Title
Horizontal Violence Among Hospital Staff Nurses and the Quality and Safety of Patient Care

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Publication Date
2010

Peer reviewed|Thesis/dissertation

Horizontal Violence Among Hospital Staff Nurses and the Quality and Safety of Patient Care

by

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DISSERTATION

Submitted in partial satisfaction of the requirements for the degree of

DOCTOR OF PHILOSOPHY

in

SCHOOL OF NURSING

in the

GRADUATE DIVISION

of the

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

Dedication and Acknowledgements

This dissertation is dedicated to **Kari Purpora Gentile,** my youngest sister and friend. You shared in the joy I felt when I began doctoral school and although you aren't here in body anymore, I know you were with me all of the way. You're in my heart. I'll never forget you.

No one arrives at this place alone. I am deeply grateful to so many people for their guidance and support. Not only to prepare to start doctoral school, but to complete this work. Somehow words come up short when expressing my heartfelt gratitude. Each person has taught me something unique. I'll carry that "something" with me as I begin my academic career and beyond.

To **Mary A. Blegen, RN, PhD, FAAN:** my academic advisor and dissertation chair. I am the least articulate when it comes to expressing my gratitude to you. You embody the meaning of teacher and mentor.

To **Nancy A. Stotts, RN, EdD, FAAN:** sage, gifted teacher and mentor, and dissertation committee member. Your love of teaching is palpable and infectious. What fun we had.

To **Susan A. Chapman, PhD, RN** and **Jean Ann Seago, PhD, RN, FAAN,** dissertation committee members, for your thorough and thoughtful critique of my work.

To **Steven M. Paul, PhD**, statistician, for your patient and consistent teaching style; I learned so much from you.

To the **faculty** in the **Department of Nursing at the University of Hartford** who created a safe environment where I learned about excellence in teaching and found my life's work.

To my perpetual rooters, **my circle of friends,** who always know what to say and when to say it.

To those who provided financial support:

To **The Gordon and Betty Moore Foundation** for the **Betty Irene Moore Doctoral Fellowship** that allowed me to focus on my research and pursue doctoral education full time. What an amazing once-in-a-lifetime opportunity.

To the **Deloras Jones RN Scholarship**, that assisted me with education related expenses.

To the **UCSF School of Nursing** for the **Century Club Funds**, to the **Sigma Theta Tau International Alpha Eta Chapter** for the **Sigma Theta Tau International Alpha Eta Chapter Research Award**, and to the **Graduate Division at the University of California, San Francisco** for the **Graduate Student Research Award**, and the **Center for Patient Safety**, for funding this dissertation research.

And finally…

To the **hospital staff RNs** who participated in my study, I'm deeply grateful to each of you because without you, this work wouldn't be.

Horizontal Violence Among Hospital Staff Nurses and the Quality and Safety of Patient Care

Christina Madeline Purpora

Abstract

Nursing is among those believed to be oppressed who are at risk for horizontal violence, yet no known evidence of a relationship between these concepts exists. Studies of horizontal violence suggest that some nurses suffer personal consequences, yet almost nothing is known about the consequences for patients. Furthermore, no known framework exists to guide research to explain these potential consequences.

The purpose of the study was to describe staff registered nurses' (RNs) work-related views of themselves, nursing as a group, their interactions and relationships with other RNs, and quality of care. Five hypotheses were tested from the horizontal violence and quality and safety of care model.

A random sample of 173 hospital staff nurses drawn from the California Board of Registered Nursing's mailing list participated online or with a paper survey. The Nurses Workplace Scale measured nurses' work-related beliefs exhibitive of an oppressed self or group. The Negative Acts Questionnaire-Revised measured horizontal violence, also called bullying if it occurs frequently. Peer relations, the quality and safety of patient care and adverse events were also measured.

Horizontal violence was reported by 21.4% of participants. Nurses' who exhibited more internalized sexism (oppressed group beliefs) reported more horizontal violence ($r=.463$, $p=.000$). Nurses' who minimized themselves more (oppressed self beliefs) reported more horizontal violence ($r=.451$, $p=.000$). Nurses' who experienced more

horizontal violence reported less supportive relationships with peers (r= -.638, p=.000), lower quality and safety of patient care (r= - .459; p=.000), and a higher frequency of adverse events (r= .408; p= .000). Findings suggested that peer relationships mediated the effect of horizontal violence on the quality and safety of patient care, but not on adverse events.

Horizontal violence was reported by one fifth of staff nurses in hospitals. Hypotheses tested were supported. Nurses who perceived more oppression of self and nurses as a group reported more horizontal violence. Nurses perceived that horizontal violence negatively impacted peer relationships and the quality and safety of patient care and increased the frequency of adverse events. Education in practice settings is recommended to improve peer relationships in the presence of horizontal violence. Reducing horizontal violence may rely on changing the social structure in hospitals.
KEY WORDS: Oppressed group, oppressed self, horizontal violence, peer relations, quality of care, patient safety, adverse events.

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CHAPTER ONE: INTRODUCTION

In the 30 years preceding entrance into the doctoral program, I practiced in the specialties of medical-surgical and critical care nursing in more than ten hospitals in six states. For most of these years, I worked as a staff nurse and for others as a clinical nurse educator. In each hospital, I experienced nurses interacting with one another in both positive and negative ways. These experiences stir me to wonder about how patients are indirectly affected when negative interactions occur among the nurses caring for them. The following examples piqued my curiosity about how patient safety is threatened in these situations:

1. A new graduate nurse wanted to approach a physician who was known to be verbally abusive with a question about an order he wrote. She asked an experienced nurse for her advice. The experienced nurse rolled her eyes, slammed a chart on the counter in front of her and told her to give the medication because he ordered it and he is the doctor. She did not question the experienced nurse further because she felt too intimidated by her behavior. Instead, she gave the medication in question to the patient. Three doses later the patient developed a rash as a consequence of receiving the drug.

2. While on orientation, a newly hired nurse was withdrawing 10cc from a liter bottle of saline for irrigation not intended for intravenous use. Curious about why she was drawing up saline from that source in that size syringe, I asked her what she was doing. She replied she needed saline to flush her patient's Peripherally Inserted Central Catheter (PICC) and the 30cc saline bottle she would normally use was not available. She decided to problem solve without asking for help; her preceptor was busy, she explained, and when the preceptor is busy, she "snaps" at her.

When I entered graduate school I had many examples of similar situations and theory helped to begin to understand them. Roberts (1983) applied Paulo Freire's (1970/2003) oppression theory to explain these negative interactions as horizontal violence but that hypothesis has not been empirically tested. Some nurses suffer consequences from their experiences of horizontal violence yet almost nothing is known about the consequences for patients and no known framework exists to guide research on the topic.

This dissertation research describes hospital staff RNs work-related views of themselves, nursing as a group, their interactions and relationships with other staff RNs and quality of care. The body of work contained herein consists of three manuscripts that will be submitted for publication, each focuses on a different aspect of the study's purpose. The first manuscript (Chapter Two), entitled "Horizontal Violence and the Quality and Safety of Patient Care: A Conceptual Model," describes the innovative model used to guide the study and its implications for future research. The second manuscript (Chapter Three), entitled "Horizontal Violence Between Hospital Staff Registered Nurses Related to Oppressed Group or Self" describes the incidence of horizontal violence and the relationship these negative workplace behaviors have to the attitudes these nurses hold about themselves and nursing as a group. The third manuscript (Chapter Four), entitled "Horizontal Violence and the Quality and Safety of Patient Care," describes the relationship among horizontal violence, peer relations, and the quality and safety of patient care. This work ends with Chapter Five, a conclusion and recommendations for research.

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CHAPTER TWO: HORIZONTAL VIOLENCE AND THE QUALITY AND SAFETY OF PATIENT CARE: A CONCEPTUAL MODEL

Abstract

For almost 20 years, nurses in international clinical and academic settings have voiced concern about horizontal violence among nurses and its consequences. However, no known framework exists to guide research on the topic or to explain these potential consequences. This paper presents a conceptual model that was developed from four theories to illustrate how the quality and safety of patient care could be affected by horizontal violence. Research is needed to validate the new model and to gather empirical evidence of the consequences of horizontal violence on which to base recommendations for future research, education, and practice.

Key terms: oppression, internalized dominant values, horizontal violence, peer communication, quality and safety of patient care.

Introduction

For nearly two decades, clinical and academic nurses have written about horizontal violence among nurses in clinical settings and its consequences. Horizontal violence is behavior that is directed by one peer toward another that harms, disrespects, and devalues the worth of the recipient while denying them their basic human rights (Blanton, Lybecker, & Spring, 1998). Examples include non-verbal behavior, such as ignoring a peer, verbal behavior, such as making sarcastic comments to them or talking behind their back, and/or physical acts like finger pointing or slamming things (Blanton et al., 1998). Other similar terms used to label negative behavior among nurses at work include nurse-on-nurse aggression (Farrell, 1997; Farrell, 1999), bullying (Hughes & Clancey, 2009; Johnson & Rea, 2009; Simons, 2008; Randle, 2003; Vessey, DeMarco, Gaffney & Budin, 2009), verbal abuse (Cox, 1991; Rowe & Sherlock, 2005; Sofield & Salmond, 2003), lateral violence (Griffin, 2004; Sheridan-Leos, 2008; Stanley, Martin, Michel, Welton, & Nemeth, 2007), incivility (Felblinger, 2008), and lateral or horizontal hostility (Thomas, 2003; Alspach, 2007). This paper uses the term horizontal violence. Research articles (Farrell, 1997; 1999; McKenna, Smith, Poole, & Coverdale, 2003, Quine, 2001; Randle, 2003; Simons, 2008) and opinion pieces (Georgiou, 2007; Stewart, 2010, Moye, 2010) from Australia, New Zealand, the United Kingdom, and the United States suggest that nurses share an ongoing and growing concern about horizontal violence and its consequences.

Many researchers have described horizontal violence among nurses working in hospitals (Dunn, 2003; Farrell, 1997; 1999; Johnson & Rea, 2009; McKenna et al., 2003; Rowe & Sherlock, 2005; Simons, 2008; Skillings, 1992; Sofield & Salmond, 2003;

Stanley et al., 2007). Nurses suffer consequences as a result of their experiences such as psychological impact (McKenna et al., 2003; Randle, 2003; Rowe & Sherlock, 2005), job dissatisfaction (Rowe & Sherlock, 2005), and negative effects on peer relationships (Rowe & Sherlock, 2005). Some describe their experiences as painful (Skillings, 1992) and far more distressing than when similar behaviors are directed toward them by physicians or patients (Farrell, 1997; Farrell, 1999). Some nurses intend to leave their current job to find work elsewhere (Johnson & Rea, 2009; Simons, 2008; Sofield & Salmond, 2003; Vessey et al., 2009), while others consider leaving nursing altogether (Johnson & Rea, 2009; McKenna et al., 2003). Some nurses perceive that horizontal violence threatens the safety of patients (McKenna et al., 2003) and diminishes the quality of their care (Rowe & Sherlock, 2005).

Rosenstein & O'Daniel (2005; 2008) reported that doctors and nurses in hospitals perceive that disruptive behavior, such as use of rude tone of voice or threatening body language, decreases their communication. Communication decreases when individuals feel too intimidated to communicate with members of the healthcare team who are known instigators of these negative behaviors (Rosenstein & O'Daniel, 2008; Institute of Safe Medication Practices (ISMP), 2003). The Joint Commission (2007) reports that close to 70% of actual or potential harm to patients can be linked to insufficient communication in healthcare organizations. Yet, no direct empirical links among horizontal violence or disruptive behavior, communication, and patient care have been made. The dearth of research and the concern about consequences for patients call for studies of horizontal violence among nurses in hospitals, its effect on their relationships and communication, and the consequences for patient care.

To date, researchers who study horizontal violence among nurses used Freire's (1970/2003) theory of oppression as a framework or no theory at all. Those who used it did so implicitly by using the term horizontal violence, one of its concepts (Longo, 2007; McKenna et al., 2003), while others did so explicitly (Dunn, 2003; Skillings, 1992; Simons, 2008; Stanley et al., 2007). Conceptual models are important because of their utility for explaining situations and for guiding research (Meleis, 2007), yet, no known study proposed a model to explain horizontal violence and its consequences.

This paper presents a conceptual model that illustrates how the quality and safety of patient care could be affected by horizontal violence. The paper begins with a description of the model in which oppression theory (Freire, 1970/2003), a theory of human motivation (Maslow, 1943), the essential human communication model (DeVito, 2008) and the Swiss cheese model of system accidents (Reason, 2000) and the quality and safety of patient care are linked. Then, implications for research are provided.

Conceptual Model

Earp & Ennett (1991) define a conceptual model as ". . . a diagram of proposed causal linkages among a set of concepts believed to be related to a particular public health problem" (p. 164). The proposed horizontal violence and the quality and safety of patient care model is displayed in figure 1. Directionality of the model flows from left to right or cause to effect.

Oppression

In his theory of oppression, Freire (1970/2003) postulated that the Brazilian people he observed were living in a "situation of oppression" (p. 55). They were dominated by others who had violently obstructed them from living their lives freely as

human beings ensconced in their unique beliefs and values. Freire (1970/2003) contends that a situation of oppression can be changed because it results from an imbalanced social structure, not fate.

Building on the work of Freire and others, Roberts (1983) posited that nurses have worked in a situation of oppression since the early 1900's when they began caring for patients in hospitals controlled by male physicians and administrators. Ashley (1976) and Reverby (1987) describe nurses in the mid 1800's to early 1900's doing the work traditionally thought of as the work of women in hierarchical hospitals. Their practice was controlled either by groups with more power that are held in higher esteem or by the systems in which they work. Thorelli (1986) defines power as "…the ability to influence the decision and actions of others" (p. 38). Today, nurses continue to bear a great deal of responsibility caring for patients whose lives are in their hands yet they have little power compared to physicians and administrators (Garman, Leach, & Spector, 2006).

Internalized Dominant Values

Freire (1970/2003) theorized that oppressed people internalize their situation by adopting the dominant group's beliefs and values while minimizing their own. Oppressed people manifest what they internalize by acting like those who oppress them while remaining submissive to them. They develop hatred for their own group and become fearful of fighting for freedom at the risk of more violence from those who oppress them (Freire, 1970/2003).

Roberts (1983) suggested that nurses have internalized the dominant physician values while minimizing those of nursing. She supports her argument by pointing to the prominence and value placed on the medical model over nursing. She further postulates

that oppressed nurses manifest what they have internalized by exhibiting poor self-esteem, feelings of inferiority, aversion for nurses who are most often, but not always, women, dissatisfaction with the primarily female profession, disunity, and lack of professional identity.

Working with Roberts and others, DeMarco (2008) used the concepts “oppressed self” and “oppressed group” (p. 299) to explain how nurses’ exhibit internalized dominant values while minimizing their own. Oppressed self demonstrates a person’s beliefs about their individual worth. When people minimize their own worth, they may stay quiet rather than contribute their opinion in situations. Oppressed group represents beliefs about women, who are most often nurses in hierarchical hospitals, and how they may be inclined behave when in a group. When beliefs are pessimistic, their collective contribution as women is minimized.

Horizontal Violence

A third concept derived from oppression theory is “horizontal violence” (Freire, 1970/2003, p. 62). Freire identified the concept based on his observations of oppressed Brazilians and on behavior first described by Fanon’s (1963) observation of oppressed Algerians. The concept was originally defined as acts of violence such as killing, burning each other’s houses and pulling knives on one another. He postulated that the oppressed feel aggressive but remain submissive toward those who oppress them and these acts occur as one way that oppressed people relieve mounting situational tension among them. Blanton et al. (1998) used Freire’s (1970/2003) work as well as others to develop the definition of horizontal violence used in the model, the only one known to be derived from Freire’s theory. Though the acts described by Blanton et al. (1998) are not the same

acts of horizontal violence defined by Freire, the concept is useful, nonetheless, for explaining behavior among nurses who are also thought to be oppressed.

In the model, horizontal violence represents the harmful behavior oppressed nurses are at risk for engaging in to relieve mounting frustration from working in hierarchical hospitals where they have great responsibility but little power. While there are many factors that influence nurses' work related behavior, oppression is central and understudied. Other factors could include age, education, and experience. An assumption that nurses may engage in horizontal violence because they are oppressed has persisted in the nursing literature for almost three decades (Cox, 1991; Roberts 1983, Simons, 2009; Skillings, 1992), but that hypothesis has yet to be tested. The purpose of using these concepts in the proposed model is, like other authors, not to fault nurses for the behavior or to view them as victims (DeMarco et al., 2008; Keen, 1991) but instead to explain, theoretically, why, as a group, nurses are considered oppressed, and, thus, at risk for engaging in horizontal violence. The proposition in the proposed model is that internalized dominant values are positively related to experiences of horizontal violence, that is, as internalized dominant values exhibited as oppressed group or self increase, so does horizontal violence.

Horizontal Violence and Peer Communication

The concepts to the right of horizontal violence, "safety needs" (Maslow, 1943, p. 376) and "psychological noise" (DeVito, 2008, p. 13), are used to hypothesize a link between horizontal violence and the next concept in the model, peer communication. In his theory of human motivation, Maslow (1943) explained how adult human behavior is motivated by several basic needs. Safety needs are centered on a human being's need to

be free from physical and emotional harm. When a person's safety needs are met they feel safe enough to relate to others. Conversely, a person who perceives the world as unsafe may believe their physical and emotional well being are at risk for harm and may react to this threat by not relating to others. The concept is useful for explaining how nurses who have suffered psychological harm from horizontal violence may perceive threats to their emotional safety in work environments. Their hesitation or resistance to interacting with others may be in response to perceived threats to their emotional well being including fear of more horizontal violence and more psychological harm.

Experiencing threats to one's well-being and fear of further horizontal violence interferes with communication. DeVito (2008) illustrates communication between people and the factors that promote or impede it in his essentials of human communication model. He defines communication as the interpersonal exchange of verbal and nonverbal messages between people (Devito, 2008). He explains that, at one extreme, a person's message will not reach an intended recipient at all because of psychological noise, a factor that impedes communication. Psychological noise includes thoughts about or beliefs and attitudes formed in advance of the communication and/or strong negative feelings about how that communication may occur.

In the proposed model, safety needs and psychological noise provide the link between horizontal violence and peer communication, the exchange of verbal and non-verbal messages among people of the same status within a group. Nurses who have experienced horizontal violence may avoid interacting with their peers because of perceived threats to their psychological well being and preconceived notions about how the communication exchange will play out. Using safety needs and psychological noise to

link them, the proposition is: horizontal violence is negatively related to peer communication, that is, as horizontal violence increases, peer communication decreases.

Peer Communication and Quality and Safety of Patient Care

To the right of peer communication is the concept "defense layers" (Reason, 2000, p.769) used to hypothesize a link between peer communication and the last concept in the proposed model, the quality and safety of patient care. Reason's (2005) Swiss cheese model of system accidents illustrates how people and things get harmed in technologically sophisticated organizations including healthcare. He developed the model to promote evaluation of bad outcomes by considering what failed in a system's defense layers rather than simply blaming people for the errors. In his conceptualization, these layers protect people and things from harm. They consist of people, technology, and policies and procedures that each play a vital part and, collectively, are usually protective. Conversely, when these layers are compromised, an opportunity for an error to cause harm exists. The defense layer of interest is the one comprised of people that, in healthcare, consists of those caring directly for patients including their communication with each other. Without open communication among caregivers, the potential for detecting and preventing harm is reduced.

In the proposed model, peer communication is hypothesized as one of many important contributors to protecting patients from harm. Communication among nurses is conceptualized as sharing information related to the care of patients including asking each other questions, providing feedback to each other, giving each other advice or seeking clarification or validation of care. Decreased peer communication is hypothesized to threaten the integrity of the defense layer.

Quality of care is the extent to which care delivered to patients increases the chance of meeting their needs (Institute of Medicine (IOM), 2001). Good quality of care is culturally sensitive and clearly communicated care that is delivered competently while involving the patient in care decisions (IOM, 2001). Patient safety is the process of delivering that care where patient harm is prevented and avoided (Agency for Healthcare Research Quality, 2004). In the model, both concepts are displayed as one, the quality and safety of patient care, because they address different aspects of care delivery. Using defense layers to link them, peer relations is positively related to the quality and safety of patient care, that is, as peer communication decreases, so does the quality and safety of patient care.

Implications for Research

The horizontal violence and the quality and safety of patient care model offers a framework to guide research where there is a paucity of empirical evidence on a topic of growing concern among nurses internationally. Before research can be conducted, measures of model concepts must be located or developed. The model and its propositions generate research hypotheses for testing. Hypothesis one, the model suggests that as internalized dominant values exhibited as oppressed group or self increase, so does horizontal violence. Hypothesis two, the model suggests as horizontal violence increases, peers communication decreases. Hypothesis three, the model suggests that as peer communication decreases, so does the quality and safety of patient care. Further research is needed to test these hypotheses in various populations of RNs and search for other factors that influence these relationships. Mounting evidence of empirical links, or lack thereof, validates and provides opportunity for improvement of the model. Evidence

of empirical links creates a new call for research to inform strategies for addressing horizontal violence and its consequences for patients.

Conclusion

This paper presented the horizontal violence and the quality and safety of care model. Four theories linked for the first time illustrate how horizontal violence arises and its effect on the quality and safety of patient care. Internationally, nurses share concern about horizontal violence and its consequences. Studies suggest that nurses suffer consequences as a result of their experiences with horizontal violence, yet little, if anything is known about consequences for patients and no known framework exists to explain or guide research on the topic. The new model begins to fill this gap. However, research is needed to validate the new model. Empirical evidence gathered from studies guided by the model will establish the foundation of practice and education recommendations.

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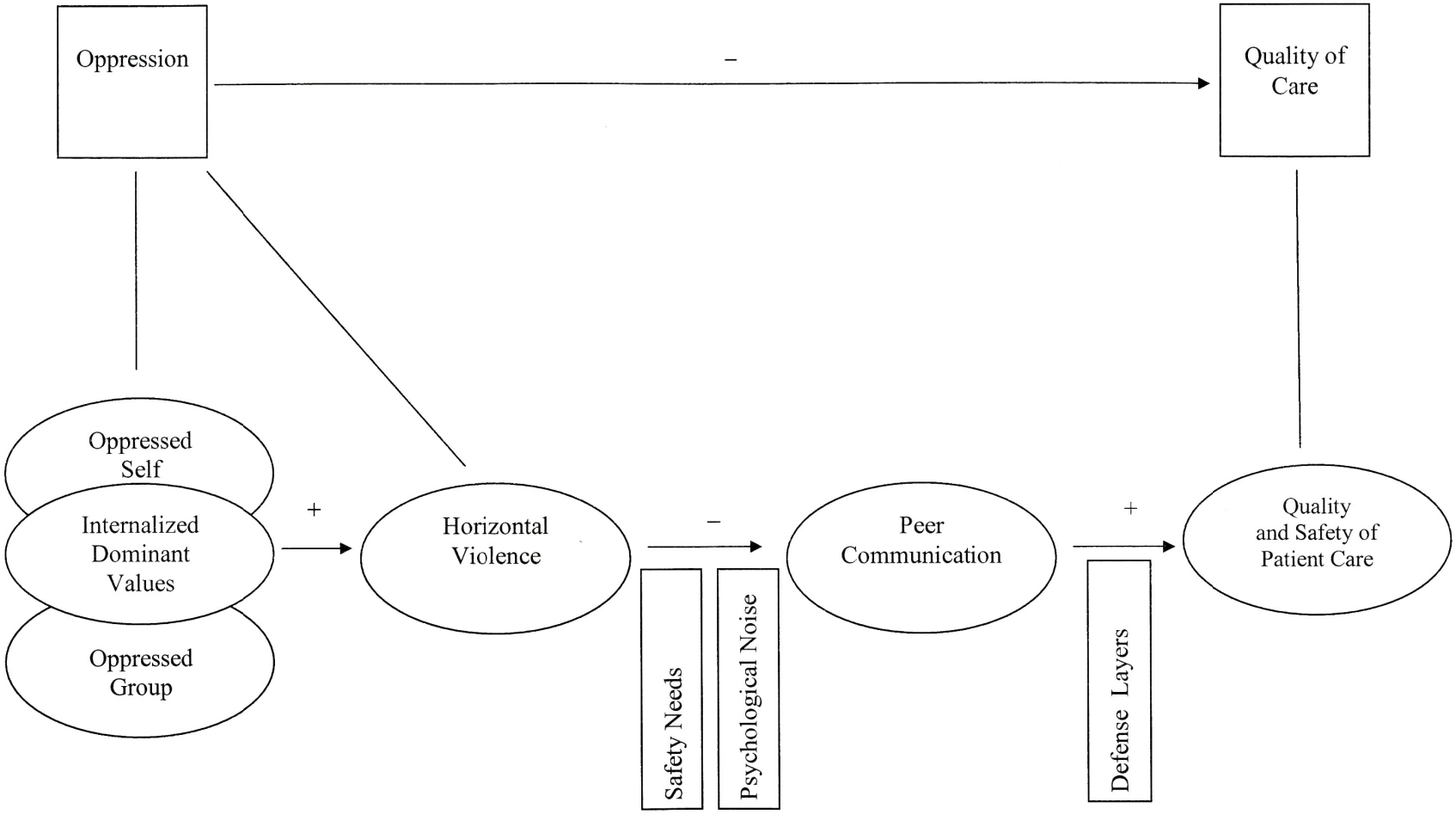

Figure 1. A Conceptual Model for Horizontal Violence and the Quality and Safety of Patient Care.

CHAPTER THREE: HORIZONTAL VIOLENCE BETWEEN HOSPITAL STAFF REGISTERED NURSES RELATED TO OPPRESSED GROUP OR SELF

Abstract

OBJECTIVE: This study described the incidence of horizontal violence among hospital staff registered nurses and tested two hypotheses: (1) nurses who exhibit more internalized sexism consistent with those of an oppressed group will report more horizontal violence and (2) nurses who exhibit more minimization of self consistent with those of an oppressed self will report more horizontal violence.

BACKGROUND: Nursing is among other groups believed to be oppressed who are at risk for engaging in horizontal violence, yet there is no known empirical evidence of a relationship between attitudes exhibitive of an oppressed group or self and horizontal violence.

METHODS: This descriptive model testing study surveyed a random sample of 173 hospital staff nurses drawn from the California Board of Registered Nursing's mailing list. The Nurses Workplace Scale measured nurses' internalized work related views exhibitive of an oppressed self or group. The Negative Acts Questionnaire-Revised measured horizontal violence, also called bullying if it occurs frequently.

RESULTS: Horizontal violence was reported by 21.4% (n=37) of participating nurses. Nurses' who exhibited more internalized sexism reported more horizontal violence (r=.463, p=.000). Nurses' who minimized themselves more reported more horizontal violence (r=.451, p=.000).

CONCLUSION: Horizontal violence was reported by one fifth of staff nurses in hospitals. Hypotheses tested were supported. Nurses who perceive more oppression of self and nurses as a group report more horizontal violence. Reducing horizontal violence

may rely on changing the social structure in hospitals. KEY WORDS: Oppressed group, oppressed self, internalized sexism, minimization of self, horizontal violence.

Introduction

Oppressed people live in various places around the world just as they have throughout human history. Being oppressed means living a life dictated by the way others live their lives that are deemed the right way of living (Freire, 1970/2003). The oppressed internalize these dominant values while casting off their own. In the process they develop hatred for their own people and become aggravated with their situation, yet afraid of living life any other way. One way they cope with their frustration is to direct destructive behavior toward one another, behavior known as "horizontal violence" in oppression theory (Freire, 1970/2003, p. 62). For nearly four decades nurses have been among those thought to be oppressed because they do work traditionally considered the work of women in hierarchical hospitals (Ashley, 1976; Reverby, 1987). The premise for this argument is that nursing practice is controlled by forces outside of the profession with higher status and power (Ashley, 1975; Roberts, 1983). Historically, these forces in hospitals have included male dominated medicine and hospital administrators (Ashley, 1975; Roberts, 1983; Reverby, 1987). The conceptualization can also be used for explaining negative behavior among oppressed nurses as horizontal violence (Keen, 1991; Roberts, 1983; Skillings, 1992, Sofield & Salmond, 2003; Simons, 2008); but, empirical evidence of an association exhibitive of being oppressed and horizontal violence has yet to be produced.

This paper describes the incidence of horizontal violence among staff registered nurses (RNs) in hospitals and tests for an association with work-related internalized dominant values consistent with an oppressed group or self. These findings are part of an overall study that describes nurses' work related views of themselves, nursing as a group,

their interactions and relationships with one another, and the quality and safety of patient care.

Background and Significance

Horizontal violence in the workplace is injurious behavior aimed by one worker toward another who is of equal status within a hierarchy that seeks to control the person by disregarding and diminishing their value as a human being (Blanton, Lybecker, & Spring, 1998). Displays of horizontal violence include calling coworkers demeaning names; using words, tone of voice, or body language that humiliates or ridicules them; belittling their concerns; and pushing them or throwing things (Blanton et al., 1998). Bullying is a term used when these behaviors happen often (Mikkelsen & Einarsen, 2001). A variety of other terms are used by nurse researchers and authors. Farrell (1997; 1999) uses nurse-to-nurse aggression. Bullying was used by Hughes and Clancey (2009), Johnson and Rea (2009), Simons (2008), and Randle (2003). Verbal abuse is used by others (Cox, 1991; Rowe & Sherlock, 2005; Sofield & the Salmond, 2003; Ulrich, Lavandero, Hart, Woods, Leggett, & Taylor, 2006) as is lateral violence (Griffin, 2004; Sheridan-Leos, 2008; Stanley, Martin, Michel, Welton, & Nemeth, 2007), incivility (Felblinger, 2008), and horizontal or lateral hostility (Thomas, 2003; Alspach, 2007).

The reported incidence of horizontal violence in hospitals varies. Forty-six percent of a sample of 26 new graduate hospital staff nurses reported lateral violence (Griffin, 2004). In a study of 461, an incidence of 28% of verbal abuse was reported (Sofield & Salmond, 2003). Ulrich et al. (2006) reported a 17.6% incidence of verbal abuse among 4346 critical care RNs. Dunn (2003) concluded from the frequencies and percentages of participant responses to individual items that horizontal violence was

common among 145 operating room nurses. From the data provided in the article, an incidence of 49.7% was estimated. Seventy five percent of a sample of 213 reported verbal abuse from other nurses (Rowe & Sherlock, 2005). In another study of 663 nurses, an incidence of 46% lateral violence was reported (Stanley et al., 2007). In two studies in Australia, 30% of 270 nurses (Farrell, 1999) and 29% of 1436 nurses reported nurse-on-nurse aggression (Farrell, Bobrowski & Bobrowski, 2006). In a New Zealand study of 551 new graduate nurses, McKenna et al. (2003) concluded that horizontal violence was a widespread experience. They used frequencies and percentages of responses to individual items, but not enough information was provided to estimate an overall incidence. In the two studies that used the same measure of bullying, 249 emergency room nurses reported an incidence of 27.3% (Johnson & Rea, 2009) while Simons (2009) described an incidence of 31% in a sample of 511 nurses working in various clinical areas.

In these studies the incidence of horizontal violence varies from 17.6% to 75% among nurses in various roles across clinical areas in hospitals. However, these percentages should be viewed cautiously because several challenges were encountered during this review. First, most investigators used a measure created or modified for their study with little or no evidence of reliability and validity. Horizontal violence was measured and defined differently across other studies. The most consistent information came from two studies that used the same measure, which had evidence of reliability and validity (Johnson & Rea, 2008; Simons, 2008). This raises an interesting question about how horizontal violence is defined and measured. Second, incidence was mostly reported on the basis of an overall sample which included nurses working in diverse roles with

varying years of experience making comparison difficult across individual populations, such as staff RNs. This is an important consideration because by definition, horizontal violence occurs among those who share the same status in a hierarchy. Nurse managers are generally perceived as having higher status and therefore have more power (Duffy, 1995; McCall, 1996). New graduate nurses may be particularly vulnerable to experiences of horizontal violence given their inexperience (McKenna et al., 2003) and may report the behavior more often than experienced nurses. Third, nurses most frequently worked in medical surgical (Farrell, 1999; Rowe & Sherlock, 2005), critical care (Ulrich et al. (2006), and emergency room (ER) (Johnson & Rea, 2009). This raises an interesting question about clinical area as a factor that influences incidence.

Theoretical Framework

The horizontal violence and the quality and safety of patient care model that guided this study was discussed elsewhere (Purpora, 2010). The first two concepts, internalized dominant values and horizontal violence were the focus of this analysis. The shaded portion of the model is not discussed here (see Figure 1).

Internalized dominant values and horizontal violence are concepts taken from Freire's (1970/2003) theory of oppression. In the model, internalized dominant values represents the work-related attitudes nurses hold about themselves and nursing in response to the oppressive hierarchal environments where they work and horizontal violence explains the negative behavior oppressed nurses are in jeopardy of using in reaction to it (Purpora, 2010). Using Freire's (1970/2003) theory to explain, those who are oppressed live their lives shaped by the values of those who control them. The oppressed adopt these values while depriving themselves of their own. His theory was

first used by Roberts (1983) to explain how nursing may be thought of as oppressed. This oppression began when women provided nursing care in exchange for training as a nurse in hospitals in the late 1800-early 1900s (Ashley, 1976; Reverby, 1987). Physicians and administrators who ran these hospitals exploited female nurses by receiving remuneration for the nursing care they provided with little compensation to the women (Ashley, 1975; Reverby, 1987; Roberts, 1983). Today, nurses continue to work in these hierarchical institutions, albeit not for free, where they bear much responsibility for the care of patients with an unequal amount of power when compared to physicians and administrators (Garman, Leach, & Spector, 2006). In such a work situation, nurses may feel frustrated as they strive to advocate for themselves and their practice in a healthcare system that has historically devalued their contribution to healthcare (Ashley, 1976; DeMarco, Roberts, Norris, & McCurry, 2008; Reverby, 1987). Influenced by their multifaceted lives as woman and nurses doing the work of women, their attitudes about themselves and nursing as a group are shaped by the dominant values they internalize and exhibited in attitudes consistent with those of an oppressed group or self (DeMarco et al., 2008). Attitudes of an oppressed group or oppressed self were labeled as "internalized sexism" and "minimization of self" respectively (DeMarco et al., 2008, p. 299). Internalized sexism is defined as unfavorable beliefs a person holds about women overall or the behavior women may employ when in a group that negates the usefulness of what they seek to accomplish (DeMarco et al., 2008). Minimization of self is defined as the amount people value themselves as individuals that may stop them from speaking freely (DeMarco et al., 2008).

Horizontal violence is a way that the oppressed may cope with their discontent from living an unsatisfactory life (Freire, 1970/2003). Freire describes this behavior as murdering, committing arson, and using weapons on one another. Blanton et al., (1998) used Freire's (1970/2003) work as well as others to develop their definition of horizontal violence that differs from the violent acts described by Freire, but is useful, nonetheless, for explaining behavior among nurses given the assumption they constitute an oppressed group.

The purpose of this study was to test the proposed relationships between internalized dominant values and horizontal violence. The two hypotheses tested were: (1) nurses who exhibit more internalized sexism consistent with an oppressed group will report more horizontal violence and (2) nurses who exhibit more minimization of self consistent of an oppressed self will report more horizontal violence.

Methods

This cross-sectional model testing study described hospital staff registered nurses' (RNs) work related views of themselves, nursing as a group, and their negative interactions with other staff RNs. Mailed and online surveys were used to collect data from a random sample of hospital staff nurses with active licenses in California (CA). The University of California, San Francisco's Committee on Human Research approved the study (Appendix A).

Population/Sample

The list of all RNs licensed in CA was obtained from the California Board of Registered Nursing (CA BRN). This mailing list provided the names and addresses of the entire population of RNs with active licenses in the state (n=309,940 as of January 26,

2010); but did not indicate their work setting. From this list a random sample of 3000 was selected to assure that a large enough pool of nurses working in hospitals would be included.

Adapted from Dillman's (2007) five step Tailored Design method of survey administration, nurses were contacted up to three times. A postcard was mailed to all 3000 RNs inquiring about their interest in participating in the study (Appendix B). RNs were included if they were working as staff nurses in hospitals and willing to share their views in an anonymous survey. If interested and eligible, they returned a supplied postcard (Appendix B) indicating their preference to do so online or with a paper survey. In return they were sent an information sheet for the online survey (Appendix C) or the paper survey (Appendix D), the paper survey, if that was their format of their choice (Appendix E), and a $2 bill as a thank you gift. The information sheet explained that participation was voluntary and receipt of a survey by investigators represented consent. One week later, a reminder postcard was mailed to all who returned a postcard thanking them for completing a survey if they had and asking them to do so if they had not (Appendix F).

Measures

Table 1 displays the research variables measured in this study and the individual items contained in each scale. They are summarized by name, scale items, scoring, and related hypothesis.

Internalized Dominant Values. Nurses' work related views of themselves and nursing as a group were measured using the two subscales within the 12 item Nurses Workplace Scale (NWS), a measure of nurses' work-related attitudes and behaviors

suggestive of being oppressed (DeMarco, et al., 2008). The NWS was developed using Keen's (1991) oppression checklist originally created to explain the work related behaviors and attitudes of nurses, who are most commonly women, not to fault them for those beliefs The items comprised two subscales: Internalized sexism (oppressed group), a measure of unfavorable beliefs held about women's behavior that undermines their being successful in what they do as a group and Minimization of self (oppressed self), a measure of attitudes held that prevents a person from openly stating their opinion (DeMarco et al., 2008). Participants indicated how often items applied to them at work using the following response scale: 1=never, 2=rarely, 3=sometimes, 4=frequently 5=always. Mean scores for each of the two subscales are calculated and range from 1-5, the higher the score the more often attitudes reflected internalized sexism or minimization of self. DeMarco et al. (2008) reported a Cronbach's alpha of the five item internalized sexism and the seven item minimization of self of .74 and .80 respectively. DeMarco et al. (2008) used exploratory and confirmatory factor analysis and examined group differences that provided evidence of construct validity of the subscales.

Horizontal Violence. Nurses' perceptions of horizontal violence from their peers at work were measured using the Negative Acts Questionnaire-Revised (NAQ-R), a measure of bullying at work (Einarsen, Hoel, & Notelaers, 2009). This tool was used in previous studies among nurses (Johnson & Rea, 2009; Simons, 2008). The NAQ-R is the English language version of the original Norwegian Negative Acts Questionnaire (NAQ) created in the United Kingdom (UK). The NAQ-R consists of 22 negative behaviors that indirectly measures bullying, a form of horizontal violence that occurs frequently (Simons, 2008). Permission to translate the NAQ-R to American English was granted by

the developers, and two translations were made for this study. “Sent to Coventry,” item six, was translated to isolation from others: “Holiday entitlement,” item 19, was translated to vacation time.

Participants indicated how frequently they experienced negative acts in the last six months using the following response scale: 1=never, 2=now and then, 3=monthly, 4=weekly, 5=daily. The negative act “being exposed to an unmanageable workload” was removed from this analysis. In this study, similar to previous work, this item was frequently chosen and thought to be more directly related to the current workplace conditions than to horizontal violence or bullying (Johnson & Rea, 2008). Either the frequencies for each item or the mean scores for the 21 item NAQ-R scale were used in all further analysis.

To determine incidence, a variable consisting of three groups was created including: group one, those who never experienced negative acts and those who experienced one act; group two, those who experienced two acts now and then or monthly; and group three who experienced two acts weekly and daily. Group three meets the criterion for bullying (Mikkelsen & Einarsen, 2001).

In addition to the categorical indicators, mean scores for the entire 21 item scale were calculated and ranged from 1-5, the higher the score the more frequently negative acts were experienced at work. Cronbach’s alpha for the 22 items was consistent across four different studies including workers from various industries in the United Kingdom (UK) .90 (Einarsen et al., 2009) and in the United States (US) .92 (Lutgen-Sandvik, Tracy, & Alberts, 2007) and two studies of nurses in two different states in the US .89

(Johnson & Rea, 2009) and .88 (Simons, 2008). Einarsen et al. (2009) provided evidence of predictive validity of the 22 item scale with measures of other concepts.

Demographics. Demographic data were collected including continuous variables age, years of experience working as an RN in a hospital, and average number of hours worked. Categorical variables included gender, race, basic RN education, highest degree held, type of hospital, such as community or teaching, size of hospital, and clinical area, such as critical care or geriatrics. Variables with more than three response choices were collapsed into two or three groups: race into Caucasian and non-Caucasian and basic RN education and highest degree held into non-BSN and BSN or higher, and clinical area into intensive care, non-intensive care, and other.

Data Analysis

Statistical Package for the Social Sciences (SPSS) version 16.0 for Windows (2007) was used to analyze data. Once data were cleaned, minimum and maximum values, means, standard deviation (SD) or frequencies were used to describe the sample. Mean scores for the NWS subscales –internalized sexism and minimization of self- and the 21 item NAQ-R were calculated. Cronbach's alpha measured the reliability of each scale. Frequencies described the incidence of horizontal violence using the categorical variable. Pearson product moment correlation coefficient tested the strength and direction of the bivariate relationships among variables. Hierarchical multiple regressions explained the unique contribution of the independent variables internalized sexism and minimization of self to the variance in the dependent variable, horizontal violence while controlling for the demographic variables chosen for inclusion in the model. A p value of .05 was set in this study for hypothesis testing.

Before statistical tests were conducted, applicable assumptions were assessed. The 21 item NAQ-R was not normally distributed, being skewed to the right. To attempt to improve this, the scale was transformed using log and square root with minimal improvement. The scale was used in both its original and transformed form to calculate multiple regressions. Comparison of the results showed no meaningful difference and the original scale results are reported for clarity.

Findings

Two hundred thirty four nurses returned postcards indicating their interest in participating and their survey format preference. In turn, 215 surveys were sent as 19 of the 234 did not meet inclusion criteria. One hundred seventy-three surveys, 82 on paper and 91 on-line, were returned. The response rate was calculated by subtracting the following amounts from the initial 3000 nurses randomly selected from the CA BRN mailing list: 20% whose addresses were estimated to be outdated by the researchers (n=600), 13% for nurses not working (n=312), 35.6% for nurses who do not work in hospitals (n=854), and from the remaining 1234, 24.4% (n=301) of nurses working in hospitals but not as staff (Spetz, Keane & Herrera, 2008). Therefore the largest possible number of nurses fitting the inclusion criteria was likely 933 and the response rate was 18.5% (173/933).

As shown in Table 2, the demographic profile of the sample in this study was very similar to the population of CA nurses. Although percentages were not identical between this study's sample of staff RNs in hospitals and the CA BRN report, they do share the most common characteristics making the study sample representative based on race, gender, age, basic RN education, highest degree held, clinical area, and average number

of hours worked. The mean number of years working as an RN in a hospital was 15.85 years (min=1, max 45, SD=12.11). Most nurses worked in a 100-300 bed hospital (n=83, 48%) in the community hospital setting (n=113, 65.3 %). BRN data on these variables were not available so a comparison could not be made.

Participants were asked how frequently they experienced negative acts from another staff RN at work. The frequencies and percentages of these behaviors are displayed in Table 3. Based on the criterion of two or more negative acts experienced weekly or daily in the last six months, the incidence of horizontal violence was 21.4% (n=37). Being ordered to do work below level of competence (12.7%; n=22), being given tasks with unreasonable deadlines (11.6%; n=20), and having opinions and views ignored (9.9%; n=17) were the negative acts reported most often. Those reported with the least frequency were intimidating behavior, finger-pointing, invasion of personal space, shoving, blocking/barring the way (1.8%; n=3), practical jokes (1.8%; n=3), having allegations made (11.6%; n=3), and threats of violence or physical abuse or actual abuse (.06%; n=1).

Table 4 displays mean scores of the research variables internalized sexism, minimization of self, and horizontal violence by nurse and work characteristics and the reliability of the measures (Cronbach's alpha). Cronbach's alpha values in this study are similar to those from previous work indicating evidence of reliability in different populations. In this study, Cronbach's alpha of .92 for the 21 item NAQ-R was good. Though no known studies report internal consistency of the 21 item scale, the value is similar to those reported for the 22 item scale. The reliability of the internalized sexism, α=.87, and minimization of self, α=.79, were strong.

There were few statistically significant differences by demographic and employment characteristics. Females reported higher minimization of self than males though there was no difference in internalized sexism. Nurses who did not hold a BSN as their basic RN education or highest degree reported more horizontal violence than those educated with BSN or higher. RNs working in intensive care reported more horizontal violence than those working in other clinical areas. Race and size and type of hospital showed no statistically significant differences.

Pearson's r was used to describe the relationship among continuous variables: age, years of experience working in a hospital as an RN, average number of hours worked per week, horizontal violence, internalized sexism and minimization of self. As shown in Table 5, Years of experience and average hours worked per week were not significantly correlated with horizontal violence, internalized sexism or minimization of self. Age was significantly correlated with horizontal violence but not internalized sexism or minimization of self.

Hypothesis Testing

Based on these bivariate findings, demographic variables for inclusion in the regression model included age, gender, basic RN education, and clinical area. Basic RN education was chosen over highest degree held because of its greater significance. Intensive care was the reference group for dummy coded clinical area: pairwise contrasts were non-intensive care to intensive care and other to intensive care.

Hypothesis 1: Nurses who exhibit more internalized sexism will report more horizontal violence. There was a significant positive correlation found between internalized sexism and horizontal violence (Table 5). As internalized sexism increased,

so did horizontal violence in both bivariate and multivariate analyses. In the multivariate analysis, age and gender were not significant predictors of horizontal violence but internalized sexism, basic RN education, and working in non-intensive care versus intensive care clinical area were (Table 6). For every one unit increase in internalized sexism score, there was a corresponding .286 increase in horizontal violence score, controlling for age, gender, basic RN education and clinical area ($p < .05$). For every one unit increase in basic RN education, there was a corresponding .161 decrease in horizontal violence score, controlling for age, gender, clinical area, and internalized sexism. Comparing non-intensive care to intensive care, there was a .208 decrease in horizontal violence score, controlling for age, gender, basic RN education, and internalized sexism ($p<.05$).

Hypothesis 2: Nurses who exhibit more minimization of self will report more horizontal violence. A significant positive correlation was found between minimization of self and horizontal violence (Table 5). As minimization of self increased, so did horizontal violence. In the multivariate analysis, age, gender, and basic RN education were not significant predictors of horizontal violence but minimization of self and working in non-intensive care versus intensive care were (Table 6). For every one unit increase in minimization of self score, there is a corresponding .380 increase in horizontal violence score, controlling for age, gender, basic RN education and clinical area ($p < .05$). Comparing non-intensive care to intensive care, there is a .236 decrease in horizontal violence scores, controlling for age, gender, basic RN education, and minimization of self ($p<.05$).

Study Limitations

The response rate to this study was 18.5% which is lower than the 24% found in a study that also offered a paper survey with an online option (Sax, Gilmartin & Bryant, 2003). In a review of the literature, Sax et al. (2003) found that the average response rate across all types of survey administration including those for web only, paper only, or paper with web option was 21.8%. Response rates can vary from web with incentive at 17.1% to paper with web option at 24% but these rates are dynamic as modes of administration change. In this study, a response rate of 18.5% is of concern; of the 3000 randomly selected RNs in CA, 933 were estimated as eligible to participate, yet 173 did. Not known is why the remaining 760 did not. This means questions remain about differences in the demographics and perceptions of those nonresponders and how that could impact study findings. This introduces a self-selection bias as a possible threat to internal validity.

Response set bias a type of measurement error is a limitation particular to survey questionnaires. All items on the NAQ-R and the NWS were worded in the same direction. When items are presented this way, some participants respond by consistently selecting the same values to reply to items. In the case of the NAQ-R and NWS, participants' answers to the frequency response scale would be either all never responses or the other extreme, all daily or always. Such extreme responses could misrepresent findings; however, in this study that does not seem to be a problem.

Some researchers suggest that factors such as the stressful hospital work environment (Vessey, DeMarco, Gaffney & Budin, 2009; Sofield & Salmond, 2003; Stanley et al., 2007) and dysfunctional work relationships (Vessey et al., 2009) contribute

to the incidence of horizontal violence. These factors not controlled for could predict horizontal violence. This is important to consider when concluding that the independent variables internalized sexism and minimization of self have relationships with horizontal violence. Being oppressed is one factor that shapes nurses behavior and their feelings and beliefs about themselves and nurses as a group. However, stress and negative work relationships are others not measured and, thus, their influence on the relationship is not known.

Causal relationships between variables in cross-sectional studies cannot be ascertained. Therefore in this cross-sectional study, causal relationships between variables cannot be assured. Study findings suggest that relationships exist between concepts.

Discussion

Nurses in this study reported 21.4% (n=36) incidence of horizontal violence which is lower than the 31% who reported being bullied in Massachusetts (Simons, 2008) and the 27.3% in Washington (Johnson & Rea, 2009). The most frequently occurring acts varied between verbal and non-verbal acts across studies but the least frequent negative act, threats of or actual physical abuse (n=1; 0.6%) was a consistent finding with one study of American workers in various industries (Lutgen-Sandvik et al., 2007) and two studies in nursing (Simons, 2008; Johnson & Rea, 2009). The notion that horizontal violence is manifested verbally and non-verbally but rarely as physical acts of violence was raised in three studies in nursing, two in Australia (Farrell, 1997; 1999) and another in New Zealand (McKenna et al., 2003). This idea and the review of literature bring into

question how horizontal violence is operationalized. Research is needed to explore and compare different measurement options.

No relationship was found between horizontal violence and age, gender, or race. Likewise, Johnson and Rea's (2009) found no relationship with variables in common with this study including age, gender, or race. Preliminary analysis revealed significant mean differences within education and clinical area and a significant correlation with age. However, further analysis demonstrated that internalized sexism, minimization of self and non-intensive care clinical areas predicted horizontal violence but age did not. Basic RN education was a significant predictor when added to the model with internalized sexism but not with minimization of self. This suggests that the nurses' demographic profile has less to do with their behavior than how they view themselves and nursing, the clinical area where they work and possibility with their basic RN education. This is a curious finding given that people are often oppressed based demographics such as gender and race (Ehrenreich & English, 2005; Freire, 1970/2003; Fanon, 1963). Moreover, this may also not be surprising given the argument that nurses feelings about themselves and nursing are shaped by the multifactorial influences from working in hierarchical systems rather than their individual characteristics (Demarco et al., 2008). Further research is needed to describe the influence of demographics on horizontal violence.

This study tested two hypotheses drawn from the horizontal violence and the quality and safety of patient care model. This study supports the model proposition that as attitudes consistent with being oppressed increase, so does horizontal violence. The relationship can be explained in that being an oppressed group represents the work situation of nurses practicing in hierarchical institutions that shape their behavior beliefs

and feelings about themselves and nursing and horizontal violence corresponds to the negative behavior they are at risk for experiencing. These beliefs and feelings undermine their success of their actions as a group and prevent individual nurses from making their opinions known and championing for their practice (DeMarco et al., 2008). Furthermore, these beliefs and feelings are associated with and predict horizontal violence. This study provides empirical evidence of a link between these concepts theorized for almost four decades. Although innovative, this is one study. More research is needed to gather empirical evidence that this relationship exists across diverse populations of nurses. As posited by DeMarco and colleagues (2008), research is needed to examine the indirect consequences for patients when nurses internalize beliefs that impact their ability assert themselves and, in turn, advocate for patients in hospitals.

This study has implications for nursing education. Freire (1970/2003) postulated that education is the key to freedom from oppression. He theorized that raising the oppressed awareness of their situation is paramount but does not explain what the oppressed can do to change their situation once they understand it. One study suggested behavioral techniques for use by individuals to respond to perpetrators of horizontal violence (Griffin, 2004). Nursing organizations call for zero tolerance of the behavior (American Association of Critical Care Nurses, 2004; Center for American Nursing, 2008). Zero tolerance is a start but ultimately not enough. More intervention research is needed to identify strategies that help individual nurses effectively cope with the behavior. Nurses and other professionals need to change how healthcare is socially structured. The first step toward achieving this is to provide evidence that the social

structure of hospitals has a negative impact on people working there and on those receiving care in them.

Conclusion

This study described the incidence of horizontal violence among hospital staff RNs and tested two hypotheses. Findings supported the horizontal violence and quality and safety of patient care model that nurses who exhibit beliefs consistent with an oppressed self or group experience horizontal violence. This study provides a foundation of empirical evidence to support what nurse authors and researchers have postulated for more than three decades. However, this is one study. More research is needed to gather empirical evidence in different populations of nurses and to create strategies that nurses can use to manage horizontal violence. Further, a change in the social structure of hospitals is needed to truly address horizontal violence.

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Table 1
Research Variables Measured

Variable	Scale Items	Scoring	Related Hypothesis
Internalized Sexism (Oppressed Group) NWS DeMarco et al., 2008, p. 299	1. Said "it's really hard to work with a bunch of women 2. Believed that it is impossible, or at least very difficult for women to reach consensus 3. Said or felt that most of your friends were men…or you just can't trust women 4. Said you always prefer a male boss over a female one 5. Believed that men have more natural ability than women	Mean score of all items are continuous Possible score: Minimum=1 Maximum=5 1=Never 2=Rarely 3=Sometimes 4=Frequently 5=Always	Nurses who exhibit more internalized sexism consistent with that of an oppressed group will report more horizontal violence
Minimization of self (Oppressed Self) NWS DeMarco et al., 2008, p. 299	6. Prefaced statements with phrases such as "I know this is a really stupid question" 7. Found it difficult to accept compliments 8. Felt or said that you were "unworthy" of an honor or reward 9. Constantly compared yourself with others 10. Changed your story according to the professional audience 11. Complained to your fellow workers but did nothing to confront the person you believe is causing the problem 12. Found yourself more frequently making comments (either positive or negative ones) about other nurses rather than to the other nurses that were the focus of your comments	Mean score of all items are continuous Possible score: Minimum=1 Maximum=5 1=Never 2=Rarely 3=Sometimes 4=Frequently 5=Always	Nurses who exhibit more minimization of self consistent with that of an oppressed self will report more horizontal violence

Table 1 continued

Research Variables Measured

Variable	Scale Items	Scoring	Related Hypothesis
Horizontal Violence 21 Item NAQ-R Einarsen et al., 2009, p. 32	See items in Table 3	Mean score of all items are continuous Possible score: Minimum=1 Maximum=5 1=Never 2=Now and Then 3=Monthly 4=Weekly 5=Daily	Nurses who exhibit more internalized sexism consistent with that of an oppressed self will report more horizontal violence Nurses who exhibit more minimization of self consistent with that of an oppressed self will report more horizontal violence

Note. Nurses Workplace Scale (NWS) items 1-12. Subscales: internalized sexism items 1-5 and minimization of self items 6-12. From "The Development of the nurses workplace scale: Self-advocating behaviors and beliefs in the professional workplace," by R. DeMarco, S. J. Roberts, A. Norris, and M. K. McCurry, 2008, *Journal of Professional Nursing, 24*(5), p. 299. Copyright 2008 by Elsevier. Permission to reuse granted by Elsevier Limited (Appendix G). Scale used with permission of the first author (Appendix H). Negative Acts Questionnaire-Revised (NAQ-R). From "Measuring exposure to bullying and harassment at work: Validity, factor structure and psychometric properties of the negative acts questionnaire-revised," by S. Einarsen, H. Hoel, and G. Notelaers, 2009, *Work and Stress, 23*(1), p. 32. Copyright 2009 Taylor and Francis. Permission to reuse granted by Taylor and Francis (Appendix I). Questionnaire used with permission of Bergen Bullying Research Group (Appendix J).

Table 2

Sample Description Compared to CA BRN 2008 Survey of California Registered Nurses

Variable	Study Sample (n=173)	CA BRN (n=5440)
Age	46.2 years	47.1 years
Gender	91% Female	86% Female
Race	62% Caucasian	59% Caucasian
Basic RN Education	41% Associate	46% Associate
Highest degree Held	50% Bachelor's	42% Bachelor's
Clinical Area	20% Medical-Surgical	13.1% Medical-Surgical
Average number of hours worked	35.6 hours	36.5 hours

Note. CA BRN demographic variables from "California board of registered nursing 2008 survey of registered nurses," by the University of California, San Francisco: J. Spetz, D. Keane, and C. Herrera, 2009.

Table 3
*Frequency and Percentages of Individual Negative Acts (*n=173)

Negative Act	Weekly, n(%)	Daily, n(%)	Total n(%)
Someone withholding information that affects your performance	6(3.5)	3(1.7)	9(5.2)
Being humiliated or ridiculed in connection with your work	5(2.9)	2(1.2)	7(4.1)
Being ordered to do work below your level of competence	10(5.8)	12(6.9)	22(12.7)
Having key areas of responsibility removed or replaced with more trivial tasks	5(2.9)	8(4.6)	13(7.5)
Spreading of gossip and rumors about you	8(4.6)	3(1.7)	11(6.3)
Being ignored or excluded or isolated from others	8(4.6)	8(4.6)	16(9.2)
Having insulting or offensive remarks made about your person, attitudes, private life	4(2.3)	5(2.9)	9(5.2)
Being shouted at or being the target of spontaneous anger (or rage)	6(3.5)	0	6(3.5)
Intimidating behavior, finger-pointing, invasion of personal space, shoving, blocking/barring the way	2(1.2)	1(0.6)	3(1.8)
Hints you should quit your job	4(2.3)	0	4(2.3)
Repeated reminders of your errors or mistakes	5(2.9)	1(0.6)	6(3.5)
Being ignored or facing a hostile reaction when you approach	7(4.0)	2(1.2)	9(5.2)
Persistent criticism of your work or effort	5(2.9)	1(0.6)	6(3.5)
Having your opinions and views ignored	11(6.4)	6(3.5)	17(9.9)
Practical jokes carried out by people you don’t get along with	2(1.2)	1(0.6)	3(1.8)
Being given tasks with unreasonable or impossible targets or deadlines	11(6.4)	9(5.2)	20(11.6)
Having allegations made against you	3(1.7)	0	3(1.7)
Excessive monitoring of your work	4(2.3)	7(4.0)	11(6.3)
Pressure not to claim something you are entitled to: sick or vacation time, travel expenses	9(5.2)	4(2.3)	13(7.5)
Being subject of excessive teasing and sarcasm	3(1.7)	1(0.6)	4(2.3)
Threats of violence or physical abuse or actual abuse	1(0.6)	0	1(.6)

Table 4
Means of Research Variables by Nurse and Work Characteristics and Reliability of Measures

	Internalized Sexism (5 items)	Minimization of Self (7 items)	Horizontal Violence (21 items)
Overall Mean (SD)	1.87 (.789)	2.18 (.612)	1.51 (.515)
Cronbach's alpha	.87	.79	.92
Gender			
Female (n=157)	1.87	2.20*	1.51
Male (n=13)	1.89	1.82	1.48
Race			
Caucasian (n=107)	1.80	2.20	1.52
Non-Caucasian (n=64)	1.98	2.14	1.47
Basic RN education			
Non-BSN (n=89)	1.93	2.26	1.60**
BSN or above (n=82)	1.80	2.09	1.40
Highest Degree Held			
Non-BSN (n=58)	1.90	2.22	1.61*
BSN or above (n=113)	1.85	2.16	1.45
Type of Hospital			
Community			
Yes (n=113)	1.95	2.22	1.53
No (n=57)	1.71	2.10	1.46
Teaching			
Yes (n=64)	1.78	2.22	1.47
No (n=106)	1.93	2.15	1.53
Government			
Yes (n=6)	1.43	1.71	1.29
No (n=164)	1.89	2.19	1.51
Size of Hospital			
< 100 beds (n=20)	1.88	2.28	1.67
100-300 (n=83)	1.81	2.13	1.50
>300 (n=64)	1.92	2.23	1.47
Clinical Area			
Intensive care (n=69)	1.92	2.17	1.63*
Non-intensive care (n=78)	1.76	2.17	1.38
Other (n=21)	1.93	2.24	1.59

*p<05, **p<.01

Table 5

Correlation of Research and Demographic Variables

	Internalized Sexism	Minimization of Self	Horizontal Violence	Age	Years	Hours
Internalized Sexism	1.0					
Minimization of Self	.255**	1.0				
Horizontal Violence	.463**	.451**	1.0			
Age	.135	.001	.157*	1.0		
Years	.129	-.031	.087	.774**	1.0	
Hours	.043	.085	.134	.007	-.078	1.0

Note: Years= years of experience working as an RN in the hospital, Hours=number of hours worked per week.
*p<.05; **p<.01

Table 6
Summary of Hierarchical Regression Analyses for Variables Predicting Horizontal Violence (n=166)

Source	R^2	B	p
Regression 1 Final Model:			
Overall Model	.278		.000
Coefficients:			
Intercept		1.411	.000
Age		.001	.831
Gender		-.112	.419
Basic RN Education		-.161*	.033
Clinical Area:			
Non-intensive care to intensive care		-.208**	.007
Other to intensive care		-.069	.556
Internalized Sexism		.286**	.000
Regression 2 Final Model:			
Overall Model	.285		.000
Coefficients:			
Intercept		.812	.009
Age		.003	.403
Gender		.079	.575
Basic RN Education		-.140	.065
Clinical Area:			
Non-intensive care to intensive care		-.236**	.002
Other to intensive care		-.125	.285
Minimization of Self (NWS)		.380**	.000

B=Unstandardized coefficients
*p<.05; **p<.01

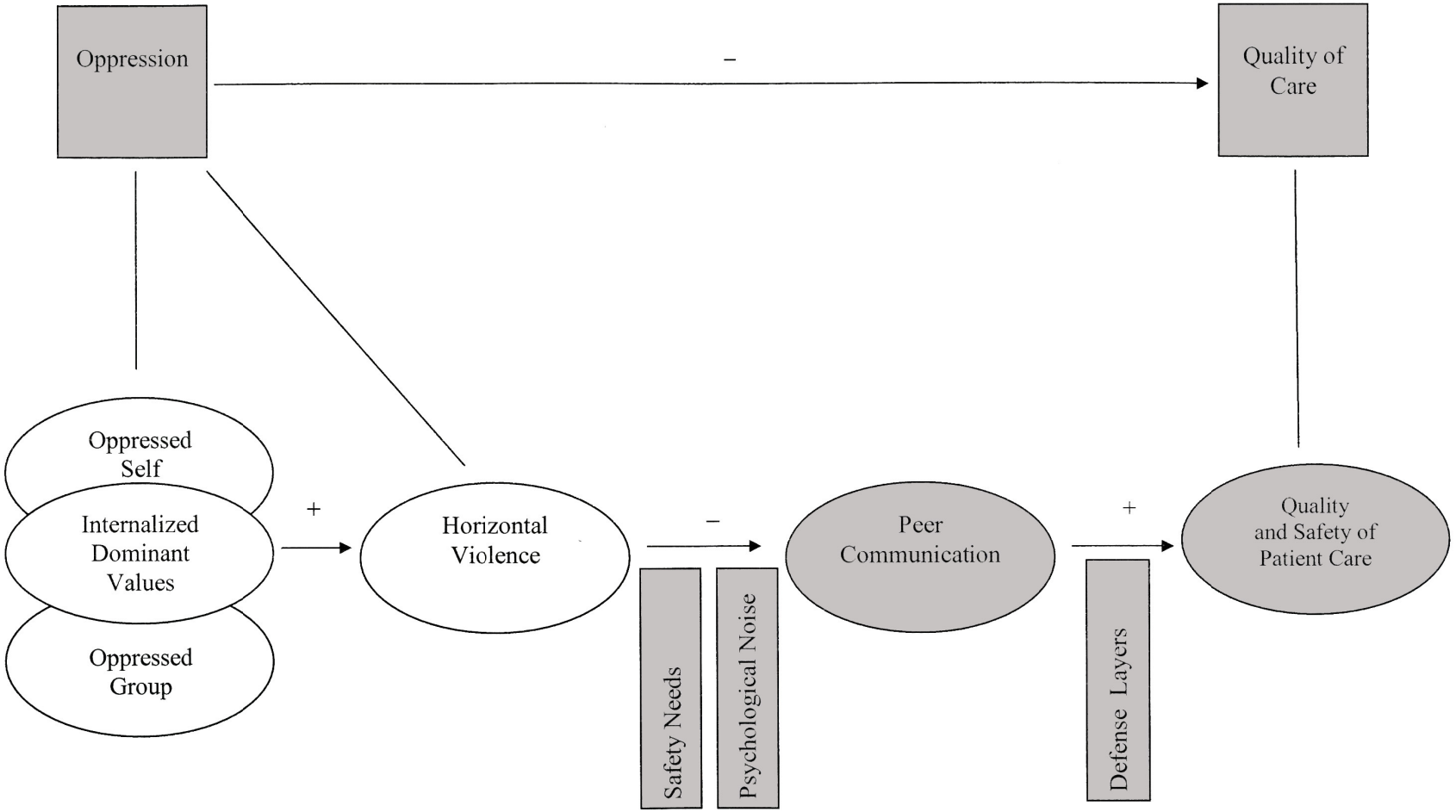

Figure 1. A Conceptual Model for Horizontal Violence and the Quality and Safety of Patient Care.

CHAPTER FOUR: HORIZONTAL VIOLENCE AND THE QUALITY AND SAFETY OF PATIENT CARE

Abstract

OBJECTIVE: This study describes nurses' work-related views of their interactions and relationships with other staff RNs and the quality and safety of patient care. Three hypotheses were tested: (1) nurses who experience more horizontal violence will report less supportive relationships with peers, (2) nurses who experience more horizontal violence will report lower quality and safety of patient care, and (3) nurses who experience more horizontal violence will report a higher frequency of adverse events.

BACKGROUND: Some nurses suffer personal consequences yet almost nothing is known about the impact on the quality and safety of patient care.

METHODS: A random sample of 173 hospital staff nurses drawn from the California Board of Registered Nursing's mailing list participated. Horizontal violence was measured using the Negative Acts Questionnaire-Revised. Peer relations, the quality and safety of patient care and adverse events were also measured.

RESULTS: Nurses' who experienced more horizontal violence reported less supportive relationships with peers (r= -.638, p=.000), lower quality and safety of patient care (r= -.459; p=.000), and a higher frequency of adverse events (r= .408; p= .000). Findings suggest that peer relations mediated the effect of horizontal violence on the quality and safety of patient care but not on adverse events.

CONCLUSION: Findings supported the hypotheses tested. Nurses perceive that horizontal violence negatively impacts peer relationships and the quality and safety of patient care and increases the frequency of adverse events.

KEY WORDS: horizontal violence, peer relations, peer communication, quality of care, patient safety, and adverse events.

Introduction

Negative behavior among workers is a phenomenon that exists in various industries including healthcare. Outside of healthcare, studies of negative behavior among workers have been done internationally (Hoel, Cooper & Faragher, 2001; Nielsen et al., 2009; Salin, 2001) and in the United States (US) (Lutgen-Sandvik, Tracy & Alberts, 2007; Miles, Borman, Spector & Fox, 2002). Researchers in healthcare studied the behavior between and among healthcare professionals including medical residents in the United States (US) and the United Kingdom (UK) (Baldwin & Daugherty, 2008; Quine, 2003), nurses in Australia, New Zealand, the UK and the US (Farrell, 1999; McKenna, Smith, Poole & Coverdale, 2003; Quine, 2001, Simons, 2008) and across these disciplines in the US (Rosenstein & O'Daniel, 2005; 2008). Despite study findings that suggest workers suffer personal consequences from their experiences with the behavior, little is known about the consequences for their work. Researchers, clinicians and nursing organizations agree that negative behavior in the workplace is a concern for nursing and potentially for patients. They express this in the studies they conduct (Johnson & Rea, 2009; Rowe & Sherlock, 2005; Vessey, DeMarco, Gaffney & Budin, 2009), in opinion pieces (Longo & Sherman, 2007; Stewart, 2010, Thomas, 2003), and in public policy and position statements (American Association of Critical Care Nurses, 2004; Center for American Nurses, 2008).

This project concentrated on the relationships among horizontal violence, or negative behavior; relationships with peers; the quality and safety of patient care; and the nurses' demographic and work characteristics. This project is a portion of a larger study

that describes RNs perception of themselves, the nursing profession, their interactions and relationships with one another, and quality of care and patient safety.

Background and Significance

The term horizontal violence is used in this project to signify negative behavior among coworkers of the same rank that exhibits a lack of respect and wounds the dignity of the receiver (Blanton, Lybecker, & Spring, 1998). This behavior includes minimizing the opinion of another, using intimidating comments, or making unwanted physical contact (Blanton et al., 1998). When horizontal violence occurs regularly, the term bullying is sometimes used (Mikkelsen & Einarsen, 2001). In addition to horizontal violence and bullying, authors and researchers use a variety of terms to name the phenomenon (Dunn, 2003, Hughes & Clancey, 2009; Johnson & Rea, 2009; Longo, 2007; McKenna et al., 2003, Moye, 2010; Skillings, 1992, Taylor, 2001; Simons, 2008; Randle, 2003; Vessey et al., 2009). Terms include nurse-on-nurse aggression (Farrell, 1997; Farrell, 1999), verbal abuse (Cox, 1991; Rowe & Sherlock, 2005; Sofield & the Salmond, 2003; Ulrich, Lavandero, Hart, Woods, Leggett, & Taylor, 2006), lateral violence (Griffin, 2004; Sheridan-Leos, 2008; Stanley, Martin, Michel, Welton, & Nemeth, 2007), incivility (Felblinger, 2008), and lateral or horizontal hostility (Thomas, 2003; Alspach, 2007).

The experience of horizontal violence results in consequences for some nurses. These include psychological harm (McKenna et al., 2003; Randle, 2003; Rowe & Sherlock, 2005), discontentment with their job (Rowe & Sherlock, 2005), and poor relationships with coworkers (Rowe & Sherlock, 2005). The behavior is more hurtful (Skillings, 1992) and the source of greater anguish when coming from another nurse than

when comparable behaviors are inflicted by doctors or patients (Farrell, 1997; Farrell, 1999). Some nurses think about quitting nursing or their job (Johnson & Rea, 2009; McKenna et al., 2003; Simons, 2008; Sofield & Salmond, 2003; Vessey et al., 2009). Some believe horizontal violence jeopardizes patient safety (McKenna et al., 2003) and lessens the quality of care (Rowe & Sherlock, 2005). Physicians and RNs working in hospitals perceive that disruptive behavior, such as intimidating gestures and offensive language, reduces their communication (Rosenstein & O'Daniel, 2005; 2008). This reduction happens when persons are apprehensive about approaching members of the team who are known to behave disruptively (Rosenstein & O'Daniel, 2008; Institute of Safe Medication Practices (ISMP), 2003). Inadequate communication has been linked with close to 70% of real or potential harm to patients receiving care in healthcare institutions (The Joint Commission, 2007). But, no empirical evidence of a relationship between horizontal violence, disruptive behavior, communication, and patient care has been shown. Research is needed to describe the relationship between horizontal violence, nurses' relationships and communication with one another, and the quality and safety of patient care. By knowing more, the problem can be addressed.

Theoretical Framework

A full description of the horizontal violence and quality and safe patient care model used to guide this study is located in another manuscript (Purpora, 2010). Figure 1 illustrates its concepts, travelling from left, cause, to right, effect. Horizontal violence, peer communication, and the quality and safety of patient care are the focus here while the shaded concepts are not.

The concept “horizontal violence” originates from oppression theory (Freire, 1970/2003, p. 62) and is used to explain disrespectful and harmful behavior among peers. Hospitals are hierarchical institutions influenced by a multitude of forces and nurses have less power in these institutions than doctors and those in administration (Garman, Leach, & Spector, 2006). Practicing in such a complex situation may aggravate nurses who encounter barriers when they advocate for patients and their practice (DeMarco, Roberts, Norris, & McCurry, 2008). They may feel frustrated by factors in their work environment over which they have no control including short hospital stays and multiple interruptions on their time (Institute of Medicine (IOM), 2004). They may release their increasing frustration through horizontal violence. This explanation does not seek to fault nurses; its purpose is to inform understanding of the behavior within its context (Keen, 1991; DeMarco et al., 2008; Purpora, 2010).

Peer communication, “the exchange of verbal and non-verbal messages among people of the same status within a group” (Purpora, 2010), is the basis for peer relations. Peer relations are the degree of support in relationships among peers at work (McCloskey, 1990). When they are supportive, nurses trust their peers, feel at ease communicating freely with them about patient care, seek help from peer openly, and work cooperatively caring for patients (Blegen et al., 2004). When there is less support, nurses do not trust their peers and avoid communicating and interacting with them (Purpora, 2010).

Quality of care is the level of care delivered to patients that maximizes the possibility that their healthcare needs are met (IOM, 2001). Care meets their needs when it is delivered competently in a culturally responsive manner, plainly communicated, and

includes patients in decisions about their care (IOM, 2001). Patient safety is the way in which care is delivered so that patients are not injured in the process (Agency for Healthcare Research & Quality, (AHRQ), 2004). Quality of care and patient safety reside in the model as one concept, the quality and safety of patient care, because they address unique facets of care delivery as a whole.

The purpose of this study was to describe the relationships among horizontal violence, peer relations and the quality and safety of patient care. Three hypotheses were tested: (1) nurses who experience more horizontal violence will report less supportive relationships with peers, (2) nurses who experience more horizontal violence will report lower quality and safety of patient care, and (3) nurses who experience more horizontal violence will report a higher frequency of adverse events.

Methods

This cross-sectional model testing study described hospital staff registered nurses' (RNs) work-related views of their interactions and relationships with other staff RNs and the quality and safety of patient care. Data were collected from a random sample of RNs in California (CA) via regular postal mail and online surveys. This study was approved by the University of California, San Francisco's Committee on Human Research (Appendix A).

Population/Sample

The CA Board of Registered Nursing (BRN) mailing list provided the names and addresses of 309,940 RNs, the total population with active licenses in the state as of January 26, 2010. This list did not specify their work setting. To assure that the sample

drawn would include a sufficient amount of potential staff RN participants, 3000 names and addresses were randomly selected from the list.

Dillman's (2007) Tailored Design, which uses five steps to administer surveys, was adapted to include up to three contacts. First, each of the 3000 RNs was mailed a postcard asking them if they were interested in taking part in the study (Appendix B). RNs working as staff nurses in hospitals who agreed to share their perceptions in an anonymous survey were included in the study. If interested in participating, they mailed a provided postcard in which they stated whether they wished to participate with a paper survey or online (Appendix B). Second, upon receipt of the postcard, researchers returned three items: (1) an information sheet for the online survey version (Appendix C) or paper survey version (Appendix D), (2) a paper survey (Appendix E), if requested, and (3) to thank them for participating, a $2 bill was enclosed. The information sheet described their participation as voluntary and that submission of their survey signified that they willingly agreed to participate. Third, a postcard was sent to those who received surveys thanking them for submitting a survey if they had and, if they had not, reminding them to complete their survey (Appendix F).

Measures

Research variables measured were: horizontal violence, peer relations, the quality and safety of patient care, and adverse events. They are summarized by variable name, scale items, operational definition, and related hypothesis in Table 1.

Horizontal Violence. RNs views of their work-related interactions with other staff RNs were measured using the Negative Acts Questionnaire-Revised (NAQ-R), a measure of horizontal violence, also known as workplace bullying when it occurs frequently

(Einarsen, Hoel, & Notelaers, 2009). Two studies in nursing have used this questionnaire to measure bullying (Johnson & Rea, 2009; Simons, 2008). By definition both concepts have in common negative behavior among coworkers and therefore it is useful for measuring horizontal violence. The original Negative Acts Questionnaire (NAQ), developed in Norway, was later revised in the United Kingdom (UK) for use in English speaking countries. The questionnaire lists 22 negative acts without using the term bullying. In this study, some items were converted to American English with permission from its creators. Item six, "sent to Coventry," was converted to isolation from others, and item 19, "holiday entitlement," was changed to vacation time.

Participants responded to negative acts by stating how frequently they experienced them over the last six months: 1=never, 2=now and then, 3=monthly, 4=weekly, 5=daily. Consistent with one other study, the "being exposed to an unmanageable workload" item was removed from analyses (Johnson & Rea, 2009). The argument for its elimination was based on the assumption that this item reflects work environments in general not a negative act as such (Johnson & Rea, 2009).

Mean scores for the scale ranged from 1-5, the higher the score the more frequently negative acts were experienced at work. Four studies provided evidence of reliability of the measure. When used in workers outside of healthcare, Cronbach's alpha was .90 in the UK (Einarsen et al., 2009) and .92 in the United States (US) (Lutgen-Sandvik, Tracy, & Alberts, 2007). In nursing, internal consistency was .89 (Johnson & Rea, 2009) and .88 (Simons, 2008). The 22 item NAQ-R has evidence of predictive validity in four studies where associations between the NAQ-R and different concepts were hypothesized and tested. Studies that provided this evidence were from outside

healthcare (Einarsen et al., 2009; Lutgen-Sandvik, Tracy, & Alberts, 2007) and two were in nursing (Johnson & Rea, 2009; Simons, 2008).

Peer Relations. The four item peer relations subscale from the Nurse Staffing and the Quality of Care Questionnaire (M. Blegen, written communication, March 3, 2009) a measure of the extent to which relationships are supportive among peers at work, was used (McCloskey, 1990). To minimize the potential for response bias, two of the four positively worded items were negatively worded for this study. Participants indicated their agreement with items using the following response scale: 1=strongly disagree, 2=somewhat disagree, 3=neutral, 4=somewhat agree 5=strongly agree. Mean scores ranged from 1-5, the higher the mean score the more supportive the relationships. Previous work provided evidence of reliability, α .75, and factor analysis resulted in evidence of validity of the subscale (Blegen et al., 2004).

Quality of Care. Quality of care is a concept that includes patient safety and adverse events. A three item scale to measure the quality and safety of patient care was developed for this study. Two items were taken from Aiken, Clarke and Sloan's (2002) Nurse-Rated Quality of Care measure of nurses' perception of the extent to which the state of the art care delivered to patients increases the chance of meeting their unique needs (IOM, 2001). The third item was taken from the Agency for Healthcare Research and Quality's (AHRQ) (2004) Hospital Survey on Patient Safety Culture, a measure of health professionals' perception of patient safety, medical error, and event reporting in hospitals. Patient safety refers to the process of delivering care while averting or minimizing patient harm (AHRQ, 2004). Originally, response choices for Aiken et al.'s (2002) quality items were excellent, good, fair or poor; for this study, like the patient

safety item, items were all assigned a grade: 1=F, failing, 2=D, poor, 3=C, acceptable, 4=very good, and 5=A, excellent. Mean scores ranged from 1-5, the higher the score the higher the perceived quality of care and the safer the patient. Evidence of predictive validity of the original quality of care measure was reported in previous work in findings from a logistic regression analysis of nurse staffing and nurses' perception of quality of care (Aiken et al., 2002). Predictive validity of the AHRQ patient safety item was described by Blegen, Gearhart, O'Brien and Alldredge (2009).

Another indicator of the quality and safety of patient care is adverse events, that is, any action or lack of action that may result in patient injury (AHRQ, 2004). Aiken and colleagues used a similar approach in measuring adverse events in the 1999 Pennsylvania Outcomes Study (Aiken et al., 2001; Aiken et al., 2007). In this study, six items measured adverse events including four taken from Aiken et al. (2007) and two items were added to create a new scale, the adverse event scale. The response scale was: 0=does not apply, 1=never, 2=rarely, 3=occasionally, 4= frequently. Mean scores ranged from 1-4, the higher the score the more often nurses or their patients were involved in adverse events in the last six months. Several previous studies tested the association between the original adverse event items, all or in part, drawn from Aiken et al., (2007) work, which provides evidence of predictive validity across at least three studies (Al-Kandari & Thomas, 2008; Harahan, Kumar, & Aiken, 2010; Lucero, Lake, & Aiken, 2010; Olds & Clarke, 2010).

Demographics. Age, years of experience working as an RN in a hospital, and average number of hours worked were continuous variables. Gender, race, basic RN education, highest degree held, type of hospital, such as government or teaching, size of hospital, and clinical area, such as pediatrics or telemetry were categorical variables. The

multiple categories for race, basic RN education, and highest degree held were collapsed into two or three groups: race into Caucasian and non-Caucasian, basic RN education and highest degree held into non-BSN or BSN or greater, and clinical area to intensive care, non-intensive care and other. The three group clinical area and size of hospital were dummy coded. Intensive care was the reference group for clinical area. More than 300 beds was the reference group for size of hospital.

Data Analysis

Data were analyzed using Statistical Package for the Social Sciences (SPSS) version 16.0 for Windows (2007). Minimum and maximum values, means, standard deviation (SD) or frequencies were used to describe the sample after data were cleaned and negatively worded items were recoded. Frequencies were determined for categorical variables. To conduct correlation and regression analyses, mean scores for the 21 item NAQ-R scale, peer relations subscale, the quality and safety of patient care scale, and adverse event scale were calculated. Cronbach's alpha measured the reliability of each scale. Pearson product moment correlation coefficient tested the strength and direction of the bivariate relationships among variables. Hierarchical multiple regressions explained the unique contribution of each independent variable to the dependent variable while controlling for other predictor variables in the model. A p value of .05 was set.

While assessing applicable assumptions for each statistical test planned, none of the dependent variables were normally distributed. To address this, all scales were transformed using log and square root with negligible improvement. The original and transformed scales were used to calculate multiple regressions but results were similar.

The results using the original scales are presented here so interpretation of findings would be clear.

Findings

Of the 3000 postcards mailed, 234 nurses replied asking for a survey. Nineteen of them were not eligible, so 215 received surveys in return. A total of 173 surveys were received from them, 47% (n=82) on paper and 53% (n=91) on-line. The CA BRN 2008 Survey of Registered Nurses reports that 13% of RNs are not working, 35.6% do not work in hospitals, and 24.4% work in hospitals but not as staff (Spetz, Keane, & Herrera, 2009). These percentages and researcher estimate that 20% of addresses were inaccurate were subtracted from the 3000 leaving 933 before calculating the response rate. The response rate to this study was 18.5% (173 ÷933= .185 or 18.5%).

As presented in Table 2, the study sample is representative of California RNs with regard to age, gender, race, basic RN education, highest degree held, clinical area, and average number of hours worked per week. Experience working as an RN in a hospital averaged 15.8 years (min=1, max 45, SD=12.11). The majority worked in a 100-300 bed (n=83, 48%) community-based hospital (n=113, 65.3 %). Representativeness of these variables could not be determined as BRN data were not available.

Table 3 displays mean scores of horizontal violence, peer relations, the quality and safety of patient care, and adverse events by nurse and work demographics and reliability of measures. A Cronbach's alpha value of .70 or greater was accepted as evidence of good reliability of a scale (Nunnally & Bernstein, 1994). Cronbach's alpha for the 21 item NAQ-R was .92, the quality and safety of patient care scale was .89, and six item adverse events scale was .86. These values were strong but calculated for the

first time in this study, so no comparison across studies could be made. The reliability of the peer relations scale, α .76, was evidence of good reliability in different populations.

Those who do not have a BSN as basic education or highest degree and worked in intensive care reported more horizontal violence. Nurses working in teaching hospitals reported higher quality of care. Those with a non-BSN as basic RN education, working in hospitals with less than 100 beds in areas other than intensive care and non-intensive care reported higher frequency of adverse events. There were no significant differences in gender, race, or other types of hospitals.

Pearson's r correlations are summarized in Table 4. There were no significant correlations between any of the research variables and years of experience working in a hospital and average number of hours worked. Age was significantly positively correlated with horizontal violence and adverse events but not peer relations and the quality and safety of patient care. Older nurses reported a higher frequency of horizontal violence (r=.157; p=.047) and adverse events (r=.213; p=.006).

Hypothesis Testing

The bivariate relationship display in tables 3 and 4 were used to screen demographic characteristics for inclusion in the multivariate regressions. Based on these findings, variables included were age, basic RN education, teaching hospital, size of hospital and clinical area. Basic RN education was included because of its higher significance that highest degree held.

Hypothesis 1: *Nurses who experience more horizontal violence will report less supportive relationships with peers.* A significant inverse correlation was found between horizontal violence and peer relations (see Table 4). As horizontal violence increases,

peer relations are less supportive. In the hierarchical regression analysis, age, basic RN education, teaching hospital, and size of hospital were not significant predictors of peer relations but clinical area and horizontal violence were (see Table 5). For every one unit increase in horizontal violence score, there is a corresponding 1.118 decrease in peer relations score, controlling for age, basic RN education, teaching hospital, size of hospital and clinical area ($p < .05$). Comparing other clinical areas to intensive care, there is a corresponding .440 decrease in peer relations score, controlling for age, basic RN education, teaching hospital, size of hospital and horizontal violence ($p < .05$).

Hypothesis 2: Nurses who report more horizontal violence will report lower quality and safety of patient care. There was a significant negative correlation between horizontal violence and their perception of the quality and safety of patient care (see Table 4). As horizontal violence increased, the quality and safety of patient care decreased. In the hierarchical regression analysis, age, basic RN education, teaching hospital, and hospital size were not significant predictors of the quality and safety of patient care but clinical area and horizontal violence were (see Table 5). Comparing non-intensive care clinical areas to intensive care, there is a corresponding .247 decrease in the quality and safety patient care score, controlling for age, basic RN education, teaching hospital, size of hospital and horizontal violence ($p < .05$). For every one unit increase in horizontal violence score, there was a corresponding .647 decrease in the quality and safety patient care score, controlling for age, basic RN education, teaching hospital, size of hospital, and clinical area ($p < .05$). On the other hand, the significant negative coefficient for horizontal violence on quality and safety in model one was reduced when

peer relations was added in model two suggesting that peer relations mediates the effect of horizontal violence on the quality and safety of patient care.

Hypothesis 3: Nurses who experience more horizontal violence will report a higher frequency of adverse events. A significant positive correlation was found between horizontal violence and adverse events (see Table 4). As horizontal violence increases, so do adverse events. In the hierarchical regression analysis, age, basic RN education, teaching hospital, and hospital size were not significant predictors of adverse events but clinical area and horizontal violence were (see Table 5). Comparing other clinical areas to intensive care, there was a corresponding .302 increase in the adverse events score, controlling for age, basic RN education, teaching hospital, size of hospital, and horizontal violence ($p < .05$). For every one unit increase in horizontal violence score, there was a corresponding .383 increase in adverse events score, controlling for age, basic RN education, teaching hospital, hospital size, and clinical areas ($p < .05$). When peer was added in model two, there was no reduction in the significance of horizontal violence on adverse events suggesting that peer relations do not mediate the effect of horizontal violence on adverse events.

Study Limitations

Sax, Gilmartin and Bryant (2003) study reported a response rate of 24% in their study using a using the same survey administration method as this study, a paper with online option. Their rate was higher than the 18.5% response to this study. On average, a response rate of 21.8% was reported by Sax et al. (2003) for previous studies using web only, paper only, and paper with web option survey administration methods. The response rate of 18.5% in this study was low. The views of those remaining nurses are

unknown leaving unanswered questions about why they did not choose to participate. Those who participated may have experienced more horizontal violence than those who did not, introducing a possible self selection bias.

Other unknown factors within the work environment of nurses not controlled for could impact peer relations, the quality and safety of patient care, and adverse events. These factors might include short hospital stays, long working hours, and multiple interruptions on nurses time (IOM, 2004). This is important to consider when concluding that the independent variables have relationships with the dependent variables.

Cross-sectional studies cannot establish causal relationships between variables. In this study, the direction of effects between the concepts analyzed cannot be certain. In addition, relationships between concepts in this study findings are based on nurses' perception of these relationships.

Scales used to measure concepts are a limitation. The NAQ-R was developed to measure bullying not horizontal violence. Although these two concepts are similar in that they are conceptualized as negative acts between co-workers, they differ in frequency of the acts. There is evidence of predictive validity of the measures of quality of care, patient safety and adverse events. However, the new measures developed from those original measures for this study had evidence of good reliability and predictive validity in this study, but no studies yet exist to comparison these findings to show evidence across studies.

Discussion

This study tested three hypotheses, one specific to nurses' relationships and communication with one another and the others to the quality and safety of patient care. The first hypothesis, nurses who experience more horizontal violence will report less supportive relationships with peers was supported. The main finding was, as horizontal violence increases, the degree to which peer relations are supportive decreases. The next question becomes, how can this relationship be explained?

Theory is useful for generating ideas about how relationships could happen . The horizontal violence and the quality and safety of care model, displayed in Figure 1, provides a hypothesis (Purpora, 2010). Between horizontal violence and peer relations, two other concepts are postulated though not measured and analyzed here "safety needs" (Maslow, 1943, p. 376) and "psychological noise" (DeVito, 2008, p. 13). In his theory of human motivation, Maslow (1943) explains that humans need to feel physically and psychologically safe. When they do, they tend to interact with others, while those who do not feel safe are not inclined to relate. Hypothetically, nurses who were psychologically hurt by their experiences of horizontal violence feel unsafe interacting with other nurses because they perceive the potential for more horizontal violence and psychological harm.

When nurses do not feel safe with one another, psychological noise is useful for speculating why they also may not communicate (Purpora, 2010). In the essential human communication model, psychological noise hinders communication, the sharing of verbal and nonverbal messages between people (Devito, 2008). DeVito (2008) theorized that psychological noise, at one extreme, prevents communication from occurring at all because of thoughts, attitudes and feelings established in a person's mind. When a person

has strong distrustful feelings or a predetermined idea about how communication will play out, they do not communicate. Theoretically, communication is decreased or does not happen at all when nurses perceive threats to their psychological well being and have predetermined beliefs about how the communication exchange will occur.

The second hypothesis tested was nurses who report more horizontal violence will report lower quality and safety of patient care. The main finding was, as horizontal violence increases, the quality and safety of patient care decreases. When peer relations and communication are decreased in the presence of horizontal violence, how can the relationship to the quality and safety of patient care be explained? "Defense layers" (Reason, 2000, p.769) is another concept not measured or analyzed here but useful for hypothesizing a link between peer relations and the quality and safety of patient care. The concept comes from the Swiss cheese model of system accidents where Reason (2000) theorizes that people can be harmed in highly technical organizations, such as healthcare, but uses the idea of defense layers to explain how people can be protected. These layers consist of people, technology, and policies and procedures that work by creating a barrier which is designed to stop errors that happen within these environments from reaching patients. When these layers are jeopardized, those errors can harm patients. People are the defense layer of interest because they consist of front line caregivers including their relationships and communication with each other. When peer relationships are not supportive, their communication decreases and so does the possibility that errors will be identified and patient harm averted. Peer relations is hypothesized as one of many important contributors to protecting patients from harm. When nurses ask each other questions, give each other feedback and advise, and seek each other out for help, they are

openly communicating, an indication that peer relations are supportive. Hypothetically, when nurses do not relate to one another including maintaining open communication, the integrity of the defense layer is jeopardized placing patients at risk for harm.

Nurses who experience more horizontal violence report a higher frequency of adverse events was the third hypothesis tested. The main finding was, as horizontal violence increases, so do adverse events. As an indicator of quality of care, this is not a surprising finding but one that has not been previously documented.

A particularly striking empirical finding is that peer relations mediates the effect of horizontal violence on the quality and safety of patient care. This suggests that decreasing supportive peer relations and open communication among nurses in hospitals was the way in which horizontal violence affected the quality and safety of patient care and provides a focus for recommendations for future research and implications for practice. However, peer relations did not mediate the effect of horizontal violence on adverse events. This difference is surprising and needs further study. More research is needed to examine this relationship in other populations of RNs to gather evidence of its existence in more than one study. Does the relationship of horizontal violence to the quality and safety of patient care depend on peer relations? What factors in addition to horizontal violence contribute to supportive peer relations among nurses? What strategies can nurses use to cope with difficult peer relations at work?

There is little empirical evidence at this time on which to draw recommendations for practice. Nurses have coped by talking to other nurses, friends, and family, leaving their job, or reporting their experiences to human resources or their union (Farrell, 1999; McKenna et al., 2003; Vessey et al., 2009). These coping mechanisms may be useful at

first but, in the long term, the behavior will persist and peer relations could suffer irreparable damage. Griffin (2004) taught new graduate nurses about horizontal violence giving them behavioral techniques useful for responding to the behavior when they encounter it. For example, when information was withheld, they were taught a scripted reply to that particular situation. The techniques contributed to nurses successfully dealing with the behavior and ultimately contributed to their retention. Given the limited evidence, education in practice settings is recommended to improve peer relations in the presence of horizontal violence. This includes conflict management skills and behavioral techniques.

Conclusion

This study tested three hypotheses. Findings supported the horizontal violence and the quality and safety of care model propositions that nurses who experience horizontal violence have less supportive relationships with peers and lower quality and safe patient care. More research is needed to examine these relationships in other populations of RNs to gather evidence of its existence in more than one study. Education in practice settings is recommended to improve peer relations in the presence of horizontal violence. More empirical evidence of these relationships will provide a firm foundation from which future research and practice recommendations can be made.

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Table 1
Research Variables Measured

Variable	Items	Operational Definition	Related Hypothesis(es)
Horizontal Violence 21 Item NAQ-R Einarsen et al., 2009, p. 32	1. Someone withholding information which affects your performance 2. Being humiliated or ridiculed in connection with your work 3. Being ordered to do work below your level of competence 4. Having key areas of responsibility removed or replaced with more trivial or unpleasant tasks 5. Spreading of gossip and rumors about you 6. Being ignored, excluded or isolated from others 7. Having insulting or offensive remarks made about your person (i.e. habits and background), your attitudes or your private life 8. Being shouted at or being the target of spontaneous anger (or rage) 9. Intimidating behavior such as finger-pointing, invasion of personal space, shoving, blocking/barring the way 10. Hints you should quit your job 11. Repeated reminders of your errors or mistakes 12. Being ignored or facing a hostile reaction when you approach 13. Persistent criticism of your work or effort 14. Having your opinions and views ignored	Mean score of all items are continuous Possible score: Minimum=1 Maximum=5 1=Never 2=Now and Then 3=Monthly 4=Weekly 5=Daily	Nurses who experience more horizontal violence will report less supportive relationships with peers Nurses who experience more horizontal violence will report a higher frequency of adverse events.

Table 1 continued
Research Variables Measured

Variable	Items	Operational Definition	Related Hypothesis(es)
Horizontal Violence 21 Item NAQ-R Einarsen et al., 2009	15. Practical jokes carried out by people you don't get along with 16. Being given tasks with unreasonable or impossible targets or deadlines 17. Having allegations made against you 18. Excessive monitoring of your work 19. Pressure not to claim something which by right you are entitled to (sick time, vacation time, travel expenses) 20. Being subject of excessive teasing and sarcasm 21. Threats of violence or physical abuse or actual abuse	Mean score of all items are continuous Possible score: Minimum=1 Maximum=5 1=Never 2=Now and Then 3=Monthly 4=Weekly 5=Daily	Nurses who experience more horizontal violence will report less supportive relationships with peers Nurses who experience more horizontal violence will report a higher frequency of adverse events.
Peer relations 4 item scale Blegen, 2003	1. I feel comfortable asking nurses on my unit for assistance 2. Nurses on my unit do not help one another care for individual patients* 3. On my unit, I can openly discuss my opinion about patient care problems with peers 4. I do not trust the people with whom I work*	Mean score of all items are continuous Possible score: Minimum=1 Maximum=5 1=Strongly Disagree 2=Somewhat Disagree 3=Neutral 4=Somewhat Agree 5=Strongly Agree	Nurses who experience more horizontal violence will report less supportive relationships with peers. Nurses who report less supportive peer relations will report lower quality and safety of patient care.

Table 1 continued
Research Variables Measured

Variable	Items	Operational Definition	Related Hypothesis(es)
Quality and safety of patient care 3 items Aiken et al., 2002 AHRQ, 2004	1. In general, how would you grade the quality of nursing care delivered to patients in your work area or on your unit in your hospital? 2. How would you grade the quality of nursing care delivered on your last shift? 3. Please give your work area/unit an overall grade on patient safety	Mean score of all items are continuous Possible score: Minimum=1 Maximum=5 1=F, Failing 2=D, Poor 3=C, Acceptable 4=B, Very Good 5=A, Excellent	Nurses who report less supportive peer relations will report lower quality and safety of patient care.
Adverse Events 6 items Aiken et al., 2007	1. Patient received wrong medicine or dose 2. Hospital acquired infections 3. Complaints from patients or their families 4. Patient falls with injuries 5. Hospital acquired pressure ulcers 6. Inaccurate infusion of blood or IV fluid	Mean score of all items are continuous Possible score: Minimum=0, Missing Maximum=4 0=Does Not Apply 1=Never 2=Rarely 3=Occasionally 4=Frequently	Nurses who experience more horizontal violence will report a higher frequency of adverse events.

*Negatively worded items were reverse coded for analysis. Note: Negative Acts Questionnaire-Revised (NAQ-R). From "Measuring exposure to bullying and harassment at work: Validity, factor structure and psychometric properties of the negative acts questionnaire-revised," by S. Einarsen, H. Hoel, and G. Notelaers, 2009, *Work and Stress, 23*(1), p. 32. Copyright 2009 Taylor and Francis. Reused with permission Taylor and Francis (Appendix I).Used with permission of Bergen Bullying Research Group (Appendix J). Peer relations subscale from the Nurses Staffing and the Quality of Care Questionnaire: Selected Subscales April, 2003 obtained from M. Blegen, written communication, March 3, 2009. Used and adapted with permission of author (Appendix K). Quality and safety of patient care. Quality of care items from "Hospital staffing, organization, and quality of care: Cross-national findings," by L. H. Aiken, Clarke, S. P.,

Sloane, D. M., 2002, *International Journal for Quality in Health Care, 14*(1), p. 13. Copyright International Society for Quality in Health Care and Oxford University Press. Permission to reuse and modify granted by Oxford University Press (Appendix L). Adapted with permission of the author (Appendix M). Patient safety item from "Hospital Survey on Patient Safety Culture," by the Agency for Healthcare Research and Quality, 2004, retrieved from http://www.ahrq.gov/qual/patient safetyculture/hospform.pdf., public domain. Adverse events scale from "Supplemental nurse staffing in hospitals and quality of care," by L. H. Aiken, S. P. Clarke, Y, Xue, and D. M. Sloane, 2007, *The Journal of Nursing Administration, 37*(7/8), p. 337. Copyright 2007 Lippincott Williams & Wilkins. Permission to reuse and adapt granted by Wolters Kluwer Health (Appendix N). Adapted with permission of the author (Appendix M).

Table 2
Sample Description Compared to CA BRN 2008 Survey of Registered Nurses

Variable	Study Sample (n=173)	CA BRN (n=5440)
Age	46.2 Years	47.1 Years
Gender	91% Female	86% Female
Race	62% Caucasian	59% Caucasian
Basic RN Education	41% Associate	46% Associate
Highest Degree Held	50% Bachelor's	42% Bachelor's
Clinical Area	20% Medical Surgical	13.1% Medical Surgical
Average number of hours worked	35.6 Hours	36.5 Hours

Note. CA BRN demographic data from the "California board of registered nursing 2008 survey of registered nurses," by the University of California, San Francisco: J. Spetz, D. Keane, and C. Herrera, 2009.

Table 3
Means of Research Variables by Nurse and Work Characteristics and Reliability of Measures

	Horizontal Violence 21 items	Peer Relations 4 items	Quality Safety 3 items	Adverse Events 6 items
Overall Mean (SD)	1.51 (.520)	4.08 (.871)	4.00 (.710)	1.74 (.567)
Cronbach's alpha	.92	.76	.89	.86
Gender				
Female (n=157)	1.51	4.10	3.99	1.72
Male (n=13)	1.48	3.83	3.92	1.92
Race				
Caucasian (n=107)	1.52	4.11	4.03	1.72
Non-Cauc (n=64)	1.47	4.01	3.92	1.77
Basic RN Education				
Non-BSN (n=89)	1.60**	3.98	3.92	1.89**
BSN or > (n=82)	1.40	4.18	4.07	1.58
Highest Degree Held				
Non-BSN (n=58)	1.61*	4.03	3.98	1.82
BSN or > (n=113)	1.45	4.10	4.00	1.70
Type of Hospital:				
Community				
Yes (n=113)	1.53	4.05	3.93	1.78
No (n=57)	1.46	4.14	4.09	1.66
Teaching				
Yes (n=64)	1.47	4.23	4.15*	1.65
No (n=106)	1.53	3.98	3.89	1.80
Government				
Yes (n=6)	1.29	3.88	3.83	1.65
No (n=164)	1.51	4.08	3.99	1.75
Size of Hospital				
<100 (n=20)	1.67	4.08	3.83	1.94*
100-300 (n=83)	1.50	4.08	3.96	1.80
>300 (n=64)	1.47	4.08	4.08	1.59
Clinical Area				
Intensive Care (n=69)	1.63*	4.07	4.05	1.72
Non-intensive Care (n=78)	1.38	4.17	4.00	1.65
Other (n=21)	1.59	3.76	3.79	2.08**

*p<.05; **p<.01

Table 4
Correlation of Research Variables and Continuous Demographic Variables

Variable	Horizontal Violence	Peer Relations	Quality Safety	Adverse Events	Age	Years	Hours
Horizontal Violence	1.0						
Peer Relations	-.638**	1.0					
Quality Safety	-.459**	.609**	1.0				
Adverse Events	.408**	-.316**	-.308**	1.0			
Age	.157*	-.057	-.127	.213**	1.0		
Years	.087	.022	-.102	.106	.774**	1.0	
Hours	.134	-.089	.004	.079	.007	-.078	1.0

Note: Years=years of experience working in a hospital, Hours=average number of hours worked per week *p<.05; **p<.01

Table 5
Hierarchical Regression Analyses

Dependent Variable	Peer Relations	Quality/Safety Model 1	Quality/Safety Model 2	Adverse Events Model 1	Adverse Events Model 2
Age of nurse	.007	.002	.000	.003	.004
Basic RN education	.003	-.022	-.023	-.116	-.116
Teaching hospital	.176	.148	.085	-.031	-.020
Size of Hospital (> 300 beds omitted)					
<100 Beds	.327	-.053	-.170	.195	.215
100-300 Beds	.078	-.087	-.115	.166	.171
Clinical Area (Intensive care omitted)					
Non-intensive care	-.131	-.247*	-.200*	.067	.059
Other	-.440*	-.288	-.131	.302*	.275*
Horizontal Violence	-1.118**	-.674**	-.273*	.383**	.316**
Peer Relations			.358**		-.060
Model p	.000		.000		.000
R^2	.462	.289	.401	.260	.265

Note: Unstandardized coefficients reported. *p<.05; **p<.01.

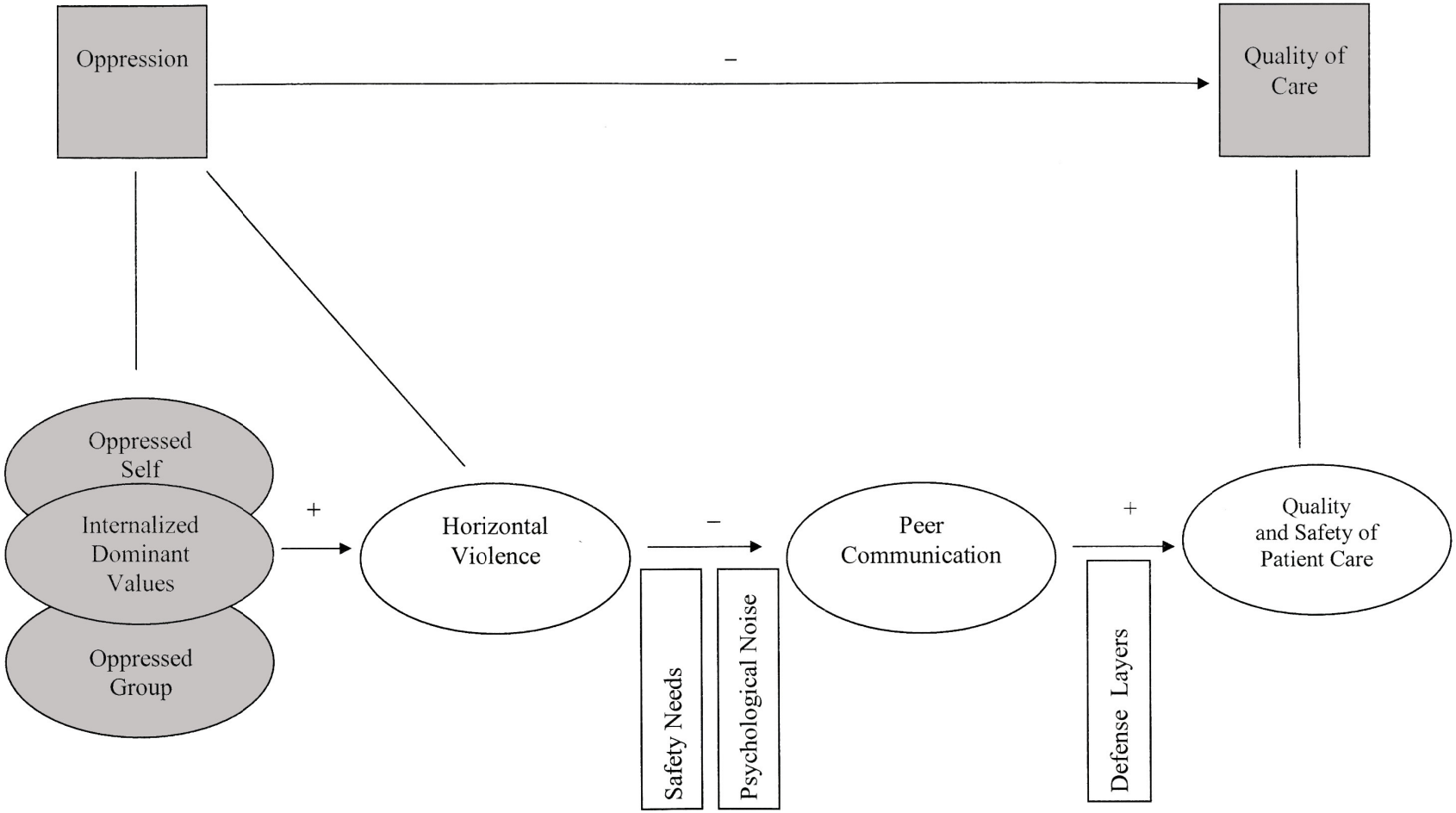

Figure 1. A Conceptual Model for Horizontal Violence and the Quality and Safety of Patient Care.

CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS FOR RESEARCH

The purposes of the theoretical manuscript and studies contained in this dissertation work were to describe hospital staff RNs work-related views of themselves, nursing as a group, their interactions and relationships with other staff RNs and the quality and safety of patient care. Staff RNs whose beliefs and feelings about themselves and nursing that were exhibitive of an oppressed group or self also experienced horizontal violence. These perceived experiences negatively affected their relationships--they did not trust other RNs or feel uncomfortable asking them for help and patient care issues were not openly discussed. Findings suggested that when peer relationships were negatively affected, the quality and safety of patient care was perceived as lessened and adverse events were more frequent. Peer relations were so important that it mediated the effect horizontal violence had on the quality and safety of patient care, although this was not the case for adverse events. These findings inspire ideas for future research.

This research project provided empirical evidence in support of assumptions made for many years about the relationship between the concepts studied and a foundation from which implications for research can be drawn. As the only study of its kind, replication is highly recommended because its impact could have far reaching implications for nurses and for patients. New research questions emerge:

1. Do the relationships found in this population exist in other populations of nurses? Specifically:
2. How should horizontal violence best be operationalized?
3. What factors in the work environment of nurses contribute to horizontal violence?
4. What factors contribute to horizontal violence across diverse demographic groups?

5. What factors link horizontal violence and peer relationships?

6. What factors contribute to supportive peer relations among nurses in hospitals?

7. What factors hinder supportive relationships among nurses in hospitals?

8. Are there consequences for the quality and safety of patient care when nurses exhibit attitudes exhibitive of an oppressed self or group?

9. What processes link peer relationships and the quality and safety of patient care?

10. Does the relationship of horizontal violence to the quality and safety of patient care depend on peer relations?

11. What strategies can nurses use to cope with difficult peer relations at work?

Mounting evidence of empirical links across different populations of hospital staff RNs, or lack thereof, validates and provides opportunity for improvement in the new conceptual model used to guide this study and interpret its findings. As our knowledge builds, innovative recommendations for education and practice can be made. As already stated, the purpose is not to fault nurses for horizontal violence, but to understand and explain the context in which it occurs. Future research that focuses on the work environment of nurses calls for taking a much broader view of the social structure of hospitals and the changes needed within it. Freire (1970/2003) postulated that being oppressed is not a life sentence, but rather a situation that can be changed. He theorized that the monumental challenge is for the oppressed to understand that they are oppressed. Once this occurs it is possible that, together, they can change their situation for the better and for good.

References

Freire, P. (2003). *Pedagogy of the oppressed* (30th anniversary ed.). New York: The Continuum International Publishing Group. (Original work published 1970).

APPENDIXES

Appendix A

University of California, San Francisco Committee on Human Research Approval Letter

COMMITTEE ON HUMAN RESEARCH
OFFICE OF RESEARCH, Box 0962
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO
www.research.ucsf.edu/chr/Apply/chrApprovalCond.asp
chr@ucsf.edu
(415) 476-1814

CHR APPROVAL LETTER

TO: Mary A. Blegen, Ph.D
Box 0608

Christina Purpora, RN; Ph D(c)
Box 0608,

RE: Interactions Among Staff Nurses in Hospitals and Quality of Care

The Committee on Human Research (CHR) has reviewed and approved this application to involve humans as research subjects. This included a review of all documents attached to the original copy of this letter.

Specifically, the review included but was not limited to the following documents:
Two Information Sheets, Dated 2/1/2010

The CHR is the Institutional Review Board (IRB) for UCSF and its affiliates. UCSF holds Office of Human Research Protections Federalwide Assurance number FWA00000068. See the CHR website for a list of other applicable FWA's.

APPROVAL NUMBER: H54238-35678-01. This number is a UCSF CHR number and should be used on all correspondence, consent forms and patient charts as appropriate.

APPROVAL DATE: February 24, 2010 **EXPIRATION DATE:** February 24, 2011 **Expedited Review**

GENERAL CONDITIONS OF APPROVAL: Please refer to www.research.ucsf.edu/chr/Apply/chrApprovalCond.asp for a description of the general conditions of CHR approval. In particular, the study must be renewed by the expiration date if work is to continue. Also, prior CHR approval is required before implementing any changes in the consent documents or any changes in the protocol unless those changes are required urgently for the safety of the subjects.

HIPAA "Privacy Rule" (45CFR164): This study does not involve access to, or creation or disclosure of Protected Health Information (PHI).

Sincerely,

Susan H. Sniderman, M.D.
Chair, Committee on Human Research

cc:

Appendix B

First Contact Postcard

Dear addressee's name here,

We're studying nurses' work related views of *themselves*, *nursing as a group*, *their interactions and relationships with other nurses*, *how satisfied they are with their job*, and *quality of patient care*.

Are you working as a staff RN in a hospital? Are you willing to share your views in a survey? If you are, then you're eligible to participate. Your opinion is very important to us because only you can provide necessary information to gain an accurate picture of how frequently negative interactions occur among nurses and how these may impact patient care.

Your name was randomly selected from a list of RNs obtained from the California Board of Registered Nursing. Your participation is voluntary. If you'd like to participate, please indicate below your preference to do so either online or with a paper survey and mail this postcard back to us. In return you'll receive an information letter, your survey preference, and a thank you gift. The survey will take up to 15 minutes to complete. The information you provide on your survey cannot be traced to you.

Thank you!

Christina Purpora, RN, PhD(c) and **Doctoral Student**

Mary Blegen, RN, PhD, FAAN
Professor
Director for the Center for Patient Safety

From the School of Nursing, University of California, San Francisco

Yes, I'm interested in participating in your study. I'd like to complete the survey in the following format (please check one):

☐ **Online survey** ☐ **Paper survey**

Please tear card at perforation and mail the above postcard back to us.
No postage required!
Name
Street address
Preprinted here

Appendix C

Information Sheet for Online Survey

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

Dear

Thank you for your postcard requesting the online link to our survey.

We are conducting a study to describe nurses' work related views of themselves, nursing as a group, their interactions and relationships with other nurses, how satisfied they are with their job, and quality of patient care. This study is being conducted by Christina Purpora, RN, PhD(c) and Mary Blegen, RN, PhD, FAAN in the School of Nursing at the University of California, San Francisco (UCSF).

Studies suggest that some nurses experience negative interactions with other nurses at work. These nurses occasionally report less self-esteem, loss of self-confidence, fear, anxiety or depression as a result of their experiences. Others consider leaving their job or nursing altogether and are less satisfied with their job. However, very little is known about consequences, if any, to patient care. We are carrying out this study to learn more about these behaviors and their consequences. By knowing more, we can address the problem, if there is one.

Your name was randomly selected from a list of RNs obtained from the California Board of Registered Nursing. The survey is entirely anonymous so please don't put your name or any other identifying information on it. Hopefully you will feel comfortable answering the questions candidly knowing that in no way can your answers be linked to you. If you would rather not answer a certain question, please feel free to leave it blank. Please tell us about your concern in the comment section provided. If you can, please answer all of the survey questions. Your opinion is very important to us because only you can provide the necessary information to gain an accurate picture of how frequently negative interactions occur among staff nurses in hospitals and how it may impact patient care.

Some nurses may feel some distress as they think about the survey statements and questions as some items are sensitive in nature. If this is the case for you, we urge you to seek available support from resources such as the employee assistance program where you work.

Your participation is voluntary and you can stop participating at anytime without any consequence to you. Receipt of your completed survey tells us that you agree to participate. If you have any questions about the study, please contact Christina Purpora at christina.purpora@ucsf.edu or (415) 503-0792.

You chose to complete your survey online. To do this, please go to:

https://www.surveymonkey.com/s/niqcs

We enclose in advance a small gift in appreciation of your time.

Thank you very much for sharing your valuable opinion with us.

Christina Purpora, RN, PhD(c)
PhD in Nursing Candidate
Betty Irene Moore Doctoral Fellow
UCSF School of Nursing

Mary Blegen, RN, PhD, FAAN
Professor in Community Health Systems
Director of the Center for Patient Safety
UCSF School of Nursing

Appendix D

Information Sheet for Paper Survey

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

Dear

Thank you for your postcard requesting a paper survey.

We are conducting a study to describe nurses' work related views of themselves, nursing as a group, their interactions and relationships with other nurses, how satisfied they are with their job, and quality of patient care. This study is being conducted by Christina Purpora, RN, PhD(c) and Mary Blegen, RN, PhD, FAAN in the School of Nursing at the University of California, San Francisco (UCSF).

Studies suggest that some nurses experience negative interactions with other nurses at work. These nurses occasionally report less self-esteem, loss of self-confidence, fear, anxiety or depression as a result of their experiences. Others consider leaving their job or nursing altogether and are less satisfied with their job. However, very little is known about consequences, if any, to patient care. We are carrying out this study to learn more about these behaviors and their consequences. By knowing more, we can address the problem, if there is one.

Your name was randomly selected from a list of RNs obtained from the California Board of Registered Nursing. The survey is entirely anonymous so please don't put your name or any other identifying information on it. Hopefully you will feel comfortable answering the questions candidly knowing that in no way can your answers be linked to you. If you would rather not answer a certain question, please feel free to leave it blank. Please tell us about your concern in the comment section provided. If you can, please answer all of the survey questions. Your opinion is very important to us because only you can provide the necessary information to gain an accurate picture of how frequently negative interactions occur among nurses in hospitals and how it may impact patient care.

Some nurses may feel some distress as they think about the survey statements and questions as some items are sensitive in nature. If this is the case for you, we urge you to seek available support from resources such as the employee assistance program where you work.

Your participation is voluntary and you can stop participating at anytime without any consequence to you. Receipt of your completed survey tells us that you agree to participate. If you have any questions about the study, please contact Christina Purpora at christina.purpora@ucsf.edu or (415) 503-0792.

The paper survey you requested is enclosed with this letter. When complete, please mail it back to us in the envelope provided.

We enclose in advance a small gift in appreciation of your time.

Thank you very much for sharing your valuable opinion with us.

Christina Purpora, RN, PhD(c)
PhD in Nursing Candidate
Betty Irene Moore Doctoral Fellow
UCSF School of Nursing

Mary Blegen, RN, PhD, FAAN
Professor in Community Health Systems
Director of the Center for Patient Safety
UCSF School of Nursing

Appendix E

Paper Survey

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

Nursing Interactions and Quality of Care Survey

SECTION 1. Negative Acts Questionnaire[1] — **CIRCLE ONE NUMBER on EACH LINE**

The following behaviors are often seen as examples of negative behavior in the workplace. **Over the last six months**, how often have you been subjected to the following negative acts from **another staff RN** at work?	Never	Now and Then	Monthly	Weekly	Daily
1. Someone withholding information which affects your performance	1	2	3	4	5
2. Being humiliated or ridiculed in connection with your work	1	2	3	4	5
3. Being ordered to do work below your level of competence	1	2	3	4	5
4. Having key areas of responsibility removed or replaced with more trivial or unpleasant tasks	1	2	3	4	5
5. Spreading of gossip and rumors about you	1	2	3	4	5
6. Being ignored, excluded or isolated from others.	1	2	3	4	5
7. Having insulting or offensive remarks made about your person (i.e. habits and background), your attitudes or your private life	1	2	3	4	5
8. Being shouted at or being the target of spontaneous anger (or rage)	1	2	3	4	5
9. Intimidating behavior such as finger-pointing, invasion of personal space, shoving, blocking/barring the way	1	2	3	4	5
10. Hints or signals from others that you should quit your job	1	2	3	4	5
11. Repeated reminders of your errors or mistakes	1	2	3	4	5
12. Being ignored or facing a hostile reaction when you approach	1	2	3	4	5
13. Persistent criticism of your work and effort	1	2	3	4	5
14. Having your opinions and views ignored	1	2	3	4	5
15. Practical jokes carried out by people you don't get along with	1	2	3	4	5
16. Being given tasks with unreasonable or impossible targets or deadlines	1	2	3	4	5
17. Having allegations made against you	1	2	3	4	5
18. Excessive monitoring of your work	1	2	3	4	5
19. Pressure not to claim something which by right you are entitled to (e.g. sick time, vacation time, travel expenses)	1	2	3	4	5
20. Being the subject of excessive teasing and sarcasm	1	2	3	4	5
21. Being exposed to an unmanageable workload	1	2	3	4	5
22. Threats of violence or physical abuse or actual abuse	1	2	3	4	5

Please Turn to the Next Page

Have you been bullied at work? We define bullying as a situation where one or several individuals persistently over a period of time perceive themselves to be on the receiving end of negative actions from one or several persons, in a situation where the target of bullying has difficulty in defending him or herself against these actions. We will not refer to a one-time incident as bullying.

Please CHECK ONE BOX in response to the following statement:

23. Using the above definition, please state whether you have been bullied at work **over the last six months**:

☐ No ☐ Yes, but only rarely ☐ Yes, now and then ☐ Yes, several times a week ☐ Yes, almost daily

SECTION 2. Quality of Care[2] and Patient Safety[3]

CIRCLE ONE GRADE on EACH LINE

Please give your work area/unit an overall grade for quality of care and patient safety. By patient safety we mean "the avoidance and prevention of patient injuries or adverse events resulting from the processes of health care delivery."[3]	Excellent	Very Good	Acceptable	Poor	Failing
24. In general, how would you grade the quality of nursing care delivered to patients in your work area or on your unit in your hospital?	A	B	C	D	F
25. How would you grade the quality of nursing care delivered on your last shift?	A	B	C	D	F
26. Please give your work area/unit an overall grade on patient safety	A	B	C	D	F

SECTION 3. Adverse Events[4]

CIRCLE ONE NUMBER on EACH LINE

Over the past six months, how often would you say each of the following incidents has occurred involving you or your patients?	Never	Rarely	Occasionally	Frequently	Does Not Apply
27. Patient received wrong medicine or dose	1	2	3	4	0
28. Hospital acquired infections	1	2	3	4	0
29. Complaints from patients or their families	1	2	3	4	0
30. Patient falls with injuries	1	2	3	4	0
31. Hospital acquired pressure ulcers	1	2	3	4	0
32. Inaccurate infusion of blood or IV fluid	1	2	3	4	0

Please Turn to the Next Page

SECTION 4. Peer Relations and Job Satisfaction[5]

Please indicate your agreement with the following statements as they apply at work:

CIRCLE ONE NUMBER on EACH LINE

	Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree
33. I feel comfortable asking nurses on my unit for assistance	1	2	3	4	5
34. Nurses on my unit do not help one another care for individual patients	1	2	3	4	5
35. On my unit, I can openly discuss my opinions about patient care problems with peers	1	2	3	4	5
36. I do not trust the people with whom I work	1	2	3	4	5
37. I feel that I am happier in my work than most people	1	2	3	4	5
38. I am disappointed that I ever took this job	1	2	3	4	5
39. Each day of work seems like it will never end	1	2	3	4	5
40. Most of the time, I have to force myself to go to work	1	2	3	4	5
41. I am satisfied with my job for the time being	1	2	3	4	5
42. I find real enjoyment in my work	1	2	3	4	5

SECTION 5. Nurse Workplace Scale[6]

Please read the following statements representing possible behaviors, feelings, or beliefs as they apply at work. Indicate how frequently these statements apply to you:

CIRCLE ONE NUMBER on EACH LINE

	Never	Rarely	Sometimes	Frequently	Always
43. Said "it's really hard to work with a bunch of women"	1	2	3	4	5
44. Believe that it is impossible or at least very difficult for women to reach consensus	1	2	3	4	5
45. Said or felt that most of your friends were men…or you just can't trust women	1	2	3	4	5
46. Said you prefer a male boss over a female one	1	2	3	4	5
47. Believed that men have more natural leadership ability than women	1	2	3	4	5
48. Prefaced statements with phrases such as "I know this is a really stupid question"	1	2	3	4	5
49. Found it difficult to accept compliments	1	2	3	4	5
50. Felt or said that you were "unworthy" of an honor or reward	1	2	3	4	5
51. Constantly compared yourself with others	1	2	3	4	5
52. Changed your story according to the professional audience	1	2	3	4	5
53. Complained about a problem to your fellow workers but did nothing to confront the person you believe is causing the problem	1	2	3	4	5
54. Found yourself more frequently making comments (either positive or negative ones) about other nurses rather than to the other nurses that were the focus of your comments	1	2	3	4	5

You're Almost Done!!!

Please Turn to the Next Page

SECTION 6. Please Tell Us About Yourself.[7]

Please FILL IN THE BLANKS TO ANSWER THE NEXT THREE QUESTIONS:

55. What is your age? _____

56. How many years of experience do you have working as an RN in the hospital? _____

57. How many hours do you work each week on average? _____

58. What is you gender?

☐ Female ☐ Male

59. What is your race/ethnicity? **Please CHECK ONE BOX ONLY:**

☐ Asian Indian	☐ Hispanic/Latino	☐ White, not Hispanic
☐ Asian, not Filipino or Indian	☐ Native American/Alaskan	☐ Mixed race/ethnicity
☐ Black/African American	☐ Native Hawaiian/Pacific Islander	☐ Other
☐ Filipino		

60. What was your basic RN education?

☐ Diploma	☐ Bachelor's degree	☐ Master's degree
☐ Associate degree	☐ 2nd degree/Accelerated	

61. What is the highest degree you hold?

☐ Diploma	☐ Bachelor's degree	☐ Doctorate degree
☐ Associate degree	☐ Master's Degree	

62. In what type of hospital do you work? **Please CHECK ALL THAT APPLY:**

☐ Community-based ☐ Teaching ☐ Non-teaching ☐ Government/Federal/Military/VA

63. In what size hospital do you work? **Please CHECK ONE ANSWER:**

☐ Less than 100 beds ☐ 100-300 beds ☐ More than 300 beds

Please Go to the Last page

64. In what clinical area do you work in the hospital? Please **CHECK ONE BEST ANSWER**:

☐ Critical Care	☐ Oncology
☐ Dialysis	☐ Pediatrics
☐ Emergency/Trauma/Urgent Care	☐ Peri-operative/Post-anesthesia
☐ Geriatrics	☐ Psychiatric/Mental Health
☐ Intermediate	☐ Step-down or Transitional Care Unit
☐ Medical/Surgical	☐ Telemetry
☐ Neonatal/Newborn	☐ Work in multiple areas, do not specialize
☐ Obstetrics/Reproductive Health	☐ Other (please explain): _____

SECTION 7. Your Comments

65. Please write any comments you would like to share with us in the box provided below:

You're Done! Thank you for Participating!

1. Einarsen, S., Hoel, H., & Notelaers, G. (2009). Measuring exposure to bullying and harassment at work: Validity, factor structure and psychometric properties of the negative acts questionnaire revised. *Work & Stress, 23*(1), 24-44.
2. Adapted from Aiken, L. H., Clarke, S. P., & Sloane, D. M. (2002). Hospital staffing, organization, and quality of care: Cross-national findings. *International Journal for Quality in Health Care, 14*(1), 5-13.
3. Adapted from Agency for Healthcare Research and Quality. (2004). Hospital Survey on Patient Safety Culture. Retrieved November 12, 2009, from http://www.ahrq.gov/qual/patientsafetyculture/hospform.pdf
4. Adapted from Aiken, L. H., Clarke, S. P., Xue, Y., & Sloane, D. M. (2007). Supplemental nurse staffing in hospitals and quality of care. *The Journal of Nursing Administration, 37*(7/8), 335-342.
5. Peer relations items from the Nurse Staffing and the Quality of Care Questionnaire: Selected Subscales. Revised 4.7.03. M. Blegen, written communication, March 3, 2009. Job Satisfaction items from Brayfield, A. H., & Rothe, H. F. (1951). An index of job satisfaction. *Journal of Applied Psychology, 35*(5), 307-309.
6. DeMarco, R., Roberts, S. J., Norris, A., & McCurry, M. K. (2008). The development of the nurse workplace scale: Self-advocating behaviors and beliefs in the professional workplace. *Journal of Professional Nursing, 24*(5), 296-301.
7. Demographics drawn from the California Board of Registered Nursing 2008 Survey of Registered Nurses.

Appendix F

Thank You and Reminder Postcard

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

Date

Dear

Last week, a survey seeking your opinion was sent to you. The survey asks nurses about their work related views of themselves, nursing as a group, their interactions and relationships with other nurses, how satisfied they are with their job, and quality of care.

Your opinion is very important to us because only you can provide the necessary information to gain an accurate picture of how frequently negative interactions occur among staff nurses in hospitals and how it may impact patient care.

If you have already completed and returned your survey to us, we thank you. If not, we ask that you do so as soon as you possibly can.

Thank you,

Christina Purpora, RN, PhD(c)
PhD in Nursing Candidate
Betty Irene Moore Doctoral Fellow
UCSF School of Nursing

Mary Blegen, RN, PhD, FAAN
Professor in Community Health Systems
Director of the Center for Patient Safety
UCSF School of Nursing

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Appendix H

Author Approval for Use of the Nurses' Workplace Scale

RE: Your Work: The Nurse Workplace Scale (NWS)

Purpora, Christina

Sent: Friday, October 09, 2009 9:53 AM

To: RDema10519@aol.com

Thank you for your permission.
I will share my suggested revision before using it.
Will be in touch shortly.
My Best,
Christina

Christina Purpora, PhD(c), RN
PhD in Nursing Student
Betty Irene Moore Doctoral Fellow
School of Nursing
University of California, San Francisco
(415) 503-0792
christina.purpora@ucsf.edu

From: RDema10519@aol.com [RDema10519@aol.com]
Sent: Friday, October 09, 2009 9:44 AM
To: Purpora, Christina
Subject: Re: Your Work: The Nurse Workplace Scale (NWS)

congratulations on your progress.
yes you have my permission with the stipulation that you recognize the authorship of the scale in publications (dissertation and otherwise) and that you share the revision you suggest with me BEFORE using it in that format. Thanks Rosanna
PS as soon as the other instrument factor analysis gets published I will send you the information. It is currently in review at the Journal of Nursing Measurement.

Rosanna DeMarco, PhD, PHCNS-BC, ACRN, FAAN
Associate Professor, Community/Public Health
Co-Chair Martin Luther King Jr. Committee
Boston College, William F. Connell School of Nursing (CSON)
140 Commonwealth Avenue
334H Cushing Hall
Chestnut Hill, MA 02467
Office: 617-552-8718
Assistant: Cathy Hill 617-552-4908
Main # CSON 617-552-4250
demarcro@bc.edu
rdema10519@aol.com

In a message dated 10/9/2009 12:35:29 P.M. Eastern Daylight Time, Christina.Purpora@ucsf.edu writes:

> Dear Dr. DeMarco,
>
> Thanks so much for your past correspondence and for providing me with a copy of the NWS.
> When last I wrote, I was writing my qualifying exam. I am now in the dissertation phase of my doctoral study.
>
> I am writing to ask -
> May have your permission to use the NWS in my dissertation work?
> If so, may I have free access and use of the data I collect for my dissertation and subsequent

publications?
Also, in discussing the scale and the potential for response bias with my advisor, would it be acceptable to you if I reversed some of the statements so there is a mixture of both positive and negative statements?
Could I replace the frequency response scale with an agreement response scale?

I am looking forward to your publication about the 4 items that predict bullying in the NAQ-R

Thank you very much for considering of my request,
Sincerely,

Christina

Christina Purpora, PhD(c), RN
PhD in Nursing Student
Betty Irene Moore Doctoral Fellow
School of Nursing
University of California, San Francisco
(415) 503-0792
christina.purpora@ucsf.edu<mailto:christina.purpora@ucsf.edu>

From: rdema10519@aol.com [rdema10519@aol.com]
Sent: Wednesday, February 10, 2010 8:58 AM
To: Purpora, Christina
Subject: Re: Update Regarding the Nurse Workplace Scale (NWS) Revision

excellent Christina.....thanks for keeping connected with me. Rosanna

-----Original Message-----
From: Purpora, Christina <Christina.Purpora@ucsf.edu>
To: rdema10519@aol.com <rdema10519@aol.com>
Sent: Wed, Feb 10, 2010 11:52 am
Subject: Update Regarding the Nurse Workplace Scale (NWS) Revision

Dear Rosanna,

Thank you so much for your patience.

I'm writing to say after much discussion with my advisor and my dissertation committee, we will leave the NWS in it's original form. No revisions will be made. This was decided because evidence of the reliability and validity of the scale exists and changing to an agreement scale wasn't useful.
My hope is to add to the evidence of its reliability and validity with my study. My population of interest is staff RNs working in hospitals in CA.

Will keep you posted.

My Best,

Christina

Christina Purpora, PhD(c), RN
PhD in Nursing Student
Betty Irene Moore Doctoral Fellow
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christina.purpora@ucsf.edu<mailto:christina.purpora@ucsf.edu>

Appendix I

Taylor and Francis Permission to Reuse

RE: Need Permission to Reuse for Dissertation

Whittaker, Michelle [Michelle.Whittaker@tandf.co.uk]

Sent: Thursday, August 05, 2010 8:01 AM

To: Purpora, Christina

Our Ref: MW/TWST/P3144

5th August 2010

Dear Christina Purpora,

Thank you for your correspondence requesting permission to reproduce the following material from our Journal in your thesis entitled 'Horizontal violence among hospital staff nurses and the quality and safety of patient care.'

Table 1 'Measuring Exposure to Bullying and Harassment at Work: Validity, factor structure and psychometric properties of the negative acts questionnaire-revised' by S Einarsen S et al Work & Stress Vol.23:1 pp24-44

We will be pleased to grant entirely free permission on the condition that you acknowledge the original source of publication and insert a reference to the Journal's web site:

http://www.informaworld.com

Thank you for your interest in our Journal.

Yours sincerely

Michelle Whittaker
Permissions Administrator
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-----Original Message-----
From: Purpora, Christina [mailto:Christina.Purpora@ucsf.edu]
Sent: 30 July 2010 05:25
To: Whittaker, Michelle
Subject: Need Permission to Reuse for Dissertation

Dear Ms. Whittaker,

My name is Christina Purpora. I am a doctoral student at the University of California, San Francisco (UCSF). I am in the process of submitting my dissertation manuscript entitled "Horizontal Violence Among Hospital Staff Nurses and the Quality and Safety of Patient Care" to the UCSF library to complete my degree.

I have already applied for and was granted permission to reuse (see below) for my dissertation through RightsLink. However, there was no license to print from that and I need such a document that states I have permission to reuse to submit with my manuscript. I spoke with Patrick Dunn at Taylor and Francis here in the US (1-800-354-1420 ext. 293). He referred me to you as what I am seeking has to come from the UK office of Taylor and Francis.

The following is what was listed on the Rightslink website:

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The article of interest is: Einarsen, S., Hoel, H., & Notelaers, G. (2009). Measuring exposure to bullying and harassment at work: Validity, factor structure and psychometric properties of the negative acts questionnaire-revised. Work & Stress, 23(1), 24-44.

I am asking to reuse the "NAQ-R item numbers" and "item wording" listed in Table 1 on p. 32 of the article.

Could you please supply me with documentation that permission to reuse the above is granted?

I look forward to hearing from you soon.

Thank you.

Christina Purpora, RN, PhD(c)
PhD in Nursing Student and Doctoral Candidate Betty Irene Moore Doctoral Fellow School of Nursing University of California, San Francisco
(415) 503-0792
christina.purpora@ucsf.edu<mailto:christina.purpora@ucsf.edu>

Appendix J

Bergen Bullying Group Approval of Use of the Negative Acts Questionnaire

Request: Negative Acts Questionaire

Purpora, Christina

Sent: Sunday, May 10, 2009 10:52 AM

To: mail@bullying.no

Dear Members of Bergen Bullying Research Group,

May I have a copy of the Negative Acts Questionnaire?

My name is Christina Purpora. I am a second year doctoral student in Nursing at the University of California, San Francisco in the United States. I have worked as a nurse in many hospitals in the clinical areas of medical-surgical and critical care nursing for 30 years. After I graduate from my doctoral program in 2010, I will teach nursing and conduct research.

My phenomenon of interest is horizontal violence, a term used synonymously with bullying in the nursing literature. I am interested in this concept when it occurs among nurses in the hospital work setting. In particular, I am interested in how patients are affected when they are being cared for by new graduate nurses who suffer psychological and physical consequences from being targets of horizontal violence at work.

I am interested in using the Negative Acts Questionnaire (NAQ) for one project - my dissertation research on my topic of interest. I agree to provide you with any NAQ data I collect in SPSS compatible form including demographic data and response rate. I will use the NAQ for research purposes only. I will provide you with any translation of the questionnaire I may do.

In addition to agreeing to provide you with NAQ data I collect, I need to clarify that I can use the data for my dissertation and subsequent publications, meaning I will have free access and use of the data I collect with the NAQ.

Thank you.

Sincerely,

Christina Purpora

Christina Purpora, RN, MSN
PhD in Nursing Student
Betty Irene Moore Doctoral Fellow
School of Nursing
University of California, San Francisco
christina.purpora@ucsf.edu
(415) 503-0792

Negative Acts Questionnaire

Bergen Bullying Research Group [mail@bullying.no]

Sent: Friday, May 15, 2009 2:18 AM

To: Purpora, Christina

Importance: Low

Attachments: Naqinfo.rar (236 KB)

Dear Christina,

Thank your for your interest in the Negative Acts Questionnaire. I am terrible sorry for the late reply, but as I have been quite busy with the public defense of my own PhD-thesis, I have not been able to work on the NAQ-project for the last few weeks.

With our terms accepted, I have attached the English version of the NAQ, the demographic inventory, a spss database, psychometric properties of the questionnaire and the articles suggested on our website. You do not have to use the demographic questionnaire or the database, but it can be a good idea to use it as a guide for your work, and to see how we have done it. We are looking forward to receive the data when they are available.

If you have any questions, we will of course do our best to answer them.

Best regards,
Morten Birkeland Nielsen
Bergen Bullying Research Group

Re: Request: Negative Acts Questionaire

Bergen Bullying Research Group [mail@bullying.no]

Sent: Friday, May 15, 2009 2:54 AM

To: Purpora, Christina

Dear Christina,

I guess I missed this part in my previous answer: "In addition to agreeing to provide you with NAQ data I collect, I need to clarify that I can use the data for my dissertation and subsequent publications, meaning I will have free access and use of the data I collect with the NAQ"

This is no problem. You have the full ownership to the data you have collected and can of course use them in any kind of publications. We just want a copy of the data which we can add to our international database on the NAQ.

Good luck with your project!
Morten

Appendix K

Author Approval for Use of Peer Relations Subscale

RE: Request Permission to Use/Modify Peer Relations Subscale

Blegen, Mary

Sent: Friday, August 27, 2010 10:02 AM

To: Purpora, Christina

Christina

You have my permission to use and modify as necessary the items measuring Peer Relations.

Best wishes with your project.

Mary Blegen

From: Purpora, Christina
Sent: Friday, August 27, 2010 10:01 AM
To: Blegen, Mary
Subject: Request Permission to Use/Modify Peer Relations Subscale

Dear Dr. Blegen,

I am writing to ask for permission to use and modify the peer relations subscale from the document you gave me entitled "Nurse Staffing and the Quality of Care; Questionnaire: Selected Subscales," dated 4/7/03. The subscale was referred to but specific items from it were not published in the article listed below:

Blegen, M. A., Vaughn, T., Pepper, G. Vojir, C., Stratton, K., Boyd, M. & Armstrong, G. (2004). Patient and staff safety: Voluntary reporting. American Journal of Medical Quality, 19(2), 67-74.

Modifications include rewording some of the positive items into negative ones.

May have your permission to use and modify the peer relations subscale in my dissertation work?
If so, may I have free access and use of the data I collect for my dissertation and subsequent publications?

Thank you,

Christina

Christina Purpora, RN, PhD(c)
Doctoral Candidate
Betty Irene Moore Doctoral Fellow
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(415) 503-0792
christina.purpora@ucsf.edu

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Sent: Monday, August 23, 2010 1:22 AM
To: Purpora, Christina
Subject: RE: Second Request: RE: Is this an acceptable modification?

Dear Christina Purpora,

Thank you for your email. In respond to your inquiry, We are happy for your adaptation and if you have already obtain permission , you are go ahead with your work.

If I can be any further assistance, please feel free to contact me.

Best wishes,

Mubashar Khattak
Permission Assistant

-----Original Message-----
From: Purpora, Christina [mailto:Christina.Purpora@ucsf.edu]
Sent: 23 August 2010 01:18
To: JOURNALS PERMISSIONS
Subject: Second Request: RE: Is this an acceptable modification?

Please see request for permission below.
Thank you!
Christina Purpora, RN, PhD(c)
PhD in Nursing Student and Doctoral Candidate Betty Irene Moore Doctoral Fellow School of Nursing
University of California, San Francisco
(415) 503-0792
christina.purpora@ucsf.edu<mailto:christina.purpora@ucsf.edu>

From: Purpora, Christina
Sent: Wednesday, July 28, 2010 12:43 PM
To: journals.permissions@oxfordjournals.org
Subject: Is this an acceptable modification?

Greetings,

My name is Christina Purpora. I'm a doctoral student in the School of Nursing at the University of California, San Francisco in the process of submitting my dissertation manuscript.

I have already applied for and was granted the below license. I am writing to you now to ask for permission to adapt material from the article:

Article: Aiken, L. H., Clarke, S. P., & Sloane, D. M. (2002). Hospital staffing, organization, and quality of care: Cross-national findings. International Journal for Quality in Health Care, (14) 1, 5-13.

on p. 13 under Appendix (b)

I'd like to adapt the two items in the following way: (I have permission from the author to modify).

1. "In general, how would you describe the quality of nursing care delivered to patients on your unit" adapted to "In general, how would you grade the quality of nursing care delivered to patients in your work area on your unit in your hospital"

2. "How would you describe the quality of nursing care delivered on your last shift?" adapted to "how would you grade the quality of nursing care delivered on you last shift"

Thank you for considering my request,

Sincerely,

Christina Purpora, RN, PhD(c)
PhD in Nursing Student and Doctoral Candidate Betty Irene Moore Doctoral Fellow School of Nursing
University of California, San Francisco
(415) 503-0792
christina.purpora@ucsf.edu<mailto:christina.purpora@ucsf.edu>

Appendix M Author Approval for Use of Quality of Care and Adverse Events Items

RE: Measure of Nurse and Patient Outcomes

Aiken, Linda [laiken@nursing.upenn.edu]

Sent: Wednesday, November 04, 2009 2:13 PM

To: Purpora, Christina

Attachments: measures_of_nurse__pt_out~1.docx (13 KB)

Dear Christina,
You have my permission to use the items in the att chment and to modify them as you wish. There are no strings attached except, of course, it would be nice to have our work acknowledged in any resulting publications. Some of the items you were interested in are Ann Rogers' and I have included her email information should you wish to contact her. Best wishes on your study, Linda

Linda H. Aiken, Ph.D.
The Claire M. Fagin Leadership Professor of Nursing
Professor of Sociology
Director, Center for Health Outcomes and Policy Research
University of Pennsylvania
418 Curie Blvd.
Claire M. Fagin Hall, 387R
Philadelphia, PA 19104-4217
Phone: 215-898-9759
Fax: 215-573-2062

-----Original Message-----
From: Purpora, Christina [mailto:Christina.Purpora@ucsf.edu]
Sent: Monday, November 02, 2009 2:42 PM
To: Aiken, Linda
Subject: Measure of Nurse and Patient Outcomes

Dear Dr. Aiken,

My name is Christina Purpora. I'm a doctoral student at the University of California, San Francisco currently working on my dissertation. I'm interested in nurses' views of horizontal violence among nurses at work and the quality and safety of patient care.

After reading many of your articles, I am very interested in the items that you and your colleagues used to measure nurse reported quality of care, patient outcomes and actual and potential errors.

May I have a copy of these measures? I've listed them below.

Article: Supplemental Nurse Staffing in Hospitals and Quality of Care (2007)
Measure: Nurse reported patient outcomes

Article: The Working Hours of Hospital Staff Nurses and Patient Safety (2004)
Measure: Survey questions pertaining to errors, actual and potential.

Articles: Nurses' Reports on Hospital Care in Five Countries (2001) & Hospital Staffing, Organization, and Quality of Care: Cross-national Findings (2002). I saw items listed in the Appendix of the latter article. From my reading of the article, I understand that is the measure.
Measure: Nurses' Assessment of Quality of Care

May I have your permission to use the items in my dissertation study? If so, may I

have free access and use of the data I collect for my dissertation and subsequent publications? Also, may I revise and select items to include?
Thank you for your time and consideration.

Sincerely,

Christina

Christina Purpora, PhD(c), RN
PhD in Nursing Student
Betty Irene Moore Doctoral Fellow
School of Nursing
University of California, San Francisco
(415) 503-0792
christina.purpora@ucsf.edu<mailto:christina.purpora@ucsf.edu>

Article: The Working Hours of Hospital Staff Nurses and Patient Safety (2004)
Measure: Survey questions pertaining to errors, actual and potential.

These questions are not from our survey. Please contact Dr. Ann Rogers (aerogers@nursing.upenn.edu).

Article: Supplemental Nurse Staffing in Hospitals and Quality of Care (2007)

Measure: Nurse reported patient outcomes

Questions to measure "nurse-reported patient outcomes" used in this article are from 1999 survey data

Over the past year, how often would you say each of the following incidents has occurred involving you or your patients (never, rarely, occasionally, frequently)

1) Patient received wrong medicine or dose
2) Nosocomial infections
3) Complaints from patients or their families
4) Patient falls with injury

Articles: Nurses' Reports on Hospital Care in Five Countries (2001) Hospital Staffing, Organization, and Quality of Care: Cross-national Findings (2002).

Measure: Nurses' Assessment of Quality of Care

In these two articles, items to measure "Nurses' Assessment of Quality of Care" are

How would you describe the quality of nursing care delivered to patients on your unit? (excellent, good, fair, or poor)

Overall, over the past year would you say the quality of patient care in your hospital has: (improved, remained the same, or deteriorated)

How confident are you that your patients are able to manage their care when discharged from the hospital? (very confident, confident, somewhat confident, not at all confident)

How would you describe the quality of nursing care delivered on your last shift? (excellent, good, fair, or poor)

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Sent: Thursday, July 29, 2010 8:08 AM
To: Purpora, Christina
Subject: Is this an acceptable modification? [Incident: 100728-000680]

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If this issue is not resolved to your satisfaction, you may reopen it within the next 14 days.

Thank you for allowing us to be of service to you.

To access your question from our support site, click here.

Subject
Is this an acceptable modification?

Discussion Thread
Response (Michael Dzicek) 07/29/2010 11:08 AM
Greetings,

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Thank You
Customer (Christina Purpora) 07/28/2010 04:58 PM
Greetings,

My name is Christina Purpora. I'm a doctoral student in the School of Nursing at the University of California, San Francisco in the process of submitting my dissertation manuscript.

I have already applied for and was granted the below license through RightsLink. I am writing to you now to ask for permission to adapt material from that article because Rightslink cannot grant me permission to do that:

Article: Aiken, L., Clarke, S. P., Xue, Y., & Sloane, D. M. (2007). Supplemental nurse staffing in hospitals and quality of care. The Journal of Nursing Administration, 37(7/8), 335-342.
i
on p. 337:

I'd like to adapt the following items in the following way: (I have permission from the author to adapt or modify).

1. "patients receiving the wrong medication or dose" adapted to "patient received wrong medicin or dose"

2. "nosocomial infections" adapted to "hospital acquired infections"

3. "patient/family complaints" adapted to "complaints from patients or their families

4. "patient falls" adapted to "patient falls with injuries"

Thank you for considering my request,

I look forward to your reply.

Sincerely,
Christina Purpora, RN, PhD(c)
PhD in Nursing Student and Doctoral Candidate
Betty Irene Moore Doctoral Fellow
School of Nursing
University of California, San Francisco
(415) 503-0792
christina.purpora@ucsf.educhristina.purpora@ucsf.edu>

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September 2, 2010

Date