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Research Article

Impact of Fall Prevention on Nurses and Care of Fall Risk Patients

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Abstract

Purpose of the Study: Falls are common events for hospitalized older adults, resulting in negative outcomes both for patients and hospitals. The Center for Medicare and Medicaid (CMS) has placed pressure on hospital administrators by identifying falls as a "never event", resulting in a zero falls goal for many hospitals. Staff nurses are responsible for providing direct care to patients and for meeting the hospital no falls goal. Little is known about the impact of "zero falls" on nurses, patients and the organization.

Design and Methods: A qualitative study, using Grounded Dimensional Analysis (GDA) was conducted to explore nurses' experiences with fall prevention in hospital settings and the impact of those experiences on how nurses provide care to fall risk patients. Twenty-seven registered nurses and certified nursing assistants participated in in-depth interviews. Open, axial and selective coding was used to analyze data. A conceptual model which illustrates the impact of intense messaging from nursing administration to prevent patient falls on nurses, actions nurses take to address the message and the consequences to nurses, older adult patients and to the organization was developed.

Results: Intense messaging from hospital administration to achieve zero falls resulted in nurses developing a fear of falls, protecting self and unit, and restricting fall risk patients as a way to stop messages and meet the hospital goal.

Implications: Results of this study identify unintended consequences of fall prevention message on nurses and older adult patients. Further research is needed understand how nurse care for fall risk patients.

Keywords: Falls, Hospital/ambulatory care, Nursing, Qualitative analysis: Grounded Theory

Falls in older adults are a major public health concern often resulting in longstanding pain, functional impairment, disability, premature nursing home admission, increased length of stay in hospitals, and mortality (Inouye, Brown, & Tinetti, 2009; Mahoney, 1998; Oliver, Hopper, & Seed, 2000). Patient falls in hospitals are common with rates varying from 3 to 17.1 falls per 1,000 beds days (Halfon, Eggli, Van Melle, & Vagnair, 2001; Oliver et al., 2000). A longitudinal study using National Database of Nursing Quality Indicators (NDNQI) data collected from 2004 to 2009 found a decrease in overall patient fall rates (He, Dunton, & Staggs, 2012). However, falls in hospitals commonly occur in adults older than 65 years (MacCulloch, Gardner, & Bonner, 2007). In hospitalized older adults, falls have steadily increased over the past 3 decades with numbers projected to rise significantly due to substantial increases in the aging population (Wanless, 2006).

The occurrence of patient falls has been identified by Centers for Medicare and Medicaid Services (CMS) as one of eight "never events" for hospital settings. Never events are high-cost, high-volume events that could be reasonably

prevented by the application of evidence-based guidelines (Rosenthal, 2007; Waters et al., 2015). A recent impact assessment, however, found that the CMS policy has had no effect on the rates of injurious falls, perhaps because there are no evidence-based practice guidelines for fall prevention (Waters et al., 2015), and few intervention studies have been conducted on fall prevention in hospital settings with minimal evidence to inform practice. Of those conducted, results have been mixed. A 2012 Cochrane review (Cameron et al., 2012) found that multifactorial programs are effective for patients who have a longer length of stay, but no recommendations could be made for any component of these programs. Other systematic reviews found that either there was no conclusive evidence that fall prevention programs reduce the number of falls (Coussement et al., 2008) or that multifaceted interventions may have a modest effect on falls, but not on fractures (Oliver et al., 2007).

In hospitals, patient falls have a multifactorial etiology that can be subdivided into three categories: (a) physiological anticipated (gait instability, fall history, and current risk for falls); (b) physiological unanticipated (fainting); and (c) environmental (external hazards or equipment failure) (Oliver et al., 2000). In addition, individual inpatient units have unique characteristics related to type of patients, staffing ratios, model of care, environment, and equipment availability, which also affect patient fall rates (Oliver et al., 2000). Due to the complexity of falls in hospital settings, a one-size-fits-all approach to reducing or preventing patient falls may not be feasible.

Staff nurses may have the greatest impact on reducing patient falls. Due to their 24-hr presence, nurses have the most consistent contact with patients and continually monitor for conditional changes. However, no research has been conducted on how nurses approach fall prevention or the multiple strategies they use to reduce the risk or prevent falls in older adult patients. When falls occur, nurses often become the "second victim" expressing increased stress, anxiety, guilt, concern for liability, and self-doubt about the quality of care they provide (Brians, Alexander, Grota, Chen, & Dumas, 1991). The American Nurses Association (1999) and the National Quality Forum (2004) use patient falls as a nursing-sensitive quality indicator, placing the responsibility for patient falls directly on nursing staff. This blame, along with potential pressure from administration to reduce falls due to CMS penalties may alter how nurses care for fall risk patients.

The purpose of this Grounded Dimensional Analysis (GDA) study was to explore nurses' experiences with fall prevention in hospital settings and the impact of those experiences on how nurses provide care to fall risk patients. The model developed in this study illustrates the impact on nurses of intense messaging from nursing administration to prevent falls and the consequences to older adult patients, staff nurses, and the organization.

Methods

Before conducting the study, Institutional Review Board approval was obtained. The study was initiated on July, 2013 and completed on December, 2014. GDA, a variant of Grounded Theory (Bowers & Schatzman, 2009), was used to explore acute care nurses' experiences with fall prevention and how those experiences influenced care of older adult fall risk patients. Similar to Grounded Theory, GDA is informed by symbolic interactionism which focuses on exploring how individuals assign meaning based on interactions with others and actions taken based on those interpretations (Blumer, 1998). GDA is particularly well suited to discovery in areas where little is known and the focus is on individuals' understandings and perceptions. GDA uses a cyclic process for sampling (open and theoretical), data collection, and analysis (open, axial, and selective; Strauss, 2008). Unlike Grounded Theory, open coding tends to continue longer during GDA to avoid early narrowing of focus and premature closure. Maintaining open coding is strategically done to explore "what all is involved" (Schatzman, 1991). For this study, open coding was continued through the fifth interview. The end result of a GDA study is the creation of a conceptual model which explains the interaction among the primary components of a social process (Strauss, 2008).

Setting

Data were collected from two hospitals located in Wisconsin. The study sites differed in the number of patient days for people older than 65 years and in bed capacity. Site A bed capacity is 530 with a reported percentage of patient bed days for adults older than 65 years of 34.3%. Site B bed capacity is 81 beds with a reported percentage of patient bed days for adults older than 65 years of 54.4%. Both hospitals are designated as teaching hospitals and have a nurse to patient ratio of 1:4.

Recruiting

Several recruitment strategies were used, including announcing the study at unit meetings (staff meetings and unit council meetings), e-mail invitations, and flyers placed in nursing staff mailboxes. In the early phase, recruitment was open to all members of the nursing staff who care for patients identified as fall risk on the participating units. Open sampling techniques were used to uncover as many relevant categories and dimensions as possible (Strauss, 2008). As categories were developed, theoretical sampling was used to ensure density of categories, capture variation in how nursing staff perceived and cared for fall risk patients, and further the development of a conceptual model (Strauss, 2008). For example, staff registered nurses (RNs) who served in formal leadership roles (charge nurse, care team leader, and representative on a falls committee) seemed to perceive fall risk patients differently than nurses in nonleadership roles and described promoting patient mobility as a means of preventing falls, rather than limiting patient mobility. The researcher actively sought out these RNs by asking nurse managers on inpatient units to provide names of individuals who served in a leadership capacity. Further, there was a noticeable difference between RNs

and certified nursing assistants (CNAs) in how they described their experiences with patient falls and how fall prevention was implemented on their units. As RNs expressed feeling more responsible and frustrated with increased additional work resulting from patient falls and were more descriptive in how they restricted patient activity compared with CNAs, a methodological decision was made to increase recruitment and sampling of RNs. Recruitment and sampling continued until saturation was reached, and fresh data no longer revealed new theoretical insights or new properties of the categories (Charmaz, 2014).

Sample

The sample consisted of 27 RNs and CNAs who were employed on a medical, surgical, or medical/surgical adult inpatient unit and caring for patients aged 65 years and older. Site A sample consisted of 2 nurse managers, 1 clinical nurse specialist (CNS), 2 CNAs, and 11 RNs. Site B sample consisted of 10 RNs and 1 charge nurse (management). This study did not collect participant demographic data. In a Grounded Theory study, deciding who to sample is based on the dimensions that are salient to the categories that emerge from the data (Strauss, 2008).

Data Collection and Analysis

In GDA, data collection and analysis occur iteratively. In-depth, one-on-one interviews (N = 22 participants) and a focus group (N = 5 participants) lasting approximately 30–60 min were conducted. All interviews were held in a private office and were audio recorded and transcribed verbatim. Unstructured open-ended questions were used initially. For example, all participants were asked, "What is it like for you to take care of an older adult patient who is identified as a fall risk"? Based on the participant responses, additional broad questions were asked to help identify all possible dimensions of participant experiences. Most participants described fall risk patients as burdensome and making them feel nervous when providing care during their work shift. Focused questions were asked once initial categories and dimensions had been labeled. For example, with fear of falls category, focused questions included, "Some nurses have described feeling like they would get into trouble if their patient fell, have you experienced this? Can you describe for me your concerns about getting into trouble"?

Data were analyzed using open, axial, and selective coding (Strauss, 2008). Open coding involved a line-by-line analysis to break down the data into concepts. Similar concepts were grouped into categories. Axial coding involved identifying properties and dimensions of categories answering questions related to when, where, who, how, and with what consequences (Strauss, 2008). Axial coding allowed the researcher to describe nurses' experience with caring for fall risk patients with great detail and provided linkages between categories. Selective coding was used to systematically relate all categories to each other and to finalize the conceptual model.

Several strategies were used to ensure rigor of the study. Data were analyzed within a group experienced with GDA who were skilled at identifying researcher imposed categories not grounded in the data, making it less likely that preconceived assumptions would be imposed. Memoing was used throughout to inform sampling, data collection, and analysis; record analytic decisions; and provide a record of how decisional matrixes evolved to describe the relationship among categories. Member checking was used during focused interviews. At the end of interviews, participants were shown a decisional matrix which identified categories and asked to provide feedback on missing properties or dimensions and suggest any alternative explanations for interactions among categories. Finally, each category and the relationships among categories were tested by locating supportive quotes from multiple interviews (Strauss, 2008).

Results

All participants stated that the goal within their institution was "zero falls." Falls were defined by staff nurses as any occurrence in which the patient descends to the floor. Many nurses described frustration in this definition, because even if a patient was intentionally lowered to the floor to prevent injury, the event was counted against them. There was variation within and between institutions in the pressure nurses experienced related to meeting an institution's goal. Nurses who worked on inpatient adult units with high fall rates described experiencing intense pressure, in the form of frequent messages from nursing administration (senior-level and midlevel), to "get the number down." The more intense the message, the more they altered their nursing care by restricting patient mobility—an upright, mobile patient is one who can fall. Conversely, nurses who worked on inpatient adult units with low fall rates did not experience similar pressures. These nurses engaged in behaviors to promote and encourage independent patient mobility regardless of whether the patient was identified as fall risk. How nurses respond to fall prevention messages delivered by nursing administration is illustrated in Figure 1.

Fall Message

Participants consistently identified their units as being labeled either a high- or a low-fall unit. Nurses stated that the label of high- or low-fall unit was communicated to them by nursing administration. Being identified as a high-fall unit occurred if the unit had more than 2 falls monthly, whereas low-fall units had occasional falls, every 3–6 months. Intensity of the zero falls message was related to how often the message was sent, who sent the message, and the message tone (positive or negative). The tone delivered to high-fall units was often blame and shame and targeted individual staff involved in patient falls. Such

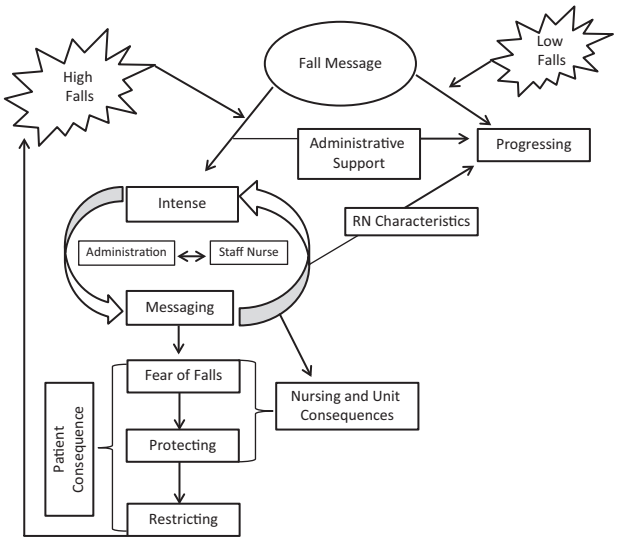

Figure 1. Acute care nurse perceptions of fall prevention.

messaging led nurses to develop a fear of falls and a need to protect themselves and the unit from being labeled as a bad unit. For nurses on high-fall units, the best way to achieve the hospital goal and stop the message was to restrict patient mobility.

In contrast, the fall message was experienced differently by nurses who worked on low-fall units. For these nurses, the message was positive because they were meeting the hospital goal. When falls did occur, nurses on low-fall units did not describe feeling blamed or shamed, but rather stated the focus was on identifying problems within the unit (environmental) or the patient (weakness) that may have contributed to the fall. Nurses on low-fall units did not talk about protecting self and unit. Instead of restricting patients, they described promoting patient ambulation with the goal of progressing patients.

Intense Messaging

Patient falls triggered a cascade of messages from a variety of sources, senior nursing administration (chief nursing officer, director of inpatient services, and director of quality and safety), midlevel nursing administration (nurse manager and CNS), and unit level (charge nurse) about why falls continued to occur. Table 1 identifies the source of the message and the frequency of occurrence. On high-fall units, the frequency of messages about falls was intense and occurred on a daily, weekly, and monthly basis, as well as after every fall. The flow of messages occurred between senior-level and midlevel nurse administration, senior nursing administration to staff RNs on the unit, midlevel nursing administration to staff RN, and staff RN to other RNs, and CNAs on the unit. Messages were delivered by several means, in person (shift report, post fall huddle, unit and hospital wide meetings, and post fall investigation); phone (to notify midlevel manager of fall); e-mail (to all hospital units that a fall occurred); and public postings (number of fall free days on each unit). Because of the intense fall reduction message, RNs on high-fall units stated they often over identify fall risk patients leading to an overwhelming list of patients for whom nurses felt they must take extra precautions to ensure falls did not occur on their shift.

> "On a unit like mine, we have a lot of people that are always identified as fall risk. I think out of 28 people we have 25 high fall risk" (Interview 6).

Daily messages also occurred as posting of fall free days. The unit's progress of how many days without having a patient fall is displayed to everyone on the unit (nursing staff, other health care providers, patients, and family members), because it is posted in a prominent location next to the nurses station. Even when the unit made good progress by going multiple days without a fall, many nurses described a sense of heightened anxiety around not wanting to be the one who ended the "streak." When a fall occurred, seeing a zero posted was interpreted by nurses as failure and having to start all over again.

> "That zero is really awful to see, you have to start all over again, you don't want to see a zero" (Interview 5).

Weekly and monthly messages were delivered in meetings, such as monthly unit staff meetings, monthly unit council meetings (attended by a staff RN representative from various inpatient units), and weekly nursing leadership meetings (between midlevel and senior nursing administration), or in the monthly hospital falls report e-mailed to all staff nurses and nurse administrators employed in the organization. These messages compared unit to unit success or failure in meeting the hospital goal, announced when and where falls had occurred, and served as an additional source of pressure on high-fall units. Staff RNs from high-fall units who participated in monthly meetings often described feeling frustrated that their unit was identified as a "bad" unit.

> "When I go to unit council, I can see the scores and see that my unit is one of the higher units…other people look at it and compare themselves…'oh look at this unit'. It makes us feel bad" (Interview 10).

Monthly meetings that included only senior-level and midlevel nursing administration often led to midlevel managers feeling blamed that their units were not meeting the goal and could jeopardize the hospital Magnet status designation.

> "And we met, there was a lot of push 'falls aren't okay' and we met for about an hour and a half and it was pretty negative. I remember it being painful" (Interview 1).

Staff RNs also have to notify senior-level and midlevel nursing administration every time a fall occurs. Staff RN

Table 1. Source of Messaging

Messaging	Low-fall unit	High-fall unit
Routine		
At the beginning of each shift, the charge nurse announces to all nursing staff which patients are at risk for falling		X
Daily e-mail from senior administration to all nursing staff and administration about falls that have occurred		X
Daily posting of number of "Fall free days" in a common space that is visible to everyone, including patients		X
Weekly e-mail from senior administration to all nursing staff and midlevel administration about falls that have occurred		X
Monthly discussion of patient falls during unit council meetings between midlevel administration and nursing staff representatives	X	X
Monthly discussion of patient falls during unit level meetings between midlevel administration and nursing staff		X
Monthly discussion of patient falls during nursing leadership meetings between midlevel administration and senior administration	X	X
Triggered by fall		
Post fall huddle		X
Nurse documents fall in an error reporting system that is sent to midlevel administration and senior administration	X	X
Nurse calls midlevel administrator post fall, anytime day/night		X
E-mail from senior administration to midlevel administration about fall event		X
Investigation about the fall event by midlevel administration		X

notifications occur in the form of a patient safety net (PSN) report and an additional two-page explanation of the fall event. Further, staff nurses on high-fall units must call the unit manager (at any time of the day or week) to report that their patient fell and participate in a personal investigation to determine what the nurse could have done differently to prevent the fall. This process of having to announce a fall made nurses feel they were being scrutinized.

> "They look at every aspect. They're looking at your charting. They're looking were they on the fall risk, did they have that wristband on and were you on top of it? I think people just feel like they're under the microscope, which they are" (Interview 9).

After every fall, the messaging intensified because the nurse and the unit are perceived by administration as not doing enough to prevent patient falls. Nurses described increasing intensity of the message as receiving more e-mails from midlevel and senior-level nurse administrators about patient falls, and increasing discussion about patient falls during shift report and unit staff meetings. Nurses on high-fall units stated that falls were always perceived as negative, regardless of the circumstances, even when they were able to safely lower a patient to the ground to avoid injury.

> "Somebody had a non-epileptic seizure…I lowered her to the ground…so that was a fall and ruined our score card…all I saw was a ceramic bathroom and a seizing patient…it should be like 'good job' but instead it was negative, negative, negative" (Interview 21).

Impact of Fall Message on Nursing Practice

Due to the continual flow and intensity of messages related to patient falls, many nurses on high-fall units identified that they had developed a "fear of falls." Nurses described fear of falls as concern for and the resulting reprimand if a fall occurred; job security for themselves, unit manager, or CNS; and public exposure of their error to other nurses and hospital administration. Concern for reprimand seemed to be related to the investigation that followed after a patient fell. Nurses had to account in detail all that transpired before, during, and after the fall. This included details about the patient, whether precautions (identifying patient as at risk for falls and placing a bed/chair alarm on the patient) were in place, what happened immediately before the fall and during the fall, and what would have prevented the fall. Nurses often internalized the investigation as personal and felt blamed for the fall event, frightened that they would get into trouble, and defeated.

> "She was tearing up, 'I promise I set the bed exit alarm, I promise, I promise'. Everyone is so afraid of getting into trouble" (Interview 3).

The overwhelming nature of fall investigations and the intensity of messages to reduce falls left nurses concerned that they would lose their job or their unit manager or CNS would be fired if falls continued to occur. The concern for job security was a common statement expressed by nurses, even though they could not identify anyone who had been fired due to patient falls.

> "I'm going to get fired…my unit's going to be the one on the bad list. Somebody from administration is going to come down and we are going to get reamed out. All of a sudden somebody is going to be gone" (Interview 1).

Public exposure occurred when nurses had to announce to the unit nursing staff, to other health care providers (physicians and case managers) or to senior nursing administration that their patient fell. Public announcement occurred during post fall huddle, interdisciplinary rounds, and through e-mails sent to senior nursing administration. Announcements in the form of e-mails were also made to the entire hospital. A post fall huddle involved gathering all nursing staff members who were working during the shift, identify that a patient fell, discuss the causes of the fall, and how the fall event could have been prevented. The post fall huddle was initiated by the nurse who was caring for the patient who fell. Other times nurses had to announce during interdisciplinary rounds that their patient fell. As with fall huddles, nurses had to recount to interdisciplinary health care providers all that transpired before, during, and after the fall.

> "A nurse told me that she had to stand up in front of the health care team, physicians, nurses, medical students, and case manager, and tell them that her patient fell. It was awful, she was traumatized" (Interview 18).
> "If we had a fall it went hospital wide… it was embarrassing. A lot of people felt that was shaming us or blaming us" (Interview 21).

Ultimately, fear of falls resulted in nurses being fearful to care for fall risk patients. Fall risk patients were seen as a threat to nurses in terms of increased workload, blame, and continued flow of negative messages. Fear of falls resulted in nurses altering their practice to protect themselves and the unit.

Protecting

Nurses primarily protected themselves from the increase in workload that occurred when the nurse had to notify multiple persons in administration that a fall happened, complete several pages of the incident report, call a post fall huddle to discuss the event, and begin the fall investigation. The increase in time demands to notify, document, and investigate, interrupted the nurses' workflow, putting them even further behind in care duties for all of his/her patients.

> "It increases workload when you have a fall and you have to do all those things, the PSN, the phone, and the huddle" (Interview 13).
> "You're already feeling bad that your patient fell. So you're going to get behind now with your work that already was out of control" (Interview 8).

Nurses protected the unit from being identified as a "bad" unit by trying to keep the fall number down. One predominant strategy used by nurses to protect the unit was to pressure all staff to urgently respond when a bed/chair alarm sounded. Nurses rationalized that if someone got to the patient "in time," a fall would be prevented and their unit numbers would continue to look good to administration. The urgency to respond to alarms led to staff stopping whatever they were doing and running to the source of the alarm. This often resulted in chaos on the unit with multiple staff members running down the hallway at the same time. The need to run to alarms was reinforced among nursing staff and came as a directive from nurse managers. The urgency to respond to alarms put even greater stress on nursing staff and increased their anxiety about caring for fall risk patients.

> "Literally the CNS and nurse manager, they look at you and say, 'I expect you to run into that room, I expect you to move faster'" (Interview 2).
> "You're just running down the hallways… We're all scattered all over the place trying to run to these alarms" (Interview 10).

Restricting

To meet the hospital zero falls goal, nurses on high-fall units often altered how they provided care to fall risk patients by restricting patient movement (containing patients or not allowing ambulation) and privacy. The most efficient way to prevent falls was to not allow fall risk patients to ambulate during their hospital stay. Most nurses described intentionally restricting patient ambulation as a primary strategy for fall prevention, even though they acknowledged that by doing so they could produce poor outcomes for patients in terms of loss of strength. For these nurses, the need to stop intense messaging from nursing administration and meet the hospital goal of zero falls superseded patient needs.

> "People are really scared, we can't have anybody fall, we don't walk our patients… and then when we do get them up they are weaker and we just shot ourselves in the foot" (Interview 21).

Nurses also restricted fall risk patient movement by containing them. Containing patients was used as a strategy when nurses wanted to get fall risk patients out of bed, but were unable to provide constant surveillance as directed by nurse managers. Containing patients was done by placing them in chairs they could not get out of or by placing patients in chairs next to the nursing station where someone could continually tell them to not get up.

> "When I want to get the patient up we use the naughty chair, when you put them in it they can't get out" (Interview 8).

Restricting patient privacy in the bathroom was also used as a strategy to prevent falls. The decision to restrict patient privacy came as a directive from nursing administration and

was based on number of falls that occurred in the patient bathrooms. Nurses stated that patients often objected to their presence in bathrooms and asked the nurse to leave. To get the patient to acquiesce, nurses' pointed out signs posted in bathrooms that indicated a nurse's presence was necessary for patient safety or appealed to the patient that a fall would increase their work or that the nurse would get into trouble.

> "Sometimes I joke around…if you fall there'll be a lot of paperwork for me" (Interview 10).

Progressing

In contrast, nurses on low-fall units focused on progressing rather than restricting patients. Progressing patients was described by nurses who worked on low-fall units and by some nurses on high-fall units who focused on the patient and not the fall numbers. Nurses who engaged in progressing patients did not describe fear of falls, need to protect self or unit, or restricting patients. Rather, these nurses focused on patient progression in terms of functional ability and viewed ambulation as a means to maintain the patient's independence and discharge to home. Nurses progressed patients by maintaining physical strength and promoting safe mobility. Maintaining strength was achieved by getting patients up and out of bed at least to a chair and walking early and often. Maintaining strength was seen as a necessity for independence upon discharge and as a strategy to decrease risk for falls.

> "If you're somebody who needs six walks, I don't care if you're a fall risk, we need to get in six walks to get in your exercise" (Interview 15).
> "The sooner they start, the more they'll maintain their strength" (Interview 14).

Promoting safe mobility was a strategy to ensure patients walked and was achieved by using ambulation equipment (gait belt and walking device), gathering additional help (another RN or CNA), getting rid of tethers (intravenous lines and drains) that inhibited movement, or having someone walk behind the patient with a wheelchair. Fall risk was not seen as a barrier to ambulation, but rather an indication that additional support during ambulation may be needed.

> "We need to get them up, the sooner they walk the better… making sure we have two people walking with them, using a gait belt and a walker" (Interview 14).

Consequences to Nurses and Organization

Consequences to the Nurse

Nurses on high-fall units described feeling overwhelmed by constant messages from nursing administration to prevent falls and the need to be on high alert to ensure that a fall did not occur. This sense of feeling overwhelmed took a physical and emotional toll on nurses. Nurses often described a sense of dread when they started their shift, felt defeated in their efforts, and described low job satisfaction.

> "I get very tired physically and mentally because it's like a roller coaster ride, you know, what's happening next" (Interview 7).

All nurses stated that a fall prevention protocol that targeted risk reduction for falls was not available on their units. Rather, the three primary mechanisms communicated to nursing staff to reduce falls was to identify patients at risk, place bed/chair alarms on patients, and run to alarms. Because nurses were not reducing risks for falls, their efforts to meet the hospital goal (zero falls) were often not successful, leaving nurses feeling defeated. In addition, as nurses had few successes they often described poor job satisfaction. Several nurses indicated that they were actively looking to transfer to a unit that had low falls.

> "It doesn't feel good when you don't get the award… it does chip at people. You know, well why don't I go here and here. I'm going to try IMC nursing" (Interview 6).

Consequences to the Unit

The over identification of fall risk patients in tandem with the "everybody runs" strategy to prevent falls, and the continued messaging that the unit was not meeting the hospital goal, produced low morale on high-fall units. The "everybody runs" culture to prevent falls produced tension between RNs and CNAs. Nurses described scolding nursing assistants or float staff if they did not move fast enough or were not responding to bed/chair alarms. Criticism among nursing staff contributed to low morale.

> "You're afraid of a fall happening so they you're really hard on your NAs too because you're like everybody's got to run" (Interview 10).

In addition, nurses described frustration in not being able to do the right thing for the patient (getting them up to walk) for fear that a fall would occur. Nurses believed if they did allow a fall risk patient to walk about independently they would be breaking a rule. Having their nursing judgment questioned further contributed to low morale on the unit.

> "It doesn't make sense to me, we're saying just while you're in the hospital it's not okay to walk around, but we feel safe enough to have you home by yourself? It makes you a little angry at the person that's telling you these are the rules. It's a morale thing, it doesn't matter what I do, what my decision is, it's going to be wrong" (Interview 13).

Conditions that Shifted Nurses to Progress Fall Risk Patients

Two conditions were identified that influenced nurse decisions to progress patients identified as fall risk. One condition involved an external source, support from nursing

administration, whereas the other was an internal source, nurse characteristics. On several inpatient units, patient ambulation was identified as a priority and encouraged and rewarded by the nurse manager, even if the unit had high fall rates. On these units, ambulating patients was the standard of care used to improve patient outcomes. Nurses were acknowledged for their efforts to get patients up to walk by receiving individual recognition from unit leadership (nurse managers, CNS, and charge nurses). When nurses on high-fall units felt supported by administration they were more likely to ambulate fall risk patients. If a fall did occur on these units, the focus of the investigation was not on individual nurse, but rather included environmental and patient factors (weakness, low blood pressure, and dizziness). Further, the fall investigation was used as a learning experience to improve how the unit could have prevented the fall.

> "I don't feel the high impact from my manager, he's always encouraging, keep ambulating and doing what you are doing" (Interview 17).

There were also nurse characteristics that prevented nurses who worked on high-fall units from developing a fear of falls. Nurse characteristics that seemed to have a protective effect were being confident in clinical decision making, having a formal (care team leader or charge nurse) or informal (seen as an expert on the unit) leadership role on the unit, and years of experience as a nurse. These nurses were not afraid of ambulating a fall risk patient because they corrected the underlying cause that put the patient at risk for falls (volume depletion, reducing tethers, and discontinuing medications). In addition, they felt secure in their position because they believed they were viewed as a valuable member of the inpatient unit. For these nurses, the focus was on the patient and not the fall number.

> "If they're orthostatic, they might need a couple liters of fluid before I'm going to get them up. After that we get up to walk" (Interview 2).

Discussion

Responsibility to prevent falls has been placed directly on nursing staff in many hospital settings. Nurses feel increasing pressure to meet the hospital goal of "zero falls" and often feel blamed and shamed when falls occur. Findings from this study provide compelling evidence that nurses experience negative consequences when intense pressure is placed on them to prevent falls. Consequently, many nurses adjust the care they deliver by restricting patient mobility, a strategy inconsistent with optimal patient progress.

In hospitalized older adults, falls are the result of interactions among complex factors including frailty, multiple comorbid conditions, acute illness, unfamiliar environment, and medical/surgical procedures (Kannus, Seivenan, Palvanen, Jarvinen, & Parkkarri, 2005; Lord, Sherrington, Menz, & Close, 2007) and are sometimes inevitable (Oliver et al., 2000). Pressuring nurses to meet a zero falls goal may have the unintended consequence of worsening functional status for older patients (Oliver, 2004). Zero falls rates should be viewed with caution; a hospital unit with no falls, is a unit where patients do not move (Oliver et al., 2000).

Nurses' interviewed acknowledged negative consequences of restricting patient ambulation. However, the need to protect themselves and their unit overrode those concerns. Restricting ambulation and/or enforced bed rest has long been recognized as contributing to muscle mass loss, postural hypotension, and a decrease in maximal work capacity (Creditor, 1993; Kortebein, Ferrando, Lombeida, & Wolfe, 2007), all factors that increase an older person's fall risk (Mahoney, 1998). Many nurses engaged in behaviors that may actually increase fall rates both in hospital settings and when the patient goes home and to the next point of care.

Nurses described three primary strategies used to prevent falls: (a) identify patients at risk; (b) place bed/chair alarms on patients; and (c) run to alarms. However, these strategies have been shown to be ineffective at preventing or reducing falls. Identifying a patient as fall risk does not provide an intervention to target the underlying risk factor (Oliver, 2007; Oliver, McMurdo, Daly, & Martin, 2004). In addition, many fall risk identification tools are "homegrown," and never tested for validity and reliability (Oliver, 2007). The ability to identify fallers and nonfallers can be seriously jeopardized depending on the fall risk identification tool used. Identifying patients at risk may provide nurses with false reassurance.

Nurses also described dependency on bed/chair alarms to alert them when fall risk patients were moving and were pressured by nursing administration to get to the patient when the alarm sounded to prevent the fall. Mass response created chaos on the unit and friction between RNs and CNAs. Further, needing to respond to multiple alarms interrupted nurses' workflow and increased work demands for all unit staff. In reality, the use of bed/chair alarms produced a negative consequence on nurses and the unit, although this was not overtly recognized by the participants.

The use of bed/chair alarms is controversial. Several studies have demonstrated that these alarms are not effective in reducing fall rate or injurious falls (Shorr et al., 2012; Tideiksaar, Feiner, & Maby, 1993). Others have posited that bed/chair alarms are unethical in that they impair a person's autonomy for free movement, infringe on dignity, and may worsen agitation in confused patients (Inouye, Brown, & Tinetti, 2009; Oliver, 2007). Future research should address both the impact of bed/chair alarms on nursing workflow and how older adult patients experience being "alarmed."

Although patients were not interviewed for this study, one has to wonder how older adults experience and perceive messages from nurses that they are at risk for falls

and the impact of restricted ambulation on the development of patient fear of falls. Fear of falls in older adults is associated with self-efficacy. Self-efficacy is influenced by receiving information about the ability to perform an activity (ambulation) from a credible and trustworthy source (nurses) and the actual performance of the activity (Bandura, 1982). Boltz, Resnick, Capezuti, and Shuluk (2014) demonstrated that fear of falls in hospitalized older adults was associated with change in physical function between admission to discharge. Limited ambulation during hospitalization has been identified as an independent predictor of loss of physical function in hospitalized older adults (Brown, Friedkin, & Inouye, 2004; Brown, Redden, Flood, & Allman, 2009). Therefore, being told throughout their hospital stay by nurses that they are at risk for falls had having ambulation restricted may be contributing factors to development of fear of falls in hospitalized older adults. Additional research on how hospital fall prevention programs affect older adults needs to be conducted.

Lastly, although falls have been identified as a nursing-sensitive quality indicator of patient care (National Quality Forum, 2004), there has been no empirical evidence on how nurses understood fall prevention and what actions they took to prevent patient falls. Prior intervention studies conducted on fall prevention in hospitals have shown little impact on reducing fall and injuries (Coussement et al., 2008; Oliver et al., 2000) due to the complex nature of patient falls in hospitals. A patient centered or unit centered approach to fall prevention has been suggested (Oliver, 2007). But if falls are classified as a "nursing problem" integrating a nursing approach to fall prevention seems key. Additional research is needed to understand how nurses provide care to fall risk patients.

Limitations

This study had several limitations: (a) Including observations beyond interviews could have strengthened the analysis by allowing the researcher to seek clarification if participants engaged in actions that were not consistent with what they described. (b) As participants were recruited from general inpatient adult medical and surgical units from two hospitals in Wisconsin the results might only be applied to these types of settings. Other hospital units, such as rehabilitation, may produce different results because falls may be seen as an inevitable part of the rehabilitation program and its goal to regaining functional independence for patients.

Conclusions

Falls in older adult patients are a common occurrence in hospital settings. Because of high rates and associated injuries, CMS has identified falls as a "never event" (CMS Medicare Program, 2007). Hospitals have responded by setting zero falls goals and placing pressure on nursing staff to attain the goal. This has resulted in unintended and potentially harmful consequences to nurses and older adult patients. A strong evidence base for care delivery for fall risk patients is lacking. Additional research is needed to gain a better understanding of how nurses (key health care providers in hospital settings) provide care to fall risk patients. There is a need for patient centered and unit-based interventions that prevent patient falls and also preserve patient function.

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