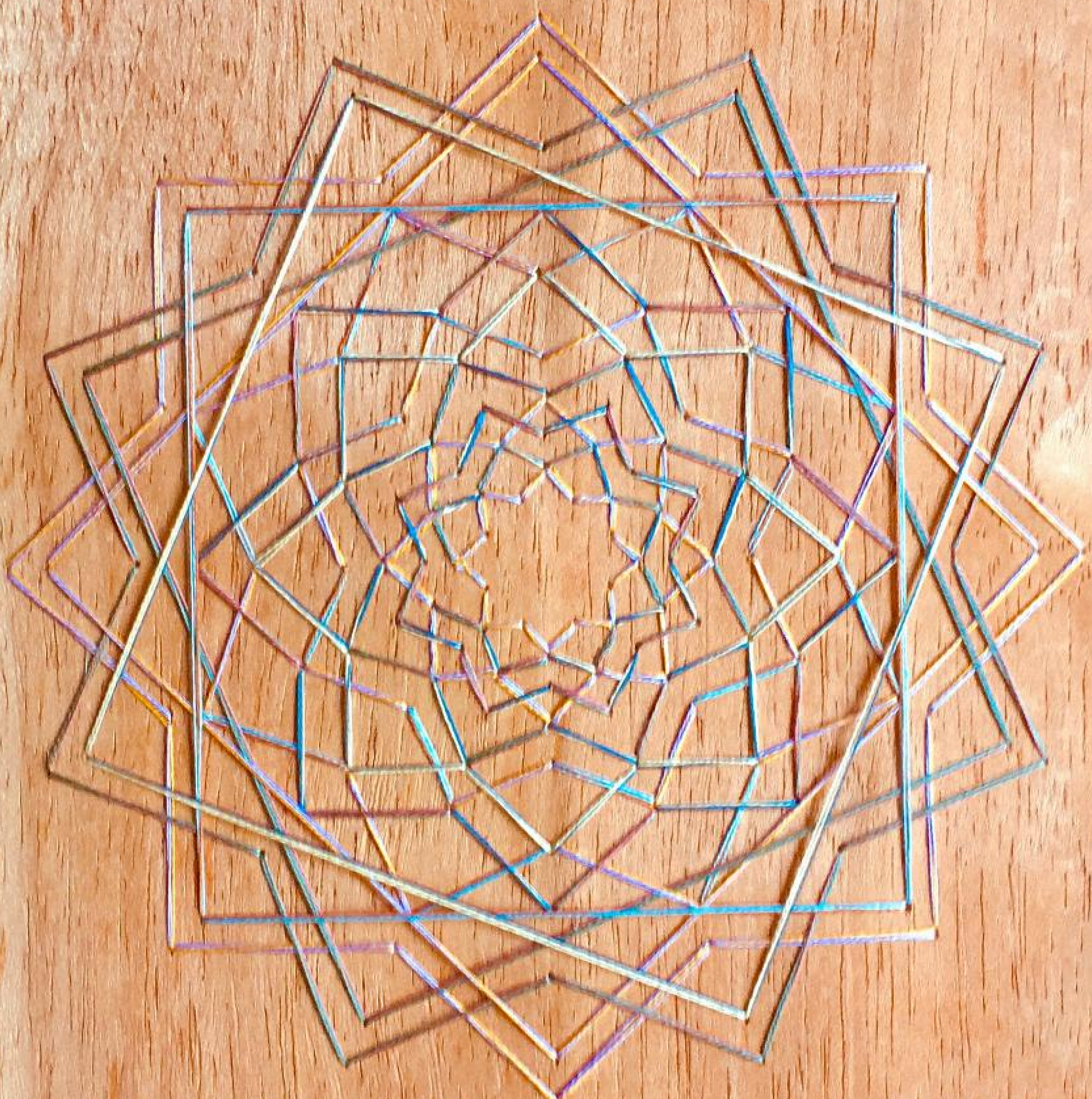
JNDSS

JOURNAL OF NURSING DOCTORAL STUDENTS SCHOLARSHIP • **VOLUME 6** • 2018



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The Journal of Nursing Doctoral Students Scholarship (JNDSS) is a scholarly publication dedicated to the development of nursing doctoral student scholarship and the advancement of nursing science. This journal is peer-reviewed by doctoral students, edited by doctoral students and targeted towards health practitioners, educators, scientists and students. This journal has both a professional and an educational mission. First, to serve the profession, each issue features articles that represent diverse ideas, spark intellectual curiosity, and challenge existing paradigms. Doctoral students will have an opportunity to explore and analyze issues and ideas that shape healthcare, the nursing profession and research around the world. Second, to fulfill its educational mission, doctoral students will be trained in the editorial and administrative tasks associated with the journal's publication and assisted in preparing original manuscripts for professional publication. This journal will be evidence of the scholarly development of nurse scientists.

Thank You

The editorial staff of the JNDSS extends our sincere thanks to the following individuals for their time and effort invested into the current edition:

Pamela Cacchione, PhD, CRNP, BC, FAAN
Susan K. Keim PhD, MSN, MS, CRNP
Justine S. Sefcik, PhD, RN

We would like to thank the following doctoral student peer-reviewers for their rigorous reviews, thoughtful suggestions and contributions to nursing science:

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We would also like to thank William Hodgson for his design help with the current issue and Cindy S. del Rosario for the photograph of her artwork used for our cover.

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Editor • Guy Weissinger, MPhil, RN

Guy Weissinger earned his Bachelor's in Psychology and Religious Studies from Rice University and his Bachelor of Science in Nursing as well Master of Philosophy in Professional Mental Health Counseling from the University of Pennsylvania. He is currently a doctoral student at Penn Nursing as well as a masters student in bioethics. His clinical background includes HIV/STI counseling, suicide assessment and intervention, emergency room nursing and public health nursing. His research interest includes health disparities experienced by people with serious mental illness, interactions between social factors and psychopathology and ethics of nursing care with vulnerable populations. Guy is a Hillman Scholar in Nursing Innovation, a Jonas Nurse Scholar Fellow and a pre-doctoral Fellow in Research Training on Vulnerable Women, Children, and Families (T32NR007100).

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Marta Bruce earned her Bachelor's in Political Economy, Public Health, and Languages from The Evergreen State College, and her Bachelor's in Science in Nursing from the University of Pennsylvania. As a Hillman Scholar in Nursing Innovation, and Jonas Nurse Leader Scholar, Marta studies disparities in trauma injuries and outcomes, trauma-informed care, and ethics of nursing care and research with vulnerable populations. Her clinical background includes firefighting and emergency medical services, as well as trauma, orthopedic, and neuroscience nursing. Marta's dissertation work will use GIS (Geographic Information Systems) to examine how geography and the social environment impact post-injury PTSD and depression in a cohort of seriously-injured urban Black men.

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Susan K. Keim PhD, MSN, MS, CRNP is currently the Program Director for the US News & World #1 ranked Nursing & Healthcare Administration and Health Leadership graduate programs, and serves as Vice Chair of the Biobehavioral Health Sciences Department in the School of Nursing at the University of Pennsylvania. She is also a Senior Fellow in the Leonard Davis Institute of Health Economics. Spurred by previous work as a hospital administrator and later as a nurse practitioner in primary care, her research interests center on clinical systems, emerging technologies and care delivery models that promote care coordination. Through the examination of factors correlated with post-hospital discharge acute healthcare utilization, she hopes to design care delivery systems aimed at reducing fragmentation in care and promoting patient safety in the community. Her doctoral dissertation work was awarded the Nursing Informatics Student Paper award at the American Medical Informatics Association conference in 2017.

Prior to Penn, Dr. Keim worked in clinical and progressive management positions at Johns Hopkins Hospital for 13 years. In addition to a PhD from Penn, she holds a MSN from Penn's Adult and Gerontology Nurse Practitioner Program, is board-certified as an Adult Gerontological Nurse Practitioner by the American Nurses Credentialing Center, and has a MS in Nursing Administration from the University Of Maryland.

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Darina Petrovsky, PhD, RN first received her Bachelors of Musical Arts from the University of Michigan, and then pursued her Masters in Nursing (MN) from the Frances Payne Bolton School of Nursing (FPB) at Case Western Reserve University (CWRU). At graduation Darina was awarded the Dean's Legacy Award for her academic excellence, service to the larger community and the capacity for leadership and innovation in health care. Darina combined her passions for music and care for older adults to continue her doctoral studies at the University of Pennsylvania working with Pamela Cacchione, PhD, CRNP, BC, FAAN and Roy Hamilton, MD, MS, where she was the first nursing student to enroll and complete a Certificate for Social, Cognitive and Affective Neuroscience. In her dissertation, Darina explored the cognitive abilities associated with music in older adults with mild cognitive impairment (MCI). Darina is a member of the Gerontological Society of America (GSA); the American Academy of Neurology and Sigma Theta Tau International Society. She was a Ruth L. Kirschstein NRSA Pre-Doctoral Fellow (NIH/NIA; F31AG055148) and her past accomplishments include being selected as a 2014-2016 National Hartford Centers of Gerontological Nursing Excellence Patricia G. Archbold Scholar and 2014-2016 Jonas Nurse Leader Scholar.

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Dr. Paule V. Joseph received her PhD in Nursing from the University of Pennsylvania and a Master's Degree as a Family Nurse Practioner from Pace University. Dr. Joseph conducted her dissertation work at the Monell Chemical Senses Center, the leaders in chemosensory biology. She is currently a clinical and translational post-doctoral fellow at the National Institutes of Nursing Research (NINR). Dr. Joseph has recently been funded by the Rockefeller University to study the effects of the microbiome in eating behavior, taste and obesity phenotype. Dr. Joseph's research interests in how brain-gut mechanism, eating behavior and genetics factor into obesity development and interventions stems from her clinical practice and research experiences. Dr. Joseph also has a strong interest in bioinformatics, research methods, transparency, and reproducibility. Prior to her PhD, she worked at Mount Sinai Hospital and at Columbia Presbyterian-Weill Cornell Hospital in New York City. Dr. Joseph brings a unique perspective to her program of research—a perspective that incorporates both clinical and bench science approaches.

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Megan Streur, PhD, RN, FNP-C, earned a Bachelor's of Science in Nursing from Oral Roberts University, a Master's of Nursing from Washington State University, and a Doctorate of Philosophy in Nursing from the University of Pennsylvania. She is currently a post-doctoral fellow at the University of Washington. Megan's clinical background include cardiovascular telemetry and intensive care as a registered nurse, and cardiac electrophysiology as a nurse practitioner at the Vanderbilt Heart Center for Atrial Fibrillation. Her research interests include atrial fibrillation symptoms, symptom clusters, and self-care, with an interest in using patient-centered technologies to improve outcomes for adults with atrial fibrillation.

Editorial

Nursing Advocacy and Nurse Scientists: A Reflection

With over 19.3 million nurses around the world (Shankar & Balasubramanium, 2013), nurses are the most common healthcare professional and perform a wide array of roles in a variety of settings. Most nurses provide direct service to patients as hospital nurses, home care nurses, nurse practitioners, or midwives. Others promote health through case management, education or administration. As doctoral students in nursing, we seek to become nursing scholars, taking on the additional role of nurse scientist in addition to our clinical, administrative and personal roles. This new role comes with its own challenges and opportunities but one role of the nurse that we must strive to maintain as nurse scientists is that of the nurse-advocate.

The Code of Ethics of the American Nurse's Association (ANA) states clearly that "nurses act as advocates for the patient and family," (ANA, 2015) placing advocacy as central to the role of the nurse and one of our primary functions. Notably, the ANA Code of Ethics was revised in 2001 with an entire core component solely directed to advocacy for patients, families, and communities. Beyond simply providing the best care or obtaining services for patients as needed, advocacy occurs when "nurses take action against any incompetent, illegal, unethical or impaired practice by any member of the health care team or healthcare system that jeopardizes the health, well-being or rights of the patient" (ANA, 2015). While advocacy can be for the benefit of a single patient or to address an issue with a single provider, nurses are called to address "incompetent, illegal, unethical" events in the healthcare system as well. Thus, advocacy has the ability to affect many patients, advancing necessary changes to ensure health care delivery that is safe, just, and upholding the rights and dignity of all patients. Thus, the role of the nurse-as-advocate is not simply to care for a single patient but to fight to achieve better health and equality for all patients and communities.

The nurse-as-advocate is not new or foreign to our profession. The foundation of modern nursing developed from advocating at both the individual and system level. Florence Nightingale, the perennial example, advocated for safer medical practices and settings for her patients, setting new standards for hygiene and sterile technique in surgical procedures in an effort to reduce post-operative fatalities and suffering. This advocacy extended to pushing for care for those who traditionally fell outside of the existing healthcare system, including religious minorities and the mentally ill (Selanders & Crane, 2012). She also fought for the human rights of sex workers and expansion of female roles in the workforce (McDonald, 2006). Other famous nurses throughout history have integrated advocacy into their work as well, even as their tactics and focal points differed as they pushed for greater respect and legitimacy in developing the role of the nurse (Selanders & Crane,2012,

Fairman, 1992). Lavinia Dock advocated for the rights of women and for nurses to be professionally independent from physicians, recognizing that her role as a nurse called her to fight the injustices that she saw not simply at the bedside but in national policy, resulting in the passage of the 19th Amendment to the United States Constitution (Garofalo & Fee, 2015).

Nor is the role of the nurse scientist new. Dorothea Dix used extensive data to demonstrate the conditions that those who lived in asylums had to face, and Florence Nightingale used epidemiology and developed her own statistical methods to demonstrate that nursing activities were improving care. Indeed, the ANA Code of ethics also states that nurses will "assist in advancement of the profession through contributions to practice, education, administration and knowledge development" (ANA, 2015). Contributing to scientific knowledge and using it to benefit the health of others is thus an integral part of our work, like clinical practice, education and administration.

Many of us joined the profession of nursing out of a calling to improve the lives of patients, reduce suffering, and protect the right of health care for all people. Nevertheless, doctoral nursing students may feel that they are caught between conflicting responsibilities as they grow into the role of nurse scientist. The responsibilities of a nurse scientist are different from those of a clinical, administrative or educating nurse, though they may have the same overall goal of improving health. Depending on the setting, nurse scientists may have to juggle competing concerns about funding, institutional issues, as well as the realities of building a career in science, not to mention attempting to balance career and personal life. These responsibilities may impinge on our efforts to advocate for the health of all or specific populations. Facing injustice, many nurse scientists may find themselves in a quandary over the extent to which our work in research actually does improve health in communities, but also, how to remain objective as a scientist while staying true to our inherent obligation as nurses to advocate for the unheard. Indeed, noting similar conflict in the world of environmental sciences, David Sedlak (2016) stated "if we move from being educators and researchers to allies of a particular cause, no matter how just, we jeopardize the social contract that underpins the tradition of financial support for basic research." Though admitting it is sometimes necessary, he feared the crossing of the "imaginary line that separates the dispassionate researcher from the…activist." (2016). Nurse scientists, especially those who study the impact of illness, injury, or inadequate access to healthcare for vulnerable populations, may face similar conflicts as they compete for grant funding or public opinion in the scientific community.

In addition to the practical and societal concerns, there are also ethical concerns for nurse scientists to consider when crossing this "imaginary line." The question of objectivity must be reflected upon, as our legitimacy as scientists depends on it. As scientists, our goal is the pursuit of truth. To nursing scientists and scholars, however, science is not simply a reductive process of measurement of objective facts but "science, as scientific knowledge, represents best efforts toward discovering truth. It is open-ended, evolving, and subject to revision and occasionally unfolds in dramatic shifts in thought"(Barrett, 2002, p. 51). While the concern for losing objectivity in the pursuit of advocacy holds weight, and should be carefully considered, it is also worth noting that the quest for objectivity remains elusive

and is not straightforward. Some have argued that ultimately, all decisions about science, from the choice of study to the methods and interpretation of results are political and moral decisions. Acknowledging that the search for true objectivity is fraught, we are left with only the checks and balances of the peer review system, transparency in the research activities, and an open marketplace of ideas. And while concerns over losing objectivity whilst pursuing more just and better outcomes for all people and communities are certainly valid and worth reflecting on, equally so are concerns for objectivity of non-advocacy-oriented scientists who work at the behest of their funders, which may introduce additional, separate forms of bias.

Advocacy is fundamental to the role of the nurse and, by extension, the nurse scientist, but such a role is not without challenges and requires thoughtful reflection. Based on conversations with nurse scientists who believe strongly in their role as advocates, the following are recommendations for balancing these roles, while also being a successful nurse scientist:

Disseminate knowledge outside of peer-reviewed journals. Though the peer-review process is an important part of the current academic institution, the majority of practitioners and almost all patients do not have access to this body of knowledge. Most nurse scientists work to implement their research but chasing the next grant or publishing in peer-reviewed journals can make getting our knowledge into the hands of those who need it harder. There are many avenues that a nurse scientist can pursue, such as educating future nurses and publishing in open access journals, but leaving the knowledge that we collect only in the hands of those who can pay does a disservice to our role as advocates.

Maintain a network of peers and mentors. Both peers who are going through the same process and mentors who came before you can help a nurse scientist to better balance the role of advocate and scientist. Though their opinions and final decisions may differ, by checking in with others one can work to retain the best possible objectivity while also recognizing the opportunities to bring one's expertise to a topic and be an advocate for change.

Stay connected to advocates, policy-makers, and non-governmental organizations who are prepared to take action. These groups are positioned well to translate our research into policies and direct outreach that impact people's lives. Supporting these groups allows us to maintain our standing as part of the scientific community, and our skills and expertise in data analysis can contribute in important ways.

Work to keep connected with the community. Many nurse scientists are unable to maintain a clinical role, but even those who do work clinically may risk losing touch with the realities of their population of focus. By engaging with communities, nurse scientists can keep connected with their role as an advocate and better understand the lived experience of a group. Engagement makes advocacy more pertinent and more effective because one understands the current situation, rather than solely what is reflected in literature. Community engagement may also improve research, as new questions or techniques may be developed. Research participants and community members are experts in their own

lives and often have innovative solutions to their problems. Community-based participatory research follows this model closely but any nurse scientist can stay connected to the needs of their community with careful thought and deliberate action.

As nurse scientists, we must reflect on our vocational roles as nurse advocates, focusing on both the pursuit of truth, and the improvement of health of individuals and populations, as mutually beneficial aspirations. As doctoral students, it may be tempting to trade our passion for objectivity and put distance between ourselves and the population we study. At times, distance from a problem or a group may be necessary, but the role of advocate must not be abandoned but rather tempered with the aid of mentors and collaborators. Advocacy is central to the role of a nurse and must be cultivated and integrated into our new role as a nurse scientist rather than replaced.

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What is an Interruption? A Concept Analysis of Interruption During Nursing Medication Administration

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Abstract

Interruptions are ubiquitous in health care settings, particularly during the medication administration process. Interruptions are associated with negative effects, one of great concern being medication errors. A consistent definition of interruption has not been found in the health care literature which has created challenges in interpreting research findings and conducting further research with generalizable results. A concept analysis using Walker and Avant's (2005) eight-step method was used to distinguish the concept of interruption from related terms, clearly define the concept, and develop a model of interruption during medication administration. The developed operational definition and model give clarity to the term interruption and can be adapted to apply to various settings and disciplines.

Keywords: interruption; medication administration; health care; nursing; concept analysis

Interruptions occur with high frequency in health care settings. Researchers have observed doctors in in-patient hospital settings interrupted on average more than five times per hour (Weigl, Müller, Zupanc, Jürgen, & Angerer, 2011), with emergency room physicians as often as once every five minutes (Institute for Safe Medication Practices [ISMP], 2012). Pharmacists and pharmacy technicians have been found to be interrupted as often as once every two minutes while dispensing medication (ISMP, 2012). Nurses have also been observed to be interrupted frequently while performing nursing tasks, particularly during medication administration (MA). Nurses are interrupted an average of 1.21-1.5 times per MA (Cooper, Tupper, & Holm, 2016; Elganzouri, Standish, & Androwich, 2009).

Fields such as psychology, cognitive science, human factors engineering, business, and aviation have studied the effects interruptions have on human performance. Researchers in psychology and cognitive science have found that interrupted tasks are more prone to error (Altmann, Trafton, & Hambrick, 2014; Li, Blandford, Cairns, & Young, 2008; Monsell, 2003) and create longer task completion times, leading to decreased task efficiency (Brumby,

Cox, Back, & Gould, 2013; Monk, Trafton, & Boehm-Davis, 2008; Monsell, 2003). Human factors engineering researchers have concluded the same (Bailey & Konstan, 2006; Loft, Sadler, & Braithwait., 2015), adding that the overall quality of work is also reduced when interruptions occur (Foroughi, Werner, Nelson, & Boehm-Davis, 2014). Human factors engineering researchers (Bailey & Konstan, 2006) have also found that people experience annoyance and anxiety when interrupted during tasks. Business researchers (Speier, Valacich, & Vessey, 1999) found that interruptions lowered performance on complex tasks and the aviation literature reports that interruptions can tax performance and contribute to accidents (Latorella, 1998).

Health care researchers have begun to study the effects interruptions have on clinical performance and patient safety. Cooper et al. (2016) provided evidence that interruptions decreased efficiency of MA and Westbrook, Woods, Rob, Dunsmuir, and Day (2010) found a positive relationship between interruptions and medication administration errors (MAEs). These findings provide support that interruptions are associated with longer task completion times and errors within health care which are consistent with findings from other disciplines (Altmann et al., 2014; Bailey & Konstan, 2006; Brumby et al., 2013; Latorella, 1998; Monk, et al., 2008; Monsell, 2003). However, it is important to note that an increase in patient safety has also been identified as a result of interruptions. Blignaut, Coetzee, Klopper, and Ellis (2017) found a significant association between interruptions and a decrease in wrong-dose medication errors. The authors observed the medication order being rechecked after an interruption occurred and explained that this likely led to a decrease in errors.

The occurrence and effects of interruptions have been studied across various fields, however, a consistent definition of an interruption has not been found in the literature. A clear meaning, or definition, of a concept is essential to formulate operational definitions, develop research instruments, generalize research findings, and replicate studies. A clear operational definition of a concept is a major component of validity of a research instrument (Brink & Wood, 1998). Without a clear definition of a concept, researchers would not know what to measure, nor be able to generalize findings. In addition, readers would not be able to understand the findings presented if a clear definition was not provided. Interruptions are associated with patient safety; thus, it is imperative to have a clear understanding of what an interruption is.

Methods

A concept analysis using Walker and Avant's (2005) eight-step method was performed with an aim to give understanding and clarity to the concept of an interruption, specifically within the context of nursing MA. The steps included in this method involve: 1) select a concept; 2) determine the aims or purposes of the analysis; 3) identify uses of the concept; 4) determine the defining attributes; 5) identify a model case; 6) identify other cases (borderline, related, contrary, invented, illegitimate); 7) identify antecedents and consequences; 8) define empirical referents (Walker & Avant, 2005, p. 65). This concept analysis included a model, borderline, and contrary case. The author believed the three cases used clarified the concept without the need for additional cases. According to Walker and Avant (2005), not all cases are required if the cases used complete the analysis.

A concept analysis on interruption was performed by nurse researchers (Brixey et al., 2007) over 10 years ago. However, a more current analysis of the term interruption and one placed in the context of MA was deemed necessary. There is a current increase in attention on interruptions in the health care setting partly due to the negative effects observed to be associated with interruptions during MA. Medication administration (MA) involves preparing medication and the act of giving medication to a patient. This process includes checking the "rights of medication": 1) the right patient; 2) the right medication; 3) the right dose;4) the right route; 5) the right time; 6) and the right documentation (Yoost & Crawford, 2016). If an omission or error occurs during any of the 6 rights, a medication error is more likely to result.

A search of the origin of the term, dictionary definitions, and an examination of the term as described in the nursing literature within the context of MA was performed. In addition, other disciplines (psychology, cognitive science, aviation, human factors engineering, and business) were also searched for the use of the term interruption. The search was conducted using the electronic databases Cumulative Index of Nursing and Allied Health Literature (CINAHL), PubMED, PsyARTICLES, and Google Scholar. The search terms "interruption", "task interruption", "nursing" and "medication administration" were used. All articles included were written in English and examined interruptions of the human experience, as opposed to, for example, an "interrupted computer signal". Nursing articles were limited in year of publication from 2007-2017 to ensure the use of the most current findings from the nursing discipline. Articles other than nursing were not limited to a timeframe. Seven nursing articles and one article from each of the other disciplines were used in the analysis.

Definitions and Uses of Interruption

The word interruption is derived from the Latin word *interruptionem* which means: a break of continuity; a breaking in upon some action (Interruption in Online Etymology Dictionary, 2018). Meriam-Webster (2018) provides a similar definition of interruption: 1. to stop or hinder by breaking in; 2. to break the uniformity or continuity of. The Cambridge English dictionary (2018) provides the definition of an interruption as: an occasion when someone or something stops something from happening for a short period.

Other uses of the word interruption include describing a hardware signal that breaks the flow of a computer program execution. In pharmacology a planned temporary suspension from taking medication is called a "structured treatment interruption". In the health care setting, one might hear the term "interrupted suture" to describe a suture in which each stitch is separately tied. These definitions and uses of the term interruption all have common elements. They each refer to a break, stop, suspension, or lack of continuity of something. This is consistent with the origin and definitions of the word.

Related Terms

The terms multi-tasking, disruption, and distraction were frequently used in the interruption research across various disciplines. These terms were at times used synonymously with the word interruption, grouped with interruptions, or may have been used to describe a result of an interruption. Each term is discussed below.

Multi-tasking. Dictionary.com (2018) defines the term multi-tasking as: to perform two or more tasks simultaneously. Researchers in the field of psychology describe multi-tasking as "undertaking multiple tasks at the same time; interleaving independent tasks in the same time period and switching among them" (Adler & Benbunan-Fich, 2013, p. 1441). Multi-tasking occurs with high-frequency in health care settings and are many times a result of an interruption.

Nurses may choose to multi-task while in the process of MA. As an example, a nurse may receive a phone call while performing MA and instead of suspending the process of MA for the duration of the phone call, the nurse chooses to engage in the interruption created by the sender of the call, by simultaneously attending to the phone call and continuing the MA process. In this example, imagine that the nurse talks with the sender of the call while continuing to take the medication out of the storage device, looking at the name of the medication, and placing it in a medication cup.

Disruption. Disruption is another related term found in the literature when researching the term interruption. A disruption is defined by Merriam-Webster (2018) as: 1. to break apart; 2. to throw into disorder; 3. to interrupt the normal course or unity of. Human factors researchers have described disruptions in relation to interruptions as follows: "…interruption research involves time and errors as measures of disruption, as they are often the most appropriate metrics for determining the effects that interruptions have on task performance" (Foroughi et al., 2014, p. 1262). In this description, the term disruption is an *effect* of an interruption. Like multi-tasking, a disruption can *result* from an interruption.

Distraction. Distraction was the most common term related to interruption found in the literature. Distraction is defined as: something that distracts: an object that directs one's attention away from something else (Distraction, 2018). Unlike the definitions of interruption which refer to a break, stop, suspension, or lack of continuity of something, distraction refers only to directing one's attention away from a primary task. In the field of psychology authors have made the distinction between a distraction and interruption clear: "Unlike mere distractions (e.g., the onset of an unexpected sound), which can temporarily draw attention away from a primary task, interruptions require the distinct cessation and resumption of the ongoing task in order to perform a separate intervening activity" (Hodgetts & Jones, 2006, p. 1120).

Distractions and interruptions were grouped together, used synonymously, or defined as the same in articles from various disciplines. Despite the interchangeable literary use, there is a clear distinction between a distraction and an interruption, whereby a distraction only directs attention away from something, and an interruption requires stopping a task. A distraction may precede an interruption, by creating an alert, however this is different than an interruption itself.

Psychology, Human Factors Engineering and Aviation

Within the field of psychology, researchers have described a definition of an interruption as "…interruptions typically note the unexpected nature of the interruption and the prompt cessation of the task at hand due to the interrupting task" (Weng, Huber, Vilgan, Tobias,

& Sanderson, 2017, p. 77). Human factors engineering (HFE) researchers have described the term interruption as "…refers to the suspension of one stream of work prior to completion, with the intent of returning to and completing the original stream of work" (Loft et al., 2015, p. 1417). In aviation the term was defined as: "…to occur only when an external event (stimulus) caused at least one pilot to stop performing (interrupt) an ongoing task. Furthermore, the event must have had two characteristics. First, it must have been unanticipated… Second, the event must have had a distinct beginning" (Damos & Tabachnick, 2001, p.1).

Cognitive Science

Altmann and Trafton (2002) provided a definition of an interruption in their Memory for Goals model as "…a situation in which a goal must be suspended before it is completed, and then resumed later" (p. 67). Here the words *suspended* and *resumed* are critical in this description of an interruption. Suspended is similar to the words *stop* or *break* from the dictionary definitions. The word *resumed* is also very important to note. The necessary resumption of a task, or the intent to resume a task, after it has been interrupted is key to this theoretical definition. If the task was not intended to be resumed, then the event of an interruption would change to become a *conclusion* of the task.

Each description in the fields of psychology, cognitive science, HFE, and aviation uses a unique definition of the term, yet they all have commonalities. Each definition refers to a cessation, suspension, break, or stopping of a task. These are critical components of what makes an interruption truly an interruption; the task must be stopped. Some of these definitions also refer to the unexpected nature of the interruption and the necessity to have an intention to resume the task that has been suspended. The unexpected nature of the interruption and the necessity to have an intent to resume the task that has been stopped are also key components of what make up an interruption.

Business

In contrast to the definitions just described, some business researchers have defined an interruption as "An interruption breaks a decision maker's attention on a primary task and forces the decision maker to turn his or her attention towards the interruption, if only temporarily..." (Speier, et. al, 1999, p. 339). According to the dictionary definition, this description given of an interruption is actually one of a distraction. Nowhere in this description do the authors state that the interruption causes one to stop the task. There is only the mention of one's attention being broken and turned toward the interruption.

Nursing

Nursing researchers have provided varying operational definitions of the term interruption, and many use the terms distraction and interruption interchangeably. This is incorrect, since as previously discussed the two terms stand alone. Although some similarities in the definitions from the nursing literature were found, such as "break in task", "ceased the preparation", or "break in the activity", there were also many unique descriptors identified in the definitions. One definition referred to a disruption of the nurse's focus, while others included the necessity to "carry out a secondary task" or "attend to an external stimulus". An interruption does not necessarily require engagement in a secondary task; it merely

requires stopping the primary task. Table 1 provides definitions of interruptions from the nursing literature.

Table 1. **Definitions of Interruptions Provided in Nursing Articles**

Author(s)/Year	Definition of Interruption Provided
Aguirre, Wilhelm, Backer, Schoeneman, & Koehler (2015, p. 54)	"anything that disrupted the nurse's focus on or caused a break in the task he/she was performing"
Beyea (2014, p. 1)	"Distractions and interruptions consist of anything that disrupts and individual from the current task by diverting one's attention"
Biron, Lavoie-Trembley, & Loiselle (2009, p. 330)	"a break in the activity being performed to carry out a secondary task"
Craig, Clanton, and Demeter (2014, p. 252)	"any emergent or non-emergent stimulus that 'halts the activity being performed for monitoring purposes or to carry out a secondary task' (Biron et al., 2009)"
Elganzouri, Standish & Androwich (2009, p. 206)	"An interruption or distraction, for this study, was defined as any event that disrupts the nurse in the medication administration process"
Trbovich, Trip, Prakash, Savage & Stewart (2010, p. 212)	"any externally initiated event (e.g., question from a patient, telephone call, infusion pump alarm) that caused the nurse's attention to be diverted from a primary task… this definition encompasses both interruptions and distractions"
Westbrook et al. (2010, p. 684)	"situations in which a nurse ceased the preparation or administration task in order to attend to an external stimulus"

Significance for Nursing

Given that interruptions are ubiquitous in health care settings, have a negative effect on productivity, and are associated with patient safety, an increase in knowledge and research of interruptions within the nursing context is warranted. However, the nursing literature has not provided a clear and consistent definition of the term interruption. Without a consistent definition or meaning of the concept interruption in the nursing literature, challenges in understanding results and comparing findings are created.

Analysis of Interruption of Medication Administration

The structure and function of the concept of interruption as it is used in language among various disciplines and how an interruption is like and unlike related terms has been presented. Using the Walker and Avant (2005) eight-step method for a concept analysis, the defining elements (attributes, antecedents, and consequences) of the concept were determined.

Attributes

Defining attributes, or characteristics, of a concept are the most frequently seen attributes that cluster together with the concept (Walker & Avant, 2005). These specific characteristics differentiate the concept from others. The defining attributes of an interruption were

determined through this analysis to be: 1) a human experience; 2) suspension of the primary task; 3) engagement or non-engagement in the secondary task; 4) intention to resume or resumption of the primary task.

Human experience. Humans, machines, and actions can be interrupted. Even an interruption of weather has been used in an example in the Meriam-Webster dictionary (2018): "a hot spell occasionally interrupted by a period of cool weather." When discussing machines, a hardware signal that breaks the flow of a computer program execution is termed an interruption. As Brixey et al. (2007) pointed out, human conversations can be interrupted as well as tasks. In this concept analysis it is specifically an interruption of a human task within the context of nursing MA that has been examined.

Suspension of the primary task. The nurse must suspend or stop the action of MA. This is crucial for an interruption to occur and aligns with the origin and dictionary definitions of interruption. An interruption requires a cessation, suspension, break, or stopping of an action to be considered an interruption. If a suspension of the task does not occur, it may be that the nurse chose to engage in multi-tasking or was merely distracted.

Engagement or non-engagement in the secondary task. The recipient must decide whether to engage in the presented secondary task or not engage in the secondary task. Some authors describe an interruption with the requirement to engage in the presented secondary task (e.g. conversation, answering the phone, involvement in the secondary task), although this is not accurate. If a recipient decides not to engage in the secondary task, but stops the primary task of MA, if even for very briefly, an interruption occurs.

Intent to resume the primary task/resumption of the task. The nurse must have an intent to resume the task of MA or return to the task to complete the process. If there is no intent to resume or actual resumption of the task, then the task has been *concluded*, not interrupted.

Antecedents

Antecedents are the elements that must occur prior to the concept (Walker & Avant, 2005). The antecedents of interruption were identified as: 1) external or internal initiator/source 2) unexpected alert; 3) recipient's cognitive system is stimulated by the alert.

External or internal initiator/source of the alert. There must be a source or initiator of the alert prior to an interruption occurring. This source or initiator can be from the environment (external) or self-induced (internal). External alerts involve the different senses. They can be audible (e.g. sounding of an alarm), visual (e.g. colleague entering the room), tactile (e.g. person touching the recipient on the shoulder), or olfactory (e.g. smell of smoke in the air).

An internal alert, which precedes a self-interruption, occurs when a thought suddenly forms in the mind. Self-interruptions have been reported to account for 40-50% of task switches (Adler & Benbunan-Fich, 2013; Katidioti, Borst, vanVugt, & Taatgen, 2016) and result in lower accuracy of tasks (Adler & Benbunan-Fich, 2013). Gathering supplies and initiating conversations with others are common self-interruptions that occur when nurses are in

the MA process (Aguirre, Wilhelm, Backer, Schoeneman, & Koehler, 2015; Craig, Clanton & Demeter, 2014; Kreckler, Catchpole, Bottomley, Handa, & McCulloch, 2008). Although self-interruptions may be at times difficult to identify by an observer, this type of interruption is widespread and should be considered when examining interruptions.

It is important to note that the source may or may not have a planned intention to interrupt the recipient. For example, the audible ring from the phone may have been mistakenly dialed, intended for a different nurse. The person who walks into the room may not have intended to create an alert and divert the nurse's attention and cause an interruption.

Unexpected alert. An unexpected alert can occur at any time during the process of MA. The alert must be unexpected or unplanned, otherwise it would be a planned event.

Stimulation of the recipient's cognitive system. The recipient's cognitive system must be stimulated to detect the alert. The nurse must be able to hear, see, feel, smell, or become aware of the alert. If the cognitive system is not stimulated, the recipient would not be aware of the alert, which must precede the interruption.

Diverts attention. The alert must divert the nurse's attention. If the nurse ignores the alert, or is unaware of the alert, the attention has not been diverted.

Consequences

Consequences of a concept are those events or incidents that occur as a result of the concept (Walker & Avant, 2005). The consequences of an interruption during MA were found to be primarily negative, although some positive consequences were also found. The consequences found were: 1) decreased efficiency/productivity; 2) perceived cause of errors; 3) decreased patient safety; 4) increased patient safety.

Decreased efficiency/productivity. Interruptions inherently create longer task completion times. The interruption event, or interruption proper, creates what is termed resumption lag. Resumption lag is the time taken to re-orient to the original task and resume that task (Brumby et al., 2013) after the break in task has occurred. The amount of time taken if the recipient decides to engage in the secondary task also needs to be accounted for. This time can be quite significant. A study conducted by Thomson and colleagues (2009) found that interruptions accounted for an average of 10 additional minutes during the MA process.

Perceived cause of medication errors. Many nurses have reported that they believe MAEs are a consequence of interruptions. Surveys and self-reports from nurses indicate interruptions as a leading cause of MAEs in the health care setting (Hayes, Jackson, & Davidson, 2015; Hewitt, 2010; Mayo & Duncan, 2004). The perceptions that interruptions lead to medication errors has been supported by empirical evidence (Westbrook et al., 2010).

Decreased patient safety. Westbrook et al. (2010) found with each interruption a nurse received during MA there was a 12.1% increased chance of a procedural error (e.g. not checking a patient's identification band prior to administration of medication). In addition,

with each interruption a nurse received, the risk of a clinical medication error (e.g. wrong dose of medication) increased by 12.7%. The more frequent the interruptions, the higher the risk of committing a medication error resulted. The researchers found statistical significance ($P = <.001$) in their study of a positive relationship between interruptions and MAEs.

Westbrook et al. (2010) also classified severity of medication errors in their study and found the severity of errors increased with frequency of interruptions. The more often a nurse was interrupted during the same process of MA, the higher the risk of a severe medication error occurred.

Increased patient safety. Blignaut et al. (2017) found through their direct observational study that interruptions lowered the risk of wrong-dose medication errors. It was observed in their study that the medication order was often re-checked after an interruption took place, which the researchers surmised led to a decrease in wrong-dose errors. In addition, Sassangohar, Donmez, Trbovich, and Easty (2012) discuss in their article that interruptions in health care can lead to an overall increase in patient safety. The authors describe how nurses may be involved in a task (such as MA) and hear an overhead page to attend to a patient in critical condition. The authors also give the example that a nurse may be interrupted by a source to convey important information. This may be an alarm on an IV pump warning of an incorrect setting that could lead to an error.

Model Case

A model case has been provided to illustrate the defining attributes, antecedents, and a potential consequence of an interruption during the process of nursing MA. The defining attributes, antecedents, and a consequence are underlined:

Nurse A is in the hospital unit medication room preparing a patient's ordered medication, hydromorphone. As Nurse A is checking the medication name on the label against the order, Nurse Z enters the medication room and says enthusiastically to Nurse A, "Hi there! I haven't worked with you in almost two weeks. How are you?". Nurse A stops looking at the medication label, turns attention to Nurse Z and replies, "I know, it's been a while since I've seen you." The two nurses continue to converse for over one minute. Nurse A then returns to preparing the medication. Nurse A incorrectly believes that all the medication rights have been checked and leaves the medication room. Nurse A administers hydrochlorothiazide to the patient, instead of the intended hydromorphone, which results in a serious medication error.

The interruption of Nurse A in the model case included the four defining attributes, the four antecedents, and one of the consequences. The attributes in the model case were: 1) a human experience; 2) suspension of the primary task of MA; 3) engagement in the secondary task; 4) resumption of the primary task.

In this model case, the human experience is that of Nurse A preparing medication in the medication room. The source of the interruption is external, initiated by Nurse Z. Nurse A's attention was diverted either by the visual alert of Nurse Z entering the room, or the audible

alert when Nurse Z stated, "Hi there!". Nurse A stops looking at the medication label, which is part of the MA process. Nurse A engages in the secondary task of conversing with Nurse Z. Nurse A resumes the task of MA.

The antecedents in the model case were: 1) external initiator/source; 2) unexpected alert; 3) stimulation of the recipient's cognitive system; 3) diverted attention. The initiator or source of the alert and interruption was Nurse Z. An unexpected alert occurred when Nurse Z entered the medication room and stated, "Hi there!". Nurse A's cognitive system was stimulated, evidenced by Nurse A diverting attention from the MA process and responding to the alert(s).

The consequence in the model case was: 1) decreased patient safety due to a medication administration error. In the model case Nurse A resumed the task of MA after being interrupted, and a medication error ensued.

Borderline Case

Borderline cases contain most, but not all, of the defining attributes of a concept (Walker & Avant, 2005). A borderline case of an interruption during MA has been provided:

Nurse A is in the hospital unit medication room preparing a patient's ordered medication. As Nurse A is checking the medication name on the label against the order, Nurse Z <u>enters the medication room</u> and says enthusiastically to Nurse A, "<u>Hi there</u>! I haven't worked with you in almost two weeks. How are you?". <u>Nurse A smiles in response</u> but does not stop looking at the medication label. After Nurse A has checked all the rights of medication, Nurse A turns to Nurse Z and says "Sorry, I was just finishing up. I'm doing well. How are you?" Nurse A converses with Nurse Z for over one minute, then leaves the medication room. Nurse A correctly administers the medication to the patient.

The borderline case included one of the defining attributes, three antecedents, and none of the consequences. The attributes and antecedents are underlined. The attribute in the borderline case was: 1) a human experience. In this borderline case a *distraction* occurred. An interruption did not. The attribute of a human experience was evidenced by Nurse A preparing medication in the medication room, however this was the only attribute of an interruption found in this case. Nurse A did not stop the task of MA. The task is continued despite the alerts, or distractions, created by Nurse Z.

The antecedents in the borderline case were: 1) external initiator/source; 2) unexpected alert; 3) stimulation of the recipient's cognitive system. The initiator or source of the alert was Nurse Z. An unexpected alert occurred when Nurse Z entered the medication room and when Nurse Z stated, "Hi there!". Nurse A's cognitive system was stimulated, evidenced by Nurse A responding to the alert(s) with a smile. There were no consequences in the borderline case.

Contrary Case

A contrary case is a clear depiction of what the concept being analyzed is not (Walker & Avant, 2005). A contrary case of an interruption during MA is below:

Nurse A is alone in the medication room, preparing a patient's ordered medication. The door is closed, signaling to other staff that no one should enter the room while Nurse A is in there. Nurse A has handed off his assigned phone to another nurse prior to entering the medication room. No one enters the room and no distractions or interruptions occur while Nurse A prepares the medication. Nurse A never stops mid-task while preparing the medication. Nurse A leaves the medication room, walks to the patient's room without interruption, and correctly administers the medication to the patient.

In the contrary case presented it appears that the agency has strict policies in place to limit any interruptions during MA. Nurse A follows these policies by handing off his phone prior to beginning the process of MA and closing the door, signaling to others to not enter the room. Nurse A completes the task of medication administration without interruption and no errors occur.

Empirical Referents

Defining the empirical referents of a concept is the final step in Walker and Avant's eight-step method. Empirical referents are "classes or categories of actual phenomena that by their existence or presence demonstrate the occurrence of the concept itself" (Walker & Avant, 2005, p. 73). The empirical referents for an interruption during MA were found to be 1) suspension of the primary task due to an unexpected alert; and 2) intent to resume or resumption of the primary task.

Definition of Interruption

Based from the analysis performed, a definition and model (see Figure 1) of interruption were developed. An interruption is defined as: occurs when an unexpected alert diverts the recipient's attention, causing the recipient to suspend the primary task, if only temporarily, with intent to resume the original task.

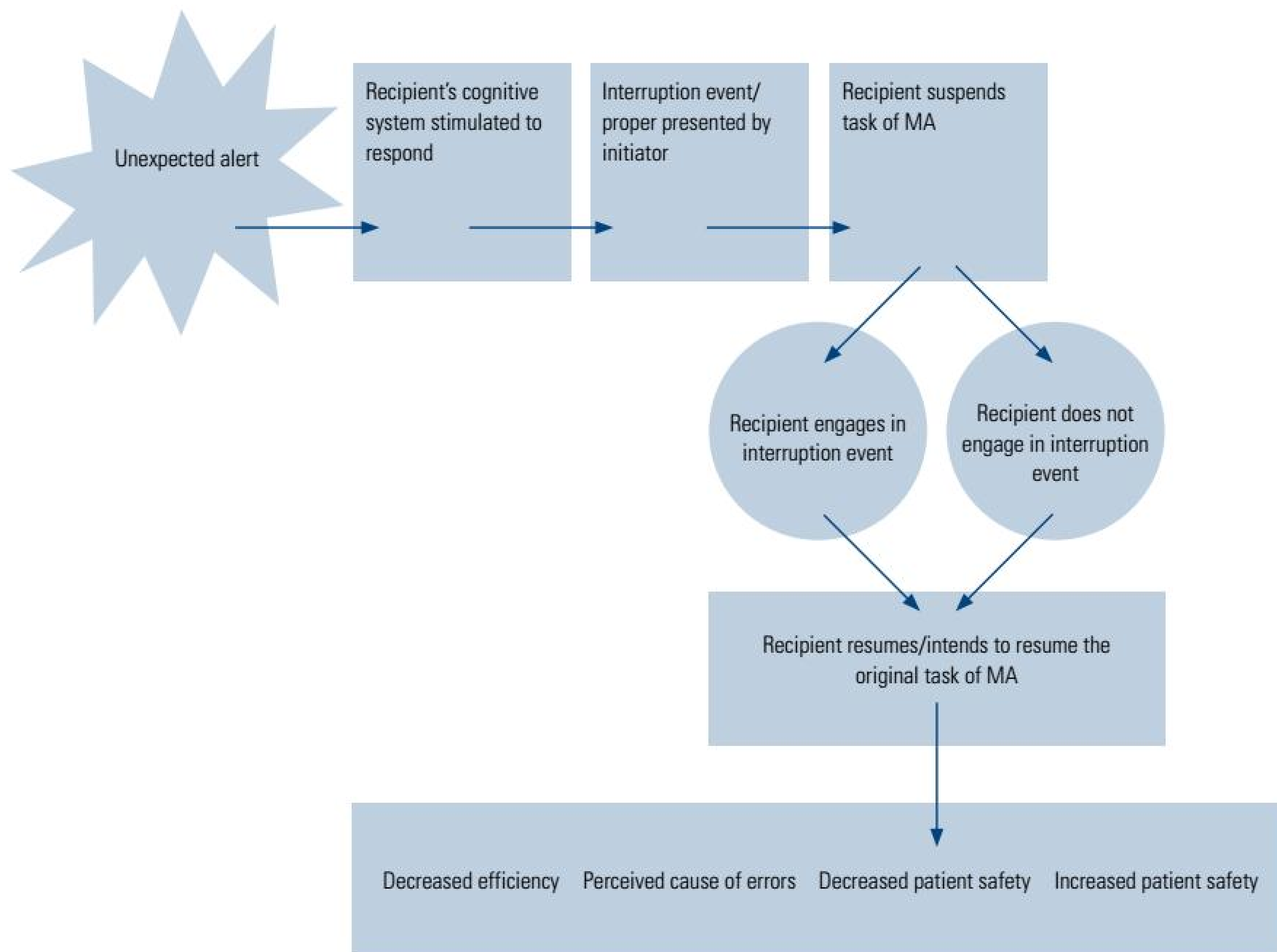
Discussion

Interruptions have the potential to occur in all human experiences. The concept of interruption has been examined within various disciplines and have been largely shown to have associations with negative effects. As they relate to the discipline of nursing, interruptions can lead to deleterious effects such as harmful, even fatal, medication errors. However, interruptions have also been shown to be associated with positive effects in health care settings and are necessary in certain situations. For example, interruptions of nursing tasks may be needed to mobilize personnel to assist in emergency situations. In addition, interruptions may occur to convey important information such as a critical lab value that leads the nurse to withhold administering a medication to a patient. In these instances, interruptions have the potential to increase patient safety.

Further research on interruptions in nursing contexts is needed. A better understanding of the associations of interruptions and patient safety, as well as evidence to guide the identification of targeted interventions and strategies aimed to best manage interruptions is required. Current interruption management interventions are aimed merely to reduce interruptions during MA due to the interpretation that interruptions have only a negative association with patient safety. Such interventions include "no interruption zones" and

nurses wearing "do not disturb" vests or sashes during MA. Raban and Westbrook (2014) performed a systematic review to explore the effectiveness of such interventions on decreasing interruption rates and MAEs and found weak evidence of the effectiveness of these interventions to significantly reduce interruption rates, and limited evidence of their effectiveness to reduce MAEs (Raban & Westbrook, 2014). An important strategy to improve patient safety is the incorporation of management strategies for interruptions (Beyea, 2014; Hayes et al., 2015; Rafferty & Franklin, 2017; Westbrook et al., 2017) rather than focusing solely on decreasing their occurrence.

Figure 1. **Model of Interruption during Medication Administration**



Results from well-designed studies can aid researchers in expanding evidence in this topic area, guide the development of health policies, and inform educators and administrators of effective strategies to best manage interruptions. Colligan and Brass (2012) and Johnson and colleagues (2017) have identified how nurses currently manage interruptions during MA. It is recommended to extend this work with an aim to discover which strategies are both practical and effective to mitigate the negative effects of interruptions during MA. However, before we can continue this research, we need a clear definition and understanding of the concept we are examining.

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Incivility and Job Demands in the Work Environment Faced by Nurse Managers: A Meta-Synthesis

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Abstract

Aim: To examine contextual relationships between the clinical work environment, the role of the nurse manager (NM), and workplace incivility (WPI).

Background: Organizational facilitators, or contributors, of WPI in nursing work environments are not thoroughly understood from a systems perspective, such as organizational communication and support, leader preparedness, organizational changes, and job demands. Nurse managers hold a unique position between senior management and staff and may offer insight into this phenomenon.

Methods: Primary qualitative studies that focused on job demands and the work environment were included in this study. Studies were appraised using a qualitative appraisal tool. An interpretive thematic synthesis was performed using established meta-synthesis standards.

Results: Seven studies were included in the meta-synthesis. Three themes emerged for NMs that illustrate WPI as an unintended consequence of work environment systems: (1) Frustrations with Organizational Demands and Communication – Working Around Conflict, (2) The Bottleneck Effect – Balancing Job Demands Without Adequate Support and Resources in an Uncivil Environment, and (3) Negative Outcomes Secondary to Job Demands and Conflict in the Work Environment.

Discussion: Workplace incivility is entangled in daily operations and is an unintended consequence of system issues due to high demands, and problems with communication and support.

Implications: Nurse managers' experiences of organizational support and communication issues, the impact of job demands on the NM workload, and the relationship with WPI can inform future research to examine relationships between factors in the work environment and WPI.

Background

In an American Nurses Association survey conducted in 2017 that included clinical nurses and nurse managers, "people issues" was ranked in the top three most challenging aspects of the job. "People issues" included workplace incivility (WPI), bullying, toxic work environment, stress, and lack of support (O'Keeffe, 2017, p. 34). "Workplace incivility is low-intensity deviant behavior with ambiguous intent to harm the target, in violation of workplace norms for mutual respect. Uncivil behaviors are characteristically rude and discourteous, displaying a lack of regard for others" (Andersson & Pearson, 1999, p. 457). Behaviors associated with WPI tend to be subtle and include actions such as rudeness, belittlement, lack of acknowledgment, interruptions, disregard, and discourteousness; these behaviors can lead to more aggressive misbehaviors (Andersson and Pearson, 1999, Clark and Springer, 2010, Pearson, Andersson, & Wegner, 2001). Workplace incivility is rampant in the healthcare industry, and nurses will likely experience WPI during their career (Gordon, 2005). According to Laschinger, Wong, Cummings, and Grau (2014), 28-53% of 1,241 Canadian nurses reported having experienced various forms of WPI. In 2015, the American Nurses Association released a position statement that nurses and employers are accountable for creating and sustaining healthy work environments that are free of forms of workplace mistreatment. Workplace incivility continues to have a presence in nursing work environments, and it is essential to explore aspects of the system to understand what is precipitating these misbehaviors. Environment factors, or contributors, to WPI in nursing work environments have not been thoroughly investigated. Identification environmental factors that contribute to WPI can support future research studies to examine factors amenable to change that will guide the modification of systems, processes, and behaviors to create healthy work environments.

In healthcare organizations, WPI has detrimental effects on employees, patients, and operations of facilities (Schilpzand et al., 2016). Consequences of WPI experienced by nurses include psychological and psychosomatic symptoms, such as distress and exhaustion (Leiter, Price, Laschinger, 2010; Vagharseyyedin, 2015). Healthcare managers are experiencing WPI when voicing their concerns about the quality of care, as demonstrated by increased reports of harassment and retaliation (National Association for Healthcare Quality, 2012). In a qualitative study conducted by Kerber, Woith, and Jenkins (2015), graduate nurses reported delayed care due to incivility among members of the healthcare team and felt that the patient experience was jeopardized. Productivity loss (Hutton & Gates, 2008), absenteeism (Lewis & Malecha, 2011), and turnover intention (Leiter et al., 2010) have been associated with WPI. The adverse effects of WPI have been supported in the literature; however, environmental factors that contribute to WPI may explain why incivility continues to have a presence in nursing work environments.

In a conceptual framework proposed by Andersson and Pearson (1999), the climate and formality of the work environment can contribute to the occurrence of incivility. To fully understand this phenomenon, precursors and causes of WPI have become areas of interest across disciplines. Research findings support that distributive injustice, job dissatisfaction, work exhaustion, power differentials, high workload, and prior experience of WPI can lead to WPI (Blau & Andersson, 2005; Francis, Holmvall, & O'Brien, 2015; LaSala, Wilson, & Sprunk, 2016). Several studies examining precursors of WPI have been conducted using

students and professionals from other industries (Francis et al., 2015; Harold & Holtz, 2015; Porath & Pearson, 2012; Torkelson, Holm, Backstrom, & Schad, 2016). Although some research has investigated precursors of WPI, contributors of WPI remain unclear in clinical nursing work environments from a systems perspective.

It is essential to investigate WPI from a systems perspective to "understand and predict factors relevant to nursing care delivery and outcomes" (Brewer, Verran, & Stichler, 2008, p. 11). The health care system is comprised of "people, processes, technology, procedures, politics" and additional variables that are interrelated (Brewer et al., 2008, p. 7). It is necessary to investigate organizational change, initiatives, organizational support and communication, leader preparedness, and job demands to understand organizational factors that contribute to WPI. Job demands are defined as "physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological effort and are therefore associated with certain physiological and/or psychological costs" (Bakker & Demerouti, 2014, p. 9). Nurse managers may offer insight into organizational issues, including job demands on the role, that may explain how incivility occurs in organizations that precipitates from environmental factors.

Nurse managers (NMs) are caught between clinical microsystems at the point in which care is delivered and operations at the organizational level. Roles of clinical NMs include: (a) leadership and management over a group of direct care clinical personnel in which healthcare is delivered to patients/clients; (b) resource management; (c) ability to hire, fire, and promote; (d) coordination of unit to meet the goals and strategic plans of the institution; and (e) coordination of the unit/area's activities with the purpose, function, and role of the unit/area and institution (KeyDifferences, 2015; UC Regents, 2016). The NM role and position in healthcare organizations create an opportunity for researchers to tap into the clinical context and system to understand system issues and unintended consequences. Through the examination of relationships between the clinical work environment, NM role, and WPI, hypotheses can be generated for future empirical testing.

This study aims to synthesize the current qualitative research on the perceptions of NMs to examine the relationship between the clinical nursing work environment in which care is delivered, the role of the NM, and WPI through an interpretive thematic synthesis. Enhancing Transparency in Reporting the Synthesis of Qualitative Research (ENTREQ) standards of qualitative meta-synthesis were used as guidelines for this study (Tong, Flemming, McInnes, Oliver, & Craig, 2012). Qualitative research offers a unique way to investigate de novo contextually-based phenomena and provides access to detailed perspectives of the interrelationships between the environment, people, and unintended consequences. Qualitative research permits for factors and relationships to be explored as they naturally occur (Creswell, 2013), allowing for researchers to probe further into untested concepts. Qualitative research enables investigators to examine how relationships exist and why these relationships happen in the manner they do, as described by those who experience them. This qualitative meta-synthesis aims to: (1) understand how clinical NMs perceived demands in the work environment, and (2) explore what relationships exist between the clinical work environment, the role of the clinical NM, and WPI.

Methods

For this study, a qualitative meta-synthesis was conducted. A meta-synthesis is a form of research in which findings from primary qualitative research studies are integrated and synthesized, and new meanings are brought forth pragmatically (Finlayson & Dixon, 2008; Tong et al., 2012). An interpretive approach, using social constructivist assumptions, was used as the framework for this study (Paterson, Thorne, Canam, & Jillings, 2001; Sandelowski & Barroso, 2007; Thomas & Harden, 2008). An interpretive approach adopts the language, context, participant quotes, and interpretations in the studies as primary data. The data is then deconstructed and used for the interpretive research to produce new conclusions about our research question.

Primary qualitative research articles published in the English language were examined. The nurse manager role was expanded between 1992-1999 to include the job duties previously described. The inclusion of these duties occurred after the healthcare system was restructured in the United States in the 1990s; therefore, the search selection included studies from 2002-2016, as the NM role was considered mature after the healthcare system was restructured (Shirey, 2006). Mixed methods primary studies, synthesized using different guidelines, were excluded from this study. Figure 1 provides the article selection process including a list of search terms and databases used to abstract articles.

Titles and abstracts of records were screened for relevance. Relevant full-text articles were then reviewed for eligibility. Table 1 provides inclusion and exclusion criteria. The final sample for this study included seven qualitative primary research articles. Table 2 presents the final yield table. Letts and colleagues' (2007) qualitative appraisal tool, The McMaster University Tool, was used to critically appraise the articles by the team, which included two qualitative research experts. The use of the appraisal tool is used as the first step into immersion for analysis. Study components were critically evaluated based on the guidelines including the design, methods, analysis, and rigor.

A team-based thematic synthesis, guided by Thomas (2006) and Thomas and Harden (2008), was conducted in which the primary data was examined, deconstructed, and reconstructed into categories emerging from the data. Research articles were independently reviewed to grasp the gestalt of each study. The articles then underwent several reviews in which notes were documented and compared across each article. Independent parallel coding was conducted using a team-based process. Segments of text from the results, findings, and discussion sections were documented and color-coded. Category labels and descriptions emerged during the analysis and were reevaluated after reviewing each study. The coded text was arranged in a manner that captured the meaning and perspective of each category. The team met to discuss the code structure and findings, and to resolve differences. Revision of categories continued while removing redundancy, until the final code structure was developed (Braun & Clarke, 2006; Thomas, 2006). Consensus building processes used by the team produced high overlap, and all decisions were documented (Thomas, 2006). As part of the interpretive integration process a reciprocal translation matrix was developed, grounding emerged themes to the original studies (Goins et al., 2015) (The reciprocal translation matrix is available upon request to the corresponding author).

Figure 1. **Article Selection Process**

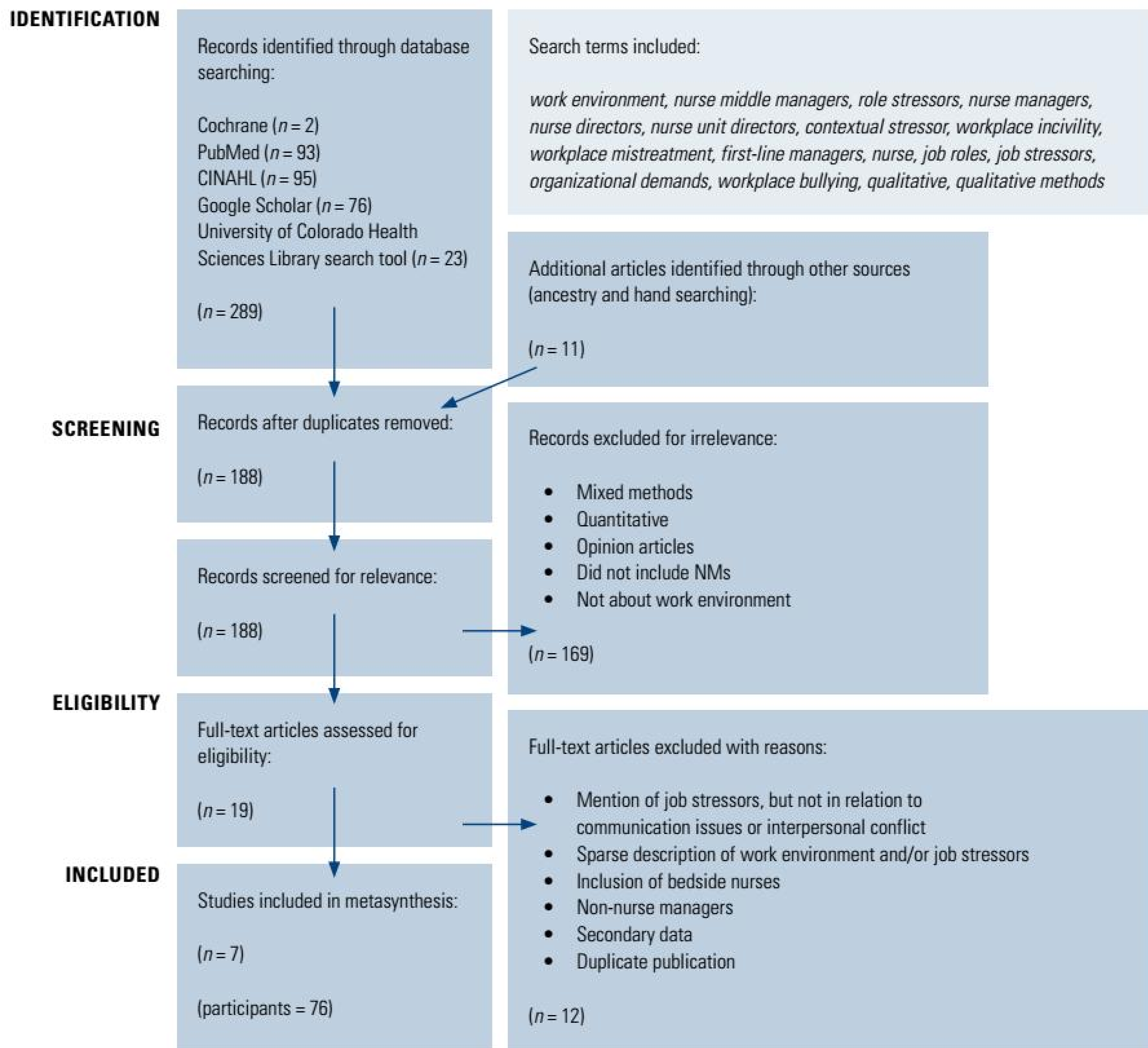

Table 1. **Inclusion and Exclusion Criteria**

Inclusion Criteria	Exclusion Criteria
Research studies that: • employed qualitative methods; • included nurse managers/directors managing personnel in a setting in which healthcare services are provided; • focused on the work environment with accounts job stressors (specific to communication, support, and interpersonal conflict); and • were published primary studies available in electronic databases since 2002.	Research studies that: • employed mixed methods and/or quantitative methods; • were written in the non-English language; • had non-nurse manager/director participants; • employed secondary data collection; and • had an inadequate description of the work environment and/or job stressors.

Table 2. **Final Yield Table: Description of Reviewed Studies**

Authors & Year	Study Purpose	Country	Study Design	Methods	Participants	Summary of Findings
Cziraki et al. (2014) (#1)	To determine recruitment and retention factors and challenges to the job for nurse managers. These factors are to help identify possible organizational strategies for retention and recruitment purposes	Canada	Qualitative descriptive	Semi-structured interviews	• 11 nurse managers • 9.5-30 years of RN experience • 1-23 years of manager experience • age 30-58 • ADN - 1; bachelor's degree - 5; graduate degree - 5; management certification- 3 • Participants were from clinical/practice settings	• Factors that attract ∘ Meaningful work ∘ A step up the ladder ∘ Personal resources ∘ Organizational resources • Factors that retain ∘ Passion and pride ∘ Continuing to grow • Characteristics of RNs who remain in the first-line nurse manager role ∘ Passionate and proud ∘ Accountable ∘ Committed to professional development ∘ Reflective and self-directed ∘ Tenacious and resilient • Challenges that must be addressed to attract and retain RNs in first-line nurse manager roles ∘ Managing complexity ∘ Organization and program support ∘ Workload and scope ∘ Rewards Nurse managers are faced with a steep learning curve when starting their role. Nurse managers sought a work-life balance and found mentors or individuals that could help them learn their position. Nurse managers expressed that certain things such as the grievance process and aspects of quality were not taught in the role. Responsibilities included staff, quality of care delivered, and resource allocation. Nurse managers were sandwiched between the demands of the organization and the needs of the unit. Conflict arose between nurse managers and unions and human resources. The financial responsibility of the job deemed challenging. Nurse managers expressed poor role preparation and that demands outweighed time, which was stressful and frustrating. Nurse managers performed duties unnoticed.
Hartung and Miller (2013) includes digital supplemental document (#2)	Perceptions of nurse managers of roles and responsibilities of communication in a patient care setting	United States	Qualitative descriptive	In-depth semi-structured interviews and open-ended questioning, 2 interviews per participant, researcher field notes	6 nurse managers, clinical care center	• Tone of Communication • Tools of Communication • Approaches & Processes that Enhance Healthy Communication • The Manager's Role High volume of information needed to be communicated leading to stress, torn in many directions, importance of access and transparency, emotional intelligence, difficulties with open communication, communication issues, practices on effective communication

Table 2 (Continued). **Final Yield Table: Description of Reviewed Studies**

Authors & Year	Study Purpose	Country	Study Design	Methods	Participants	Summary of Findings
Lindy and Schaefer (2010) (#3)	Experiences or observations of negative workplace behaviors	United States	Qualitative descriptive, Phenom-enological analytic	Individual, semi-structured interviews (recorded/tran-scribed) with open-ended questions, field notes of observations	20 nurse managers from a hospital setting • 18 females/2 males • age 34-58 • 2.5-29 years of manager experience • 11-35 years of RN experience • Diploma/ADN - 4; bachelor's degree - 7; master's degree - 9 • All reported observations of behaviors as a staff • Few observed in manager role • All reported staff reported behaviors	• Just how she is – described associated behaviors, some bullies were described as expert clinicians • They just take it – victims accommodating and passive, bullying behaviors tolerated, and avoidance behaviors discussed • A lot of things going on – personality and stress as triggers, generational or work ethic differences, and bullying as a defense mechanism • Old baggage – absenteeism/turnover, hard feelings interfering with teamwork Three sides to a story – meeting with individuals having conflict, finding the truth, and taking action • A management perspective – teasing out bullying vs. assertiveness, misperceptions that conflict is not being addressed, importance of support, ignoring issues/being questioned about decisions, unsure whether conflict improved
Shirey et al. (2008) (#4)	The purpose of this study was to determine stressor related to the nurse manager role and the decision-making strategies used in the role	United States	Qualitative descriptive	A demographic questionnaire, semi-structured face-to-face interviews (recorded)	5 nurse managers from one hospital system • All participants were white females • 17-28 years of RN experience • 5-17 years of experience as a nurse manager • age 39-51	• Nature of nurse manager work • Sources of stress • Emotions • Value conflicts • Coping strategies • Perceptions of social support • Relationships and communication • Health outcomes Nurse managers filtered and disseminated communication and monitored the unit for problems. Nurse managers were sandwiched between the organization demands and needs of the unit. Finances were a challenge. Meetings took much of the day and nurse managers had to balance multiple roles. Stressor included never having all the work done and navigating the system. Emotions included stress, joy, anger, guilt, frustration. Personal values were challenged. Nurse managers used emotional- and problem-focused coping strategies. Sources of support were sought outside of work. Nurse managers communicated that a lot of their work is unknown to others or goes unnoticed and that communication to administrators is not open. The authors noted poor health outcomes (psychological and physiological).

Table 2 (Continued). **Final Yield Table: Description of Reviewed Studies**

Authors & Year	Study Purpose	Country	Study Design	Methods	Participants	Summary of Findings
Shirey et al. (2010) (#5)	Perceptions of stress and coping by nurse managers	United States	Qualitative description, Critical Decision Method	Face-to-face, 14-open-ended-question interviews (recorded & transcribed)	21 nurse managers from three acute-care hospitals • All female • 2 participants shared management positions over 3 patient care units • age 37-62 • 12-35 years of RN experience • 1.5-18 years of management experience • Bachelor's degree - 18; master's degree - 4	• Sources of stress ◦ Situations in general that are sources of stress – included people and resources, tasks and work, and performance outcomes ◦ Factors that increase stress – specific and peripheral issues surrounding role ◦ Factors that decrease stress – focusing on positives, support, accomplishments, and downtime ◦ Emotions associated with stress – positive, negative, and mixed emotions • Coping strategies ◦ Using a combination of strategies – emotion-focused vs. problem-focused coping and self-care strategies ◦ Experiences and differences in coping strategies – experiences of adverse health, mentions of how culture impacts coping ◦ Comanager model and differences in coping – partnerships helped • Health-related outcomes ◦ Psychological outcomes – health outcomes discussed, co-managing insulated from stress ◦ Physiological outcomes ◦ Functional ability – high and low functionality discussed Overwhelming demands in position, unrealistic expectations, complexity, and demands of role require additional training
Udod and Care (2011) (#6)	Explore stress experiences & coping strategies of nurse managers in acute care settings, specific to recruitment and retention	Canada	Qualitative, descriptive	Semi-structured open-ended interviews	5 Nurse managers from a tertiary hospital with a minimum of one year's experience ad nurse manager on the unit • 4 participants with prior management experience • 4 female/1 male • 5-35 years of RN experience	• Stressors: ◦ Fiscal responsibilities ◦ Inadequate human resources ◦ Managing others ◦ Intrapersonal distress ◦ Management role & competing priorities • Coping strategies: ◦ Peer and superior support ◦ Cognitive coping strategies ◦ Social and personal strategies Conflicting responsibilities due to high demands, maintaining of work-life balance, mentions of unhealthy work environments, distress

Table 2 (Continued). **Final Yield Table: Description of Reviewed Studies**

Authors & Year	Study Purpose	Country	Study Design	Methods	Participants	Summary of Findings
Van Bogaert et al. (2015) (#7)	Perceptions and experiences of nurse managers related to clinical nurse structural empowerment and its impact on nurse manager leadership role and style	Belgium	Qualitative descriptive, construc-tivist paradigm	Individual semi-structured interviews (recorded), analytic notes, codebook	8 medical-surgical unit nurse managers • Medical unit – 3 • Surgical unit – 4 • Mixed unit – 1 • Management and leadership training – 1 • Bachelor's degree - 8, master's degree - 3	• Vision of empowerment – shared decision making, autonomy, support quality improvement • Structural empowerment policy – staff engagement, high pressure, overwhelming, information overload, project unclear, lack of feedback • The nurse manager's role – projects took a secondary role to patient care, young nurses more positive about Structural Empowerment practices, infrastructures not set up for teamwork, top-down decision making continued, the concept of Structural Empowerment was not foreign, increase in workload for nurse manager, loss of command and control over staff • Suggestions by nurse managers to improve the empowerment policy – the need for feedback, siloed information, dissemination of change poor, need for support, keeping track of projects/initiatives, time pressure, readiness scale

Results

Study and Participant Characteristics

Of the seven studies used for the synthesis, four were conducted in the United States, two were conducted in Canada, and one was conducted in Belgium. All the studies used a qualitative descriptive design and were performed at clinical sites in which care was provided to patients. In total seventy-six NM participants were included in the studies and the number of NM participants ranged from 5-21 in each study. Of the studies that reported demographics, participants were primarily female with 9.5-35 years of registered nurse experience and 1-35 years of management experience. Table 2 provides additional details of the reviewed studies.

Methodological Critical Review

Letts and colleagues' (2007) qualitative appraisal tool, The McMaster University Tool, was used to critically appraise the articles used in this study, presented in Table 3 (insert table 3 about here). All of the studies used an appropriate design, had a relevant literature review, and clearly identified the purpose of the study. Two of the studies identified a theoretical perspective (Lindy & Schaefer, 2010; Van Bogaert et al. 2015). The process of sampling and descriptions of the site and participants were adequately described in all seven studies. A description of an inductive data analysis was described in six of the studies and findings were consistent and reflective of the data across all studies. Two studies described the development of an audit trail (Lindy & Schaefer, 2010; Van Bogaert et al., 2015) and all, but one study described the data analysis process (Udod & Care, 2011). All the studies provided

theoretical connections with the findings. Three studies provided evidence of all the components of trustworthiness: (1) credibility, (2) transferability, (3) dependability, and (4) confirmability (Cziraki, McKey, Peachey, Baxter, & Flaherty, 2014; Hartung and Miller, 2013; Lindy & Schaefer, 2010). Five studies demonstrated credibility, six studies demonstrated dependability, and four studies demonstrated confirmability. All studies demonstrated transferability. Conclusions were appropriate across the studies and findings from each of these studies contributed to theory development and future research.

Table 3. **Critical Review of Studies using the McMaster University Tool (Letts et al., 2007)**

	Cziraki et al. (2014)	Hartung and Miller (2013)	Lindy and Schaefer (2010)	Shirey et al. (2008)	Shirey et al. (2010)	Udod and Care (2011)	Van Bogaert et al. (2015)
Study Purpose: Was the purpose and/or research question stated clearly?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Literature: Was relevant background literature reviewed?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Study Design: Was the design appropriate for the study question? Was a theoretical perspective identified?	Yes No	Yes No	Yes Yes	Yes No	Yes No	Yes No	Yes Yes
Sampling: Was the process of purposeful selection described? Was sampling done until redundancy in data was reached? Was informed consent obtained?	Yes Yes Yes	Yes Yes Yes	Yes Not addressed Yes	Yes Not addressed Not addressed	Yes Not addressed Not addressed	Yes Not Addressed No	Yes Yes Yes
Data Collection: Was there a clear and complete description of the site and participants? Role of the researcher and relationships with participants? Identification of assumptions and biases of researcher? Was procedural rigor used in data collection strategies?	Yes Yes Yes Yes	Yes Yes No Yes	Yes No No Yes	Yes No No Yes	Yes Yes No Yes	Yes No No Not addressed	Yes No No Not addressed
Data Analysis: Were the data analyses inductive? Were the findings consistent with the and reflective of the data?	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Not addressed Yes	Yes Yes

Table 3 (Continued). **Critical Review of Studies using the McMaster University Tool (Letts et al., 2007)**

	Cziraki et al. (2014)	Hartung and Miller (2013)	Lindy and Schaefer (2010)	Shirey et al. (2008)	Shirey et al. (2010)	Udod and Care (2011)	Van Bogaert et al. (2015)
Auditability: Was a decision trail developed? Was the process of analyzing the data described adequately?	Not addressed Yes	Not addressed Yes	Yes Yes	Not addressed Yes	Not addressed Yes	Not addressed No	Yes Yes
Theoretical Connections: Did a meaningful picture of the phenomenon under study emerge?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Overall Rigor: Was there evidence of the four components of trustworthiness: 1) credibility; 2) transferability; 3) dependability; and 4) confirmability?	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes Yes Yes Yes	No Yes Yes Yes	Yes Yes Yes No	No Yes No No	Yes Yes Yes No
Conclusions & Implications: Were conclusions appropriate given the study findings? The findings contributed to theory development and future health care practice and research?	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes

Meta-synthesis

The research question for this study was "How do clinical NMs perceive demands in the work environment and what relationships exist between the clinical work environment, the role of the clinical NM, and WPI?" Three themes emerged from the meta-synthesis in which perspectives of participants were aggregated and provided a description of relationships between the environment, the NM job role, and attributes of WPI. The emerged themes for the NMs were: (1) Frustrations with Organizational Demands and Communication – Working Around Conflict, (2) The Bottleneck Effect – Balancing Job Demands Without Adequate Support and Resources in an Uncivil Environment, and (3) Negative Outcomes Secondary to Job Demands and Conflict in the Work Environment.

Theme 1: Frustrations with Organizational Demands and Communication – Working Around Conflict. This theme speaks to organizational-level communication and project coordination issues and conflict workarounds described by participants. Participants conveyed that multiple initiatives could be coinciding from several departments and councils, but changes and updates to those changes were not communicated:

> There was limited communication between individual healthcare workers and between members of different nursing units…we were not always aware or informed of

certain decisions and changes. Project information and initiation comes from different departments with a lot of requests…It is sometimes overwhelming…who kept an overall picture of what we have to do? (#7, p. 7).

It was conveyed that organizational-level communication and communication across units was inconsistent and feedback was scarce (#7, p. 5 & 7; #2, p. 268). Projects were inconveniently timed in which preparation time for initiatives was not allotted, and initiatives were expected to be executed in a matter of days by NMs, which increased stress (#4, p. 127). The schedules and workloads of NMs and their staff were not considered when projects were assigned, which negatively impacted the workflow of the manager (#7, p. 7). Participants expressed that communication channels related to management reporting structures were navigated, accounting for "organizational red tape" (#5, p. 84), meaning that NMs sought support and communication outside the reporting structure to steer away from individuals who were rude or unwilling to provide the information and resources needed. Avoidance behaviors, which are associated with WPI, were inadvertently encouraged in which NMs learned to work around potential conflict related to internal politics (#4, p. 128; #5, p. 84). A participant mentioned that colleagues' belief in open communication and good leadership practices hindered further development of professional behaviors (#2, p. 268).

There was a general perception that the volume of communication was "overwhelming" (#2, p. 1; #7, p. 5) and answering large amounts of emails was perceived as a priority (#1, p. 1011; #5, p. 85), which contributed to the stress of NMs. Administrative and committee meetings could last through the entire workday (#6, p. 60), keeping NMs isolated from their unit and other job duties. Meetings were conveyed as time-consuming and redundant. As one NM stated, "You start to resent the meetings because it's the same stuff regurgitated over and over again and you think of what you could be doing during that time." (#2, p. 2).

Theme 2: The Bottleneck Effect – Balancing Job Demands Without Adequate Support and Resources in an Uncivil Environment. This theme speaks to the participants' notion of being "sandwiched" (#2, p. 4; #6, p. 65) between the needs of the unit and the demands of the organization, not having the resources needed to complete the job, and experiencing WPI. This theme also speaks to the invisible roles of NMs and communication challenges with staff. Participants discussed long workdays (#4, p. 128), dealing with several interruptions, and juggling responsibilities:

> Staffing a unit aggravated by the fact that you do not have a full complement of staff, being asked to help with an emergency situation, having the human resources department call to say an applicant is here for a job interview…finding out that you have an e-mail with a project that has a short-term deadline. (#5, p. 85)

The NM participants felt as though they are out on a limb and experienced stress related to "not having the tools to deal effectively with the demands of the workplace" (#6, p. 67). Participants expressed feeling stressed when attempting to acquire staff to fill open shifts and positions, which were impacted by budgets. Participants voiced that senior management was adding on additional projects to already full schedules and that duties were unable to be completed due to interruptions (#1, p. 1011; #4, p. 127; #5, p. 85; #6, p. 62).

Participants expressed the need for support from senior management and peers (#1, p. 1010; #5, p. 86; #6, p. 64; #7, p. 6 & 7). One participant conveyed inconsistent support, "Sometimes I get supported, and others [times] I do not" (#5, p. 86). Participants expressed the importance of support and healthy relationships in the NM role, "All stress in the nurse manager role has to do with support and relationships. It all boils down to whether you feel supported and have good relationships" (#5, p. 85). One participant expressed the "disconnect" NMs felt from senior management, "They don't hear you. They don't have a clear understanding of the pressures you feel." (#1, p. 1010). One participant expressed the "lack of respect for managers…you are not truly empowered here" (#5, p. 86) and another participant explained that opinions of NMs were disregarded "Hospital management wanted to do certain things. . . they asked for our opinions, but these were not considered" (#7, p. 6). Such statements express lack of acknowledgment and respect of another's input, which is reflective of WPI. Participants expressed the broad scope of their position, and one participant conveyed that the NM role is misunderstood:

> They (the hospital managers) forgot that nurse managers have an operational role in daily practice, we have to deal with that. For example, patient rounds, handing over meetings, training, and coaching new colleagues,…which are tasks we do on a daily basis. Our role is important in assuring the continuity of our unit. (#7, p. 7)

Participants across studies conveyed minimal role preparation related to the application of conflict management and fiscal responsibilities. One participant stated, "When I became the clinical manager I learned by the seat of my pants" (#1, p. 1008).

Participants discussed the "invisible work" (#4, p. 127) performed in addition to overseeing the delivery of patient care on the unit. Challenges and frustrations communicating with staff included using different modes of communication and ensuring employee accountability (#2, p. 3). Participants expressed that gaining buy-in, motivating staff, and using joint decision-making was difficult (#2, p. 1, 4; #7, p. 7), especially for some employees that viewed initiatives as unwelcomed work (#7, p. 6).

Participants described difficult interpersonal interactions with and among staff. The staff could be inappropriately negative during meetings, "We have a diverse staff, and there are a lot of differences of opinion. The nurses are very open-minded and sometimes open-mouthed about what the issues are, what the problems are" (#2, p. 3-4). One participant noted how "generational differences, personality differences, or work ethic differences contribute to bullying. If you are a strong person and you don't like anybody pointing out your mistakes, you hide the behavior by bullying other people" (#3, p. 288-289). Conflicts were also attributed to power struggles and mistrust between managers and employees (#6, p. 63). Stress from the work environment and personality traits were expressed as contributors to conflicts among clinical staff. Nurse managers from one study identified several staff nurse "bullies" on their units that were considered clinical experts. The expert nurses demonstrated uncivil behaviors and poor interpersonal skills, and bullying behaviors increased during stressful situations and when the units were busy (#3, p. 288-289). Addressing conflict related to performance, patient complaints (#5, p. 84), quarrels among staff (#3, p. 289), and union-related issues (#1, p. 1010) were also discussed

by the participants as additional duties related to their role; however, as previously stated, conflict management training was absent from NM training.

Theme 3: Negative Outcomes Secondary to Job Demands and Conflict in the Work Environment. Nurse managers were impacted by the high demands of their job and participants expressed several adverse psychological and physiological outcomes (#1, p. 1011; #2, p. 4; #4, 127-130; #5, 85-87). Some participants discussed a work-life imbalance (#4, p. 127; #5, p. 87) and the sense of "losing it" (#5, p. 88), or losing their ability to control their emotions. Participants conveyed that conflict and uncivil behaviors in the unit led to staff absenteeism, turnover, and issues with recruitment (#3, p. 289; #6, p. 62). Participants noted that previous conflict impacted current work relationships causing the inability to work as a team and led to avoidance behaviors in which perpetrators were avoided (#3, p. 289; #6, p. 66). One participant explained that high turnover was related to behaviors associated with "negative workplace behavior" (#3, p. 289). Another participant discussed the inability to recruit due to the toxic work environment on the unit:

> The turning point came when one of the staff upstairs…was willing to come down and see if she wanted to work here…the attitude in the unit wasn't very positive. And she went back up and said, 'I don't want to work in that kind of atmosphere' (#6, p. 62)

High demands and tense work environments did not allow NMs to respond appropriately in which the NM group inadvertently developed a negative work environment. One participant reported:

> I find the other managers…because there's so many demands, it can become a toxic group, plus this ebb and flow of people coming and going. There's a lot of unhappy people…they really bring you down. (#6, p. 66)

Discussion

For this meta-synthesis, NMs perceptions of their work environment and relationship between the clinical nursing work environment, the role of the NM, and WPI were explored; three themes emerged. Participants described the work environment as stressful due to issues around communication, support, and resources, which were associated with miscommunication, conflict, and adverse individual and organizational outcomes. Participants expressed the challenges of juggling overwhelming demands from clinical staff and administration, while not having the resources required to deal with the demands of their job effectively. Resources play a crucial role in an employee's success. Resources include, "physical, psychological, social, or organizational aspects of the job that are: (a) functional in achieving work goals; (b) reduce job demands and the associated physiological and psychological costs; or (c) stimulate personal growth, learning, and development" (Bakker & Demerouti, 2014, p. 9). The resources described are needed for employee performance and employee health, and if such resources are not provided, employees can have adverse outcomes (Bakker & Demerouti, 2014). Participants described stress and frustrations due to lack of resources, which impacted their health and the health of the work environment. Participants identified uncivil behaviors and interactions through descriptions of the work environment in which WPI permeated daily operations and interpersonal communication.

In Theme 1, NMs expressed frustrations that there were no centralized communication channels about organizational decisions. Nurse managers were often left with inconsistent directives, delegated projects given on short notice, and given little feedback on performance. High volumes of emails and meetings kept participants away from their unit and other duties, furthering the stress on the NM. Nurse managers expressed navigating "organizational red tape" suggesting that participants were aware of topics of concern and people in the organization that were off-limits. Avoidance behaviors in which individuals avoid potential conflict and perpetrators that commit incivilities has been associated with WPI in other studies (Kerber et al., 2015; Peters, 2014). Participants described knowing topics and individuals to avoid in the organizational to prevent conflict, which is worthy of further investigation on how such behaviors hinder completion of initiatives, teamwork, and quality reporting.

Findings from Theme 2 emphasize that NMs perceive their work environment as demanding and "overwhelming". Nurse manager participants described balancing job demands without adequate resources and support in an uncivil work environment. Participants conveyed that they were "sandwiched" in their position often balancing the financial state of their unit, advocating for staff resources, and juggling projects with short deadlines. Findings from this study are similar to a study conducted by Kath, Stichler, Ehrhart, & Sievers (2013) in which role overload, organizational constraints, and role conflict were the strongest predictors of NM stress.

Projects were perceived as being piled onto already overwhelmed NMs in which participants expressed underlying tones of frustration. Findings from this study parallel a phenomenon called the "quality burden", a phenomenon in which high demands are placed on employees to improve quality of care delivered to patients. These demands require a considerable amount of time and effort for managers, who already have high workloads (Disch & Sinioris, 2012). Role responsibilities and high workloads were deemed "stressful" by participants; uncontrolled stress can impact the relationship between communication, the health of the work environment, and perceptions of support, ultimately leading to WPI. Francis et al. (2015) observed that undergraduate students who experienced WPI reciprocated uncivil behaviors. Uncivil behaviors were reciprocated more often when students experienced high workloads. With so many quality initiatives co-occurring, it is becoming even more important for senior management to evaluate the impact of hospital initiatives on the workload and workflow of NMs to prevent conflict.

Participants voiced the importance of support from senior management; however, participants described having little support, which led to feelings of stress and a sense of inadequate resources to meet job demands. Participants described situations in which that their job duties and priorities were not acknowledged and their time were not respected. Lack of respect (Kerber et al., 2015) and lack of support (Peters, 2014) are behaviors associated with WPI demonstrated in other qualitative studies. Several participants described situations in which there was the absence of shared decision-making, active listening, and empowerment by senior leaders; lack of input and superficial listening are behaviors associated with WPI (Lachman, 2014; Vagharseyyedin, 2015). Senior managers may be unaware that these behaviors are seen as uncivil and modification of behaviors may improve perceptions of support and decrease perceptions of incivility.

Participants articulated that diversity in clinical staff complicated communication on the unit and contributed to uncivil behaviors. In a study performed by Leiter et al. (2010), Generation X nurses experienced higher rates of incivility from peers, supervisors, and the general environment than Baby Boomer nurses. Based on findings from this meta-synthesis, participants have not received resources on how to communicate effectively across generations and to different stages of nursing experience. Nurse managers also described conflict related to power struggles between people at different levels of an organization which has been supported by other research studies (Kerber et al., 2015; Peters, 2014). Participants illustrated how misbehaviors on the unit increased during stressful situations, which has been supported by a research study conducted by Oyeleye, Hanson, O'Connor, & Dunn (2013) in which stress was significantly related incivility and burnout. Due to increasing patient acuity and high demands on healthcare employees, NMs may not be aware of the importance to evaluate the demand of the unit and how to deescalate stressful situations.

NMs noted that they did not receive adequate training in conflict management; however, invisible roles of the NMs included addressing conflict. Conflict management and communication with a diverse staff added complexity to the NM job role, but training is needed in these areas, as expressed by participants. Due to high demands, lack of management training, and inadequate resources the NM group adopted a negative culture as described by a participant; an uncivil work climate is theorized as an outcome of WPI (Andersson & Pearson, 1999).

Nurse managers are not immune to stress and conflict secondary to high demands, which impacted well-being as described by participants in Theme 3. Conflict and negativity managed and experienced by participants were described in association with avoidance behaviors, decreased teamwork, and adverse organizational outcomes including turnover, absenteeism, and inability to recruit. Experienced incivility has been shown to have a significant relationship with absenteeism (Lewis & Malecha, 2011) and turnover intentions (Leiter et al., 2010; Oyeleye et al., 2013). As previously stated, NMs do not have conflict management training or the support to stop WPI before adverse outcomes occur and such training is necessary to prevent and address WPI.

There is limited literature on the role that factors in the work environment have on WPI from a systems perspective; however, this meta-synthesis supports that WPI occurs in daily operations as a product of system tensions related to organizational initiatives, communication structures, support systems, and job demands. As stated by Brewer et al. (2008), the system is comprised of several interrelated factors which should be examined to "understand and predict" variables that impact nursing work environments (p. 11). In the case of this study, processes and structures in the work environment, are placing pressure on the nurse manager role, such as ineffective organizational communication channels, organizational politics, inadequate resources, and organizational demands related to projects and internal changes. These work environment factors impact the workload and workflow of NMs by increasing work demands, which intensifies stress and frustration. Inadequate processes and structures in the work environment have a trickling effect that impact the NM and reaches clinical staff. Due to stressed systems and relationships and high job

demands, interpersonal conflict occurs. Incivility appears be an unintended consequence of the system, or an unplanned adverse effect caused by the system secondary to turbulence (Sipes, 2012). In healthcare systems, job demands are high for NMs, and if physical, psychological, social and organizational resources are not provided, NMs can experience exhaustion and stress (Bakker & Demerouti, 2014). Fatigue and stress can lead to unmet expectations, ineffective coping, and, ultimately, WPI. Incivility may occur as an indirect effect of inadequate resources (psychological, social, and organizational support) related to organizational change, communication, job demands, and training. It is important to recognize that behaviors associated with WPI are subtle, which can wear away at the health of individuals and the work environment.

Limitations of this study include the number of articles used in the study, the limited diversity among participants, and self-report in the qualitative studies. Organizational structures and work environment regulations were not examined across the three countries the studies were conducted. Due to the nature of the meta-synthesis method, exact details of the context and misbehaviors cannot be inspected in depth; however, the synthesis of these studies exposes a new perspective on relationships between the work environment and WPI. Strengths of this study were the inclusion of primary studies, the ability to tap into experiences of 76 participants across three countries, the examination of studies across a variety of contexts, and the use of a team-based approach. The synthesized qualitative studies provided a rich description of NMs experiences and perceptions that offers insight on what is occurring in a complex system. These rich descriptions identified what is relevant and meaningful to participants within their context and provided a framework that will guide future research.

Implications

Provided the findings from this meta-synthesis there are research implications for nurse scientists. A further in-depth study is needed to tap into organizational structures and processes that impact the NM role and examine how turbulence leads to WPI as an unintended consequence. Environmental factors worthy of examination based on this study include the impact of organizational projects and initiatives on the NM workload, the degree of support and communication from senior management, organizational politics, and perceptions of WPI from the perspectives of NMs. Future research endeavors may include the examination of the NM workload and workflow when organizational changes are initiated. Using qualitative methods the degree of shared decision-making, support, and resource allocation can be investigated, and interpersonal interactions could be teased out to examine how conflicts occur. Such research may lead to hypothesis generation and assist in identifying relationships that need to be empirically tested. Current concepts for future WPI research also include: (1) work overload; (2) types of psychological, social, and organizational support needed for NMs; (3) unmet expectations; (4) role modeled behaviors among NMs; and (5) pragmatic conflict management training. In addition, studying how work relationships are perceived among generational cohorts of NMs may offer insight into generational communication patterns and WPI.

Practice implications based on findings from this study include the importance of evaluating communication structures in the work setting. Senior management teams

should examine the health of relationships and effectiveness of communication across units and disciplines and at each level of employment using a validated psychometric tool to address communication issues (Gillen, Sinclair, Kernohan, Begley, & Luyben, 2012). The workload of NMs should be examined and possibly modified when organizational projects are assigned. Job expectations should be clear and feedback on performance should be provided frequently (Porter-O'Grady & Malloch, 2015). Senior management should ensure that conflict management training is available to NMs and code of conduct policies and reporting processes are in place for clinical staff and management to report mistreatment (Dillon, 2012).

Nurse managers influence the work environment for their staff, and it is essential to recognize that high job demands and inadequate resources can lead to frustrations and WPI, which impact coworkers and clinical staff. This synthesis of the literature offers insight into factors in the clinical nurse work environment that contributes to WPI. Through further examination of environmental factors, investigators may understand and predict how and why WPI occurs. By understanding how organizational variables impact people in the system, the potential exists to prevent WPI before it happens.

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Heart Rate Variability as a Stress Biomarker in Pregnancy: A Primer for Researchers and Clinicians

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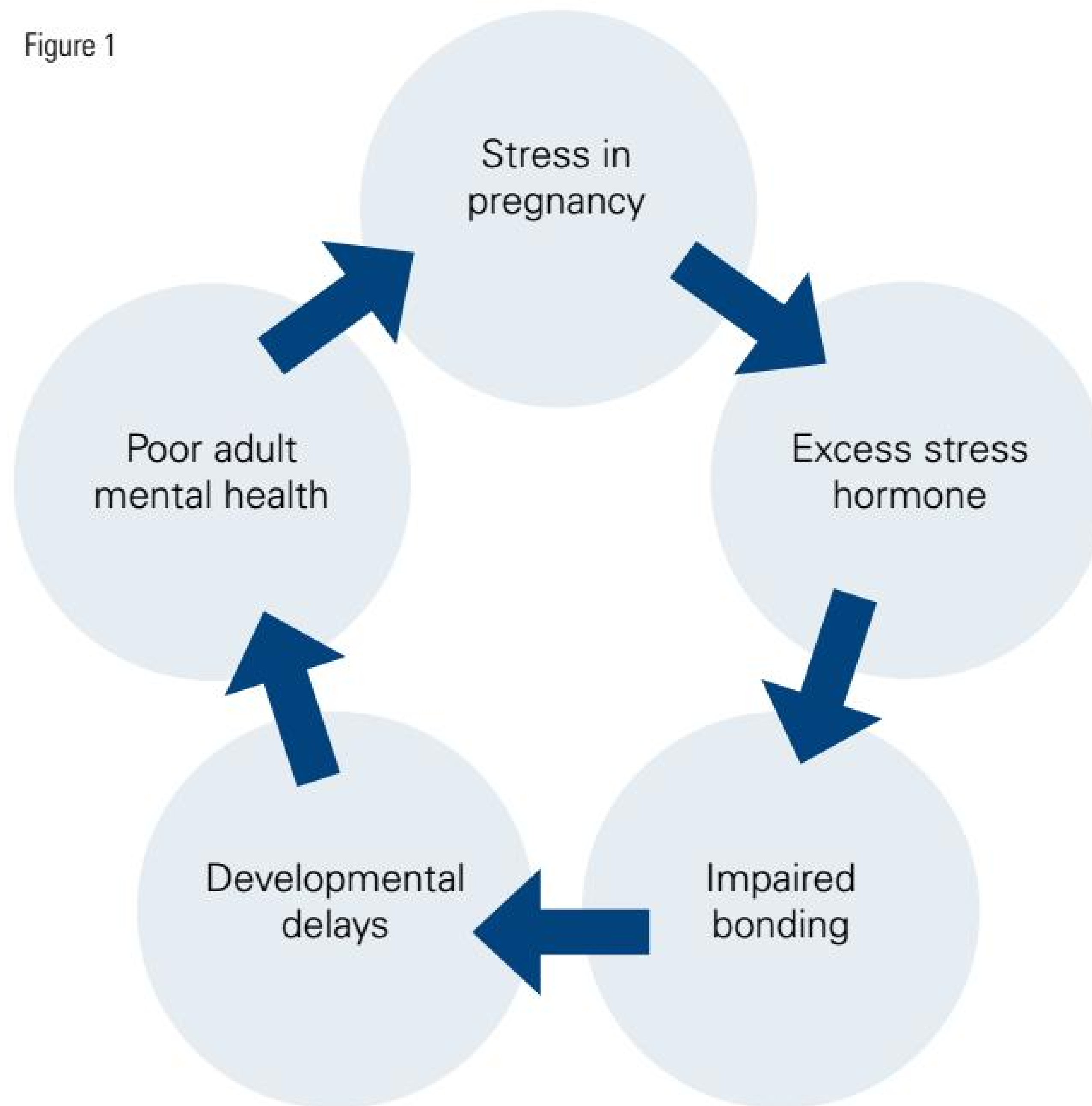
Abstract

Over 75% of pregnant women indicate that they have experienced some type of major stressor in their pregnancy. Stress in pregnancy is a known contributor to a host of devastating birth outcomes (e.g. low birth weight, premature) and mental health sequelae (e.g. depressive symptoms, anxiety) for the mother. Presently, multiple biomarkers are used in practice and research to operationalize stress, some of which can be invasive, expensive, and non-specific. Heart rate variability (HRV) is the beat-to-beat variation of heart rate that is a reliable, non-invasive marker of autonomic nervous system activity that is extremely sensitive to stress perception. To date, HRV has rarely been investigated as a biomarker for stress in pregnancy. The aim of this primer is to serve as a resource for researchers and clinicians to understand the relevant literature, theory, physiology, and application of HRV as a stress biomarker during pregnancy.

One of the most significant health crises of the millennia is the epidemic of unmanaged stress in pregnant women (Dingfelder, 2009; Dunkel Schetter & Tanner, 2012). Besides the crippling healthcare costs ($26 billion from birth outcomes alone) (March of Dimes, 2015) associated with unmanaged prenatal stress, there is an even greater loss to humanity. Prenatal stress management is a chronic issue that results in a devastating cycle. Unmanaged prenatal stress causes excess stress hormone to enter the placenta (Davis & Sandman, 2010; Ellman et al., 2008; Glover, 2014), increasing the risk of preterm birth among other adverse birth outcomes (Dole et al., 2003; Lilliecreutz et al., 2016; Wadhwa et al., 2011).

After the bombardment of stress hormone to the fetus, once the infant is born, the bond between mother and infant may be impaired (Spratt et al., 2016). The impaired bond may lead to a myriad of poor early childhood outcomes like developmental delays (Davis & Sandman, 2010; Ellman et al., 2008, Glover, 2014) and even poor mental health outcomes in adulthood (Kim, Bale, & Epperson, 2015). Figure 1 displays the cyclical progression of unmanaged prenatal stress and the effects on the lifespan of an individual and generations to come.

Figure 1



The present paper aims to provide nurse scientists and clinicians with a primer on Heart rate variability (HRV) as a stress biomarker in pregnancy. The aim of this primer is to serve as a resource for researchers and clinicians to understand the relevant literature, theory, physiology, and application of HRV as a stress biomarker during pregnancy.

Selection of HRV as a Stress Biomarker. In the mid 2000s, the World Health Organization named prenatal stress as a top health priority for the next millennium (World Health Organization, 2006). Consequently, the World Health Organization created a formal action plan that invites clinicians and researchers to uncover early prenatal stress detection methods (e.g. biomarkers). Even though biomarkers like cortisol, corticotrophin-releasing hormone, and interleukins have been tested in the pregnant population with varied success (DiPietro et al., 2002; Coussons-Read et al., 2005; Coussons-Read et al., 2012;Entringer et al., 2013), one promising biomarker remains: heart rate variability (HRV). HRV is a reliable stress biomarker in several populations (Taelman et al., 2009; Thielmann & Boeckelmann, 2016; Zefferino et al., 2003), but the use of HRV as a stress biomarker in pregnancy remains invalidated.

Definition of Heart Rate Variability (HRV). HRV is defined as the beat-to-beat variation of heart rate that is a reliable, non-invasive marker of autonomic nervous system activity that is extremely sensitive to stress perception (Dishman et al., 2000; Klinkenberg et al.,

2009; Task Force, 1996; Thayer & Lane, 2000). HRV is an attractive biomarker because it is non-invasive, accurate, and a real-time measure of an individual's physiologic stress level. Furthermore, HRV has been highly correlated with psychological stress in several studies (Bilchick & Berger, 2006; Klinkenberg, 2009) therefore, HRV serves as a biomarker of physiological and by proxy a biomarker of psychological stress.

History of HRV. HRV was first tested in the hallmark Framingham heart study (Singh et al., 1999; Tsuji et al., 1996). The Framingham heart study is best known for explaining risk factors for cardiac events (Tsuji et al., 1996) however, the cohort study also uncovered the predictive ability of HRV (Tsuji et al., 1996). The researchers of the Framingham heart study found that HRV was a strong predictor of mortality (Villareal, Liu, Massumi, 2002). Consequently, HRV was then tested as a stress biomarker and continues to be used in dozens of diverse populations (e.g. students, surgeons, and healthy participants) today (Dimitriev & Saperova, 2015; Lim & Kim, 2014; Rieger et al., 2014).

HRV Theoretical Underpinnings

In addition to understanding the cardiac physiology of pregnancy and the biologic adaptations that occur, it is also vital to understand the theoretical underpinnings of HRV as a stress biomarker. As such, there are two dominant theories that explain the relationship between stress perception and physiologic response (i.e. the relationship between stress and HRV): The Polyvagal Theory and the Neurovisceral Integration Theory.

Porges and the Vagus Family. The first theory, Polyvagal Theory, was developed by Stephen Porges using an evolutionary framework to describe how the human autonomic nervous system developed. Porge's Polyvagal Theory posits that primitive humans began with a nascent behavioral inhibition system that developed into a complex communication system known as the autonomic nervous system (i.e. fight or flight; Porges, 2001). According to Porges, the autonomic nervous system is responsible for human's range of emotional expression, social engagement, and stress perception (Porges, 2001; 2009).

Porges also proposed that one structure in the brain, the vagus, is responsible for the vast majority of physiologic and psychological stress responses (Porges, 2003). The vagus is a complex brain structure that is one of the major tenants of Polyvagal Theory. The vagus is located in the brainstem and receives input and output from other feedback systems (i.e. organs). The vagus is essential to human survival because it continuously encourages communication about environmental stressors between the viscera (i.e. the heart) and the brain to allow for adaptation (Porges 2001; 2009).

Like other brain structures, the vagus has also evolved over time. Much like a car, Porges theorizes that over time the vagus has developed a braking system called the "vagal brake" (Porges, 2001; Porges, 2003). As the name implies, the vagal brake rapidly inhibits vagal tone eliciting either fight (i.e. excitement) or flight (i.e. calm) in an individual (Porges, 2001). It is important to note that HRV and psychological stress share an inverse relationship. This means that as an individual's stress level increases, their HRV decreases. Therefore, when vagal tone increases, the vagus acts like a brake on the sinoatrial node in the heart to decrease an individual's heart rate variability and increase their psychological stress level

(Porges, 2001). Conversely, when vagal tone is inhibited, the heart's sinoatrial node does not receive any signal to slow down and HRV increases, while stress perception decreases (Porges, 2001). The vagal brake serves the purpose of allowing the viscera to change quickly in order to accommodate impending fight or flight.

Neuroviseral Integration Theory. The opposing theory to the Polyvagal theory is Thayer and Lane's Neurovisceral Integration Theory (Thayer & Lane, 2000). The Neurovisceral Integration Theory posits that human emotion drives a larger self-regulation system. Specifically, Thayer and Lane (2000) argue that specific emotional states (i.e. stressed states) emerge from a combination of environmental demands and a lack of swift mental and physiologic adaptability to the stressor.

Much like the vagus in the Polyvagal Theory, the central autonomic network is the command center that governs all cognitive, behavioral, physical, and neuroendocrine behaviors in Neurovisceral Integration Theory (Thayer & Lane, 2000). The central autonomic network exerts control by monitoring the viscera (i.e. cardiovascular system) through a series of feedback loops (Thayer, Friedman, & Borkovec, 1996). Therefore, when a stressor is perceived, the feedback loop that is mediated by the central autonomic network reacts by inhibiting or exciting the cardiovascular system. This inhibition or excitement message sent by the central autonomic network is detected by the cardiovascular system resulting in alteration in HRV (either increased or decreased) in order to ultimately manage one's reaction to a stressor (Friedman & Thayer, 1998; Thayer, 2007). As in Porges theory, HRV and stress are inversely correlated.

HRV and Perceived Stress in Pregnancy

In most populations, HRV has long been regarded as a biomarker of overall physical health (Task Force, 1996). In healthy subjects, elevated HRV is indicative of better cardiovascular health (e.g. lower blood pressure and pulse) and predictive of mortality (Task Force, 1996). However, the pregnant population deviates from the norm as HRV in pregnancy gradually decreases across gestation (Carpenter, Emery, Uzun, Rassi, & Lewis, 2016; Chamchad et al., 2007). Moreover, HRV further diminishes during pregnancy especially when confronted with a stressful situation (Chamchad et al., 2007).

Normal Changes in Pregnancy. In order to understand the relationship between HRV and psychological stress, one must be aware of the normal physiologic changes that occur in pregnancy. Compared to non-pregnant women, pregnant women have faster heart rates, reduced HRV, faster respiratory rates, and decreased blood pressure (Ekholm & Erkkola 1996; Voss et al. 2000; Yang et al. 2010). The maternal cardiovascular system undergoes substantial changes to support fetal development. Such changes include increased blood volume by 45% (Speranza, Verlato, & Albiero, 1998), increased stroke volume and heart rate, and increased cardiac output by 30–50% (Chamchad, Horrow, Nakhamchik, & Arkoosh, 2007; Klinkenberg et al., 2009). Most of the cardiac changes occur in the first and second trimester with cardiac modifications plateauing in the third trimester (Sanghavi & Rutherford, 2014). Again, despite all of the drastic cardiovascular adaptations, maternal HRV in pregnancy gradually decreases across gestation (Ekholm & Erkkola, 1996; Ekholm, Hartiala, & Huikuri, 1997;Walther et al., 2005). The gradual decrease in HRV has been

theorized to play a protective function that prevents the mother and fetus from excessive exposure to stress hormones and pregnancy-induced cardiovascular responses (Christian, 2010).

Operationalization and Measurement

Time Domain Indices. HRV is an optimal pregnancy stress biomarker because it can be measured in the ambulatory setting and is representative of real-time stress measurement. In order to measure HRV, one will need a device that produces an ECG and software that can analyze the ECG. In order to interpret HRV, one must understand that there are two broad categories of HRV measurement indices: time domain or frequency domain. To measure a time domain index, one must be able to detect the occurrence of P-waves on the ECG. Examples of time domain indices include: the standard deviation of normal-to-normal intervals (SDNN) and the root mean square of successive differences between NN intervals (rMSSD). Researchers should consider using the SDNN for longer measurement sessions (i.e. 24 hour ambulatory collection) and the RMSSD for short measurement intervals (i.e. 5 minutes) (Shaffer & Ginsberg, 2017). According to a review of HRV indices, the SDNN and RMSSD are optimal biomarkers because they are standardized and are comparable across studies (Nunan et al., 2010).

Frequency Domain Indices. Conversely, frequency domain indices are not standardized and there is still some uncertainty about what each index measures. Some of the frequency domain indices include: low-frequency power (LF), high-frequency power (HF), and the ratio of LF to HF power (LF: HF) (Nunan, Sandercock, & Brodie, 2010). The HF index is thought to be associated with parasympathetic control and the LF index is thought to be associated with sympathetic control (Bilchick & Berger, 2006). According to a review by Nunan et al. (2010), the HF index is the least reliable measurement of HRV because it had the largest variation across 44 studies. No matter if an investigator chooses time domain or frequency domain HRV parameters, investigators need consistent measurement across studies at the HRV parameters cannot be compared. For example, RMSSD is measured differently from SDNN even though they are both classified as time domain indices and therefore cannot and should not be compared.

Suggestions for Future Research.

For investigators that may be interested in testing HRV in pregnancy, it is also important to control or take note of: time of day, physical positioning, demographic variables and differences in operationalization.

Control of HRV Measurement Error. One of the most critical pieces of using any biomarker is controlling for error in HRV measurement. This control is especially necessary when working with HRV, as HRV is a real-time measurement that is easily influenced by the environment. Like other biomarkers (e.g. cortisol), HRV follows a predictable diurnal rhythm in which HRV slowly rises throughout the morning and troughs in the afternoon into the evening (Kim, Yoon, & Cho, 2014). Therefore, investigators need to consider time of day when they measure HRV and either statistically control for this variable or measure HRV at the same time for all participants.

Another potential source of error of HRV measurement is physical positioning (D'Silva, Davies, Emery, & Lewis, 2014). Like heart rate, HRV changes as a person changes physical position (e.g. sitting vs. standing). With position changes comes alterations in blood flow and baroreceptors affects HRV (D'Silva, Davies, Emery, & Lewis, 2014). Therefore, investigators interested in measuring HRV need to measure HRV in the same position. Participants should sit during HRV measurement because this is not only comfortable but the heart is in a neutral position and can function under no undo stress (D'Silva, Davies, Emery, & Lewis, 2014).

Control of Health Variables and Demographics. Investigators should obtain a detailed health history and take note of demographic variables. It is known that certain health factors such as body mass index (Arai, Nakagawa, Iwata, Horiguchi, & Murata, 2013), smoking (Harte et al., 2013), or heart conditions (Friedman, 2004) decrease HRV. Therefore, investigators may again to choose to control for this factor. Furthermore, several demographic characteristics that predispose individuals to alterations in HRV including age, sex, and race/ethnicity. For example, compared to younger individuals (i.e. <40 years), older individuals (>40 years) tend to have decreased HRV that may result from aging receptors in the autonomic nervous system (Voss et al., 2015). Additionally, females typically have lower HRV compared to males due to differences in circulating hormones and the effects of the cardiovascular system (Ryan et al., 1994). Furthermore, African Americans have higher HRV when all other health-related factors are controlled for (Fuller-Rowell et al., 2013; Hill et al., 2015); however, this is confounded by the rates of hypertension, diabetes mellitus, elevated cholesterol, physical inactivity, overweight, and current smoking, all of which are highest in prevalence among African Americans (Centers for Disease Control and Prevention, 2014; Keenan & Shaw, 2011).

Conclusion

It can be daunting to think about the preventable consequences of unmanaged prenatal stress: preterm birth, developmental delays, and adult mental health disability to name a few. There is an obvious great need for early identification of chronic stress in pregnancy in order to connect these women with the services they may need (e.g. counseling) to prevent such devastating outcomes. Therefore, the incorporation of HRV into future studies has clinical and research relevance as well as national importance. Understanding the cardiac physiology, theoretical underpinnings, and sources of measurement error are essential to implementing HRV as a pregnancy-stress biomarker. Therefore, this primer serves as a resource for nurses to better understand and implement HRV as a pregnancy-stress biomarker in their own research and practice.

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Beyond Data Collection: Unanticipated Benefits of Qualitative Interviews

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Abstract

Researchers often reflect on the value and benefits of our scholarship, and how our work will improve the health and health care of patients, communities, and health systems. However, beyond the benefits of the translation of evidence into practice, or the illumination of health inequities as we seek to improve health access for all people, we should also consider the therapeutic value of the qualitative interview process itself. This article explores considerations for scholars to reflect on as we conduct qualitative interviews, especially with vulnerable populations.

Qualitative interviews are typically seen as a method of gathering descriptive data and are not considered interventional. Some scholars argue that the role of researcher and therapist must not be blurred, as role confusion may confound the purity of findings (Lupton, 1994, Goffman, 1961, Dickson-Swift, James, Kippen, & Liamputtong, 2006). Researchers posit that positive outcomes may be related to the interview process itself, rather than an intended intervention, causing a placebo effect that could muddy results in a randomized clinical trial (Targum, 2011). Those that endorse this perspective recommend that researchers make "every effort to restrict clinical benefit accrued during the interview process..." (Targum, 2011, p. 43). In contrast, we argue that while the potential for ambiguity introduced by a therapeutic interview is an important consideration for researchers when describing study design and limitations, every effort should be made to improve the health and well-being of patient-participants, including potential benefit of the interview process itself. This discussion runs to the core of the identity of nurse-researchers, who, with a foot in each world, must be true to the goals and duties of both nurse/patient advocate and objective scientist. Careful balancing of these priorities requires us to take a more thoughtful approach to our responsibility both to the patient and the body of science our work may contribute to. The potential therapeutic benefit of interviews should be acknowledged and developed. At a minimum, our objective as researchers is to do no harm, but beyond that, to promote health, wellness, and positive outcomes for our participants.

When researchers conduct qualitative interviews with vulnerable populations to learn more about potentially sensitive topics that may evoke intense emotional responses and vulnerability, we are often asked to justify and prepare for participants' emotional distress. It is imperative that researchers thoughtfully consider not only the risks but also the benefits of qualitative research, while planning studies that fall within Institutional Review Board and standard ethics procedures. We assert that participants' rights and interests are primary, and that research must, at a minimum, "do no harm," and beyond that, it must only be undertaken if it contributes to reducing human suffering (Jacobsen & Landau, 2003). Conducting qualitative interviews about sensitive topics with vulnerable populations introduces several complex ethical challenges that arise from the precarious position of marginalized peoples and the risk that scholars may approach research with these populations with an "ends justify the means" way of thinking. Approaching the interview process with a Kantian perspective can ease the potential for ethical discrepancies by providing a set of moral imperatives which guide the interview process throughout, and state that each action of a process must be treated as the "end" (Kant, 1873/1916). Additionally, the possibility of therapeutic misconception must be explored as a potential risk that may occur when participants trust that researchers have their best interests in mind, simply because of positive interpersonal interactions. This could affect participant decision-making regarding the risks associated with research contribution. Given historical patterns of ethical misconduct by researchers working with marginalized populations, such ethical considerations are especially important.

In reflecting on past research experiences with vulnerable populations, the therapeutic potential of the interview process itself became apparent after conducting semi-structured qualitative interviews with a group of traumatically-injured Black men. The men had elected to participate in a study on perceptions of research participation, which was embedded in a larger primary study focused on the psychological effects of injuries among urban Black men. The parent study included qualitative and quantitative data (i.e.: demographics and injury characteristics, questionnaires about risk and protective factors contributing to injury outcomes, geographic data, and psychological symptom severity measures). The sample was drawn from this larger study and included 83 hospitalized Black men recruited in an urban trauma center in the northeastern United States, with a mean age of 38. More than half of the injuries were due to interpersonal violence, with the most common mechanism of injury gunshot wounds, followed by falls, and other mechanisms. A majority of the men stated that they joined the study for human connection (Bruce, et al., 2016). The interviews were seen as an opportunity to process the injury event with the added benefit of human connection, which the men felt was important, but lacking in their care. It allowed them to express the importance of their physical and emotional needs after these serious injuries, with someone who would listen.

As noted in the quotes below, patient-participants perceived that participation in the study provided a means for processing their injury in ways they had not been able to with the health care staff.

> Because you ask me real questions that I never had asked before. So I could tell you something. I never talked to nobody about my problems…like I wouldn't tell nobody

> none of this stuff here… I need to talk to someone and get it out. And that really helps it out. Thank you. Thank you.

Another participant felt that the research process warranted an opportunity for therapeutic communication that he felt wasn't otherwise available to him during his hospitalization.

> Y'all gave me an opportunity to actually have somebody to talk to…when y'all came in it was kind of great, I wasn't able to talk to the nurses 'cause they always wanna go help other people, so when y'all came in it was great for me to have someone to talk to.

Some participants felt that participating in the study awarded them a means to express their feelings following the injury event, in a cathartic way that offered them significant benefit.

> For somebody to talk to. Express my feelings. I usually keep everything bottled in. Actually I needed somebody to talk to, somebody I can trust…

> That y'all listened to me…Y'all like helped me, a lot. Because instead of me keeping how I feel inside, I'm actually venting right now, so it's helping me.

> It was very satisfying with just some of the questions being asked. So I really enjoyed the study…it was soothing to be ask—being asked some of the things that, you know, being asked.

The novel findings above prompted discussion among researchers about the perceptions of research participation for vulnerable populations, and the research process itself. A large body of evidence has investigated the factors that contribute to underrepresentation of vulnerable populations in clinical research (George, Duran, & Norris, 2014; Hussain-Gambles, Atkin, & Leese, 2004). In particular, Black men are underrepresented in clinical research due to mistrust of health research, perceived systemic and interpersonal racism, lack of access to and information about health research, logistical issues, and lack of culturally sensitive research methods (George, Duran, & Norris, 2014; Scharf et al, 2010). The motivation of Black men choosing to participate in a study for the opportunity of human and therapeutic connection prompts a larger discussion on the intersection between clinical care and the research process.

The potential therapeutic benefit derived from the interview process has sparked thoughtful discourse among qualitative researchers from other disciplines, including sociology, anthropology, psychiatry, and others. Participants often describe such interviews as "cathartic" and "empowering" (Wolgemuth, et al., 2015) However, the structure and characteristics of the interview likely influence the perceived therapeutic value of the conversation. Participants may be more likely to experience feelings of catharsis during an unstructured interview, whereas a survey or structured interview may not offer the same level of therapeutic connection (Campbell, Adams, Wasco, Ahrens, & Sefl, 2010). The relationship between interview characteristics and participant experience must be considered throughout the research design and process. We suggest that researchers be

especially thoughtful about not only the richness of data collected through the interview, but also the participants' emotional and psychological perceptions of the process.

In order to maximize the therapeutic potential of qualitative interview, the researcher must thoughtfully reflect on structural and situational factors during the design, planning, and implementation process. Traditionally, the participant-researcher power dynamic favors the researcher. In the interview process, the researcher should identify their stance toward the participant (Eide & Kahn, 2008). Will they remain distant and removed? Or will they connect personally with the participant? In either scenario, including techniques for therapeutic engagement and disengagement can help improve the participant experience, as well as the richness of the interview itself (Dempsey, Dowling, Larkin, & Murphy, 2016). Each approach has different ramifications on the data collection and analysis process and should be consistent with the research purpose/question and overarching qualitative methodology (i.e. phenomenology, ethnography, etc.). For example, will all parts of the interview be recorded, or will participants be allowed to go "off record?" What, if anything, will the researcher share about themselves? Furthermore, the researcher must consider the ethical implications of whether or not to engage in a therapeutic relationship with a research participant, as this may or may not be helpful, or cause harm to, the participant in given situations. This can be assessed as part of the interview process.

Systematic knowledge about the potential benefits of interview participation in nursing research remains limited. The current understanding about participants' perceptions of the qualitative interview process has most often originated from populations described as "vulnerable" interviewed about "sensitive" topics using unstructured interview approaches (Wolgemuth, et al., 2015). Furthermore, such knowledge is primarily derived from unsolicited feedback or singular questions at the conclusion of an interview. Given the inherent vulnerability of a patient's position within a highly complex healthcare system, the lack of discourse surrounding the therapeutic benefit of qualitative interviewing in nursing research is notable.

As a discipline, nursing approaches science with a humanist perspective characterized by the relationship between nurses and patients. This relationship prioritizes health and wellness, which is partly derived from the caring practices of the nurse (Meleis, 2012). Nursing research thus seeks to advance understanding of the impact of life experiences, including health, illness, injury, and death, on individuals and communities (Meleis, 2012). The potential participant benefits described above align with such priorities while simultaneously providing nurse researchers with a means to generate important knowledge about the human condition and promotion of health and wellness. In this way, the qualitative interview process poses dual benefit for nurse researchers by providing opportunity to simultaneously advance knowledge and provide therapeutic benefit. While seeking to improve understanding of important human experiences, nurses may also generate the caring presence and therapeutic values that underlie nursing as a profession.

Reconceptualizing the intent and benefits of qualitative interviewing has broad implications for health care professionals, from frontline clinicians to researchers. With the knowledge that the premises that underlie interviewing provide means for developing therapeutic

relationships, nurses may be better equipped to engage in meaningful conversations with vulnerable patients and families in patient care. When conducting qualitative interviews for the purposes of research, the research team should include interview questions about participants' experiences of the interview itself. Researchers should also consider their intent for data collection and analysis, as well as the potential therapeutic experience of the participant. Systematic assessment of participant experience will broaden the body of science on this important topic and lend credibility to using interviews as both a data collection technique and intervention (Campbell & Adams, 2009). Furthermore, many participants find value in the potential benefits that the research they participate in will provide to others (Campbell & Adams, 2009, Bruce et al., 2016). Member checking, or sharing findings with participants, can help to reinforce this important benefit. This may be relevant for both frontline nurses and researchers, and is particularly relevant for the nursing PhD student, who combines these important skill sets.

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Using Postcolonial and Poststructuralist Approaches to Understand Aboriginal Relocation Near the End of Life

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Abstract

Relocation, the act of being moved from one place to another, is a common experience among individuals facing advance illness and near the end of life. Respecting a person's preference for care, including location of death, is a goal of palliative and hospice clinicians. This paper will analyze the phenomena of relocation as conceptualized and experienced by Aboriginal and Torres Strait Islander Australians, who have been known to use mainstream palliative services at lower rates, later in disease process, and for shorter lengths of stay compared to non-Indigenous Australians. A postcolonial lens will be used to investigate the history leading to Aboriginal hesitation of such services and the discourse informing cultural awareness programs promoted by palliative care researchers. Methods rooted in post-structuralism will be applied to understand how a sense of self and belonging are formed through Aboriginal spiritual beliefs surrounding place of death.

Background

Respecting individuality and treatment preferences to reduce the burden of illness for patients near the end of life and the families who care for them are central tenets of hospice and palliative care. One concrete manifestation of this tenet is to facilitate the receipt of medical treatment in a location of their preference, whether it be at home or in a facility. Interest in this topic has uncovered that many seriously ill patients and those near death often face transitions from one place of care to another, in the United States and rural areas abroad (Burge, Lawson, & Johnson, 2005; Pong et al, 2011; Teno et al., 2013). While location of care for the dying is of global importance, this paper will focus on the experiences of Aboriginal Australians, as an example of a rural population who has been historically excluded from mainstream healthcare services and known to have spiritually strong ties to land and country. The phenomena of relocation, the act of being moved from one place to another, specifically in the context of serious illness near the end of life, will be examined using postcolonial and poststructuralist lenses. Using these lenses, we may gain

insight into how seriously ill individuals and those who love them are affected by relocation near the end of life.

A significant portion of the body of literature devoted to rural hospice and palliative care originates from Australia, owing to the country's low population density. Australia ranks among the most sparsely countries in the world, with an average of 3 persons per square kilometer and wide variance about this mean. With the majority of the country's 22.7 million residents and services concentrated along coastal urban centers, the majority of its 7.7 million square kilometers is considered extremely remote and far from mainstream health services (Central Intelligence Agency, 2015). The Australian Institute of Health and Welfare (2015) has prioritized providing basic medical services to inhabitants of rural and remote areas, where higher death rates may be evidence of differences in access and socioeconomic disadvantage.

The focus on the experiences of Aboriginal and Torres Strait Islander Australians (henceforth referred to as Aboriginals or Aboriginal Australians) is motivated by several factors. A review of Aboriginal palliative care models revealed that very little empirical data on Aboriginal use of mainstream palliative care services exists, but authors generally agreed that Aboriginals tended not to use them (O'Brien et al., 2013). A palliative care needs study conducted by Sullivan et al. (2003) showed that Aboriginal Australians tended to be referred to palliative care at very late stages of illness, or not at all (Sullivan et al., 2003). Even when mainstream palliative care is examined, Aboriginal Australians are disproportionately affected by separations in palliative care, have shorter lengths of stay, and receive nearly all palliative care in an inpatient setting (Australian Institute of Health and Welfare, 2011).

Given that 15% of inhabitants of remote areas 49% of very remote areas are Indigenous, discussions on rural and remote healthcare delivery must address Indigenous health (Baxter, Hayes, & Gray, 2011). With this in mind, adopting a postcolonial lens in examining relocation could illuminate how the past informs present day interactions between historically excluded Aboriginals and a government-sponsored healthcare system, and how to mollify past inequities to achieve better health and improve professional behavior.

Lastly, palliative care providers are directed to be culturally aware and culturally safe for their clients, and more so in the face of serious illness and death, which are extremely personal experiences laden with meanings (Palliative Care Australia, 2018). With over four hundred distinct linguistic groups and a pervading emphasis on locality and immediate kinships structures, mandating that care for the dying be culturally appropriate proves to be fraught with complications. However, Aboriginals perspectives reveal a rich tradition of spiritual and cultural ties to land and country, resulting in elegantly articulated conceptualizations of the self and the importance of place in death in unifying the spirit. The lens of poststructuralism, which questions how the self and a sense of belonging are constructed within linguistically mediated structures and discourse, lends itself to illuminating the how relocation threatens one's concept of self, and how health workers might help to protect an individual's sense of unity.

Postcolonialism

Chief among the ideas encompassed by postcolonialism are critiquing Eurocentrism, complicating the binary of dominant hegemonic power versus submissive subaltern, and opposing the normalcy of underdevelopment (Lazarus, 2004). Pioneered by influential scholars Edward Said, Homi K. Bhabha, and Gayatri Spivak, postcolonial scholarship deconstructs the discourses and historical forces that impose simplified binaries on world narratives, and replaces them with complex webs of relationships through which cultural and political identities are formed. While this method draws upon historical context in exposing evidence of oppression, inequality, and dominance, the object of postcolonial criticism is often historical scholarship itself, which has often been manufactured to reinforce colonial hierarchies. Postcolonialism has proven to be illuminating when turned on discourses relating to health, in both explaining the origins of health inequities and shortcomings of policies aimed at rectifying them.

Looking at the history of colonial and Australian Commonwealth policies toward Aboriginal health exposes a narrative perpetuated to justify submission via discrimination and exclusion. Following the arrival of Europeans, Aboriginals experienced widespread losses of land and livelihood with the introduction of new diseases and conflict. Yet European settlers began attributing the spread of contagious disease with Aboriginals rather than themselves. Beginning in 1837, protectionist policies were established to segregate Aboriginals to missions and government settlements for the purposes of preventing the spread of diseases to non-Aboriginal people. Discourses related to Aboriginals as contagion was used to justify limiting Aboriginals' rights to movement and land, as well as reinforce the otherness of non-Europeans.

The concept of mainstream health services as foreign, imposed sites of disempowerment persists in interviews with Aboriginals on relocation due to advanced illness. One interviewee describes the hospital as "not only is it a place where you're — you are completely disempowered and you don't understand but you're away from all your relatives, you're away from everything that you know and you feel comfortable with" (McGrath, 2006, p. 105). Furthermore, interviewees explain that they hesitate to go to hospitals out of fear of a long stay against their wishes. One interviewee says that patients are "not wanting to go to Darwin or to the hospital because they're frightened that something's going to happen to them or they going to die there, especially if they're really sick and not come back to their country" (McGrath, 2006, p. 105). Another interviewee says that a lack of financial resources often necessitates relocation since "they can't come back to their homelands because they haven't got the resources to adequately support them out bush" (McGrath, 2008, p. 108). Against the historical context of mandated relocation for segregation, mandated relocation for treatment is similarly viewed as an act of alienation and subjugation.

The current politics and history of sovereignty and Aboriginal land rights are dense, even without a postcolonial analysis that embraces complexity. Despite being dubbed British subjects during the colonial period yet unrecognized as citizens until the recent past, Aboriginal Australians are often referred to as "first-nation peoples" and ceremonial acts of reconciliation of their land rights are practiced (Australian Capital Territory Government,

2017). Consequently, the Australian populace is conceived of as a multiplicity of countries and nations, rather than a unified sovereign state (Prokhovnik, 2015). Such discourse pervades Aboriginal choices in language when describing going to hospitals and the urban centers in which they are located. Fear of hospitals as an unwelcoming and foreign place was found to be a dominant emotion in research devoted to understanding relocation among Aboriginals. An interviewee explained, "I was terrified in hospital. [It's] an unknown territory" (McGrath, 2006, p. 104). The act of entering a hospital, for these individuals, was tantamount to crossing very real political boundaries. These boundaries are formed, not solely by territorial seizures by dominant political powers, but by Aboriginals' positive affirmation of their rights to what remains of their land as its first inhabitants. Another interviewee, in paraphrasing their grandmother's reasons to die at home, said, "No I want to be home when I pass away, I don't want to be that big city; this is my country here" (McGrath, 2007, p. 266).

Given the cultural and spiritual significance of death and illness to many individuals, mandating culturally appropriate care at the end of life is an oft-repeated mantra among clinicians, and discussions on palliative care for Aboriginals are no different. This dialogue of cultural sensitivity for end-of-life care is a stark contrast from the Commonwealth policies of Aboriginal assimilation that marked the period from 1937 to 1960s. Assimilation policies asserted that Aboriginals had health needs no different from non-Indigenous Australians, using the healthcare system as a means to negate Aboriginal differences (cultural and physical) and invalidate non-European traditions (Khoury, 2015). Underlying assimilation is the assumption that European culture is the norm to which Aboriginals should conform, an assumption which was mechanized through systemic racism carried out by non-Aboriginal health workers.

These acts of ethnocentrism are an obvious target of a cursory and basic postcolonial critique. Yet the contemporary rhetoric of scholarly work on Aboriginal palliative care delivery continues to default to the hegemonic narrative—relegating Aboriginal culture to "otherness" and privileging mainstream healthcare as the culture-free norm. The predominant opinion in the literature is the way to "reach out" to Aboriginals is to deliver "culturally-appropriate" care (McGrath & Phillips, 2008; O'Brien et al., 2013). It is proposed that clinicians' ignorance of Aboriginal belief systems surrounding the end of life, including the life-death-life model, ties to the land, and Aboriginal spirituality of the Dreamtime leads to a disconnect between Aboriginal patients and palliative care clinicians. Downing et al. (2011) found that the majority of Indigenous cultural training programs were characterized by a cultural awareness framework, which emphasizes training on health workers on "Indigenous culture" in order to motivate more tolerant behavior.

A postcolonial analysis of cultural awareness frameworks reveals a similar, yet less obvious, ethnocentrism on the part of supporters of such programs. To speak of Aboriginal culture as a singular whole to which healthcare professionals should familiarize themselves is an act of essentialism, which has several detrimental consequences (Downing & Kowal, 2011). Its most basic is ignorance of the variation among Aboriginal and Torres Strait Islander groups by positing that there exists a unified Aboriginal culture. In recognition of this fallacy, some authors advocate for a "living model" approach to Aboriginal palliative care health

policy that is flexible and acknowledges the great diversity in needs across communities, saying that "there should never be a one-size-fits-all model" (O'Brien et al., 2013, p. 1). Other healthcare resources on Aboriginal culture, including ones supported by Aboriginal-led organizations, urge clinicians to investigate cultures and practices of their targeted population to further to tailor their care to their locality (O'Brien et al., 2013). A perfect and sensitive description of the heterogeneity of Aboriginal cultures is impossible, but even if it were, it would not redress other fundamental fallacies that plague cultural awareness frameworks. Such cultural awareness programs emphasize health worker education as a means to bridge differences, which may lead workers to develop a false sense of cultural knowledge, or to wrongly attribute simple misunderstandings and individual preferences to culture. Furthermore, by placing Aboriginal culture as the central object of study, cultural awareness programs reinforce the assumption that Aboriginal culture is a deviation from a norm. By refraining from introspectively examining the culture of health workers and the system in which they operate, modern medicine remains immune to criticism, and remains dominant.

One response to the dominance of Westernized modern medicine was Aboriginal-led movements to establish Aboriginal community health organizations. Reaffirming Indigenous agency, Aboriginal leaders used these organizations to subvert the assumed paradigms that form the basis of Westernized modern medicine. The narrative surrounding Indigenous health evolved from one to blaming Aboriginals for their poor health (protection), to one of negating a difference in needs (assimilation), to a more multifaceted view of Aboriginal health inequalities as consequences of systematic socioeconomic and political deprivation. The 1967 Referendum gave the Australian Commonwealth the authority to legislate on behalf of Aboriginal Australians and create health programs to respond to Indigenous health problems, which were too severe to address by the oft-ignorant policy of assimilation. During the 1970s, Aboriginal-led groups established and maintained their own health centers, culminating in the establishment of the National Aboriginal Controlled Community Health Organisation (NACCHO) in 1975 (Khoury, 2015).

Driven by the imperative to reject the narrative of Indigenous underdevelopment, NACCHO promotes health through providing basic services, such as adequate shelter and clean drinking water, and actively shaping discourse on Aboriginal health, through its philosophy-driven mission and educating mainstream health institutions. The Aboriginal Community-Controlled Health Services philosophy goes beyond the Western paradigm of health as the physical well-being of an individual (who, as a corollary, bears the blame when his health fails), by recognizing that health is achieved when one reaches their "full potential as a human being" and necessitates "bringing about the total well-being of their Community" (Khoury, 2015, p. 477). Furthermore, passive acceptance of the dominant Western view of death as the end of life is rejected in favor of the Aboriginal "cyclical concept of life-death-life" (Khoury, 2015, p. 477).

Underlying the work of NACCHO and discussions of improving palliative care access among Aboriginals is the imperative that Aboriginal health workers and leaders participate in care delivery. The success of organizations such as NACCHO in attracting Aboriginals health seekers is in large part attributed to the Aboriginal workers who staff them. One worker notes, "[t]hey see other black faces working in and running the clinics and they

know that the whole place is controlled by Aboriginal people. This is very different to what they normally experience in a health care setting" (Khoury, 2015, p. 481). Prioritizing the involvement of Aboriginal health workers goes beyond simply mandating that clinicians deliver "culturally appropriate care," by recognizing Aboriginal agency and their contributions to their communities. To focus solely on tolerating cultural differences plays into the antiquated narrative of Aboriginals as a resource-poor population upon which modern health policies are foisted.

Poststructuralism

With respect to the phenomena in question, poststructuralist theory can be used to understand how an individual may conceive of herself and how the threat of serious illness and relocation threaten this concept. Poststructural methodology examines how the embodied self is constituted in relation to social institutions and discourses associated with health (Wright, 2003). With this view, an individual's idea of the self is constructed through intersecting layers of discourse and relations, and made manifest through choices of language. Poststructuralist theorists posit that an individual is both self-aware and self-reflective, and is able to see themself from the point of view of another. Resultantly, an individual may alter their behavior to meet expectations (Carolan, 2005). Drawing upon the traditions of structural linguists such as Saussure and Levi-Strauss, all forms of meaning-making may be interrogated as texts, and meaning itself is treated as a culturally and historically informed, dynamic entity (Wright, 2003).

As medical diagnoses, especially cancer, are often issued in hospitals or clinics, people can come to associate these locations with new terms of identification, new words to affix to and alter the sense of self. Carolan (2005) proposes that poststructuralism is useful in making sense of illness, a new life experience which requires "complex adjustments to the individual's previously held identity, involving a repositioning of 'self' in terms of alternate or additional storylines and categories" (p.7). The hospital is where an individual transforms into a case of a disease. As one health worker explains Aboriginals' hesitation to go seek treatment, "Yes they might have had pain for a long time and they've just been given Panadol or Mylanta for 12 months and then all of a sudden they are sent to Darwin and they're diagnosed with cancer and the family are angry. This happens quite often" (McGrath, 2006, p. 104). The name of a person's disease, their primary diagnosis, is henceforth affixed to her individual name in all subsequent discussions among professionals, in conflict with their former concept of self. The diagnosis itself may not exist in the preferred language of the individual, as is the case with *cancer* in Aboriginal languages, where the term does not exist (O'Brien et al., 2013). Thus, the new diagnosis could demote an individual into an object of a foreign study.

The hospital is where a person becomes known as a "patient." Receiving a diagnosis, if serious, often marks the beginning of a series of hospital visits, where an individual is referred to by her number, a medical record number, or as a patient belonging to a cancer ward or the docket of a particular surgeon. Becoming a patient parallels Lacan's mirror stage, a psychoanalytic theory of development. According to his theory, toddlers, when staring at themselves in the mirror come to the realization that it is they themselves behind the image, instead of an entertaining play of light and shadows (Vanheule & Verhaeghe,

2009). This formative experience is significant because it marks the beginning of a person's self-awareness as an object in the mind's eye of another. Similarly, by entering a hospital, a person becomes a medical curiosity for others to examine by sight, smell, and touch. Limited to a bed in a ward, or a small, unlocked room at best, a person becomes an object freely accessed by a multitude of clinicians through repeated assessments and unending lines of questioning. Being hospitalized could be an intimidating experience for anyone. One worker describes the frustration of Aboriginal patients unused to hospital communication patterns, or lack thereof, by saying, "[t]hey're not used to 25 different people talking to them about the same thing and asking the same question. They can't understand why one person just doesn't ask that question and that's the end of it, they pass that information on" (McGrath, 2006). Receiving a diagnosis is a threat to autonomy. Aboriginal interviewees have expressed hesitancy to visit hospitals, access service, out of fear that it will initiate a chain of events that limits their freedom to be where they wish to be. Another worker says, "[w]ith some of our palliative care clients, even though they need respite some of them are too frightened to come into town in case they're going to finish up in town" (McGrath, 2006). When travelling becomes financially or physically strenuous, "[t]hey don't come in just for a day or so they come in for 2 or 3 weeks" (McGrath, 2006).

Additional steps in constructing a concept of the self include "becoming involved in cultural stories where meaning is allocated" and "recognizing oneself as belonging" (Carolan, 2005, p. 6). These steps inform a sense of how one should behave and belonging to the world in a certain way, which can be seen in Aboriginal descriptions of how dying *should* be. Thus, Aboriginals individuals' preference for dying at home may be characterized as a means of affirming belonging to their family and home country. Recognizing the importance of kinship, one interviewee says dying among the familiar is preferable so that "if they need to pass on any special sacred information onto any family member they can do that" (McGrath, 2007, p. 267). Fundamental to remaining at home to die is the idea that one should die in their "death country," rooted in the belief that "the spirit of the deceased person can have a physical impact on the place or country with that person's spirit" (McGrath & Phillips, 2008, p. 160). Otherwise, "their soul and their spirit believe that if they don't die in their own country that spirit going to walkabout all the time… Yeah, looking for home" (McGrath, 2007, p. 267). Dying somewhere results in existential restlessness in the afterlife, and anticipation of such an event results in a fragmented sense of self. In more clinical language, the Cultural Respect Framework for Aboriginal and Torres Strait Islander Health (2004) states that "[f]rom a mental health perspective, what happens after death is as important as what happens before death for Aboriginal and Torres Strait Islander peoples" (p. 12).

Examining traditional Aboriginal spiritual beliefs provides insights on how its believers situate their selves in the universe. Interviews of Aboriginals on reflections on death and dying affirm that many follow a spirituality that is a fusion of traditional Aboriginal and Christian beliefs (McGrath & Phillips, 2008). The present reality of human experience is preceded by the Dreamtime, a higher level of reality composed of spirits, from which the material world is sung into existence. The life-death-life cycle refers to the Aboriginal belief that death marks a return to this spiritual world. In contrast to traditional Christian views of the afterlife situated either above or below, the material and the spiritual worlds

are superimposed upon one another spatially, necessitating the return of a person's body, and therefore their spirit, to their country of origin, or their death country. One interviewer explains, "[a]t the end they always talk about country, yeah, where they belong and which country they [will die]" (McGrath, 2008, p. 161). For many, dying at home is for the comfort of the familiar. For followers of Aboriginal beliefs, it is a matter of spiritual reunification with a superior plane of existence. This sentiment echoes the world posited by Baudrillard (1994) in *Simulacra and Simulation*, in which a world of symbols and signs create a simulated hyperreality devoid of meaning that is layered upon perceived reality. Yet, in the traditional Aboriginal worldview, the material present world is the simulation of referents upon the true meaningful spiritual world to which they desire to return. In *Symbolic Exchange and Death*, Baudrillard (1993) highlights a difference in "pre-modern" cultures conceptualization of death. Whereas modernity devolved into associating death with non-existence, "primitive" cultures saw dying as a natural and social event, a symbolic exchange between the worlds of the dead and the living. Thus, the Aboriginal preference for being close to their home at the time of death is not an issue of comfort, but a spiritually necessary precursor to enter the next world.

Implications

In practice and application, both the postcolonial and poststructural lenses have strengths and shortcomings. Postcolonial analysis is most useful in deconstructing the meta-narratives that depict hospitals as foreign, Aboriginal cultures as one of difference, and palliative clinicians as acolytes of cultural awareness. It is best applied in identifying and removing harmful and disempowering language and practices, but falls short in providing guidance for forward-thinking action. Poststructuralism lends insight into how identity is formed in contexts besides the historical and political, but the obligation of health workers to support this formation comes from acknowledgment these contexts.

Taken to extremes, using the postcolonial method alone typically results in contradiction. While the method scrutinizes the binary of Westernized medicine as hegemonic and Aboriginal culture as the other, oversimplification through language is nearly inescapable, even by those who purvey the method. The discourse of many influential postcolonial theorists, well-meaning scholars of Aboriginal health, and this analysis cannot avoid essentialist language that divides the world between Aboriginal and not, or "mainstream" healthcare and not. Referring to individuals of the hundreds of Aboriginal and Torres Strait Islander groups collectively as "Aboriginal" is, in effect, an act of essentialism. Any scholars who refer to indigenous people still render them an object of study, no matter the goodness of their intentions. Even scholars who seek to "empower" others perpetuate the binary in presuming they have power to redistribute. In effect, postcolonialism deconstructs itself and its own methods by rendering all dichotomous language and study problematic.

Within the postcolonial context, one of the more promising approaches is to cultivate an environment of cultural safety. Cultural safety is a framework originally developed by indigenous nurse leaders in New Zealand to remedy power imbalances healthcare providers, who were usually descendants of White settlers, and their indigenous Maori clients (Ramsden, 1993). The framework encourages health workers to think critically about identity- and culture-forming processes, in themselves and the health system in which they

work, and later to act upon reflection by removing practices that disempower people who seek care (Anderson, et al., 2003). Concretely, cultural safety could manifest as providing interpreter services for people who do not comfortably speak providers' language or recognizing health events as the consequence of systematic deprivation of basic needs. For example, prevalence of babies' rashes in one community could be seen as a consequence of lack of access to clean water (Smye et al., 2006). The ultimate measure of adherence to the cultural safety framework is the level of safety perceived by those who seek care (Downing & Kowal, 2011).

Like the postcolonial ideas that precede it, cultural safety is prone to similar contradictions. How could health workers ensure that all individuals of a group feel safe when acknowledging group membership may be perceived as essentialism, and therefore harmful? How do providers empower health-seeking clients, when implying they hold power to give, could be perceived as patronizing and therefore disempowering? When an action has the potential to be perceived as harmful in the mind of the individual, adherents of cultural safety would err on the side of inaction. Consequently, proponents of cultural safety primarily encourage passive recognition of past deprivation, over active remediation through concrete solutions. Cultural safety operates best through recognizing and removing what is harmful, rather than providing insight into what ought to take its place.

These contradictions and those elsewhere are no surprise within the poststructuralist framework. Selves are still formed despite contradictions, and very often because of the threat posed by them. Binary divisions and essentializing through signifiers are ways of making meaning through language, and not attributes of an objective reality. As such, the illogical shortcomings of language are practically inescapable, and therefore not reasons to surrender passively to contradiction. Dichotomies of dominant versus submissive, or the intersections thereof, are not the only means from which the notion of the self arises. Helping someone return to their spiritual home to die could be viewed as preserving that person's sense of self and belonging, and not simply a remedial concession to the culturally different, historically disempowered other.

If supporting Aboriginals' preference to die at home could be justified just as honoring any individual's preferences could be justified, is recognition of the historical context of land deprivation wholly necessary? In other words, if Aboriginal preferences could be honored simply as a people with desires and needs, does the postcolonial lens, with all its contradictions, provide additional insight? Although the poststructuralist view recognizes that human beings exist in a multiplicity of overlapping structures and relationships, rooted in family, politics, history, seeking health, and in dying, the postcolonial lens demands that we focus on those identity-forming structures and relationships which *systematically* perpetuated power imbalances. As parts of the system that deprived Aboriginals of their rights, health workers are obligated to rectify historical wrongs, even in the face of contradictions. A poststructuralist lens helps health workers understand Aboriginals' preference to return to their country to die, whereas the postcolonial lens imbues it with moral urgency.

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