Published in final edited form as:

Int J Nurs Stud. 2013 September ; 50(9): 1240–1246. doi:10.1016/j.ijnurstu.2013.02.007.

Attributing the responsibility for ambulating patients: A qualitative study

Barbara Doherty-King^{a,*} and Barbara J. Bowers^b

^aUniversity of Wisconsin-Madison, School of Nursing, United States

^bUniversity of Wisconsin-Madison, School of Nursing, United States

Abstract

Background—Functional decline has been identified as a leading negative outcome of hospitalization for older person. Functional decline is defined as a loss in ability to perform activities of daily living including a loss of independent ambulation. In the hospital literature, a patient's loss in ability to independently ambulate during the hospital stay varies between 15 and 59%. Lack of ambulation and deconditioning effects of bed rest are one of the most predictable causes of loss of independent ambulation in hospitalized older persons. Nurses have been identified as the professional most capable of promoting walking independence in the hospital setting. However, nurses do not routinely walk patients.

Objective—The purpose of this study was to explore the relationship between nurses' attributions of responsibility for ambulating hospitalized patients and their decisions about whether to ambulate.

Methods—A descriptive, secondary analysis of data gathered for a parent study was conducted. Grounded dimensional analysis was used to analyze the data. Participants consisted of 25 registered nurses employed on medical or surgical units from two urban hospitals in the United States.

Results—Nurses fell into two groups: those who claimed ambulation of patients within their responsibility of practice and those who attributed the responsibility to another discipline. Nurses who claimed responsibility for ambulation focused on patient independence and psychosocial well-being. This resulted in actions related to collaborating with physical therapy, determining the appropriateness of activity orders, diminishing the risk and adjusting to resource availability. Nurses who attributed the responsibility deferred decisions about initiating ambulation to either physical therapy or medicine. This resulted in actions related to waiting, which involved, waiting for physical therapy clearance, physician orders, risks to decrease, and resources to improve before ambulating.

Conclusions—Nurses who claimed responsibility for ambulating patients within their domain of practice described actions that promoted patient independent function and were more likely to get patient s up to ambulate.

Keywords

Hospital; Nursing care; Ambulating; Older patients; Grounded dimensional analysis

1. Background

People are living longer due to medical, social, and economic advances over disease (National Institutes on Aging, 2007). As the world population ages chronic illness and use of health care services, particularly hospital days, are increasing with over half of hospital bed days in developed nations now devoted to person aged over 65 (DeFrances et al., 2005; Hospital Episode Statistics, 2010; Karmel et al., 2007). For many older people, hospital stays have negative outcomes such as falls, delirium and functional decline (Mahoney, 1998; Inouye et al., 2000; Zisberg et al., 2011).

Functional decline, in particular, has been identified as a leading negative consequence of hospitalization for older adults (Kleinpell et al., 2008). Functional decline is defined as a loss in ability to perform usual activities of daily living including a loss in ability to ambulate (Brown et al., 2006; Mahoney, 1998; Pearson, 2000). Depending on how ambulation is defined, loss of independent ambulation in hospitalized older persons varies between 15 and 59% (Hirsch et al., 1990; Mahoney et al., 1998; McVey et al., 1989).

The impact of loss of independent ambulation is associated with increased length of hospital stay (Narain et al., 1988), nursing home admissions (Brown et al., 2004), falls both during and after hospitalization (Mahoney et al., 2000), and mortality (Brown et al., 2004). Unfortunately, loss of independent ambulation does not always resolve after discharge from the hospital. One study documented continuing loss in 30% of older persons three months after discharge (Mahoney et al., 1998). From both a cost and quality of life perspective, loss of independent ambulation, especially when preventable, is a significant problem.

Although loss of independent ambulation can be partly attributed to the illness that precipitated the hospitalization and the attending medical and/or surgical procedures, lack of ambulation and deconditioning effects of bed rest are one of the most predictable causes for newly acquired ambulation deficits in older patients (Callahan et al., 2002). Research has documented that older hospitalized patients spend most of their time in bed or in a chair (Brown et al., 2004; Fisher et al., 2011).

Because of their 24 h presence at the patient's bedside, some researchers have identified nurses as the profession most capable of promoting walking independence (Resnick, 2004). However, evidence suggests that nurses do not routinely walk patients (Callen et al., 2004). Boltz et al. (2011) reported several factors that discourage nurses from walking hospitalized patients. These included: bed rest orders, the role of physical therapy, and fear of patient falls and back injury to themselves. Another study found that tethers such as intravenous lines and Foley catheters, as well as staff shortages, lack of walking devices and patient resistance, all acted as barriers (Brown et al., 2007). King and Bowers (2011) found that acuity level, patient labeling, perceived risk and unit expectations influence patient ambulation. The purpose of this study was to explore the relationship between nurses' attributions of responsibility for ambulating hospitalized patients and their decisions about whether to ambulate.

2. Methods

This is a descriptive, secondary analysis of data gathered from a prior study (referred to as the parent study), which explored how nurses decided whether to ambulate hospitalized older adults (King, 2010). In the parent study, 25 registered nurses participated in in-depth interviews. Open, axial and selective coding was used to analyze the data (Strauss and Corbin, 1998). Results from the parent suggest that nurses' decisions about whether to ambulate patients are complex.

It became apparent during the analysis of the parent study data that there were differences between nurses who walked patients and those who waited for other to walk patients. One dimension identified that differed between the two groups (walk verses wait) was whether or not nurses claimed ambulation of patients as their responsibility. However, the identification of this dimension occurred after data collection was completed. Because the researcher had become theoretically sensitized to the dimension of nurses claiming ambulation as their responsibility, a decision was made to return to the data. Therefore, this secondary analysis focused primarily on nurses' attribution of responsibility for ambulating patients and influence on whether or not nurses ambulated patients, which was not explored in depth in the parent study. Institutional Review Board approval was obtained for the study.

Sample

Inclusion criteria in the parent study included: registered nurse, employed on a medical or surgical unit in a hospital and currently providing nursing care to adults aged 65 and over. Twelve of the 25 nurse participants had received additional training in care of hospitalized older adults by participating in the NICHE (Nurses Improving Care of Health systems Elders). NICHE is a United States (US) based program developed to assist hospitals to meet the needs of acutely ill older patients. The goal of NICHE is to improve care of hospitalized older persons by providing protocols exclusively under the control of nursing practice (Fulmer et al., 2002). Nurses who participate in NICHE are given the title of geriatric resource nurse and recognized as experts in providing care to hospitalized older persons.

Setting

The parent study was conducted at two hospitals in urban southern Wisconsin in the US. Setting A is a 468-bed hospital and setting B is a 300-bed hospital. Both facilities are teaching hospitals with similar compliments of registered nurses, certified nursing assistants, clinical nurse specialists and physical therapy services. Patient/nurse ratios in both facilities are 1:4 or 1:5 which are similar to the US average (New England Public Policy Center, 2005). These nurse/patient ratios are also consistent to those in the United Kingdom (UK) (Audit Commission, 2011). Nurses interviewed for the parent study were employed on medical or surgical adult inpatient units at both facilities. Thirteen nurses were from setting A and 12 nurses were from setting B. Nurses from setting B had undergone NICHE training.

Data collection and analysis

Grounded dimensional analysis, which combines the key concepts of grounded theory (constant comparisons, open, axial and selective coding) with the analytic framework of dimensional analysis (Bowers and Schatzman, 2009; Kools et al., 1996; Robrecht, 1995) was used. Returning to the data to conduct further exploration of relevant concepts is consistent with grounded theory methodology (Strauss and Corbin, 1998). Strauss and Corbin (1998) describe the process of discriminate sampling, which can be used during selective coding. During discriminate sampling the researcher may choose sites, persons and documents that will maximize opportunities for comparative analysis. For this secondary analysis, the researcher used discriminate sampling by returning to the data, retrieved excerpts for further exploration and reorganized categories and dimensions according to theoretically relevant concepts (Strauss and Corbin, 1998). Grounded theory studies generally use both discriminate and theoretical sampling, often relying heavily on theoretical sampling. Secondary analysis relies on discriminate sampling, as there is no opportunity for theoretical sampling (Strauss and Corbin, 1998).

Several strategies were used to maintain rigor of the analysis in the parent and secondary data analysis. Data were analyzed within a qualitative research team ($N=9$) consisting of nurses from four countries (US = 4, UK = 2, South Korea = 1 and Thailand = 1) and a non-

nurse (social work). Memos regarding theoretical and methodological decisions were kept and referred back to during the analysis. Decisional matrices, which outlined the process of nurses' decisions about walking patients, were shown to nurse participants (member checking) during the parent study to determine if the analysis was accurate as to how nurses experienced the phenomena. For the secondary analysis, the results were presented in poster format at two national conventions (Midwest Nursing Research Society and Gerontological Society of America). Nurses who stopped to discuss the poster indicated that the results of the secondary analysis were accurate and described how they experienced whether or not they claimed ambulating patients as their responsibility or the responsibility of others.

This study explored how variations in one dimension (attribution of responsibility for ambulation) influenced ambulation of older persons. This analysis focused on a comparison between nurses who claim ambulation as a specific responsibility within the domain of nursing and those who see ambulation as important while attributing responsibility to other practitioners, conditions that influenced attributing responsibility, and actions taken by nurses as a consequence of attributing responsibility.

3. Findings

A conceptual model (Fig. 1), which illustrates differences in nurses' actions related to walking patients or waiting for other to walk patients and factors which could move nurses from waiting to walking was created from the secondary analysis. During the analysis it became apparent that nurses fell into two groups, those who attributed responsibility for ambulation to nursing labeled as *Claiming Responsibility* and those who attributed responsibility for ambulation to another discipline labeled as *Attributing Responsibility to Others*.

All nurses understood the negative consequences older persons experience from bed rest or low levels of mobility during their hospital stay. The two groups differed significantly on how they responded to the risks associated with ambulation and how they attributed responsibility (nursing, physical therapy, or medicine) for initiating ambulation to *make sure* that older patients walked. The two groups, attributing responsibility to others and claiming responsibility will be described separately.

4. Attributing responsibility to others

Some nurses ($N = 10$) interviewed attributed responsibility for ambulation to other disciplines, deferring decisions about initiating walking to either physical therapy (PT) or medicine. Nurses in this group focused on potential for injury to the patient (fall) or nurse (back injury) if they pursued walking the patient. Nurses waited for (1) PT clearance, (2) physician orders, (3) risks to decrease, and (4) resources to improve before ambulating.

Waiting for PT nurses consistently described waiting for PT to initiate ambulation. Only after clearance by PT were they willing to walk the patient or to delegate walking to a certified nursing assistant (CNA). This was true despite the level of perceived risk to themselves or the patient.

“All we do is go by what PT is having them do with ambulation...PT comes and assesses them...we hear from them whether it is safe” (Interview 1, site 1).

Waiting for Orders nurses often followed physician orders for activity without questions. For example, for some nurses, an order to get the patient up to chair three times a day meant just that, even when they believed that the patient could ambulate. Nurses indicated they would not pursue walking the patient without a change in the patient activity order and did not request a change in activity from the physician.

“I think some of the nurses are really scared to do that (walk patients) unless they have an order...they are waiting” (Interview 5, site 1).

New graduates in particular, waited for physician orders before ambulating patients, believing they did not have the authority to initiate ambulation or challenge a physician order.

“Physician orders are a problem especially for a new nurse...a new nurse may not read into the order and will wait to get an order” (Interview 17, site 2).

Waiting for Risk to Change

Most nurses described ambulation as potentially risky to both themselves and patients. Risks included patient falls and back injuries to nurses. Nurses tended to wait for risks such as compromised cognitive, physiologic or physical status to decrease before initiating ambulation.

“I have this sense that they are affected cognitively...you can see clearing with antibiotics...when they start to feel better it’s time to get up” (Interview 2, site 1).

Because of short hospital stays, waiting for risk level to decrease meant waiting until just before the patient was discharged. Some nurses described not reaching an acceptable level of risk, often resulting in patients never ambulating during the hospital stay.

Waiting for Resources to Change

For nurses, even a change in activity order and ‘clearance’ by PT did not guarantee that ambulation would occur. Sufficient resources in the form of CNAs were also required. Since nurses were highly dependent on CNAs to ambulate patients, walking a patient was still unlikely unless CNAs were available to help.

“It’s their responsibility. In our hospital CNAs get the call first...I would say that 90% of the time the CNAs do the ambulation” (Interview 14, site 2).

Additionally, eliminating patient ambulation was seen as a strategy for responding to a busy unit or insufficient staffing. This was particularly important when getting the patient up for the first time when more than one person was needed.

“If it is really busy on the unit, getting the patient up to walk is the last thing on my mind, it doesn’t happen, especially if I need help” (Interview 21, site 2).

5. Claiming responsibility

Nurses ($N = 15$) who claimed ambulation as primarily a nursing responsibility focused on the importance of ambulation for patient independence and psychosocial well-being. They acknowledged the risks involved in ambulating patients but consistently responded differently to these risks than the other group. They also identified written orders and insufficient resources (CNAs) as barriers to ambulation. Rather than being stopped by these barriers they described a range of strategies to address them. Actions taken by this group included: (1) collaborating with PT, (2) assessing the appropriateness of orders, (3) diminishing the risk, and (4) adjusting to resources.

Collaborating with PT

Nurses initiated contact and collaborated with PT to discuss the patient’s progress and strategies to motivate and advance patients towards independence. If nurses were unable to talk with PT they read PT progress notes. Contact (either face to face or reading the PT note) with PT was particularly important early in the hospitalization when patients had not yet ambulated. However, nurses were not willing to wait for the initial PT note or PT

assessment before walking the patient. Rather they took it upon themselves to determine the patient's ability and initiate ambulation.

"PT didn't come up to see them, so I just got them up and walked them, some nurses were appalled that they weren't evaluated by PT first" (Interview 5, site 1).

Assessing the Appropriateness of Orders

Nurses in this group did not see bed rest orders as a barrier to walking patients. They requested changes in physician activity orders to more accurately reflect patient status or initiated ambulation and then requested an activity order change.

"We'll do what we need to, involving the doctors making sure the orders are up to date. If there is an old bed rest order I call them and get it changed" (Interview 2, site 1).

"If there's a bed rest order and we've been getting the patient up, we will tell the doctor to write an new order for activity" (Interview 19, site 2).

Diminishing the Risk

Nurses reduced the risks of ambulating patients by decreasing the number of "tethers" (intravenous lines and Foley catheters) that restricted patient movement. They asked physicians to write orders to "cap" the intravenous line when intravenous fluids were no longer required and to discontinue Foley catheters as soon as possible. Eliminating the Foley catheter was seen as a way to get patients to walk more frequently by requiring them to go to the bathroom.

"Sometimes I go to the doctor and say, "Doctor, this patient is not walking well, if you take out their Foley, they will have to walk" (Interview 5, site 1).

"We want to get those Foleys out. Nurses will work hard to get that out in a day... they are not as mobile with a Foley in" (Interview 18, site 2).

Nurses also reduced risk to both themselves and patients by ensuring that necessary equipment such as walkers, canes, and prosthetics were readily available. They determined need for mobility devices by asking patients if they had used an assistive device in the past or by observing the patient standing and taking steps, taking the initiative to order assistive devices and instructing patients in using devices, thereby reducing patient's risk for injury during ambulation.

Adjusting to Resource Limitations

Nurses responded to insufficient availability of CNAs by negotiating with other staff members (nurses) to assist them with ambulating patients.

"There are times when the CNAs says, "I really can't get them up". We see if there is anybody else on the floor that isn't as busy that can help us out" (Interview 14, site 2).

Careful planning with team members for shift activity was also used to ensure ambulation. Nurses described meeting with CNAs early in the shift, discussing their patients, identifying who needed to be ambulated and deciding together how to make it happen.

"I meet up with the CNA fairly early in the morning...we try to set a plan for the day, I'll say, this is the person, I will come in with you to help get them up" (Interview 9, site 1).

5.1. NICHE and patient ambulation

In setting B, 10 of 12 nurses claimed responsibility for ambulation within the domain of nursing while only two of 12 attributed the responsibility to other disciplines. In setting A only five of 13 nurses claimed responsibility for ambulation while 8 of 13 attributed the responsibility to other disciplines. Significantly, the hospital (setting B) with the greater proportion of nurses who claimed responsibility for initiating ambulation is a participant in the NICHE program. NICHE nurses stated the training increased their awareness of how rapidly hospitalized older persons declined.

“The mobility...I didn’t think of that at all before my NICHE training...just being made aware of that (mobility) makes you more cognizant. I think it’s made me a better nurse” (Interview 13, site 2).

NICHE nurses also seemed to have a stronger sense of responsibility for an area of practice (nursing). Awareness of how quickly older patients declined when on bed rest combined with a strong sense of responsibility for nursing practice seemed to move nurses beyond barriers to getting patients up and ambulating.

“Its awareness, the big part is awareness...the hospital is not a safe place for older adults” (Interview 18, site 2).

“Getting patients up and walking, this is nursing practice” (Interview 11, site 2).

“Mobility is part of every care plan and discussion, we are responsible” (Interview 18, site 2).

5.2. Changing actions without changing responsibility

Two conditions were found to increase the likelihood that nurses, who attributed the responsibility to others, would ambulate patients. Both conditions involved external influences that encouraged nurses to get patients up to walk.

Individuals charged with the responsibility to oversee the care of older adults across hospital units, such as CNSs, could influence an individual nurse’s awareness of each patient’s walking ability prior to hospitalization. This increased awareness often had the effect of increasing nurses’ expectations for the patients’ functional level, including raised expectations for ambulation. While nurses frequently based their expectations for functional level on a patient’s current status, they usually changed their expectations when provided with information that contradicted their picture of the patient’s pre-hospital status.

When coupled with instructions from the CNS about reducing risks during ambulation, and regular follow up by the CNS, nurses often engaged in actions that were more consistent with nurses who claimed responsibility for ambulating patients. That is, they walked patients. However, ongoing presence of a CNS was often required for these nurses (attributing responsibility) to initiate ambulation.

“There have been a couple of patients who were difficult and I (CNS) went there every morning and got them up and I would check on them later in the day. I go back to the unit and they’ve (nurses) done it...I reinforce that” (Interview 22, site 2).

An even more powerful influence was the establishment and enforcement of a unit level expectation that patients will be ambulated. Regardless, of attribution of responsibility, nurses on these units initiated ambulation. A clear unit expectation for ambulating patients, particularly when accountability for meeting the expectation was communicated, highly visible, and enforced by the unit manager, could override nurses’ beliefs that ambulation was someone else’s responsibility.

“Our unit manager sits in on unit rounds...we audit charts for documentation for ambulation and activity. We do audits when they are not expecting it...and that has increased compliance because those results are shared with management” (Interview 18, site 2).

In contrast, on units where the expectation to walk patients was not enforced by the unit manager, walking patients was primarily at the discretion of individual nurses.

“Our (nurse) manager made a board that says walk your patient...but I would probably say I maybe saw two patients walk in the hallway today” (Interview 19, site 2).

6. Discussion

It is well established that loss of independent ambulation leads to serious negative outcomes for older persons. This study suggests that nurses claiming responsibility for initiating ambulation influences whether, when and how often ambulation of patients occur. Few studies have investigated whether or not nurses perceived patient ambulation as a task they are responsible for carrying out. Results of this study and those of Kalisch (2006) suggest that many nurses have given up responsibility for making sure patients are ambulated. The loss of nurse driven patient ambulation has had a significant consequence for older hospitalized patients.

Drolet et al. (2012) state that physical therapists are only available to ambulate patients 30 min/day. Therefore, leaving the responsibility for initiating ambulation of patients to PT will likely continue to produce delays in patient ambulation, perpetuating loss of independent ambulation in older persons. This research suggests that shifting nurses from attributing the responsibility for ambulating patients from PT or medicine to within nurses' domain of practice may produce an increase in patient ambulation and improve patient outcomes. Significantly, nurses in this study who claimed responsibility for initiating ambulation were not taking responsibility away from PT but instead were collaborating with PT to make sure patients were ambulated.

Every nurse interviewed was knowledgeable about the negative consequences of bed rest. Surprisingly, knowing the consequences of not ambulating by itself seemed to have little effect on practice. This is an important finding since a common approach used in nursing to influence practice is to increase knowledge. Clearly, knowledge alone is not sufficient to increase ambulation. However, education (NICHE program) in relation to helping nurses reframe their practice as special and unique and impacting patient outcomes did change nurses' perspective about ambulating hospitalized older patients. Current interventions are generally directed at increasing knowledge. Future interventions should focus on how to increase nurses' sense of responsibility for practice.

All nurses discussed barriers to initiating ambulation of older persons in hospital settings. However, they clearly distinguished themselves by whether they were stopped by barriers or found ways around them. Claiming the responsibility for initiating ambulation was pivotal in how nurses overcame barriers and influenced whether or when patients were ambulated. Concern for injury to the patient or nurse also acted as a barrier for nurses who attributed the responsibility for ambulation to other disciplines. This result is reflective of those described by Boltz et al. (2011) who found that fear of patient falls and back injury discouraged nurses from walking patients. How nurses perceived barriers within their environment and the affect this has on nursing care may be important when targeting strategies to decrease patient loss of independent ambulation.

Influences on nursing practice related to ambulating older patients were both external and internal. Involvement of a CNS and a clearly communicated and enforced unit expectation to ambulate patients were significant external factors. The importance of a unit manager in setting unit expectations and establishing accountability was vital for patient ambulation. While external influences are effective, they require ongoing presence. For example, turnover of nurse managers from one who enforces patient ambulation to another who does not could change the level of patient ambulation on the unit.

In contrast, nurses who claimed responsibility for initiating ambulation as their domain did not require ongoing external influence to ambulate patients. These nurses found ways to integrate ambulation into their daily practice despite limitation of resources. This sense of responsibility acted as an internal influence on initiating patient ambulation. In addition, nurses who claimed patient ambulation as primarily a responsibility of nurses focused on maintaining patient independence and psychosocial well being. Focusing on patient psychosocial well being for progressing patient mobility was also found by O' Sullivan and Savage (2008). Therefore, future research should address interventions to enhance nurses' sense of responsibility for initiating patient ambulation and target improving patient psychosocial well being and independence as outcomes.

7. Limitations

There are several limitations to this study. First, because this was a secondary analysis, conducting theoretical sampling to recruit participants to fill in gaps in the analysis was not possible. Therefore, the researchers cannot say that saturation was met. Additionally, because recruitment of additional participants did not occur there may be other dimensions related to whether nurses claim responsibility for ambulating patients or attribute responsibility to others. Second, the parent study was conducted in urban teaching institutions with nurses who were employed on adult medical or surgical units. Thus, the results of this study can only be applied to nurses who work in similar settings.

8. Conclusion

The percentage of adults aged 65 years and older is increasing worldwide. Due to the rise in older adults, it is possible that the incidence of loss of independent ambulation could increase demands on health care resources. Nurses will play a vital role in preventing loss of independent ambulation in older persons. Results of this study suggest that when nurses claim responsibility for ambulating patients, they collaborate with physical therapy to promote progression of patient mobility, keep physicians on track to maintain accurate activity orders, and engage patients in ambulation. In contrast, when nurses attribute the responsibility for ambulation to others they are more likely to wait and not engage patients in ambulation unless directed. Further research is needed to understand how to identify and influence nurses' domain of practice to improve patient ambulation in hospital settings.

Acknowledgments

Funding: Dr. King wishes to acknowledge the John A. Hartford Foundation, building academic geriatric nursing capacity (BAGNC) funding for support of her graduate program and the William S. Middleton Memorial Veterans Hospital in Madison, WI. This material is a result of work supported with resources at the William S. Middleton Memorial Veterans Hospital, Madison, WI. The contents do not represent the views of the Department of Veterans Affairs or the United States government. Dr. Bowers wishes to acknowledge grant support: 1UL1RR025011 from the Clinical and Translational Science Award (CTSA) program of the National Center for Research Resources, National Institutes of Health. The funding sources had no involvement in the study design, collection or analysis of data, or interpretation of data.

References

- Amidei C. Mobilisation in critical care: a concept analysis. *Intensive and Critical Care Nursing*. 2012; 28:73–81. [PubMed: 22326102]
- Audit Commission. Audit Commission Acute Hospital Portfolio. London: 2011. Ward staffing. from <http://www.audit-commission.gov.uk> [July 27, 2011]
- Boltz M, Capezuti E, Shabbat N. Nursing staff perceptions of physical function in hospitalized older adults. *Applied Nursing Research*. 2011; 24:215–222. [PubMed: 20974088]
- Bowers, B.; Schatzman, L. Dimensional analysis. In: Morse, J.; Stern, P.; Corbin, J.; Bowers, B.; Charmaz, K.; Clarke, A., editors. *Developing grounded theory: the second generation Developing qualitative inquiry series*. Left Coast Press; Walnut Creek, California: 2009.
- Brown CJ, Friedkin RJ, Inouye SK. Prevalence and outcomes of low mobility in hospitalized older patients. *Journal of the American Geriatrics Society*. 2004; 52:1263–1270. [PubMed: 15271112]
- Brown CJ, Roth DL, Peel C, Allman RM. Predictors of regaining ambulatory ability during hospitalization. *Journal of Hospital Medicine*. 2006; 1(5):277–284. [PubMed: 17219513]
- Brown CJ, Williams BR, Woodby LL, Davis LL, Allman RM. Barriers to mobility during hospitalization from the perspective of older patients and their nurses and physicians. *Journal of Hospital Medicine*. 2007; 2(5):305–313. [PubMed: 17935241]
- Callahan EH, Thomas DL, Goldhirsch SL, Leipzig RM. *Geriatric Hospital Medicine. The Medical Clinics of North America*. 2002; 86(4):707–729. [PubMed: 12365337]
- Callen BL, Mahoney JE, Grieves CB, Wells TJ, Enloe M. Frequency of hallway ambulation by hospitalized older adults on medical units of an academic hospital. *Geriatric Nursing*. 2004; 25(4): 212–217. [PubMed: 15311196]
- DeFrances CJ, Hall MJ, Podgornik MN. National hospital discharge survey. *Advance Data from Vital and Health Statistics*. 2005; 359:1–20.
- Drolet, A.; DeJuilio, P.; Harkless, S.; Henricks, S.; Kamin, E.; Leddy, EA.; Lloyd, JM.; Waters, C.; Williams, S. Move to improve: the feasibility of using an early mobility protocol to increase ambulation in the intensive and intermediate care settings physical therapy. 2012. (retrieved 18.9.12) In: <http://ptjournal.apta.org/>
- Fisher SR, Goodwin JS, Protas EJ, Kuo Y, Graham JE, Ottenbacher KJ, Ostir GV. Ambulatory activity of older adults hospitalized with acute medical illness. *Journal of the American Geriatrics Society*. 2011; 59:91–95. [PubMed: 21158744]
- Fulmer T, Mezey M, Bottrell M, Abraham I, Sazant J, Grossman S, Grisham E. Nurses improving care for healthsystem elders (NICHE): using outcomes and benchmarks for evidence based practice. *Geriatric Nursing*. 2002; 23(3):121–127. [PubMed: 12075275]
- Hirsch CH, Sommers L, Olsen A, Mullen L, Winograd C. The natural history of functional morbidity in hospitalized older patients. *Journal of the American Geriatrics Society*. 1990; 38:1296–1303. [PubMed: 2123911]
- [July 27, 2011] Hospital Episode Statistics (2009–2010). Headline figures. from <http://www.hesonline.nhs.uk>
- Inouye SK, Borgardus ST, Baker DI, Leo-Summers L, Cooney LM. The hospital elder life program: a model of care to prevent cognitive and functional decline in older hospitalized patients. *Journal of the American Geriatrics Society*. 2000; 48(12):1697–1706. [PubMed: 11129764]
- Kalisch BJ. Missed nursing care: a qualitative study. *Journal of Nursing Care Quality*. 2006; 21:306–313. [PubMed: 16985399]
- Karmel, R.; Hales, C.; Lloyd, J. Older Australians in hospital. *Australian Institute of Health and Welfare*; 2007. from <http://www.apo.org.au/research/older-australians-hospital> [July 27, 2011]
- King, B. Dissertation. University of Wisconsin- Madison, UMI number: 3424071; 2010. How nurses decide to get older patients moving.
- King B, Bowers B. How nurses decide to ambulate hospitalized older adults: development of a conceptual model. *The Gerontologist*. 2011; 51:786–797. [PubMed: 22024979]
- Kools S, McCarthy M, Durham R, Robrecht L. Dimensional Analysis: broadening the conception of grounded theory. *Qualitative Health Research*. 1996; 6(3):312–330.

- Mahoney J. Immobility and falls. *Clinics in Geriatric Medicine*. 1998; 14(4):699–726. [PubMed: 9799475]
- Mahoney J, Sager M, Jalaluddin M. New walking dependence associated with hospitalization for acute medical illness: incidence and significance. *Journal of Gerontology: Medical Sciences*. 1998; 53A(4):M307–M312.
- Mahoney JE, Palta M, Johnson J, Jalaluddin M, Gray S, Park S, Sager M. Temporal association between hospitalization and rate of falls after discharge. *Archives of Internal Medicine*. 2000; 160:2788–2795. [PubMed: 11025789]
- McVey LJ, Becker PM, Saltz CC, Feussner JR, Cohen HJ. Effect of a geriatric consultation team on functional status of elderly hospitalized patients. *Annals of Internal Medicine*. 1989; 110:79–84. [PubMed: 2642284]
- Narain P, Rubenstein LZ, Wieland GD, Rosbrook B. Predictors of immediate and 6- month outcomes in hospitalized elderly patients: the importance of functional status. *Journal of the American Geriatrics Society*. 1988; 36:775–783. [PubMed: 3411059]
- National Institutes on Aging. [July 27, 2011] Why population aging matters: a global perspective. 2007. Publication number 07-6134. Summit on Global Aging, from <http://www.nia.nih.gov/researchinformation/extramuralprograms/behavioralandsocialresearch/globalaging.htm>
- New England Public Policy Center. Nurse to patient ratio: Research and reality; NEPPC Conference Report # 05-1; 2005 Jul.
- O'Suillivan M, Savage E. Nursing contributions to mobilizing older adults following total hip replacement in Ireland. *Journal of Orthopaedic Nursing*. 2008; 12:181–186.
- Resnick, B. *Restorative Care Nursing for Older Adults: A Guide for all Care Settings*. Springer Publishing; New York: 2004.
- Robrecht L. Grounded theory: evolving methods. *Qualitative Health Research*. 1995; 5(2):169–177.
- Strauss, A.; Corbin, J. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. SAGE publications; London: 1998.
- Waters KR, Luker KA. Staff perspectives on the role of the nurse in rehabilitation wards for elderly people. *Journal of Clinical Nursing*. 1996; 5:105–114. [PubMed: 8696594]
- Zisberg A, Shadmi E, Sinoff G, Gur-Yaish N, Srulovici E, Admi H. Low mobility during hospitalization and functional decline in older adults. *Journal of the American Geriatrics Society*. 2011; 59:266–273. [PubMed: 21314647]

What is already known about this topic?

- Older persons frequently experience a loss in ability to independently ambulate during their hospital stay.
- Bed rest and limited ambulation have been identified as the most common predictor and most preventable cause of loss in ability to ambulate.
- Nurses have been identified as the key health care professional who can promote walking independence in older patients.
- Nurses infrequently walk patients.

What this paper adds

- Nurses who claim responsibility for patient ambulation get patients up to walk and focus on maintaining or improving patient functional independence.
- Nurses who attribute the responsibility for ambulating patients to others focus more on injury prevention and delay patient ambulation.
- Development of a conceptual model, which illustrates actions nurses take, related to whether they claim or attribute responsibility for ambulating patients and conditions that influence nurses actions.

Fig. 1. Conceptual model of actions nurses take in relation to attributing/claiming responsibility for patient ambulation.