunity to improve practice by better understanding how nurses incorporate changes into their practice is significant.

## **Syntheses of Literature**

This literature review suggests nursing practice can be changed through the use of theories, models or frameworks. The rationale behind implementing a nursing theory is to strengthen clinical practice from a nursing disciplinary perspective, whereas the focus of using a KU model or QI framework is to align practice with available best evidence. Having a process to guide practice change appears to be important when implementing change. Part of this process is the planning and initiation at the leadership level followed by buy-in amongst participating nurses. Additionally, as shown in the literature, having a middle person between leadership and direct care nurses is helpful for successful change. The focus of the research using these theories, models or frameworks was on the results of the change, including the qualitative literature that gave voice to the nurses participating in the change. What is missing is the voice of the nurses with respect to how they incorporated the change into their daily practice. Understanding the most helpful aspects of these tools to guide practice change may help future researchers incorporate these aspects into their planned change. It may also create space for including the individual practitioner as a fully participating member of change rather than merely the target of the intended change.

Various methodological approaches have been used to study nursing practice change. The studies included in this review covered the research spectrum of qualitative and quantitative approaches. The majority of these studies used a descriptive exploratory approach although there were some mixed methods and one case study. Despite the approach used to showcase the nursing practice change, the focus remained on the outcome of the intervention measured on a unit or organizational level. Shifting the focus to include the variations in individual practice

change may shed light on areas of opportunity for improvement when planning research focused on changing nursing practice.

One of the most obvious changes in the literature after 2012 has been the focus on organizational interdisciplinary projects. Many of the available KU models/frameworks could not be included in this review because of the necessary inclusion of a team with no option for individual use. While I do recognize the current trend for interdisciplinary care, broadening the focus to include the individual practitioners who make up the organization may strengthen the efforts to create change within an organization. Nurses work closely with other disciplines especially medicine, pharmacy and physiotherapy, however, nurses are the practitioners who spend the majority of direct care time with patients. Just as we need space for the individual within the organization, we need space for nursing within the interdisciplinary. It is important that the study of nursing by nurses continues in addition to the interdisciplinary movement.

What is missing from all of the literature included here is the voice of the nurse undertaking practice change. For example, Reavy and Tavernier (2008) share their development of an evidence-based practice model specifically intended for nurses practicing at the bedside. Interestingly enough, the request for this model came from the nursing administrators and not from the nurses themselves. In the new model, a team was formed that included four staff nurses as representatives working with the manager, a clinical nurse specialist and a nurse researcher. It was this team that identified the first practice to undergo change using the newly developed evidence-based practice model. The authors provide detail regarding the pre-change assessment, problem identification, literature review, staff education and measures used during the pilot study. However, it is left up to the reader to imagine how the bedside nurses actually incorporated this change into their daily practice. The only statement given by the authors is

“based on the initial analysis of the findings, changes in nursing care of CVADs became permanent and the unit policy was updated” (Reavy & Tavernier, 2008, 171). Matthew-Maich, Ploeg, Jack, and Dobbins (2010) suggest that nursing practice change is much more complicated than presently articulated, suggesting that there are often resistors who have a firm belief that the current practice (i.e., the way the practice has traditionally been done) is best and that if they resist long enough, the old practice will become new again. While planning, measurement and evaluation are critically important to change, studying the actual change in practice occurring among the direct care nurses is valuable. Questions still remain regarding the ease with which the nurses gave up the old practice to incorporate the new. Were there nurses who accepted the new practice immediately and others who refused to change despite the newly developed policy and procedure? If so, how did the nurses who incorporated the change into their practice do so? Did they change their practice overnight? Did they incorporate the new practice bit by bit? In many of these articles, the direct care nurses are what Copnell and Bruni (2006) refer to as targets and they state: “the views of these ‘targets’ are rarely, if ever, expressed. Hence, clinical nurses are effectively silenced” (p. 302).

Why is it important to conduct a study that describes nursing practice change on an individual level? Firstly, we have a solid foundation that helps plan, implement and evaluate changes to nursing practice but there is room for improvement. Understanding the process individual practitioners undertake to change their nursing practice can strengthen these outcomes by identifying more effective methods of generating a desire to improve practice. If we can better identify the process nurses engage in to successfully incorporate changes into their practice, we can build on these processes and include them in our efforts to change and improve nursing practice on the whole. The study I have completed will give voice to the nurse who changed her

practice in a significant way as well as the nurses practicing in the region – two groups that are underrepresented in the literature.

### Chapter 3: Methodology

Choosing a methodology to address my research questions was not a straightforward decision. Initially, I had chosen grounded theory, particularly the work of Charmaz (2014), to guide my study. When I interviewed my initial participants and began analyzing the data, I was in the mindset of grounded theory. However, I soon found myself discouraged by the methodology taking precedent over the relevancy of findings for clinical practice and was frustrated at the need to prove compliance with the methodology as the ultimate goal rather than making the findings relevant for nursing practice. When sharing my initial findings with those who were either novice or experts in grounded theory, the discussion was largely focused on how I had taken up grounded theory – Glaser and Strauss (1967), Corbin and Strauss (2008) or Charmaz (2014) – and the applicability of my constructions to clinical practice was given less importance, if it was raised at all.

As someone who has struggled with connecting abstract theories to bedside clinical practice, I felt disheartened and as though my research was at risk of being disconnected from nursing practice. I found myself frustrated with the dominance of theory development in grounded theory over clinical applicability in the exact setting from where my participants were working at the bedside. I knew I wanted to have a study that would make sense to, and be relevant for, practicing nurses while simultaneously producing a study that was rigorous. If I could not make the process of nursing practice change relevant to those involved in the practice of nursing, what was the point? I wanted the product of my research to be just as relevant to the bedside nurse as it was to academic nurses. That is when my dissertation advisors suggested I read *Interpretive Description* (Thorne, 2016) and re-examine my study to consider using this approach. Within the first few pages of the book, I knew I had found exactly what I needed. This

approach allowed me to stay true to my purpose of identifying a process RNs undertake to change their practice while increasing the likelihood that my findings could be used by nurses at the bedside. This was particularly important to me as I tried to be sensitive to the cultural differences between myself and my participants and the awareness I had of the lack of voice given to nurses working in the Middle East as shown in Chapter 2.

Interpretive description (ID) was developed by Thorne, Kirkham and MacDonald-Emes (1997) as a non-categorical approach for creating qualitative knowledge that is relevant for applied health sciences. While its roots are in nursing, ID has been taken up by various applied disciplines such as nutrition (Williams & Haverkamp, 2015), pharmacy (Murphy et al., 2016) and physiotherapy (Atkinson & McElroy, 2016). The finished product of ID is an interpretation (one of many tentative truth claims) of the themes or overall patterns in the data that simultaneously acknowledge individual variation of the experience and is applicable to nursing practice (Thorne, Reimer-Kirkham, & O’Flynn-Magee, 2004). Of particular importance is generating knowledge that is useful for practitioners by disentangling the disciplinary beliefs from other schools of thought such as the social sciences that have strongly influenced qualitative methodologies (Thorne, 2016). Such interpretations require a recognition that generalized knowledge created from research must be applicable to individual experiences. Rather than a method or methodology per se, ID is a conceptual label reflecting the pragmatic paradigm of applied science (Thorne, 2016). Relevant methods from theory-generating approaches are used in ID studies to generate practical knowledge that previously would have been considered subordinate to compliance within a specified approach. The worthiness of an ID study is contingent on both practicality and fidelity with its philosophical foundations rather than just compliance with a methodology. The question under study must be relevant to the discipline

of nursing (or other disciplinary perspective), meaning it must have something to do with the nursing practice of treating illness and supporting the health of the population. The methods used to study the disciplinary relevant question are up to the researcher and can be borrowed from any valid qualitative approach.

According to Thorne (2016), a valid ID study begins by asking a disciplinary relevant question to build and expand on currently existing knowledge. For this study, the question of what is known about practice change was mostly located in the nursing theory, knowledge utilization and quality improvement literature (see Chapter 2). Yet despite the wealth of knowledge and research in this literature, successfully getting nurses to change their practice in a meaningful and sustained way remains a struggle. Thus, the process that individual nurses undertake to change their practice remains unclear and better understanding this process may provide some insight into how to best bring new findings into clinical practice. The primary purpose of this study is to interpretively describe a process nurses undertake to change their practice.

### **Locating Myself**

When choosing the methodology that would best address my research questions, it was imperative that the approach fit well with my ontological and epistemological beliefs, in addition to giving prevalence to the practice of nursing, particularly for bedside nurses where I continue to practice. Currently, my beliefs are aligned with a naturalistic orientation in which multiple subjective realities can coexist and cannot be separated from what we are studying, and this also aligns with the foundations of ID. According to this naturalistic orientation, valuable ‘truths’ come from the intricate play of those involved in the research process – for example, the researcher and the participant (Thorne, Reimer-Kirkham, & MacDonald-Emes, 1997). I am also

strongly influenced by the idea of constructionism as defined by Crotty (1998) in which an object does not have meaning in and of itself but rather the viewer constructs meaning that is influenced by both the object and society. For this study, the object for interpretation was nursing practice change and the meaning of it was interpreted by myself and the participants. This was done while simultaneously recognizing that our interpretation was influenced by multiple constructs such as nursing practice and the society in which we practice and live.

I came to this study with an extensive clinical background largely focused on trying to initiate nursing practice change among experienced practitioners. At the time I entered my PhD program, I was a clinical nurse specialist trying to promote best practices for older adult clients in the healthcare system. I spent hours reading, critiquing and translating research that I would disseminate to nurses at the bedside providing direct care to acutely ill older adults and to decision-makers within the healthcare organization. My dissemination tactics were broad and included lectures, pamphlets, one on one consultations, participation in team meetings, in addition to writing policies and procedures. I studied both the gerontology and knowledge utilization literature hoping to find some previously untapped method that would help me facilitate nursing practice change for the betterment of the patients. While I usually felt a sense of anticipation at the beginning of projects, upon evaluation I realized little, if any, practice change had occurred. Being immersed in the facilitators and barriers of research utilization literature, I addressed these issues locally yet had minimal success in creating meaningful and sustained change. However, every once in a while, I would engage with a nurse who had changed her nursing practice in a significant way and I could not help but wonder how she had come to change her practice and whether or not this process was common among other nurses.

## Statement of Study Context and Culture

In addition to locating myself, I felt it was important to locate the study and present some consideration of the culture and context in which it took place. At the time this research was conducted, I was living and working in Doha, Qatar, a nation that is currently undergoing rapid development of its entire social structure system, including the healthcare system, as it prepares for the 2022 World Cup. The overall plan for Qatar's modernization was defined in the Qatar National Vision 2030 and the Qatar National Development Strategy ([www.mdps.gov.qa](http://www.mdps.gov.qa)) publications. Qatar is a Muslim state located in the Persian Gulf bordering the Kingdom of Saudi Arabia and has been ruled by the Al-Thani family for many years. It has one of the highest per capita incomes in the world because of its large natural gas reserves. The local Qatari population is relatively small making up approximately 313,000 of Qatar's 2.6 million inhabitants. The remaining population comes from various countries including other Arab nations and those close to the Indian Ocean.

Al-Yateem, AlYateem and Rossiter (2015) suggest there are some general concepts that are helpful for those who are unfamiliar with the Middle Eastern culture, particularly when employed in healthcare. Although oversimplified, I believe they are helpful for understanding, at least at a superficial level, the culture and context of where the research took place. There are two main influences in this multicultural and multilinguistic Arab state - family and Islam. In the Arab culture, family is often the centre of society and is given priority over the individual (Lovering, 2012; McDermonnt-Levy; 2011). Traditionally based on a patriarchal and tribal system, large and extended families are fundamental to the way of life in the Middle East. Customarily, family has a significant role to play in health, healthcare and illness treatment as decisions are rarely made by individuals in isolation of the family. For example, when an older

member of the family is diagnosed with a terminal illness, the practice in Qatar is not to share this information with the patient but rather deal with the burden as a family (Roberson-Malt, Herrin-Griffith, & Davies, 2010). Generally, all major decisions including marriage, career and health practices are made within the family.

The other dominant influence is the Islamic faith that entails five pillars – faith in one god, prayer five times daily, the charitable giving practice of Zakat, fasting during Ramadan and Pilgrimage to Hajj once in a Muslim's life. Islam widely affects many aspects of life in the non-secular State of Qatar, including health and healthcare systems. Traditionally for Muslims, there is no division of spirituality and religion (Rassool, 2000). Health is understood to be the will of God and illness is considered to be a test of faith, yet individuals are responsible for the care of their body and spirit (Lovering, 2012). Ordinarily, modesty and purity are of significant value to Muslim people and must be respected by all nurses, including non-Muslims, when providing care to Muslim patients. This is enacted in daily life, for example, through the assignment of male nurses to male patient and female nurses to female patients whenever possible (Lovering, 2012).

Various aspects of culture may have had an influence on the recruitment of participants for this study. As outlined in Chapter 1, the majority of RNs in Qatar are expatriates. Each participant was situated in a culture of their homeland, the Arab culture (if this was not their homeland) and the organizational culture of the healthcare system. Furthermore, as a Western researcher, I necessarily brought my own culture into the data collection and analysis. The Qatar healthcare system and the push for change also may have had a strong influence on the participants' descriptions of nursing practice and change. Although it is slowly improving, nursing remains an undesirable profession among many Arab families due to the intimate nature

of the work (Clerehan, McCall, McKenna, & Alshahrani, 2012; El-Haddad, 2006; Hassan, Hassan, & King, 2012). Therefore, the majority of practicing nurses in Qatar are expatriates who have undertaken their education in non-Arab countries (Cannaby et al., 2017). Both male and female nurses currently practice in Qatar, yet male nurses provide care for male patients only, while female nurses provide care for patients of both sexes (Nehring, 2003). Historically, nursing is largely practiced as subservient to physicians and nurses are not encouraged to think critically (Nehring, 2003), however current literature suggests this is slowly changing (Cannaby et al., 2017; Hassan, Hassan, & King, 2012),

In addition, nursing education in Qatar has traditionally been at the level of diploma although this has recently changed (Cannaby et al., 2017). At the time of this study, all nurses graduating with either an undergraduate or graduate nursing degree in the State of Qatar receive a Westernized education from the University of Calgary – Qatar which is a satellite campus. Bringing a Westernized curriculum to Qatar to educate local nurses and recruiting North American and European nurses to work in the healthcare system was beginning to create a shift away from a handmaid style of nursing to a more modernized, critical thinking profession. As a faculty member at the University of Calgary – Qatar satellite campus, I observed differences in how nursing practice was adopted between those nurses who were educated in Westernized universities and those who were diploma prepared in Qatar. While there appeared to be a privileging of Western thought, the influence of culture and religious beliefs was strong for many Arab nurses. For example, while many practicing nurses espoused to have an evidence-based practice, there were many occasions in which outcomes were not appropriated to science but rather were understood as Allah's will. It was as though these nurses were living in two worlds

when providing care to patients as they worked to fit critical thinking and research into their practice while acknowledging the cultural nuances.

Finally, there is a lack of research studying nursing practices in the Middle East. Using the search terms “nursing” and “Middle East” in CINAHL results in only 268 publications. This is without any limits on the search such as language, year of publication or literature review. Having lived and worked in the Middle East, I am aware of the current push for more publications from the area but the scientific study of nursing practice is still in its infancy. Zebian, Alamuddin, Maalouf and Chatila (2007) conducted a content analysis on psychology studies from 1950 to 2004 in the Arabic-speaking world to assess for cultural sensitivity and determined that in addition to the majority of studies originating in this part of the world having low cultural sensitivity, the existence of sustained regional research programs is almost non-existent. These authors were unsure whether the unsustainability of research programs in the Arabic-speaking region was due to a lack of funding or other reasons, but they did not see an improvement in the approximately 55 years of publication included in the literature review. Furthermore, at the time of publication, Qatar did not have a single publication included in the content analysis. This re-emphasizes the shortage of research in the Middle East, and particularly in Qatar.

### **Language**

Although Qatar is a multilingual country, English is the official language of the healthcare system, therefore, it is a requirement that persons working within the healthcare system have workable skills in reading and writing English. Although English is the official language of the healthcare system, it was my experience that most discussions were held the language of the expatriates or Arabic. However, the nurses who had graduated from English

speaking schools, such as the majority of my participants, had a much higher level of proficiency as they were required to communicate in English at a scholarly level. Al-Amer, Ramjan, Glew, Darwish and Salamonson (2016) highlight the challenges faced when interviewing the participants in Arabic then translating the interviews into English and suggest that Arabic cannot be translated into English verbatim because the meanings are often lost in translation. As translation is about capturing meaning rather than words (Crane, Lomard, & Tenz, 2009), I chose to complete the interviews in English to encourage the participants to be their own interpreters in an effort to encourage them to translate their meanings.

Koulouriotis (2011) reports that qualitative research has been successfully undertaken in English with non-native English speakers rather than interviewing participants in their native language and transcribing into English. Researchers are not required to have the same first language as the participants but they do need to be sensitive to and clarify multiple meanings of language (Polkinghorne, 2005). Interpretive description (ID) has been successfully used to study various aspects of clinical practice in international settings (Brewer et al., 2014; Nkulu Kelengayi et al., 2012; Teodoro et al., 2018), however, an ID study undertaken with English as Second Language (ESL) participants was not published. There are examples of other interpretive approaches in which the participants identified as ESL but participated in the study using English rather than their first language (Claydon-Platt, Manias, & Dunning, 2014; Mulready-Shick, 2013). Furthermore, there are examples of qualitative research undertaken in English with native Arabic speakers (Clerehan, McCall, McKenna, & Alshahrani, 2012; Donnelly et al., 2012; McDermott-Levy, 2011).

## **The Research Design**

In the following sections, I will detail the methods used for this study, including recruitment and sampling procedures, data collection analysis techniques, strategies for ensuring scientific rigor and credibility, ethics and informed consent considerations, and potential limitations of the study.

### **Setting.**

The setting for this study was at the Hamad Medical Corporation located in Doha, Qatar and includes acute inpatient hospitals, outpatient clinics, public health clinics, home care and mental healthcare. Hamad General Hospital, the main hospital where the majority of the participants were employed, is a 603-bed acute care facility located in the capital city of Qatar. Due to its small national population, the State of Qatar has addressed the shortage of nurses by international recruitment and therefore its nursing staff is multinational and multilingual. Although Qatar is an Arabic speaking country, the official language used in the healthcare system is English for communication and documentation. Therefore, the majority of nurses at Hamad General Hospital have a workable ability for speaking and writing in English.

### **Recruitment and sampling procedures.**

Decisions regarding sampling and data collection techniques are guided by the current state of knowledge about the subject and the research question (Thorne, Kirkham Reimer, & O'Flynn-Magee, 2004). Thorne (2016) suggests there are three main areas of concern regarding recruiting participants for a study – representation, sample size and sampling methods. Generating a representative sample is a noble idea but an unattainable goal in applied qualitative research, according to Thorne (2016). Rather, we must acknowledge that the sample we generate is a reflection of “a certain kind of perspective from an auditable set of angles of vision whose

nature and boundaries we can explicitly acknowledge and address” (Thorne, 2016, p. 173).

Therefore, the sample reflected the multinational, multilingual RNs working within the Hamad Medical Corporation.

Interpretive description lends itself to various sampling procedures and Thorne (2016) encourages the use of more than one. Initially, purposive sampling was used to recruit nurses who self-identified as having made a significant change in their nursing practice. Purposive sampling, more specifically maximum variation sampling, is a form of non-probability sampling used to include participants possessing certain qualities (Etikan, Musa, & Alkassim, 2016; Palys, 2008). For example, after interviewing and interpreting the data from the first three interviews, I sought out participants to enhance maximum variation including variation in years of experience, places of employment, country of origin and country where their nursing education was achieved. Lastly, snowball recruiting was used as participants were encouraged to share their interview experience with fellow colleagues. Initial recruitment strategies included posters and flyers in key areas, such as nurse lounges, and an introduction to the study at nursing grand rounds. An invitation to participate was sent out via head nurses to existing email lists. Inclusion criteria for the participants was: (1) proficiency in reading and writing in English; (2) having experienced a ‘shift’ in knowledge, attitude or skills resulting in some change in behaviour at some time in their nursing career; (3) having worked for two or more years; and, (4) being a RN. In Qatar, the majority of nurses work full-time and as a result, the majority of participants were working full-time.

Following the initial purposive sample, participants were recruited using a method referred to as theoretical sampling (Glaser and Strauss, 1967). Thorne (2016) suggests using theoretical sampling and maximal variation in ID studies to give substance to emerging themes.

Theoretical sampling is intimately connected to theoretical sensitivity and data analysis for which the researcher begins to hypothesize an interpretation that fits and explains the data and then seeks out participants with this intention in mind. Maximal variation is a subset of theoretical sampling that encourages the recruitment of specific cases to test constructions coming from the data and minimize the likelihood that the findings are unique to the sample. Thorne (2016) suggests that no single participant will have access to the whole of all that is possible, so recruiting non-homogenous participants will help the researcher construct interpretations that are recognizable to those in the applied discipline. For example, I purposely sought out participants who varied in country of origin, level of education, positions held in the organization, and the area of nursing in which they worked. The data analysis began with the initial interview resulting in theoretical leads that suggested where I should go next. For example, one of my first interviews was with Dimah (pseudonym) who shared the struggles she faced when trying to generate compliancy with her cardiac patients. She was trying to change her practice by incorporating the latest research in her plan of care and yet was not successful until she learned to address the concerns the patients had, such as their pets at home, before moving into the evidence-based interventions. She spoke in a hushed tone when telling me about putting the patient's non-healthcare concerns above the best practice concerns the healthcare system told her she needed to focus on. For every interview after, I would make space for participants to share these sorts of stories by asking about whether or not they felt safe sharing their practice change with others.

According to Thorne (2016), representation and sample size are constructions of the researcher. She suggests that true representation of a population is something to strive for while simultaneously acknowledging it is impossible. Instead, she suggests the construction of the

sample be auditable and articulable by the researcher. Researchers construct the data sample by choosing who will be in the study and who will not. The construction becomes auditable through the inclusion and exclusion criteria and it is our critical reflection on how we have constructed the sample that brings integrity and credibility. ID allows for variable sample size and Thorne (2016) recognized the very real constraints of time and resources when recruiting participants for an applied study. She also argued against using the term ‘saturation’ when using an interpretive approach for applied research because claiming that there is no other possible variation is in opposition to the epistemological claim of “infinite experiential variation” (Thorne, 2016, p. 192).

Participant recruitment occurred over six months. The final sample size for this research project was 15 participants from varying backgrounds working within the Hamad Medical Corporation with one participant working for a natural gas company as an occupational health nurse. Of the nurses working for Hamad Medical Corporation, their areas of practice were diverse including the operating room, pediatric and adult cardiology, emergency, trauma, women’s health, quality improvement, various outpatient and public health clinics and research. The youngest participant was 25 while the oldest participant was 42. All of the participants were female despite multiple attempts to recruit male nurses. Over half of the participants were married, one was divorced and the rest were single. Seven participants had children. Two participants had their Master of Nursing, while all of the other participants had at least a bachelor’s degree, and some had a specialty certificate for their area of practice such as occupational health. All of the participants worked full-time. Four participants were Qatari and eight participants were born and raised in Qatar but were considered non-Qatari due to their parents being non-Qatari nationals. Of these participants, most had received their nurse diploma

from a college within the Middle East region such as Qatar, Bahrain or Saudi Arabia and completed their Bachelor of Nursing in Qatar. Two of the remaining participants were from Asia and one participant was from North America. These three participants had received a Bachelor of Nursing from their country of origin.

### **Data collection and analysis techniques.**

Throughout the entire process, even before the first interview, I was memoing. Memoing is a technique commonly used in qualitative research (Birks, Chapman, & Francis, 2008). It is an opportunity to explore thoughts, connections and feelings about and/or between data, categories, properties and any ideas that arise during data analysis. Memoing is critical for the researcher to raise the level of data to abstraction and interpretation while keeping track of their thoughts. My memos were used as a map of progress, explicated my thinking process throughout the research project and created an auditable trail of how I constructed data and described my interpretation. It is the documentation of how I came to construct and interpret my data as I did.

The section that follows is a description of both the process of ID and how I carried out these processes for this study. Three key processes are critical for the ID analytic process: concurrent data collection and analysis, constant comparative method and iterative analysis (Thorne, Kirkham Reimer, & O'Flynn-Magee, 2004). Concurrent data collection and analysis allowed for increased theoretical sensitivity as I asked questions of the data and explored ideas about commonalities and themes that give them meaning. The constant comparative method required me to compare data to data, data to themes, themes to themes, interpretations to interpretations, and interpretations to data to expand my initial understanding of the subject. Iterative analysis required me to continually question my interpretations of the data by asking “what am I seeing here?”, “what are other possibilities?”, and “is there a better way to

understand this?” These three processes were ongoing throughout the entire research process from the initial conception to the final product.

According to Thorne (2016), ID allows researchers to borrow analytic procedures to interpret themes in common social processes that are of concern to the discipline of nursing. Similar to how the sampling procedures and size are intimately connected to the purpose of the research, analysis techniques are chosen to help answer the question guiding the research. These techniques are chosen to help with the analytical inductive reasoning undertaken by the research to broaden current understanding of the subject under study and move away from the original scaffolding outlined in the research proposal (Thorne, Kirkham, & O’Flynn-Magee, 2004). The techniques are used to interpret the raw data, identify common experiences while simultaneously acknowledging individual variation, and generate alternative understandings that move us away from the initial framework. ID allows for the conceptualization of nursing practice change as being common, in that it is not unreasonable to assume that most nurses will undergo some type of practice change during their careers, yet at the same time, ID allows recognition of the complexity of nursing practice change. In other words, nursing practice change, while being expected, does not necessitate simplicity.

Thorne (2016) argues that data are constructed rather than collected and it is the meaning given to the data via interpretations that makes it valuable. It is the meaning of interpretations that makes qualitative data useful in the clinical field rather than the words themselves. For the purposes of the study, I constructed the data by choosing to focus my attention on the initial recognition the participants described when realizing their practice had to change, the steps they took to make that happen and how they were able to maintain that change over a sustained period

of time. This structure was not decided at the beginning of the study, however, it quickly took shape as I read and transcribed the interviews while asking: “What is going on here?”

Birks, Chapman and Frances (2007) address interviewing participants from cultures different than the researcher within an interpretive paradigm. Arguing that as nurses and patients increasingly migrate around the world, the idea of only interviewing participants in their native language is unnecessary. These authors identify three key areas that may influence the interview process. First, research specific factors include interviewing skills, preparedness, knowledge of culture and environment, an ability to establish rapport, communication skills and control of the process (Birks, Chapman, & Frances, 2007). Second, participant specific factors include level of anxiety, English proficiency and desire to please (Birks, Chapman, & Frances, 2007). Third, context specific factors include location, time, cultural norms and ethical issues (Birks, Chapman, & Frances, 2007). These authors argue that these three factors must be considered to engage in an effective interview with participants from a culture different than the researcher.

Taking direction from Birks, Chapman and Frances (2007), I addressed research, participant and context factors that may affect the validity of the data generation process. Consideration of the researcher specific factors included: experience conducting research interviews, thorough preparation via completion of a dissertation proposal, awareness of the culture and environment from having lived in the Middle East for two years at the time of data generation, excellent rapport with the participants (most of whom were previous students of mine), strong communication skills with non-native English speaking persons developed by navigating my way through living in a new culture, and control of the interview process by redirecting participants if they started to lose track of or wander with their answers. Efforts to address the participant specific factors included: minimizing participant anxiety by offering tea

and ensuring complete confidentiality; recruiting participants who were proficient in English; minimizing the desire to please by sharing the purpose of the study; employing various questioning techniques, such as open-ended questions; and allowing adequate time for participants to provide thoughtful answers. Finally, efforts to address the research factors included: allowing each participant to choose the location and time of the interview, allowing time for the participants to gather their thoughts and for me to confirm my interpretation of their answers, my familiarity with the Arab and hospital culture in which most of the participants were situated, the successful completion of ethical approval from two research boards, and agreement for the study from the involved institutions.

The data for this study came from interviews conducted with the participants in a variety of settings. Before conducting the interview, I wrote field notes about the environment in which the interview was taking place, my feelings or thoughts about previous interviews or data I had been reviewing, and any theoretical areas I wanted to ask questions about in addition to the semi-structured interview guide. After the interview, I wrote field notes about the participant's energy, body language, excitement or hesitancy when answering a question, if I thought there were any challenges in the participant's understanding and answering of the questions, and finally my overall thoughts about the interview.

I transcribed the interviews verbatim as soon as possible and created memos while I was transcribing to keep track of my thoughts that emerged about the participants and their experiences with nursing practice change. For example, one of my early participants described how her practice changed after a personal event of being ill and needing healthcare herself. I wondered if other participants might have had similar experiences. I kept memos about the idea

and found that the documentation of my thinking resulted in my gaining a different level of understanding of one aspect of practice change for these participants.

As part of the ID process, data came from in-depth interviews, my field notes and my memos. The methodology did not direct me to complete a step-by-step data gathering process, but rather to collect interview data, reflect on it, record my thoughts and use these thoughts in further understanding the data and in revising questions asked in future interviews.

Concurrent data generation and analysis required me to begin analyzing the data directly after I conducted my first interview even before any coding was undertaken. The interview invited the participant to contemplate on her change in clinical practice at a considerably deep level, perhaps a deeper level than she had previously. All interviews were between 30 to 90 minutes and most were conducted in my office at the University of Calgary – Qatar. Four interviews were conducted in the clinical setting at the participants' request. The interviews began with me reviewing the purpose of the research, any ethical considerations as outlined in the consent form (see Appendix A), providing a written copy of the semi-structured interview questions (see Appendix B) and finally asking the participants to describe their nursing practice history. This allowed the participants to get comfortable with talking to me while also getting used to the audio-recording equipment. I also took the opportunity to identify areas I thought were worthy of re-exploring as they described their history, such as why the participants chose to leave positions they claimed to enjoy. Next, I would ask two to three general questions about the participants' experiences with changing their clinical practice to encourage them to reflect more deeply on their experience and share that experience with me. I provided a written copy of the questions so the participants could easily refer back to the question if they lost their train of thought or got off topic. The goal of the interview was to create vertical depth through an

intensive exploration (Polkinghorne, 2005) of the participants' experiences in clinical practice change. The follow-up questions were open-ended to encourage the participants to deeply reflect on the experience and to explore these depths with me.

Thorne (2016) warns us against generalizing findings that come from interviews and appeals to qualitative researchers to recognize that our participants are likely to use available constructs to describe their experience rather than finding the language that reflects the complexity of their situation. Thus, the researcher must explore with their questions, listen with an open ear and mind, and recognize the data generated from the interview is contextual. I approached each interview as a "curious learner" (Thorne, 2016) and memoed before, during, and after each interview to keep track of my biases and beliefs. I would close each interview by sharing a summary of what I understood the participant to be sharing about her experience with practice change to allow for any necessary clarification. At the same time, I was conscious that the majority of participants I was interviewing, while being born and raised in the Arab culture, were still considered expatriates, as I was. While encouraging the participants to speak their truth, I was also aware that some of the expatriate participants may be hesitant to share their truths due to the fear of deportation despite my assurances of confidentiality. This fear is particularly complicated in the non-Qatari nurses who were born and raised in Qatar. They fear being deported to a country that they may have never been to but hold a passport from. This may have even further limited the constructs that the participants were comfortable engaging with to describe their clinical practice change.

Throughout this study, I used concurrent data collection and analysis, constant comparative method and iterative analysis to analyze my data prior to moving onto the next interview. Immediately after the first interview, I documented my field notes to capture the

overall atmosphere of the interview. I documented reflections of both my own, and my participants, comfort level with the interview, questions that encouraged deeper reflection than others, any difficulty the participant had with describing their practice change, and anything I thought needed improvement for the next interview. It was not until the third interview that I began to code broadly using an iterative manner – moving in and out of the data – to identify broad codes that captured the common experience without forfeiting the individual detail (Thorne, Kirkham Reimer, & O’Flynn-Magee, 2004). I made a conscious choice to wait until after the third interview to begin coding because I wanted to reflect on any similarities or differences I saw in the participants’ experiences of clinical practice change.

Thorne (2016) supports coding data and urges aspiring ID researchers not to “be derailed by excessive precision in your early coding” (p. 287). Rather, an ID researcher must be sensitive to initial thoughts about the data while allowing a sense of the whole to develop (Thorne, 2016). This awareness of the whole began for me with transcribing the data as Thorne (2016) recommends neophyte researchers undertake on their own rather than hiring a transcriptionist. It was particularly important for me as I was able to memo and code while transcribing about things that were not on the audio recordings. For example, how the participant would lean in during a certain part of the interview and lower her voice as though confiding something to me that she did not want others to hear.

Coding captures the empirical aspects of the data and raises the level of analysis to concepts through ‘interpretive rendering’ (Charmaz, 2016). Coding defines what is happening in the data and what it means to the people involved as interpreted by the researcher. The creation of codes is intimately connected to the use of language and language manifests the researchers’ and the participants’ life-worlds. Remaining open to any and all possible emerging codes is

critical to the beginning of the analysis process. Throughout my coding I was constantly asking questions of the data such as: “What am I learning about clinical practice change?” and “What is missing?” Initially, my codes were more descriptive than analytical. For example, one of my first codes was labeled ‘identifying a gap’ that described situations in which the participants were not able to provide the type of care they wanted, and it was often due to lack of knowledge or clinical experience. Using a label such as this is more of a description than an interpretation. Asking questions of my broad-based codes allowed me to test how the data was similar and fit within the code, or different and fit better within another broad-based code. I used an iterative manner in which I would return back to the raw data and then broaden my interpretation by asking critical questions about where I saw connections and themes. I explored the fit of various data pieces together and tried to see if there was a better way for the emerging themes to fit. This constant comparison elevates the level of conceptualization by integrating and connecting previously identified themes, and a common experience of nursing practice change began to emerge.

### **Rigor and credibility.**

Biases exist within the individual researcher and the discipline in which the study is grounded (Hunt, 2009). The credibility of the study rests solely with the researcher as everything from the inception of the study, to the generation of data, the analysis of the data, and the production of a finished product is entirely an interpretation of the researcher (Thorne, Kirkham Reimer, & MacDonald-Emes, 1997). Tentative truths are constructed by the researcher and the validity of these tentative truths are contingent on the researcher’s ability to interpret the raw data into a framework that is recognizable to those who have experienced the phenomena (Thorne, Kirkham Reimer, & O’Flynn-Magee, 2004). The development of this framework must be

retraceable, therefore, documentation of the thought processes that lead to our interpretation of the phenomenon must be documented, logical and understandable to others.

To address bias in my study and document my decisions, I diligently memoed and journaled about every aspect of the research project, including its inception. I created memos for each participant I interviewed, each code and theme I created, the overall process identified, and each segment of the research project including the writing of this dissertation. At times, I would revise and group memos as I reflected critically on the thoughts of emerging themes. I even created a memo on a memo to capture a thought that I was not sure was relevant at the time. It was through memoing that I was able to play with various ways of grouping the data to see what fit together and what required further development or reconceptualization. Titles of four of my memos have become the generalized process, ‘easing the dis-ease’, and the three main themes of: ‘disrupting’, ‘actioning’ and ‘stablizing’. One of the most important memos I made, labeled “Research Journal”, is a diary of sorts that documents my personal struggle with methodology and how it was that I ended up choosing ID. Almost every thought I have had about the research process and my findings is traceable through the memos.

To further strengthen the credibility of my findings, I completed member checking simultaneously with participant interviews. I summarized the emergent themes with each participant at the conclusion of the interview. This allowed an opportunity for better interpretation on my part, and the opportunity for the participant to expand and clarify her intention. I also explored my thoughts and interpretations of previous data analysis by asking refined questions. This process helped to clarify concepts and encouraged denser interpretation.

The credibility of a qualitative project coincides with the researcher’s ability to show how decisions, interpretations and conclusions are made. One of the first concepts Thorne (2016)

identifies as critical as a researcher moves from proposal writing to engaging in ID, is tracking reflections. From the earliest outset of my research, I began documenting my thought and decision processes in a research journal. For three years, I documented my thoughts about conversations I had with myself, my participants and my advisors. This journal documents my journey of wrestling with choosing the right approach for this research, the first codes I used to describe my interpretations of the participant interviews, my learning path with the NVivo software, and my insecurity and questions about myself, my interpretations and the entire research process. In addition to my journal, I memoed about participants, codes, themes and all of unfolding interpretations. The coding memos show how my beginning interpretations grew from basic descriptions to deeper interpretations that eventually resulted in the three major themes and one over-arching interpretation. For example, I created a memo labeled 'disruption' almost one year after my data collection and analysis began, and in the first entries, I discussed how other codes such as 'fear of harming', 'experiencing shame' and 'feeling unsettled' could be captured by one overall theme I labeled 'disruption'. The same was done when I created 'doing the uncomfortable', 'no option but to do something' and 'sticking her neck out'. Together, these formed the 'actioning' theme. Finally, 'facing intimidation', 'made me who I am' and 'becoming the expert' were all joined under the final theme of 'stabilizing'. The memos I created after each participant interview show my growing confidence with interviewing participants with a functioning understanding of English and whose culture was significantly different from mine. These memos also trace the concern I had for my participants after they shared unsettling situations with me particularly with their leadership and hierarchical struggles. Finally, these memos were often shared with my advisors during progress meetings in an effort to develop clarity of my interpretations and fuller descriptions.

**Ethics and informed consent.**

Ethical approval for this study was granted by the Human Research Ethics Board at the University of Victoria (see Appendix C) and the Hamad Medical Corporation Research Center as a quality improvement project (qualitative research is considered a quality improvement project at this facility). Consent to participate in the study was sought prior to the beginning of each interview with assurances of confidentiality (see Appendix A). During the interview, if I noticed a change in a participant's demeanor, such as speaking in hushed tones, I would assure the participant again regarding confidentiality. Informed consent was determined by both a written and verbal agreement from the participant and included participation in the study and audio recording. All interviews were conducted in private rooms with locked doors. All audio-recordings were kept safely on a password protected laptop that was under lock and key when unsupervised. All interviews were transcribed verbatim on the same laptop.

**Limitations of the study.**

There are limitations that must be acknowledged for this study. One is that this study and its findings are limited in application to Qatar and the Middle-East. Polit and Beck (2010) suggest that analytic generalization, the generalization inherent in qualitative research moving from the particulars to the abstract, is strengthened by asking the right questions of the right people, and reflecting on concepts interpreted from the data. According to Thorne (2016), new knowledge generated through ID research is located within the society that constructs it. Therefore, the findings of this study may not be generalizable to all contexts in which nursing practice change is occurring. Another limitation is that the interviews were conducted using a non-native language for most of the participants, which may have led me to inaccurately interpret what a participant meant. In addition to the challenge of expressing themselves in a

second or third language, the participants may have self-imposed filters on their descriptions due to fear of deportation.

Qualitative research is undertaken to gain understanding about those things that are not properly captured through numbers and measurement, but are best expressed through non-measurable methods such as language. As stated by Thorne (2016), our ability to verbalize strongly influences our ability to conceptualize. It is how the participants phrase and summarize their reality that allows me some understanding of their experiences, and their limited language skills may have hindered their ability to share their experiences of changing their practice. Although I was present in the room with each of the participants as they shared their experiences of nursing practice change, and could see their non-verbal language, at times I heard the participants struggle to find the right word to capture the ideas they were trying to share. This may have been due to limitations with language or efforts to describe their experience without offending those in powerful positions for fear of deportation. Despite communicating in English during working hours, most of the participants spoke another language outside of work, so although proficient in a second language, there were most likely ideas, feelings and experiences that were lost in translation. As times, I would listen to the participants articulate an idea out loud in their own language and then try a few different sentences to describe it in English. I attempted to address this by having select participants clarify meaning in addition to sharing my thoughts and interpretations with the participants whenever possible.

Another limitation was the cultural differences between and amongst the participants and myself. As noted in Chapter 1, the Arab culture is largely focused on religion and family, and while they may invite expats into their country, they can be reluctant to invite expats into their culture. There is an ever-present threat to all expats, including the 11 non-Qatari participants, of

deportation if a cultural law is violated, even unknowingly. Qatari citizenship is a complex concept that is passed through generations via Qatari fathers (a female Qatari's descendants will not be given Qatari citizenship if she marries a non-Qatari), and it is only given to those families who were living in Qatar at the time of the discovery of natural gas. This means Arab and non-Arab families may have been living in Qatar for generations but will never receive Qatari citizenship and will always be considered expats. Indeed, many of my participants were born and raised in Qatar, but held passports from countries they have never been to. The threat of being deported to their homeland by saying something that could be misconstrued as an insult to the Qatari culture was very real. Even though the participants were assured of confidentiality, this reality may have made the participants cautious about what they said and shared. On the other hand, the participants may have shared incidents, feelings and reflections with me because I was an outsider and they did not fear deportation from describing their experience with nursing practice change because I was also an expat.

Although Thorne (2016) does not set upper or lower limits regarding sample size, she does suggest that researchers with smaller sample sizes must recognize the potential for further investigation with larger sample sizes. While there is no set rule for determining sample size in ID, the researcher must have an adequate size for conducting the study within the constraints of funds and time. It is possible that recruiting a larger sample size may reveal other themes or patterns that were not evident with this sample of 15 participants.

Lastly, it is important to note that the majority of the participants were former students of mine. I was continually reflecting on, and trying to be aware of, the participants' need to please me. However, in the end, the fact that I was their previous instructor allowed us to build a deeper level of trust during the interview process. The participants who were my previous students knew

me as an ethical and caring person who recognized their immense knowledge of clinical nursing practice in Qatar.

## Chapter 4: Presentation of Study Findings

This chapter describes the study's findings, answering the question: "What is the process RNs undertake to change their practice?" I begin with a brief overview of the process that emerged from my interpretation of the participants' descriptions of their change in practice. Next, I provide a more detailed description of the three main themes involved in the practice change journey and finally, I interpret the findings within the context of the original research question. Changing clinical practice is a difficult process (Gupta et al., 2017) and understanding how these nurses changed their practice in a significant way may provide a process framework to improve the success of planned change.

Coming from an interpretivist paradigm in which I co-created the data with the participants and interpreted my findings using constant comparison of the data, analysis and memos, I have labelled an overall theme of nursing practice change that I came to understand as: 'easing the dis-ease'. Easing the dis-ease signifies a personal journey when the nurse realizes her practice can no longer stay as it is. She journeys from discomfort, to change and then to a re-stabilization of practice. This journey captures what I learned from my participants through the critical interpretation of the data. I identified three sub-themes: disrupting, actioning and stabilizing. Disrupting was an understanding that their practice must change if they are to ease the dis-ease and consists of disrupting practice or personal knowledge. Once the disruption was obvious and the nurse realized her practice had to change, she engaged in the next major theme of actioning, which entails positional, educational or relational actioning. Taking steps to address dis-ease, the nurse evaluated and engaged in options she believed best dealt with the perceived needed change and took the necessary actions to tackle the change. She may have tried more

than one approach to actioning until she felt her practice was acceptable to her again.

Stabilization occurred when she once again became confident and comfortable with her practice.

### **Disrupting Knowledge**

When embarking on the project, I was curious about the participants' ability to recall the context and factors that led to their practice change. I found that all of the participants were able to recall times when they knew their practice had to change. All of the participants had been practicing for more than two years and the majority had been practicing for a number of years. Every participant had a sense of pride when describing her own level of expertise in her everyday practice. Only when the nurses suddenly found themselves in an unusual situation or setting, such as being transferred to another unit or having a patient respond in an unexpected way such that the nurses' expertise was challenged, did they see themselves as inadequate. The participants used words such as 'surprise', 'anger', or 'fear' to capture the moment of recognition when they knew their practice had to change. Even though some of the participants were describing a change in practice that had occurred years before, their body language and facial expressions sometimes revealed disappointment and acknowledgement that their level of practice or knowledge was not enough. It was this recognition that led to the first theme, the beginning of practice change, which I labeled: disrupting knowledge.

Disrupting knowledge refers to an awakening or realization that a nurse's practice cannot continue as is. All participants described a disruptive occurrence after which continuing their current practice seemed impossible. For some participants, the disruption happened immediately and the awareness that their practice had to change was instantaneous. For others, the disruption was a slower process in which the awareness occurred over time. In other words, it may not be the first exposure to a disruption that makes one realize that their practice must change.

Sometimes it takes repeated exposures before the nurse finally recognizes things cannot continue as they are. The participants described two different types of disruption: (1) Disruption to practice knowledge – a disturbance in the confidence they had in their current level of knowledge; and (2) Disruption to personal knowledge – a disturbance in their personal life that directly affected their clinical practice.

### **Disrupting practice knowledge.**

Disrupting practice knowledge was the most common type of disruption I interpret in the data. This disruption appeared to be caused by a feeling of insecurity or inadequacy in a nurse's practice knowledge that was perceived as a threat to patient safety or caused by newly discovered knowledge that had a clear benefit for her patient. Participants described a feeling of unease when they were exposed to unsettling situations that pushed the boundaries of their clinical practice knowledge in which they did not know the correct course of action to take. However, at times it was not the lack of knowledge that pushed the disruption but rather the introduction of new knowledge that challenged their previous practices. Both of these scenarios seemed to leave the nurse feeling insecure and vulnerable in her practice knowledge, leaving her at dis-ease with the current situation. I present examples of six situations in which the participants described 'disrupting practice knowledge' below.

Abidah described disruption caused by her not knowing what to do in a patient care situation:

The high dependency unit is right in front of the counter and sometimes we had accident patients and that one boy just collapsed. He had a fractured femur. Ah yes, I think that's the one that really made me think 'what is happening to this boy?' I am looking at him. He is a small boy, he was 17 or 18 years old and he had a fractured femur. He had an

operation done and I was doing the frequent monitoring and I am looking at him and he just collapsed. I didn't know why 'what is wrong?' I am just 26 and I am just looking at him 'something is really wrong'. I keep shaking him 'what is wrong with you, wake up, wake up, wake up'. I started screaming for help - call the doctor, call the nurse, call code blue. They came and they pushed the bed straight to ICU and we managed to save him and maybe at that time I felt I needed to know more. I should know things faster, I should not panic and I feel I want to be good in this intensive care. I really wanted to do good.

This clinical situation left Abidah with a desire to learn more because she wanted to 'do good' by her patients and in her work environment.

Elham, who experienced disruption regarding the benefits of breastfeeding, began to change her practice overnight. Prior to enrolling in a course on breastfeeding, Elham did not initiate conversation with the pre-natal mothers about the benefits of breastfeeding. She described being "surprised by the information, especially the skin to skin contact". After the first day of the course, Elham began to incorporate the knowledge directly into her practice. She stated: "I try to apply it because I feel that I am confident. I am really confident because I have this good information. This right information. Why I would not apply in my health centre?"

In both of these situations, the participants described how the lack of knowledge affected them personally. While interviewing the participants, I began to notice a pattern of emotional reactions to their recognized lack of knowledge. Each nurse had a sense of pride in her nursing practice and the sudden disruption brought negative emotions. For instance, Abidah described being ashamed that she did not know what to do immediately in the situation and recalled screaming to try and get someone to help her because she did not know how to care for her patient. Elham described initial surprise that was quickly followed by anger because she was

unaware of such an important aspect of health for her clients. Neither of the nurses found it acceptable to continue practicing the way they were initially and this recognition was unsettling for them. Both Abidah and Elham wanted to change their practice immediately so that they could feel competent again. As stated by Abidah: “I speak to them and I explain ‘you know, I don't feel right doing this. We should know what we are doing’”.

Jalilah is an experienced trauma nurse who shared a harrowing experience in the trauma emergency room that challenged much of her assumed knowledge and experience. Working on a night shift, Jalilah was preparing a room to receive a patient who would be dead on arrival due to a road traffic accident. The patient would already be in a body bag. She talked about the slowness with which she prepared the room knowing there was no rush to save a life. She received the body, connected it to the monitor and checked the pupils at an unhurried pace when suddenly the physician told her to start CPR. Jalilah was confused by this order and actually looked around to see if the physician was talking to someone else. She confirmed the order as a question: “Start CPR?” Since the body had been received in a non-critical room, she had to run into another room to get the equipment for the code. As she was gathering the equipment, she had many questions running through her mind:

He started CPR and when I relieved him, when I started doing the CPR, he started calling the code and activating the code and calling for help. I didn't pay attention ... I didn't know why I am doing it but I just did it because I trust the doctor. In like two minutes or less than two minutes, we had a rhythm.

It never entered Jalilah's mind that the patient had experienced a cardiac episode that contributed to the road traffic accident. From that day forward, Jalilah maintained an open mind about the sequencing of events and unexpected outcomes in the trauma room.

Na'imah, a nurse working in the post-partum unit, learned that trusting her instincts and advocating for her patients was critical. A mother had raised Na'imah's concerns when she indicated her newborn baby was not sucking. Upon assessment, Na'imah confirmed the mother's findings and took the necessary steps to eliminate the most common reasons for non-sucking in an infant, while simultaneously trying to get the help of a physician. She first notified the on-call physician who said he was too busy in the labour room. She then tried a doctor who was present at the nurses' station stating: "Please doctor, come and assess this baby. Please because we feel the baby is not sucking". According to Na'imah, the physician took a cursory glance at the child and ordered a blood sugar be taken, which Na'imah had already done. The physician walked away, and it was not until the baby began having chest retractions and became apneic that Na'imah was able to find another physician to help. By that time, they had to transfer the baby to the intensive care unit and eventually the baby died. Na'imah shared how difficult it was for her to find courage while facing doubtful physicians but it pushed her to become an excellent patient advocate even when facing intimidation by physicians. Na'imah learned to trust her knowledge and instinct when her accumulated clinical knowledge indicated a poor outcome for the patient. Unlike that of Abidah and Elham, Na'imah's disruption had been building up over time and following this situation, she realized that she had to learn to trust the knowledge she already had.

Dimah's disruption also occurred slowly over a significant amount of time. Working in an outpatient clinic setting with cardiac patients who did not prioritize their health issues the same way as the medical team helped Dimah pay more attention to the patients' concerns. Her greatest frustration was with patients she deemed as non-compliant with their medication regime. When these patients would come to the clinic, Dimah would want to discuss their non-compliance to see what adjustments the patient could make to become more adherent, she indicated that the

patients rarely placed their non-compliance as a priority. Instead, the patients wanted to discuss other health concerns that the medical team had placed at the bottom of the priority list. It was when she started listening to the patients and focusing on the individual and dealing with their concerns first that she was eventually able to get around to medication compliance:

It was so ... but the change was in realizing that was not the issue. The issue was not the medication. The issue was attention to the individual. It is the attention to the individual where you actually make the most ... um ... you have the most potential to affect change. In actually paying attention to the individual.

Jawaher recalled working in the emergency room of a smaller hospital in a rural setting. She was the only nurse in the emergency room and was experiencing an unusually high number of urgent cases. After receiving handover from the previous shift, Jawaher was completing her rounds and was immediately concerned about an elderly patient who told Jawaher that she just kept fainting. Knowing that inappropriate circulatory perfusion may cause recurrent fainting, Jawaher kept a close eye on the patient and monitor as she completed her assessment of the other patients. Before she was able to complete her assessments, the elderly patient went into ventricular fibrillation. As per hospital protocol, Jawaher called a code blue and after a short time, the woman sat up straight and was talking to Jawaher with no memory of what had happened. Jawaher estimated this occurred at least 10 more times where the patient would go into ventricular fibrillation, Jawaher would call a code and perform defibrillation, the ventricular fibrillation would stop, and the patient would be alert and oriented. The only help she received was from an off-duty nurse who had come to the hospital to collect her pay cheque:

I was the only nurse on in the ER but it was day shift so I pulled the call bell right out of the wall multiple times, and nobody came. I called over the PA, nobody came. I shouted

over the PA and finally the head nurse came sauntering down and asked me why I didn't have a second IV line in... So it just was repeated and she would ... we would take her pulse, there'd be no pulse, we would shock her, she would wake up like eyes wide open. ...It was very, very traumatic because I didn't know ... I was just ... at this point I'm like 'am I doing everything right? I have nobody to bounce ideas off of. I can't get my second IV in. I can't get this poor woman any sedation.' I didn't know what was really happening with her. She ended up getting a ... she ended up surviving as far as we know ... and getting an internal pace maker put in. I very often think of this woman.

Going through this experience significantly changed Jawaher's practice because she made self-care a priority and taught self-care to any new nurses she orientated. She also resigned from her post immediately and moved to another hospital that was further away from her home but that she had personal connections at that made her feel safe. Jawaher then sought therapy with a counselor who helped her work through the personal trauma that resulted from being left in a situation where she had duties that went beyond her practice and left her feeling abandoned by her colleagues. It was through this therapy that she learned the importance of self-care and prioritizing herself and family over work.

### **Disrupting personal knowledge.**

The theme of personal disruption captured the impact of changes in the participants' personal lives on their clinical practice. The experiences vary from marriage, being a patient themselves and witnessing the care of a loved one. Each of these situations brought about recognition from the nurses that they could improve their practice to help others in a significant way but the disruption comes from a personal source.

Fawzia had been a nurse for many years before she got married. Once she was married, Fawzia realized she was no longer able to make independent decisions and instead had to comply with her husband's decisions. Fawzia wanted to return to school to complete her Bachelor of Nursing (BN) for improved job security and increased salary but her husband did not support this idea. While speaking with me, she shared her worries and concerns about her children and how she could best support them should something happen to her marriage. In her opinion, returning to school was the best option to guarantee her children's future yet her husband forbade her. Despite this, Fawzia secretly returned to school to complete her BN and was forced to study late at night after her husband and children had gone to bed:

My husband he did not agree about the study at all. He said all the ones who have college certificates are stupid. So when I studied I did it after everyone slept. After 12 midnight. I did not believe about what he say and the way he was thinking pushed me to study more because I am not agree with what he said and I was not satisfied with him.

When discussing with Fawzia how her decision to return to school changed her clinical practice, she gave some expected answers regarding improving her clinical practice such as scope of practice, but Fawzia insisted the ability to achieve her degree despite the turmoil at home had the biggest impact on her practice because of her newfound belief in herself. Her education gave her the opportunity to apply for a promotion and eventually shift from working in a large tertiary hospital to one of the major oil and gas companies as an Occupational Health Nurse, which improved the lives of her and her children.

Becoming the patient, another type of personal knowledge disruption, was an experience that had a direct impact on those participants who received care in a hospital as opposed to being the providers of care. Whether it was the insertion of an intravenous or urinary catheter, the time

waiting for results or the communication with healthcare providers, nurses in this study spoke about their own experiences as patients and how these experiences changed their own nursing practice. Hadiya was admitted to the emergency room with abdominal pain and diagnosed with appendicitis. She describes receiving a medication she had given to her patients numerous times. Her patients complained that the medication made them feel unwell but Hadiya described how she disregarded these sentiments until she herself experienced side effects:

And this medication make you feel like you want to go out and remove everything and feeling like you don't .... I don't know .... and you sweat. Really I didn't believe the patients 'I give you only Primperan. What happened?' I would tell them 'baba, just relax don't worry'. Khalas, OK I didn't believe them until I really feel that I hate this medication, I hated it. So when I admit it, I say to my patients its haram (forbidden by Islamic law) what I'm doing for them. Really, this made a difference with me.

Hadiya also described having an intravenous inserted and the discomfort resulting from this came as a surprise her because this was an everyday nursing procedure that she performed on patients that she did not realize could cause so much pain: "And the vein, when they started to take IV fluid, the cannula, I cried. Oh my god. 'I'm doing this for a patient' and I cried. It hurt a lot". Hadiya described discharging herself against medical advice as she was so traumatized by her experience. She was readmitted later that evening after her appendix burst at home.

Each of these personal experiences of being the patient rather than the nurse directly changed Hadiya's clinical practice in patient education, patient preparation and medication administration. First, she reported that she now gives very detailed patient education prior to administration of medication or the insertion of an intravenous catheter and shares her own personal experience with her patients. Next, she described use a numbing cream at the

intravenous insertion site if it is available and using the smallest catheter gage that is appropriate for the treatment to promote patient comfort. Lastly, Hadiya indicated that she now administers intravenous medications at a much slower pace than previously and listens more intently to patients if they inform her of any untoward feelings when receiving medication.

Witnessing the excellent care given to her dying mother caused a personal disruption that significantly changed Sahara's clinical practice. Sahara's mother was her source of personal strength and was her biggest supporter to become a nurse. Having her mother diagnosed with terminal cancer while working in a critical care area created a space for Sahara to compare her nursing care for patients "who will be returned back to life" with the care provided to her mother in the end stages of her life. In Sahara's words:

It is my strength ... it give me confidence that if they can do it with those disappointing patients, those patients dying, why we cannot do it for critical patients who maybe they will be sick for a month but they will return back to life.

The intimate and personalized care her mother received touched Sahara and helped her focus on the patient rather than the treatment therefore making her nursing care more humane and less robotic. It gave her "the strength to do things in the right way".

For Sadaqah, it was the birth of her twins that caused her personal disruption. After having her own children, Sadaqah developed patience with her clients who were new mothers and understood where their anxiety was coming from. Prior to having her own children, Sadaqah thought the new mothers were overly anxious and apprehensive. She shared how she was dismissive of their concerns, perhaps even flippant in her response that was typically 'don't worry so much, everything will be OK'. She found herself asking her nurse the same questions she had previously dismissed from her clients: "But when I go through this experience I feel

about their feelings. I know more about their feelings. Now I can answer my question that I have before”.

Changing nursing practice must begin somewhere, and for these participants, it began with a disruption in knowledge. Whether it was a lack of confidence in their own practice knowledge or a personal experience that challenged core practice assumptions, each participant was able to succinctly describe the moment of recognition that her practice could not go on as it was. Working from a place of insecurity left the nurse feeling vulnerable and uneasy in her practice. She knew things could not stay the same and began to take steps to address it. She began to ease the dis-ease by actioning.

### **Actioning**

The internal struggle was profound for participants who realized their practice must change. When conducting the interviews, I could hear a sense of vulnerability and insecurity in their voices and detected a sense of regret that their clinical practice was not as good as they wanted it to be. For the participants, their practice was a source of pride because they had worked years to become proficient and independent. Recognizing that they needed to change their practice left some nurses feeling exposed. It was the dis-ease with this exposure and a sense of vulnerability that led to the conclusion that something had to change. Considering what actions to take to address the dis-ease resulted in the next theme: ‘actioning’. Nurses talked about three different types of ‘actioning’: (1) Positional actioning – seeking out a new role or job; (2) Educational actioning – seeking out formalized education to enhance knowledge and skills; and finally (3) Relational actioning – seeking help from those in positions of power to facilitate the necessary change. Many of the participants tried more than one type of actioning because success was not guaranteed on the first try.

**Positional actioning.**

When recounting how they chose to change their clinical practice, many participants described feeling confined or unable to change their clinical practice if they remained in their current position. The participants believed their internal struggle of needing to change could not be alleviated in their current work environments. A lack of support from people in leadership positions was the most frequently mentioned structural constraint and the participants described a sense of futility in attempting to change their clinical practice without a change in position.

For example, Haniya chose to leave her position after facing intimidation by the nursing leadership team. She described an incident in which a patient urinated on an expatriate nurse while the nurse was trying to help the patient get to the bathroom. The nurse was later chastised by the nursing supervisor for smelling bad and was sent home. When Haniya tried to defend the expatriate nurse and report the supervisor to the Director of Nursing, she was patronized and told: "Oh, you know what she's like. She doesn't mean it". Haniya was insistent that something needed to be done because she felt the supervisor's attitude was creating an unsafe environment for the patients due to staff intimidation. When the Director of Nursing refused to take action, Haniya wrote a letter, accompanied by 52 signatures, to the Chief Executive Officer. Although Haniya was promised by the Chief Executive Officer that she would not face any retaliation for writing the letter, she revealed in her interview that she faced immense intimidation that culminated in her being falsely held responsible for a patient's suicide. Haniya concluded that she had no choice but to leave her position because, despite numerous attempts to change the working environment with the promise of non-persecution, she felt unjustly accused by the leadership team. She resigned from her position and moved to a new department leaving valued work, colleagues and her expert practice behind.

Another participant, Hadiya, took positional actioning after not receiving support from her supervisors or by the hospital security department during aggressive situations. Hadiya described being physically threatened multiple times by patients' family members when providing treatments a family member had deemed unnecessary. Hadiya reported being yelled at and accused by some family members as being incompetent. One incident was serious enough that Hadiya approached a hospital security guard and asked for his intervention but the security guard told Hadiya he was unable to intervene and if she felt threatened she should contact the police. When Hadiya approached her supervisors about the family member's behaviour and the verbal abuse, she did not receive the support she needed. Instead, Hadiya shared that the supervisors informed her it was acceptable for patients (and their family members) to yell and curse at the nurses:

They are worse. More than the relatives. And they are supporting the relatives and not just one time, but a lot of times. And here, because we are Muslims we have to respect the woman itself. If the patients' says a bad word to you the supervisor is supporting him. They say it's a patient's relative. The patient has the right.

A number of participants undertook positional actioning seeking a promotion, though most were unsuccessful in actually getting the promotion. For example, Benazir was an experienced emergency trauma room nurse who faced intimidation by senior nurses after she had pursued higher education through the post-diploma program and multiple certifications:

Most of the time it was the senior nurses. The ones that don't want to go further in their career and they don't want to improve their knowledge or skills or anything. They think 'I'm a nurse, the doctor is better than me, I am a nurse and my job is to give what the doctor ordered me'. She cannot challenge the doctors if he is giving the wrong dose. This

is what I learned later in emergency. I am the one who is suggesting the treatment, I am the one who ... if I see this is not appropriate for the patient I will tell the doctors 'doctor, no the patient has that and that and that so the medication wouldn't be the perfect'.

Benazir changed positions twice seeking a promotion because she feared if she did not gain a more senior position in the organization then she would continually face bullying by nurses more senior but less educated than her. Her first move from emergency to wound care was supposed to be a promotion but after she transferred into the new position, she was told there was no budget for the promotion. She changed positions two more times in a short number of years, each time seeking a promotion yet never successful. When asked about her unsuccessful pursuit of a promotion, Benazir stated:

I don't know but I feel that in Hamad people don't get promotion even if they will do their best, it's only about who you know better in this area. So it's not your qualification, it's not your experience, it's not your skills or knowledge.

Sahara also changed positions after being promised a promotion with a new role. Initially, Sahara was offered the role of quality reviewer without a promotion. She transferred from a level grade 108 to a new position that was increased scope of practice but remained a level grade 108 in the organizational hierarchy. A promotion would have entailed a position level grade above 108, which was Sahara's level grade at that time. However, after months of performing at an advanced level, but not being classified at a higher level, Sahara asked for the promotion:

After that, I asked for promotion. I said its time for promotion because I have a family and my salary was not that much enough. And I'm doing a job like it's not only 108 my grade was 108 which is registered nurse. So I asked for my right. I am not now a registered nurse so you should give me something.

Unfortunately for Sahara, the opportunity to give her a promotion did not exist in her current department, so she continued doing the advanced position while remaining in a RN position for four years. It was not until her supervisor suggested Sahara change to a different department that the possibility of a promotion presented itself.

### **Educational actioning.**

A second kind of action that participants used to address the need for change was educational actioning. This refers to a participant seeking out additional education. Some participants pursued education through formalized systems such as universities, while others sought out specific people and mentors to guide their aspiration for further knowledge.

Dimah returned to university to obtain her Master's degree because she was frustrated with the scope of practice for nurses and felt that a higher level of education would afford her more room to perform at the level she felt capable of practicing. She was strongly discouraged by her colleagues who felt Dimah was too young and did not have enough clinical experience. However, Dimah was motivated by a desire to enhance her knowledge to provide better care to patients and by the belief that knowledge would provide her with more power to make a difference. Dimah explained: "Nurses have all of the responsibility but none of the power. I thought if I returned to school and got my Masters, I would be able to have more power". Dimah expressed frustration at the interventionist focus in medicine and her perception that nurses do not have a voice within the medical hierarchy:

I think it was just the complete focus on intervention, the focus on ... it's the medical model that drove me crazy... like the medical ... that nurses you know don't have a voice. You have to prove that you have a voice. And it is only with certain doctors that you have a voice, and even then it is only under certain circumstances and certain times when they

have a moment that you get to have a voice. You don't just automatically get to have a voice and that drove me crazy.

Returning to school allowed Dimah to apply for more advanced positions in the organization – leadership positions that enabled a more independent practice and the ability to better improve her patients' health.

Jalilah also sought to upgrade her knowledge by moving to a different country to get a specialty diploma in critical emergency. Jalilah's pursuit of continuing education was rooted in a disruptive episode in which she was the assigned nurse for a beloved teacher whose husband was dying of cancer.

Yes, it was that way but it got .... I made that decision when my school-teacher, like I knew her when I was a kid. She came with her husband who was in end stage cancer. And I tried to do my best and it didn't work. He was still young and intubated and really sick. So that was the thing that made me change. I thought I might care for a lot of people that I know and I won't be able to help them. Coming every morning and having the same questions or looking at them and spending all duty hours. I couldn't give her back what she gave me. At least some good news or comforting.

Jalilah became passionate about always having the most up-to-date information integrated into her practice. Jalilah was so dedicated to this actioning that she left her family and went to a different country and culture to gain the education that could not be provided locally. Jalilah was already an experienced emergency trauma nurse but was always pushing herself to learn more. The education and credentials gave her a boost in confidence: "I wanted to enhance that experience and knowledge for my benefit and for that same direction. So it was a natural process for me". Throughout her entire nursing career, Jalilah was continuously seeking out knowledge

through courses and was one of the only participants in the study who mentioned seeking out research to update her practice on a regular basis.

Na'imah was also a nurse who was constantly questioning and building her clinical practice knowledge but her educational actioning was less formalized than Jalilah's. Na'imah described a chaotic environment in which she was frequently reassigned to unfamiliar units such as antenatal care when she preferred to work with post-natal babies. Eventually, because of the unpredictability of where she would work and her feelings of being inadequately prepared to provide safe care for laboring mothers, Na'imah asked for a transfer to a new department which minimized her paediatric clinical skills. While in her position, she sought to educate herself by continually updating her clinical knowledge of paediatric nursing, accessing a variety of sources such as YouTube, smart phone apps, clinical experts, courses such as advanced paediatric resuscitation and textbooks, even though she was no longer working in a paediatric setting.

Other nurses also developed informal strategies to enhance their learning. Aelyah accepted a part-time position as a nurse research associate so she could return to university and complete her Bachelor of Nursing. However, her previous clinical position as a surgical nurse did not prepare her with the skills necessary for research. In her new role, Aelyah was responsible for data collection, entry and analysis that required an advanced level of computer literacy. Although Aelyah had a basic understanding of most of the software she would be using, she took it upon herself to become an expert. She sought out teachers in the community who could help her achieve excellence in Excel, PowerPoint and other software required for her new position:

No I signed up myself. I did ask but was told it was not possible because the IT department was very busy with many projects. So I went to private centres and I paid myself. It cost me maybe \$5,000 QR. It was very hard for me. I was going to some

teachers home to learn for advanced level in Excel, Word. Because my life totally changed from patient to computer. So I was telling it's OK, I have to develop myself even if I pay money.

### **Relational actioning.**

Relational actioning was the purposeful building of relationships to achieve a certain goal. Relational actioning occurred when a nurse sought out people who could help her overcome obstacles. Sahara was working on a neurology unit with patients diagnosed with multiple spinal cord injuries. While reviewing the policies and procedures of the unit, Sahara realized the accepted practice of turning the spinal cord injury patients with two staff members was a violation of policy/procedure that required three staff members – one to stabilize the neck and two to roll the patient's body. Sahara immediately set out to change her practice.

Unfortunately, there was not a lot of support for her from nurses who had been practicing using the two-person technique for years. It was not until one of the neurosurgeons, who had trained outside of Qatar, witnessed the two person rolling while Sahara was in the room that an opportunity to change nursing practice presented itself and Sahara capitalized on it. After a brief discussion between Sahara and the neurosurgeon, from that point forward all of his patients were turned according to policy. It took many months for all of the nurses to adopt the practice but Sahara was able to change her practice the next day with the support of the neurosurgeon:

So we started then because this doctor discovered this one with me. Both because he's a doctor and you know when instructions come from doctors he is right not the nurses. So it was a good opportunity for me to get that doctor with me. So he supported that and they add on the competency things. And they repeat the competencies for people and now when you go and see them they are doing it nicely.

Abidah, after experiencing knowledge disruption, knew she needed further education to have safe and competent practice. Knowing that the physicians held more power in the organization than nurses, Abidah went directly to a highly influential physician to gain his support in her request for specialty education for the high dependency unit. She asked him directly to send her and two of her colleagues to an intensive care course at a different hospital. After much resistance from her immediate supervisor, Abidah and her colleagues approached the head anesthetist to gain his endorsement and were sent to the course fully supported by the organization. However, upon returning to the hospital after the six month intensive course, Abidah had to re-engage with the same physician to overcome the barriers to the practice changes that needed to be initiated for the high dependency beds. For example, during their time away, the nurses learned how to do arterial blood gases, which up to that point had only been done by physicians or respiratory therapists. The nurses were competent in this new practice and knew they could save valuable time if they were allowed to draw the blood gases but the organization would not support them in doing so. Finally Abidah campaigned both the head of the hospital and the physician who supported her campaign for further education to ensure the changes were made.

In summary, there was a vulnerability expressed by the participants as they described deciding how best to address the recognition that their practice needed to change. Some of the participants made the decision to change their position in the organization because they could not continue to practice in their current environments knowing that their practice needed to change. The pursuit of education helped some participants ease the discomfort they felt regarding their clinical practice while also addressing their knowledge disruption. Others reached out to those in leadership positions who could help ease the path for change. Some participants had to make

multiple attempts to change their practice whereas others implemented change immediately.

After taking action to address their disrupted knowledge, the participants shared how they made these new practices routine.

### **Stabilization**

The final theme the participants described was stabilization or the state when the new practice became routine. Stabilization often includes the capacity to face challenges or obstruction from non-accepting colleagues. Many participants described initial resistance from their co-workers when they began to change their practice but noted that this often transformed into support later in the change process. Persevering until their colleagues came around required an attitude of 'ignoring and enjoying' as described Fawzia. Stabilization entailed perfecting the new practice while simultaneously convincing others that the change in practice was appropriate.

Aelyah shared how her colleagues used to tease her because of her size and age, referring to her as a child. One skill Aelayh knew would impress her colleagues was perfecting her intravenous insertion technique. Aelayh wanted to change her practice because she was missing too many insertions. She began perfecting her skill by watching multiple YouTube videos, exploring various initiation techniques and observing more expert nurses. She learned to assess veins based on palpation and location rather than colour. She then volunteered to start any intravenous sites necessary on the surgical floor. She trialed various techniques including positions of the limb, the use of heat, alternative lighting and non-typical insertion sites until she became the expert on the floor. She capitalized on every opportunity to perfect her technique and became sought after by colleagues to initiate their difficult intravenous insertions. Aelyah also took it upon herself to spread her new practice:

We have to go back, read, and take the information to our colleagues. Improve ourself and protect our patients from unexpected mistakes. So I think I am proud. This was a good chance for me to show everybody and the new staff that I am confident

Hadiya shared her experience of taking arterial blood gases (ABG) and her multiple attempts at perfecting her technique. She explored the technique via video and textbook in addition to watching others. When she first attempted to undertake withdrawing arterial blood, she required multiple attempts yet remained unsuccessful. It was not until a respiratory therapist offered to work side by side with Hadiya that she was finally successful. She worked closely with the therapist for multiple draws, initially just watching the respiratory therapist and then working with the therapist and finally having the therapist observe her. Hadiya was driven to perfect her technique and volunteered to take arterial blood gases anytime a draw was needed for any patient during her shift:

I can remember when I started to learn how to take an ABG. It looks very simple. When you watch someone take it, it looks very easy but it is very difficult. It's very difficult. I tried with a patient four times or more than four times. I didn't believe. I am always seeing it. I didn't know it was that much difficulty. But with practice and the respiratory therapist, she teach me.

When Kalila left her position in the emergency room and took a position in the operating theatre she scrubbed in for every possible surgery until she felt competent. She volunteered to spend extra hours at work, volunteered to scrub in when she was assigned to circulate and volunteered for any unusual cases or difficult surgeons or surgeries. She kept volunteering: "I was scrubbing for all single ... surgery procedure". Kalila perfected her surgical scrub practice and then trialed other ways of setting up the sterile instruments and kept trying new approaches

until she came up with a method of stacking the instruments in layers rather than using different scrub trolleys. She felt the need to perfect her technique because her practice change could impact other members of the surgical team, in particular the surgeons: “He will remember your face that you scrubbed with him before so he will not forgive you of the second time”. At first, other operating theatre nurses were not supportive of Kalila’s change but after witnessing the time and space saved by Kalila’s new technique, the other nurses slowly embraced the change.

Eventually, some resistors became the participants’ greatest supporters in their practice change. Lulu, who initially faced intimidation when she began completing a full head to toe assessment on all of her patients, described how the primary physician she worked with finally embraced her practice change and began to depend on it. She reflected: “So when he will ask the patient, he will look at me and do smile. He will know. He know this patient is supposed to be checked from head to toe”. Dimah was often chastised in her earlier stages of practice change by her colleagues for doing ‘doctors’ work’ but when she started to apply her new clinical knowledge at the bedside some of her resistors became her biggest supporters and would often express a sense of relief when Dimah was on the same shift they were.

Many of the participants shared a sense of confirmation knowing that the change they undertook was a positive step for their practice and brought a sense of pride. Elham shared “I think I become more strong. I feel I am really a leader here”. Sahara echoed Elham’s sense of pride stating: “I feel so much proud of myself that really now I am applying the nursing job. I really feel that I am a leader here”. Sadaqah echoed almost the exact same words, saying: “Before I am proud but now I am more proud about myself and my patients”. Benazir stressed that undertaking a significant practice change not only changed her practice but actually changed her

personality: “It changed not only my clinical practice, it also changed my personality. Everything. I was a soft girl and I became stronger.”

Stabilization also has an aspect of sharing the new practice. Abidah took it upon herself to facilitate the practice change among her new colleagues.

There would be three or four nurses who will come, so I used to feel like I used to teach them. At that time I was a clinical nurse and I used to teach them to do the way we do. So I want them to be confident. Whatever they do is not the same as .... So I used to teach them and they are doing whatever they are doing. I will make sure that they know. I will go to each one of them. I can even stay longer because especially things go wrong in the time changes, in between shifts.

In this last theme of the process, the participants reflected on their practice change and noted that it required them to overcome resistance from colleagues who often became their biggest supporters. This was achieved by perfecting their new practice and volunteering at every possibility. Unlike disruption, stabilization did not involve a sense of immediacy, instead, it occurred over an undesignated length of time as the new practice became part of a participant’s routine practice. Unlike actioning, stabilization did not entail multiple approaches but rather occurred over time and through repetition.

## **Conclusion**

Using the ID methodology, I interpreted a main theme, easing the dis-ease, comprised of three sub-themes: disrupting, actioning and stabilizing. Together, these describe nursing practice change. All of the participants described an awakening, which I have labeled as disruption, after which they perceived their practice as inadequate because of newly gained knowledge. Drawing a sense of pride in their competence, clinical practice was important to all of the participants.

Having perceived a weakness in their disciplinary knowledge left the participants with a feeling of compulsory change. Whether this disruption came from an unexpected patient outcome, sudden awareness of knowledge that could improve patient care, witnessing colleagues being bullied by leadership or the care provided to a loved one when the outcome was certain death, the participants described being unable to continue to practice as they always had. Choosing the course of action to change their practice varied from changing their employment position, to seeking further education, to recruiting the support of those in powerful positions within the organization. The practice change was not complete until it had been repeated multiple times, was accepted by others and became part of their everyday practice.

The secondary questions asked in Chapter 1 included exploring what initiates, mediates and sustains the practice change. Initiation did not occur until the nurse perceived a gap in her practice knowledge. It was a source of unease for the participants who felt competent in their practice prior to the disruptions. The choice of how to address the knowledge gap was mediated by the organization and availability of education. If the participant understood their leaders as unsupportive of change then they chose to change positions either within the organization or leave the organization entirely. If the participants believed they had supportive leadership and education was closely available, they would remain in their position and bring their new education into their current practice. If the education was not locally available, the participants would travel to different organizations or countries to get the education they needed. The sustainability of the practice was attributed to a sense of resilience among the participants. They were convinced that their new way of practicing was the correct way despite being intimidated by colleagues. Nursing practice change as interpreted in this study was an individual

undertaking. If the context in which the individual nurse was currently employed was not receptive to change then the nurse found employment elsewhere.

## Chapter 5: Discussion

The overall theme uncovered in the findings, easing the dis-ease, was an interpretation of the participants' descriptions of changing their nursing practice. Disruption, actioning and stabilizing were chosen to capture the three sub-themes interpreted from the data. The participants described changing their practice after they identified a gap in knowledge, took actions to address the perceived gap and were resilient when facing confrontation by unsupportive leaders and colleagues. Prior to identifying the perceived gap in knowledge, the nurses described a level of pride in their clinical competence and all experienced a sense of disruption when perceiving their inadequacy. The actions the participants described taking to address their respective gaps were dependent on access to education and whether or not they sensed support from their leaders. Finally, the ability to stabilize their new practice required a spirit of 'ignoring and enjoying' until the resistors came to accept and embrace the new practice.

In this final chapter, I situate my findings within our current understanding of nursing practice change. First, I compare the findings of my study with the nursing practice change literature reviewed in Chapter 2. I then position my interpretations within the change theories used in the literature review and suggest a change theory that focuses on individual change rather than change at an organizational level. Next, I propose future studies looking at the process of nursing practice change. Finally, I conclude by reviewing the unique findings of this study and suggesting how the findings may be helpful for researchers, educators, nursing leaders, and those in direct clinical practice.

### **Practice Change: Individual, Organizational or Both**

One of the key findings of the nursing theory, KU, and quality improvement literature review was that attempts to change nursing practice was initiated by organizational leadership

and outcomes were measured on an organizational level. This is in stark contrast to my findings in which change started with the individual nurse, and while the nurse did influence others practice as part of stabilization, their idea of a successful change was not dependent upon organizational change. Organizations did play a significant role during actioning and influenced the nurse's choice to change her practice while staying in her current role or leaving because she saw no opportunity to change her practice if she stayed.

Another difference between how change is actualized in the literature and how it is described by my participants is when planning occurs. In the literature, planning the change and preparing the staff through education happens before change has been implemented. This differed from my participants description of planning which happened in the actioning stage after the recognition that change needed to occur. The participants description of actioning through education and relations is similar to the planning steps described in the literature to prepare nurses for change, however the idea of disruptions was not found in the literature. The idea of a nurse awakening to the recognition that her practice must change is a significant finding of this study, and the idea of planning the change is supported, but only after disruption has occurred.

An important finding of my study is the importance of individual agency in nursing practice change, which is missing in the literature showcasing actualized change. In 2008, Rycroft-Malone (2008) wrote an article stressing the importance of moving beyond the focus of individuals for the evidence-based practice movement. In the article, she argued that evidence-based models emphasizing individual practitioners as rational agents, who had the independent ability to incorporate the latest research into their practice, were neglecting the impact of the system in which the practitioners worked. When reviewing the literature reporting on nursing practice change, I noticed a trend beginning 2005 – 2006, of moving away from the study of

individual behaviour towards the study of organizational behavior around the time this article was published. By 2010, the focus was almost exclusively on the organizational level in the nursing theory, knowledge utilization and quality improvement literature. The focus had shifted from conceptualizing practitioners as rational agents capable of making decisions about changing their practice, to naïve operative or a vessel through which change will pass through.

However, of significant importance from my study is the finding of individual agency in nursing practice change. My study revealed a striking disparity between the literature's focus on the organizational level and the role of the individual that was described by participants. Ozan, Okumus, and Lash (2015) highlight the role of the individual in a case study design using Watson's Theory of Human Caring. In the case study, one nurse described how he applied the 10 Carative Factors from the theory to his nursing practice when providing care for a woman undergoing fertility treatments that were unsuccessful (Ozan, Okumus, & Lash). This study may be useful for individual nurses wanting to make their practice more theory-based because the authors show how the Watson's caring processes can be applied to bedside clinical practice. The challenge with the study, however, is the absence of a description of the practice before implementation. While we understand the application of the theory to practice, we do not understand the change that occurred.

There are examples of models in the knowledge utilization literature (i.e., Stetler Model of Research Utilization (Stetler, 2001); Ottawa Model of Research Use (Logan & Graham, 1998)) that consider individual and organizational components but overall, they are underrepresented in more recent literature. These two models were frequently used in the earlier years of evidence-based practice, however, after 2010 researchers chose guiding structures focused on organizations with no explicit role of the individual identified. Review of the

literature suggests these Stetler and Ottawa models are currently underutilized, lost in the dominant discourse of organizational change, and it may be beneficial to re-engage with these models in light of my findings that practice change begins with the individual. Creating a sense of disruption, a personal awareness that current individual practice is not the ideal practice, is missing. My participants described a feeling of dis-ease that awoke them to the matter that their practice had to change. Both the Stetler and Ottawa models begin with an assumption that individual practitioners are capable and desirable of recognizing when their practice needs to change, just as described by the participants in this study.

The significance of individual agency in nursing practice change is paramount. Although the majority of the participants addressed the role of the organization at some point in their change process, the change started with an individual participant's realization that her practice could not continue as it was. While I was able to find literature that acknowledged the role of the individual in changing nursing practice through knowledge transfer (Leiter, Day, Havie, & Shaughness, 2007; Vasli, Dehghan-Naveri, & Khosravi, 2018), the majority of the literature addressing nursing practice change implies the role of individual practitioners rather than making their function explicit. There is no description of how the individuals participating in the studies incorporated new practices.

Like other literature (Fleischer, Semenic, Ritchie, Richer, & Denis, 2016; Regan, Laschinger, & Wong, 2015), this study found that organizations do have an influence on nursing practice change, particularly when the nurses were deciding what action to take to address the uneasiness they felt with their current practice. Two specific aspects within the organization – leadership and the powerful influence of physicians – were described by participants as having influenced their ability to change their practice. In comparison to the nursing practice change

literature, there is a similarity with the influence of leadership. The influence of physicians was seen to be both negative (i.e., in Na'imah's case) and positive (i.e., for both Sahara and Abidah). When Na'imah attempted to recruit the help of a physician for a failing child, she experienced "socially sanctioned superiority" (Sundin-Huard, 2001, p. 380) by the physician. Sahara and Abidah were struggling to implement their changes until they were able to gain the support of a physician in a leadership role.

A powerful finding of my study was the decision to change positions in the organization, or leave the organization entirely, due to the inability to change their practice in their current role which did not appear in the literature review. There is significant research examining nurses intent to leave due to various factors such as job satisfaction, complexity of care, staffing, and violence (Burmeister et al., 2019; Jeong & Kim, 2018; Lansiquot, Tullia-McGuinness, & Madigan, 2012; Valizadeh et al., 2018). The clear message from my participants is that if the organization does not allow for the necessary changes the nurse wants to make, the nurse will choose to leave the organization rather than not change her practice because the need to change is not optional once disruption has occurred. In order to ease the dis-ease felt when realizing their current practice is less than ideal, the nurses in my study felt they had no option but to change their practice, and if the organization did not allow for this change, the participants chose to leave their position rather than maintain the status quo. This finding points to the need for further research examining how health care organizations can better support nurses wanting to change their practice and the effect of staff retention.

Perhaps what is needed as we move forward is a model or framework for change that gives equal importance to both individual agency and organizational context. Sukhera, Milne, Teunissen, Lingard, & Watling (2018) studied the reaction of healthcare practitioners when

exposed to their own biases through the lens of workplace learning theories and found that both individual and organizational factors influenced the participant's reaction. Similar to my interpretation of disruption, these researchers suggested a period of cognitive dissonance when initially recognizing the biases faced by persons needing mental health in an emergency room setting. According to Sukhera et al., the participants who experienced dissonance between their current practice and idealized practice, felt an initial sense of helplessness and powerlessness to change their practice due to the environment in their workplace. However, because there were a number of participants from the same department, they were able to critically reflect on current practices as a team and create a positive change in both their individual practice and the culture of the emergency room. This finding is significant showing how organizational change occurred without the leadership involved, and showing how individual agency may play an important role in change processes in health care organizations which is underexplored in the literature. The idea of organizational change initiating with an individual nurse differs significantly from the current literature which largely focuses on organizations changing nursing practice rather than individuals changing organizations.

### **Change Theories: Similarities and Differences Among Theories and Findings**

In addition to nursing specific literature, the findings from my study are reflected in three broad change theories, namely Lewin's planned change (Lewin, 1951), Rogers' diffusion of innovations (Rogers, 2003), and Prochaska and DiClemente's transtheoretical (Prochaska & DiClemente, 1982) models. Both the planned change model and diffusion of innovations model were constructed to reflect change through a social system whereas the transtheoretical model was constructed to describe change on an individual level. The transtheoretical model (Prochaska

& DiClemente) was developed to help understanding change on an individual level as people recover from addiction.

According to Mitchell (2013), Lewin was a pioneer in the field of planned change and his model continues to be one of the most frequently used today. There is an obvious similarity between the three main themes I interpreted from the participants' descriptions of practice change and the three steps identified in Lewin's planned change model. Although Lewin's model was intended for group change, the unfreezing, moving and refreezing stages share similarities with this study's disruption, actioning and stabilizing themes. Unfreezing entails creating a readiness and motivation for change that is similar to the participants experiencing personal awareness of their need to change. Similar to the moving stage of identifying plausible solutions, in the actioning theme, the participants decided on the best solution to address the unease they felt with a perceived weakness in their practice. Finally, in the last stage of Lewin's model, those who have undertaken change move forward to make it part of their normal. This is comparable to the participants' descriptions of their changes becoming part of routine practice.

The most significant difference between my findings and Lewin's model is the idea of a force field. According to this theory, the dynamics in which the individual is existing must change in order to facilitate individual change (Burns, 2004). In other words, the environment must change before the individual changes which contrasts with my findings. Lewin addresses supportive and resistive forces in the first phase of change, suggesting that the motivation and readiness to change will not occur unless the supportive forces outnumber the resistive forces. This is similar to the current emphasis on creating change at an organizational level by addressing facilitators and barriers to change. However, my participants did not describe their change as an imbalance of external supportive/resistive forces in the disruptive theme. Instead,

they described these in the actioning theme, and described an internal imbalance of forces that once acknowledged, needed to be acted upon. The perceived gap in knowledge disrupted their confidence and gratification with respect to their personal nursing practice and they knew their practice had to change. The participants did not describe the change as a choice but rather as an inevitability. The choice was how to address the gap, rather than whether or not to address it.

Another influential change theory is Everett Rogers' Diffusion of Innovations (2003) in which the adoption of an innovation is largely dependent on the social system in which diffusion occurs. According to Rogers, diffusion requires social change because innovations entail a newness that results in a structural or functional shift within a social system. Similar to Lewin's theory, the use of this theory is reflective of the emphasis of change occurring at a system level rather than individual level. Although Roger's (2003) diffusion of innovations is focused on how ideas spread throughout a social system, there are resemblances between his innovation-decision process and the three themes identified in this study. The two steps of the innovation-decision process are learning about an innovation and considering adoption of the innovation. These two steps are similar to the disruption theme in which the participants described an understanding that their practice was deficient and that they must do something to address the deficiency. The fourth step of Roger's identified process, implementation, fits well with the actioning theme in which the participants described taking steps to address the unease they felt about their practice. Finally, the fifth step, confirmation, is parallel to the stabilization theme in which the participants described the new practice becoming part of their routines.

What the participants in this study did not describe is deciding whether or not to change – something that is highlighted in Roger's third step – the innovation-decision process. While it is possible that the participants made an unconscious decision to change their practice, their

descriptions suggest that they simply knew that their practice needed to change. The participants described a similar feeling to Sukhera et al's. (2018) cognitive dissonance in which they knew their current practice was not ideal and it must change. The disruption that occurred was a recognition that their practice must change, not a decision as to whether or not it should. Rogers use of the word 'diffusion' is much more passive than the emotions described by my participants; their change was not a soft awakening, but rather was an exposure to an aspect of their practice that required immediate action.

Of importance is the parallel between Rogers' idea of diffusion of an innovation through society and the participant's description of sharing their new practice among colleagues described in the stabilization theme. Although my participants described their change in practice as an individual, there is a shift to organizational spread in the stabilization theme that fits well with Rogers idea of diffusion. Once the participants identified and mastered their practice change, they felt the need to share this change with their colleagues. The desire to spread the idea after individual change is echoed in the work by Sukhera et al. (2018) who show that after cognitive dissonance is triggered, individual behaviour changes. Specifically, Sukhera and colleagues reported in their study of co-constructing social change that senior nurses felt compelled to role model to junior nurses and articulated their own personal ability to transform organizational culture. Findings from Sukhera et al suggests that there may be both an individual and organizational element to nursing practice change.

One of the most influential models focused on change at an individual level is the transtheoretical model of change by Prochaska and DiClemente (1982). Unlike Lewin and Rogers' theories, the transtheoretical model was developed to explain individual behavior change in clients seeking treatment for addictions (Armitage, 2009). This model shares many similarities

with the change process described by the participants in the current study, particularly with respect to the transtheoretical model's last three phases of determination, action and maintenance stages. The determination step of this change theory entails a commitment to change that is similar to what the participants in my study described. Upon realizing their practice had to change, the participants were determined to change their practice and took all of the necessary actions to do so. The act of choosing the steps to address their change in practice is closely resembles Prochaska and DiClemente's action stage where those determined to change decided what options would work best for them. Finally, the maintenance stage described by Prochaska and DiClemente or the stage in which the change becomes routine, is comparable to the stabilizing theme described by my participants.

However, there are significant differences in the findings from my study and the first two stages of the transtheoretical model, namely the idea of change as a choice. Because my participants did not describe their change in practice as a choice, rather, recognizing that a change was needed caused a personal discomfort for my participants at which point the choice was *how* to address the change versus *whether or not to undertake the change*. Personal choice, as suggested in the transtheoretical model, did not seem to play a significant role in the decision to change.

### **The Influence of Context and Culture**

The reported apparent lack of support from nursing leadership described by some participants is alarming. The three sets of literature reviewed for this dissertation all suggested that having leadership support change in nursing practice is crucial. Moreover, in the literature, most of the change projects were initiated by organizations' nursing leadership in the theory, knowledge utilization and quality improvement literature. This is in sharp contrast to the

description of practice change by the participants that initiated change with an individual recognition that their practice could not remain as it was. It was in the actioning and stabilizing themes where the participants explained the influence of leadership on the process of nursing practice change. Haniya's unsettling description of the perceived bullying and harassment captured the negative influence of nursing leadership on nursing practice change. While I was unable to locate any literature situated in the Middle East dealing with bullying by management in the workplace, Hutchinson and Jackson (2015) investigated the effect of bullying by leadership in the Philippines. They found that it is often encouraged and rewarded by organizations during times of change (Hutchinson & Jackson, 2015). This study may reflect some of the issues with bullying of employees as a significant number of the direct-line leadership positions in the Qatar are held by expatriates coming from the Philippines. At the time my study was undertaken, the entire healthcare system was undergoing significant change as part of the National Health Strategy 2018 – 2022. Haniya described raising her concerns to the highest nursing position in the organization only to face deleterious effects for herself while there were no repercussions for the nurse leaders to whom she reported. Consequently, Haniya felt she had no choice but to seek a new position in an unfamiliar area.

Although there is a movement in Qatar to implement a nursing systems framework to help improve the multiple aspects of nursing practice (Cannaby et al., 2017), the negative conception of nursing in Qatar remains strong though the conception of medicine overall is positive (Hassan, Hassan, & King, 2012). This may explain why the participants in the current study had more success changing their practice with the support of physicians. Considering the time and energy spent in healthcare systems to plan change, particularly in regards to evidence-based practice, I was surprised that none of the participants highlighted organizational change,

such as the nursing system framework, as the motivator for their clinical practice change. Bearing in mind that the healthcare system was undergoing significant change during the time of data collection and analysis, the absence of planned change initiated by the organization to increase evidence-based practice was unexpected. Since 2011, there have been ongoing state-wide and organizational-wide efforts to improve the health of the population and the function of the healthcare system (see National Health Strategies 2011 – 2016 <https://www.moph.gov.qa/HSF/Pages/NHS-11-16.aspx>). Although there were massive changes happening in the country and the healthcare system, not one participant mentioned it suggesting that there may be a significant gap between what is planned at the leadership level and what is enacted at the practitioner level.

I was also expecting some description of how adjusting to a new culture had changed the expatriate nurses' practice but no participants discussed this during the interviews. I know, from my own experience, that while there are many familiarities about healthcare systems around the world, there is often an initial adjustment period as you learn the culturally acceptable ways of delivering care. Al-Yateem, AlYateem and Rossiter (2015) studied the educational needs of non-Muslim expatriate nurses working in Islamic countries. Understanding the culture and religion of the Middle East was challenging for these nurses and they required significant time to adjust their nursing practice to ensure culturally sensitive care. Although a significant portion of the participants in this study came from Arab and Muslim regions, many came from other areas of the world and may have gone through a similar cultural shock and adjustment of nursing practice as described by Al-Yateem, AlYateem and Rossiter (2015). However, in reviewing the interview transcriptions, I noted that not a single participant mentioned having to change her nursing practice based on the cultural practices of the area. It is not unreasonable to expect that a small

number of expatriate nurses adjusted their nursing practice, particularly during the month of Ramadan in which Muslims fast from sunrise to sunset. It was my personal experience that providing care for devout Muslim patients who required medications, food and fluids during fasting times could be challenging. It could also be challenging to provide care to patients when numerous family members were present and did not leave the room during personal aspects of care. However, none of these challenges were mentioned. It may be because I did not ask a direct question regarding adjusting to an unfamiliar culture or it may be that participants were reluctant to say anything negative about the culture for fear of deportation.

### **Future Studies**

Thorne (2016) stresses the importance of interpretive researchers having an appreciation for alternative findings depending on participant variables. These variables include the number of participants and their ability to conceptualize and express their descriptions. In this study, 15 English as second language participants described their change in nursing practice. They shared their experiences with me, an expatriate researcher who was living in the same country but did not share the same cultural beliefs and practices. Thus, an important future study to build on the interpretations shared in this dissertation may be one that explores nursing practice change with a researcher and participants who share the same culture and first language. For instance, repeating this study in the State of Qatar with a researcher who comes from the same culture and speaks the same language as the participants may highlight other aspects of the change process. It would be particularly interesting as the healthcare system undergoes the numerous changes outlined in the planning documents introduced in Chapter 1. These planning documents are strengthening the evidence-based movement in Qatar across all disciplines, including nursing. Furthermore, expatriates from the United Kingdom who hold key leadership have implemented a nursing

systems framework which introduces many Westernized ideals such as career frameworks and nursing structures and committees (Cannaby et al., 2017). These changes may or may not have created enough pressure amongst the practicing nurses to create widespread change. It would be interesting to investigate whether or not the process the nurses used to change their practice was similar.

If this research was undertaken in North America the results may be significantly different. For example, North American nurses may identify with the concept of easing the disease and the role of evidence-based practice and organizational change may be more fully present in the data. Understanding whether or not the theme of easing the disease and the three sub-themes of disruption, actioning and stabilization, also describe the process North American nurses undertake to change their own practice may help to deepen our understanding of individual nursing practice change. While Qatar is transitioning into an evidence-based healthcare system with significant organizational changes planned (Cannaby et al., 2017), it is still considered a developing country with an emerging evidence-based healthcare system. Repeating the study in a developed healthcare system that has a longer history of evidence-based practice and documented change efforts may contribute to our understanding of the influence of research and organizational change on change at the individual level. The availability of research to North American nurses, particularly research conducted in the first language of the majority of nurses, may increase the likelihood that nurses will read studies and therefore have a more significant role to play in individual nursing practice change.

In addition to carrying out a future study in North America, using a concept analysis approach would help develop each of the three themes constructed in this study. Performing a concept analysis of disrupting, actioning and stabilizing may help build on, or challenge, the

concepts and their relationships as interpreted in this study. Rodgers, Jacelon and Knafl (2018) completed a scoping review of the published concept analysis in the nursing literature and concluded several concept analysis studies were executed without a strong connection to the nursing discipline and were unclear as to what disciplinary problem they were trying to address. Embarking on an interpretive description of these concepts using the conceptual analysis methods such as those suggested by Schiller (2018) would be a natural fit. The disciplinary epistemological grounding of an interpretive description using conceptual analysis methods would ensure a clear and relevant connection with practice.

### **Unique Findings and Practice Implications**

The unique finding of this study is the process the participants described and I interpreted as easing the dis-ease. Participants conveyed a deep sense of distress at the recognition that their practice needed to be better, followed by drive to take action resulting in change, and then a period of stabilization in which they would spread their practice among their colleagues if presented the chance. The initiation of this process was the result of an unexpected disruption to the participants practice or personal knowledge that left them feeling as though they had no choice but to take action and begin to ease the dis-ease they felt about their clinical practice. This is a unique perspective regarding change as unplanned, which is largely unexamined in the literature. Another novel contribution of my study is the finding that many participants changed their position after realizing their practice could not remain the same and remaining in their current position would not allow for the necessary change. This finding may have significant implications for organizations regarding staff retention and creating a safe space to engage in new practices. Lastly, the stabilization theme described by the participants was a rebuilding of competence and pride in their work and the desire to share the new practice with colleagues.

The application of study findings to nursing practice is what separates interpretive description from other qualitative approaches. That being said, I would be amiss if application of these findings to nursing practice was ignored. The majority of literature focused on changing clinical practice has a strong organizational focus whereas this study brings forth the importance of the individual in practice change. Practice change for these participants began with a disruption in their routine practice, something that affected them in such a way that the nurses described feeling no other choice but to change. The consideration of how to disrupt practice may need to be further investigated and taken into consideration by nurses wanting to change their practice or those wanting to plan practice change for others. Furthermore, the role of the organization and its influence on actioning and stabilizing themes is a new way of conceptualizing the relationship between individual and organizational change. As suggested in my findings, individual nurses both have the ability to change their own practice and influence the organization as they spread their change to colleagues. Furthermore, safe space needs to be created within organizations for the recognition of nurses having individual agency in addition to being an organizational member. As the changes discussed in Chapter 1 become an increasing reality, finding a safe and non-threatening method of disrupting individual nursing practice becomes important.

This research has implication for future research, education, nursing leadership, and clinical practice. Understanding our individual role in changing nursing practice highlights the personal responsibility for practicing nurses, and this concept merits consideration for those interested in conducting future studies investigating nursing practice change. During our journey from newly practicing nurses to nurses with expertise in our chosen areas, the potential for our practice to change is ever present as the campaign for best practice continues. Preparing student

nurses for their roles as individuals and as parts of an organization may be helpful in preparing them for a future of continually changing practice. As nursing leadership continues to promote best practices in their organization, considering the individual capacity of the nurses involved in change and the usefulness of the process of easing the dis-ease, may help to create an environment that is more conducive to change. It is important for practicing RNs to understand and embrace the process of practice change and its distinction from organizational change in an effort to improve patient care. Changing nursing practice is more than improving bedside nurses skills and techniques but rather it encourages nurses to examine their own agency within their scope of practice and identify potential areas of improvement in patient care. Understanding the individual's role in organizational change may help experienced nurses become more reflexive in their practice and seek out opportunities for easing the dis-ease.

### **Conclusion**

In this interpretive description, participants described their experience of nursing practice change. They described an overall discomfort with their practice once they recognized a change needed to be made – a discomfort I have labeled as dis-ease. The participants described engaging in a change process consisting of three main themes: disruption, actioning and stabilizing. Together, these three themes address the perceived practice weakness, resulting in an overall theme I interpreted as: easing the dis-ease. The most noticeable difference between the participants' descriptions of practice change and how change is conceptualized in theory and actualized in research is the role of the individual. Ultimately, for this study, it was the individual who decided to change her practice due to a disruption in her knowledge, and she took steps to address this disruption by leaving her current position, pursuing further education or using her relationships with those in leadership positions. Once the change was in place, the participants

repeatedly practiced until the change became part of their routine and their nursing practice stabilized.

This study contributes to the important practice change literature by showcasing the role of the individual practitioner during a time when many studies are emphasizing the role of organizations. By providing the perspective of the nurses undertaking practice change, this study brings forth a process that contributes to our understanding of what happens at an individual level. This study may help empower nurses by highlighting a process of practice change that is accessible to bedside practitioners. It may help those in organizations who are planning practice change to better understand why some practitioners change their practice, while others resist. Finally, this study may identify new areas in need of exploration by researchers studying more effective ways of changing practice. Incorporating the idea of easing the dis-ease at the individual level into practice, planning and research may make our efforts at changing practice more effective and bring awareness to the voices of the individual nurses involved in change.

## References

- Abdul Qadar, S. A., & King, M. L. (2015). Transcultural adaptation of best practice guidelines for ostomy care: pointers and pitfalls. *Middle East Journal of Nursing, 9*(2), 3 – 12.
- Aita, M., Richer, M. C., & Heon, M. (2007). Illuminating the process of knowledge transfer in nursing. *Worldviews on Evidence-Based Nursing, 4*(3), 146-155.
- Al-Amer, R., Ramjan, L., Glew, P., Darwish, M., & Salamonson, Y. (2016). Language translation challenges with Arabic speakers participating in qualitative research studies. *International Journal of Nursing Studies, 54* (Feb), 150 – 157.
- Alligood, M. R. (2011). Theory-based practice in a major medical centre. *Journal of Nursing Management, 19*(8), 981-988.
- Altman, S. H., Butler, A. S., & Shern, L. (2016). *Assessing progress on the Institute of Medicine report: the future of nursing*. Washington, DC: National Academies Press.
- Al-Yateem, N., AlYateem, S., & Rossiter, R. (2015). Cultural and religious educational needs of overseas nurses working in the kingdom of Saudi Arabia and the United Arab Emirates. *Holistic Nursing Practice, 29*(4), doi: 10.1097/HNP.0000000000000095
- American Nurses Association (ANA). (2014). *Nursing informatics: scope and standards of practice* (2nd ed.). Silver Spring, MD: Nursebooks.org
- Anderson, J. M., Browne, A. J., Reimer-Kirkham, S., Lynam, M. J., Rodney, P., Varcoe, C., Wong, S., . . . Brar, A. (2012). Uptake of critical knowledge in nursing practice: lessons learned from a study knowledge translation study. *Canadian Journal of Nursing Research, 42*(3), 106-122.

- Armitage, C. J. (2009). Is there utility in the transtheoretical model? *British Journal of Health Psychology, 14*(part 2), 195 – 210.
- Armour-Burton, T., Fields, W., Outlaw, L., & Deleon, E. (2013). The healthy skin project: changing nursing practice to prevent and treat hospital-acquired pressure ulcers. *Critical Care Nurse, 33*(3), 32 – 39.
- Asselin, M. E. (2001). Knowledge utilization among experienced staff nurses. *Journal for Nurses in Staff Development, 17*(3), 115 – 124.
- Atkinson, R., & McElroy, T. (2016). Preparedness for physiotherapy in private practice: novices identify key factors in an interpretive description study. *Manual Therapy, 22*, 116 – 121.
- Baird, L. M. G., & Miller, T. (2015). Factors influencing evidence-based practice for community nurses. *British Journal of Community Nursing, 20*(5), 233 – 242.
- Baumbusch, J. L., Kirkham, S. R., Koushambhi, B. K., McDonald, H., Semeniuk, P., Tan, E., & Anderson, J. (2008). Pursuing common agendas: a collaborative model for knowledge translation between research and practice in clinical settings. *Research in Nursing & Health, 31*(2), 130-140.
- Bent, K. N., Burke, J. A., Eckman, A., Hottmann, T., McCabe, J., & Williams, R. N. (2005). Being and creating caring change in a healthcare system. *International Journal for Human Caring, 9*(3), 20-25.
- Best, J. T., Frith, K., Anderson, F., Rapp, C. G., Rioux, L., & Ciccarello, C. (2011). Implementation of an evidence-based order set to impact initial antibiotic intervals in adult febrile neutropenia. *Oncology Nursing Forum, 38*(6), 661 – 668.
- Birks, M., Chapman, Y., & Francis, K. (2007). Breaching the wall: interviewing people from other cultures. *Journal of Transcultural Nursing, 18*(2), 150 – 156.

- Birks, M., Chapman, Y., & Francis, K. (2008). Memoing in qualitative research: probing data and processes. *Journal of Research in Nursing, 13*(1), 68 – 75.
- Bishop, K. K. (2007). Utilization of the Stetler Model: evaluating the scientific evidence on screening for postpartum depression risk factors in primary care setting. *Kentucky Nurse, 55*(1), 7 – 7.
- Bonkowski, S. L., De Gagne, J. C., Cade, M. B., & Bulla, S. A. (2018). Evaluation of a pain management education program and operational guideline on nursing practice, attitudes, and pain management. *Journal of Continuing Education in Nursing, 49*(4), 178 – 185.
- Burmeister, E. A., Kalisch, B. J., Xie, B., Doumit, M. A. A., Lee, E., Ferraresion, A., Terzioglu, F., & Bragadottir, H. (2018). Determinants of nurse absenteeism and intent to leave: an international study. *Journal of Nursing Management, 27*(1), 143 – 153. doi: 10.1111/jonm.12659
- Burns, B. (2004). Kurt Lewin and the planned approach to change: a re-appraisal. *Journal of Management Studies, 41*(6), 976 – 1002.
- Breimaier, H., Halfens, R. J. G., & Lohrmann, C. (2015). Effectiveness of multifaceted and tailored strategies to implement a fall-prevention guideline into acute care nursing practice: a before-and-after, mixed-method study using a participatory action research approach. *BMC Nursing, 14*(8). doi: 10.1186/s12912-015-0064-z
- Brewer, K. M., Harwood, M. L. N., McCann, C. M., Crengle, S. M., & Worrall, L. E. (2014). The use of interpretive description with Kaupapa Maori Research. *Qualitative Health Research, 24*(9), 1287 – 1297.
- Browne, G., Birch, S., & Thabane, L. (2012). *Better care: an analysis of nursing and healthcare system outcomes*. Ottawa: Canadian Health Services Research Foundation.

- Cameron, H. L., & Little, B. (2018). Nurses' perceptions and practices related to alarm management: a quality improvement initiative. *The Journal of Continuing Education in Nursing, 49*(5), 207 – 215.
- Canadian Home Care Association, College of Family Physicians of Canada, & Canadian Nurses Foundation. (2016). *Better homecare in Canada: a national action plan*. Retrieved from [https://www.cna-aiic.ca/-/media/cna/page-content/pdf-en/better-home-care-in-canada\\_a-national-action-plan-copy.pdf?la=en&hash=D7C8B69F4E0B000F74CE372D6DAFCA9D198ADD39](https://www.cna-aiic.ca/-/media/cna/page-content/pdf-en/better-home-care-in-canada_a-national-action-plan-copy.pdf?la=en&hash=D7C8B69F4E0B000F74CE372D6DAFCA9D198ADD39)
- Canadian Institutes for Health Information. (2017). *Canada's regulated nurses: a look at internationally educated nurses in Ontario and Canada*. Ottawa: Canadian Institutes for Health Information.
- Canadian Nurses Association. (2008). *CNA's preferred future: health for all*. Retrieved from [www2.cna-aiic.ca/cna/documents/pdf/publications/preferred\\_future\\_webcast\\_e.pdf](http://www2.cna-aiic.ca/cna/documents/pdf/publications/preferred_future_webcast_e.pdf)
- Canadian Nurses Association. (2012). *2010 workforce profile of registered nurses in Canada*. Retrieved from [https://www.cna-aiic.ca/-/media/cna/page-content/pdf-en/2010\\_rn\\_snapshot\\_e.pdf](https://www.cna-aiic.ca/-/media/cna/page-content/pdf-en/2010_rn_snapshot_e.pdf)
- Canadian Nurses Association. (2018). *Nursing informatics joint position statement*. Retrieved from <https://www.cna-aiic.ca/-/media/cna/page-content/pdf-fr/nursing-informatics-joint-position-statement.pdf>
- Cannaby, A. M., Gkantaras, I., Foreman, B., Butler, G., Topping, A. (2017). Implementing a nursing systems framework in a developing country. *International Nursing Review, 64*(3), 345 – 352.

- Carper, B. (1978). Fundamental ways of knowing in nursing. *Advances in Nursing Science*, 1(1), 13-23.
- Carroll, T., Ronges, M., & Ray, J. (2017). Preparing for electronic medical record implementation. *The Journal of Nursing Administration*, 47(11), 558 – 564.
- Castiglione, S. A., & Ritchie, J. A. (2012). *Moving into action: we know what practices we want to change, now what? An implementation guide for healthcare practitioners*. Ottawa: Canadian Institutes of Health Research.
- Cates, M. (2016). Evaluation of peripheral intravenous practices. *Vascular Access*, 10(1), 8 – 13.
- Charmaz, K. (2014). *Constructing grounded theory* (2nd ed.). Thousand Oaks, CA: Sage.
- Chew, B. W. K. (2014). Exploring factors influencing the development and implementation of evidence-based healthcare practice in emergency care setting. *Singapore Nursing Journal*, 2(4/5), 29 – 34.
- Claydon-Platt, K., Manias, E., & Dunning, T. (2014). Development and evaluation of a screening tool to identify people with diabetes at increased risk of medication problems relating to hypoglycaemia and medication non-adherence. *Contemporary Nurse: a Journal for the Australian Nursing Profession*, 48(1), 10 – 25.
- Clerehan, R., McCall, L., McKenna, L., & Alshahrani, K. (2012). Saudi Arabian nurses' experiences of studying Masters degrees in Australia. *International Nursing Review*, 59(2), 215 – 221.
- Cody, W., & Fawcett, J. (2003). Scholarly dialogue. Nursing theory as a guide to practice. *Nursing Science Quarterly*, 16(3), 225-231.
- Copnell, B., & Bruni, N. (2006). Breaking the silence: nurses' understanding of change in clinical practice. *Journal of Advanced Nursing*, 55(3), 301 – 309.

- Corbin, J., & Strauss, A. (2008). *Basics of qualitative research* (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage.
- Crane, L. G., Lombard, M. B., & Tenz, E. M. (2009). More than just translation: challenges and opportunities in translingual research. *Social Geography*, 4(1), 39 – 46.
- Crotty, M. (1998). *The foundations of social research: meaning and perspective in the research process*. Thousand Oaks, CA: Sage.
- Dang, D., & Dearholt, S. (2018). *Johns Hopkins Nursing Evidence-Based practice: model and guidelines* (3rd ed.). Indianapolis, IN: Sigma Theta Tau.
- Davis, A., Wong, C. A., Laschinger, H. (2011). Nurses participation in personal knowledge transfer: The role of leader-member exchange (LMX) and structural empowerment. *Journal of Nursing Management*, 19(5), 632 – 643.
- Deitrick, L. M., Baker, K., Paxton, H., Flores, M., & Swavely, D. (2012). Hourly rounding: challenges with implementation of an evidence-based process. *Journal of Nursing Care Quality*, 27(1), 13 – 19.
- Delmas, P., O'Reilly, L., Iglesias, K., Cara, C., & Burnier, M. (2016). Feasibility, acceptability, and preliminary effects of educational intervention to strengthen humanistic practice among hemodialysis nurses in Canton of Vaud, Switzerland: a pilot study. *International Journal for Human Caring*, 20(1), 31 – 43.
- Dennison, R. D. (2007). A medication safety education program to reduce the risk of harm caused by medication errors. *The Journal of Continuing Education in Nursing*, 38(4), 176 – 184.

- Desmond, M. E., Horn, S., Keith, K., Kelby, S., Ryan, L., & Smith, J. (2014). Incorporating caring theory into personal and professional nursing practice to improve perception of care. *International Journal for Human Caring, 18*(1), 35 – 44.
- Dobratz, M. C. (2009). A model of consensus formation for reconciling nursing's disciplinary matrix. *Nursing Philosophy, 11* (1), 53-66.
- Donnelly, T. T., Al Suwaidi, J., Al Enazi, N. R., Idris, Z., Albulushi, A. M., Yassin, K., Rehman, A. M., & Hassan, A. H. A. (2012). Qatari women living with cardiovascular diseases – challenges and opportunities to engage in healthy lifestyles. *Health Care for Women International, 33*(12), 1114 – 1134.
- Doran, D. M., Haynes, R. B., Kushniruk, A., Straus, S., Grimshaw, J., Hall, L. M., . . . Jedras, D. (2010). Supporting evidence-based practice for nurses through information technologies. *Worldviews on Evidence-Based Nursing, 7*(1), 4 – 15.
- Drahnak, D. M., Hravnak, M., Dianzu, Ren, D., Haines, A. J., & Tuite, P. (2016). Scripting nurse communication to improve sepsis care. *MedSurg Nursing, 25*(4), 233 – 239.
- Drenkard, K. N. (2008). Integrating human caring science into a professional nursing practice model. *Critical Care Nursing Clinics of North America, 20*(4), 403-414. doi: 10.1016/j.ccell.2008.08.008
- Eisenberg, M. M. (2010). Implementation of evidence-based nursing practice: nurses' personal and professional factors? *Journal of Advanced Nursing, 67*(1), 33 – 42.
- Ellis, I., Howard, P., Larson, A., & Roberston, J. (2005). From workshop to work practice: an exploration of context and facilitation in the development of evidence-based practice. *Worldviews on Evidence-Based Nursing, 2*(2), 84-93.

- El-Haddad, M. (2006). Nursing in the United Arab Emirates: an historical background. *International Nursing Review*, 53(4), 284 – 289.
- Endo, E., Miyahara, T., Suzuki, S., & Ohmasa, T. (2005). Partnering of researcher and practicing nurses for transformative nursing. *Nursing Science Quarterly*, 18(2), 138 – 145.
- Erci, B., Sezgin, S., & Kacmaz, A. (2004). The impact of therapeutic relationship on preoperative and postoperative patient anxiety. *Australian Journal of Advanced Nursing*, 26(1), 59 – 66.
- Estabrooks, C. A., Thompson, D. S., Lovely, J. J. E., & Hofmeyer, A. (2006). A guide to knowledge translation theory. *Journal of Continuing Education in the Health Professions*, 26(1): 25 – 36.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1 – 4.  
doi: 10.11648/j.ajtas.20160501.11
- Evans, E. C., Deutsch, N. L., Drake, E., & Bullock, L. (2017). Nurse-patient interaction as a treatment for antepartum depression: a mixed-methods analysis. *Journal of the American Psychiatric Nurses Association*, 23(5), 347 – 359.
- Fawcett, J. (2003). Theory and practice: a conversation with Marilyn E. Parker. *Nursing Science Quarterly*, 16(2), 131-136.
- Fawcett, J. (2005). Criteria for the evaluation of theory. *Nursing Science Quarterly*, 18(2), 131-135.
- Fennel, V. (2013). *Collaboration in making evidence-based practice decisions: perceptions and experiences of nurses engaged in healthcare quality professional roles* (doctoral dissertation). Mercer University, Georgia.

- Flanagan, J. (2009). Patient and nurse experiences of theory-based care. *Nursing Science Quarterly*, 22, (2), 160-172. doi: 10.1177/0894318409331937
- Fleischer, A. R., Semenic, S. E., Ritchie, J. A., Richer, M-C., & Denis, J-L. (2015). Nursing leaders influence on the long-term sustainability of evidence-based practice improvements. *Journal of Nursing Management*, 24(3), 309 – 318. doi: 10.1111/jonm.12320
- Fontaine, G., Forgione, M., Lusignan, F., Lanoue, M-A., & Drouin, S. (2018). Cervical spine collar removal by emergency room nurses: a quality improvement project. *Journal of Emergency Nursing*, 44(3), 228 – 235.
- Fraser, V., Cossette, S., Mailhot, T., Brisebois, A., & Dube, V. (2018). Evaluation of an intervention with nurses for delirium detection after cardiac surgery. *Worldviews on Evidence-Based Nursing*, 15(1), 38 – 44.
- Gadbois, C., Chin, E. D., & Dalphonse, L. (2016). Health promotion in an opioid treatment program. *Journal of Addictions Nursing*, 27(2), 127 – 142.
- Gifford, W. A., Zhang, Q., Chen, S., Davies, B., Xie, R., Wen, S-W., & Harvey, G. (2018). When east meets west: a qualitative study of barriers and facilitators to evidence-based practice in Hunan China. *BMC Nursing*, 17(26). doi: 10.1186/s12912-018-0295-x
- Glaser, B., & Strauss, A. L. (1967). *The discovery of grounded theory: strategies for qualitative research*. Chicago: Aldine.
- Goldsack, J., Bergey, M., Mascioli, S., & Cunningham, J. (2015). Hourly rounding and patient falls: what factors boost success? *Nursing*, 45(2), 25 – 30.
- Graeve, C., McGovern, P. M., Arnold, S., & Polovich, M. (2017). Testing an intervention to decrease healthcare workers' exposure to antineoplastic agents. *Oncology Nursing Forum*, 44(1), E10 – E19.

- Graham, I. D & Tetro, J. M. (2007). Getting evidence into policy and practice: perspective of a health research funder. *Journal of the Canadian Academy of Child and Adolescent Psychiatry, 18*(1), 46-50.
- Godin, G., Belanger-Gravel, A., Eccles, M., & Grimshaw, J. (2008). Healthcare professionals' intentions and behaviours: a systematic review of studies based on social cognitive theories. *Implementation Science, 3*(36). doi: 10.1186/1748-5908-3-36
- Godlock, G., Christiansen, M., & Feider, L. (2016). Implementation of an evidence-based patient safety team to prevent falls in inpatient medical units. *MedSurg Nursing, 25*(1), 17 – 23.
- Gomes, M., Hash, P., Orsolini, L., Watkins, A., & Mazzoccoli, A. (2016). Connecting professional practice and technology at the bedside: nurses' beliefs about using electronic health record and their ability to incorporate professional and patient-centred nursing activities in patient care. *Computers, Informatics, Nursing, 34*(12), 578 – 586.
- Graham, K., & Logan, J. (2004). Using the Ottawa Model of Research Use to implement a skin care program. *Journal of Nursing Care Quality, 19*(1), 18-24.
- Graham, I. D., Logan, J., Harrison, M. B., Straus, S. E., Tetroe, J., Caswell, W. & Robinson, N. (2006). Lost in knowledge translation: time for a map? *The Journal of Continuing Education in the Health Professions, 26*(1), 13-24. doi: 10.1002/chp.47
- Granger, B. B. (2018). Science of implementation versus science of implementation: integrating both into clinical inquiry. *AACN Advanced Critical Care, 29*(2), 208 – 212.
- Greenhalgh, T. (2018). *How to implement evidence-based healthcare*. Hoboken, NJ: Wiley Blackwell.

- Gupta, D. M., Boland, R. J., & Aron, D. C. (2017). The physician's experience of changing clinical practice: a struggle to unlearn. *Implementation Science*, 12(28).  
doi:10.1186/s13012-017-0555-2
- Hamad Medical Corporation (2015). *Hamad medical corporation nursing and midwifery strategy 2015-2018*. Retrieved from [https://www.hamad.qa/EN/Hospitals-and-services/Nursing/Nursing-Strategy/nursing\\_strategy\\_15\\_18/Documents/Nursing-Strategy-2015-18-E.pdf](https://www.hamad.qa/EN/Hospitals-and-services/Nursing/Nursing-Strategy/nursing_strategy_15_18/Documents/Nursing-Strategy-2015-18-E.pdf)
- Hanson, J. L. & Ashley, B. (1994). Advanced practice nurses' application of the Stetler Model for Research Utilization: Improving bereavement care. *Oncology Nursing Forum*, 21(4), 720 – 724.
- Happell, B., & Martin, T. (2004). Exploring the impact of the implementation of a nursing clinical development unit program: what outcomes are evident? *International Journal of Mental Health Nursing*, 13(3), 177-184.
- Hassan, J., Hassan, A., & King, M. L. (2012). Nursing image in Qatar: past, present, and future. *Middle East Journal of Nursing*, 6(4), 26 – 28.
- Helfrich, C. D., Damschroder, L. J., Hagedorn, H. J., Daggett, G. S., Sahay, A., Ritchie, M., . . . Stetler, C. (2010). A critical synthesis of literature on the promoting action on research implementation in health services (PARIHS) framework. *Implementation Science*, 5(82).  
doi: 10.1186/1748-5908-5-2
- Hogan, D. L., & Logan, J. (2004). The Ottawa Model of Research Use: a guide to clinical innovation in the NICU. *Clinical Nurse Specialist*, 18(5), 255 – 261.
- Hohdorf, M. (2010). Self-care deficit nursing theory in Ingolstadt – an approach to practice development in nursing care. *Self-Care, Dependent-Care, & Nursing*, 18(1), 19-25.

- Hunt, M. R. (2009). Strengths and challenges in the use of interpretive description: reflections arising from a study of the moral experience of health professionals in humanitarian work. *Qualitative Health Research, 19*(9), 1284 – 1292.
- Hutchinson, M., & Jackson, D. (2015). The construction and legitimation of workplace bullying in the public sector: insight into power dynamics and organizational failures in health and social care. *Nursing Inquiry, 22*(1), 13 – 26.
- Institute of Medicine (2011). *The future of nursing: leading change, advancing health*. Washington, DC: National Academies Press.
- International Council of Nurses. (2018). *Transformation and Innovation*. Geneva, Switzerland: International Council of Nurses.
- Jarman, H. J. (2009). Sharing expertise – using clinical nursing rounds to improve UK emergency nursing practice. *Australian Emergency Nursing Journal, 12*(3), 73-77. doi: 10.1016/j.aenj.2009.03.001
- Jacobsen, F. F., Mekki, T. E., Forland, O., Folkestad, B., Kirkevold, O., Skar, R., . . . Oye, C. (2017). A mixed method study of an education intervention to reduce use of restraint and implement person-centered dementia care in nursing homes. *BMC Nursing, 16*(55). doi: 10.1186/s12912-017-0244-0
- Jessup, R. L. (2007). Interdisciplinary versus multidisciplinary teams: do we understand the difference? *Australian Health Review, 31*(3), 330-331.
- Jeong, I-Y. & Kim, J-S. (2018). The relationship between intention to leave the hospital and coping methods of emergency nurses after workplace violence. *Journal of Clinical Nursing, 27*(7-8), 1692 – 1701. doi: 10.1111/jocn.14228

- Karga, M., Kiekkas, P., Aretha, D., & Lemonidou, C. (2011). Changes in nursing practice: associations with responses to and coping with errors. *Journal of Clinical Nursing*, 20(21-22), 3246-3255. doi: 10.1111/j.1365-2702.2011.03772.x
- Kerfoot, K. M. Lavandero, R., Cox, M., Triola, N., Pacini, C., & Hanson, M. D. (2006). Conceptual models and the nursing organization: implementing the AACN synergy model for patient care. *Nursing Leader*, 4(4), 20-26.
- Kitson, A. L., Harvey, G., & McCormack, B. (1998). Enabling the implementation of evidence based practice: a conceptual framework. *Quality in Health Care*, 7(3), 149-158.
- Kitson, A. L., Rycroft-Malone, J., Harvey, G., McCormack, B., Seers, K., & Titchen, A. (2008). Evaluating the successful implementation of evidence into practice using the PARIHS framework: theoretical and practical challenges. *Implementation Science*, 3(1), 1-12. doi: 10.1186/1748-5908-3-1
- Koulouriotis, J. (2011). Ethical considerations in conducting research with non-native speakers of english. *TESL Canada Journal*, 28(5), 1 – 15.
- Lansiquot, B. A., Tullia-McGuinness, S., & Madigan, E. (2012). Turnover intention among hospital-based registered nurses in the Eastern Caribbean. *Journal of Nursing Scholarship*, 44(2), 187 – 193. doi:10.1111/j.1547-5069.2012.01441.x
- Lavoie-Tremblay, M., O'Conner, P., Harripaul, A., Biron, A., Ritchie, J., Lavigne, G. L., . . . & Sourdif, J. (2014). The effect of transforming care at the bedside initiative on healthcare teams' work environments. *Worldviews on Evidence-based Nursing*, 11(1), 16 – 25.
- Leiter, M. P., Day, A. L., Harvie, P., & Shaughnessy, K. (2007). Personal and organizational knowledge transfer: implications for worklife engagement. *Human Relations*, 60(2), 259 – 283.

- Leiter, M. P., Jackson, N. J., & Shaughnessy, K. (2008). Contrasting burnout, turnover intention, control, value congruence and knowledge sharing between baby boomers and generation X. *Journal of Nursing Management*, *17*(1), 100 – 109.
- Lewin, K. (1951). *Field theory in social science*. London: Tavistock Publications.
- Li, Hongyan., Nie, W., & Li, J. (2014). The benefits and caveats of international nurse migration. *International Journal of Nursing Sciences*, *1*(3), 314 – 317.
- Logan, J., & Graham, I. D. (1998). Toward a comprehensive interdisciplinary model of health care research use. *Science Communication*, *20*(2), 227-246. doi: 10.1177/1075547098020002004
- Logan, J., Harrison, M. B., Graham, I. D., Dunn, K., & Bissonnette, J. (1999). Evidence-based pressure ulcer practice: the Ottawa Model of Research Use. *Canadian Journal of Nursing Research*, *31*(1), 37-52.
- Lovering, S. (2012). The crescent of care: a nursing model to guide the care of Arab Muslim patients. *Diversity and Equality in Health and Care*, *9*(3), 171 – 178.
- Mars, J-A., & Lowry, L. W. (2006). Nursing theory and practice: connecting the dots. *Nursing Science Quarterly*, *19*(1), 44-50. doi: 10.1177/0894318405283547
- Mathers, D. (2011). Evidence-based practice: improving outcomes for patients with a central venous access device. *Journal of the Association for Vascular Access (JAVA)*, *16*(2), 64-72. doi: 10.2309/java.16-2-3
- Matthew-Maich, N., Ploeg, J., Jack, S., & Dobbins, M. (2010). Transformative learning and research utilization in nursing practice: a missing link? *Worldviews on Evidence-based Nursing*, *7*(1), 25 – 35.

- McCleary, L., McGilton, K., Boscart, V., & Oudshoorn, A. (2009). Improving gerontology content in baccalaureate nursing education through knowledge transfer to nurse educators. *Nursing Leadership, 22*(3), 33-46.
- McCormack, B., Kitson, A. L., Harvey, G., Rycroft-Malone, J., Titchen, A., & Seers, K. (2002). Getting evidence into practice: the meaning of context. *Journal of Advanced Nursing, 38*(1), 94-104.
- McCrae, N. (2011). Wither nursing models? The value of nursing theory in the context of evidence-based practice and multidisciplinary health care. *Journal of Advanced Nursing, 68*(1), 222-229. doi: 10.1111/j.1365-2648.2011.05821.x
- McCurry, M. K., Revell, S. M. R., & Roy, C. (2009). Knowledge for the good of the individual and society: linking philosophy, disciplinary goals, theory, and practice. *Nursing Philosophy, 11*(1), 42-52.
- McDermott-Levy, R. (2011). Going alone: the lived experience of female arab-muslim nursing students living and studying in the United States. *Nursing Outlook, 59*(5), 266 – 277.
- McGill, A. C., Jones, N. T., Boss, A. R., & Sheitman, B. (2017). Enhancing evidence-based clinical assessment in a large, public psychiatric hospital: using behavior data collect by direct care nursing staff. *Worldviews on Evidence-based Nursing, 14*(3), 246 – 248.
- McGuire, D. B., Walczak, J. R., Krumm, S. L., Haisfield, M. E., Beezley, A., Reedy, A. M., ...Ashley, B. (1994). Research utilization in oncology nursing: application of the Stetler Model in a comprehensive cancer center. *Oncology Nursing Forum, 21*(4), 703 – 724.
- McMahon, J. T. (2017). Improving medication administration safety in the clinical environment. *MedSurg Nursing, 26*(2), 374 – 409.

Mekki, T. E., Oye, C., Kristensen, B., Dahl, H., Haaland, A., Nordin, K. A., . . . McCormack, B.

(2017). The inter-play between facilitation and context in the promoting action on research implementation in health services framework: a qualitative exploratory implementation study embedded in a cluster randomized controlled trial to reduce restraint in nursing homes. *Journal of Advanced Nursing*, 73(11), 2622 – 2632.

Ministry of Development, Planning, and Statistics, State of Qatar. (2017). *Qatar in figures*.

Retrieved from

[https://www.mdps.gov.qa/en/statistics/Statistical%20Releases/General/QIF/Qatar\\_in\\_Figures\\_32\\_2017\\_EN.pdf](https://www.mdps.gov.qa/en/statistics/Statistical%20Releases/General/QIF/Qatar_in_Figures_32_2017_EN.pdf)

Ministry of Public Health, State of Qatar. (2018). *National health strategy 2018 – 2022. Our health our future*. Retrieved from

<https://www.moph.gov.qa/HSF/Documents/short%20report%20eng%2020.03.2018.pdf>

Mitchell, G. (2013). Selecting the best theory to implement planned change. *Nursing Management*, 20(1), 32 – 37.

Mohammadpour, A., Sharghi, N. R., Khosravan, S., Alami, A., & Akhond, M. (2015). The effect of a supportive educational intervention developed based on the Orem's self-care theory on the self-care ability of patients with myocardial infarction: a randomized controlled trial. *Journal of Clinical Nursing*, 24(11-12), 1686 – 1692.

Monforto, K., Figueroa-Altmann, A., Stevens, C., Thiele, K., & Ely, E. (2012). Time changes for scheduled nursing assessments: impact on clinical decisions and patient discharge.

*Journal of Pediatric Nursing*, 27(1), 26-32. doi: 10.1016/j.pedn.2010.11.002

- Montgomery, A., Riley, T., Tranter, S., Manning, V., & Fernandez, R. S. (2018). Effect of an evidence-based quality improvement framework on patient safety. *Australian Journal of Advanced Nursing, 35*(4), 6 – 16.
- Morata, L., Yon, J., Ogilvie, C., & Johnson, A. (2017). Decreasing peripherally inserted central catheter use with ultrasound-guided peripheral intravenous lines. *The Journal of Nursing Administration, 47*(6), 338 – 344.
- Mulready-Shick, J. (2013). A critical exploration of how english language learners experience nursing education. *Nursing Education Perspectives, 34*(2), 82 – 87.
- Murphy, A. L., Martin-Misener, R., Kutcher, S. P., O'Reilly, C. L., Chen, T. F., & Gardner, D. M. (2016). From personal crisis care to convenience shopping: an interpretive description of the experiences of people with mental illness and addictions in community pharmacies. *BMC Health Services Research, 16*(569). doi: 10.1186/s12913-016-1817-4
- Murray, S., Magill, J., & Pinfold, M. (2012). Transforming culture in the critical care environment – the building block of the journey. *International Practice Development Journal, 2*(1), 1 – 11.
- Murray, E., Vess, J., & Edlund, B. (2016). Implementing a pediatric fall prevention policy and program. *Pediatric Nursing, 42*(5), 256 – 259.
- Nazik, E., & Eryilmaz, G. (2013). The prevention and reduction of postpartum complications: Orem's model. *Nursing Science Quarterly, 26*(4), 360 – 364.
- Nehring, V. (2003). A snapshot of nursing in Qatar. *Nursing Education Perspectives, 24*(5), 226 – 229.
- Nkulu Kalengayi, F. K., Hurtig, A-K., Ahlm, C., & Ahlberg, B, M. (2012). 'It's a challenge to do it the right way': an interpretive description of caregivers' experiences in caring for

- migrant patients in Northern Sweden. *BMC Health Services Research*, 12(1).  
doi:10.1186/1472-6963-12-433
- Norman, V., Rossillo, K., & Skelton, K. (2016). Creating healing environments through the theory of caring. *AORN Journal*, 104(5), 401 – 409.
- Obrecht, J. A., Vincent, C. V. H., & Ryan, C. S. (2014). Implementation of evidence-based practice for a pediatric pain assessment instrument. *Clinical Nurse Specialist*, 28(2), 97 – 104.
- Overton, G. K., McCalister, P., Kelly, D., & Macvicar, R. (2009). Practice-based small group learning: how health professionals view their intention to change and the process of implementing change in practice. *Medical Teacher*, 31(11). E514 – e520.
- Ozan, Y. D., Okumus, H., & Lash, A. A. (2015). Implementation of Watson's theory of human caring: a case study. *International Journal of Caring Sciences*, 8(1), 25 – 35.
- Palys, T. (2008). Purposive sampling. In L. M. Given (Ed.) *The Sage Encyclopedia of Qualitative Research Methods*. (Vol. 2, 697 – 698). Sage: Los Angeles.
- Parr, J. M., Bell, J., & Koziol-McLain, J. (2018). Evaluating fundamentals of care: the development of a unit-level quality measurement and improvement programme. *Journal of Clinical Nursing*, 27(11/12), 2360 – 2372.
- Perry, L., Bellchambers, H., Howie, A., Moxey, A., Parkinson, L., Capra, S., & Byles, J. (2011). Examination of the utility of the promoting action on research implementation in health services framework for implementation of evidence based practice in residential aged care setting. *Journal of Advanced Nursing*, 67(10), 2139-2150. doi: 10.1111/j.1365-2648.2011.05655.x

- Pipe, T. B. (2007). Optimizing nursing care by integrating theory-driven evidence-based practice. *Journal of Nursing Care Quality, 22*(3), 234-238.
- Polit, D. F., & Beck, C. T. (2010). Generalization in quantitative and qualitative research: myths and strategies. *International Journal of Nursing Studies, 47*(11), 1451 – 1458.
- Polkinghorne, D. E. (2005). Language and meaning: data collection in qualitative research. *Journal of Counselling Psychology, 52*(2), 137 – 145.
- Prochaska, J. O. & DiClemente, C. C. (1982). Transtheoretical therapy: toward a more integrative model of change. *Psychotherapy: Theory, Research, and Practice, 19*(3), 276-288.
- Radtke, K. (2013). Improving patient satisfaction with nursing communication using bedside shift report. *Clinical Nurse Specialist, 27*(1), 19 – 25.
- Rassool, G. H. (2000). The crescent and islam: healing, nursing, and the spiritual dimension. Some considerations towards an understanding of the Islamic perspectives on caring. *Journal of Advanced Nursing, 32*(6), 1476 – 1484.
- Reavy, K., & Tavernier, S. (2008). Nurses reclaiming ownership of their practice: implementation of an evidence-based practice model and process. *The Journal of Continuing Educating in Nursing, 39*(4), 166 – 172.
- Regan, S., Laschinger, H. K. S., & Wong, C. A. (2015). The influence of empowerment, authentic leadership, and professional practice environments on nurses' perceived interprofessional collaboration. *Journal of Nursing Management, 24*(1), e54 – e61.  
doi:10.1111/jonm.12288

- Renolen, A., & Hjalmlhult, E. (2015). Nurses experience of using scientific knowledge in clinical practice: a grounded theory study. *Scandinavian Journal of Caring Sciences*, 29(4), 633 – 641.
- Robertson-Malt, S., Herrin-Griffith, D. M., & Davies, J. (2010). Designing a patient care model with relevance to the cultural setting. *Journal of Nursing Administration*, 40(6), 277 – 282.
- Rodgers, B. L., Jacelon, C. S., & Knafl, K. A. (2018). Concept analysis and the advance of nursing knowledge: state of the science. *Journal of Nursing Scholarship*, 50(4), 451 – 459. doi:10.1111/jnu.12386
- Rogers, E. M. (2003). *Diffusion of Innovations* (5<sup>th</sup> ed.). New York: Free Press.
- Romp, C. R., & Kiehl, E. (2009). Applying the Stetler Model of Research Utilization in staff development. *Journal for Nurses in Staff Development*, 25(6), 278 – 284.
- Rosswurm, M-A., & Larrabee, J. H. (1999). A model for change to evidence-based practice. *Image: Journal of Nursing Scholarship*, 31(4), 317-322.
- Ryan, L. A. (2005). The journey to integrate Watson's Caring Theory with clinical practice. *International Journal for Human Caring*, 9(3), 26-30.
- Rycroft-Malone, J. (2004). The PARIHS framework--a framework for guiding the implementation of evidence-based practice. *Journal of Nursing Care Quality*, 19(4), 297-304.
- Rycroft-Malone, J. (2008). Evidence-informed practice: from individual to context. *Journal of Nursing Management*, 16(4), 404 – 408. doi: 10.1111/j.1365-2834.2008.00859.x.

- Rycroft-Malone, J., Kitson, A., Harvey, G., McCormack, B., Seers, K., Titchen, A., et al. (2002). Ingredients for change: Revisiting a conceptual framework. *Quality & Safety in Health Care, 11*(2), 174-180.
- Rycroft-Malone, J., Seers, K., Chandler, J., Hawkes, C. A., Crichton, N., Allen, C., . . . Strunin, L. (2013). The role of evidence, context, and facilitation in an implementation trial: implications for the development of the PARIHS framework. *Implementation Science, 8*(28). doi: 10.1186/1748-5908-8-28
- Rycroft-Malone, J., Seers, K., Titchen, A., Harvey, G., Kitson, A., & McCormack, B. (2004). What counts as evidence in evidence-based practice. *Journal of Advanced Nursing, 47*(1), 81-90.
- Sandelowski, M. (1997). "To be of use": enhancing the utility of qualitative research. *Nursing Outlook, 45*(3), 125-32.
- Sandhaus, S., Zalon, M. L., Valenti, D., & Harrell, F. (2009). Promoting evidence-based dysphagia assessment and management by nurses. *Journal of Gerontological Nursing, 35*(6), 20-27. doi: 10.3928/00989134-20090331-08
- Santo, A. E., & Choquette, A. (2013). Experience of adapting and implementing an evidence-based nursing guideline for prevention of diaper dermatitis in a paediatric oncology setting. *International Journal of Evidence-Based Healthcare, 11*(2), 121 – 127.
- Scheidenhelm, S., & Reitz, O. E. (2017). Hardwiring bedside shift report. *The Journal of Nursing Administration, 47*(3), 147 – 153.
- Schluter, J., Seaton, P., & Chaboyer, W. (2011). Understanding nursing scope of practice: a qualitative study. *International Journal of Nursing Studies, 48*(10), 1211-1222. doi: 10.1016/j.ijnurstu.2011.03.004

- Sciarra, E. (2011). Impacting practice through evidence-based education. *Dimensions of Critical Care Nursing, 30*(5), 269-275.
- Shafer, L., & Aziz, M. G. (2013). Shaping a unit's culture through effective nurse-led quality improvement. *MedSurg Nursing, 22*(4), 229 – 236.
- Sidani, S., Manojlovich, M., Doran, D., Fox, M., Covell, C. L., Kelly, H., . . . McAllister, M. (2016). Nurses' perceptions of interventions for the management of patient-oriented outcomes: a key factor for evidence-based practice. *Worldviews on Evidence-based Nursing, 13*(1), 66-74.
- Simerson, D., & Hackbarth, D. (2017). Emergency nurse implementation of the brief smoking-cessation intervention: ask, advise, and refer. *Journal of Emergency Nursing, 44*(3), 242 – 248.
- Simmons, L. (2009). Dorothy Orem's self-care theory as related to nursing practice in hemodialysis. *Nephrology Nursing Journal, 36*(4), 419 – 421.
- Simpson, P., Yeung, F. K. K., Kwan, A. T. Y., & Wah, W. K. (2006). Family systems nursing: a guide to mental health care in Hong Kong. *Journal of Family Nursing, 12*(3), 276 – 291.
- Staggers, N., McCasky, T., Brazelton, N., & Kennedy, R. (2008). Nanotechnology: the coming revolution and its implication for consumers, clinicians, and informatics. *Nursing Outlook, 56*(5), 268-274.
- Stetler, C. (1994). Refinement of the Stetler/Marram model for application of research findings to practice. *Nursing Outlook, 42*(1), 15 – 25.
- Stetler, C. (2001). Updating the Stetler Model of research utilization to facilitate evidence-based practice. *Nursing Outlook, 49*(6), 272 – 279.

- Stetler, C. B., Damschroder, L. J., Helfrich, C. D., & Hagedorn, H. J. (2011). A guide for applying a revised version of the PARIHS framework for implementation. *Implementation Science, 6*(99), 1-10. doi: 10.1186/1748-5908-6-99
- Sukhera, J., Milne, A., Teunissen, P. W., Lingard, L., & Watling, C. (2018). Adaptive reinventing and the co-construction of social change. *Advances in Health Science Education, 23*(3), 587 – 599. doi: 10.1007/s10459-018-9816-3
- Sundin-Huard, D. (2001). Subject positions theory – its application to understanding collaboration (and confrontation) in critical care. *Journal of Advanced Nursing, 34*(3), 376 – 382.
- Sullivan, R. (2017). Use of a diagnosis-driven heel pressure injury algorithm. *MedSurg Nursing, 26*(6), 399 – 402.
- Tanaka, J., Katsuno, T., & Takahashi, T. (2012). Using Parse's humanbecoming theory in Japan. *Nursing Science Quarterly, 25*(1), 99 – 102.
- Tayyib, N., & Coyer, F. (2017). Translating pressure ulcer prevention into intensive care nursing practice. *Journal of Nursing Care Quality, 32*(1), 6 -14.
- Tektas, P., & Cam, O. (2017). The effects of nursing care based on Watson's theory of human caring on the mental health of pregnant women after a pregnancy loss. *Archives of Psychiatric Nursing, 31*(5), 440 – 446.
- Teodoro, I. P. P., de Cassia Felix Reboucas, V., Thorne, S. E., de Souza, N, K. M., de Brito, L. S. A., Alencar, A. M. P. G. (2018). Interpretive description: a viable methodological approach for nursing research. *Esc Anna Nery, 22*(3). doi: 10.1590/2177-9465-ean-2017-0287

- Thompson, G. N., Estabrooks, C. A., & Degner, L. F. (2006). Clarifying the concepts in knowledge transfer. *Journal of Advanced Nursing*, 53(6), 691 – 701.
- Thorne, S. (2016). *Interpretive description: qualitative research for applied practice* (2nd ed.). New York: Routledge.
- Thorne, S., Kirkham, S. R., & MacDonald-Emes, J. (1997). Interpretive description: a noncategorical qualitative alternative for developing nursing knowledge. *Research in Nursing & Health*, 20(2), 169 – 177.
- Thorne, S., Kirkham, S. R., & O’Flynn-Magee, K. (2004). The analytic challenge in interpretive description. *International Journal of Qualitative Methods*, 3(1). doi: 10.1177/160940690400300101
- Titler, M. G., Kleiber, C., Steelman, V. J., Rakel, B. A., Budreau, G., Everett, L. Q., Buckwalter, K. C., Tripp-Reimer, T., & Goode, C. (2001). The Iowa Model of Evidence-Based Practice to promote quality care. *Critical Care Nursing Clinics of North America*, 13(4), 497 – 509.
- Tonges, M., & Ray, J. (2011). Translating Caring theory into practice. *Journal of Nursing Administration*, 41(9), 374 – 381.
- Vasli, P., Dehghan-Nayeri, N., & Khosravi, L. (2018). Factors affecting knowledge transfer from continuing professional education to clinical practice: development and psychometric properties of a new instrument. *Nurse Education in Practice*, 28, 189 – 195.
- Wallin, L., Profetto-McGrath, J., & Levers, M-J. (2005). Implementing nursing practice guidelines: a complex undertaking. *Journal Wound, Ostomy, & Continence Nursing*, 32(5), 294 – 301.

- Valizadeh, L., Zamanzadeh, V., Habibzadeh, H., Alilu, L., Gillespie, M., & Shakibi, A. (2018). Threats to nurses dignity and intent to leave the profession. *Nursing Ethics*, 25(4), 520 - 531. doi: 10.1177/0969733016654318
- Velmurugan, R. (2017). Nursing issues in leading and managing change. *International Journal of Nursing Education*, 9(4), 148 – 151. doi:10.5958/0974-9357.2017.00113.1
- Yatim, J., Wong, K-S., Ling, M-L., Tan, S-B., & Hockenberry, M. (2016). A nurse-driven process for timely removal of urinary catheters. *International Journal of Urological Nursing*, 10(3), 167 – 172.
- Watts, S. A., & Nemes, D. (2018). Best practice nursing management of nosocomial hypoglycemia: lessons learned. *MedSurg Nursing*, 27(2), 98 – 102.
- Williams, M., & Haverkamp, B. E. (2015). Eating disorder therapists' personal eating disorder history and professional ethics: an interpretive description. *Eating Disorders*, 23(5), 393 – 410.
- Wilson, J., & Gramling, L. (2009). The application of Orem's self-care model to burn care. *Journal of Burn Care & Research*, 30(5), 852 – 858.
- Wimpenny, P. (2002). The meaning of models of nursing to practicing nurses. *Journal of Advanced Nursing*, 40(3), 346 – 354.
- Whittemore, R., & Knafl, K. (2005). The integrated review: updated methodology. *Journal of Advanced Nursing*, 52(5), 546 – 553.
- World Health Organization. (2004). *New WHO guidelines to promote proper use of alternative medicines*. Geneva, Switzerland: WHO Press.
- World Health Organization. (2016). *Global strategy for human resources for health: workforce 2030. Draft for the 69<sup>th</sup> world health assembly*. Geneva, Switzerland: WHO Press.

Zebian, S., Alamuddin, R., Maalouf, M., & Chatila, Y. (2007). Developing an appropriate psychology through culturally sensitive research practices in the Arabic-speaking world. A content analysis of psychological research published between 1950 and 2004. *Journal of Cross-Cultural Psychology*, 38(2), 91 – 122.

## Appendix A: Table 1 – Theory Findings

Table 1

*Theory Findings*

	Location	Theory	Design & Setting	Outcome	Initiators	Setting	Change agent	Practice change
Alligood (2011)	North America	Modeling and Role Modeling	Action research Acute care	Qualitative	Leadership	Acute	Yes	Improved external survey or accreditation scores
Bent et al., (2005)	North America	Human Caring	Action research Acute care	Qualitative	Leadership	Acute	Yes	Improved recognition of patient needs  Improved communication
Delmas, O'Reilly, Iglesias, Cara, & Burnier (2016)	Europe	Human Caring	Quasi-experimental Acute care	Quantitative	External Researcher	Acute	No	Improved patient and nurse satisfaction
Desmond et al., (2014)	North America	Human Caring	Quasi-experimental Acute care	Quantitative	Leadership	Acute	No	Improved patient and nurse satisfaction  Improved recognition of patient needs
Endo, Miyahara, Suzuki, & Ohmasa (2005)	Asia	Health as Expanding Consciousness	Praxis Acute Care	Qualitative	External Researcher	Specialty Centre	Yes	Increased nurse satisfaction

Evans, Deutsch, Drake, & Bullock (2017)	North America	Interpersonal Relations	Mixed methods  Community care	Quantitative Qualitative	External Researcher	Community	No	Increased contact between patient and nurse  Increased use of patient-centered services  Decrease scores of post-partum depression
Flanagan (2009)	North America	Human Caring + Health as Expanding Consciousness	Descriptive  Acute care	Qualitative	External Researcher	Specialty centre	Yes	Improved patient and nurse satisfaction
Gomes, Hash, Orsolini, Watkins, & Mazzoccoli (2016)	North America	Human Caring	Descriptive  Acute care	Quantitative	Leadership	Acute	No	Improved recognition of patient needs  Increased time spent with patient
Hohdorf (2010)	Europe	Self-care Deficit	Descriptive  Acute care	Qualitative	Leadership	Acute	No	Improved recognition of patient needs
Mohammadpour, Sharghi, Khosravan, Alami, & Akhond (2015)	Middle East	Self-care Deficit	Randomized Control Trial  Community care	Quantitative	External Researcher	Community	No	Improved recognition of patient needs

								Improved communication  Improved patient self-care ability
Norman, Rossillo, & Skelton (2016)	North America	Human Caring	Descriptive  Acute care	Quantitative	Leadership	Acute	Yes	Improved patient and nurse satisfaction  Improved recognition of patient needs  Improved communication
Ozan, Okumus, & Lash (2015)	Middle East	Human Caring	Case study  Community care	Qualitative	External Researcher	Community	No	Improved patient and nurse satisfaction
Pipe (2007)	North America	Human Caring	Descriptive  Acute care	Qualitative	Leadership	Acute	Yes	Improved patient and nurse satisfaction
Radtke (2013)	North America	Interpersonal Relations	Descriptive  Acute care	Quantitative	Nursing staff	Acute	Yes	Improved patient and nurse satisfaction  Improved external survey

								or accreditation scores
Ryan (2005)	North America	Human Caring	Descriptive Acute care	Qualitative	Leadership	Acute	Yes	Improved communication
Scheidenhelm & Reitz (2017)	North America	Interpersonal Relations	Descriptive Acute care	Quantitative	Leadership	Acute	Yes	Improved patient and nurse satisfaction  Improve external survey or accreditation scores
Simpson, Yeung, Kwan, & Wah (2006)	Asia	Calgary Family Assessment Model	Quasi-experimental Acute care	Quantitative Qualitative	Nursing staff	Acute psychiatric	No	Increased nurse satisfaction
Tektas & Cam (2016)	Asia	Human Caring	Randomized Control trial Community care	Quantitative	External Researcher	Community	No	Improved recognition of patient needs  Improved communication  Reduced patient anxiety
Tonges & Ray (2011)	North America	Carolina Care Model	Descriptive Acute care	Quantitative	Leadership	Acute	No	Improved patient and nurse satisfaction

									Improved recognition of patient needs  Improved external survey or accreditation scores
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**Appendix B: Table 2 – Knowledge Utilization Findings**

Table 2

*Knowledge Utilization Findings*

	Location	Model	Design & setting	Outcome	Initiator	Change Agent
Bonkowski, De Gagne, Cade, & Bulla (2018)	North America	Knowledge to Action	Quasi-experimental Acute care	Pain management	Leadership	Yes
Doran et al., (2010)	North America	Promoting Action on Research Implementation in Health Services	Quasi-experimental All healthcare settings	Technology use	External Researcher	No
Ellis, Howard, Larson, & Robertson (2005)	Australia	Promoting Action on Research Implementation in Health Services	Mixed methods Acute care	Pain management Central line care	External Researcher	Yes
Fraser, Cossette, Mailhot, Brisebois, & Dube (2018)	North America	Unspecified knowledge utilization model	Quasi-experimental Acute care	Delirium care	External Researcher	Yes
Graham & Logan (2004)	North America	Ottawa Model of Research Use	Quasi-experimental Acute care	Skin care	Leadership	No

Hogan & Logan (2004)	North America	Ottawa Model of Research Use	Quasi-experimental Acute care	Family-focused care	Leadership	Yes
Jacobsen et al., (2017)	Europe	Promoting Action on Research Implementation in Health Services	Mixed methods Long-term care	Restraint reduction	External Researcher	Yes
Mathers (2011)	North America	Stetler Model of Research Utilization	Quasi-experimental Acute care	Central line care	Leadership	No
Mekki et al., (2017)	Europe	Promoting Action on Research Implementation in Health Services	Mixed methods Long-term care	Restraint reduction	External Researcher	Yes
Obrecht, Vincent, & Ryan (2014)	North America	Promoting Action on Research Implementation in Health Services	Descriptive Acute care	Pain management	Leadership	Yes
Reavy & Tavernier (2008)	North America	Evidence-based Practice Model for Staff Nurses	Quasi-experimental Acute care	Central line care	Leadership	Yes
Romp & Kiehl (2009)	North America	Stetler Model of Research Utilization	Descriptive Acute care	Preceptorship program	Leadership	No

Rycroft-Malone et al., (2013)	Europe	Promoting Action on Research Implementation in Health Services	Mixed methods Acute care	Peri-operative fasting	External Researcher	Yes
Sandhaus, Zalon, Valenti, & Harrell (2009)	North America	Ottawa Model of Research Use	Quasi-experimental Acute care	Dysphagia	Leadership	No
Santo & Choquette (2013)	North America	Knowledge to Action	Descriptive	Diaper dermatitis	Nursing staff	Yes
Tayyib & Coyer (2016)	Australia	Ottawa Model of Research Use	Randomized control trial Acute care	Skin care	External Researcher	No

## Appendix C: Table 3 – Quality Improvement Findings

Table 3

*Quality Improvement Findings*

	Location	Model	Design Setting	Outcome	Initiator	Change Agent
Armour-Burton, Fileds, Outlaw, & Deleon (2013)	North America	Not specified	Pretest/posttest  Acute Care	Increased prevalence of pressure ulcers attributed to incomplete documentation at baseline	Leadership	Yes
Cameron & Little (2017)	North America	Not specified	Pre/posttest  Acute Care	Improved practice regarding alarms	Leadership	Yes
Carroll, Tonges, Ray (2017)	North America	Carolina Care Model	Descriptive  Acute Care	Implementation of Electronic Medical Record	Leadership	No
Cates (2016)	North America	Registered Nurses Association of Ontario	Pre/posttest/posttest  Acute Care	Improved peripheral intravenous practices	Leadership	No
Drahnak, Hravnak, Ren, Haines, & Tuite (2016)	North America	Six Sigma	Pre/posttest  Acute Care	Decrease in non-occurrence of sepsis screening	Leadership	No
Evans, Grunawalt, McClish, Wood, & Friese (2012)	North America	Not specified	Pre/posttest	Bedside report decreased handover time	Staff nurses	Yes
Fontaine, Forgione, Lusignan, Lanoue, Drouin (2018)	North America	Not specified	Descriptive  Acute care	Implementation of decision aid to assist with removal of cervical spine collars	Leadership	No
Gadbois, Chin, & Dalphonse (2016)	North America	PDSA	Descriptive	Improved documentation	External researcher	Yes

			Community			
Godlock, Christiansen, & Feider (2016)	North America	FOCUS – PDCA	Pre/posttest Acute care	Decreased fall rate	Leadership	No
Graeve, McGovern, Arnold, & Polovich (2017)	North America	Not specified	Pre/posttest Acute care	Decreased staff exposure to antineoplastics	External researcher	Yes
Happell & Martin (2004)	Australia	Not specified	Descriptive Acute care	Increased family sensitive practice	External researcher	No
Jarman (2009)	Europe	Not specified	Descriptive Acute care	Implementation of nursing clinical practice rounds	Leadership	Yes
Lavoie-Tremblay et al. (2013)	North America	TCAB	Pre/posttest Acute care	Improvement in communicating specific information. All other measures decreased.	Leadership	No
McGill, Jones, Boss, & Sheitman (2017)	North America	Not specified	Descriptive Long-term care	Improved documentation	Leadership	No
McMahon (2017)	North America	PDSA	Pre/posttest Acute care	Reduction in medication errors	Leadership	Yes
Monforto, Figueroa-Altman, Stevens, Thiele, & Ely (2012)	North America	Not specified	Descriptive Acute Care	Changed times of nursing assessments resulting in improved collaboration and workflow	Leadership and staff nurses	No
Murray, Vess, & Edlund (2016)	North America	PDSA	Pre/posttest Acute Care	Reduced falls	Leadership	No
Parr, Bell, & Koziol-McLain (2018)	New Zealand	Not specified	Pre/posttest Acute care	Improvement in compliance with care standards	Leadership	Yes

Shafer & Aziz (2013)	North America	TCAB	Descriptive Acute Care	Implementation of nurse led-quality improvement processes	Leadership	Yes
Simerson & Hackbarth (2018)	North America	Not specified	Pre/posttest Acute care	Screening and referral program for smoking cessation	External researcher	No
Sullivan (2017)	North America	PDSA	Pre/posttest Acute care	Reduced skin pressure injuries	Leadership	Yes
Watts & Nemes (2018)	North America	PDSA	Pre/posttest Acute care	Increased compliance with hypoglycemic protocol	Leadership	Yes
Yatim et al. (2016)	Asia	Not specified	Pre/Posttest Acute Care	Implementation of nurse decision tool for catheter removal	Leadership	Yes

*Notes.* FOCUS – PDCS: Find, Organize, Clarify, Understand, Select, Plan, Do, Check, Act.

PADPTE: Prepare, Assess, Diagnose, Plan, Treat, Evaluate

PDSA: Plan, Do, Study, Act.

TCAB: Transitioning Care at the Bedside

## Appendix D: Participant Consent Form

### Consent Form: Interview with Registered Nurses

**Project Title:** Defining the process of nursing practice change: a grounded theory study of nurses working in Qatar.

**Principle investigator:**

Merry-Jo Levers, RN, PhD (candidate)  
University of Victoria, School of Nursing  
email: [nursingpracticechange@gmail.com](mailto:nursingpracticechange@gmail.com)

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Hello, my name is Merry-Jo Levers, and I am a doctoral student at University of Victoria in Victoria, British Columbia, Canada. I am interested in studying the process of nursing practice change in hopes it can help nurses and organizations desiring to improve clinical practice. I am seeking Registered Nurses who have changed their clinical practice to participate in my study.

You do not have to decide today whether or not you will participate in the research and are free to ask me questions about the research prior to deciding. I will go through the consent form with you. If anything is unclear, then please ask me to stop as we go through the information and I will take time to explain. If questions arise later, you can ask them at any time by telephoning or email me using the above contact information.

#### Purpose of the Study

The purpose of this study is to describe the process Registered Nurses undertake to change their clinical practice by defining: (1) the process undertaken by individual professional nurses when changing his/her nursing practice, (2) factors that initiate clinical practice change, (3) factors that mediate clinical practice change, and (4) factors that are necessary for clinical practice change.

#### Participant Selection

You are being invited to participate in this study if you have been a Registered Nurse working at Hamad General Hospital for at least four years, speak and read English well, and have changed your clinical practice within the last two years. Although it is impossible to predict the exact number of participants for a grounded theory study, it is expected that approximately 25 nurses will participate.

#### Voluntary Participation

Your participation in this study is completely voluntary. It is your choice to participate or not. Your decision to participate or not will have no effect on your employment at Hamad General Hospital.

You are free to withdraw from the study at any time. If you decide to withdraw, you may ask that any data gathered during your interview be destroyed.

### Type of Research

The research approach for this study will be grounded theory. If you choose to participate, you and I will be sitting together for approximately 2 hours to discuss the process you undertook to change your clinical practice. The expected completion date for the study is June 2015. Depending on the need for further data collection, I may also contact you at a later date for a follow-up interview. You do not have to answer any questions you do not want to and you are free to change your answer at any time during the interview. Once the interviews are completed and transcribed, I will share the transcriptions with you to ensure your answers are correctly reflected in the data. If, upon reading the transcripts, you do not feel as though your answer is correctly reflected in the words, then you are free to change your answer at that time.

### Benefit and Risks

The benefit for you will be the opportunity to share your story of changing your clinical practice. Identifying the process nurses undertake for clinical practice change will support health services administrators and leaders who plan practice change in an organization. Finally, the discipline of nursing will benefit from a framework or theory describing the process of nursing practice change. It is very unlikely that you will experience any potential physical, emotional, social, or economical risk as a participant of this research.

### Rights and Compensation

By signing this form, you do not give up any of your legal rights and you do not release the Principal Investigator from legal and professional duties. There will be no costs to you for participation in this study, and you will receive no direct monetary compensation for participating in this study.

### Confidentiality and Anonymity

The information gathered during the interview will be shared with a transcriptionist located in Victoria Canada who has signed a confidentiality agreement. Information may also be shared with my PhD committee members at the University of Victoria, in British Columbia, Canada. Electronic data will be stored on a passcode protected USB stick and in an electronic folder on the University of Victoria's confidential netdrive. The only people who will have access to the confidential folder will be myself, the transcriptionist, and my PhD committee members. Transcripts of the interviews, the passcode protected USB device, and any notes I may make during the interview will be stored at my home in a wall-mounted, passcode protected safe. Only myself and my husband have the code to this safe. One year after the study is completed, the electronic files, transcripts, notes, and passcode protect USB stick will be destroyed. When the findings are shared, you will be given an alias to prevent anyone relating the data and findings back to you. The interviews will take place away from Hamad General Hospital at the University of Calgary - Qatar. The findings from this

study will be shared at international nursing conferences and published in nursing journals but all data will be anonymized prior to presentation or publication.

#### Contact Information

If you have any questions about the study, please feel free to contact me at [nursingpracticechange@gmail.com](mailto:nursingpracticechange@gmail.com). You are also free to contact my PhD advisors: Dr. Kelli Stajduhar [kis@uvic.ca](mailto:kis@uvic.ca), or Dr. Noreen Frisch at [nfrisch@uvic.ca](mailto:nfrisch@uvic.ca)

#### Contact for concerns about the rights of research participants

If you have any concerns or complaints about your rights as a research subject and/or your experiences while participating in this study, you may contact the Human Research Ethics Office at the University of Victoria (250-472-4545 or [ethics@uvic.ca](mailto:ethics@uvic.ca)) or the Hamad Research Ethics at (974 439 2440)

#### Authorization

I have read and understand this consent form, and I volunteer to participate in this research study. I understand that I will receive a copy of this form. I voluntarily choose to participate, but I understand that my consent does not take away any legal rights in the case of negligence or other legal fault of anyone who is involved in the study. I further understand that nothing in this consent form is intended to replace any applicable Qatari laws.

Participants Name:  
Signature:

Date:

Principle Investigator Signature:

Date:

### **Appendix E: Semi-structured Interview Questions**

#### Main Question

1. Tell me a bit about where you work and the kind of work you do as a nurse.
2. I am interested in understanding nursing practice change. Can you tell me about a situation in which you changed your practice?

#### Secondary Questions

1. How did you come to the decision to change your practice?
2. What was the process you undertook to change your practice?
3. What factors helped to facilitate your practice change?
4. What factors impeded your practice change?

#### Techniques to assist the narrative

- Facilitation – encouraging the participants to say more
- Reflection – echoing the participants words
- Clarification – summarizing to confirm understanding

### Appendix F: Certificate of Renewed Approval



Office of Research Services | Human Research Ethics Board  
 Administrative Services Building Rm B202 PO Box 1700 STN CSC Victoria BC V8W 2Y2 Canada  
 T 250-472-4545 | F 250-721-8960 | uvic.ca/research | ethics@uvic.ca

## Certificate of Renewed Approval

PRINCIPAL INVESTIGATOR: Merry-Jo Levers	ETHICS PROTOCOL NUMBER Minimal Risk - Delegated	14-179
UVic STATUS: Ph.D. Student	ORIGINAL APPROVAL DATE:	27-Jun-14
UVic DEPARTMENT: NURS	RENEWED ON:	28-May-15
SUPERVISOR: Dr. K. Stajduhar; Dr. N. Frisch	APPROVAL EXPIRY DATE:	26-Jun-16
PROJECT TITLE: Defining the process of nursing practice change: a grounded theory study of nurses working in Qatar		
RESEARCH TEAM MEMBERS: None		
DECLARED PROJECT FUNDING: None		
<b>CONDITIONS OF APPROVAL</b>		
<p>This Certificate of Approval is valid for the above term provided there is no change in the protocol.</p> <p><b>Modifications</b> To make any changes to the approved research procedures in your study, please submit a "Request for Modification" form. You must receive ethics approval before proceeding with your modified protocol.</p> <p><b>Renewals</b> Your ethics approval must be current for the period during which you are recruiting participants or collecting data. To renew your protocol, please submit a "Request for Renewal" form before the expiry date on your certificate. You will be sent an emailed reminder prompting you to renew your protocol about six weeks before your expiry date.</p> <p><b>Project Closures</b> When you have completed all data collection activities and will have no further contact with participants, please notify the Human Research Ethics Board by submitting a "Notice of Project Completion" form.</p>		
<b>Certification</b>		
<p>This certifies that the UVic Human Research Ethics Board has examined this research protocol and concluded that, in all respects, the proposed research meets the appropriate standards of ethics as outlined by the University of Victoria Research Regulations Involving Human Participants.</p> <p style="text-align: center;"><i>Rachael Scarth</i></p> <hr style="width: 20%; margin: auto;"/> <p style="text-align: center;">Dr. Rachael Scarth Acting Associate Vice-President, Research</p>		

Certificate Issued On: 28-May-15

14-179 Levers, Merry-Jo

