Nurses Perspective of Patient Acuity on Geriatric Assessment Units

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Abstract

The purpose of this study was to explore how nurses on geriatric assessment inpatient units perceived patient acuity. Three questions were developed and included: what variables do nurses use to define acuity; does variation exist between and among groups of nurses; and are there nursing activities taken for granted or overlooked that can contribute to the perception of acuity? The purposive sample included all the full time and part time nurses (11 RNs, 16 LPNs) working on the units. Focus groups were used to facilitate the data gathering for this qualitative study. Five themes were identified from the data and the program NUD*IST was used to visualize the relationships between the individual items and themes. Patient acuity was defined differently by the RNs and LPNs and is based on their reality and the realm of their mandated practice. A large category of indirect non patient related activities was found to contribute greatly to the nurses' perception of acuity. Two benefits of the study were: 1) provision of a breakdown of items nurses incorporate into their definition of acuity; 2) a list of categories to guide decision making when determining which category of staff is required to best meet the needs of the patients.

Nurses' Perspective of Patient Acuity on Geriatric Assessment Units

Nurses on the geriatric assessment units were using the terms acuity and workload inter-changeably. Applying these interchangeably lead to discrepancies between their perception of patient acuity and their workload, and the results of the standardized workload measurement tool. There are conceptual differences between the terms. Acuity relates to a technical and patient framework, while workload incor-porates the nurses' reality, the framework or conditions in which they provide care to patients. Nurses use their professional judgement, assimilation of clinical data, educational program, personal values and their past experience with specific patients, in making declarations about the 'heaviness' of workloads. These can be too subjective to be useful for the kinds of decisions that need to be made and heavy workload cannot be reliably equated with particular acuity level (M. Campbell, personal communication, March 18th, 1996). The question of how nurses themselves define patient acuity has received little research.

Defining Patient Acuity

Often nurses' include subjective perceptions of workload rather than clinical data to determine patient acuity. The existing literature focuses on workload measurement and patient classification systems rather than on acuity. These common measures have been problematic and criticized (Kelleher, 1992). Workload measurements are generally based on lists of tasks required and are associated with 'blocks' of time. The majority of studies have been completed on acute medical and surgical units and may not be applicable to other specialty areas. There have been critiques of the current measurement tools based on the focus on tasks and whether tasks capture both direct and indirect nursing care (Buckle, Horn, & Simpson, 1991; O'Brien-Pallas, Cockerill, & Leatt, 1992; Prescott, 1991). Wilden and Goudy (1994) found that a large component of nursing work on a Geriatric Psychiatry unit had not been captured by the workload measurement tool.

There is limited literature on nurses' perceptions or definitions of the components of patient acuity. Smith and Molzahn-Scott (1986) used Medicus to compare nursing care requirements of patients in acute care (medical/surgical) and Long Term Care (LTC) units in a setting similar to the setting for this study. The conclusions they reached were: LTC patients had equivalent or more nursing care requirements; there were variations within LTC units; and the proximity of LTC to acute care may have an effect on care requirements. Two articles focused on the nurses' perceptions of patient needs and self care. Ward-Griffen and Bramwell (1990) conducted a community study on elderly client and nurse perceptions of self care in relation to mutual goal setting and found a positive relationship between the client and nurse ratings on self care. Farrell (1991) examined the nurses' perceptions of what the patients would identify as their needs. Neither of these studies examined acuity, nor patients on a geriatric assessment inpatient unit.

In summary, there is little information on staff nurses' perceptions of patient acuity, any variation that may exist between units or groups of nurses and the impact, if any, of indirect nursing activities on the definition of workload and acuity. Examining patient acuity in relation to activities reported that are not categorized as direct patient care, but could be categorized as indirect patient centered activities or nonpatient related activities, could lead to identifying distinctions that are important in capturing the perceptions of acuity, time spent and value judgement of nurses.

Study Questions

The purpose of this study was to explore how nurses on two inpatient geriatric assessment units defined patient acuity in their work. As there is limited knowledge of the

methods nurses use to define acuity, the following research questions were developed for the study:

1. What are the variables nurses use to define acuity on a geriatric unit?
2. Does variation exist between the two groups of nurses (Registered Nurses and Licensed Practical Nurses) in defining the acuity of geriatric inpatients?
3. Are there nursing activities (direct, indirect or both) that are taken for granted or overlooked, which are contributing to the perception of a heavy workload or acuity?

Operational Definitions

The following definitions were developed for the study:

1. Acuity: Physiological or psycho-social instability, concomitant medical conditions needing treatment and/or a period of rehabilitation.
2. Workload: The subjective frame of reference used by nurses to describe the conditions in which they must solve nursing problems and provide care to patients. Includes direct, indirect, and nonpatient related activities.
3. Direct Patient Centered Activity: The care that involves direct contact with the patient or family (e.g. a 'hands-on' treatment, teaching patient and family).
4. Indirect Patient Centered Activities: Care that is related to specific patients but does not involve direct contact with patient or family (e.g. calling the physician, documentation).
5. Non Patient Related Activities: Activities that are generic for the entire unit (e.g. narcotic count, staff meetings).
6. Geriatric Patient: An individual age 75 or over, exhibiting multi-system issues (medical, functional, psycho-social) requiring inpatient assessment or rehabilitation.
7. Inpatient Geriatric Assessment Units: Specialized units for multidisciplinary assessment and rehabilitation of geriatric patients with a focus on independence.
8. Nurses: The Registered Nurses (RN) and Licensed Practical Nurses (LPN) who work full or part time on the two inpatient geriatric units.
9. Perceptions of Acuity: The nurses' personal cognition, their understanding of, or beliefs about, the factors that constitute acuity in a specific geriatric population.

Design

The design for this study was exploratory and descriptive, using Grounded Theory methodology. Grounded theory, as described in Munhall & Boyd (1993), was chosen for this study because it takes into account people's experience and how a group of people define their reality.

Sample

The purposive sample included 11 Registered Nurses (RN) and 16 Licensed Practical Nurses (LPN), all the full time and part time RN and LPN staff on two geriatric assessment units. Both units are situated in an acute care hospital setting, have the same physical layout and each has a multidisciplinary team dedicated to it. Members of the team include physicians, nurses, social worker, physiotherapist and occupational therapist. Admissions to the units are received by referral from both acute care and community.

All participants were female. The nursing experience of the participants ranged from 6 months to 25 years. Seven participants had 5 years experience or less; 4 had 6-10 years; 8 had 11-15 years; 4 had 16-20 years; and 4 had over 20 years experience. The years of experience were not limited to the field of geriatrics but included acute medicine and surgery, psychiatry and pediatrics.

Methods

Ethical approval for the study was obtained from the Capital Health Region Research and Ethical Approval Committee and informed consent was obtained from the nurse participants. Each potential participant was informed that: 1) their participation was voluntary; 2) participation or non participation would have no effect on their workplace; 3) all observations and data would be kept confidential; 4) anonymity would be maintained at all times; and 5) the conclusions would be reported in the aggregate form. Only the researchers, facilitator and graduate student involved in the study would have access to or could see the data.

Focus groups were used as the data gathering technique for this qualitative study. Gaining perceptions on a given topic or area of interest in a non-threatening environment can allow for insights and data that are not as accessible without the stimulus of group discussion (McDaniel & Bach,1994; Nyamathi & Shuler, 1990). Focus group questions were based on the literature, the expertise of the investigators and related to the study questions. The questions were open-ended, moved from the general to the specific to elicit fundamental information and were selected to obtain the maximum amount of information from participants. For example, the questions moved from 'what do nurses mean when they say the unit is heavy' to 'how would you define patient acuity'.

A trained facilitator and graduate student, with no affiliation to the units, conducted the focus groups. This approach eliminated bias and increased the objectivity of the study. The graduate student (from the University of Victoria, Faculty of Human and Social Development), recorded responses in a notebook to facilitate classification of each response as being from an RN or an LPN. Five focus groups were held, 1 hour in length, each group having a mix of RN and LPN staff. The sessions were held on the units to facilitate staff attending.

Data Analysis

The data was note based, including field notes, debriefing notes and summary comments from the focus groups. The

data was reviewed as collected from each group but, as identified by Krueger (1994), the type and nature of the analysis was not prejudged and determined until there had been sufficient exposure to the data. The three investigators and the graduate student independently reviewed the data, line by line, looking for similar words, patterns and themes. The analysis involved a constant comparison of notations and comments until the core concepts and themes emerged. The investigators then met, compared their findings and reached concensus on five themes. The computer program NUD*IST was used to visualize the relationships and linkages between the individual items and themes.

Validation of the data involved :1) debriefing between facilitator and recorder after each focus group; 2) verification of the summarized key points with the participants of each focus group; 3) agreement between the investigators on the emerging variables and categories; and 4) verification of the identified themes with the participants in a post focus group.

Findings

The total number of responses was 270. Although there was a higher number of LPN participants in the study, the RNs responded more frequently (170:100). The five themes and subcategories identified provide a framework for the variables nurses use to define acuity. The numbers of responses in each theme and the numbers of responses according to RN or LPN designation demonstrate the variation between the two groups of nurses (see TABLE 1). The findings indicate that for all the nurses in this study, the definition of acuity is multifaceted and encompasses more than direct patient care activities.

The following are the five themes derived from the data, with examples of the common elements within each theme and participant's comments that support the elements and the themes.

Admission and Discharge Theme

Elements of this theme included: time for admission; assessment; co-ordination, planning; medication processes; and the documentation related to admissions and discharges. There were two (2) subcategories identified: Direct and Indirect care. The content of the RN responses relates to the mandate of the registered nurse and includes co-ordinating, assessing, planning, and the documentation associated with admissions and discharges. Examples of comments in the indirect category include; "discharge planning is time consuming and [we] need to make up medication calendars"; "when patients go home [we] need to organize the patients' medications . . . call the doctor . . . get orders, fax information".

Illness Theme

Two subcategories arose within this theme, i.e. Acute and Multiple Diagnostic. The sub-category of Acute included items related to acute patient occurrences, e.g., sepsis, IVs, infections, and falls. The Multiple Diagnostic subcategory included treatment for diabetic patients, and organizing and preparing patients for multiple diagnostic tests (laboratory, medical imaging, etc.). Comments within the Illness theme demonstrate interventions requiring the practice skill level of the RN. Some examples are: ". . . IVs"; " diabetics and all the work associated with that, [e.g.] insulin, assessments"; " sudden changes in patients conditions, deterioration, change for the worse". The LPN comments reflected on the workload of the RN and how it impacts on the LPN work: "IV meds are time consuming for both the RN and LPN, for the LPN there are extra tubes to work around ."

Table 1 RESPONSES by THEME and NURSING STAFF DESIGNATION

THEME		RN	LPN	TOTAL
ADMISSION/DISCHARGE				
Direct		7	2	9
Indirect		13	0	13
	TOTAL	20	2	22
ILLNESS				
Acute		16	9	25
Multiple diagnostic		6	3	9
	TOTAL	22	12	34
DIFFICULT to MANAGE				
Confused		5	8	13
Heavy Care		10	14	24
Psycho-Social		24	12	36
Non-Rehabilitative		8	2	10
	TOTAL	47	36	83
SPECIFIC DIAGNOSIS	TOTAL	9	2	11
NON-PATIENT RELATED ACTIVITIES				
Staffing, Workload Measurement		18	7	25
Time Management		11	18	29
Environment		8	2	10
Team Communication		25	17	42
Equipment		5	2	7
	TOTAL	72	48	120

Difficult to Manage Theme

The highest number of total comments for this theme is in the sub-category of Psycho-social. This theme demonstrates the emotional support required for families and patients is perceived differently by the RN and LPN groups. The RNs comments reflect that the support they provide to families is not normally captured by workload measurement tools. Examples are: " lots to do with families and family dynamics"; "have to be on guard especially in abuse situations.. when abuser shows up or [the] alcoholic shows up drunk"; "ALS patients are very emotional, different family members come throughout the day and you're supporting all day"; " [you] get total picture of circumstances and discover they can't go home - then they are grieving and need more support, to adjust, to settle affairs"; "especially if they are given bad news, the entire family with [the] patient is a dynamic, and this usually happens when the staff numbers are down, after 4 pm or on weekends."

The LPN comments suggest that primarily they didn't see themselves in a supportive role, rather they view themselves as recipients of the patients' or families' emotional distress. Examples of their comments include: " evenings have a lot of family problems. Families are time consuming; need support, social worker is not available"; " [patients and families] need anger management, they blame the nurse for the position they are in and want to be home".

Comments within the sub-categories of Confused and Non-Rehabilitative reflect the care requirements of patients with dementing illnesses and of those awaiting placement in a long term care facility who are not viewed as meeting the mandate of the program. "Our focus is rehab but some doctors want them [patients] to have a chance [which is] sometimes not appropriate...need placement", and "we aren't rehabing them and it takes us away from others and what we are supposed to be doing".

The Heavy Care sub-category generated more responses from the LPN participants. Comments include: " physical aspect [of care] is heavy, total care, bell ringers, incontinent, risk for falls, on alert"; "[on] admission and discharge, settling in or packing [up], heavy day; lifting up and down all day long, eight people can add up to 8 x 6-10 lifts, dependent and independent patients vary with physical disabilities, Parkinson or a stroke".

Specific Diagnosis Theme

This theme was developed from the RN identification of patients by their need for assessment and management in relation to a specified diagnosis and treatment. An example is: " we get a lot of Parkinson patients, which means a lot of medication changes and teaching." " Two is plenty and, if they have dementia, are high risk, or are anxious about medications, it is terrifying for patients and family. Physical [care needs of] patients are easier to work with [than anxiety]."

Again, the LPN responses reflected on the RN's comments, and were stated in generalities rather than by specific diagnosis. A comment included: "Being in hospital equals UTIs [urinary tract infections], [there are] bowel problems and [patients have] several medical problems".

Non Patient Related Activities Themes

The sub-category of Team Communication generated the highest number of responses for the whole study. Comments included: "[it's a] problem, nursing staff feel they are not listened to because we are nursing, not rehabilitation, rest of the team thinks that the patient is ready to go home and yet the night nurse says they are incontinent, we are trying to solve that by charting more specifically which is more time consuming"; "staff mix has huge implications, for example: calm staff = calm floor, stressed staff = stressed floor"; " we have constant consultation with other disciplines who are there all day, interactions with them is important and effective time, but [it is] time consuming with pharmacy, OT, PT and SW"; and "multiple disciplines can be burdensome".

The second highest sub-category within this theme is Time Management. This also had the highest number of LPN responses for the study. Comments from the LPNs included: " [shift] reports longer than 1/2 hour, report times at 7 a.m., 3 p.m., 7 p.m., and 11 p.m."; " LPNs want to be included in what's happening with patients at meetings. The invitation is there but the LPN needs to be on the floor. "Hear RNs laughing and the LPN is sweating away"; "people who don't carry their weight"; "staff expectations, for example, physio wanting people dressed for a certain time creates a conflict when the nurse needs them for other things"; and "restrictions imposed by other disciplines, ie. nutritionist says patient is on regular diet when the patient really needs minced. Takes time to get this worked out. Takes time and physical effort to get things changed."

RN comments included: "students take time, talking to them about routine can be way more work, some are good, it can be an extra pair of hands, but sometimes need to double check their work"; "go home feeling really awful about not getting things done"; " 1530 (hrs) and after is a bad time, with phone orders, emergency or family then you're stuck"; " patient conferences are time consuming, have to prepare infor-mation then there is conference time and documentation time, means a reduction of staff on the floor"; and " we have multiple people dealing with the patient. Time management is difficult with so many people."

The distribution of comments in the Workload Measurement subcategory reflects the RN involvement in staffing and workload indicators. For example: " Medicus interpretation is different for everyone;" "point system like Medicus needs to look at physical, emotional, psycho-social"; " wording of Medicus will not capture many things, [for example] toiletting is not reflected in the number of

times. Feed with assist is counted but does not reflect the time spent;" and " [what is not captured is] when unit clerk is off, the workload goes up considerably, with having to phone for staffing, RNs do staffing on off hours."

The comments in the category of Environment and Equipment for both the RN and LPN participants were presented in the context of interfering with care. Examples include rooms that are too crowded for equipment, narrow doors and the concern about skill level related to infrequent use of some equipment.

Discussion

The results indicate that nurses' perception of acuity is multi-faceted and encompasses far more than direct patient care activities. Even with guided questions from the facilitator, the terms acuity and workload were used interchangeably by nurses when reflecting on their workplace reality. As well, patient acuity is perceived differently by the RN and the LPN staff and is based upon the realm and reality of their mandated care practice responsibilities. There was also variation identified between the two groups in the number of responses by theme and subcategory.

The strong role the RN has in directly supporting patients and families became apparent. This role is in line with both the Standards of Practice and the RN educational preparation related to families and family systems theory. It would seem that, although this was identified as a key component and RNs do provide support to patients and families, there is little recognition in the workplace setting of the reality of this support. Nor are these indicators listed on the workload tool. Individual comments make it apparent that the RN continues to act as a direct resource to the family even after the patient is discharged from the unit: " many calls from home" and "patients call us once they are home." Currently, there is no way to capture nursing involvement with a patient (or their family) after discharge.

A large category of indirect nonpatient related activities, such as communication and team work, were contributing to the nurses perception of acuity. These appear to involve workplace factors that have an impact on the provision of patient care. The comments on communication and team work gave another perspective on multidisciplinary teams. It was not suggested by the nurses that the availability of a multidisciplinary team on each unit was not beneficial to the patients, but it was apparent having the team also impacted on their workload. The need for increased commun-ication with a number of individuals, the fact the other team members are only available during the standard workday hours (between 8 a.m. and 4 p.m.) was a source of frustration. The comments can be summarized into two points: first, nurses do not always feel they are viewed as equitable members of the team; and second, communication is seen as important but the time involved with multiple disciplines can be burdensome.

As noted by Munhall and Boyd (1993), a core variable is an essential requirement and the basis for the generation of any theory and basic social processes are core variables. The ability to explain ongoing social processes from the field setting, over time, and which have relevance to those working in the setting will lead to theory development. It would appear from the themes identified in this initial study that there are core variables or basic social processes which exist for nurses in determining their work in geriatric inpatient units. Identifying these factors may help to explain why neither current standard workload measures nor measures of patient acuity, in and of themselves, meet the nurses needs. For nurses in this study, patient acuity and workload were interwoven with the interactions with others in the setting, forming the basis for their social reality.

The nurses' perceptions of acuity incor-porated two core constructs: elements of patient acuity (acute illnesses, multiple diagnostics, psycho-social needs); and, the unit organ-izational issues of team functioning and systems in place. Further research would assist in development of a conceptual framework that could increase understanding of the nurses reality in the inpatient workplace system.

The study has limitations. The focus of this study was on the definition of patient acuity/workload from the perspectives of nursing on two geriatric assessment units. The definitions of acuity/workload by nurses in other areas or by other professional support services were not explored at this time.

Summary

This study did assist to define and describe nurses' perceptions of patient acuity within the geriatric programs in this facility. This knowledge allows for an increased understanding of the concepts involved in the use of terms, such as heavy workload or high acuity, from the nurses perspective. Additional research is needed to determine if other sectors working with geriatric populations are identifying similar concepts or social processes in their workplace and to determine if the two constructs of acuity and unit organizational issues are identified.

Differences were discovered in the responses of RNs and LPNs, which reflect the contrast between their educational preparation, regulatory requirements and scope of practice. This study also identified that unit organizational issues related to team communication and time management can impact on patient care. Benefits of the study include: 1) the provision of a breakdown of items that staff incorporate into their definition of acuity; and 2) a list of categories to guide decision making when staff identify high acuity on the unit. This could assist in the determination of the level of staff required, i.e. RN or LPN, to best meet the needs of the patient and the unit. A comment from a participant best sums this up: " When work is physically heavy [we] really need an extra LPN, when RN work is heavy ie., [patients are] sick, meds, you need an extra RN".

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