Exploring Nursing Decisions Regarding Mobilization of Hospitalized Patients

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CLINICAL SCENARIO:

Lack of physical activity in the hospital may contribute to decline in function and walking independence (Callen, Mahoney, Grieves, Wells & Enloe, 2004) yet research has demonstrated that low mobility and bed rest are common during acute hospitalization (Padula, Hughes & Baumhover, 2009). Sixty-five percent of patients experience a decline in mobility from preadmission baseline to second hospital day, with most patients failing to improve by discharge (Brown, Friedkin & Inouye, 2004). Studies show a new walking dependence is a common negative effect of hospitalization affecting 16 to 59% of hospitalized older patients (Doherty-King & Bowers, 2011). Functional decline, demonstrated through a loss of independent ambulation, is associated with increased length of stay, nursing home admissions, and falls both during and after hospitalization (Doherty-King and Bowers, 2013).

The referral to physiotherapy or occupational therapy for consultation can lead to confusion over whose role it is to oversee the functional activity and mobility needs of a patient. The result is episodic, inconsistent approach to addressing a patient's activity and functional care needs (Markey & Brown, 2002). Providing support and necessary assistance to increase patient mobility is a fundamental nursing care activity (Doherty-King, Yoon, Pecanac, Brown & Mahoney, 2014). Ambulation of patients is reportedly missed 76.1% to 88.7% of the time (Kalisch et al. 2011) despite evidence that early ambulation is best practice. A clear understanding of nurses' perceptions and experiences that influence their decision to walk a patient is required.

FOCUSED CLINICAL QUESTION:

On a medical/surgical unit, how do nurse's perceptions and experiences influence their decision to include mobility as part of routine nursing care?

SUMMARY of Search, 'Best' Evidence' Appraised, and Key Findings

To better understand the perceptions and experiences of nurses that influence their decision to ambulate inpatients, a review of the literature was completed. Five qualitative studies were found that supported components of the PICO question.

Brown, Wickline, Ecoff and Glaser (2008) addressed nursing practice, knowledge, attitudes and perceived barriers to evidence based practice in general. They identified the need for nurses to have the appropriate access to evidence, autonomy over practice and mentorship to assist them through implementation and evaluation.

Kalisch (2006) looked at missed nursing care on a medical/surgical unit and identified ambulation as the most frequently missed care activity. Reasons identified from nursing were too few staff, too much time required to complete the ambulation, poor use of existing staff resources, and the "it's not my job" syndrome.

Brown, Williams, Woodby, Davis and Allman (2007) interviewed patients, nurses and physicians to understand barriers to mobilization. Lack of motivation by patients and families, lack of available ambulatory devices, staff shortages, and restrictions from medical equipment such as IV and catheters and medical reasons necessitating bed rest were the most reported barriers.

Doherty-King and Bower (2011) conducted a two year, three phase study to develop a conceptual model grounded in how nurses experience walking patients. Two groups emerged, those that walked patients, and those that waited for others to walk patients. While knowledge of the benefits of mobilization was found not to be a barrier, factors such as altering the perception of risk to patient and nurse, understanding and identifying walking dependency as a preventable complication, and establishing ambulation as a standard of care at a unit level were identified as possible approaches.

Doherty-King and Bower (2013) revisited the data from their 2010 work to further explore a dimension which identified nurses' attribution of responsibility to ambulate with patients, and its influence on whether or not nurses ambulated patients. Nurses who claim

responsibility to ambulate patients are collaborative with physiotherapy, ensure mobility orders from physicians, and engage patients in ambulation. Those that attribute responsibility to others wait for physiotherapy to mobilize patients, wait for doctors' orders, and do not engage patients unless directed.

CLINICAL BOTTOM LINE:

The decision made by nurses to walk patients is complex. Knowledge regarding benefits of mobility is not a barrier. Nurses who see their special and unique role in influencing patient outcomes are more accepting of mobility as being within the nursing domain. This understanding appears to have influence on the decision to mobilize or attribute the responsibility to mobilize to others. Further research is required to understand how to identify and influence nursing practice pertaining to mobility.

Limitation of this CAT: This critically appraised paper (or topic) was prepared for a graduate course assignment and has been reviewed by one other independent instructor.

SEARCH STRATEGY:

Terms used to guide Search Strategy:

- Patient/Client Group: nurses on inpatient units, medical/surgical nursing
- <u>Intervention</u>: mobility, ambulation, walking
- Outcome: perceptions and beliefs influencing decisions to include mobility in routine care; nursing practice, clinical decision making

Databases and Sites	Search Terms	Limits Used
Searched		
CINAHL	(MM "acute care" or inpatient*)	
Medline	AND	Limit to age 65+
Embase	(MM "walk*")	
	OR	English only
	(MH "Physical mobility")	
	AND	
	(MH "nurses+")	
	exp*early ambulation/ exp*Walking/ exp* hospitalization/or exp "length of stay"/	

	mobility AND (functional decline) AND inpatient AND nursing	
Google Scholar	Author search	

INCLUSION and EXCLUSION CRITERIA

Inclusion:

- acute or inpatient care on a medical unit,
- over age 65+
- mobility, ambulation, walking,
- All nurses
- Attitudes, beliefs, barriers to practice

Exclusion:

- Rehab/geriatric units
- Younger than +65
- Community/continuing care settings
- Articles about assessment tools

RESULTS OF SEARCH

Table 1: Summary of Qualitative Study Designs of Articles Retrieved

Study Design/ Methodology of	Level*	Number	Author (Year)
Articles Retrieved		Located	
Generalizeable studies	I	1	Doherty-King &
			Bowers, 2013
			Doherty-King &
Conceptual studies	II	3	Bowers, 2011
			Brown, Williams, Woodby, Davis & Allman, 2005 Kalisch, 2006
Descriptive studies	III	1	Brown, Wickline, Ecoff & Glaser, 2008

^{*} Based on hierarchy of evidence- for -practice in qualitative research (Daley et al, 2007).

BEST EVIDENCE

The following study/paper "Attributing the responsibility for ambulating patients: a qualitative study" by Doherty-King and Bowers (2013) was identified as the 'best' evidence and selected for critical appraisal. Reasons for selecting this study were:

- Most applicable to my PICO question
- Level 1 evidence
- Most recent
- Qualitative design to explore perceptions and beliefs

SUMMARY OF BEST EVIDENCE

Table 2:

Doherty-King, B., & Bowers, B.J.(2013). Attributing the responsibility for ambulating patients: A qualitative study. *International Journal of Nursing Studies*, 50(9), 1240-1246.

Aim/Objective of the Study/Systematic Review: Explore the relationships between nurses attribution of responsibility for walking patients and their decisions about whether to ambulate patients or not.

Study Design: Descriptive, secondary analysis of data gathered from a prior study (parent study) in 2010 using grounded dimensional analysis (a combination of key concepts of grounded theory combined with analytical framework of dimensional analysis).

Setting: Parent study done using two medical/surgical units from two urban teaching hospitals > 300 beds (setting A and B). Both sites had similar staffing compliments and similar physiotherapy services and patient census indicated high number of patients 65+ years of age

Participants: 25 Registered Nurses employed on medical/surgical unit who currently provided care to adults aged 65+. Thirteen (13) nurses were from setting A and twelve (12) from setting B. Setting B nurses had received additional training in geriatric nursing care by participating in Nurses Improving Care of Health systems Elders (NICHE).

Phenomenon Investigated: The parent study data explored how nurses decided whether or not to walk patients. During data analysis it became apparent that there were differences

between the two groups that had emerged regarding who walked patients and who did not. Upon completion of analysis, an emergent dimension was identified which involved attribution of responsibility to walk patients. The researchers had become theoretically sensitized to the dimension of nurses claiming ambulation as their responsibility and a decision was made to return to the data. This secondary analysis of data (and focus of this appraisal) focused primarily on the nurses' attribution of responsibility for walking patients, and the influence on whether or not nurses ambulated with patients.

Qualitative Methods: During the parent study, researchers used in-depth interviews with open ended questions which were tape recorded and transcribed. Each interview was conducted in a private space away from the patient care unit, lasted 30 to 60 minutes, and used both probing and comparison interview strategies. Phase one focussed on how nurses explored ambulation. Probing questions were provided. Phase two focussed on identifying dimensions within the categories of phase one. Phase three was integration of categories. The secondary analysis revisited the data gathered from the parent study.

Main Findings:

Secondary data analysis created a conceptual model that illustrated differences in those who walk patients, those who wait to walk, as well as factors that could influence those who wait to walk to move into the walk group. Two clear groups became apparent during analysis – those who **claim responsibility** to walk patients and those who **attribute responsibility** to another discipline.

Claim Responsibility	Attribute responsibility to others		
Understood negative consequences of bed	Understood negative consequences of bed		
rest and low mobility	rest and low mobility		
Focus on independence and psychosocial	Focus on injury to patient through a fall, or		
benefits to patients	nurse (back)		
Collaborated with PT	Waited for PT to clear patients		
Requested activity orders	Waited for physician orders		
Addressed risk to patient/self	Waited for risk to decrease		

Site B nurses who had undergone NICHE training understood how to reframe their practice as special and unique, were more likely to identify mobility as within the nursing domain, and were therefore more likely to walk patients independent of direction. Nurses who did not have the additional training could be directed to ambulate with patients with clear unit guidelines and expectations as well as ongoing support from a clinical nurse specialist but did not initiate the practice on their own.

Original Authors' Conclusions:

Nurses that claim the responsibility to ambulate patients are able to frame their practice as special and unique, impacting patient outcomes. They see mobility as part of the nursing domain. They are collaborative with PT, ensure accurate activity orders are in place, and engage patients in ambulation. Nurses who understand the importance of ambulation but attribute the responsibility to others will wait for direction and not engage patients in ambulation.

The authors conclude "Further research is required to understand how to identify and influence nurses' domain of practice to improve patient ambulation in hospital settings" (p. 1246).

Critical Appraisal:

Validity: Overall Rigour

Credibility: Present

Parent study data collected over two years, in three phases from 25 participants at two different sites. Each phase was informed by the previous phase. Memos were kept regarding theoretical and methodological decisions. Member checking was used in the parent study to confirm findings both during the collection and analysis of the data. The secondary analysis of data was presented via poster format at two national conferences. Conference participants confirmed the analysis as their experience with ambulation.

Transferability: Limited

There was potential for transferability. The study involved nurses in a medical/surgical unit. There was limited demographic information regarding age, experience of nurses,

and little information regarding the researcher who conducted all the interviews, or the relationship between the researcher and the participants. Recruitment of Phase one nurses was done through a mail out to all nurses, so volunteer bias must be questioned. Seven additional Phase two participants were purposely sampled and recruited adding further potential bias. There was no mention in the parent study of saturation. In the secondary analysis, the researchers had to rely on discriminate sampling, as there was no opportunity for theoretical sampling of data, creating a possibility that other dimensions for attribution may have been missed.

Dependability: Present

Secondary analysis of the data required the authors use discriminate sampling. The researchers retrieved excerpts for further exploration to allow for reorganization of categories and dimensions according to theoretically relevant concepts. Data was analysed using grounded dimensional analysis that combined constant comparisons, open, axial and selective coding with the analytical framework of dimensional analysis. Memos formed an audit trail and were referred back to regarding theoretical and methodological decisions.

Confirmability: Present

The qualitative research team consisted of nine nurses from four countries and one social worker to ensure neutrality of data. Memos were kept and shared regarding decision points. In the parent study, decisional matrices outlining data were shared with nurse participants using member checking..

Interpretation of Results:

Transferability of this study is limited due to concerns with unknown aspects of sampling and bias in the parent study. Additionally, the secondary analysis did not allow for theoretical sampling to fill in gaps in the analysis. There may be dimensions related to nursing attributing responsibility for ambulation that have not been identified.

Summary/Conclusion:

Nurses are knowledgeable about and well placed to prevent functional decline among hospitalized elder patients (Boltz, Resnick, Capezuti, Schuluk and Secic, 2012). How nurses accepted mobility as part of their nursing domain was pivotal in how they

overcame barriers to mobility, and influenced whether or not patients were ambulated. NICHE training was identified as one dimension that appeared to influence how nurses reframe their practice as unique, special, and contributing to patient outcomes. There is limited literature available to define how nurses make decisions about whether to ambulate, how they ambulate, and when to ambulate, with only two qualitative studies found. For application to practice, further research is needed to understand factors that identify and influence the nurse's domain of practice to ultimately improve patient mobility outcomes.

IMPLICATIONS FOR PRACTICE, EDUCATION and FUTURE RESEARCH

- Physiotherapy resources are limited on acute care medical/surgical units and often not
 present during evenings or weekends. Waiting for PT to assess and initiate ambulation
 will lead to delays in ambulation.
- Simply increasing positions for PT or therapy assistant on med/surgical units will not change nurse's attribution of responsibility and will therefore not impact nurse led mobility.
- Nurses must reframe their practice as unique and special, impacting patient outcomes.
 NICHE education is one opportunity identified.
- Collaboration for mobility between PT and nursing with the focus on patient centered outcomes may influence the acceptance of mobility as part of the nursing domain of practice
- Further research to understand and identify other dimensions that influence mobility as a domain of nursing practice is required
- Further research looking at nursing practices with regards to mobility on geriatric or rehabilitation units may provide insight into other dimensions

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