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Relationship between Horizontal Violence among Registered Nurses and Falls

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RELATIONSHIP BETWEEN HORIZONTAL VIOLENCE AMONG REGISTERED NURSES AND FALLS

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ABSTRACT

Background: Horizontal violence is a manifestation of oppressed group behavior leading to low self-esteem and feelings of worthlessness among nurses. Horizontal violence leads to the creation of a hostile, unsafe work environment preventing nurses from performing at their highest potentials. A hostile work environment leads to a culture of unsafe patient care which may result in increased harm to patients. An understanding of why horizontal violence occurs and the implications of this phenomenon are the first steps in addressing this destructive behavior as well as protecting patients from harm. Health care environments must support nurses to perform at their best in order to provide safe high quality patient care.

Methodology: This was a correlation descriptive study of the relationship between nurses' responses to an online questionnaire regarding prevalence of horizontal violence and NDNQI data submission of the number of unit falls, with and without injury. Data was analyzed and correlated at the individual and group levels but was not simultaneously correlated to demonstrate individual responses as predictors of group outcomes. Simultaneous analysis of hierarchical subjects would require more complex analytical methods outside the scope of this study.

Results: A majority of the responses to the survey on prevalence of horizontal violence among registered nurses indicated exposure to at least one of these behaviors. Only 42 out of 168 respondents (25%) gave the response "never" to all four items. At least one horizontal violence behavior was experienced by 126 out of 168 respondents (75%) over a six-month period. Individual response (n=168) to the prevalence of horizontal did not positively correlate to the number of unit falls with and without injury.

The mean of individual responses per unit (n=6) did not positively correlate to the number of falls with and without injury. No statistical significance was obtained regarding the relationship between prevalence of horizontal violence among registered nurses and falls.

Conclusions: While this study did not demonstrate a positive relationship between the prevalence of horizontal violence and falls, undesirable patient outcomes have been shown in the literature to result from care provided in an environment of poor communication and lack of team work. In the presence of increased numbers of poor patient outcomes, including falls, it is strongly recommended that the work environment be assessed for the presence of horizontal violence.

DEDICATION

I would like to dedicate this dissertation to my husband, Joseph Rocha, who always accepted and supported my decision to take on another degree program. I know he is thrilled that I have obtained my terminal degree in nursing! Thanks for all of your love, support, and patience.

I would also like to acknowledge my children, Stephen, Michael, and Jennifer, who spent their childhoods watching Mom go off to school. All three of these incredible people are now college-educated and good citizens!

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Chapter One

INTRODUCTION

The presence of horizontal violence also referred to as bullying, lateral violence, nurse aggression, mobbing, and incivility in the workplace is a serious issue for the nursing profession and may contribute to the creation of an unsafe environment for both patients and nurses (Joint Commission, 2008). Nurses with high self-esteem generally deliver high quality care. Horizontal violence can lower nurses' self-esteem resulting in poor quality care (Randle, 2003).

Griffin (2004) described the phenomenon of horizontal violence as nurses directing their dissatisfaction towards other nurses, especially those less powerful such as newly licensed RNs or those recently employed. Horizontal violence is repeated behavior that leads to an abusive environment resulting in problems with nurse job satisfaction, recruitment and retention (Hutchinson, Wilkes, Vickers, & Jackson, 2008). Horizontal violence was described by Vessey, DeMarco, Gaffney, and Budin (2009) as repetitive actions characterized by offensive, abusive, intimidating, and insulting behaviors. Three forms of horizontal violence have been described: personal attacks; erosion of professional competence and reputation; and attacks which obstruct work performance (Hutchinson, Wilkes, Jackson, & Vickers, 2010). Horizontal violence has detrimental

effects on the workplace and the workforce including job satisfaction, nurse retention, physical and psychological health impairments, and increased risk of unfavorable patient outcomes (Vessey, DeMarco, & DiFazio, 2010).

The Institute of Medicine (IOM) reported in 2000 that the work environment of nurses had changed dramatically and increasing patient injuries were associated with errors in communication between health care providers. Other causes of patient safety compromise were inadequate staff orientation, education, and competency assessment. Despite many programs in place to reduce patient injuries, ten years following the IOM report, these efforts have failed at a cost of millions of dollars (Fagan, 2012). Quality of care and patient safety are compromised by poor communication in an oppressive environment characterized by horizontal violence among nurses (Purpora & Blegen, 2012).

Background

Oppression

Horizontal violence may be a symptom of oppressed group behavior. Freire (2011) described oppression as a situation in which one person interferes with another's quest for self-affirmation. He theorized that dominated people felt devalued in a culture where those in power promoted their own attributes as those to be valued, admired, and emulated. Oppressed persons dislike themselves, and believe themselves to be inferior. This self-loathing leads to a loss of pride and low self-esteem. Those oppressed believe that in order to succeed they must take on the attributes of the oppressors resulting in marginalization, being on the fringes of the oppressed group but not really part of the oppressor group. Horizontal violence among nurses has been

characterized by demeaning and humiliating behaviors towards other nurses of equal status leading to feelings of low self-esteem and inferiority (Randle, 2003; Roberts, DeMarco, & Griffin, 2009; Purpora, Blegen, & Stotts, 2012). Oppressed group behavior is expressed as horizontal violence and contributes to a hostile work environment.

Horizontal Violence

Horizontal violence is characterized by repeated behavior such as verbal abuse, threats, humiliation, and intimidation. These acts interfere with the nurse's ability to perform her role and lead to feelings of defenselessness, demoralization, loss of dignity, and low self-esteem. The perpetrator of these acts attempts to gain complete control over the victim and draw others into this behavior, often through intimidation or coercion (Murray, 2009).

Horizontal violence is overt or covert aggression between nurses (Johnson & Rea, 2009) and is viewed as psychological harassment and emotional hostility. Characteristics of horizontal violence include withholding important information, taking credit for another's performance, making negative comments in front of others, and blaming others for poor outcomes (Felblinger, 2008). Other characteristics of horizontal violence include backstabbing, disrespect for privacy, innuendo, sabotage, and ostracizing (Coursey, Rodriguez, Dieckmann, & Austin, 2013). Horizontal violence is significant and pervasive resulting in psychological manifestations such as low self-esteem, depression, and feelings of worthlessness (Embree & White, 2010). According to Freire (2011) these behaviors are acts of violence by oppressed persons towards others and lead to further dehumanizing of the oppressed.

Workplace Environment

The Institute of Medicine (IOM) (2004) addressed the critical role of nurses in the present day health care system. The environment in which nurses provide care has undergone many changes and keeping patients safe remains a priority. A supportive work environment for all clinicians is a critical factor for ensuring patient safety (Hughes & Clancy, 2009b). Representing a majority of the healthcare workforce, nurses rely on their varied skills and knowledge to safely care for patients. When the process does not go as planned and patients are placed in unsafe situations, nurses are often held accountable.

According to the American Association of Critical-Care Nurses (AACN) (2005), an unhealthy work environment contributes to poor communication and increased conflict between professionals resulting in poor care delivery and errors. A negative work environment diminishes teamwork leading to diminished quality patient care and increased errors (Ditmer, 2010).

Falls

Falls are serious issues for acute care environments and fall rates are often a benchmark of the quality of nursing care. While various facets of the patient's condition put him at risk for falling, nurses identified incomplete or incorrect patient information and poor teamwork to be major obstacles in the prevention of falls. In a study by Dykes, Carroll, Hurley, Benoit, and Middleton (2009), nurses participating in focus groups frequently referred to situations when either they or other nurses on the unit did not respond to another staff member's patient's call light. Lack of response to a patient's call for assistance may lead to patient injury.

Problem Statement

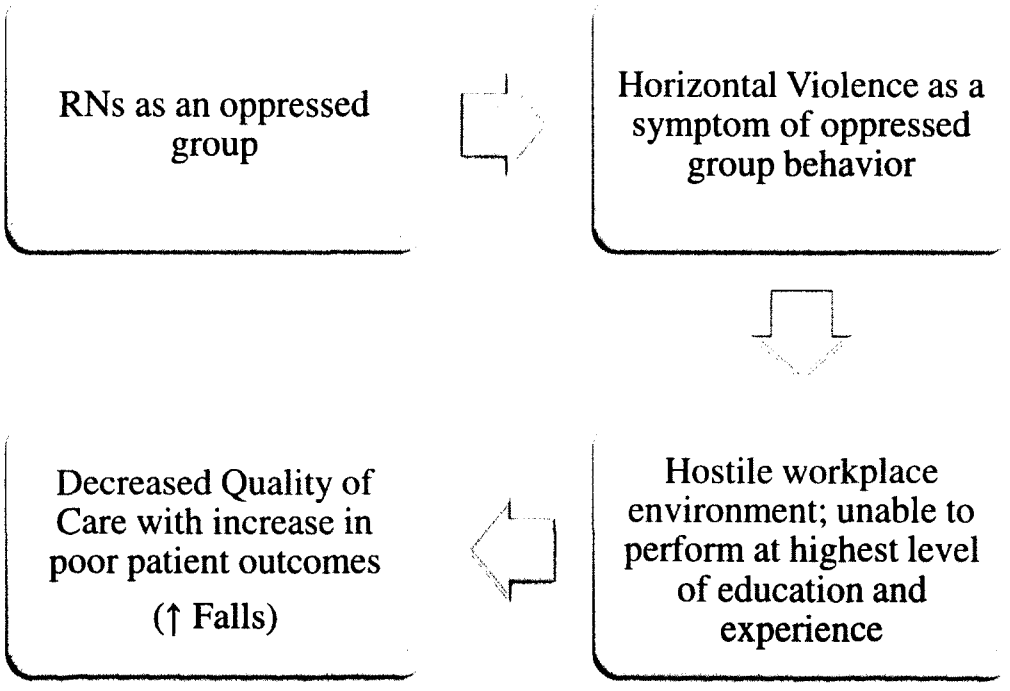
Horizontal violence, as a symptom of oppressed group behavior, has been shown to cause feelings of low self-esteem and worthlessness in nurses leading to the creation of a hostile work environment and jeopardizing patient safety. Hostile work environments also prevent nurses from performing at their fullest potentials resulting in lower quality of care and increased risk of patient harm. Few studies have been done regarding the impact of horizontal violence on patient safety, particularly preventable patient injuries such as falls. Addressing this gap in the research was important because safety is paramount. Health care facilities must be knowledgeable in the prevalence of horizontal violence and its relationship to preventable patient injuries).

Purpose of Study

The purpose of this study was to determine the relationship between horizontal violence among unit-based registered nurses and the number of unit-based falls with and without injury. The conceptual framework for this study was adapted from Freire's (2011) work with oppressed groups and the IOM (2011) report on the future of nursing. According to Freire, oppressed persons cannot reach their full potential due to lack of self-esteem and feelings of worthlessness. RNs working in environments where horizontal violence is present cannot perform at their highest levels of education and experience and, as a result, patients may be injured. The conceptual framework illustrated in Figure 1 that follows supported the constructs for this study: RNs experiencing horizontal violence led to the creation of a hostile work environment where they were unable to perform at peak levels and resulted in increased risk of poor patient outcomes such as falls. As stated by the IOM (2011) nurses must be afforded a healthy work

environment within a culture of safety in order to provide high quality care and prevent patient harm.

Figure 1. Conceptual Framework (adapted from Freire, 2011; IOM, 2011)



Research Questions

1. What is the prevalence of horizontal violence among registered nurses?
2. What is the relationship between horizontal violence and falls?

Specific Aims

Aim 1. What is the level of horizontal violence among registered nurses?

Aim 1a. What is the level of horizontal violence among registered nurses in the critical care - adult unit?

Aim 1b. What is the level of horizontal violence among registered nurses in the Step Down unit [referred to at this facility as the Intermediate Care Unit (IMCU)]?

Aim 1c. What is the level of horizontal violence among registered nurses in the medical/surgical units?

Aim 2. What is the relationship between horizontal violence and falls?

Aim 2a. What is the relationship between horizontal violence and falls with injury?

Aim 2b. What is the relationship between horizontal violence and falls without injury?

Summary

Horizontal violence is a manifestation of oppressed group behavior leading to low self-esteem and feelings of worthlessness among nurses. Horizontal violence leads to the creation of a hostile, unsafe work environment preventing nurses from performing at their highest potential. A hostile work environment leads to a culture of unsafe care which may result in increased harm to patients. An understanding of why horizontal violence occurs and the implications of this phenomenon are the first steps in addressing this destructive behavior as well as protecting patients from harm. Health care environments must support nurses to perform at the fullest extent possible in order to provide safe, high quality patient care.

Chapter Two

REVIEW OF THE LITERATURE

The purpose of this chapter is to provide a summary of the literature regarding horizontal violence and its effects on preventable patient outcomes. This study will add to the body of knowledge regarding the relationship between horizontal violence among nurses and patient outcomes.

A comprehensive literature review was performed utilizing the Cumulative Index to Nursing Allied Health Literature (CINAHL) Plus with full text, EBSCO, Google Scholar, and PubMed. Key search words were "horizontal violence," "bullying," "lateral violence," "nurse aggression," "mobbing," "burnout," "incivility," "patient safety," and "patient falls." Additional articles were found using the reference list of cited articles. A ten-year time span of articles were reviewed as well as several seminal studies published more than ten-years ago (see Appendix A).

Oppression

The concept of aggression in clinical settings from the perspective of nurses was studied by Farrell as early as 1997. Interviews of nurses were undertaken seeking information on their experiences with aggression in the workplace and the importance of these experiences. Nurses reported that co-workers did not respect the values and

activities necessary to maintain good work relationships including: balanced work load, respect for privacy, keeping confidences, and working collaboratively. Nurses also reported that conflict with other nurses was more upsetting to them than conflict with patients, families, and other health care workers. Building on his own work, Farrell (2001) developed a conceptual framework explaining interpersonal conflict in nursing. His research found that while oppression theory provided insight, it did not account for the other causes of conflict among nursing colleagues. Farrell contended that nurses play a role in shaping their environments and were in turn shaped by their environments. Reasons for interpersonal conflict must take into consideration individual characteristics to include personality, attitude, demographic variables, and stressors both internal and external to the work environment.

A study by Freshwater (2000) described the role of the nurse as both oppressed and subordinate, lacking autonomy and control, and suffering from low self-esteem. Horizontal violence was seen as the embodiment of the oppressed group's frustration and tendency to direct anger towards its own members. The author noted her own concerns that nursing education and curricula socialized nurses into believing in and accepting their own limitations, which perpetuated oppression and horizontal violence. Causes of horizontal violence in nursing may be rooted in the perception of nursing as an oppressed group displaying aggression against its own members as a means of dealing with feelings of low self-esteem (Griffin, 2004). Oppressed group behavior among nurses resulted in feelings of inferiority, lack of pride, and low self-esteem. The qualities of the oppressors were valued and nurses took on these behaviors believing them to be the keys to success in the organization. Oppressed groups did not verbalize their feelings of low self-worth

and instead became aggressive towards their own group members (Roberts, Demarco, & Griffin, 2009). As Freire (2011) described, in this phenomenon of oppressed and oppressor, nurses as the oppressed become the oppressors and any attempt to change this behavior is seen as weakness. The oppressed group is unable to organize and unite due to power struggles and a sense of worthlessness. In their research of the lived experience of oppression, Tinsley and France (2004) found the concept of suffering to be the major theme during interviews of nurses obtained during their phenomenological study. Substructures of suffering were then identified and were three in number: nurse abuse, burnout, and the search to recapture what nursing once meant to these nurses. Participants in this study chose to leave nursing based on these substructures. Building on Freire's (2011) dimensions of oppression (assimilation, marginalization, self-hatred and low self-esteem, submissive-aggressive syndrome, and horizontal violence), Matheson and Bobay (2007) noted similarities in nursing. The authors contend that the medical model was deemed to be the correct way to view patient care while nursing's contributions were undervalued and dismissed. The oppressive relationship between physicians and nurses has a long history and has resulted in a patriarchal oppression and an inability of nurses to join together and exert their power.

The psychological effects of horizontal violence, including the nurse's shame response, were discussed by Felblinger (2008). As horizontal violence was perpetrated against the targeted nurse, the immediate response was shame leading to anger which was self-directed. The victim blamed herself for the situation she was in and silently endured the abuse. As horizontal violence continued, the victim began to display unsafe clinical behaviors in a work environment she found to be intolerable. There was a real danger of

the nurse as oppressed becoming the nurse as oppressor further resulting in an unsafe work environment and patient harm. Some victims of horizontal violence claimed permanent health impairment and an inability to return to work. The loss of talented and educated nurses, according to Felblinger, was a result of the psychological effects of horizontal violence.

Horizontal violence among nurses was described by Murray (2009) as an expression of the need for control over the workplace. The perpetrator of horizontal violence desired complete control over an individual and selected the target, determined how the abuse would occur, and attempted to involve others in the plan either as volunteers or by coercion. Nurses who bully other nurses may have personality flaws and possibly lack feelings of remorse or guilt for this behavior. A literature review by Dong and Temple (2011) found evidence of oppression as negative, harmful, and unjust. Recognition of nurses as both oppressed and oppressor was vital before change could begin.

Oppressed group behaviors in nursing were reviewed in the literature by Roberts, DeMarco, and Griffin (2009). The authors noted nursing's lack of power and control in the workplace and domination by medicine due to the hierarchical nature of health care. Noting that oppressed group behaviors in nurses have been discussed and described in the literature for over twenty years, the authors found that nurses were twice oppressed as a result of socialization as both women and nurses. Horizontal violence was an aspect of oppression and allowed other groups to maintain control over and not be challenged by nursing. Nurses appeared to be unable to join together and support each other in resolving this conflict. Writing from a feminist perspective, Im (2010) noted that feminist nursing

researchers must be open to and aware of the need to challenge oppression that currently exists as well as discrimination, marginalization, and social injustice in national and international health care systems. Two studies concerning nurses' situation in the complex culture of health care were conducted by Croft and Cash (2012) and Cleary, Hunt, and Horsfall (2010). Both studies noted nurses experienced a hectic, face-paced, and often heavy workload with the added stress of life threatening occurrences. Within the hierarchical structure of health care, nurses were concerned with caring for patients which was deemed to be less important than the work of medical providers in attempting to provide cures for patient ailments. Nurses' feelings of powerlessness and lack of autonomy in the organization may cause them to lash out at one another in frustration. This sense of oppression may cause nurses to portray themselves as negative stereotypes leading to internalization of feelings of poor professional identity. A study by Purpora, Blegen, and Stotts (2012) observed the relationship between beliefs of nurses as an oppressed group and prevalence of horizontal violence. The authors hypothesized a positive relationship between nurses who considered themselves oppressed and the prevalence of horizontal violence. Their research found that nurses employed in hospitals with oppressive hierarchies were at higher risk for horizontal violence.

An Australian study by Demir and Rodwell (2012) found horizontal violence to be linked to high negative affectivity (NA) as well as lack of supervisor and coworker support. NA was defined as an individual trait reflecting negative emotionality. Individuals with high NA levels were more likely to feel negative emotions than those with lower levels of NA. A relationship between horizontal violence and NA may exist in that NA may be an antecedent to horizontal violence leading to increased likelihood of

interpersonal conflict. Heightened negative emotions may occur as stress levels increase leading to a cycle of conflict. Rodwell and Demir (2012) surveyed Australian nurses regarding antecedents of workplace horizontal violence among staff and confirmed the high rates of this abusive behavior. Additionally, the authors found that in keeping with Freire's (2011) theory of oppressed groups when nurses felt powerless and were silent and submissive when confronted by authority figures, the results were fear and low self-esteem. Rodwell and Demir (2012) also noted a connection between indicators of oppression and verbal sexual harassment. The authors suggested that sexual harassment may be a form of horizontal violence more likely to occur in an oppressive environment, especially in hierarchies such as those found in health care environments.

In a reflection on her original Silencing the Self Theory, Jack (2011) proposed that women were taught from childhood to put other's needs ahead of their own. In order to accomplish this, women have had to silence their feelings, thoughts, and actions resulting in loss of the self. Women were taught to be more interested in pleasing others; this resulted in internalized anger as women attempted to be externally pleasant. This self-silencing created a harmonious environment but it limited women's personal growth, self-development, and ability to forge intimate relationships. Depression may result when women felt trapped, isolated, and hopeless. Jack noted that silence can be an indicator of oppression and can become destructive when the individual felt silence was the only behavior choice available. Building on Jack's original theory proposal, DeMarco, Roberts, Norris, and McCurry (2007) found strong linkage between gender and the concept of self-silencing. The authors noted that women were socialized to value

relationships to the extent that they kept silent about their own needs in an effort to maintain peace and equilibrium.

A study of the socialization of new graduate nurses was published by Duchscher and Myrick (2008) with findings that 33-61% changed jobs or left the nursing profession within their first year of practice. One of the reasons noted for this exodus from nursing was horizontal violence and abuse towards new graduates by exhausted and dissatisfied experienced nurses. The loss to the profession of new graduates was cause for alarm in that provision of quality care was dependent on the quality of the nursing work environment and the empowerment of nurses to perform safely, competently, and confidently.

Summary

Horizontal violence is an oppressed group behavior. Nurses, dominated by the medical profession and healthcare administration, lack power and control in the workplace. Nurses, both as primarily women and caring individuals, are often made to feel that their work is undervalued and underappreciated. Unable to change their environment, they may strike out at their own peers as a way to deal with feelings of oppression.

Horizontal Violence

The prevalence of horizontal violence among nurses has been described and studied in national as well as international environments. Prevalence of horizontal violence among nurses ranges from 5%-38% in Scandinavia, the United Kingdom, and the United States (Simons, 2008; Johnson, 2009). Australian studies noted the prevalence

of horizontal violence among nurses to be over 50%. Studies in Turkey documented 86.5% of nurses experienced horizontal violence (Johnson, 2009).

Covert and overt behaviors indicative of horizontal violence were described by Griffin (2004). Overt characteristics included sabotage and scapegoating while covert displays included unfair patient assignments and unspoken behaviors such as eye rolling or making faces out of sight of another nurse. In a study of horizontal violence behaviors, Rowe and Sherlock (2005) found a high prevalence of verbal abuse from nurses towards other nurses. Nurses experiencing horizontal violence were found to be more stressed, less satisfied with their jobs, more likely to be absent from work, and more likely to provide less than quality care to their patients. A study by Wilson, Diedrich, Phelps, and Choi (2011) found that horizontal violence strongly impacted nurse job satisfaction and well-being and was a major contributor to increased sick calls and high turnover rates. Symptoms and consequences experienced by the victims of horizontal violence included recurrent nightmares, depression, and low self-esteem (Felblinger, 2008). Horizontal violence was described by Einarsen, Hoel, and Notelaers (2009) as persistent exposure to aggression and mistreatment from subordinates, co-workers, or leaders that can have devastating consequences for the victim(s). Their research indicated that long exposure to horizontal violence tended to deplete the victim's coping mechanisms leading to an increased feeling of powerlessness felt by the target. A mixed-method study by Hutchinson, Wilkes, Vickers, and Jackson (2008) found nurses as victims of horizontal violence reported symptoms of feeling worthless, anxious, panicked, sleep-deprived, depressed, and vulnerable. Horizontal violence can turn the work place into an abusive and unsafe culture. Nurses victimized by horizontal violence suffered from effects related

to physical, psychological, and social distress. These effects were manifested in headaches, gastric disorders, higher incidence of chronic disease, feelings of low self-esteem, isolation, anxiety, depression, change in personality, and suicidal ideation (Johnson, 2009). Horizontal violence as studied by Martin and Martin (2010) was defined as negative behavior intending to undermine, humiliate, denigrate, or harm an individual. Characteristics of horizontal violence included attempts to socially isolate and intimidate while setting unrealistic work expectations, demonstrating unwanted sexual advances, and use of vulgarity. Responses to this abusive behavior included anxiety, depression, headaches, decreased ability to concentrate, unhappiness, loneliness, self-harm, and suicidal thoughts.

The effect of horizontal violence on long-term sickness absence, defined as over six consecutive weeks of absence due to illness, was studied by Ortega, Christensen, Hogh, Rugulies, and Borg (2011). Long-term sickness absence was significantly higher for employees who had experienced horizontal violence than for those who had not. The empirical evidence obtained in this study confirmed that the negative effects of horizontal violence resulted in health complaints among the victims. Horizontal violence had consequences for individual nurses as noted by Mahon and Nicotera (2011). In an effort to cope, nurses experiencing horizontal violence may exhibit inappropriate behaviors such as aggression, conflict avoidance, and withdrawal. These behaviors can lead to further exclusion from the group as peers begin to avoid the victim.

A qualitative study of Australian nurses by Hutchinson, Vickers, Wilkes, and Jackson (2010) explored the complexities of horizontal violence. Three forms of horizontal violence behaviors were noted: attacks of a personal nature; downplay of

professional competence and reputation; and attack through making work roles and responsibilities difficult. Behaviors that attacked the person led to isolation and exclusion depriving the victim of needed social support within the unit and the organization. When professional competence and reputation were eroded, the victim often found career opportunities diminished due to the perception of being incapable or incompetent. Lastly, the victim of horizontal violence often had to deal with work life difficulties such as no breaks for meals, excessive workloads, and unfair patient assignments.

A study of the prevalence of horizontal violence among nurses in New York State defined horizontal violence as being unkind, discourteous and a source of conflict between co-workers resulting in gossip, verbal abuse, intimidation, sarcasm, and fault-finding (Sellers, Millenbach, Kovach, and Yingling, 2009-2010). Research findings by these authors related to horizontal violence among nurses were inconsistent indicating that this behavior was engrained in the organizational culture and often not recognized as unusual. A study by Sellers, Millenbach, Ward, and Scribani (2012) found a much greater prevalence of horizontal violence in union cultures and less horizontal violence in Magnet® organizations. Their study also noted that more experienced nurses had greater exposure to horizontal violence both as witnesses and victims. Female nurses reported more experience with horizontal violence than did their male counterparts.

Hutchinson (2009) noted that horizontal violence is a complex interaction between working groups and the organization. Nurses are acculturated into a climate of horizontal violence becoming tolerant to the behavior leading to perpetuation and normalization of this hostile work environment behavior. In an environment of horizontal violence, nurses were passively tolerant or tended to ignore witnessed acts. Hutchinson

(2009) stated that ignoring witnessed acts of horizontal violence did not indicate neutrality but increased the likelihood that this behavior would continue. Research by Walrafen, Brewer, and Mulvenon (2012) found respondents expressed surprise that the definition of horizontal violence included witnessing acts of violence towards another. Horizontal violence was further described by Longo (2012) as behavior that was unacceptable, unprofessional, and disruptive leading to the healthcare team's inability to communicate and work together effectively. When horizontal violence was accepted as routine or normal behavior, new nurses were acculturated into this environment and horizontal violence was perpetuated.

New graduate nurses were particularly vulnerable to horizontal violence. New nurses working in a culture of horizontal violence were less likely to ask questions, seek clarification and validation, or to feel as though they belonged (Griffin, 2004). In a descriptive study, McKenna, Smith, Poole, and Coverdale (2003) noted that many new graduate nurses experienced horizontal violence in the clinical settings. The consequences for these nurses in their first year of practice included frequent absenteeism from work, consideration of leaving the profession, and increased stress secondary to having no guidelines on how to deal with this behavior. These new nurses also reported overwhelming stress at the frequency of which they were given assignments felt to be beyond their level of expertise and without adequate supervision.

Summary

Horizontal violence is a set of overt and covert behaviors intended to humiliate, sabotage, scapegoat, and undermine the self-esteem and sense of worth of another. Victims of horizontal violence relate physical as well as psychological ramifications

resulting in isolation and exclusion from the group. Horizontal violence is perpetuated through acculturation of nurses into an environment where this behavior is tolerated. New graduate nurses are particularly vulnerable to horizontal violence and may elect to leave the current position or the nursing profession.

Workplace Environment

Horizontal violence was found to affect not only the nurse, but the workplace environment. A qualitative study by Lewis (2006) found that horizontal violence was essentially behavior that was learned within the workplace and not necessarily a psychological deficit within the perpetrator of this behavior. A study by Attree (2007) found that nurses perceived that nothing would be done to address their concerns so were unwilling to take the risk of repercussions and reprisals against them for speaking up when unsafe practices were observed. A qualitative study of nurses and horizontal violence by Simons and Mawn (2010), found four themes: structural bullying from supervisors; nurses eating their young; feeling out of the clique; and leaving the job. The authors validated previous research that horizontal violence was associated with job satisfaction, performance, and retention.

The Joint Commission (2008) noted that behaviors of intimidation and hostility contributed to medical errors leading to decreased patient satisfaction, potential patient injury, and increased cost of care. Medical errors and patient safety are serious consequences of horizontal violence (Martin, 2008). When nurses were intimidated by horizontal violence behaviors in the workplace they were less likely to request clarification of medication orders from peers, managers, or physicians. Victims of horizontal violence may be less likely to self-report or report a physician or peer when a

medication error occurred for fear of retribution. As members of the health care team and the professionals most likely to prevent harm to patients, nurses must be encouraged to speak out when practices fall short of standards or when hostile work environments cause miscommunication. According to Hughes and Clancy (2009a) patient safety was dependent on an environment of mutual trust, collaboration, and communication. In a 2008 report, the Center for American Nurses stated that horizontal violence negatively impacted the work environment and prevented a culture of safety. Horizontal violence led to problems with communication between nurses and other providers, according to Mahon and Nicotera (2011). Their study on interpersonal communication during handoff highlighted errors that occurred when conflict between nurses interfered with sharing of patient information. In her qualitative study, Garon (2012) determined that nurses continued to refrain from speaking up despite the known harmful effects for patients, other staff, and the organization. Noting that nurses valued an open relationship with leaders, Garon (2012) encouraged nurse executives to create an organizational structure in which nurses felt they were listened to and valued, were given timely feedback, and had decision-making ability. When nurses took the risk of speaking up, felt valued rather than penalized, and felt supported, they were more likely to continue to voice their concerns. Additionally, communication issues were noted to be the leading cause of sentinel events, defined by the Joint Commission as death or serious injury resulting from an unexpected occurrence (http://www.jointcommission.org/Sentinel_Event_Policy_and_Procedures).

The presence of horizontal violence also affected nurses' attitudes towards their patients. A study by Felblinger (2008) described the objective of a work environment that

was both safe and emotionally stable was to empower nurses and ultimately ensure the well-being of their patients. Felblinger stated that health care organizations, like all businesses, required a safe work place environment in order to be efficient, productive, and innovative. In a mixed-method study Hutchinson, Wilkes, Vickers, and Jackson (2008) found that horizontal violence turned the work place into an abusive and unsafe culture. The toxicity of horizontal violence resulted in lowered morale among nurses as well as difficulty in working as a team. A study by Hutton and Gates (2008) regarding productivity loss among direct care staff indicated that horizontal violence in health care resulted in financial loss and adversely impacted the health of employees.

A study of patient safety climates and related hospital/unit characteristics in medical-surgical units across 146 hospitals was published in 2009 by Hughes, Chang, and Mark. The authors found that nurses attempted to balance job requirements with patient safety and often put safety second. Nurses indicated they found the work environment to be an important determinant in supporting patient safety initiatives. Nurses pressured to complete tasks admitted to taking shortcuts potentially unsafe for patients. Nurses working on complex, fast-paced units reported difficulty in balancing patient safety with the demands of the job. Creation of an unsafe work environment due to undermining of nurses' confidence in promoting patient safety was in keeping with the definition of horizontal violence. Horizontal violence cannot be managed as an individual behavior but attention must be paid to understanding the workings of groups and organizations that enable this behavior or were seen to reward and perpetuate horizontal violence (Hutchinson, 2009).

Horizontal violence was noted by Murray (2009) to be responsible in large part for declines in productivity and work-related injuries among nurses. Stress among hospital workers related to workload and job control was studied by Oore, Leblanc, Day, Leiter, Laschinger, Price, and Latimer (2010). In an environment of high stress, the importance of relationships among colleagues was significant and when poor relationships among workers were the norm, stress levels increased. These increased stress levels led to negative job attitudes, poor performance, and a tendency for workers to leave the job. Disrespectful behaviors in the workplace enhanced the typical work stressors and exacerbated the negative impact of high work overload and low job control leading to increased mental and physical strains among workers.

A study of workplace acquired infections by Cimiotti, Aiken, Sloane, and Wu (2012) noted that nearly seven million patients become infected while undergoing treatment for other conditions. Nurses were generally implicated when infections occurred but no clear rationale for this association was determined. The results of their survey indicated there was an association between nurse staffing, nurse burnout, and acquired infections. More hospital-acquired infections were seen when nurses cared for high numbers of patients or were suffering from burnout, also defined as emotional exhaustion. Coping mechanisms for emotional exhaustion included detachment from appropriate work practices, such as hand hygiene, adherence to isolation precautions, and inadequate handoff communication to ancillary nursing staff secondary to feeling overwhelmed by an unsafe work assignment in a hostile work environment.

According to Hutchinson, Vickers, Wilkes, and Jackson (2009) horizontal violence in nursing can be defined as "organizational corruption" (p. 213). Their

qualitative research among Australian nurses found perpetrators of horizontal violence were part of a much larger network of corruption whose protection afforded them the opportunity to continue their abusive behavior towards other nurses knowing they were safe from punishment. Workgroup and institutional processes enabling horizontal violence were studied by Hutchinson, Wilkes, Jackson, and Vickers (2010). Their qualitative research found that tolerance increased the likelihood of horizontal violence. Three organizational factors were found that contributed to the perpetuation of horizontal violence: "informal organizational alliances, organizational tolerance, and reward of bullying and misuse of legitimate organizational processes and procedures" (p. 175). According to Kramer, Maguire, and Brewer (2011) healthy work environments supporting professional practice positively impacted nurse retention, job satisfaction, quality of work life, patient safety, and patient outcomes. Their study of work experience by nurses in Magnet® hospitals found that support, leadership and empowerment of visionary leaders was central to development and maintenance of healthy work environments.

The effects of work environments on nurse and patient outcomes were studied by Purdy, Laschinger, Finegan, Kerr, and Olivera (2010). Staffing levels were found to be the largest predictor of falls and nurse-assessed risk. The authors stated that adequate resources were critical workplace factors. Another finding of this study was a significantly strong relationship between structurally empowering workplaces and group processes. The ability to function as a team was vital in the achievement of quality care. The provision of quality care was found to be an important contributor to nursing job satisfaction.

A literature review published by Hutchinson (2012) found nurses who directed abusive behavior towards other nurses were often popular, socially prominent and opportunistic indicating that horizontal violence may be reflective of group status and not that of a socially marginalized individual. Hutchinson's model of horizontal violence behaviors described four tactics of horizontal violence as workgroup manipulation: "influencing; persuading; rationalizing; and complying" (p. 3). An overview of these tactics indicated that individuals wanted to be part of a group and ignored, tolerated, or engaged in this destructive behavior in order to avoid being marginalized. The author noted that more research was needed to understand horizontal violence as workgroup manipulation in an effort to avoid perpetuation of a cycle of hostility.

A study of novice nurses exposed to horizontal violence found a significant impact on work productivity (Berry, Gillespie, Gates, & Schafer, 2012). Novice nurses experienced increased stress levels when dealing with horizontal violence leading to a decreased ability to communicate and cope appropriately. Poor communication and coping skills interfered with workplace productivity. Research conducted by Lewis and Malecha (2011) and Flynn, Liang, Dickson, Xie, and Suh (2012) indicated that when nurses were supported in their work environment they tended to employ practices that identified and prevented or intercepted errors before they affected patients. A healthy work environment that supported a culture of safety had fiscal implications in that increased lengths of stay and potential loss of revenue as a result of errors negatively affected the hospital's bottom line. Due to increasing pressure from federal, state, regulatory, and consumer groups, hospital leadership must provide proof of outcomes

from and demonstration of a culture of organizational safety that ensured patients were safe from harm (Sammer, Lykens, Singh, Mains, & Lackan, 2010).

New graduate nurses were particularly vulnerable to horizontal violence in the clinical setting (Simons, 2008; Hutchinson, 2009; Clark, Olender, Cardoni, & Kenski, 2011; Laschinger, 2012; Laschinger & Grau, 2012; Read & Laschinger, 2013). These authors described many of the same findings: when negative behaviors were normalized within the healthcare environment, horizontal violence among nurses was perpetuated. New graduate nurses must be welcomed and supported in a work environment focused on safe patient care to prevent burnout, poor nurse health, and intention to leave either the current position or the nursing profession.

Summary

Nurses must be empowered by the organization to speak up knowing they are heard and their concerns regarding an unsafe work environment given serious attention. A culture of safety is paramount to quality patient care and prevention of patient injury as a result of poor communication in a hostile work environment.

Falls

Literature was found linking horizontal violence with patient safety and adverse patient events. In performing this literature review, no articles were found directly linking horizontal violence among nurses and the incidence of patient falls.

The American Association of Critical-Care Nurses (AACN), in their standards for establishing and sustaining healthy work environments (2005), stated that collaboration among nurses and other health care providers was vital to prevent or reduce patient injury. Horizontal violence causes disruption in the work environment leading to adverse

patient events (Felblinger, 2008). Her study of health care providers' responses to horizontal violence found that 25% of workers saw a connection between workplace disruption and patient mortality while 53% to 75% of workers felt horizontal violence strongly impacted clinical outcomes including patient safety, errors in care, and adverse events. Due to the nature of their work and their close proximity to patients, nurses are the most likely healthcare professional to prevent errors and patient harm. Nurses' role in patient safety went beyond prevention of falls and medication errors and relied on their ability to provide coordination for the total patient care experience (Hughes & Clancy, 2009a). Individual nurses and providers as well as organized focus groups of nurses were surveyed by Walrath, Dang, and Nyberg (2013) to determine the impact of disruptive behavior on staff. Disruptive behavior led to an unstable work environment resulting in nurse turnover which put patients at risk for harm.

Acute care nurses' experience with patient falls noted that when a fall occurred, the nurse caring for that patient experienced intense feelings of guilt and self-blame (Rush, Robey-Williams, Patton, Chamberlain, Bendyk & Sparks, 2008). The authors found that the ability for nurses to effectively monitor patients for fall risk was affected by low or inadequate unit staffing. When staffing levels were low, nurses must depend on all staff members to assist in keeping patients from falling. A study of falling from the patient's perspective found that patients often reported observations of the nurse as being too busy to help and not wanting to bother the nurse by asking for assistance. Other patients decided that after making repeated requests for assistance without response, to get out of bed without waiting for staff (Carroll, Dykes, & Hurley, 2010). The relationship between unmet nursing care needs and patient outcomes in hospitals

including falls with injury was studied by Lucero, Lake, and Aiken (2010) and Kalisch, Tschannen, and Lee (2012). The authors found evidence that unmet nursing care needs were significantly associated with adverse patient outcomes. Kalisch, Tschannen and Lee (2012) confirmed the findings that levels of nurse staffing predicted patient falls but that completion of standard nursing care lessens the impact of staffing on patient falls. The authors defined the nursing care most often missed was performing patient assessments with focused reassessments and call light response. In other words, rather than adding staff, the authors found that completion of all standard nursing care actions in their entirety were essential in preventing falls.

Intimidation was found to compromised patient safety (Lamontagne, 2010). Intimidation was frequently associated with horizontal violence and led to missed patient care, secondary to communication breakdown between providers. Intimidation was also associated with decreased levels of confidence especially in novice nurses who may find learning opportunities stunted as a result of being too unsure to ask questions and seek clarification. Ditmer (2010) and Roche, Diers, Duffield, and Catling-Paull (2010) reported an increase in patient falls and medication errors when nurses work in environments experiencing horizontal violence. The normalization of deviance in healthcare was discussed by Banja (2010). The author defined deviance as frank violations of rules or variations in activity that departed from required practice resulting in unreasonable risk of harm to patients. When deviance behaviors witnessed by nurses who are new to the profession or new to the organization appeared to be sanctioned, an unsafe environment persisted.

The relationship between factors related to patient care quality as rated by nurses and patient outcomes was studied by Djukic, Kovner, Brewer, Fatehi, and Cline (2011) . Their results found several factors contributing to the nurses' ratings of quality including nurse-physician relations, workgroup cohesion, procedural justice, physical work environment, and job satisfaction. The time between activation of a patient call bell and nurse presence may be a significant factor contributing to an increased risk of patient falls (Digby, Bloomer, & Howard, 2011). Their study found that timely response to calls from patients was important in both customer satisfaction and patient safety.

In a study of patient injuries, Taylor, Dominici, Agnew, Gerwin, Morlock, and Miller (2012) found that more nursing hours per patient were associated with fewer patient falls. The authors noted that unit turnover should be considered a risk factor for patient injuries. Working conditions of staff were related to patient safety and patient satisfaction decreased in the presence of nurses who were dissatisfied and burned-out (Rieble, Braun, & Hafiz, 2013). A study of patient safety and satisfaction by Aiken et al. (2012) indicated nurse surveillance was a deterrent to errors and anything that detracted from nurses' total concentration on safe practices could put the patient in danger. This study also noted that hospital participants worldwide agreed that nurse staffing and the quality of the work environment were critical for achieving patient satisfaction.

According to Goeschel (2011) and Tzeng and Yin (2013) , when teamwork and collaboration fail or when team members see a problem but do not speak up, patient safety is at risk. True collaboration among health care professionals was frequently missing, due in large part to ineffective communication, when nurses were reluctant to

speak up (Sayre, McNeese-Smith, Phillips, & Leach, 2012). As a result of this reluctance the nurse's role as patient advocate was diminished and harm may occur.

A perceived inverse relationship between horizontal violence and patient safety was noted in a study by Purpora (2010): an increase in prevalence of horizontal violence was linked to a decrease in patient safety. Horizontal violence was linked to patient safety in a conceptual model proposed by Purpora and Blegen (2012). The authors stated that oppression as described by Freire (2011) negatively affected quality of care through lack of peer communication and other harmful activities engaged in by nurses working in a hostile work environment. According to Purpora, Blegen, and Stotts (2012) empirical studies regarding a relationship between horizontal violence, quality care, and patient safety are beginning to be seen in the literature but more research is needed in this arena. A review of the literature addressing the relationships between nurse working conditions and patient outcomes was published in 2011 by Bae. The author included eleven studies for data extraction. In these eleven studies, 69 relationships between nurse working conditions and patient outcomes were noted including autonomy, supportive managers, and supportive relationship with peers/coworker cohesion. While these 69 working conditions did not significantly impact patient falls, the author noted significant relationships between nurse working conditions and reduced mortality rates in hospital settings. The author stated that supportive managers and collaborative relationships between nurses had a relationship to the reduction of adverse patient outcomes.

A grounded theory study based on qualitative research by Groves, Finfgeld-Connett, and Wakefield (2012) was proposed on the ways nurses actually keep patients safe. Participants in this study acknowledged that keeping patients safe was a continual

process based on constant assessment, reliance on knowledge and experience, setting and changing priorities, and intervention as needed. Participants acknowledged, when asked about specific events involving patient safety, that falls and medication errors were so common that a particular event did not readily come to mind. The nurses involved in the study also stated that assessing patient risk relied on information from many sources including fellow nurses as team members. The authors concluded that patient safety does not occur in a vacuum but is dependent on the institution's culture of safety combined with resources available to the nurse in clinical setting. Knowledge and appreciation of nursing's unique contributions may empower nurses to speak up when patient safety is compromised.

Summary

The literature review of horizontal violence and its implications for patient safety included definitions of horizontal violence, the causes for and behaviors associated with horizontal violence, the effects on the nursing environment, and the implications for patient outcomes. While the effects of horizontal violence are well-documented in the literature regarding workplace environment, gaps remain regarding the implications for patient safety to include untoward outcomes such as falls.

Chapter Three

METHODOLOGY

This chapter includes a description of the study specific aims, design, sample and sampling, data collection, and analytic procedures. The protection of human subjects is presented.

Purpose

The purpose of this study was to determine the relationship between horizontal violence among unit-based registered nurses and the number of unit-based patient falls with and without injury. Although a variety of labels were found to describe this behavior, the term horizontal violence was used in this study. The other terms (bullying, lateral violence, nurse aggression, mobbing, and incivility) were considered to be forms of horizontal violence.

Research Questions and Aims

Question 1: What is the prevalence of horizontal violence among registered nurses?

Aim 1: What is the level of horizontal violence among registered nurses?

Aim 1a: What is the level of horizontal violence among registered nurses in the critical care - adult unit?

Aim 1b: What is the level of horizontal violence among registered nurses in the Step Down (IMCU) unit?

Aim 1c: What is the level of horizontal violence among registered nurses in the medical/surgical units?

Question 2: What is the relationship between horizontal violence and patient falls?

Aim 2: What is the relationship between unit horizontal violence and unit falls?

Aim 2a: What is the relationship between unit horizontal violence and unit falls with injury?

Aim 2b: What is the relationship between unit horizontal violence and unit falls without injury?

Research Design

A descriptive correlational design was used for this study. According to Polit and Beck (2012) the purpose of descriptive research is to describe a situation as it naturally occurs based on observation and frequency. Correlation refers to the relationship or connection between variables: was a variation in one variable related to variation in the other variable (Polit, 2010). A descriptive correlational design described the relationships between variables without attempting to explain the causes of the occurrences.

In order to determine if horizontal violence among registered nurses was present, a prevalence study was previously conducted through a hospital Institutional Review Committee (IRC)-approved quality improvement project offered via online survey approximately one year prior to this research study. Secondary data analysis was obtained in this study.

Setting

The setting for this study was nursing units eligible for collection of falls data for submission to the National Database of Nursing Quality Indicators (NDNQI). These nursing units were geographically located within a 301-bed level 2 trauma, non-teaching, medical center. This acute care facility was part of a public hospital district in southern California. The hospital served both rural and urban areas and was governed by elected officials. The hospital was not-for-profit, licensed by the California Department of Public Health, and was accredited by The Joint Commission. The nurses worked in a union environment and at the time of this study, the hospital was seeking Magnet® status.

Eligible adult in-patient nursing units, as defined by NDNQI, included Critical Care, Step Down, defined by this institution as Intermediate Care Unit (IMCU), Medical, Surgical, and combined Medical-Surgical. Eligible units comprised a total of 223 beds and were further designated by the individual facility as:

Critical Care: 28 bed intensive care unit; highest acuity level

Step Down (IMCU): 32 bed intermediate care unit; high acuity level

Medical, Surgical, Combined Medical/Surgical:

Tower 8: 33 bed combined medical/surgical; lowest acuity level

Tower 7: 33 bed medical oncology; lowest acuity level

Tower 6: 30 bed telemetry/cardiac monitoring; medium acuity level

Tower 5: 32 bed combined medical/surgical; medium acuity level

Inclusion/Exclusion Criteria

All staff RNs employed in this 301-bed acute care facility and assigned to units eligible to submit falls data to NDNQI were included. Staff RNs not employed in this

301-bed acute care facility or on units ineligible to submit falls data to NDNQI were excluded. RNs in supervisor, manager, director, or advanced practice registered nurse (APRN) positions were excluded from the study.

Sample Selection and Size

The sample for this study included staff RNs assigned to eligible acute care units in a 301-bed public health district hospital in southern California. Staff RNs included in the sample were permanently assigned to an NDNQI-defined adult care in-patient nursing unit. Employment status was full-time, part-time, or per diem. Shifts were 12-hours in length with designated times of 0700-1900 and 1900-0700.

Using Polit and Beck (2012), with an alpha of .05, an estimated population correlation coefficient (p) of .25, and a power level of .80, a sample size of 123 was required for Pearson correlations. A sample size of 123 indicated the expectation of wrongly rejecting a true null hypothesis five times out of 100 and wrongly retaining a false null hypothesis 20 times out of 100.

Demographic and Operational Definitions

The concepts and operational definitions for this study are listed in Table 1.

Table 1. Demographic and Operational Definitions

Concept/Type of Variable	Operational Definitions	Measurement Tool
Gender (nominal/categorical)	Male or Female	Demographic Questionnaire
Age (continuous)	Age ranges 20-39, 40-59, and 60-79 years	Demographic Questionnaire
Years as an RN (continuous)	Range is 1-50 years	Demographic Questionnaire
Years at facility (continuous)	Range is 1-50 years	Demographic Questionnaire
Hours worked (nominal/categorical)	Full time, Part time, Per Diem	Demographic Questionnaire

Concept/Type of Variable	Operational Definitions	Measurement Tool
Highest nursing degree (nominal/categorical)	Diploma, Associate, Bachelor, Master, Doctoral	Demographic Questionnaire
Professional certification	Yes: type (free text); No	Demographic Questionnaire
Area worked (nominal/categorical)	Adult critical care, Step Down (IMCU), medical, surgical, combined medical-surgical unit	Demographic Questionnaire
Horizontal Violence	Covert and overt acts of verbal and non-verbal aggression between nurses	Longo (2012)
Prevalence of Horizontal Violence	Online survey to determine prevalence of horizontal violence among staff nurses in one acute care facility	NAQR-US (see Appendix B)
Patient Falls, NDNQI	Defined by NDNQI as a sudden, unintentional descent, with or without injury to the patient, that results in the patient coming to rest on the floor, on or against some other surface, on another person, or on an object. NDNQI considers falls occurring on eligible nursing units only.	http://www.nursingquality.org/
Categories of Patient Falls, NDNQI	Assisted-any staff member present with attempts to minimize impact of fall; Physiological-fall attributed to physiological factors such as hypotension, side effects of medications, delirium, etc.; Injury level-determined by hospital staff within 24 hours of fall: no injury; minor injury (pain, bruise, or abrasion); moderate injury (requiring steri-strips, splinting); major (resulting in surgery, casting, traction, etc.); and death (patient dies of injuries sustained from the fall)	http://www.nursingquality.org/

Concept/Type of Variable	Operational Definitions	Measurement Tool
Demographic Questionnaire	Investigator written email to staff RNs describing horizontal violence behavior and inviting RNs to complete demographic survey and to participate in online survey. Investigator developed tool to collect information on gender, age, years as an RN, years at facility, hours worked, highest nursing degree, professional certification, and area worked	See Appendix C

Protection of Human Subjects

In order to ensure human subject protection, Investigational Review Committee (IRC) approval for data collection and analysis was obtained from the health system as well as from the University of San Diego Institutional Review Board (IRB). Permission to conduct the online survey using the Negative Acts Questionnaire Revised-United States (NAQR-US) (Simons, 2008) was originally obtained on December 8, 2011 from the hospital's Expedited Review for a Quality Improvement or Evidence Based Practice Project (see Appendices D and E). The online NAQR-US survey was previously accessed through a link sent to the work email address of acute care staff registered nurses employed in one large regional medical center in southern California and assigned to units eligible to submit NDNQI falls data. Nursing units eligible to submit falls data included Adult Critical Care, Step Down (IMCU), Medical, Surgical, and combined Medical-Surgical. Completion of the survey indicated consent and results were anonymous. The researcher had sole access to the online survey results and these were maintained on the researcher's assigned, password-protected, work computer. There were no paper records. The survey results will be destroyed after 5-years.

Measurement

Prevalence of horizontal violence among staff nurses was determined by responses (see Appendix J) obtained through an online survey using the Negative Acts Questionnaire Revised-United States (NAQR-US) (Simons, Stark, & DeMarco, 2011). Permission to use this survey was received via personal email from the author, Shellie R. Simons, PhD, RN (see Appendix F).

Survey Instrument: NAQR-US

The NAQR-US was developed during a study of horizontal violence among non-managerial nurses licensed in Massachusetts in 2001, 2002, and 2003. Horizontal violence was defined in this study as an individual's perception of negative actions against him or her by one or more persons over a period of time six months or greater. The individual had difficulty defending against this behavior. A power relationship was often perceived by the victim whether or not this was actually true, i.e. a more experienced nurse displayed horizontal violence behavior towards a new graduate nurse (Simons, 2008).

The purpose of the 2008 study by Simons was to validate the Negative Acts Questionnaire – Revised (NAQ-R). This 22-item instrument measured perceived experience with horizontal violence in the workplace among non-nursing populations. Using factor, reliability, and regression analyses, Simons, et al. (2011) tested the dimensionality, reliability, and construct/criterion validity of the NAQ-R. The authors found a subset consisting of four items to be both valid and reliable for measuring horizontal violence in the sample of Massachusetts nurses. Noting that horizontal violence in the workplace was a one-dimensional construct, this shorter instrument, the

Negative Acts Questionnaire Revised – United States (NAQR-US) was found to be valid and reliable with a Cronbach's alpha of .75 which was acceptable for internal consistency. A valid and reliable survey tool with four items relieved both participants and researchers of time required to complete the instrument as well as compile and analyze the results.

In addition to the four items requested on the NAQR-US, this study included an option for free text narration of participant's exposure to horizontal violence. Responses to the request for the RN's "story" were collected and will be used for future analysis.

Demographic Survey

An investigator developed demographics tool was included as part of the online survey. Respondents were asked to provide information on the following items: gender, age, years as an RN, years at the facility, hours worked, highest nursing degree, professional certification, and unit worked within the facility. Utilizing guidelines recommended by Dillman, Smyth, and Christian (2009), the original survey invitation was followed by an email reminder to complete the survey or as a means for thanking the RN for his/her participation.

NDNQI Database and Falls Collection Tool

The National Database of Nursing Quality Indicators (NDNQI) was established by the American Nurses Association (ANA) in 1998 in an effort to provide acute care hospitals with information on nursing indicators. These nursing indicators could be used in quality improvement projects and to develop a database from which to examine relationships between aspects of the nursing workforce and nursing-sensitive patient outcomes. The NDNQI is a large, longitudinal database containing unit-level data and

national, if not representative, coverage. With over 1,100 hospitals reporting data quarterly on nursing workforce characteristics and patient outcomes, NDNQI collects data for eight unit types and conducts an annual Nurse Satisfaction Survey (Dunton, Gajewski, Klaus, & Pierson, 2007).

Hospitals participating in data submission input data electronically that includes patient falls. Guidelines for Data Collection and Submission, Patient Falls Indicator (NDNQI, 2013) was made available to the investigator through the health system's Center for Nursing Excellence based on the organization's membership in NDNQI. Falls were defined by NDNQI as a "sudden, unintentional descent, with or without injury to the patient that results in the patient coming to rest on the floor, on or against some other surface, on another person, or an object" (NDNQI, 2013, p. 2). NDNQI defines a nursing unit as that area where "nursing care is provided, regardless of who is providing care...at the time of the fall. This area includes the hallway, patient room, and patient bathroom; and may include other areas such as a patient lounge....if it is physically located on the unit and nursing care is provided in this space" (NDNQI, 2013, p. 3). Only falls that occurred on eligible nursing units were counted by NDNQI and all assisted and unassisted falls including those attributed to physiological factors, such as syncope, were reportable regardless of the patient's age and admission status (inpatient versus observation or short stay). Falls on purpose or claiming to have occurred, but did not, were defined as suspected or intentional. These falls were reported to NDNQI but did not count in the data computation for fall rates. Falls not reported were those sustained by visitors, students, employees, patients on units not eligible for reporting, or patients who were not on the eligible nursing unit when the fall occurred.

Data entry regarding falls, initial or repeat, on eligible nursing units was electronically submitted by member organizations per calendar month to include the number of patient falls, risk assessment scale used by the organization, and information pertaining to each individual patient fall. Data related to individual patient falls included month of occurrence, patient age and gender, whether or not the fall was physiological, whether or not the fall was assisted and the type of employee assisting, injury level, and patient assessment data before and after the fall. NDNQI provided four quarterly rates to member organizations: (1) total falls per 1,000 patient days, (2) injury falls per 1,000 patient days, (3) unassisted falls per 1,000 patient days, and (4) intentional falls per 1,000 patient days (NDNQI, 2013).

Procedure

As part of the original IRC-approved Quality Improvement Project, an email was sent by the investigator to all RNs employed in NDNQI defined, adult acute care units in this facility. The email consisted of a brief paragraph defining horizontal violence and explaining the purpose of the study. Brief directions were provided on correct use of the Likert scale as part of the NAQR-US and respondents were invited to free text any comments regarding individual perceptions of horizontal violence, both witnessed and experienced. Investigator contact information was provided as was an online link to the survey. A reminder email was sent 4-weeks later asking RNs to complete the survey and/or thanking them for participating. Survey results were maintained on a personal non-shared drive on the investigator's worksite password protected computer.

Upon approval of the investigator's Dissertation Committee, IRC approval by the hospital system (see Appendices G and H) and Institutional Review Board (IRB)

approval from the University of San Diego were obtained (see Appendix I). The investigator met with the hospital's NDNQI analyst to obtain falls data reported from eligible units over the same time period as the previously obtained online horizontal violence prevalence survey.

Correlations between the scores and mean of scores for individual responses to the prevalence of horizontal violence survey and unit falls with and without injury were analyzed using SPSS 21. Free text comments regarding horizontal violence were saved for future analysis.

Data Analysis

Descriptive statistics were used for analyses including mean, median, standard deviation, and percentages to describe the variables of interest. Correlations were described using a correlation coefficient, Pearson Product-Moment or Pearson's *r*. Because of the hierarchical structure of subjects, data was analyzed at the individual (micro) and the group (macro) levels only. Simultaneous correlations between the individual subjects as predictors of group outcomes were not obtained due to the complex nature of the required analysis, outside the scope of this study, and the small sample size available to the investigator.

Summary

The results obtained from a previously offered online survey addressed to the work email addresses of staff RNs assigned to eligible nursing units within a 301-bed acute care hospital in southern California were used to determine the prevalence of horizontal violence. Data submitted to NDNQI regarding nursing unit-specific number and category of falls was obtained for the same time period as the survey. Due to the

presence of a hierarchical structure of subjects, individual nurse responses to the NAQR-US and falls with and without injury for the six units, data was analyzed separately. Simultaneous correlations of individual responses to predict group falls outcomes was not obtained due to the requirement for a complex method of analysis and small sample size..

Chapter Four

STUDY RESULTS

The purpose of this study was to determine the relationship between horizontal violence among unit-based registered nurses and the number of unit-based falls with and without injury. While there have been multiple studies on the impact of horizontal violence on nursing recruitment, retention, physical and mental well-being, and patient safety, there was a gap in the in the science regarding actual patient harm such as falls. Addressing this gap was important because horizontal violence, as a symptom of oppressed group behavior, has been shown to cause feelings of low self-esteem and worthlessness in nurses leading to the creation of a hostile work environment and jeopardized patient safety. Hostile work environments prevent nurses from performing at their fullest potential resulting in reduced quality of care and increased risk of patient harm. The two research questions that provided direction for the study were (1) What is the prevalence of horizontal violence among registered nurses and (2) What is the relationship between horizontal violence and falls?

Sample Profile

The survey was transmitted via email to 292 RNs of which 168 RNs participated (58%). The typical survey respondent was female (87%), aged 20-39 (49%), with

12 years of experience as a nurse, and employed for at least two years on the unit. The majority worked full time (73%), on the day shift (55%), had obtained a BSN (56%), and had no professional certification (68%). Full demographic information is contained in Table 2 that follows.

Table 2. Demographics

Variables	Categories	Results
Age	20-39	82 (49%)
	40-59	68 (41%)
	60-79	9 (5%)
	Missing	9 (5%)
	Total	168; Mean 40; Median 39
Gender	Male	19 (11%)
	Female	146 (87%)
	Missing	3 (2%)
	Total	168
Years as an RN	12 Years	Mean 12; Median 8
Years on Unit	2 Years	Mean 2; Median 2
Primary Shift	Day	92 (55%)
	Night	73 (43%)
	Missing	3 (2%)
	Total	168
Hours Worked	Full Time	123 (73%)
	Part Time	40 (24%)
	Per Diem	3 (2%)
	Missing	2 (1%)
	Total	168
Highest Nursing Degree	Diploma	4 (2%)
	Associate	57 (34%)
	Bachelor	94 (56%)
	Master	11 (7%)
	Doctorate	0
	Missing	2 (1%)
	Total	168
Professional Certification	Yes	25 (15%)
	No	114 (68%)
	Missing	29 (17%)
	Total	168

Variables	Categories	Results
Unit Assigned	Tower 8 (0)	15 (9%)
	Tower 7 (1)	20 (12%)
	IMCU (2)	36 (21%)
	CCU (3)	42 (25%)
	Tower 6 (4)	19 (11%)
	Tower 5 (5)	36 (21%)
	Total	168

Because this study was focused on the respondent's perception of horizontal violence prevalence, completed NAQR-US survey items were considered essential information. In this study, two surveys were found to have one missing data item each. According to Roth, Switzer III, and Switzer (1999), missing data elements as part of a scale or subscale of items measuring the same construct are often highly related to each other. Using mean substitution, these authors found that inserting the mean of a person's score as the missing data element was highly accurate in estimating missing scores. In this study, for the two surveys with missing data elements, the score of each set of answers was obtained, the mean determined, and the mean then substituted for the missing response. Following this action, all 168 surveys were considered complete.

Psychometric testing was performed on the NAQR-US survey tool prior to analyzing the data. SPSS 21 was used to compute reliability statistics. A Cronbach's Alpha of .721 and a Cronbach's Alpha based on standardized items of .744 were obtained for the NAQR-US. According to Polit (2010), coefficients in the vicinity of .70 and .75 may be adequate but coefficients of .80 or greater are highly desirable.

The most common behaviors indicating horizontal violence were unmanageable workload (46%), being ignored or excluded (30%), being humiliated, or ridiculed (28%), and having information withheld (27%). Most responses indicated exposure to horizontal

violence behaviors with only 42 out of 168 respondents (25%) giving the response "Never" to all four items. Out of the 168 respondents, 126 (75%) indicated responses of other than "Never" to experiencing at least one horizontal violence behavior. The survey results suggested that over a six-month timeframe, 75% of respondents experienced at least one horizontal violence behavior. NAQR-US questions and responses are noted in Table 3 that follows.

Table 3. NAQR-US Questions and Overall Responses

Question 1	Never (1)	111 (66%)
Withholding Information	Now and Then (2)	46 (27%)
	Monthly (3)	3 (2%)
	Weekly (4)	6 (4%)
	Daily (5)	2 (1%)
	Total	168
Question 2	Never (1)	107 (63%)
Humiliated or Ridiculed	Now and Then (2)	47 (28%)
	Monthly (3)	6 (4%)
	Weekly (4)	3 (2%)
	Daily (5)	5 (3%)
	Total	168
Question 3	Never (1)	98 (58%)
Ignored or Excluded	Now and Then (2)	50 (30%)
	Monthly (3)	8 (5%)
	Weekly (4)	7 (4%)
	Daily (5)	5 (3%)
	Total	168
Question 4	Never (1)	54 (32%)
Unmanageable Workload	Now and Then (2)	77 (46%)
	Monthly (3)	11 (7%)
	Weekly (4)	18 (11%)
	Daily (5)	8 (5%)
	Total	168

Specific Aims and Results

Aim 1: What is the level of horizontal violence among registered nurses?

Aim 1a: What is the level of horizontal violence among nurses in the critical care adult unit?

The critical care-adult unit had 25% of the total respondents (42). Unmanageable workload was the most common behavior indicative of horizontal violence (52%). Respondents answered "Never" to each of the four items 57% of the time while 43% indicated that over a six-month time frame, at least one behavior associated with horizontal violence was experienced.

Aim 1b. What is the level of horizontal violence among nurses in the Step Down (IMCU) unit?

The Step Down (IMCU) unit had 21% of the total respondents (36). Unmanageable workload was the most common behavior indicative of horizontal violence (44%). Respondents answered "Never" to each of the four items 62% of the time while 38% indicated that over a six-month time frame at least one behavior associated with horizontal violence was experienced.

Aim 1c: What is the level of horizontal violence among nurses in the medical/surgical units? The medical/surgical units were four in number: Tower 5, Tower 6, Tower 7, and Tower 8. Responses were reviewed separately for each unit.

Tower 5 had 21% of the total respondents (36). Unmanageable workload was the most common behavior indicative of horizontal violence (39%). Respondents answered "Never" to each of the four items 56% of the time while 44% indicated that over a six-month time frame at least one behavior associated with horizontal violence was experienced.

Tower 6 had 11% of the total respondents (19). Unmanageable workload was the most common behavior indicative of horizontal violence (58%). Respondents answered "Never" to each of the four items 38% of the time while 62% indicated that over a six-month time frame at least one behavior associated with horizontal violence was experienced.

Tower 7 had 12% of the total respondents (20). Unmanageable workload was the most common behavior indicative of horizontal violence (40%). Respondents answered "Never" to each of the four items 60% of the time while 40% indicated that over a six-month time frame at least one behavior associated with horizontal violence was experienced.

Tower 8 had 9% of the total respondents (15). Being ignored or excluded was the most common behavior indicative of horizontal violence (60%). Respondents answered "Never" to each of the four items 41% of the time while 59% indicated that over a six-month time frame at least one behavior associated with horizontal violence was experienced.

Aim 2: What is the relationship between horizontal violence and falls?

The purpose of this study was to determine the relationship between prevalence of horizontal violence among registered nurses and falls. Data for this study were obtained through individual responses (n=168) to an online survey while the number of falls with and without injury was obtained from acute care unit (n=6) data submitted to NDNQI. During the same time frame as the online survey, a total of 55 falls occurred on the six units. Fourteen falls resulted in injury and 41 falls did not result in injury (see Appendix K).

According to Glaser and Hastings (2011), simultaneous correlation of individual data (micro) as predictors of group (macro) outcomes involves a complex process as individuals are often "nested" (p. 877) within groups forming a hierarchical structure of subjects. When data from hierarchical structures are not analyzed appropriately, an underestimation of the standard errors, inflated rates of Type I errors, could lead to wrongful rejection of the null hypothesis when it is actually true. An increase in Type II errors is also possible due to data distortion resulting in failure to reject the null hypothesis. These authors recommend multilevel modeling analysis (MLM) for hierarchical structures. This form of analysis provides a unified framework for data obtained from multilevel or hierarchical structures. The use of MLM for simultaneous analysis of data from levels of subjects prevents inference of individual data from group analysis as well as group inference from individual analysis. Similarly, Bennink, Croon, and Vermunt (2013) discussed the traditional approach to relationships between micro and macro subjects was aggregating individual predictors to the group level or disaggregating group outcome variables to the individual level. The process of aggregation and disaggregation of data for predictors of outcomes is not realistic as it does not reflect heterogeneity within groups nor does it represent variations among individuals.

Sufficient sample size for use with micro-macro relations and MLM was the focus of several studies. Small group sample size was noted to result in a decrease in the power of statistical tests; increasing the sample size would result in an increase in statistical power (Bennink, Croon, & Vermunt, 2013). Maas and Hox (2005) stated that the group level sample size, usually lower in number than the individual sample size, was the more

important of the two. While there was lack of evidence as to the preferred sample size, these authors found that a sample size of less than 50 led to biased estimates and an increase in Type II errors.

In this study, utilizing a sample size of six inpatient acute care units had an increased probability of Type II errors, failing to reject the null hypothesis. A sample size of six units was too small to show sensitivity to effect size or to provide a reliable prediction of falls outcomes; however, six units was the total sample size available to the investigator. Neither micro-macro relations nor MLM methods to correlate individual responses as predictors of group outcomes were utilized due to the complexity of analysis required and the small sample size available to the investigator.

Correlations were obtained separately for micro (individual nurse responses to the NAQR-US) and macro (falls on nursing units) subjects. For micro correlations, the mean of nurse responses to the NAQR-US (n=168) were disaggregated by unit. The total number of falls, falls with injury, and falls without injury were determined by unit and were reflected as fixed values without intra-unit variability. For example, Tower 8 had 15 nurse respondents and a total of 11 falls, 1 with injury, and 10 without injury. The mean of the NAQR-US scores of these 15 nurse respondents (7.27) was correlated to the unit fixed falls values of 11, 1, and 10. Correlations were obtained using SPSS 21 with no statistical significance obtained. While individual nurse responses indicated exposure to horizontal violence behaviors, their mean scores did not positively correlate with each unit's number of falls, falls with injury, and falls without injury (see Table 4 for correlation results).

Correlations of macro data were analyzed by aggregating the mean of all 168 NAQR-US scores (6.73) and the fixed values of the number of falls, falls with injury, and falls without injury for each of the six units (n=6). This aggregated data were analyzed using SPSS 21 with no statistical significance obtained. The mean of all NAQR-US scores did not correlate positively with the unit number of falls with and without injury (see Table 4 for correlation results).

Table 4. Correlations of Individual/Micro and Unit/Macro Data

Descriptive Statistics for Individual/Micro and Unit/Group Variables for Correlation Between Horizontal Violence Among Nurses and Falls		
Variables	**NAQR-US Mean**	**Range (minimum-maximum)**
Individual NAQR-US Responses	6.73	4 to 18
Tower 8 (Unit 0)	7.27	4 to 18
Tower 7 (Unit 1)	6.10	4 to 18
IMC (Unit 2)	6.00	4 to 18
CCU (Unit 3)	6.19	4 to 18
Tower 6 (Unit 4)	7.96	4 to 18
Tower 5 (Unit 5)	7.56	4 to 18
Units (n=6)	Frequency	Percentage
Total Falls	55	100
Falls with Injury	14	25
Falls without Injury	41	75
Correlations		
Disaggregated (n=168)		
NAQR-US Scores	Pearson Correlation	Significance
Total Falls	0.092	0.234
Falls with Injury	0.138	0.075
Falls without Injury	-0.007	0.933
Aggregated (n=6)		
Mean of NAQR-US Scores	Pearson Correlation	Significance
Total Falls	0.210	0.690
Falls with Injury	0.339	0.511
Falls without Injury	-0.044	0.934

NAQR-US = Negative Acts Questionnaire Revised-United States

Significance for correlations is 2-tailed

Aim 2a: What is the relationship between horizontal violence and falls with injury?

Based on the presence of a hierarchical structure of subjects, data were analyzed separately rather than simultaneously and individual responses as predictors of group outcomes could not be obtained without the use of complex analytical methods. No determination could be made regarding prevalence of horizontal violence among registered nurses and falls with injury.

Aim 2b: What is the relationship between horizontal violence and falls without injury?

Based on the presence of a hierarchical structure of subjects, data were analyzed separately rather than simultaneously and individual responses as predictors of group outcomes could not be obtained without the use of complex analytical methods. No determination could be made regarding prevalence of horizontal violence among registered nurses and falls without injury.

Summary

The two research questions providing direction for the study were: (1) What is the prevalence of horizontal violence among registered nurses, and (2) What is the relationship between horizontal violence and falls? To answer research question one, out of the 168 respondents, 126 (75%) indicated responses of other than "Never" to experiencing at least one horizontal violence behavior over a six-month time frame. The survey results suggested that over a six-month timeframe, 75% of respondents experienced at least one horizontal violence behavior. Regarding research question number two, no statistically significant findings were obtained regarding a relationship

between prevalence of horizontal violence among registered nurses and falls, with and without injury, at either the individual or group level of this hierarchical structure of subjects. A more complex method for simultaneous analysis of correlations of individual responses as predictors of group outcomes was beyond the scope of this study. A sample size of six units was too small to show sensitivity to effect size or to provide a reliable prediction of falls outcomes; however, six units was the total sample size available to the investigator.

Chapter Five

DISCUSSION OF FINDINGS

This study was the first in a program of research designed to determine whether there was a relationship between horizontal violence among registered nurses and falls. Prior research had implicated the negative effects of horizontal violence on nurse recruitment, retention, physical and mental well-being, and patient safety. The purpose of this study was to address the gap in knowledge regarding a relationship between horizontal violence among registered nurses and falls. This study determined the prevalence of horizontal violence among individual registered nurses. Correlations were obtained between unit horizontal violence survey scores and unit falls.

Summary of Current Study

The survey was sent via online link to a total of 292 nurses' work email addresses with 168 responses returned.

Limitations and Strengths of Study

This study did have limitations. The perceptions regarding the prevalence of horizontal violence of the 124 nurses who chose not to respond remain unknown. The survey link contained neither individual user identification nor passwords and as nurses generally shared unit-based computers, there was no way to ensure that nurses did not

respond to the survey more than once. Duplication of survey responses may have occurred indicating that of the 168 responses eligible for use in the study, some number of these may have been completed by the same nurse. This survey was obtained approximately five months prior to the move into a new acute care facility. Planning and discussions were underway during the time frame of the survey and the stress of the upcoming move combined with the planned reorganization of various units may have contributed to the perception that horizontal violence was occurring.

This study was performed in one facility using NDNQI eligible units. Horizontal violence and patient injury such as falls may have been occurring on non-NDNQI eligible units but these were not addressed in this study. Nurses were asked regarding the prevalence of horizontal violence behaviors and their answers may have been based on perceptions rather than actual facts. Falls data submitted by nurses were based on documentation after the fact and may not have fully explained or assessed the events as they actually occurred. Additionally, it is possible that not all falls were reported to the hospital's Quality Department, the source for data submission to NDNQI.

Simultaneous correlation of data between individual and group results was not possible without the use of complex methods of analysis such as micro-macro relationships or multilevel modeling (MLM) which was beyond the scope of this study. A small sample size of six units increased the likelihood of Type I and Type II errors while decreasing statistical power; however, six was the total sample size available to the investigator making the use of micro-macro relationships or MLM inappropriate.

This study had strength in that it was retrospective and bias regarding documentation of falls was avoided as nurses were not aware that these events were to be

included in the research. While the study did not obtain statistically significant findings regarding a relationship between horizontal violence and falls, it did demonstrate that a majority of respondents had experienced at least one example indicative of this abusive behavior. It is important that awareness of the possible presence of horizontal violence among nurses in a unit or across units be in the arsenal of tools for every advanced practice registered nurse (APRN), such as the Clinical Nurse Specialist (CNS), and nursing leaders whenever poor patient outcomes are noted.

Study Implications

Horizontal violence, as a symptom of oppressed group behavior creates an unsafe working environment where quality of care and communication among health care professionals is compromised (Purpora & Blegen, 2012). In addition to the effects of horizontal violence on nurse recruitment, retention, and physical/mental health, patients may suffer injury (Vessey, DeMarco, & DiFazio, 2010). This study obtained information on the perception of horizontal violence among nurses employed on NDNQI eligible units in a union facility seeking Magnet status.

Demographic information obtained in this study was similar to others in that the majority was female aged 20-40 with a BSN degree (Simons, 2008; Johnson & Rea, 2009; Wilson, Diedrich, Phelps, & Choi, 2011; Sellers, Millenbach, Ward, & Scribani, 2012). At least 75% of respondents in this study reported experiencing at least one behavior and 53% reported experiencing at least two behaviors indicative of horizontal violence. Simons (2008), in her study of bullying reported by Massachusetts nurses newly licensed over a three-year period, found that 31% of respondents had experienced at least 2 examples of these behaviors. Johnson and Rea (2009) found that

27.3% of respondents reported experiencing horizontal violence behaviors over a six month period. Wilson, Diedrich, Phelps, and Choi (2011) found 85% of responders had at least witnessed horizontal behavior whether or not the respondent was the intended victim. Sellers, Millenbach, Ward, and Scribani (2012) noted 25% of respondents reported being victims of at least one behavior indicating horizontal violence. These authors also determined that experience with or knowledge of horizontal violence was higher in a union environment and lower in hospitals with Magnet® status.

This study had findings consistent with those of other studies on the prevalence of horizontal violence among nurses. Additionally, this study adds to the science of nursing by providing research on the prevalence of horizontal violence among nurses and the relationship of this unsafe behavior to patient outcomes such as falls.

Clinical Practice

Unsafe work environments affect not only the performance of nurses; patients may suffer injuries when lack of communication and poor teamwork are prevalent. Again, nursing leaders and APRNs must be vigilant for signs of horizontal violence within and across units. In the presence of horizontal violence, nurses cannot perform at their full potential and patient injuries may occur. This study obtained data regarding the relationship between the prevalence of horizontal violence among registered nurses and the number of falls, falls with injury, and falls without injury per unit. While this study did not obtain a statistically significant relationship between horizontal violence and falls, a study by Purdy, Laschinger, Finegan, Kerr, and Olvera (2010) found a positive relationship between empowered work environments and patient outcomes. Group processes including sharing of the workload, communication, and cooperation, were

positively associated with nurse-assessed quality and negatively related to nurse-assessed risk of patient safety outcomes such as falls, nosocomial infection, and errors in medication administration. On an interesting note, this study utilized multilevel modeling analysis to correlate nurses' perceptions of their work environments and quality/risk outcomes for nurses and patients, including falls, in an acute care setting.

As one of the two most common injuries to patients most closely aligned with nursing practice, falls can have a devastating impact not only on patients but on hospital financial reimbursement as well. According to Virkstis, Westheim, Boston-Fleischhauer, Matsui, and Jaggi (2009), healthcare executives have developed a more focused view of reimbursement in the presence of hospital-acquired conditions (HAC). Falls are considered to be not only one of the most challenging events for nursing, but one of the most costly in terms of reimbursement loss.

As pay for performance programs increase among payers across the healthcare industry, nursing-sensitive measures are becoming increasingly under scrutiny. The Centers for Medicare and Medicaid Services (CMS) defined HACs as those that are either high cost, high volume, or both; resulted in assignment of a higher payment MS-DRG, and could have been prevented. Of the 11 HACs listed by CMS (http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalAcqCond/downloads/HACFactSheet.pdf), four of them, including patient falls, are considered nurse-sensitive.

Education

Nurses were often unaware of the behaviors associated with horizontal violence and did not know how to recognize or respond to these abuses (Sellers, Millenbach,

Ward, & Scribani, 2012). Education on the signs of horizontal violence must begin in nursing schools in order to ensure that students and new graduate nurses have the tools necessary to deal with those staff members who act in this abusive manner (Griffin, 2004). Nursing school curricula should include education through lecture and role-playing on recognition of horizontal violence signs and effective ways to identify, respond, and combat this behavior. Hospitals should offer in-service education to all staff including nurses, physicians, and administrators, both during orientation and on an ongoing basis. Enhancing awareness of horizontal violence as well as methods for dealing with the abuse is vital to the prevention of the consequences of this behavior. According to Fagan (2012) nursing leaders have a myriad of education programs at their disposal and while there is no firm evidence that team training improves patient outcomes, the literature does support poor communication and lack of teamwork as contributing factors to errors that put patients at risk.

Nursing Research

This study described the relationship between horizontal violence among registered nurses and patient falls. While many research studies and scholarly articles exist regarding the impact of horizontal violence on nurse recruitment, retention, and physical/mental well-being, the implications on quality patient care, patient satisfaction, and institutional reimbursement require further investigation. In this era of hospital reimbursement tied to patient satisfaction, patient choice of hospitals for care, and non-reimbursable funds related to patient injury in the hospital, health care organizations must be cognizant of any barriers to communication and teamwork. Horizontal violence is abusive behavior that cannot be tolerated and creates an unsafe work environment.

Utilizing as a research framework the conceptual model provided by Purpora and Blegen (2012), horizontal violence and the quality and safety of patient care, additional research would be focused on the relationships between oppression, prevalence of horizontal violence, peer communication, and patient safety outcomes.

Based on the findings of this study, future studies would include the use of more complex analysis methods for simultaneous correlations of data using individual level data to predict group outcomes. Utilizing the "stories" provided by respondents to the online survey, a qualitative study of the lived experience of horizontal violence will be obtained. Further studies on the topic of horizontal violence among registered nurses and patient injury are recommended with emphasis on other nurse-sensitive indicators such as hospital-acquired pressure ulcers.

Conclusion

This study determined that while there was no statistically significant relationship obtained between horizontal violence among registered nurses and falls, a majority of respondents experienced at least one example of this abusive behavior. The literature supported the tendency of horizontal violence to create hostile work environments characterized by poor communication among health care providers and lack of teamwork. In the presence of poor communication and lack of teamwork, patients may be the victims of horizontal violence among nurses. Recognition of the signs of horizontal violence is vital to maintain quality of care, to ensure effective communication between providers, and to keep patients safe. Poor patient outcomes may be reduced in an environment of respect, effective communication, and teamwork.

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Appendix A

Literature Review of Constructs

Author/Title	Setting / Participants	Conceptual Framework	Variables	Instruments and Psychometrics	Findings
Oppression					
Demir & Rodwell (2012) Psychosocial antecedents and consequences of workplace aggression for hospital nurses	207 Australian RNs working in medium to large Australian hospital	Job demands-resources (JD-R) model and individual trait of negative affectivity (NA)	JD-R , NA, outcomes of aggression	Bullying scale by Hoel & Cooper (2000); violence scale by Hesketh et al. (2003); job demands scale by Caplan et al. (1980); job control scale by Karasek (1985); social support scale by Caplan et al. (1980); *Positive and Negative Affect Schedule (PANAS),* (Watson et al., 1988); organizational commitment scale by Allen & Meyer (1990); job satisfaction scale by Brayfield & Rothe (1951); *Kessler-10* (Kesler & Mroczek, 1994) for psychological distress. Cronbach's alphas ranged from .77 to .91 but not individually defined. Nurse demographics questionnaire	Majority of nurses reported no exposure to workplace aggression; high rates were found for aggression types of bullying. Nurses are at high risk for workplace aggression.
Purpora, Blegen, & Stotts (2012) Horizontal violence among hospital staff nurses related to oppressed self or oppressed group	175 hospital staff RNs	Horizontal violence and the quality and safety of patient care	Oppressed self-beliefs; oppressed group beliefs; relationship to HV to each; nurse and work characteristics and relationship of each to HV	*Nurses Workplace Scale (NWS),* (DeMarco et al., 2008); no psychometrics provided; *Negative Acts Questionnaire - Revised (NAQ-R),* (Einersen, Hoel, & Notelaers, 2009); no psychometrics provided; Nurse demographics questionnaire	Positive relationship between beliefs consistent with an oppressed self and HV; a positive relationship between beliefs consistent with those of an oppressed group and HV
Rodwell & Demir (2012) Oppression and exposure as differentiating predictors of types of workplace violence for nurses	273 staff RNs and CNMs in a med-large Australian hospital	Demand-Control-Support (DCS) model, (Karasek, 1079); oppressed group behavior	High job demands, low job control, low social support and association with workplace aggression; higher levels of NA and association with workplace aggression; demographical factors of tenure and work schedule and impact on workplace aggression	Nursing demographic questionnaire; Bullying scale by Hoel & Cooper (2000); violence scale by Hesketh et al. (2003); job demands scale by Caplan et al. (1980). Cronbach's alpha .89; job control scale by Karasek (1985). Cronbach's alpha .73; social support scale by Caplan et al. (1980). Cronbach's alpha for 3 subscales .88, .80, .81; Positive and Negative Affect Schedule (PANAS). (Watson et al., 1988). Cronbach's alpha .77.	Bullying: 2 antecedents identified were NA and bullying; positive relationship between morning shift and bullying; high rates of workplace aggression
DeMarco, Roberts, Norris & McCurry (2007) Refinement of the silencing the self scale - work for registered nurses	738 RNs in various hospital settings and units throughout Massachusetts	Silencing the Self: Oppressed Group Behaviours	Oppressed group behaviours in the work setting	Nursing demographic questionnaire; *Silencing the Self Scale-Work (STSS-W).*(Gratch, 1994). Cronbach's alpha for all subscales .86-.94; *Nurse Workplace Scale (NWS),* (Keen, 1991). Cronbach's alpha .81	Reliability and validity of the STSS-W supported. Scores were highly correlated with the NWS indicating that not expressing what a person needs or feels directly or putting others first is linked to minimization of self or viewing men more positively than women.

Author/Title	Setting / Participants	Conceptual Framework	Variables	Instruments and Psychometrics	Findings
Demir & Rodwell (2012) Psychosocial antecedents and consequences of workplace aggression for hospital nurses	207 RNs and CNMs working in wards within medium to large Australian hospital	JD-R model (job demands-resources); NA (negative affectivity)	Occurrence & frequency of workplace bullying; aggression types	Cross-sectional survey design; Aggression types: bullying scale (Hoel & Cooper, 2000); violence scale (Hesketh, et al. 2003); Work conditions: Job Demands Scale (Caplan, et al. 1980); Job Control Scale (Karasek, 1985); Social Support Scale (Caplan, et al. 1980); Individual levels of NA: Positive and Negative Affect Schedule (PANAS), (Watson et al., 1988), Cronbach's alpha .77. Work attitudes and psychological distress: Org Commitment (Allen & Meyer, 1990); Job Sat (Brayfield & Rothe, 1951); Psychological distress: Kessler-10 (K-10) (Kesler & Mroczek, 1994), Cronbach's alphas .77 to .91.	High job demands and low job control lead to increased reports of bullying
Tinsley & France (2004) The trajectory of the registered nurses' exodus from the profession: a phenomenological study of the lived experience of oppression	RNs with at least 5 years' experience who chose to leave the profession; understood English. 5 RNs. Caucasian, female with 12-23 years' experience; BSN; 4/5 worked CCU	Husserl's phenomenology ; Watson's theory of human science and human care.	Essential structures emerged	Hermeneutic phenomenological design	3 essential structures: suffering (nurse abuse, burnout, the search to recapture); exodus (leaving the profession); oppression (controlled by external forces with greater prestige, power, status)
Randle (2003) Bullying in the nursing profession	3-year longitudinal study of preregistration nursing students in England.	Self-esteem theory; grounded theory		Mixed methods study; qualitative study with quant findings reported elsewhere.	Student nurses witnessed bullying or were bullied leading them to engage in bullying activities once they become RNs

Author/Title	Setting / Participants	Conceptual Framework	Variables	Instruments and Psychometrics	Findings
Horizontal Violence					
Sellers & Millenbach (2012) The degree of horizontal violence in RNs practicing in New York State	2659 RNs from 19 NY State hospitals	MacGregor-Burns Transformational Leadership theory (Burns, 1978)	Occurrence of HV; nurses' knowledge of HV;	Briles' Sabotage Savvy Quiz, (Briles, 1994); Cronbach's alpha .76	Higher degree of HV in union vs. nonunion cultures; less HV in Magnet hospitals. HV engrained in nursing and not recognized nor taken seriously.
Walrafen, Brewer, & Mulvenon (2012) Sadly caught up in the moment: an exploration of horizontal violence	N=227 RNs in a multi-institutional health care system	Bandura (1969) Social Learning Theory	Presence and prevalence of HV	Mixed-method descriptive design with researcher developed questionnaire; 9-item Horizontal Violence Behavior Survey, no psychometrics provided; 3 open-ended questions	Validated Bandura's theory: individuals will mimic or role model behaviors exhibited by the group to which they want to belong. Many were unaware that their behaviors constituted HV.
Wilson, Diedrich, Phelps, & Choi (2011) Bullies at work	RNs at a Southwestern community hospital; 130 respondents	Horizontal Hostility (HH)	Degree of HH; HH affected sick calls; likelihood of leaving current position	28-item survey based on 2 validated survey tools: AACN survey and Lateral Violence in Nursing Survey	85% experienced or witnessed HH; 20% admitted to calling in sick due to HH; 40% stated going to leave position due to HH
Mahon & Nicotera (2011) Nursing and conflict communication	57 nurses in a variety of specialties enrolled in 2 universities' degree completion, graduate programs, nsg faculty	Communication competence	Communicative strategies employed by nurses: hostile or constructive	Exploratory pilot study. Focus groups of nurses; scenarios assessed for validity. Wiseman & Schenck-Hamlin's Compliance-gaining strategies (1981); Verbal Aggressiveness scale (Infante & Wigley, 1986).	Nurses are highly unlikely to confront conflicts directly.
Ortega, Christensen, Hogh, Rugulies, and Borg (2011) One-year prospective study on the effect of workplace bullying on long-term sickness absence	9949 employees working in elderly-care sector in 36 Danish municipalities	Effect of bullying on sickness absence among health care employees	Long-term sickness absence; bullying; demographics	Survey on work and health through Copenhagen Psychosocial Questionnaire (COPSOQ), (Kristensen et al., 2005). Intra-class correlations indicate good reliability (higher than 0.40) with little overlap between scales. Nurse demographics questionnaire	Risk of long-term higher sickness absence higher in those frequently bullied
Hutchinson, Vickers, Wilkes, & Jackson (2010) A typology of bullying behaviours: the experiences of Australian nurses	24 RNs and 2 enrolled nurses from two health care settings in Australia	Typology of bullying behaviours	Behaviours and tactics by bullies	Qualitative study with interviews of 26 participants	3 forms of bullying were reported: personal attack, erosion of professional competence and reputation, attack through work roles and tasks
Hutchinson, Wilkes, Jackson, & Vickers (2010) Integrating individual, work group and organizational factors: testing a multidimensional model of bullying in the nursing workplace	370 completed surveys from randomized survey of Australian nurses. Part of larger study (3rd stage)	Test of a multidimensional model of bullying in the nursing workplace (3rd stage of a larger study)	Org factors	Structural equation modeling	Organizational characteristics were critical antecedents to bullying: informal org alliances, org tolerance/reward of bullying, misuse of legitimate org processes and procedures
Sellers, Millenbach, Kovach, & Yingling (2009-2010) The prevalence of horizontal violence in New York State Registered Nurses	RN members of the NY Org of Nurse Executives, 108 participants	MacGregor-Burns Transformational Leadership theory (Burns, 1978)	Occurrence of HV; nurses' knowledge of HV	Briles' Sabotage Savvy Quiz, (Briles, 1994); Cronbach's alpha .76	HV is ingrained in nursing's organizational culture so that it is not recognized

Author/Title	Setting / Participants	Conceptual Framework	Variables	Instruments and Psychometrics	Findings
Vessey, DeMarco, Gaffney, & Budin (2009) Bullying of staff registered nurses in the workplace: a preliminary study for developing personal and organizational strategies of the transformation of hostile to healthy workplace environments	303 RNs from across the US who responded to invitation in Nursing Spectrum magazine	Bullying results in hostile work environment	Bullying frequency, type, perpetrators, personal, professional consequences	30-item electronic survey. Descriptive survey design.	New RNs working in staff positions are vulnerable. Supervisors and managers are most often the perpetrators. RNs more likely to leave position if being bullied.
Einarsen, Hoel, & Notelaers (2009) Measuring exposure to bullying and harassment at work: validity, factor structure and psychometric properties of the Negative Acts Questionnaire-Revised	5288 respondents to a survey sent to employees in 70 organizations across Great Britain	Effects of bullying on workers	Original 23-item scale and revised 22-item scale	Negative Acts Questionnaire-Revised (NAQ-R), (Einersen & Hoel, 2001), with Cronbach's alpha .89	Validation of the NAQ-R as a reliable tool
Johnson and Rea (2009) Workplace Bullying	249 RNs, members of the Washington State Emergency Nurses Association.	Effect of bullying on nurses	Experience of RNs with bullying; relationship between bullying and intent to leave organization or nursing	Negative Acts Questionnaire-Revised (NAQ-R), (Einersen & Hoel, 2001), with Cronbach's alpha .89; Nurse demographics questionnaire	Bullying is strongly linked to nurse attrition. Largest group identified as exhibiting bullying behavior was director/manager
Simons (2008) Workplace Bullying Experienced by Massachusetts Registered Nurses and the Relationship to Intention to Leave the Organization	511 randomly selected newly licensed RNs with less than 36 months experience in Massachusetts	Freire's oppressed group behavior (1970)	Bullying behavior, work experience, bullying and intent to leave	Negative Acts Questionnaire-Revised (NAQ-R), (Einersen & Hoel, 2001), with Cronbach's alpha .89 Intention to Leave, subscale of the Michigan Organizational Assessment Questionnaire, (Cammann et al., 1981), Cronbach's alpha .83. Nurse demographics questionnaire	Bullying had a greater effect on intent to leave than other independent variables.
Hutchinson, Wilkes, Vickers, & Jackson (2008) The development and validation of a bullying inventory for the nursing workplace	102 RNs employed in clinical nursing positions in New South Wales, Australia	None	Attack upon competence and reputation; personal attack; attack through work tasks	Researcher designed instrument; Cronbach's alpha .93	Development of a valid, reliable inventory to measure bullying in the nursing workplace
Rowe & Sherlock (2005) Stress and verbal abuse in nursing: do burned out nurses eat their young?	213 RNs and LPNs employed in a teaching hospital in the Philadelphia area; level 1 trauma center. 500 beds, participants from a wide variety of units	Nurse on nurse verbal abuse	Type of aggression, feelings, coping behaviours	Verbal Abuse Survey, (Cox, 1987); no psychometrics noted Verbal Abuse Scale, (Manderino & Berkey, 1997), Cronbach's alpha .81	Nurses were the most frequent source of verbal aggression to other nurses. Judging and criticizing were found to be the most stressful.

Author/Title	Setting / Participants	Conceptual Framework	Variables	Instruments and Psychometrics	Findings
Griffin (2004) Teaching cognitive rehearsal as a shield for lateral violence: an intervention for newly licensed nurses	26 newly licensed nurses in a large acute care tertiary hospital in Boston, MA	Oppressed behaviors Cognitive learning theories	Cognitive rehearsal as a response to LV	Exploratory descriptive study; education on LV provided to the group and time spent on cognitive rehearsal and appropriate responses to LV; laminated cueing cards provided; returned one year later to participate in focus groups on effectiveness of intervention	Participants felt strongly that all nurses needed education on LV and interpersonal conflict must be addressed.
McKenna, Smith, Poole, & Coverdale (2003) Horizontal violence: experiences of registered nurses in their first year of practice	551 New Zealand nurses with one year of practice on a variety of inpatient units	Nurse on nurse aggression	Prevalence of HV, characteristics of distressing incidents, consequences, psychological impact, adequacy of training to manage HV	Impact of Event Scale, (Horowitz, Wilner, & Alvarez, 1979), no psychometrics provided; Modified questionnaire by Coverdale et al., 2001, measuring acts of violence from patients towards physician trainees, modified to reflect nurse violence towards nurse	Serious impact of interpersonal conflict: absenteeism from work, high number considering leaving nursing, underreporting, no debriefing after events, no training to manage the behavior

Author/Title	Setting / Participants	Conceptual Framework	Variables	Instruments and Psychometrics	Findings
Work Environment					
Walrath, Dang, Nyberg (2013). An Org Assessment of Disruptive Clinician Behavior	N=5710 RN 2759 ANP 470 SON faculty, fellow, house staff 2481. All depts./practice settings of 1013-bed urban academic medical center in Mid-Atlantic region of US.	Disruptive clinician behavior in hospitals settings, an organizational assessment of RNs/MDs.	Experience with disruptive behavior, triggers, responses, impacts on clinicians, patients, and the organization.	Disruptive Clinician Behavior Survey for Hospital Settings. Descriptive survey designed by healthcare system with online access. Cronbach's alpha = 0.93 and 0.72-0.92 for subscales; Nurse demographics questionnaire	84% of respondents reported personal experience with disruptive behavior during the past year. Both RNs and MDs responded that the person who had the most negative impact was a member of their own discipline.
Read & Laschinger (2013) Correlates of new graduate nurses' experiences of workplace mistreatment	342 new grad nurses in Ontario	Model of proposed antecedents and outcomes of workplace mistreatment among new grad nurses	Incivility, bullying, empowerment, community, values congruence, fairness, psych capital, authentic leadership, burnout, physical health, mental health, job sat, career sat, job turnover intentions, career turnover intentions	Secondary data analysis from a larger study of new grad work life using multiple valid and reliable instruments. See Laschinger & Grau (2012)	Workplace incivility, bullying were significantly related to authentic leadership, structural empowerment, work life fit, and psychological capital
Laschinger (2012) Job and career satisfaction and turnover intentions of newly graduated nurses.	Ontario hospital settings; RNs in first 2 years of practice; n=342	Initial conditions and personal factors influence work outcomes through intervening work experiences.	New grad demographics; turnover intentions based on personal/ situational factors and work/personal factors	Areas of work life scale, (Leiter & Maslach, 2004), Cronbach's alpha .88; Conditions of Work Effectiveness Questionnaire II (CWEQ II), (Laschinger, 2001); Cronbach's alpha = 0.81; Authentic Leadership Questionnaire (ALQ), (Walumbwa et al., 2008), Cronbach's alpha .95; Core Self-Evaluation (CSE), (Judge et al., 2003), Cronbach's alpha .82; Utrecht Work Engagement Scale (UWES), (Schaufeli et al., 2002), Cronbach's alpha .86; Maslach Burnout Inventory-General Scale emotional exhaustion and cynicism, (Schaufeli et al., 1996), Cronbach's alpha .94 and .86 respectively; NAQ-R measure bullying, (Einersen & Hoel, 2001), Cronbach's alpha .92; Workplace Incivility Scale (WIS), (Cortina et al., 2001), Cronbach's alpha .90; Pressure Management Indicator (PMI), physical symptoms and energy levels, (Williams & Cooper, 1998), Cronbach's alpha .72 and .79 respectively; Satisfaction Scale (adapted from Hackman & Oldham, 1975), Cronbach's alpha .80; Turnover Intent, (adapted from Kelloway et al., 1999), Cronbach's alpha .87.	Nurses' situational factors and a core personal resource characteristic had a sig influence on new grad job and career satisfaction and turnover.

Author/Title	Setting / Participants	Conceptual Framework	Variables	Instruments and Psychometrics	Findings
Laschinger and Grau (2012) The influence of personal dispositional factors and organizational resources on workplace violence, burnout, and health outcomes in new graduate nurses: a cross-sectional study	165 Ontario RNs with one year or less nursing experience	Structural equation model	Areas of work life; psychological capital; Negative Acts Questionnaire; emotional exhaustion cynicism, physical health, mental health.	Leiter and Maslach's (2004) six Areas of Work life Model; expanded by this study to include personal dispositional factor and psychological capital. Areas of work life scale, Leiter and Maslach, Cronbach's alpha .88 Psychological capital measured with Psychological Capital Questionnaire (PCQ), Luthans et al. 2007, Cronbach's alpha .88-.89; NAQ-R used to measure bullying, Einersen and Hoel, 2001, Cronbach's alpha .92; Maslach Burnout Inventory-General Scale to measure emotional exhaustion and cynicism, Schaufeli et al., 1996, Cronbach's alpha .94 and .86 respectively; Pressure Management Indicator (PMI), to measure physical symptoms and energy levels, Williams and Cooper, 1998, Cronbach's alpha .72 and .79 respectively; Mental Health Index (MHI-5), to measure mental health, Ware et al., 2000, Cronbach's alpha .78-.83.	Nurses with higher levels of psychological capital experienced a better fit between their expectations of and the actual reality of their working conditions, which was related to decreased experiences of bullying, burnout, and physical/mental health problems.
Flynn, Liang, Dickson, Xie, & Suh (2012) Nurses' practice environments, error interception practices, and inpatient medication errors	686 RNS on 82 med/surg units from 14 acute care hospitals in the US	Nursing Organization and Outcomes Model (Aiken et al., 2002)	Characteristics of work environment, nurse staffing levels, nurses' error interception practices, rates of nonintercepted med errors	Number of med errors per 1000 pt days; Practice Environment Scale of Nursing Work Index (PES-NWI) (Lake, 2002)	Supportive practice environment positively associated with error interception; inverse relationship in presence of nonsupportive practice environment
Berry, Gillespie, Gates, & Schafer (2012) Novice nurse productivity following workplace bullying (WPB)	197 novice nurses (less than 3 years' experience) from Ohio, Kentucky, and Indiana	Benner: Novice to Expert (Benner, 1984)	Frequency of WPB; Work productivity change;	Healthcare Productivity Survey (HPS) (Gillespie et al., 2010), 4 subscales with Cronbach's alphas of .871-.945; Negative Acts Questionnaire(NAQ) (Einarsen et al., 2009), Cronbach's alpha .90	72.6% witnessed or experienced workplace bullying with 21.3% bullied on a daily basis. Perpetrators were more senior nurses; productivity negatively affected
Cimiotti, Aiken, Sloane, & Wu (2012) Nurse staffing, burnout, and health care-associated infection	2006 survey of 7076 RNs in 161 hospitals in PA	Nurse burnout and health-care associated infection	Nurse staffing, nurse burnout, UTI, SSI	Secondary data from 2006 survey of 7076 RNs. Nurse survey data on burnout, 2006 PA Health Care Cost Containment Council, Maslach Burnout Inventory-Human Services Survey (MBI_HSS)(Maslach et al. 1996), no psychometrics reported.	Significant association between patient-to-nurse ration and UTI and SSI. Nurse burnout significantly associated with these infections. Reducing burnout reduces infections and saves money
Garon (2012) Speaking up, being heard: registered nurses' perceptions of workplace communication	33 RNs, staff or mgt, variety of healthcare settings in CA, both Magnet and non-Magnet	Oppressed group theory	Nurses' perception of ability to speak up	Focus group interviews, descriptive qualitative study	Influences on nurses' decision to speak up: personal (cultural background, values, language, etc.) and organizational (peer influences, manager influences, environment and culture)

Author/Title	Setting / Participants	Conceptual Framework	Variables	Instruments and Psychometrics	Findings
Wilson, Diedrich, Phelps, & Choi (2011) Bullies at Work	130 RNs from Southwestern US community hospital	Consequences of hostility in the workplace	Degree of horizontal hostility in the workplace; perception that horizontal hostility affected ill calls/likelihood of leaving current position	Retrospective descriptive cross-sectional design using 28-item survey modeled on 2 validated survey tools: AACN survey and Lateral Violence in Nursing Survey. No psychometrics were reported. Nurse demographics questionnaire	Horizontal hostility has profound influence on nurse job satisfaction, contributes to ill calls and high turnover rates.
Simons, Stark, DeMarco (2011) A new, four-item instrument to measure workplace bullying.	511 RNs Non-managerial RNs in Massachusetts; simple random sample of 1000 RNs licensed in 2001, 2002, 2003 were sent NAQR-US survey in mail	Revision of NAQR to simpler form to decrease researcher and participant burden and still be valid/reliable	RNs licensed in MA in 2001, 2002, 2003; perceived bullying by RNs	Proposed new 4-item instrument to measure bullying in the workplace, the NAQR-US; modified from NAQ-R, (Einersen and Hoel, 2001), Cronbach's alpha = .74 Nurse demographics questionnaire	Correlational study found that subset of 4 items measured bullying with validity and reliability.
Clark, Olender, Cardoni, & Kenski (2011) Fostering civility in Nursing education and practice	174 nurse leaders attending a statewide conference in a large western state	Clark & Olender (2010): Conceptual model for fostering civility in nursing education	Factors contributing to adverse working relationship between nursing education and practice	Descriptive qualitative survey developed by the authors: 4 open ended questions	Validates model for fostering civility in nursing academic and clinical practice environments
Lewis & Malecha (2011) The impact of workplace incivility on the work environment, manager skill, and productivity	659 Texas RNs responded to randomly survey	Impact of workplace incivility	Workplace incivility, cost, productivity	Postal survey, Nursing Incivility Scale (Guidroz et al., 2007), 43-item with Cronbach's alphas of .88 to .94, measures source-specific incivility; Work Limitation Questionnaire (Tufts Medical Center, 2001) 25-item instrument to measure productivity in one's job. Cronbach's alpha range for subscales was .88 to .94	85% reported experiencing workplace incivility (WPI); nurses in Magnet organizations reported lower WPI scores. Nurses with neg perceptions of manager's ability to handle WPI; lost productivity due to WPI calculated at 11K/RN/year
Kramer, Maguire, & Brewer (2011) Clinical nurses in Magnet hospitals confirm productive, healthy unit work environments	12,233 experienced RNS from 717 clinical units in 34 Magnet hospitals	RNs in Magnet hospitals confirm healthy work environment; Donabedian's Structure-Process-Outcome theory (1980)	Healthy Work Environment (HWE)	Essentials of Magnetism II (EOMII)(Kramer et al. 2007), Cronbach's alpha .83-.97.	82% of RNs confirmed healthy work environment within individual hospitals
Simons & Mawn (2010) Bullying in the workplace - a qualitative study of newly licensed registered nurses	184 RNs responding to a 2008 survey wrote personal stories on witnessing or experiencing bullying	Theory of oppressed group behavior	Written narratives	Qualitative descriptive design from a 2008 quantitative study on newly licensed RNs in MA.	4 themes emerged: structural bullying, nurses eating their young, feeling out of the clique, leaving the job
Oore, LeBlanc, Day, Leiter,& Latimer (2010) When respect deteriorates: incivility as a moderator of the stressor-strain relationship among hospital workers	Health professionals, 478 pre-intervention; 361 post-intervention from 17 care-giving units in Nova Scotia and Ontario.	Civility, Respect and Engagement at Work (CREW)	Effects of job stressors (workload and job control) on 2 indicators of strain (mental and physical health)	Areas of work life scale (AWS), (Leiter & Maslach, 2004), Cronbach's alpha .88. Workplace Incivility Scale (Cortina et al. 2001), Cronbach's alphas .85 and .85. Respect (Siegrist et al. 2004), Cronbach's alpha .67. Mental Health Inventory (MHI) (Ware & Sherbourne, 1992), Cronbach's alpha .85. General Health Index, Cronbach's alpha .82, no author reported.	Pre-intervention stressor-strain relationship scored dropped 6 months after a colleague-based civility programme was introduced

Author/Title	Setting / Participants	Conceptual Framework	Variables	Instruments and Psychometrics	Findings
Purdy, Laschinger, Finegan, Kerr, & Olivera (2010) Effects of work environments on nurse and patient outcomes	679 RNs and 1005 patients in 61 med/surg units in 21 Canadian hospitals	Kanter's theory of workplace empowerment (Kanter, 1977, 1993)	RN perception of work environment; patient outcomes	Conditions of Work Effectiveness Questionnaire (CWEQ-II, Laschinger et al., 2001), Cronbach's alphas .78-.93. Work Group Characteristics Measure (Campion et al. 1993), Cronbach's alpha .64-.92. Patient Satisfaction with Nursing Care Quality Questionnaire (PSNCQQ, Laschinger et al. 2005), Cronbach's alpha .97. Therapeutic Self-care Questionnaire-Acute Care Version (Sidani & Doran, unpub data), no psychometrics reported. Perceived Quality of Care on Unit scale (Aiken et al. 2001), no psychometrics reported. Psychological Empowerment Questionnaire (PEQ), (Spreitzer, 1996), Cronbach's alpha .87-.92.Empowerment Questionnaire (Irvine et al. 1999), no psychometrics reported. Nurse Global Satisfaction Questionnaire (Laschinger & Havens, 1996), Cronbach's alpha .77-.84	Empowered workplaces support positive outcomes for nurses and patients
Hutchinson, Vickers, Wilkes, & Jackson (2009) "The worse you behave, the more you seem, to be rewarded": bullying in nursing as organized corruption	26 RNs with experience of workplace bullying from 2 Australian public sector health care organizations	Bullying as a corrupt behavior	Qualitative stage of a sequential, mixed method study	Focus interviews	Bullying is a form of conduct requiring cooperation among actors in a network. Bullies misuse org position for private power or political gain.
Hughes, Chang, & Mark (2009) Quality and strength of patient safety climate on medical-surgical units	3689 RNs on 286 med/surg units in 146 hospitals	Safety Climate attributes, quality, strength	Safety climate	Safety Climate Scale(Zohar, 1980; revised by Mueller et al. 1999), Cronbach's alpha .95. Error Orientation Scale (Rybowiak et al. 1999) Cronbach's alpha .95.	Balance between job duties, safety compliance, nurses' reluctance to reveal errors continue to be problematic
Sutton & Gates (2008) Workplace incivility and productivity losses among direct care staff	145 RNs in a Midwestern hospital	Incivility and productivity losses	Workplace incivility, productivity	Work Limitations Questionnaire(WLQ) (Lerner et al., 2001), no psychometrics reported. Incivility in Healthcare Survey (HIS) (Guidroz et al. 2007), Cronbach's alpha .943.	Workplace incivility from patients and management have greater impact on employees' productivity than workplace incivility from other sources
Attree (2007) Factors influencing nurses' decisions to raise concerns about care quality	142 RNs from 3 Acute NHS Trusts in England	Grounded theory	Factors identified by RNs as influencing decisions to raise concerns about standards of practice	Semi-structured interviews	One core category emerged: professional dissonance: professional discrepancies; professional discontent and disquiet; professional dilemmas and decisions. Conflict between desire to raise concern versus negative consequences.

Author/Title	Setting / Participants	Conceptual Framework	Variables	Instruments and Psychometrics	Findings
Patient Falls					
Tzeng & Yin (2013) Frequently Observed Risk Factors for Fall-Related Injuries and Effective Preventive Interventions	5 health care systems with 68 critical care, step-down, and noncritical acute units for adult inpatients. 560 RNs	Donabedian's structure, process, and outcome model for health care organizations (1986)	Nurses perception of frequency of specific risk factors for injurious falls	Tool developed by the authors in 3 parts: potential factors leading to falls; interventions to prevent falls; optional items. Nurse demographics questionnaire	RNs' perceptions of the most frequent and preventable risk factors and those most frequently adopted are inconsistent
Aiken, Sermeus, Van den Heede, Sloan,Busse, McKee...Kutney -Lee (2012) Patient safety, satisfaction, and quality of hospital care: cross sectional surveys of nurses and patients in 12 countries in Europe and the United States	33,659 nurses and 11,318 patients in Europe; 27,509 nurses and 120,000 patients in the US	Patient safety, satisfaction, and quality of hospital care	Nurse outcomes; patient outcomes	Practice Environment Scale of Nursing Work Index (PES-NWI) (Lake, 2007), no psychometrics report. Maslach Burnout Inventory, (Maslach & Jackson, 1986), no psychometrics reported. AGRQ hospital survey on patient safety culture (Sorra & Nieva, 2004), no psychometrics reported. Hospital Consumer Assessment of Healthcare Providers and Systems (USDHHS, 2011), no psychometrics reported.	Improved work environments and reduced ratios of patients to nurses were associated with increased care quality and patient satisfaction. Deficits in hospital care quality were common in all countries.
Sayre, McNeese-Smith, Philips, & Leach (2012) A Strategy to Improve Nurses Speaking Up and Collaborating for Patient Safety	2 acute care hospitals within the same parent organization. not provided	In-service would provide a change in practice	Posttest scores would increase after intervention	Speaking-Up Measure, (Premeaux et al., 2003); Collaborative Practice Scale, (CPS) (Weiss & Davis, 1985) No psychometrics provided. Nurse demographics questionnaire	Prior to education intervention, no difference in CPS scores between control and intervention group. Following the intervention, statistically significant difference for the intervention group posttest scores.
Taylor, Dominici, Agnew, Gerwin, Morlock, & Miller (2012) Do nurse and patient injuries share common antecedents? An analysis of associations with safety climate and working conditions	723 RNs in 29 nursing units in urban, level-one trauma center in the US		Unit-level safety climate; specific nurse working conditions; injury outcomes for nurses; injury outcomes for patients.	Safety Attitudes Questionnaire (SAQ) (Sexton et al. 2006). Cronbach's alpha .90. RN working hours per patient day, unit turnover, patient injuries, nurse injuries	Safety climate was associated with both patient and nurse injuries; increased unit turnover is a risk factor for nurse and patient injuries.
Kalisch, Tschannen, and Lee (2012) Missed Nursing Care, Staffing, and Patient Falls	11 acute care hospitals, 124 units 3432 RNs and LPNs 980 CNAs	Missed nursing care leads to poor patient outcomes, based on Donabedian (1988)	Nurse staffing levels, missed nursing care, hours per patient day, patient falls	MISSCARE survey, (Kalisch & Williams, 2009) to measure missed nursing care. Cronbach's alpha .75. Nurse demographics questionnaire	The level of nurse staffing predicted patient falls and fall rates are lessened when standard nursing care is completed.
Groves, Finfgeld-Connett, & Wakefield (2012) It's always something: hospital nurses managing risk	12 RNs working on 2 medical units in 274-bed academic medical center in the Midwestern US	Grounded theory of Managing Risk		Semistructured interviews	Managing Risk Theory comprised of risk assessment, risk recognition, prioritization, protective interventions to keep patients safe. Understanding the work of nurses is critical to keeping patients safe.

Author/Title	Setting / Participants	Conceptual Framework	Variables	Instruments and Psychometrics	Findings
Djukic, Kovner, Brewer, Fatehi, & Cline (2011) Work environment factors other than staffing associated with nurses' ratings of patient care quality	1,439 RNs working in 60 sites in 34 states in the US including DC	Work system design model (Carayon, 2009; Carayon et al., 2006)	RN ratings of patient care quality; 18 predictor variables	98-question survey designed to collect data about RN demographics, work environment, and market factors taken from multiple valid and reliable tools with Cronbach's alphas ranging from .70 to .948	Making changes in individual work environment factors can lead to improvements in RNs' ratings of patient care quality.
Digby, Bloomer, & Howard (2011) Improving call bell response times	Geriatric facility in Australia	Call bell response times impact patient falls	Call bell response times before and after interventions to reduce falls	No instruments or psychometrics provided. Nurse demographics questionnaire	Prioritizing call bell response and raising staff awareness improved the response to patient falls
Roche, Diers, Duffield, & Catling-Paull (2010) Violence toward nurses, the work environment, and patient outcomes	2,487 RNs from 94 nursing wards in 21 hospitals in 2 states in Australia	Nursing resources , workload, work environment, and patient outcomes	Nurses experiencing violence, source of violence, environmental factors, patient adverse events	Nursing Work Index-Revised (NWI-R) (Aiken et al., 2001). Cronbach's alphas .63-.83; Environmental Complexity Scale (ECS) (O'Brien-Pallas et al., 1997), Cronbach's alpha .56-.82.	Violence in the workplace is related to deficiencies in nursing practice and negative patient outcomes.
Lucero, Lake, and Aiken (2010) Nursing care quality and adverse events in US hospitals	Acute care hospitals in Pennsylvania, varied work settings; 10184 nurses 168 acute care hospitals in PA general, vasc, ortho patients: n=232,342; ages 20-85 years	Process of Care and Outcomes Model (PCOM), based on Donabedian (1988) view that interventions directly produce expected outcomes	Unmet nursing needs; nursing care quality indicator; nurses reports of adverse events (med errors, nosocomial infections, and falls	Secondary analysis of data collected in a 1999 Pennsylvania study of nurses' work settings. Nurse demographics questionnaire Parent study tools: Practice Environment Scale of the Nursing Work Index (PES-NWI). (Lake, 2002); no psychometrics provided Unmet Nursing Needs, (Lucero, et al., 2009). Cronbach's alpha 0.73	There was a significant association between unmet nursing care needs and each adverse event (med errors, nosocomial infections, and falls with injury)
Carroll, Dykes, & Hurley (2010) Patients' perspectives of falling while in an acute care hospital and suggestions for prevention	9 patients referred by nurses and who had fallen within 48 hours; cognitively intact; communication in English; 2 men and 7 women, ages 24-78 years Family members present	Patients' perceptions of falling	Interviews of patients within 48 hours of fall	Qualitative descriptive study. Nurse demographics questionnaire	Two themes emerged as to why patients fell: need to toilet coupled with loss of balance and unexpected weakness. Other themes, not having everything within reach and no response to call bell; did not want to bother nurse; not aware patient was at risk to fall.....missed nursing care
Kalisch, Landstrom, & Williams (2009) Missed nursing care: errors of omission	459 nurses in 3 Michigan hospitals; multiple in-patient unit types	Missed nursing care leads to poor patient outcomes, based on Donabedian (1988)	Missed nursing care Reasons for missed nursing care	MISSCARE survey, (Kalisch & Williams, 2009) to measure missed nursing care, Cronbach's alpha .75. Nurse demographics questionnaire	Assessments missed by 44% respondents; interventions/basic care/planning missed by 70% respondents. Communication was one reason: breakdowns among nursing team, inadequate handoff between shifts and transferring units
Dykes, Carroll, Hurley, Benoit, & Middleton (2009) Why do patients in acute care hospitals fall? Can falls be prevented?	4 focus groups with 23 nurses and 4 focus groups with 19 nursing assistants in 4 acute care hospitals, 2 urban academic medical centers, 2 suburban teaching hospitals			Nurse demographics questionnaire; Qualitative study with focused questioned groups	6 concepts including information access and teamwork; Information access: poor or no handoff between shifts or RN/NA; Teamwork: failure to cover for each other or to assist each other in caring for other's patients; no response to other patients' call bells87

Author/Title	Setting / Participants	Conceptual Framework	Variables	Instruments and Psychometrics	Findings
Rush, Robey-Williams, Patton, Chamberlain, Bendyk, & Sparks (2008) Patient falls: acute care nurses' experiences	15 nurses with diversity in terms of age, years of experience, educational background and current nursing position: inpatient general med/surg units	Nurses' perspectives of patients' falls	6 semi-structured questions pertaining to falls and nurses' perception and experience	Qualitative descriptive study; focus group discussions. Nurse demographics questionnaire	Major theme: knowing the patient as safe thru risk assessment, monitoring, communication. Poor staffing was a variable for monitoring patients closely. High nurse:pt ratios increase risk of falls and depend on nurses working as a team. Non-responsiveness to patients' requests for help was a variable under communication.

Appendix B

Negative Acts Questionnaire Revised-United States (NAQR-US)

The following behaviors are often seen as examples of negative behaviors in the workplace. Over the last six months, how often have you been subjected to the following negative acts at work?

Please check the number that best corresponds with your experience over the last six months:

1	2	3	4	5
Never	Now and then	Monthly	Weekly	Daily

	1	**2**	**3**	**4**	**5**
1) Someone withholding information which affects your performance					
2) Being humiliated or ridiculed in connection with your work					
3) Being ignored or excluded					
4) Being exposed to an unmanageable workload					

Used by permission of Shellie R. Simons, PhD, RN

Appendix C

Demographic Questionnaire

1. Sex:
   - ☐ Male
   - ☐ Female

2. Age in years:
   - ☐ 20-39
   - ☐ 40-59
   - ☐ 60-79

3. Years as RN: _____

4. Years at PMC: _____

5. Hours worked:
   - ☐ Full time
   - ☐ Part time
   - ☐ Per diem

6. Highest nursing degree:
   - ☐ Diploma
   - ☐ Associate
   - ☐ Bachelor
   - ☐ Master
   - ☐ Doctorate

7. Professional Certification:
   - ☐ Yes

   Type of certification: _____
   - ☐ No

8. Area Worked:
   - ☐ PMC - Tower 8
   - ☐ PMC - Tower 7
   - ☐ PMC - Intermediate Care Unit
   - ☐ PMC - Critical Care Unit
   - ☐ PMC - Tower 5
   - ☐ PMC - Trauma Intensive Care Unit

Appendix D

Palomar Pomerado Health Investigational Review Committee Application

Palomar Pomerado Health Investigational Review Committee
Application for Expedited Review for a
Quality Improvement or Evidence Based Practice Project

Version Date 05/01/09

(Enter text in the **white space areas** below each numbered heading bar. **Expand the size of table cells as needed** – to multiple pages if needed.
See accompanying Instructions for explanation of headings and information to be provided)

1. PROJECT TITLE

The Relationship Between Lateral Violence Among Registered Nurses and Clinical Outcomes

2. PRINCIPAL INVESTIGATOR and CO-INVESTIGATORS/PRINCIPLE PROJECT COORDINATOR/CO-COORDINATOR

Project Coordinator: Ann Rocha, RN, MSN, CNS-BC, Center for Nursing Excellence; Sponsor: Brenda Fischer, RN, PhD, Director, Center for Nursing Excellence; Co-coordinator: Kathleen Stacy, RN, PhD, CNS

3. FACILITIES

Palomar Medical Center

4. PURPOSE OF THE DATA REQUEST/COLLECTED FOR QUALITY IMPROVEMENT OR EVIDENCE BASED PRACTICE

A survey consisting of demographic data, 4 item questionnaire (Negative Acts Questionnaire Revised-United States) relating to negative behaviors in the workplace, 1 open ended question requesting RNs answering yes to any of the 4 items to "share your story and feelings," will be sent through Survey Monkey via PPH email to RNs working at Palomar Medical Center with the exception of NICU/Pediatrics. Approximately 6 weeks will be given to complete the survey with reminders sent by PPH email after 4 weeks. Data will be analyzed by unit and then compared to NDNQI unit specific patient outcome data, in particular hospital acquired skin conditions and falls, to see if there is a relationship between lateral violence and patient outcomes. Depending on the findings, unit-specific education can be provided to stop the occurrence of lateral violence among RNs.

5. DATA, DOCUMENTS, RECORDS, OR SPECIMENS IDENTIFICATION

No patient information or medical records will be accessed. Data obtained from RNs at PMC will have no personal identification and patient skin/falls data also contains no identification and comes from NDNQI of which PPH is a member.

6. PLANS FOR DISSEMINATION OF RESULTS WITHIN/OUTSIDE THE ORGANIZATION

There are no plans to disseminate the data obtained outside the organization. Prevalence of lateral violence and the relationship to patient outcomes synthesized data will be offered to nursing leadership within PPH as an area of interest and possible future action.

Appendix E

Palomar Pomerado Health Investigational Review Committee Approval Letter, December 2011

MEDICAL STAFF SERVICES

PALOMAR
POMERADO
HEALTH

December 8, 2011

Ann Rocha, R.N.
Center for Nursing Excellence
Palomar Pomerado Health
15255 Innovation Drive
San Diego, CA 92128

RE: The Relationship Between Lateral Violence Among Registered Nurses and Clinical Outcomes

Dear Ms. Rocha:

Thank you for providing me information regarding your above-mentioned project. As Chairman of the Palomar Pomerado Health Investigational Review Committee (PPH IRC) I have reviewed the information and determined that the design of the project will be able to fulfill the outcomes and I see no ethical issues that would prevent it from moving forward. As the project is a quality improvement activity and not research, the study will not require oversight by the PPH IRC.

I will forward this information to Deborah Barnes, Director of Quality Management. Please notify the Quality Management Department of the results of this Quality Improvement project when it is completed. If you should decide to publish or present the results at a conference or in a public forum outside PPH in the future, please notify the Quality Officer, Opal Reinbold.

Sincerely,

Richard G. Just, M.D.
Chairman, Palomar Pomerado Health Investigational Review Committee

cc: Deborah Barnes, R.N.

PALOMAR MEDICAL CENTER
555 East Valley Parkway, Escondido, CA 92025
Tel 760.739.3140 Fax 760 739.2926

POMERADO HOSPITAL
15615 Pomerado Road, Poway, CA 92064
Tel 858.613.4664 Fax 858.613.4217

A California Health Care District

Appendix F

Permission to Use NAQR-US, Personal Correspondence with S. Simons, PhD, RN, October 2011

-----Original Message-----
From: Rocha, Ann [mailto:Ann.Rocha@pph.org]
Sent: Tuesday, October 25, 2011 12:08 PM
To: Simons, Shellie R
Subject: Re: Lateral Violence

Absolutely, Shellie and accept my heartfelt thanks.

Ann

Sent from my Verizon Wireless Phone

----- Reply message -----
From: "Simons, Shellie R" <Shellie_Simons@uml.edu>
Date: Tue, Oct 25, 2011 06:23
Subject: Lateral Violence
To: "'Rocha, Ann"' <Ann.Rocha@pph.org>

Ann-
Absolutely - with the one stipulation that you send me the results of your project using the 4-item instrument after you're finished. I am very interested in following its usefulness in practice. Let me know & I will send it along.
Good luck- Shellie

From: Rocha, Ann [mailto:Ann.Rocha@pph.org]
Sent: Monday, October 24, 2011 8:05 PM
To: Simons, Shellie R
Subject: FW: Lateral Violence

Would you be willing to let me use your instrument as part of my research project? Thanks.

Ann Rocha, RNC-OB, MSN, CNS-BC
Clinical Nurse Specialist
Pomerado Hospital
Birth Center
Office: 858-613-4477
Pager: 760-781-9390
ann.rocha@pph.org<mailto:ann.rocha@pph.org>

Appendix G

Palomar Health Investigational Review Committee Study Approval Letter, November 2013

PALOMAR HEALTH
Medical Staff Services

November 15, 2013

Elizabeth Rocha, R.N.
Center for Professional Practice
Palomar Health
15525 Innovation Drive
San Diego, CA 92128

RE: Relationship Between Horizontal Violence among Registered Nurses and Falls

Dear Ms. Rocha:

The Palomar Health Investigational Review Committee, in its meeting of November 14, 2013, reviewed and approved the protocol for the above-mentioned study. The study was also granted a waiver of informed consent requirements as it was determined that the criteria in 45CFR46.116(d) have been satisfied. The study was approved to be conducted at Palomar Medical Center.

Prior to initiation of the study, approval must also be obtained from the Administration of the Hospital(s) involved. Studies approved by the Investigational Review Committee may not proceed until after administrative approval is obtained. Please contact Melissa Wallace at (760) 480-7988 for information on the administrative review process. Study specific laboratory and imaging studies that will be performed as part of the study are required to be ordered on the appropriate form.

The Palomar Health Investigational Review Committee is in compliance with Federal Rules and Regulations and operates in accordance with Good Clinical Practices. Approval of this protocol and informed consent is effective for one (1) year from the initial approval and may not proceed past November 14, 2014 without reapproval by the Palomar Pomerado Investigational Review Committee.

Sincerely,

Richard G. Just, M.D.
Chairman, Investigational Review Committee

Appendix H

Palomar Health Administrative Approval Letter, December 2013

From: Wallace, Melissa <Melissa.Wallace@palomarhealth.org>
Sent: Monday, December 09, 2013 10:03 AM
Subject: Administrative Approval

Ann,

This email is to inform you that there are no outstanding administrative review items. As such, you have been granted administrative approval to begin your study, titled "The Relationship Between Lateral Violence Among Registered Nurses and Clinical Outcomes." Please note that as the Principal Investigator and a Palomar Health employee, you are responsible for implementing the study and coordinating with any departments who are impacted by it.

Thank you,

Melissa Wallace
Manager Revenue Cycle Analytics
Palomar Health
2227 Enterprise Street
Escondido, CA 92029
(760) 480-7988
melissa.wallace@pph.org

Appendix J

NAQR-US Survey Results by Unit

Tower 8 (T8) Q1	Never (1)	9	(60%)
Withholding Information	Now and Then (2)	5	(33%)
	Monthly (3)	0	
	Weekly (4)	1	(7%)
	Daily (5)	0	
	Total	15	
T8 Q2	Never (1)	9	(60%)
Humiliated or Ridiculed	Now and Then (2)	6	(40%)
	Monthly (3)	0	
	Weekly (4)	0	
	Daily (5)	0	
	Total	15	
T8 Q3	Never (1)	5	(33%)
Ignored or Excluded	Now and Then (2)	9	(60%)
	Monthly (3)	1	(7%)
	Weekly (4)	0	
	Daily (5)	0	
	Total	15	
T8 Q4	Never (1)	3	(20%)
Unmanageable Workload	Now and Then (2)	6	(40%)
	Monthly (3)	2	(13%)
	Weekly (4)	2	(13%)
	Daily (5)	2	(13%)
	Total	15	
Tower 7 (T7) Q1	Never (1)	11	(55%)
Withholding Information	Now and Then (2)	7	(35%)
	Monthly (3)	1	(5%)
	Weekly (4)	1	(5%)
	Daily (5)	0	
	Total	20	
T7 Q2	Never (1)	15	(75%)
Humiliated or Ridiculed	Now and Then (2)	5	(25%)
	Monthly (3)	0	
	Weekly (4)	0	
	Daily (5)	0	
	Total	20	

NAQR-US Survey Results by Unit

T7 Q3	Never (1)	15	(75%)
Ignored or Excluded	Now and Then (2)	5	(25%)
	Monthly (3)	0	
	Weekly (4)	0	
	Daily (5)	0	
	Total	20	
T7 Q4	Never (1)	7	(35%)
Unmanageable Workload	Now and Then (2)	8	(40%)
	Monthly (3)	3	(15%)
	Weekly (4)	2	(10%)
	Daily (5)	0	
	Total	20	
IMCU Q1	Never (1)	24	(67%)
Withholding Information	Now and Then (2)	11	(30%)
	Monthly (3)	1	(3%)
	Weekly (4)	0	
	Daily (5)	0	
	Total	36	
IMCU Q2	Never (1)	26	(72%)
Humiliated or Ridiculed	Now and Then (2)	9	(25%)
	Monthly (3)	1	(3%)
	Weekly (4)	0	
	Daily (5)	0	
	Total	36	
IMCU Q3	Never (1)	27	(75%)
Ignored or Excluded	Now and Then (2)	8	(22%)
	Monthly (3)	0	
	Weekly (4)	1	(3%)
	Daily (5)	0	
	Total	36	
IMC Q4	Never (1)	12	(33%)
Unmanageable Workload	Now and Then (2)	16	(44%)
	Monthly (3)	3	(8%)
	Weekly (4)	5	(14%)
	Daily (5)	0	
	Total	36	

NAQR-US Survey Results by Unit

CCU Q1	Never (1)	31	(74%)
Withholding Information	Now and Then (2)	9	(21%)
	Monthly (3)	1	(2%)
	Weekly (4)	1	(2%)
	Daily (5)	0	
	Total	42	
CCU Q2	Never (1)	24	(57%)
Humiliated or Ridiculed	Now and Then (2)	13	(31%)
	Monthly (3)	4	(10%)
	Weekly (4)	1	(2%)
	Daily (5)	0	
	Total	42	
CCU Q3	Never (1)	23	(55%)
Ignored or Excluded	Now and Then (2)	14	(33%)
	Monthly (3)	2	(5%)
	Weekly (4)	3	(7%)
	Daily (5)	0	
	Total	42	
CCU Q4	Never (1)	18	(43%)
Unmanageable Workload	Now and Then (2)	22	(52%)
	Monthly (3)	1	(2%)
	Weekly (4)	1	(2%)
	Daily (5)	0	
	Total	42	
Tower 6 (T6) Q1	Never (1)	9	(47%)
Withholding Information	Now and Then (2)	8	(42%)
	Monthly (3)	0	
	Weekly (4)	1	(5%)
	Daily (5)	1	(5%)
	Total	19	
T6 Q2	Never (1)	9	(42%)
Humiliated or Ridiculed	Now and Then (2)	8	(42%)
	Monthly (3)	0	
	Weekly (4)	0	
	Daily (5)	2	(11%)
	Total	19	

NAQR-US Survey Results by Unit

T6 Q3	Never (1)	8	(42%)
Ignored or Excluded	Now and Then (2)	7	(37%)
	Monthly (3)	0	
	Weekly (4)	1	(5%)
	Daily (5)	3	(16%)
	Total	19	
T6 Q4	Never (1)	4	(21%)
Unmanageable Workload	Now and Then (2)	11	(58%)
	Monthly (3)	1	(5%)
	Weekly (4)	3	(16%)
	Daily (5)	0	
	Total	19	
Tower 5 (T5) Q1	Never (1)	27	(75%)
Withholding Information	Now and Then (2)	6	(17%)
	Monthly (3)	0	
	Weekly (4)	2	(6%)
	Daily (5)	1	(3%)
	Total	36	
T5 Q2	Never (1)	24	(67%)
Humiliated or Ridiculed	Now and Then (2)	6	(17%)
	Monthly (3)	1	(3%)
	Weekly (4)	2	(6%)
	Daily (5)	3	(8%)
	Total	36	
T5 Q3	Never (1)	20	(56%)
Ignored or Excluded	Now and Then (2)	7	(19%)
	Monthly (3)	5	(14%)
	Weekly (4)	2	(6%)
	Daily (5)	2	(6%)
	Total	36	
T5 Q4	Never (1)	10	(28%)
Unmanageable Workload	Now and Then (2)	14	(39%)
	Monthly (3)	1	(3%)
	Weekly (4)	5	(14%)
	Daily (5)	6	(17%)
	Total	36	

Appendix K

Falls Data by Unit

Total Falls:	55	
Falls with Injury:	14	
Falls without Injury:	41	
T8	1	With Injury
	10	Without Injury
Total Falls	11	
T7	1	With Injury
	3	Without Injury
Total Falls	4	
IMCU	3	With Injury
	11	Without Injury
Total Falls	14	
CCU	1	With Injury
	1	Without Injury
Total Falls	2	
T6	1	With Injury
	2	Without Injury
Total Falls	3	
T5	14	With Injury
	7	Without Injury
Total Falls	21	