GUEST EDITORIAL - Kaylene Fiddes

Kaylene Fiddes is Project Manager, Victorian Centre for Ambulatory Care Innovation and the Disease Management Unit, The Alfred Hospital, Melbourne, Australia.

DISEASE MANAGEMENT: COMING TO A HOSPITAL NEAR YOU

Bed shortages, nurse shortages, chronic disease readmission rates and shorter lengths of stay are some of the issues impacting on our acute health care system today. Such issues have contributed to the implementation and evaluation of innovative service delivery models.

The principles of 'disease management' and disease management program models have attracted much interest internationally and a range of trials and projects are also underway in Australia.

Some of these trials build on programs implemented overseas which have had a positive impact on patient outcomes as well as improving the health care system. Disease management, whilst a multidisciplinary approach, also provides a unique role for nurses with a strong component of patient education, holistic assessments and case management.

Common conditions targeted for such approaches have included heart failure, asthma, chronic obstructive pulmonary disease and diabetes. Factors influencing the implementation of disease management for specific conditions can be seen in the example of heart failure.

Rates of readmission for patients with congestive heart failure (CHF) have been reported at 29% - 47% within three to six months (Rich et al 1995). One study reported an unplanned readmission rate of 20% within 28 days for this patient population (Lowe et al 1998). Factors such as poor understanding or poor compliance with diet, lifestyle recommendations and medication regimens are often reported as reasons contributing to readmission.

Trials in the US that have utilised interventions that address these issues have demonstrated significant improvements in readmission rates. These interventions have included a multidisciplinary proactive approach that provided structured follow-up and monitoring. This included nurse home visits, telephone follow-up, an intensive education program promoting patient self-management skills development and a support service. Further to this, these studies have demonstrated reduced emergency department presentations, improved quality of life, reduced costs, improved compliance with lifestyle recommendations and medication behaviour and improved functional capacity for patients with CHF (Rich et al 1995; West et al 1997; Stewart et al 1998; Shah et al 1998).

The focus of disease management sees a shift from the emphasis on managing the acute episode to managing the entire course of a disease, highlighting prevention and maintenance of well-being for patients with a chronic disease. Typically, programs seek to proactively address the needs of patients with specific long term conditions in the ambulatory care setting through ongoing follow-up, assessment and education, thereby preventing exacerbations and admission to hospital.

Common objectives include:

- improvement of patient well-being and quality of life;

- promotion of patient self-management skills;

- reduction of acute episodes, acute health care utilisation and readmission rates;

- provision of support services and ongoing follow-up; and,

- utilisation of evidence based practice.

Key components of many disease management programs include:

- extensive patient education (often ongoing);

- a multidisciplinary coordinated approach;

- ongoing monitoring and support often mediated by a nurse via home visit(s) or via the telephone;

- structured follow-up (for example, monthly telephone calls to determine issues, new needs, early warning signs of exacerbation and revise education);

- the use of evidence-based practice and guideline recommendations;

- the promotion of optimal lifestyle behaviour and self-management skills; and,

- clinical outcomes management.

Disease management programs may follow patients for up to six months while structured follow-up contacts have ranged from weekly to monthly. Patient follow-up may be in the outpatient clinic, the patient's home or via telephone contact. Sometimes it has simply involved mailing a reminder or information fact sheet. For example, a diabetic may be sent a reminder that their yearly foot examination is due.

Disease management programs are developed with the knowledge and understanding of the nature of the specific disease, and when and which interventions are likely to have an impact in terms of maintaining an optimal health status for the patient.

Developing the processes for managing the disease include the development and utilisation of disease specific interventions. Patient education uses a variety of interventions from written material to video instruction.

Critical pathways, telephone assessment forms, telephone clinical decision support algorithms, disease mapping, and treatment protocols are other tools used in disease management programs. Effective information systems are essential for data collection and outcomes analysis.

Some programs also provide a 24-hour telephone contact service for patients. A program for CHF patients may see a patient call in complaining of pedal oedema or increasing shortness of breath. Following consultation with the medical staff, a home care nurse may then visit the patient in their home and administer IV frusemide.

Not only has the patient been taught to notify health care professionals at a point where treatment can be given before it becomes a much more dire situation, but the treatment has been provided in the comfort of the patient's home and out of the more expensive acute care environment.

Research that demonstrates the effectiveness of treatments and care plays an important part in the development of a program. Review of clinical guidelines, clinical trials and literature, which is widely accepted by specialists, is essential for program development and optimal outcomes. Knowledge gained from these reviews, along with local expert consensus, is incorporated into the design. A simple illustration of this is described in the following:

Training patients with asthma in the use of a peak flow meter has been shown to be clinically effective and have a costs saving potential. This practice then, would be advisable as a key element in asthma disease management programs.

Measuring the outcomes of these programs have generally included health care utilisation and costs, patient quality of life and patient satisfaction. Medication intake may be measured during the service, along with functional status data and symptomatic data. Preventative health care utilisation may also be monitored. A population of diabetics may be monitored for improvement in the percentage of patients who have yearly foot and eye examinations or the percentage of CHF patients who are on ACE inhibitor therapy may be evaluated.

Whilst disease management is a multidisciplinary approach with overall management the responsibility of medical staff, the nurse is central to the success of disease management programs.

Some of the key aspects of the nurse's role include:

- delivery of clinical care in the home or via the phone;

- assessment for early warning signs of exacerbation;

- patient education and facilitation of patient self-management skills;

- remaining familiar with current evidence based practice and guidelines for specific patient population, for example, heart failure;

- understanding of outcomes established and appropriate interventions if variances occur;

- coordination and access of support and services in the community for patients as needed; and,

- liaison with all health care professionals involved in patient management across all health care sectors.

Disease management programs have been clearly identified by both Australian State and Federal governments as one of a number of intervention models to be used to deal with our changing disease and demographic patterns. The increasing evidence regarding the effectiveness of disease management in the care of individuals with chronic illness presents nurses with a unique opportunity to take a leading role in coordinating these emerging models of care. It is now up to the nursing profession to grasp the opportunity to become involved in the research, development and implementation of disease management programs in Australia.

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THE DEVELOPMENT, VALIDITY AND RELIABILITY OF THE HOSPITAL IN THE HOME DEPENDENCY SCALE (HDS)

Nick Santamaria, RN, RPN, BAppSc(Adv Nsg), GradDipHealthEd, MEdSt, PhD, MRCNA, is Principal Research Scientist - The Alfred Hospital, Melbourne; and Associate Professor, School of Postgraduate Nursing, University of Melbourne

Sue Daly, RN, DipAppSc(Nursing), BN, MN, FRCNA, is Business Manager - Victorian Centre for Ambulatory Care Innovation, Melbourne, Australia

Rachael Addicott, BA(Hons), is Research Assistant - Victorian Centre for Ambulatory Care Innovation, Melbourne, Australia

Lexie Clayton, RN, RM, BN, MHA, FRCNA, AFACHSA, is Director of Ambulatory and Community Services, The Alfred Hospital, Melbourne; and Associate Professor, School of Postgraduate Nursing, University of Melbourne

ABSTRACT

The aim of this study was to develop and investigate the validity and reliability of the Hospital-in-the-Home (HITH) Dependency Scale (HDS). The HDS is a new instrument designed to measure the dependency of HITH patients. It calculates an overall dependency level by rating four dimensions of the provision of HITH nursing care. Specifically, these dimensions are the complexity of assessment, complexity of treatment, time taken to provide the treatment, and the frequency of treatment. The results of testing the HDS suggest that it is valid in measuring adult medical and surgical HITH patient dependency. The scale demonstrated strong stability over time in test retest procedures over a one month period (r = 0.80, p <0.01) and internal consistency (Cronbach's alpha = 0.72). We conclude that the HDS is a valid, reliable instrument that is quick and easy to use in the HITH setting.

INTRODUCTION

For many years the measurement of patient acuity and dependency has been undertaken in the hospital setting utilising a variety of instruments. The needs for such measurements stem from various clinical and administrative sources including; the prediction of the chances of survival of a critically ill patient; the determination of nurse staffing requirements; resource allocation and the assessment of appropriateness of care. More recently the advent of new treatment options, such as hospital in the home (HITH) programs, has highlighted the need for new instruments to objectively capture the acuity and dependency of patients treated in such programs. When existing measures, such as the Appropriateness Evaluation Protocol (Gertman and Restuccia 1981) are applied to HITH patients, they have been found to lack the necessary sensitivity required to accurately capture the characteristics of these patients and unique elements of their care in the home setting.

LITERATURE REVIEW

Endacott and Chellel (1996) describe nursing dependency as the total patient need for nursing attention, including education, rehabilitation and psychological care. A number of other studies focus alternatively on patient dependency that involves the patient's ability to care for him or herself or the extrapolation of costs based on degree of resource utilisation as a function of patient care needs (Walker and Whynes 1990; Stillwell and Haley 1993).

A range of instruments have been developed to assess nursing dependency in specific conditions, such as, the cardiac illness dependency instrument (Riegel et al 1997) and in various settings including: the Therapeutic Intervention Scoring System (Cullen et al 1974) in the intensive care unit. The *Excelcare* system (Mason 1991) has been developed for the acute in-patient setting, the Northwick Park Dependency Score (Turner-Stokes et al 1998) in the rehabilitation setting and the Omaha problem classification system in the community setting (Helberg 1994). Each of these instruments has limitations when applied to the HITH setting. Further more, a number of studies have highlighted limitations of instruments such as the Appropriateness Evaluation Protocol (AEP) in the evaluation of ambulatory care nursing dependency (Lang et al 1999; Mozes et al 1996). Some studies have undertaken the development of alternative measures of nursing dependency which may be applicable for use in a home care environment, (Corless et al 1994; Halloran and Corless 1994; Carr-Hill and Jenkins-Clarke, 1995) however, few of these measures have undergone rigorous reliability and validity assessment.

Riegal et al (1997) conducted a factor analysis of a 25-item instrument used to measure cardiac illness dependency. On the basis of this factor analysis, the 25 items were divided into four primary areas – attention, reassurance, concern and assistance. These four factors accounted for 57.4% of the variance in scores.

Carr-Hill et al (1995) reported the findings of a comparison of four nursing workload measurment systems used in the acute care setting in the United Kingdom. The systems investigated included *Criteria for Care and South East Nursing System* which adopted a dependency level approach; the *Financial Information Project* which is based on a task orientated approach; and *Excelcare* which uses a care planning approach based on units of care. A simple comparison of the nursing workload measurement systems with the actual shift hours worked showed wide variations and, although there were quite high correlations between the estimates of over/understaffing from each of the systems and per capita hours worked, there was no obvious pattern. The authors concluded that dependency, as measured by these four systems, was a poor predictor of actual hours worked.

A study conducted by Turner-Stokes et al (1998) provides an evaluation of the Northwick Park Dependency Score (NPDS), a tool used in the rehabilitation setting at Northwick Park Hospital to assess impact on nursing time. Following a series of pilot tests, the NPDS was subjected to inter-rater and intra-rater reliability through an analysis of 21 patients by three senior nurses. Scores on the NPDS were collected on days one, three and seven. These reliability measures were calculated using a Spearman rank correlation. Inter-rater reliability provided a correlation of 0.9 (p<0.1). Intra-rater reliability, assessed through a comparison of scores on day one and day three, was 0.93 (p<0.1), indicating statistically significant reliability of the NPDS.

Helberg (1994) assessed the impact of nursing dependency on resource use by elderly home care patients. Nursing care requirements were measured through the use of the nursing classification index for home health care. This index identified 25 care activities and was scored by summing the total number of activities. A significant correlation was determined between measures of nursing dependency and duration and frequency of nursing visits (p<0.02). However, nursing dependency was only found to account for 7% and 5% of the variation in number of nursing visits and days of nursing service respectively (both measures statistically significant, p<0.02). Given the variables used to measure nursing dependency – mental status, physical activities of daily living, instrumental activities of daily living and coping ability – it appears that Helberg's definition of nursing dependency is more closely aligned with that of patient dependency.

Freeman et al (1999) reported on a nurse dependency tool developed in Wolverhampton, which aimed to provide an explanation of the caseload for individuals and teams working in district nursing services. This tool, which reflected the product of time per visit and frequency of visits, improved on the author's previous dependency measurement that was based on frequency of visits only. However, while this tool provided a total number of hours per patient, it did not differentiate the complexity of care being delivered.

As is indicated by the aforementioned studies, few reliable or valid instruments exist which measure patient dependency on nursing care in the ambulatory setting (Mozes et al 1996). While a number of studies focus on general nursing dependency (Freeman et al 1999; Carr-Hill and Jenkins-Clarke 1995; Helberg 1994), these typically tend to centre on the impact of nursing dependency on caseload or on the cost of care and have associated limitations when applied in the HITH environment.

Conceptual and measurement dimensions of the HDS

A recent review of 168 patients from six Victorian HITH programs conducted by the Victorian Centre for

Ambulatory Care Innovation revealed that using biological measures of acuity similar to those employed in the AEP resulted in HITH patients recording little or no abnormality. The problem in measuring HITH patient acuity using traditional methods is that while that patient may have a variable degree of dependency on care, they may not have measurable biological abnormality present on commonly measured parameters. An example of this situation is a patient with cellulitis who is being treated with intravenous antibiotics may not have an elevated temperature or abnormal blood chemistry, and consequently will register a negligible acuity score. However, this patient does have a discernible dependency level evidenced by the need for assessment and treatment. The difficulty with measuring patient acuity presents HITH programs with the problem of not having objective evidence to support the government requirement that HITH care provide a substitution for in-hospital care.

Because of the previously identified problems regarding the measurement of acuity in HITH patients, we decided to focus our efforts on developing a scale to measure patient dependency in the home setting. We believed that dependency could be successfully and reliably measured in both the in-patient and HITH settings, thereby providing the ability to directly compare in-patients with HITH patients. The challenge was to develop a measurement system that was valid, reliable, sensitive to changes in the patient as well as being relatively easy and quick to use for the treating nurse.

The HDS approaches the measurement of dependency in a unique manner because it utilises biometric, psychometric and temporal parameters to infer the final dependency level of the patient. Underpinning the HDS methodology are a number of assumptions regarding patient dependency. Firstly, that dependency level is the most appropriate measure of patient needs in the HITH setting due to the lack of meaningful acuity data. Secondly, that dependency can be measured in an objective, valid and reliable manner by examining the complexity of assessment and treatment required by a patient. Thirdly, that the frequency and duration of each treatment episode are meaningful indicators of dependency.

The HDS is designed to measure patient dependency on nursing care by calculating the sum of four major elements of HITH nursing care. These comprise the complexity of assessment, complexity of treatment, frequency of treatment and time taken to deliver treatment. The sum of these sub-scales produces a total dependency value for the patient.

Each of the two complexity sub-scales for assessment and treatment use a three-point scoring range i.e. 1=Low, 2=Moderate and 3=High. The complexity sub-scales rate complexity from the perspective of the behavioural demands of the tasks to be performed by the HITH nurse. This can be thought of in terms of the tasks having

cognitive, affective and psychomotor components. Therefore, the assessment and treatment tasks require the nurse to hold and apply a particular body of knowledge (cognitive), attitudes (affective) and physical skills (psychomotor) to the care of the patient.

From a practical perspective, this conceptualisation of determining overall complexity can be exemplified in the case of the HITH nurse who is administering a dose of an anticoagulant such as a low molecular weight heparin (LMWH) to a patient who has a deep vein thrombosis (DVT). The procedure of administering the drug is relatively simple and would be allocated a 'Low' (1) score, however the assessment task is much more complex due to the cognitive load and is allocated a 'High' (3) score. The nurse needs to understand the patient's current and past illness history, the physiological processes in the clotting mechanism, the role of the drug in that mechanism and the complications associated with the drug. The nurse also needs to determine the psychosocial and educational needs of the patient and family, as well as how to conduct the assessment process and how to elicit the data from the patient. Based on this example the complexity for this patient would be scored as Moderate to High (1 + 3 = 4 out of a possible score of 6).

The frequency and time sub-scale are relatively straightforward to score. Each range is divided into four steps. Frequency scores may range from daily or less (1), bd (2), tds (3) or qid (4). The time to provide treatment scale divides time as follows: 30 minutes or less (1), >30 minutes to ≤60 minutes (2), >60 minutes to ≤90 minutes (3) and >90 minutes (4).

The sum of the HDS sub-scale scores may range from 4 to 14 points. This dependency value is then used to allocate a final dependency classification to the patient in the following way: 4 = Low, 5-6 = Low/Moderate, 7-8 = Moderate, 9-11 = Moderate/High, 12-14 = High.

The overall definition of dependency encompassed in the HDS approach can therefore be represented by the following formula:

Dependency = Assessment complexity + Treatment complexity + Frequency of treatment + Duration of treatment

METHODS

Multiple methods were used to develop and trial the HDS. These included; the use of a consensus expert panel; the review of a normative sample of HITH patients; and an examination of the concordance between HDS values and those of HITH nurses to typical patient scenarios. Test-retest procedure, calculation of item to total correlation coefficients and a calculation of Cronbach's alpha were also employed in the testing process.

Validity development and testing

Validity refers to the degree to which an instrument measures what it purports to measure (Dawson-Saunders and Trapp 1994). In the case of the HDS, the construct of interest was that of patient dependency on nursing care. The first stage in the HDS development comprised convening an expert panel of HITH nurses. The nurses were all HITH coordinators from metropolitan and regional Victorian Hospitals. Their task was to advise and help define the levels of HITH patient dependency commonly encountered in practice. The deliberations of the panel resulted in a decision to view dependency level as the composite of four dimensions of HITH nursing practice. These dimensions were the complexity of assessment, complexity of treatment, time taken to provide the treatment and the frequency of the treatment. The panel then developed two lists of HITH nursing interventions, one representing assessment and one treatment. Each list grouped the interventions according to one of three levels of complexity, low, moderate or high.

The next stage in establishing the validity of the HDS was to use the intervention lists developed by the expert panel, and to compare the levels of assessment and treatment complexity to that of a normative sample of 129 adult medical and surgical HITH patient records from seven Melbourne metropolitan HITH programs. This process produced a data matrix of 704 individual patient observations that were used to refine the initial intervention lists. These patient data were believed to be representative of the majority of adult HITH patients in Victoria.

The final stage was to investigate the construct validity of the HDS. This was approached by the authors developing six patient scenarios based on the complexity interventions (see tables 1 and 2) and the characteristics of the HITH patient normative sample. The six patient scenarios were constructed so that there were two scenarios for each complexity level of the HDS assessment and treatment sub-scales. A group of 20 nurses drawn from five Victorian HITH programs were asked to allocate one of three possible complexity levels to the assessment and treatment interventions required in each scenario as defined by the expert panel. The goal of the process was to investigate the validity of the dependency complexity levels by observing the concordance between the expected levels and the determinations of the HITH nurses.

Reliability testing

The reliability of an instrument relates to the accuracy and consistency of the instrument in measuring a particular characteristic or construct (Tabachnick and Fidell 1989). In the case of the HDS, this property relates to its accuracy and consistency in measuring assessment and treatment complexity and subsequent dependency level. The process we employed involved using the same six patient scenarios that were developed for the validity testing. We asked a further group of 20 HITH nurses to score the scenarios on two separate occasions with a time interval of one month between scoring. This technique enabled us to hold the patient characteristics constant while calculating the test-retest correlation coefficients of reliability of the HDS scores for each patient. Item to total correlation coefficients were also calculated for each HDS scenario and a value for Cronbach's alpha was derived for the total HDS instrument and for the effect on the alpha value of removing individual items from the scale.

Analysis

All statistical tests were carried out with SPSS V9 computer program. Test-retest results were explored using Pearson's product moment correlation coefficient. Scale reliability was tested by calculating item to total correlation coefficients and Cronbach's alpha for the overall scale. Alpha was also calculated for the scale if the individual items were removed. In all cases the significance level was set at 0.05.

RESULTS

Validity

Tables 1 and 2 present the findings of the expert panel of 10 HITH coordinators after adjustment based on the review of a normative sample of 129 HITH patients.

Table 1: HITH Assessment complexity		
High	**Moderate**	**Low**
1. comorbidities > 1	comorbidities X 1	no comorbidities
2. highly complex needs social psych educational	complex needs social psych educational	stable needs social psych educational
3. IV drugs > 2	IV drugs X 2	IV drugs X 1
4. IV pumps	IV pump	no pumps
5. complex wounds >1	complex wound	Simple wound
6. complex drainage system	drainage system	no drains
7. complex physical assess	physical assessment	vital signs only
8. central venous access devices		peripheral venous access device

Table 2: HITH Treatment complexity		
High	**Moderate**	**Low**
central venous access	cannulation	peripheral IV bung

devices
    CVC, PICC,
    Hickmans,
    Portacath
chemotherapy
    IV bolus,
    IV infusion
	total parenteral nutrition	insitu

titration of IV drugs		IMI or SC injection
sliding scale insulin	enteral feeds	O₂ administration
multiple IV pumps	single IV pump	bronchodialators
complex specimen		simple specimen
collection		collection

highly complex support
    Social
    Psych
    Educational
	complex support
	    social
	    psych
	    educational
		simple support
		    social
		    psych
		    educational

complex interdisciplinary	interdisciplinary	
communication	communication	hygiene
complex wound care > 1	complex wound care	simple wound care

Assessment and treatment interventions have been grouped under three complexity levels according to the composite of cognitive, affective and psychomotor load required to perform each intervention.

Table 3 presents the characteristics of the normative sample of 129 adult medical and surgical HITH patients drawn from seven Melbourne hospital HITH programs used to refine the complexity sub-scales.

Table 3: Normative sample patient characteristics (N=129)	
mean age (range)	52.4(18-83)
male/female ratio	48/81
treatment by type	
IV antibiotics	41
anticoagulation	29
wound care	25
IV drugs	8
SC injection	4
IV blood product	1
enteral nutrition	1
post-op care	1
other	19
total	129

Table 4 reports the results of the construct validity testing using a group of 20 HITH nurses. The table presents the expected sub-scale complexity mean scores for each of six patient scenarios and compares them to the actual means recorded by the HITH nurses. The difference and the direction of the difference for each scenario are expressed as a fraction and percentage.

Table 4: Expected vs actual means for HITH patient scenarios			
Scenario	**Expected Mean**	**Actual Mean (SD†)**	**Difference (%)**
1. assessment 1. treatment	1 1	1.31 (0.47) 1.57 (0.50)	+0.31 (23.7) +0.57 (36.4)
2. assessment 2. treatment	3 2	2.42 (0.60) 2.31 (0.47)	-0.58 (19.4) +0.31 (13.5)
3. assessment 3. treatment	2 2	1.89 (0.56) 1.52 (0.51)	-0.11 (5.5) -0.48 (24)
4. assessment 4. treatment	1 1	1.31 (0.58) 1.42 (0.50)	+0.31 (24.7) +0.42 (29)
5. assessment 5. treatment	2 2	1.84 (0.37) 2.26 (0.56)	-0.16 (8.6) +0.26 (11)
6. assessment 6. treatment	3 2	2.05 (0.52) 1.94 (0.52)	-0.95 (32) -0.06 (3.0)
total	22	21.84 (3.03)	-0.16 (0.7)

† Standard deviation

Reliability

Table 5 reveals that the test-retest reliability of the HDS with a one-month interval between scores produced a correlation coefficient of 0.809, $P < 0.01$. Cronbach's alpha for the HDS and the effect on the alpha value of removing individual items on the scale is also reported.

Table 5: Corrected item to total correlations and alpha values		
Scenarios	**Corrected item to total correlation**	**Alpha if item removed**
1. assessment 1. treatment	0.29 0.17	0.70 0.71
2. assessment 2. treatment	0.56 0.37	0.68 0.70
3. assessment 3. treatment	0.47 0.47	0.69 0.69
4. assessment 4. treatment	0.08 0.31	0.72 0.70
5. assessment 5. treatment	0.52 0.76	0.69 0.67
6. assessment 6. treatment	0.61 0.37	0.68 0.70
HDS Alpha		0.72

DISCUSSION

Validity

The testing of construct validity presented in Table 4 reveals the HITH nurses generally scored the two lowest complexity patient scenarios (1 and 4) as having higher complexity than expected. The medium complexity scenarios (3 and 5) were predominantly scored as being slightly lower than predicted. These scenarios also demonstrated the lowest total degree of variance. Scenarios at the highest level of complexity (2 and 6) were mainly scored lower than expected. Overall, the HDS scenario mean score was only 0.16 (0.7%) below the expected mean. The degree of concordance between the expected and actual scores demonstrates a degree of statistical regression towards the mid-point of the scale, that is that lower complexity scenarios were scored higher and conversely high complexity scenarios were scored lower. We believe that the extremely close overall means support the general construct validity of the HDS. It should be noted that the HDS scenarios had no other information regarding how to score the complexity apart from the instruction to allocate one of three possible scores to each. Because no definitions of complexity or lists of interventions such as those presented in Tables 1 and 2 were given to the HITH nurses, we conclude that the HDS has relatively strong construct validity.

Reliability

We believe that the findings of the reliability testing support the performance of the HDS. The test-retest correlation coefficient value of 0.80 (p < 0.01) indicates that when patient characteristics were held constant, the HDS demonstrated stability over a period of one month. Similarly the internal consistency of the HDS was supported by the strong value calculated for Cronbach's alpha of 0.72. The corrected item to total correlation coefficients presented in Table 5 should be interpreted with caution because the scenarios were designed to have differential values. The consequence is that they cannot be used in the usual manner to judge the value of either rejecting or retaining an individual item on the scale. The individual alpha values provide a more meaningful measure of the internal consistency of the scale and consequently the relative performance of individual items. Overall, we believe that the findings demonstrate that the HDS is internally consistent and stable.

Limitations

The study is limited by the relatively small normative sample used to refine the assessment and treatment complexity sub-scales. Ideally, the normative sample should be larger given the volume of HITH care provided in Australia. The current form of the HDS is specifically designed for adult acute medical or surgical HITH patients therefore we make no claims regarding its performance with other patient groups.

Future development and research

We believe that the HDS presents a number of development opportunities. Specific versions could be developed in areas such as midwifery and paediatrics. The HDS could be suitable for conversion to a computerised form, ideally designed to operate on hand held computers that are becoming increasingly popular in community settings. The performance of the HDS should be investigated with specific HITH patient groups. It is possible that the HDS could perform differently with some patient groups. It would also be interesting to investigate the relationship between dependency levels measured by the HDS and the cost of care for a range of diagnostic categories.

CONCLUSION

The HDS is at a relatively early stage of development, however we believe that its performance to date is encouraging. The HDS is unique in the HITH practice setting because it uses the assessment and treatment complexity, frequency and duration of care provided by HITH nurses to infer patient dependency. We believe that with further refinement and testing the HDS will provide HITH clinicians and managers with a valuable instrument to monitor patient dependency levels, resource utilisation and to provide objective evidence of the comparability of HITH patients to in-patient populations.

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USING ACTION RESEARCH WITHIN A SCHOOL OF NURSING: EXPOSING TENSIONS IN IDEOLOGIES

Margaret McAllister, RN, RPN, BA, MEd, EdD, is a Senior Lecturer, School of Nursing, Griffith University, Nathan, Brisbane, Australia

Lynette Stockhausen, RN, BEd, MEdSt, PhD, is a Senior Lecturer and Deputy Head of School, School of Nursing, Griffith University, Nathan, Brisbane, Australia

ABSTRACT

This paper examines and critically reflects on a recent curriculum evaluation that took place in 1999 within a school of nursing. Critical theory, and in particular action research, was chosen as an approach for the research. The method aimed to foster participation and reveal and problematise aspects of nursing education which had become taken for granted. Through the process of action research a number of tensions and challenges were revealed. The exposed tensions and challenges are discussed and reframed so that they offer potential for renewed commitment to nursing education, rather than continued constraint and conformity.

INTRODUCTION

The problem of course evaluation

Evaluation research in education has been popular since the 1970s, but has tended to rely on objectivist and positivist methodologies that aim for generalisable findings and universal prescriptions for practice (Cohen et al 2000). However, because each course has different teaching contexts and climates, different learning needs and outcomes, different teacher and student resources, as well as different goals and values, a uniform approach to evaluation design is at the very least unhelpful (Alheit 1999; Simons 1996).

Indeed, several authors argue that it is not the generalisability of programs that has merit, but the specificity (Simons 1996; Farmer 1993). In other words, local program evaluation offers meaning and insight to others about particular educational practices. Findings may not be generalisable, but still generate new ideas and better practice. Rather than continue to pursue the invention of a single method for curriculum evaluation, one needs to acknowledge the value of multiple methods and local research. For too many years, curriculum research has been used to promote uniformity in teaching, which has constrained the artistry and individuality of a teacher's craft (Eisner 1998).

In terms of undergraduate nursing programs this aim for uniformity is less noticeable. There is, however, pressure on schools of nursing to produce graduates who can demonstrate achievement of the Australian Nursing Council Incorporated (ANCI) competencies which are national agreed outcomes. State regulatory bodies have a role in ensuring that courses consider these competencies and also use methods to evaluate how well competencies are achieved. Local workplaces also exert some pressure on schools in their vocalisations about how work-ready they perceive students and graduates to be. However, exactly how schools go about achieving those goals is

generally a matter of local preference. Despite this autonomy to provide nursing education in creative ways, the craft of teaching nursing has not been sufficiently scrutinised or communicated. In part this is because curriculum evaluation processes are not commonly reported in either education or nursing literature (McAllister 2000).

This paper will contribute to the discourse on the craft of teaching nursing by explaining and critically reflecting on a recent curriculum evaluation which took place in 1999 at Griffith University, Brisbane, Australia. The methodology will be explained as well as how findings were interpreted. Recommendations for curriculum development will be outlined.

BACKGROUND TO THE STUDY

Moving beyond positivism

As a result of a growing acknowledgement that regularities and certainty in education may not exist, scientific approaches to understanding teaching and learning are being replaced by interpretive and critical designs (Constas 1998; Eisner and Peshkin 1990). The impetus for this paradigm shift appears to have come from advances in sociology and the increasingly acceptable view that classrooms are places of human interaction which can not be adequately understood using empirical methods (Candy 1989; Jackson 1968; Smith and Geoffrey 1968). Thus, evaluation of teaching and learning practices have therefore broadened to encompass a study of schools and classrooms as social organisations. Interpersonal activities, the hidden curriculum and the ways teachers approach their craft are all legitimate areas for research inquiry.

Political movements, such as feminism and civil rights, have also influenced activities within the classroom as well as critical thinking about those events (Culley and Portuges 1985). The student body has become more active and teachers are beginning to look at their work in a different way (Van Vught and Westerheijden 1994). Feminism offered a critique of paternalistic educational structures that tend to: maintain inequalities within the classroom due to gender, culture, class or authority; overlook processes in learning because of a preoccupation with outcomes; and, promote objective, universal truth instead of acknowledging subjectivity and multiple understandings (Culley and Portuges 1985).

This concern for relationships, in this case within the classroom, and the need for change, are key beliefs which underpin the critical theory paradigm. Critical theory assumes that knowledge in a discipline such as nursing tends to be controlled and constrained by positivist inquiry that emphasises objectivity, and hypothesis testing (Bland 1995).

Critical theory

Critical theory seeks to understand human experience as a means to change the world. Thus, unlike other more conventional paradigms, the researcher seeks to move beyond description and interpretation, towards transformation (De Poy and Gitlin 1994; Adorno 1973; Habermas 1972; Marcuse 1969). The aim is to uncover reasons and motivations which may perpetuate unfairness and inequity and which convince people that change is either unnecessary or impossible.

Taken-for-granted social constructions such as 'the nature of nursing' are of interest to critical researchers, because it is these practices which reveal how a culture such as nursing is reproducing favoured ideas and alternatively, suppressing others. If dominant views are accepted without reflection, disempowerment of those who hold alternate views can inadvertently result. The critical social researcher also aims to suggest other ways of thinking about cultural practices in order to offer potential for peoples' empowerment and systemic transformation.

While individual methods may differ, critical approaches are concerned with exploring interactions, discourses, power relations, language, cultural practices, silences, and competing ideas and interests; because it is these phenomena which expose false consciousness, the power of the dominant paradigm to set agendas and constraints on freedom (Constas 1998).

The critical social researcher attempts to avoid becoming preoccupied with the technical procedure of research because technical knowledge produces only rules and limits, rather than knowledge that connects people or knowledge that empowers people (Habermas 1972). Further, the researcher may not be overly concerned about *facts*, preferring to focus on *values* because 'facts' assume that knowledge is unitary and fixed. Values, on the other hand, are the key to what dominant groups foreground as important, and therefore shape action and beliefs (Sumara 1998).

Similarly the researcher tends to avoid preoccupation with *efficiency* in order to consider the importance of *quality*. Importantly, the critical researcher aims to reframe the purpose of research from being about work done *on* subjects, to work being done *with* and *for* participants (McWilliam et al 1997).

According to Constas (1998), findings ought to be presented in a cautiously reflective manner. Indeed the outcome of such research may be further questions rather than answers, since the aim is to make problematic that which we have mostly taken to be right, proper and precise. Lather (1993) argues similarly when she states that conclusions of research must only be tentative because what may appear to be true in one context, may be irrelevant and inaccurate in the next.

In this particular curriculum evaluation, critical theory was chosen as a suitable research approach because of the need to problematise aspects of nursing education which had perhaps become taken for granted. Such aspects include: content of nursing courses, ways clinical knowledge and skills are taught and learned, as well as assessment within nursing courses (McWilliam et al 1997).

The participatory nature of critical theory, and the concerted effort to work with participants, rather than on them, was an important goal. Because curriculum is a lived experience, rather than a static document, meaningful exploration of the strengths and weaknesses of an existing curriculum required active involvement from the players: teachers, students, administration and community (Eisner 1998). Therefore, a research design which valued and focused on engaging full and open discussion and the active exchange of ideas was seen to be important in this review of a nursing curriculum.
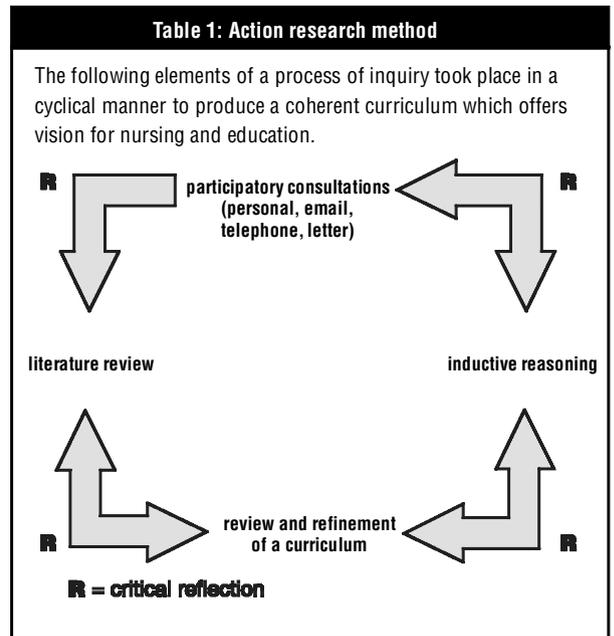
THE STUDY

Action research method

An action research method was designed so that all stakeholders for the nursing curriculum would be invited to have input, to promote the achievement of outcomes grounded in the participants' beliefs and needs, to increase ownership and commitment to a common curriculum, and to allow for changes to be made in an incremental and accumulative way (St Leger and Walsworth-Bell 1999; Sumara 1998; McNiff 1995).

Action research is a spiralling process of data collection and analysis, reflection on emerging findings and comparisons with insights from the literature. In using this method, students, lecturers, clinicians and consumers became co-researchers jointly involved in planning the research process, gathering data, reviewing plans, implementing actions and evaluating effects. A key concept of this research approach is that research is done with participants, rather than done on them. In this way, the team aimed to increase possibilities for the new curriculum to be accepted, embraced and owned by all participants.

In order to achieve the aim for collaboration, the project leader adapted the ethical principles suggested by Hopkins et al (1989) which include a stance of impartiality, confidentiality, negotiation, collaboration and accountability. In addition, the project leader was particularly sensitive to the issue of ownership of ideas, and understood the need to develop and maintain trust.

Table 1 provides a diagrammatic summary of the action research method.

Table 1: Action research method

The following elements of a process of inquiry took place in a cyclical manner to produce a coherent curriculum which offers vision for nursing and education.

participatory consultations (personal, email, telephone, letter)

literature review

inductive reasoning

review and refinement of a curriculum

R = critical reflection

Setting

This curriculum research took place in the context of a school of nursing which has three campuses, and two distinct curricula. One campus offered a problem-based curriculum model which emphasised development of learning process. The other two campuses offered an integrated curriculum model which stressed development of interdisciplinary knowledge. While the three courses offered variety for students and opportunities for diverse ways of knowing nursing, the situation was resource-intensive and hindered the development of a shared vision for the school. While there was an explicit commitment to move towards building unity, the reality was that people varied in their attitudes and beliefs about the need for curriculum change. Thus, the method for research inquiry needed to be sensitive and accommodating to these diverse attitudes.

METHOD

Data gathering and analysis followed an inductive approach to reasoning which meant that exploration of the issue of nursing education began with a broad outlook and general questions, and gradually the issues were focused using a convergent approach to consultations and literature review.

A Course Advisory Committee was established with representation from each campus, consumers of nursing and the nursing profession. This committee steered the project leader providing direction and ratifying decisions. A grant of $5000 was made available from the School of Nursing Special Project Fund to support the project leader with curriculum development.

Participants involved in the study were drawn from the South East Queensland region and included key stakeholders: consumers of nursing services; faculty members including students, academics, administration and technical officers; clinical colleagues including managers, clinicians and clinical educators; and professional bodies. In all, over 100 participants provided input.

Data gathering and analysis utilised a combination of group semi-structured interviews, email and letter communications, telephone calls and personal discussions. Findings and ideas were regularly shared with participants and guided by the Course Advisory Committee. The activities which occurred in this process of data gathering and analysis are summarised in Table 2.

Table 2: The process of data gathering and analysis							
1999-2000	July	Aug	Sep	Oct	Nov	Dec	Jan
Letter to stakeholders inviting all contributions	✔						
Curriculum discussion retreat			✔		✔		✔
Course advisory committee established and convened	✔		✔		✔		✔
Literature review	✔	✔	✔	✔	✔	✔	
Email consult: broad question		✔					
Email consult: respond to interpreted data				✔	✔	✔	✔
Focus interview with stakeholders		✔					
Interview with regulatory body		✔					
Focus interviews at Gold Coast; Logan and Nathan campuses		✔					
Focus interview with clinical staff		✔					
Proposed curriculum circulated for comment			✔				
Curriculum expert consulted			✔				
Subjects for the curriculum discussed and decided					✔	✔	
Subjects developed							✔
School submission document prepared							✔

Methodological trustworthiness

In order to ensure that findings from the study reflected the experiences of teachers and students, the ideas of Constas (1992) were applied to data collection and analysis. Constas recommends that qualitative research ought to aim for data completion and confirmation. Therefore, focus interviews and verbal and written correspondence were undertaken repeatedly with participants until no new data emerged. Data was also analysed collaboratively between project leader and participants so that any interpretation was confirmed and supported. In this way interpretation of data was grounded in the beliefs of participants, thus helping to make findings more likely to be accepted and owned by the group.

Because action research involves a repeated process of exploration, critical reflection, implementation of a change, followed by more critical reflection, achieving research completion requires patience and commitment. A clear boundary between data collection and analysis does not exist, and therefore interpretations, revisions, consultations, feedback and input needed to be repeated.

FINDINGS

Exposing hidden tensions

The process of consultation and discussion revealed diverse beliefs about nursing education. Appreciation for their complexity and attempts to reach compromise on these beliefs became the primary goal for the research team.

The first tension was identified to occur between the belief that clinical learning in a nursing program is important and yet faculty had to depend on teachers and supports independent of the school for its achievement. Clinical facilitators, clinical nurses and managers may not have educational expertise, or familiarity with the local curriculum and yet they were expected to be effective teachers. The question was posed: How do we respond to the charge to give nursing care primacy and at the same time maintain a commitment to knowledge development?

Resolving this question will be a major challenge for the future. How imaginatively and effectively the curriculum is able to inspire students to excel in the work of nursing practice and theory remains to be seen. One important strategy the faculty has resolved to implement is to conceptualise four dimensions for learning outcomes for every subject taught within the curriculum. These dimensions are: cognitive, metacognitive, skills and attributes. For example, a subject on communication will aim to teach students knowledge about communication (a cognitive dimension), questions to ask self in order to guide learning and think differently (a metacognitive dimension), communication skills, and attributes important to effectively communicate. By using the four dimensions for outcomes, and a standard subject development guide, teachers may be encouraged to think beyond dualisms such as theory/practice, content/process, and learning the what/how. Such dichotomies can subtly reinforce hierarchical division between nursing practice and theory. Additionally, subjects will be constructed with the principle that learning may be enhanced when it is contextualised. For example, sociology will be taught but within the context of how it is important to nursing.

The next tension identified was between the clinical facilitators' desire to nurture, support and guide neophytes which clashed with the faculty expectation that clinical facilitators accurately diagnose and judge a student's level of knowledge, skills and attributes. The question was posed: How do we maintain and develop the quality of student support in the clinical area while at the same time enhance rigorous summative assessment of student competence?

Again, this challenge remains ahead for students, teachers, and the nursing communities with whom we collaborate. Some important initiatives the school will be introducing include a more user-friendly clinical assessment tool which makes explicit the faculty's belief that clinicians are the people best placed to make decisions about a student's clinical performance. In simple language, the assessor and student will be reminded that critical comment about the student's clinical performance is important for learning, and that decisions will be respected and recorded. The new two page form, known as the CAT (Clinical Assessement Tool), relates to ANCI competencies but minimises jargon and contains simple, clear, unambiguous directions relevant to both students and clinical teachers. Implementation of the CAT will be piloted in 2001. The faculty has also resolved to encourage students and clinicians to undertake a new flexibly-delivered subject entitled 'Clinical Teaching For Nurses' which focuses on the development of rigorous, supportive, evidence-based and reflective clinical education in nursing.

Another tension existed between the values and intentions underpinning two major socialising forces for nursing students: tertiary education and the workplace. Both socialising agents share an ability to transmit knowledge but they sometimes operate in competition rather than in concert. While one agency has the requirement to support and develop learning to their client - the student, the other has the requirement to supply effective and efficient health care providers to their client - the patient.

Since awareness is sometimes sufficient to deepen insight and change behaviours, faculty believes that a simple but effective strategy to resolve this tension will be to acknowledge it. In forums such as classroom discussions, clinical reflections, collegial meetings between academics and clinicians, our dual purposes can be discussed which may help to remind us all that educational and health service outcomes are equally important to the advancement of nursing.

Another tension lay between the knowledge that nursing culture needs to be transmitted and yet a transmission view of teaching/learning produces passivity and control. The question was posed: Is it possible to transmit and transform the culture while engaging rather than controlling neophytes?

Nursing literature abounds with discussion of this issue, and while there is a strong argument which contends that nursing needs creative, lateral thinkers in order to extend knowledge and practice, it is also true that nursing is highly regulated (Milligan 1999; Bandman and Bandman 1995). Hence, students who learn to abide by rules and understand the limits of their scope of practice will be an asset to the efficient functioning of health services. Faculty has, therefore resolved to renew its commitment to teaching foundational concepts and skills in areas such as law, health sciences, and health responses, and encourage creative expression in areas suitable to divergent and creative interpretation such as in health promotion, nursing research and approaches to illness adaptation and recovery.

Despite the need to conform to various rules and regulations, there is much about nursing's culture which can be changed through quality education. It will therefore be important to provide opportunities for students to learn: how to be political and active citizens, how to communicate assertively rather than passively or aggressively, the value in supporting each other, in celebrating success, and finally in recalling and retelling our cultural stories so that they enrich neophyte values of tolerance, compassion, respect for difference and interdisciplinarity. In this way, it is likely that the educational experience will be empowering and renewing, not just for neophytes, but eventually for the whole of nursing.

There was also tension between the desire to integrate or embed concepts throughout the whole course so that students were assisted to learn practical knowledge with clear relevance to the workplace, with the desire to isolate foundational or crucial concepts so that they could be examined in depth. The question was posed: Is it possible to integrate knowledge from various disciplines and at the same time offer opportunity to master distinct bodies of knowledge?

The notion that nursing is both a distinct body of knowledge, and a discipline which can be enhanced by other disciplines is a principle to which faculty is strongly committed. Therefore, the faculty has resolved to develop challenging teaching and assessment strategies that promote the integration of knowledge unique to nursing as well as interdisciplinary knowledge and practices. For example, the exploration of case studies which require students to problem solve using a nursing framework will be completed and followed up with a re-examination of the same study this time using frameworks that social workers, medical practitioners or psychologists may use. In this way, students will be learning about the roles of other professions while not losing sight of nursing's contribution.

Another tension revealed was between the expectations of industry/culture for 'competent' practice and the

additional, general educational ideals to produce critical and transformative thinkers. The challenge was put: How do we promote the ideals that graduates are able to be work-ready as well as capable of changing our collective futures?

Students need to be able to be responsive to, and transform, not only the interchange and spaces where nurses and clients meet, but also the changing demands of a dynamic profession and health care environment. The faculty and clinicians have resolved to: change students' concept of the spaces in which nurses work; create innovation in the way students become critical thinkers so that they work competently and creatively in these changing spaces; and change the way 'work' is viewed by students. One strategy is to reconceptualise the 'classroom' as a microcosmic extension of a space in which nurses work. By promoting collegial relations in the classroom, providing forums for students to challenge and change both the work-space of the classroom and the spaces nurses and patients occupy or could occupy, we believe we will be contributing to a changing face of nursing and extending its possibilities.

Tension was also evident between the educational desire to maintain and improve the teaching of 'constants' in nursing such as calculations, interviewing skills, self care, while needing to make time and space to teach new horizons in nursing knowledge such as contemporary practice, embodiment, ecology/environment, politics/power.

The faculty and clinicians determined that the 'constants' needed to remain in the curriculum but taught in a changed teaching and learning environment. For example, self-directed mathematics or information retrieval activities will be devised which students will be expected to complete and master prior to classroom contact, in order that teacher-student contact can be dedicated to more advanced concepts.

Finally, there was an awareness that the spaces in which nurses are expected to perform, and the spaces that students elect to experience were sometimes in competition. While the social world continues to expect nurses to be generalist, competent to care for people across the lifespan, in contexts ranging from acute care environments, the home, community and residential settings, as well as for special needs groups, it begs the question: How is it possible to serve multiple, and sometimes competing interests?

In response, the faculty has renewed its determination to select meaningful clinical experiences for students and to provide intensive and thorough education and training prior to the off campus experience so that students can know what it is they should be practising during this time and how they can communicate their needs to clinical colleagues and teachers.

Further, a small but significant change has been introduced to the sequence and focus for off campus placements. In the past, the first semester of first year did not involve clinical experience, possibly because faculty believed students needed the whole semester to prepare. Yet consultation with past and potential students found that students were very eager to learn about nursing practice at the beginning of the course. Further, teachers felt the need for students to understand better the broadening scope of nursing work. Thus, the faculty has agreed to include one week of clinical fieldwork in the first semester of study. This week requires students investigate social and cultural practices in various nursing spaces. Students will be intensively prepared by learning concepts such as sociological analysis, ethnographic and interviewing techniques, as well as empathic, professional communication. We intend to closely evaluate the contribution this innovation makes to students' appreciation for the many spaces in which nurses can and do operate.

Reflections on the challenges of action research

While action research offers a potential for increased participant involvement within the research inquiry, it is also a labour-intensive, exhausting method. It required the project leader to be tolerant and open to diverse and competing ideas, neutral yet also participatory, sensitive to ideological differences yet also pragmatic because the research had to produce a practical outcome: a new curriculum.

At times, some research participants tended to adopt a marginalised position and projected on to the research team frustrations and anger more likely to have been generated from the changing nature of the university workplace. As universities are responding to national requirements to generate revenue and perform multiple educational, research and community functions, so academic and administration staff may be feeling the pressure of changing, competing and overloaded roles. Throughout the consultation process in the research, participants needed a lot of time to discuss workplace problems. It was challenging to be patient and restrain the eagerness to begin to work towards solutions, but catharsis is a necessary precursor to insight and awareness, which is in turn a precursor to the generation of solutions.

Reflection on the data was both a validating and frustrating exercise because it began to expose familiar and unfamiliar cleavages within nursing and education. The cleavages include the tension between theory and practice, science and aesthetics, outcomes and process. Due to the embedded nature of those rifts, solutions and ways to reach compromise were a major challenge. For example, a few participants frequently refused, or were unable, to collaborate.

Perhaps collaboration was an unfamiliar activity for those who had often been left out of discussions in the past.

It also seemed that participants felt that the only way to act within a research process was as inactive, passive and in receipt of knowledge, rather than co-creators. Perhaps some participants saw their identity as an academic, and their place within the educational world to be under threat, and thus they felt defensive and self-protective.

This concern for protecting identity also appeared to translate to beliefs held about 'essential nursing knowledge'. Whenever debate began about what were considered fundamental concepts in a nursing curriculum, discussion became polarised and emotional. Participants either retreated into silence, or refused to see others points of view. One way to read this situation, is to see it as another form of false consciousness perpetuated by a dominant culture which has vested interests in keeping nursing divided and away from meaningful debate which could lead to change. If disagreement cannot be tolerated, silences will result, compromise will not be reached and the status quo will be upheld.

In this case, maintenance of the status quo would likely involve: decision making in nursing education remaining the role of an elite few; the continued view of nursing as a role that involves responding to client problems and illness, being a generalist and efficient task master, doing for a person rather than acting with, and being reactive rather than proactive (Arras and Dubler 1995). All of these roles will likely be accepted without question by a society that knows no other way for nurses to be, and help to prop up a paternalistic health service which has a focus on disease, diagnosis and treatment.

While firm answers to these problems have not been reached, the study has been successful in at least exposing some of these previously hidden tensions, which perhaps opens them up to being contested and at least unsettles the status quo. The study has also prompted an opportunity to take a fresh look at the ways we teach and contribute to the nursing community.

Renewed commitments

Even though awareness of problems may not be sufficient to lead to change, at least this process of critical reflection has exposed a number of hegemonic forces which prevent change and maintain the status quo. While they may not be overcome in this renewed effort to produce a coherent curriculum, there is possibility for them to be challenged and no longer taken for granted.

Despite lingering differences in educational values and ideas about nursing's 'true' identity, the faculty were able to identify a number of important areas in which they were united. We agreed that clinical learning must have primacy. Nursing is a practice discipline and undergraduate nursing degree programs have a responsibility to produce graduates who are skilled to work efficiently in an environment of change as well as envisioned and committed to transforming health services. The challenge for the course is to respond to current economic and social forces, which are placing pressure on students to work in more diverse environments. Additionally, the course is pressed to prepare students so that they have technical knowledge, a wider general education, and personal and transferable skills and attitudes.

We also agreed on a united approach to conceptualising theory. A false dichotomy persists which tends to create unhelpful tension between theoretical and experiential knowledge. Thus, a challenge for the new curriculum would be to build unity and find solutions rather than remain problem-oriented. The ways that this principle would be enacted included: teaching practical theory rather than pure theory; planning teaching, learning and assessment activities which incorporate the development of declarative, procedural, logical and imaginative thinking skills which are relevant to practice.

We agreed on a united approach to conceptualising the student-teacher relationship. Rather than think of teaching as a one-way flow of knowledge, or knowledge transmission, the teaching-learning process will be considered as transactive so that the teacher and student share responsibilities for knowledge development and creation. While power in this relationship is not equal, since the roles and expertise of teacher and student are not equivalent, power need not be exploitative and it can be shared.

The teacher's role is not simply to be a facilitator of a student's cognitive and metacognitive skill development but also to demonstrate and share nursing expertise. The student's role is to learn not just the surface level requirements of nursing practice, but to learn at deep and achieving levels so that neophytes move beyond competence towards excellence.

We agreed to value a varied approach to teaching and learning strategies. While learning outcomes and measurements of those outcomes will be shared across the three campuses in this new curriculum, diverse teaching and learning strategies will be encouraged and supported because we believe it will produce creative, enriched environments for students to learn and for academics to research. The approach to teaching and learning would be to aim for a balance between the need to efficiently teach essential subjects in an expanding nursing discipline and maximise the student's development of life-long learning skills. Academic and clinical teachers perform a crucial

and active role in taking students swiftly through existing nursing knowledge in a supportive and facilitative way that encourages the development of insight, foresight and wisdom.

We agreed to use a range of educational approaches so that knowledge foundations, the process of learning and becoming a nurse, and best possible outcomes are achieved for Griffith University. Those approaches may include: interactive lectures and tutorials, computer activities, situated learning, problem-based learning, intensive study, peer learning, field trips, clinical experience, expositions and conferences.

In addition, we agreed to make a practical commitment to building a shared culture. Nursing has been fractured by the presence of power differentials and diverse and competing interests both within and beyond the profession. Since the new curriculum will have a commitment to being solution-oriented, it will be important to build community within and beyond the faculty in order to sustain the renewed optimism for partnerships between clinical and academic nurses. Examples of community-building events include holding shared events such as student and academic conferences and promoting industry/university initiatives.

Finally, we believe in the need to work towards reclaiming for nursing the human dimension of health care. The notion of nurse and client working together to achieve balance in a healthy body, peaceful spirit and social harmony is an exciting opportunity and one that offers direction and vision for nursing. The curriculum can focus on balancing technology and humanity, efficiency and effectiveness, autonomy and collaboration, professionalism and partnership, reason and creativity, evidence and intuition, individual and society, nature and culture.

CONCLUSION

A critical theory paradigm offers potential to examine that which has been taken-for granted and may illuminate fresh ways of understanding and approaching a situation. In nursing education, a critical approach has made possible this re-examination of entrenched ways of teaching and learning nursing. Whether or not we are able to achieve our united aims, this research has successfully identified and opened up the possibility for transformation, a number of tensions which work to constrain and distract nursing education from reaching its overall goal: the emancipation of nursing. From this participatory process, the team agreed to produce a new course which would emphasise the practice-based nature of nursing, the diverse work of the nurse-client partnership which may take place in various settings, the proactive

and response roles of nursing practice and the active role that clinical and academic teachers must play to support effective learning and advance the profession.

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NEW MOTHER GROUPS AS A SOCIAL NETWORK INTERVENTION: CONSUMER AND MATERNAL AND CHILD HEALTH NURSE PERSPECTIVES

Dorothy Scott, BA (Hons), PGradDipSoc Stud, MSW, PhD is Associate Professor in the School of Social Work, University of Melbourne, Parkville, Australia

Sue Brady, BSW, GradDipComDevt, is a Masters of social work student at the University of Melbourne, Parkville, Australia

Patricia Glynn, RN, RM, MCHN, BAppSci(AdvNsg), MHlthSc, is a maternal and child health nurse in the city of Wyndham, Victoria, Australia

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ABSTRACT

Maternal and child health nurses in two outer urban local government areas in Melbourne, Australia were interviewed about how they facilitated first-time parent groups. Groups were offered to all first time mothers and almost two thirds of mothers joined a group. The groups ran for approximately eight sessions and provided infant-focussed parent education and social contact. Women who joined the groups were followed up 18 months to two years later to determine the degree to which these groups continued to meet on their own accord and the extent to which they had become self-sustaining social networks. The study found a very high level of continuation, suggesting that providing such programs may be an important vehicle for enhancing social support during the transition to parenthood and thus be a useful primary prevention strategy.

INTRODUCTION

The now widely quoted African proverb that 'it takes a village to raise a child' begs the question 'and what might it take to rebuild a village?' New parent groups may be one way of recreating the village (Lawson and Callaghan 1991). A growing body of research indicates a correlation between a lack of social support and poor quality of childrearing, maternal depression, and child abuse and neglect (Brown and Harris 1978; Crittenden 1985; Quittner et al 1990; Beeman 1997) although such research does not suggest a simple causal relationship between low social support and such psycho-social problems.

With increased participation of women in paid employment, the birth of a first child is often associated with a shrinking of the social network (for example, the loss of social contact with work associates in the absence of close neighbourhood relationships) at a time of increased need for social support. Recent research shows that many women feel the lack of social support at the time of the birth of their first child (Brown et al 1994). Trends toward much earlier discharge from hospital following birth may exacerbate this (Stewart and Tilden 1995). Rogan et al (1997) found that many women report feeling drained, alone and at a sense of loss following birth. Research by Majewski (1987) suggests that while partners provide new mothers with the greatest levels of support, support provided through parent groups may create a network of friends which is sustained over time.

In recent decades the objectives of maternal and child health services have broadened from advising on and monitoring infant feeding and development to

encompassing the emotional and social well-being of the young family (Scott 1987). In the l990s in Victoria, Australia, maternal and child health services, which are provided by local government in that State, were funded by the State Government to provide eight weekly group sessions for all first time mothers. Typically such groups explore post-birth adjustment, infant feeding, baby massage, safety in the home and child development. Groups are held at the local maternal and child health centre and comprise approximately eight to 10 women. All first time mothers with babies under approximately three months are invited to attend. A few nurses also invite fathers to attend the groups and this has led to their recent renaming as 'first time parent groups'. Anecdotal evidence suggested that some of the groups continued to meet informally after the nurse-facilitated sessions were finished. This study assessed the degree to which such groups evolved into self-sustaining supportive social networks.

METHOD

The study involved two parts - semi-structured interviews with the 17 nurses facilitating groups in two municipalities (Part A) and a telephone administered semi-structured survey with a sample of 243 women who had joined new parent groups in these two municipalities 18 months to two years earlier (Part B). The interviews with nurses were all conducted by Scott and lasted for an hour to an hour and a half. The interviews were conducted in the maternal and child health centre in which each nurse worked.

The interviews with the mothers were shared between the investigators and conducted by telephone, typically lasting 15-20 minutes. A total of 314 women were identified from maternal and child health records as having joined one of 24 first time parent groups which had started within a given 12 month period. This represented approximately two thirds of women having their first child in these two municipalities during this period. There were no fathers in the membership lists. Of the 314 participants in groups, 53 were unable to be contacted due to relocation and 18 declined to participate due to arrival of a second baby, lack of time or ill health, leaving 243 (or 77% of those who joined groups) agreeing to be interviewed.

The study was approved by the University of Melbourne Human Research Ethics Committee and the two local government authorities (the City of Wyndham and the Shire of Yarra Ranges). Maternal and child health nurses sent letters to all women who had joined the groups, seeking permission from them to be approached by the researchers to ascertain their willingness to participate in the study. Both nurses and the mothers who gave their informed consent to the study did so on the understanding that their anonymity would be protected and that they could withdraw at any time.

RESULTS

Part A: Interviews with nurses

The 17 nurses were very experienced, with the average number of years they had been practising as a maternal and child health nurse being 17 (range seven to 28 years), and with an average of 13.5 years (range five to 28 years) in the region in which they currently worked. They also had a high level of experience in facilitating new mother groups, the average being 10 years (range three to 18 years), and the estimated average number of groups being 34 per (range six to 70).

The following topics were explored in the interviews: the ways in which nurses invited parents to join groups; their perceptions of the reasons for non-attendance; the content of group sessions; the ways in which participation was facilitated; issues relating to diversity in group membership based on factors such as gender, age, marital status, ethnicity and social class; and views on the life of the group after the nurse-facilitated sessions had finished.

Ways of engaging parents

All nurses personally invited new mothers to join a group, and in one municipality most were also sent written invitations. The nurses' styles ranged from being neutral and low key 'There's no pressure - I say to them "it might not be your scene" to active encouragement. I say they can get the kids weighed at the same time and save on petrol. I have to sell it.' Most nurses gave some encouragement on more than one occasion, and used strategies such as: writing the date of the next group in the baby's book; giving a list of topics to be covered in each session; and scheduling appointments before the group. Only one used the conventional groupwork engagement technique of directly exploring and normalising ambivalence about the prospect of joining a group: 'I often say "it can be hard to come" and I take the time to go through it with them and reassure them'.

The reasons nurses gave mothers for attending the group ranged from being child-focussed (for example, the benefits to the baby of information on feeding or CPR) to mother-focussed (for example, social contact), and nurses varied the reasons according to what they thought would appeal to the women. For example, one described how she emphasised the practical aspects of the content of the sessions, saying that 'some of them don't want the gossip thing'. Another conveyed the idea of group participation as a normative expectation but did so in a subtle and unpressured manner: 'You promote it as something for all

new parents and give some information and then gradually turn it around to meeting others and transition to parenthood issues. I think it would put them off if I wasn't low key.'

ATTENDANCE

Nurses were asked to estimate the percentage of first time mothers who accepted the invitation to join a group and where possible, this was checked against the record of the invitation list and those who actually attended. The mean estimated 'take up rate' was 68% but there was a marked difference across nurses (range 33% to 95%).

The nurses' perceptions of why some women chose not to join groups were, in the following order of frequency: returning to paid employment; adequacy of pre-existing supports; post-natal depression; personality ('not a group type'); and sensitivity about meeting in homes. The latter referred to one nurse's opinion that some women were aware of an expectation that this was the longer-term outcome of the group and chose not to join because of their discomfort about this. Nurses also identified some sub-groups of women whom they had found to be less likely to join their groups: adolescent and single mothers; women from non-English speaking backgrounds; women from very low income groups; and those experiencing family crises.

Nurses were also asked to estimate the 'drop out' rate in their groups - that is the proportion of those who joined but who were not part of the group at the stage it finished at the centre. The estimated average number who dropped out from each group (again checked against recent records where possible) was one to two (range nil to three) per group of seven to eight. Nurses nominated several reasons for women discontinuing attendance during the initial phase and these were: personality clash/group dynamics; mothers returning to work; family relocation; and lack of interest.

In relation to group dynamics, some nurses gave specific illustrations of some women feeling different from other members of the group because: they were the only one not breast feeding; they were much younger or unmarried; or because they were uncomfortable about the later prospect of meeting in one another's homes. There were only a couple of references to actual inter-personal conflict occasionally occurring within groups during the period it was facilitated by the nurse.

Size, frequency and location of groups

Nurses reported that the ideal size for a group was seven to eight members. All but one nurse ran weekly groups. The average number of sessions offered was eight with most Shire of Yarra Ranges nurses adopting a model

of seven weekly sessions and one follow up session when the babies were one year old. All of the groups were held in maternal and child health centres. These were generally satisfactory venues, although nurses commented on problems such as limited space, excessive heat in summer, and traffic problems (noise and parking). In the semi-rural areas in the Shire of Yarra Ranges, some centres are only open for a couple of sessions a week and so it was necessary for some women to travel to another area to attend a centre in which a new group was being formed.

Ages of babies

Most babies were aged between three and 17 weeks when their mothers joined the group (total range one to 26 weeks), with most nurses expressing a strong preference for a younger and narrower age range (such as four to 12 weeks). The reason given by nurses was that this enabled women to share similar issues in the early transition to motherhood and for the content of sessions to be relevant to their babies' ages.

Group content and process

Most nurses had set topics for each session although the topics chosen varied somewhat between nurses. The Shire of Yarra Ranges had developed a manual which many nurses in that area used as a guide, and this included suggestions for facilitating participation as well as content. The topics covered did not differ between the two local government areas. A typical first session might start with introductions and debriefing on experiences of pregnancy and labour. Some nurses focussed more on the 'here and now' and asked women how the reality of being at home with a new baby compared with what they had expected it to be like. Later sessions focussed on topics such as baby massage, settling techniques, nutrition and introduction of solids, child development, women's health, and safety in the home (including CPR). A few nurses also invited guest speakers to the groups to cover topics such as speech development or children's books.

A video entitled '1+1 = 3' was used by about half the nurses in the first session to introduce issues related to transition to parenthood, including the challenges this poses for the couple relationship. Some nurses explored emotions associated with birth and adjustment experiences in some depth, seeing self-disclosure as a vehicle which generated an early and strong sense of trust and cohesion in the group. Others were quite cautious about this ('I don't let things get too personal too quickly'), fearing that this might be threatening, and chose to focus more on the more practical aspects of day-to-day infant care.

Nurses gave numerous examples of how they adapted the content of the group sessions to suit the stated preferences and the often implicit rather than explicit

wishes of group members. Most nurses saw the provision of information and facilitating social interaction as equally important dimensions of the group and none saw information provision as being the primary function of the group. Many nurses were trying to make the groups less didactic.

Some saw social contact and peer support as more important than information provision, or at least recognised that this was how the mothers saw it, and ran the group in a highly unstructured way to facilitate a sense of group cohesion and informality. 'My overall aim is to get them connected with one another ... I don't give information directly, I draw out their experiences' said one nurse. This was echoed by another who commented that 'Sometimes they don't want information and I have to balance that - they want the social experience'.

Facilitating participation

Nurses facilitated participation in the group in a number of ways. Some introduced themselves as mothers, thus minimising the social distance between them and the other women, and modelling limited and appropriate self-disclosure ('I give a little anecdote and if people don't talk I'll tell them mine and draw them in'). Many nurses emphasised the importance of doing the introductions well and ensuring that the members actually got to learn one another's names, using name tags or reiterating their names and the babies' names for the first few weeks until everyone was familiar with them. Some nurses deliberately underscored what the mothers had in common in order to strengthen the cohesion of the group, and avoided drawing attention to differences.

Nurses described using different ways to encourage participation. For example, some deliberately but gently drew quiet members into the discussion, or broke the group into small sub-groups or into rotating pairs for discussion on particular topics. Before and after the group some nurses acted in a way in which a good hostess might do at a social function, one describing how she 'worked the room', making people feel comfortable, connecting individuals to each other by being alert to what they might possibly have in common (for example, 'did you know that you live just two streets from each other?').

The participation of fathers and grandmothers

Fathers infrequently participated in the groups and there were marked differences in nurses' attitudes to this. While most were undecided about it, others were either strongly opposed or strongly in favour of fathers' participation. One nurse who was adamantly opposed stated that the groups were 'women's business' - 'I don't want the fathers! It's not the same - women want to discuss private things and while they (the men) are not told not to

come they soon get the message'. Others were not hostile toward fathers *per se* but their experiences of having had them in parent education groups had not been overly positive and they thought that men being there adversely affected the group dynamics.

Others were of a very different opinion and on the initial home visit would often meet the fathers and tell them they were welcome to come to the groups if they were free during the day. One remarked that 'I haven't had a problem with it - when men come I'll include them and ask 'what do you see from a male perspective?'. In the Yarra Ranges fathers often came to the CPR session which was normally scheduled for an evening to make it possible for both mothers and fathers to come. These sessions were often described as 'hilarious' and for some groups it was the beginning of them mixing socially as families outside the group sessions. One Wyndham nurse had gone to great lengths to run a small group for fathers in the primary caregiving role and 10 men had participated in this group over a two to three year period.

Generally nurses were less ambivalent about the occasional participation of maternal grandmothers in the group, although there were still positive and negative aspects of this. Grandmothers visiting from overseas were welcomed and in some instances played an active role ('an Indian grandmother came to all the sessions and she was my expert baby massager') and in other instances grandmothers declined to take part in the group and sat outside the group minding the baby for the mother. Local grandmothers also sometimes participated, particularly coming to the CPR sessions in Yarra Ranges, or accompanying a mother with twins, and these were seen as very positive experiences. However, there were occasions when grandmothers were perceived as giving inappropriate advice, and as having a negative impact on the group climate.

Dealing with diversity - ethnicity, social class, age and marital status

Nurses were aware of the difficulty associated with encouraging the participation of mothers from diverse ethnic backgrounds. The demographic profile for the City of Wyndham is predominantly Anglo-Celtic, and is particularly so for the Shire of Yarra Ranges. Some nurses also observed variations in the response of different ethnic groups. For example, east Asian women from India (fluent English speakers) were more likely to become involved than women from Vietnam whose English was poor. In some instances, for example, the very well-established Italian community in Wyndham, the low level of participation was not seen as problematic as these women were perceived to have very strong social support from within their own extended family and friends who lived locally.

A few nurses described working very well with migrant women, including those who had a struggle with the English language. One nurse was excited about one of her groups in which ethnic diversity was actually what gave the group its cohesion. 'There are virtually no Anglo-Australians and it's a real multicultural group and they're mixing really well together' she said, adding that the husbands had also joined in regular social occasions which the group had organised. Another nurse described how 'in one group there was only one 'Anglo' and they were just wonderful, and they're still meeting - they are a very diverse group'. This nurse recalled that the most popular session she had run for that group was on the theme of 'parenting in a new land' in which the members had shared similar experiences.

All nurses reported that women from lower socio-economic status were less likely to join and/or to remain involved in the groups. The two regions differed somewhat in their demographic profile in respect to social class. All but one of the Wyndham neighbourhoods were very homogenous in relation to income, education and housing quality while in some of the areas in the Yarra Ranges there was great diversity within the immediate locality. Not surprisingly it was the nurses in the Shire of Yarra Ranges who described some women's sensitivity about meeting in one another's homes as their housing varied greatly in level of affluence. The Yarra Ranges nurses were also more likely to explore with their groups alternative to meeting in homes such as using community centres as the venue.

Moreover, in terms of running the group itself, the Wyndham nurses did not report the same level of difficulty resulting from class diversity. Some even found it a positive feature. 'My best group in 1997 was a great mix of incomes ... A 16 year old girl, two 18 year old single mothers who were shop assistants, one 17 year old and the others were professional women in their thirties!'. All but one of the Yarra Ranges nurses saw class diversity as a major challenge. One said 'they have different ways of expressing themselves', and another commented 'I mix them diplomatically and I have to deal with it - financial counselling referrals, one who swears like a trooper ... others talking about how much money they have'. The one Yarra Ranges nurse whose centre was located in a very homogeneously low income area on the rural fringe of the Shire said that she did not encounter any problems in this respect and that the few mothers with higher education had learned to fit in with the majority.

All the nurses saw it as difficult to involve adolescent and single mothers in the groups, although most commented on the clear exceptions to this, such as the confident breast feeding adolescent, or how some adolescent mothers had taken the initiative in the group and both older and younger mothers had ended up mixing well.

Some nurses reflected on the dynamics of their relationship with adolescents. One remarked 'With the real teenage mum I haven't had much success - the one looking for Mum thinks I'm wonderful but the one rebelling against Mum thinks I'm terrible'. Others explained the problems in different ways, seeing the maternal role as quite marginal to the adolescents' sense of identity ('they're just not on the same wavelength'). A few successfully ran groups just for younger mothers, although this was dependent upon having sufficient numbers. These groups were described as being very different from other groups ('I serve coke instead of tea!') and less reflective and more action oriented ('we just sat on the floor and made toys and they loved it'). One nurse said she avoided using videos as the adolescent mothers just 'switched off as if they were back in the classroom'. Both areas had a centralised specialist service for young mothers but only a small minority of young women became involved with this. Those who experienced problems such as substance dependence were particularly hard to engage and also resisted referral to the specialist service. Specialist outreach workers and a non-government agency which ran an innovative peer based program for adolescent mothers were seen as valuable alternatives.

The continuation of the groups

Almost all the nurses thought that it was a good idea for groups to continue to meet after the formal sessions were finished, and most said their groups did so. Some gave anecdotes about groups which had led to deep and long lasting friendships. 'I have groups I started 15-20 years ago that are still meeting ... those groups end up working like an extended family - they become so important in each other's lives, they are like family members'.

RESULTS

Part B: Consumer survey

The majority of the women were 25-34 years of age (72%), were in two parent households (92%) and had English as their first language (97%). Nearly all (98%) had worked full time prior to the birth of their first child, the largest occupational category being retail and clerical. By the time the children were 12 months of age, 30% of women had returned to work, mostly in a part-time capacity. At the time of follow-up for the study (at which time most of the children were aged close to two years), 60% of women had returned to work, the majority in a part-time capacity. Comparative data was not available on those who chose not to join groups, but given the broader demography of the areas and the nurses' perceptions, it would appear that young, single and low income mothers were likely to have been under-represented in the groups.

Initial phase of the group

Most of the women (75%) reported positive feelings about the prospect of joining a group, with the remainder equally divided between those who were neutral, those who were negative and those who felt hesitant about doing so. The most important things women hoped to gain from the group were, in the following order: child health and development information; the sharing of experiences and mutual support with other first time mothers; to make friends in the local area; and to 'get out of the house'.

The majority of women (76%) reported that the members of their group got along well. Those who had been in groups where this had not happened thought that the reasons included: group size (too large for the group to 'click' or 'gel' as they described it); too great a diversity of age and backgrounds; and differences in values and lifestyles, especially related to child rearing. Most women (60%) were highly satisfied with the way their group was facilitated. Those who expressed dissatisfaction reported that the sessions were too didactic ('too much like a school class') or that the physical aspects of the centre itself were a problem (for example, too small, noisy, too hot in summer). A small number were dissatisfied due to differences in maternal age, marital status and ethnicity which they thought made the group harder to 'gel'.

Longer term group outcomes

All but one of the 24 groups continued to meet informally after the sessions at the centre had ended with five ending by 12 months. At 12 months 18 groups (constituting two thirds of the women in the study) were still meeting, and 16 groups were still meeting at the time of follow up (18 months to two years). Women returning to paid employment was related to groups not continuing but some groups with members who returned to paid employment went to considerable lengths to change the group meeting times to accommodate this and these groups continued to flourish.

Even among those groups which were not meeting 18 months later, there was considerable one-to-one contact between some members and significant friendships had been made through the groups. One-to-one relationships were classified as mutual aid friendships, social activity based friendships or acquaintance relationships. A large majority (80%) formed at least one mutual aid friendship through the group, and had frequent contact with the friend(s) outside the group, often assisting each other with babysitting, as well as being a confidante.

Those who did not form a mutual aid friendship reported having formed social activity based friendships or acquaintance relationships. Social activity based friendships did not involve the sharing of personal information but were characterised by participating in activities such as children's birthday parties, clothes parties and occasional evenings spent together without the children. In some instances family to family contact developed which involved the fathers (for example, barbecues and picnics with the children).

The women who formed acquaintance relationships in which they would occasionally 'bump into one another at the shops and have a chat' were usually the women who had only attended the group for a short period of time or had resumed work and lost contact with the group. However, even this level of relationship was described by some as important in that it gave them a sense of familiarity with others in their community.

Women gave multiple reasons for participating in the continuation of their group, with the main reasons being: that they enjoyed sharing their experiences of motherhood with one another (96%); that the groups provided support (95%) and that it was beneficial for their child to have contact with others (82%).

Most of the groups met in one another's homes on a rotating basis. As the children became increasingly mobile this presented problems and some of the groups evolved into playgroups which met at community venues. A few women spoke of their discomfort at meeting in one another's homes, particularly where there was a discrepancy in the level of affluence among members.

CONCLUSION

This study found that the majority of new parent groups evolve into self-sustaining social networks and provide important social support for families experiencing the transition to parenthood. Most women highly valued the groups both for the benefits they had for their children and for themselves. A few women experienced some aspects of the groups as negative.

While the study did not investigate the women who did not join groups, this is obviously an area which needs further research, preferably in a prospective study, as it is likely that current groups do not reach some of the most socially isolated and vulnerable families in the community. However, new parent groups are not the only way to strengthen social support for parents in the transition to parenthood and it should not be assumed that they are necessarily helpful to all first time parents. In some circumstances one-to-one professional, peer or volunteer-based home visiting programs may be more appropriate and preferred by the family. Some parents may have little need or interest in such groups. Just because most who chose to join a group found it a positive experience does not mean that others should be pressured to do so.

Most nurses also expressed satisfaction with the outcomes of the groups they facilitated although a few

found their role anxiety-provoking and hard to manage on top of their other duties. Considerable differences existed between nurses on the involvement of fathers. Whether such groups are 'new mother groups' or 'new parent groups' requires further discussion, and research is required on the best ways to facilitate single sex and mixed parent groups.

Notwithstanding these issues, it is clear that for many families professionally facilitated social networks have the potential to perform a similar role to that traditionally played by naturally occurring neighbourhood based social networks. Economic and social changes have had a major impact on family structure and functioning with women's participation in paid employment and increased mobility decreasing the opportunities which once existed for naturally occurring neighbourhood-based social support. For many families, first time parent groups can play an important role in nurturing neighbourhood networks which may build social capital in communities. In the words of one maternal and child health nurse, 'You are creating a little community, you are building a little village'.

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Research by nurses Gene Cranston Anderson, RN, PhD, FAAN, Mary Alice Dombrowski, RN, MSN, CFNP, and Joan Swinth, RNC, demonstrates improved breast-feeding success and suggests enhanced parent-infant bonding and decreased maternal depression.

Kangaroo care involves mothers and fathers resting their infants skin-to-skin against their chests.

Dr Anderson's kangaroo care research is the winner of the Outstanding Research Paper Award, Childbearing-Related Research Section, Midwest Nursing Research Society, March 2001, and can be found in *Reflections on Nursing Leadership, 2001 (2nd quarter), 2001 Vol 27, No 2.*

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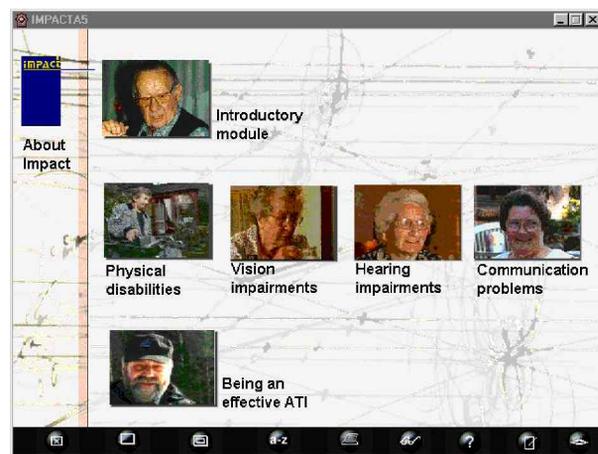
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This free courseware has been developed as a resource learning set to enable students and practitioners within social science and healthcare to be aware of the role they can play in ensuring that older and disabled people have access to assistive technology that can improve their quality of life.

The materials are designed to offer learners a user-friendly means of accessing key ideas and concepts that underpin the ability to advocate the use of assistive technology. By providing a flexible resource, from which learners may choose where, when and how long they study, and at what level, the courseware can support and enhance the development of practice skills. However, the courseware is not intended to replace the need for skills practise.

The courseware is targeted at all social and health care students and practitioners who do not receive extensive specialist training in assistive technology. This includes social workers, home and residential care workers, as well as health professionals such as health visitors, nurses - in both clinical and community settings, general practitioners and doctors in hospital settings.
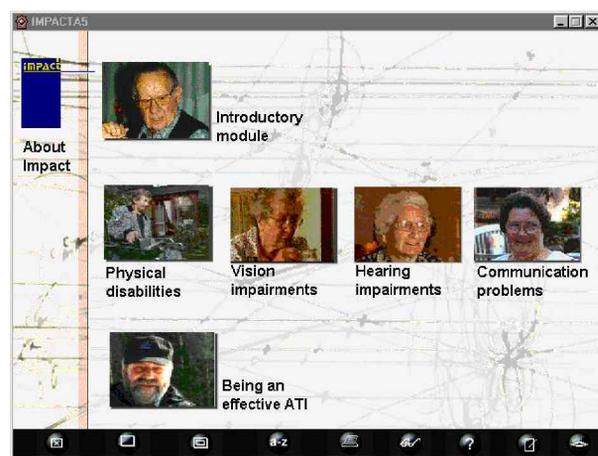
The courseware has been developed as a flexible resource for trainers and educators to use within a diverse range of learning environments in further and higher education and within practice settings.

The courseware consists of an introductory module followed by four modules which contextualise the use of assistive technology for people with:

a) physical impairments; b) hearing impairment;
c) vision impairments, and, d) communication difficulties.

Within each of these four specialist modules three different settings are used to reflect the common interface settings within which social and healthcare professionals meet service users:

*   within the home;
*   the general practitioner's surgery; and,
*   the hospital.

A final module summarises the main learning points of the courseware.

It is available in English, Dutch and Danish.

For more information visit www.fontys.nl/impact/

CyberNurse - **In this edition of AJAN we look at self-injury references for patients and families.**

Margaret McAllister, RN, PhD, and Andrew Estefan, BN, DNSc, RN, CertAWT

Name	Description	Web address
Selfabuse.com	An excellent web site to start. It has links for information on books, newsgroups, coping skills, carer support. It offers UK and Australian links and services, personal stories and ways to stay safe.	www.selfabuse.com/
SAFE	A Canadian therapeutic program with information for consumers and professionals.	www.wwdc.com/safe/
Bristol crisis service for women	An innovative UK service and a site that has useful information sheets, eg, 'Helpful responses to self-injury'.	www.areti.net/self-harm/cont.htm
UK Mental Health Foundation	National UK foundation which provides more general mental health information, with relevant links, information, and referral sources.	www.mentalhealth.org.uk/selfharm.htm
Self-injury: You are not the only one	A consumer site which contains questionnaires, information and useful links.	www.palace.net/~llama/psych/injury/html
Bodies under siege	An email support group.	www.palace.net/~llama/psych/busfaq.html
Self-injury	A UK website that contains links, information, ways to cope with the urge to self injury, UK groups and the self injury forum - in which users can post a communication on this site and later receive responses by email.	www.selfinjury.freeserve.co.uk/
StrongeR	A US website that contains some very disturbing, though accurate information about celebrities who self-harm, a chat group, as well as interesting, though not necessarily authoritative information about the politics of self harm.	www.geocities.com/cut_the_truth/frontpage.html
Self-harm: Breaking down the barriers	Basic information about self harm, articles on minimising the damage from self harm, as well as links to the UK SHOUT - Self-Harm Overcome by Understanding and Tolerance - newsletter.	www.areti.net/self-harm/cont.htm

ENGENDERING CHANGE: EMPOWERING NURSE ACADEMICS TO TAKE PART IN A UNIVERSITY RESEARCH CULTURE

Judith Clare, RN, PhD, FCNANZ, FRCNA, is Professor of Nursing, School of Nursing and Midwifery, The Flinders University of South Australia, Adelaide, Australia

Cathy Hawes, BSc, MgSc, PhD, is Director, Research Education Unit, School of Nursing and Midwifery, The Flinders University of South Australia, Adelaide, Australia

ABSTRACT

Any school of nursing, which is building upon a college-based teaching culture to create and maintain a viable research culture within a university, must build from within its own resources. This paper outlines a strategic approach to create a research culture in one such school. We describe the empowerment philosophy based on critical and feminist approaches that underpinned our strategy in transforming what was a teaching based college of advanced education culture to that of a university in which both research and teaching are required of its staff. A climate to facilitate change was created and a research support structure was put in place. The success of the strategies can be assessed by the increased participation in research activities, enhanced productivity and evidence of increasing confidence of staff.

INTRODUCTION

To create a research culture in nursing a number of complexities and challenges have to be addressed. Nursing is relatively new to academia, and the majority of nurses are women who face many obstacles in achieving academic recognition in any discipline (Gregor et al 1995). Nurse academics were recruited to Australian universities from hospital schools of nursing and clinical agencies where they were respected for their teaching and clinical skills. They were then expected to complete a Masters degree and then enrol in PhD degrees, which are now becoming a desirable, if not essential requirement for promotion.

The Flinders University School of Nursing and Midwifery was created from a merger of the former College of Advanced Education and Flinders University in 1991. Since 1975, the School had delivered well recognised diploma programs during the period when traditional hospital schools were closing. Since 1993 however, State and Federal Government economic rationalist policies have impacted to the extent that the School has halved in size. Educating a nursing workforce is still core business but finding income generation opportunities and increasing research activity are priorities.

The strongly held beliefs of staff that our mission is to offer effective educational programs to meet health workforce needs is being constantly challenged by Federal Government policies of economic and educational reform. In this emerging environment, teaching income is reduced and research activity is rewarded. This conflict between research and teaching orientations is echoed across Australia (Harman and Wood 1990) and inevitably continues to shape the emphasis in the University. The School has had to position itself to meet this requirement.

CREATION OF A CLIMATE FOR CHANGE

Using a critical theory perspective in which one seeks to understand the established order (Stevens 1989; Thompson 1987), it was seen that in the college system staff received many rewards for maintaining the status quo. For example, considerable power over colleagues (and students) was exercised through the ways in which teaching teams and curriculum processes operated. The relative isolation in each topic maintained the myths and mystery surrounding their particular teaching area. They retained job security through making 'the system' work.

However, when the School became part of the University, a different hegemonic institution in which different power relations existed, little was done to ensure that staff understood the nature of this radical cultural shift. Rewards for making the university system work are different - they are focussed on research effort rather than teaching. Staff experienced considerable alienation from the dominant culture of the university and received little support or mentoring from their new colleagues. The flow-on effects led to the development of the usual characteristics of an oppressed group. In particular, a lack of confidence in their own ability to defend and contribute to nursing knowledge through research ensured that the nurses on the staff had little opportunity to articulate a nursing position at curriculum or policy level or to access resources.

Once these structures were recognised by applying critical theory, it became possible to promote change. The perspective of critical theory showed that the School was part of a hegemonic institution which fostered the belief that the system of privilege, status and property it defended operated in the best interests of its staff and students, whose compliance or support was being elicited (Fay 1987; Burns and Grove 1993). Staff believed that if they worked hard they had jobs for life, they owned particular areas of academic study, that students are passive learners and want to be here, and so on. In this way the status quo was maintained. Thus, the ideology prevailing in the college culture did not serve the staff's true interests in the new one. It concealed and misrepresented the real conflicts of interests - and led staff in effect, to be conscious participants in their own domination. Moreover, as there was little attempt to properly integrate the School into the university, there was increasing alienation and feelings of disadvantage compared to their university colleagues. It is only now when economic rationalist policies are beginning to alter the relations of power in the School and the University that academic staff are willing to commit to structural and educational reform.

A critical interpretation as described above prevents personal blaming and sacrifice of individuals - it is nobody's fault. Importantly, it ensures a climate of mutuality and open governance in which the nature of oppression is revealed so that it can be challenged and changed. A critical and feminist approach to management allows change to be focused on ideology and structure rather than on individuals. A transformative leadership style combined with open governance was employed in which the processes of transformation were visibly negotiated. This allows a climate of trust and respect among staff to move towards more constructive power relationships between people who must work together to serve their mutual interests in a university context.

For the last four years staff have been encouraged and facilitated to examine the available options for change. We have worked together to create a strategic plan and a business plan, workloads now include research and publication and significant fiscal changes have been made. People are not ideological dupes (Willis 1997). We are able to penetrate at the level of practice the elitism of the beliefs of those with more power even though we might knowingly choose to perpetuate those beliefs for our own 'survival' (Clare 1991). In this way nurse academics can take control of their career opportunities, workloads, teaching and research activities to compete with others in the university system.

DEVELOPMENT OF A RESEARCH CULTURE

Research cannot happen in a vacuum. It requires a community of scholars where open, non-distortive communication allows discussion and debate about sometimes highly emotive issues. Staff (and students) need to be able to trust one another to the extent that *ideas* will be challenged, not personal idiosyncrasies. Excitement and enthusiasm accompany hard work and the application of research evidence in practice and teaching is expected. The new processes in the School encourage a spirit in which achievement is appropriately celebrated and setbacks acknowledged in a supportive climate.

Establishing this transformative program also requires the support of mentors who are secure enough in their own discipline to allow staff the freedom to explore and to be innovative in their approach to knowledge. The School has actively sought colleagues in the University and international scholars for this purpose.

The importance of the academic environment was borne out by an Australia wide study which found that a cooperatively managed structure, participative governance and collaborative leadership are critical factors in enhancing research performance (Ramsden 1994). Similarly, the Centre for Policy in Nursing Research in the United Kingdom identified the need for improved leadership, experience, expertise, confidence and infrastructure to improve research capacity in nursing (Traynor 1998). The crucial role of infrastructure was also

emphasised by the achievements of Western Sydney in the development of a research culture in the university and health authorities (Greenwood and Gray 1998). Beverland and Bretherton (1993) described the need for the implementation of a strategic process in the development of a research culture in a New Zealand Institute of Technology.

STRUCTURAL CHANGES

To facilitate change in the culture of the School, funding was negotiated from the University to create the position of Research Manager at postdoctoral level, a unique position in the University to augment the post of Foundation Professor of Nursing.

This position, taken up in early 1996, combined an academic and administrative role. Leadership and guidance was provided to staff in applying for funding, planning and conducting their research, and improving the outcomes by publication. Staff workloads were negotiated within a system that used the four categories for promotion as a guide. In this way time for research was made available and both clinical and classroom teaching were counted in staff workloads.

In 1997, research infrastructure funding funded additional research and administrative assistance and the creation of a Research Education Unit. This funding had not previously been available in the School. In addition, funding from the School budget and research income was directed to the Unit in recognition of the essential need to establish research in the School.

THE RESEARCH EDUCATION UNIT

Through 1998-2000, the Research Education Unit comprised up to 3.8 full time equivalent staff under the supervision of the Research Manager (now Director). These staff range from a relatively junior level administrative assistant to senior lecturer level. The broad range of skills of these staff enables the Research Education Unit to maintain its core business and provide a service to academics and senior students.

The core business comprises: maintenance of the school research database which records all research activities; management of the annual government required data collections; publication of research bulletins and an annual staff profile booklet; acting as a resource centre with references on writing, publishing and a comprehensive collection of journal guidelines for authors; hosting research forums with, both staff and visiting speakers; and, monitoring the units own services.

Staff in the unit assist with: identifying funding opportunities; the preparation of grant applications to ensure that they are of high standard before submission; the preparation of ethics applications; planning research careers - particularly in obtaining an appropriate balance between postgraduate study and other research opportunities; choosing journals for publication; ensuring that manuscripts meet editorial requirements and dealing with the reviewers' comments; management of qualitative and quantitative data; literature searching; article retrieval; and, software basics.

While providing these services, the unit maintains its emphasis on research education. Its aim is to enable academic staff to become empowered by acquiring the necessary research skills. Staff are encouraged and expected to take final responsibility for their research.

IS RESEARCH EDUCATION MAKING A DIFFERENCE?

The extent of the understanding and knowledge of the role and services of the unit by the academic staff was sought in its first year of establishment. A questionnaire survey revealed that 97% of the respondents knew of most of the services provided by the unit. Over 70% of respondents considered that they had gained in skills and knowledge and felt more confident in conducting research. By mid 2000, the unit had completed 763 requests for assistance from 89% of the School's academic staff.

At present, the most popular service is that of article retrieval. Since the three library collections are geographically separated, the unit can markedly increase the efficiency of obtaining articles. Also popular are literature searching via electronic databases, reviewing of grant and ethics applications, and editorial support in publishing.

In 1998, an academic editor was appointed to work specifically with staff who had few or no publications in refereed journals. This resulted in sixteen papers being
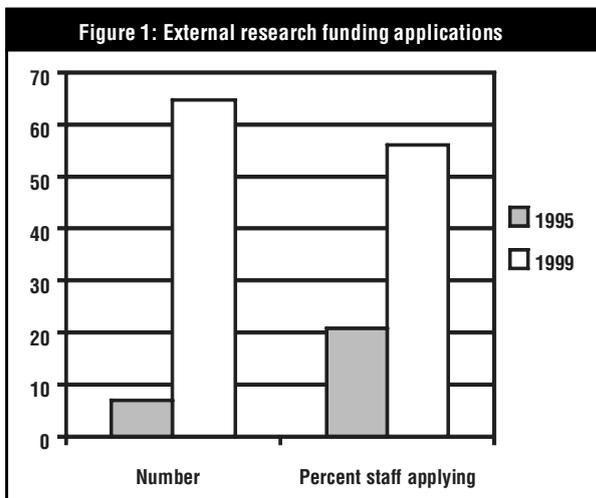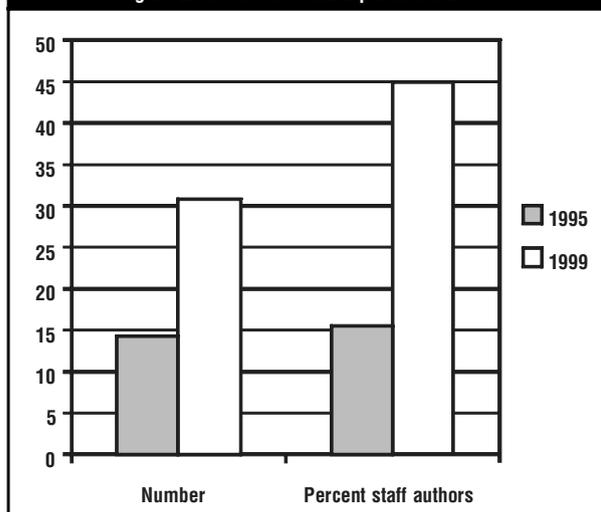

Figure 1: External research funding applications

Figure 2: Refereed Journal publications

published by the beginning of 2000.

In Figures 1 and 2 the marked increase in external funding applications and refereed journal articles published from 1995 (prior to creating the position of Research Manager) to 1999 is illustrated. In keeping with the aim of empowering all staff to take part in research activities, the percentage of staff applying for external funds and publishing refereed journal articles has dramatically increased.

PLACING THE SCHOOL IN CONTEXT

It is important to keep in mind that many academic staff are not yet in a position to be successful in applying for external funding, given that the majority are not doctorally qualified. In 1995 only two nurse academics in the School held PhDs, increasing to 14 in mid 2000. Seventeen are still enrolled in research higher degrees, while the remainder hold or are enrolled in coursework Masters degrees. The relatively underqualified position of nursing academics was illustrated in a 1994 study in which 30% of the Australian academics whose highest qualification was a Bachelor's degree came from nursing (Deane et al 1996). Further, the low percentage of the School's nurse academics holding PhDs contrasts starkly with national 1996 data showing that an average of 47.7% of all Australian academics held PhD qualifications (Probert et al 1998).

The research productivity of women academics increased with qualifications and experience (Gregor et al 1995; Deane et al 1996). Thus, few in the School of Nursing have had the time necessary to acquire a sufficient publication record to compete for external research grant funding. The length of time needed is clearly pointed out by Emden (1998), who suggests that 'as most early career nursing researchers are currently mature age women

working full time', they will require longer than the accepted two to three years. She emphasises the need for nursing academics to be strategic in their approach. This was also documented by Roberts (1997) whose study of nurse academics clearly identified their expressed need for mentoring to assist them in entering the research culture.

The significance of the percentage (45% in 1999) of staff in the School contributing to publications (see Figure 2) is apparent when compared to a 1993-1994 study which showed that only 7.5% of Australian nursing academics had published in refereed journals (Roberts 1996). Further favourable comparison can be made with tenured, doctorally prepared nurse academics in a United States study in which 65% had published research articles in the preceding three years (Megel et al 1988).

Figures 1 and 2 show that not only are more grants being sought and more publications being produced, but, more importantly, an increasing percentage of staff are participating in these research activities. This is in keeping with the employed philosophy of empowering staff so that *all* can participate in and benefit from the new hegemonic culture in which participation in research is an essential element for career progression and promotion.

CONCLUSION

Many nurse academics need to overcome significant barriers to take their place in the university. The university culture of recognition of research by publications and grants presents hurdles to those from a practice and teaching background. The demand to complete higher degrees while carrying significant teaching, administrative and/or clinical loads places them under enormous pressure. Further the hard won newly completed PhD still does not equip the researcher with a track record of publications and funding. This study illustrates how structural change was introduced into the School body via transformative leadership and how strategic planning and sustained support in all aspects of research has enabled many staff to establish their research track records in a timely fashion.

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EDUCATING NURSES TO PROTECT THE PAST OR TO ADVANCE HEALTH CARE?: A POLEMIC

Rhonda Nay, RN, PhD, is Head of School, and Professor of Gerontic Nursing, La Trobe University, Bundoora,Victoria, Australia

Alan Pearson, RN, PhD, is Professor of Nursing, La Trobe University, Victoria, Australia

ABSTRACT

Internationally, nursing is challenged by recruitment and retention issues. On the one hand nursing is expanding and extending practice whilst on the other, lesser skilled workers are undertaking many roles which were previously fulfilled by nurses. This opinion paper contextualises the current debate and outlines many of the reasons that have been proffered for the apparent shortage. It then progresses to suggest strategies that may ensure nursing remains relevant to contemporary health care. Essentially a presentation of the authors' views, the intent of the paper is to generate debate.

INTRODUCTION

This paper presents a discursive analysis of the state of nursing within the Australian health system, drawing on our experience in nursing practice, nursing education, nursing management and nursing research. As such, then, we do not draw on an extensive literature; rather, we offer up a critique and posit some suggestions on why things are as they are, and how nursing could respond to the current demands for health care.

The emergence of modern nursing and the resulting recognition of the importance of high quality nursing in the nineteenth century immediately created an ongoing cycle of over-then under-supply of nurses (Pearson, Taylor and Coleborne 1997 p.1). Most Westernised countries have a long history of commissioning and implementing strategies to meet the needs of the community for access to nursing; and all have, eventually, been found to be ineffective.

Until the 1930s, the lack of professional opportunities for young women created a ready supply of 'probationer' or 'student' nurses. These poorly paid workers carried out most of the nursing work in hospitals and nursing homes under the supervision of a very small qualified workforce. The few who 'stuck at it' and eventually qualified often struggled to find employment as registered nurses as few positions existed, given that the nurses in training did most of the work; and at a very cheap price. This situation changed rapidly with the advent of the Second World War and the broadening of work options for women that flowed from it. Most countries responded by creating a second tier of nursing training (the assistant nurse, the enrolled nurse or the nurses' aide.) Many leaders envisioned a large workforce of 'pupil nurses' or trainee nurses aides; a smaller workforce of student nurses; an even smaller group of second level nurses; and a leadership group of professional or registered nurses. In some countries, a third level of nursing worker - the auxiliary or nurse assistant - was introduced to supplement the growing legion of various levels of nurses.

Constant variations of this complex jigsaw have come and gone in the past 50 years. The profession's vision of an all registered nurse workforce, educated to degree level in universities, and the demise of the second level nurse seemed more possible in the latter decades of the twentieth century (Pearson 1992, p.16-17). But, as the 21st century begins, yet another workforce shortage looms and the debate on who should be nurses; how nurses should be educated; and what constitutes the legitimate role of various levels of nurses still rages despite 150 years of trying to evade a problem that is unlikely to go away.

Given the rapid development of nursing in Australia over the past 20 years and our responsibility as professionals to develop strategies to ensure that high quality nursing is accessible to all Australians, we wish to argue that it is time the occupation of nursing re-focused on rationally re-constructing the composition of nursing service. Such a re-construction needs to address society's continuing need for nursing and to accommodate those with a desire to care and the ability to do so. If nursing is about assisting people and communities to meet their goals that otherwise may be thwarted because of illness or disability we need to be aware of and responsive to what is happening in terms of health care and health challenges and to prepare nursing workers to practise within complex, changing health systems. It is becoming increasingly clear that the 'dreamed for' all-RN nursing service is unrealistic. This is partly because nursing, as a labour intensive activity, requires large numbers of people and there will never be sufficient RNs to meet the needs of communities for the provision of nursing care. Economically, highly educated professional nurses demand and, as it should be, receive significant remuneration. Given the contemporary funding crisis in health care, even if we were able to supply sufficient RNs to provide nursing care, funding levels are such that it would be impossible to fund.

This paper is based on the assumption, therefore, that if nursing education is to fulfill its obligations to advance health care and remain relevant it must be responsive to changing health care needs in the broader society. Before examining education for nurses it is useful to briefly explore the context of health care and nursing.

The context of care

It is not intended here to undertake a comprehensive review of the context of health care, rather to highlight that there are changes impacting on educational needs and to provide some significant examples. These include: the ageing population, the increase in chronic illness/disease and especially mental ill health, emphasis on self care, increased provision of care in the community and greater demand for complementary - non Western/biomedical approaches to health care. The broad expectation that individuals and communities have a right to good health and the technological explosion have resulted in

increasing expense which is leading governments to look for more economical ways of offering care. The requirement for individuals to fund their own care and the emphasis on self care and consumer rights is associated with more litigation (Nay et al 2000).

These changes increase client need for assistance to co-ordinate care delivery and information to facilitate access, informed decision making and self-care. Nurses can play a major role in negotiating appropriate care, influencing health care policy, lobbying to improve access and continuing to provide direct and indirect client care. A national morbidity study in the United Kingdom 'found that 30% of GP consultations are 'trivial' and do not need the assistance of a doctor' (Dargie 1999). Research projects on the nurse practitioner role in Australia and advanced roles internationally indicate that nursing can provide a significant amount of generic health care more cost effectively than general practitioners and without loss of quality (Buppert and Knight 1995; Doult and Watson 1998; NSW Department of Health 1996).

At the same time as there are increasing demands for the type of care nursing is well suited to provide - young people are no longer choosing nursing in the large numbers which in the past could be expected and many student/graduate nurses are choosing to work only casual/part-time in nursing or are leaving nursing altogether (Australian Institute of Health and Welfare 1999). Terms such as 'critical nursing shortage' and 'crisis' are becoming commonplace and government concern has resulted in various studies and a national forum in September 1999.

Where are the nurses?

There appear to be a number of reasons, which together may help explain the current perceived shortage. These include (Nay and Closs 2001; Reid 1994; Nurses Registration Board NSW 1997; Ogle and Ferguson 1996; Warr et al 1998):

- the employment opportunities for women have greatly expanded beyond the traditional occupations of teaching, nursing and domestic work;

- many nurses are choosing to work only casually or part time;

- it is still the case that women are more likely to be the main child carers;

- many just want a 'job' - they are not interested in a professional career and all that that requires - their preference is for 'blue collar' conditions in terms of working shifts and not having to do more 'in their own time';

- despite the movement of women into traditionally male employment areas little effort has been expended to attract men to traditionally female occupations and men

in general are not attracted to nursing;

- in the workplace criticisms of hierarchical management structures, horizontal violence and victim behaviours remain common and many contemporary nurses will not tolerate such work pressures;

- remuneration does not encourage nor reward self-funded education - in dollar or time terms;

- excellence is not sufficiently rewarded - 'a nurse is a nurse is a nurse' in many instances; 'tall poppies' are still frequently discouraged and there remains a view that academic and practical skills are mutually exclusive;

- many students still complain that they face punitive, maternalistic situations in which a form of obedience is still required and debate and rigorous questioning are still discouraged - men in particular have complained about the treatment they receive;

- the collegiality between industry and the academy has much room for improvement;

- the image and status of nursing remains poor;

- nursing is perceived to be for the 'not so bright' and bright students are counselled away from choosing nursing;

- the relatively low university entrance scores reinforce this view;

- the three year undergraduate preparation has long been seen by nursing leaders as insufficient; the sheer body of knowledge and skills that nurses require to be safe comprehensive practitioners can not be taught adequately in six, 13 week semesters - most, if not all, other health professional preparation in Australia provides at least four years of learning time;

- criticisms of inadequate clinical preparation and insufficient preparation in areas such as aged care, mental health and palliation are also common;

- perhaps as a result of the low entrance score, many nursing students have great difficulty with the sciences and most universities now have special science subjects for nurses (often referred to as 'veggie science') - whereas other allied health and medical students are able to study the same (rigorous) science - this simply confirms the view that nurses are not equal to their professional colleagues from other disciplines;

- student/graduate nurses (not surprisingly, given these factors) often feel of lesser ability than the other health professionals, lack confidence and frequently 'do not have a voice' - all of which in turn can explain continuing horizontal violence and workplace problems not conducive to attracting and maintaining career minded staff;

- the lack of clear articulation between enrolled nurses (EN) and registered nurses (RN) and insufficient recognised prior learning (RPL) leads to nurses wasting time and money on education they do not need and possibly giving up before gaining more appropriate education; and finally

- it has been argued that many 'nursing' positions are now being lost to other workers.

The way forward?

We could respond to this situation by continuing to argue for increasing numbers of RNs and ENs; we could fight the encroachment of generic workers onto our patch; we could continue to demand unrealistic educational overlap 'to maintain standards' rather than sit down and work out a clear articulation that recognises prior and current learning and so on but we would argue that this is not the way to advance health care or nursing and in fact could see nurses made redundant. While we try to maintain the current RN numbers we will increasingly face 'shortages' and continue to have problems with workplace organisation/management and unhappy work-lives for nurses, however styled.

For a very long time leaders in Australian nursing had argued that there must be only one level of nurse, that all nursing care should be delivered by RNs. There was a hope that if we refused to educate unlicensed workers they would 'go away' and to agree to educate them was hypocrisy and exploitation of them and the people who had to receive their care. In other words - if these people needed education in order to do the work they were doing did not that demonstrate that an educated person - ie a RN - was required? However, for the past 30 years at least we have had unlicensed, 'unqualified' people making up a large proportion of the aged care workforce.

It has also been common to see nurses - enrolled and registered wanting to move away from the bedside and direct care. Promotion for being 'good' at nursing has been to move away from the bedside into administration or education.

Despite the efforts of many nurses, the numbers of unlicensed workers in aged care is rising, not dropping *and* they are moving into other areas of health care. This is occurring in an unplanned way to fill 'nursing' vacancies because nurses are variously: not available, too inflexible, too expensive and/or not seen to be adding value.

So what do we see as a more useful approach - yes probably pragmatic - but also we would argue more likely to result in quality outcomes for clients? We want to paint something of a futuristic scenario (a) because it is the best approach we have been able to conceptualise thus far and (b) to encourage debate, discussion and better ideas from those who disagree. It is essential that nurses do not simply criticise and obstruct change - if the ideas presented are not considered acceptable then for nursing to progress those people who disagree are responsible for providing

something more appropriate - we invite such debate.

A possible future

1 Nursing has a broad vision - it is no longer considered good enough to just put a 'band-aid' here or there and hope we can go back to 'the good old days'. The recent National Forum - Rethinking Nursing (Department of Health and Aged Care 1999) proposed a national workforce committee, a national chief nurse and a national strategy. Nurses united can lobby governments at all levels to bring these ideas to fruition.

2 We look again at the nature of nursing and who should perform it - certainly nurses need to develop nursing knowledge and skills - but they will never - have never - provided all nursing. Nursing/nurses could concentrate on developing the discipline, gathering the evidence and testing it in practice; informing health care; assessing who should provide care and at what level; monitoring that appropriate care is provided teaching appropriate care and providing care where the context requires it. Nursing is not just a set of tasks - if someone other than a nurse gives out the medications nursing will not collapse. However, if we concentrate on just keeping tasks it might!

3 Most nursing care has been and still is provided by families, non-nurses and vocational nurses - there are in fact relatively few genuinely professional nurses. If we accept this rather than pretend it is not the case we can then plan proactively rather than simply react to 'shortages'.

4 A more proactive way forward could be to develop a system - not unlike the current one in terms of types of people delivering care but one that is more rationally recognised, planned and utilised with a genuine focus on client/community outcomes.

5 This system would draw upon workers of various distinctions to make up an appropriate team - it could have family members, Health Care Assistants (HCAs),[1] Licensed Practical Nurses (LPNs)[2] and RNs delivering nursing. The educational preparation would reflect the level of competencies required for each staff level.

6 In this model HCAs could have fairly basic preparation - from six to 12 months - they could provide care to people who were assessed by the RN as being quite stable and probably cognitively intact.

7 LPNs would have a broader scope of practice than they currently enjoy and would require a stronger educational base - say two years. They would make up the vocational proportion of the workforce - the educational preparation, and rewards would reflect the vocational nature of the role and associated expectations. RNs would be a relatively smaller proportion of the workforce - they would have greater expectations placed on them and would be rewarded accordingly as professionals.

8 RNs would be genuinely professional and adopt a life long approach to learning - and their professional remuneration along with the multiple modes of delivery available would assist them in accessing the education. Credentialling would be the norm.

9 Undergraduate education for RNs would involve four years of preparation - this would allow time for increased emphasis on those areas currently criticised: clinical, mental health, ageing, leadership, research, negotiation skills, rigorous science and so on. The smaller numbers would facilitate a rise in the entrance score and thus impact positively on image; undertaking the sciences together with other health professionals would improve the sense of collegiality and confidence. Professional expectations would mean that this group would take responsibility for leading the profession; ensuring care is evidence based; lobbying for adequate resources; providing public comment where relevant, deciding what an appropriate skills mix might be in any context; modeling and monitoring best practice; critiquing and researching practice, etc.

10 There would be very clear educational articulation from the generic health care worker preparation through the practical nurse and the professional nurse. Recognition of learning would facilitate rather than obstruct multiple exits and entry points. Students would be able to take out the vocational license while undertaking the four-year professional practice degree. Universities and TAFE colleges would work more cooperatively to ensure the best outcome for students and clients.

11 Education would be more closely linked with practice environments. We would move to much closer partnerships - knowing now the principles we wish to sustain while having the confidence to embed learning back in practice. For example, students could be linked with a major health care provider and undertake the majority of their clinical experience with that provider. The provider could agree to provide paid work and reduce the need for students to work in situations that do not maximise learning opportunities. Objectives could be established that recognise learning does occur outside semester and thus some recognition of current learning may be possible. The student's greater familiarity with the work environment would reduce the sense of 'burden' felt by the staff. Students would graduate feeling really familiar with the real world - they would be welcomed by their colleagues who have been closely involved in their education and growth and know they are useful colleagues. They would also be already used to feeling a valued part of the multidisciplinary team. The organisation would have adopted a learning organisation philosophy and would

encourage debate and questioning as the essence of best practice. Clinical supervision/preceptorship would be provided by the industry partner staff (who would be university title holders) not sessional teachers who are often seen to be 'visitors' to the organisation.

12 There would be many more combined degrees which would provide nurses with the flexibility to work across health care situations - these would be consistent with multipurpose centres, integrated care models and nurse practitioner case loads.

13 The more planned and appropriate skills mix with knowledge/qualifications better matching care delivery requirements would increase confidence and reduce horizontal violence. Thus the workplace would be a more attractive place and recruitment and retention problems would be minimised.

14 Universities would have been forced to further rationalise and there would be a greater emphasis on quality rather than quantity. This smaller number of nursing faculties would have produced stronger teams of experts who are not spread so thinly they can not maintain quality in teaching and research while also maintaining their own clinical credibility. Industry partnerships would also be stronger and recognised prior learning the norm at postgraduate level. The many streams we currently offer would have been better considered to determine what should be 'learned on the job' and what higher level knowledge development universities should take responsibility for.

15 In this environment nursing would be equally attractive to women and men - and nurses would no longer eat their young.

16 Experienced nurses in all spheres of practice, education, administration, credentialling, etc, would recognise the need to model best practice.

CONCLUSION

The context in which nursing is practised has changed enormously. As a result there are increasing demands for care which potentially nursing could meet. However, recruitment and retention of nurses is problematic and the consequences could leave the profession of nursing marginalised and/or redundant to health care if we do not recognise and involve ourselves constructively in the changes. We have argued that nursing must change and suggested ways in which this might be progressed. Central to our argument is the belief that a healthy future for nursing requires nurses to forego old territorial battles and instead allow the health needs of consumers and societies to direct the developments of the profession.

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FOOTNOTES

EVENTS AT HOME AND OVERSEAS

AUSTRALIA

JUNE 2001

June 6-7, 2001 - Sydney NSW
6th National In Charge Nursing Conference. Masonic Centre, Sydney. Cost $394. Contact: Ausmed Publications, ph: (03) 9380 6788

June 14, 2001 - Caulfield Vic
Practical use and understanding of spirometry. Ashley Ricketson Centre, Caulfield. Contact: Lung Health Promotion Centre at The Alfred, ph: (03) 9276 2382, fax: (03) 9276 3434, email: lunghealth@alfred.org.au.

June 23, 2001 - Adelaide SA
South Australian College of Lactation Consultants SACLC Annual Conference: WOMBAT. Adelaide Convention Centre. Contact Wendy Turner, ph: (08) 8374 1635, mobile 0407 310 387, or Heather Earle ph: (08) 8371 3969

June 24, 2001 - Melbourne Vic
Nursing careers, education and employment expo. Royal Exhibition Building, Melbourne. Contact: RCNA, ph: 1800 061 660, fax: (02) 6282 3565, email: conf@rcna.org.au, website: www.rcna.org.au

June 27-28, 2001 - Canberra ACT
Health Outcomes 2001: The Odyssey Advances. Pre-conference workshops 26 June. The Australian Health Outcomes Collaboration. Website: www.health.act.gov.au/epidem/ahoc.html

June 27-28, 2001 - Adelaide SA
Nursing Leadership Conference, Tiffins on the Park, Adelaide. Cost $328. Contact: Ausmed Publications ph: (03) 9380 6788

June 27, 2001 - Melbourne Vic
Sleep issues including sleep apnoea and dealing with insomnia. Sir Donald & Lady Trescowthick Centre, Prahran. Contact: Lung Health Promotion Centre at The Alfred ph: (03) 9276 2382, fax: (03) 9276 3434, email: lunghealth@alfred.org.au

June 28-30, 2001 - Brisbane Qld
Nursing Education and Employment Conference: Regroup-Revive-Refocus. Contact: RCNA ph: 1800 061 660, fax: (02) 6282 3565, email: conf@rcna.org.au, website: www.rcna.org.au

JULY 2001

July 1, 2001 - Brisbane Qld
Nursing careers, education and employment expo. Contact: RCNA, ph: 1800 061 660, fax: (02) 6282 3565, email: conf@rcna.org.au, website: www.rcna.org.au

July 4-6, November 5-7, 2001 - Melbourne Vic
Three day: Introductory Course in Asthma Education. Contact: Lung Health Promotion Centre at The Alfred, ph: (03) 9276 2382, fax: (03) 9276 3434, email: lunghealth@alfred.org.au

July 20, 2001 - Melbourne Vic
Designing and coordinating a pulmonary rehabilitation program. The Alfred Centre for Professional Development. Contact: Lung Health Promotion Centre at The Alfred, ph: (03) 9276 2382, fax: (03) 9276 3434, email: lunghealth@alfred.org.au

July 25-27, 2001 - Hamilton Island, Qld
International Ethics Conference: Health ethics futures. Multidisciplinary conversations.
Contact: RCNA, ph: 1800 061 660, fax: (02) 6282 3565, email: conf@rcna.org.au, website: www.rcna.org.au

AUGUST 2001

August 9-11, Cairns Qld
3rd Joint Conference of Infection Control Practitioners Association of Queensland and Queensland Wound Care Association. Contact Conference Secretariat, PO Box 1280 Milton Qld 4064, ph: (07) 3858 5538, fax: (07) 3858 5510 email: wic01@im.com.au

August 9, 2001 - Melbourne Vic
Paediatric respiratory conditions. Sir Donald & Lady Trescowthick Centre. Contact: Lung Health Promotion Centre at The Alfred, ph: (03) 9276 2382, fax: (03) 9276 3434, email: lunghealth@alfred.org.au

August 15, 2001 - Sydney NSW
University of Sydney, Faculty of Nursing Alumni Association annual dinner. Faculty of Nursing, University of Sydney. Details: Judith Romanini, ph: (02) 9351 0614, email: romanini@nursing.usyd.edu.au, website: www.usyd.edu.au/nursing/pdu

August 18, 2001 - Adelaide SA
To theatre or burst - AAA's total patient care: SA Society for Vascular Nursing. Contact: Marie Haydon, ph/fax: (08) 8281 6567, email: happyhaydonmp@picknowl.com.au

August 22-23, 2001 - Cairns Qld
International haemochromatosis seminar. Contact Margaret Rankin, Haemochromatosis Society Australia Inc, PO Box 154, Coopers Plains 4108 Australia, ph: (07) 3345 7583, fax: (07) 3345 8051, email: haemsoc@gil.com.au

August 28-31, 2001 - Cairns, Qld
The 19th National Annual CRANA Conference: 'Generalist to Specialist' The Australian Remote Area Nurse. Contact the National Secretariat for details, CRANA, PMB 203, Alice Springs, NT 0872, ph (08) 8953 5244, fax (08) 8953 5245, email: cranadirector@ozemail.com.au, website www.crana.org.au

August 29-31, 2001 - Cairns, Qld
*51st Director of Nursing Association Qld, (Inc)
Conference.* Contact: RCNA, ph: 1800 061 660,
fax: (02) 6282 3565, email: conf@rcna.org.au,
website: www.rcna.org.au

August 29, 2001 - Melbourne Vic
Asthma and the older person. Contact: Lung Health
Promotion Centre at The Alfred, ph: (03) 9276 2382,
fax: (03) 9276 3434, email: lunghealth@alfred.org.au

SEPTEMBER 2001

September 13-15, 2001 - Melbourne Vic
2nd Medical/Surgical Nursing Conference.
Contact: RCNA, ph: 1800 061 660, fax: (02) 6282 3565,
email: conf@rcna.org.au, website: www.rcna.org.au

September 19-21, 2001 - Brisbane Qld
*Australian College of Midwives 12th Biennial National
Conference.* Contact: Tina Ashburner, ph: (07) 3854
1611, fax: (07) 3854 1507, email: tinaa@ozaccom.com.au

September 26-28, 2001 - Sydney NSW
Conference: Stories from the Field 2. Faculty of Nursing,
University of Sydney. Details: Judith Romanini,
ph: (02) 9351 0614, email: romanini@nursing.usyd.edu.au,
website: www.usyd.edu.au/nursing/pdu

OCTOBER 2001

October 11-13, 2001 - Brisbane Qld
*Geriaction National Conference 2001: Sustaining the
changes: Directions in aged care.* Conference Organiser:
ph: (03) 9380 1429, fax: (03) 9380 2722,
email: conorg@ozemail.com.au

October 11, 2001 - Melbourne Vic
Practical use and understanding of spirometry.
Contact: Lung Health Promotion Centre at The Alfred,
ph: (03) 9276 2382, fax: (03) 9276 3434,
email: lunghealth@alfred.org.au

NOVEMBER 2001

November 1-2, 2001 - Canberra ACT
*Women's and Sexual Health Nurses Association 5th
National Conference.* Contact Susan Pier,
ph: (02) 9716 6099

November 14-16, 2001 - Sydney NSW
*4th International Neonatal Nursing Conference 2001,
Excellence knows no boundaries.* Contact: RCNA,
ph: 1800 061 660, fax: (02) 6282 3565,
email: conf@rcna.org.au, website: www.rcna.org.au

November 17, 2001 - Geelong Vic
Breastfeeding and wellbeing.
Contact: ph: (03) 5227 0742, fax: (03) 5227 0685,
email: cbuckland@geelongcity.vic.gov.au

28 November 28, 2001 - Melbourne Vic
Update on management of asthma in adults and children.
Contact: Lung Health Promotion Centre at The Alfred,
ph: (03) 9276 2382, fax: (03) 9276 3434,
email: lunghealth@alfred.org.au

MARCH 2002

March 14-16, 2001 - Melbourne Vic
*Australian Association of Stoma Therapy Nurses
Conference.* Contact PR Conference Consultants,
ph: (03) 5781 0069, fax: (03) 5781 0082,
email: enquiry@prcc.com.au

MAY 2002

May 20-26, 2001 - Melbourne Vic
*Australian College of Operating Room Nurses 10th
National Conference: Perioperative nursing: Evolution or
revolution?* Contact: Helen Barallon, ph: (03) 9544 4679,
email: hbarallon@bigpond.com.au

JUNE 2002

June 6-7, 2002 - Brisbane Qld
*Rethinking our vocabulary: Australian Infection Control
Association Second Biennial Conference.* Contact: Lyn
Greenfield or Suzanne Langton ph: (07) 3858 5599,
fax: (07) 3858 5510

OVERSEAS

JUNE 2001

June 10-15, 2001 - Copenhagen Denmark
*International Council of Nurses 22nd Quadrennial
Congress: Nursing: A new era for action.*
ICN, C/O DIS Congress Service Copenhagen A/S,
Herlev Ringvej 2 C, DK-2730 Herlev, Denmark,
ph: +45 4492 4492, fax: +45 4492 5050,
website: www.icn.ch/Congress2001.htm

SEPTEMBER 2001

September 2-7, 2001 - Christchurch, NZ
Perioperative Nurses World Conference. Contact AORN,
ph: 0011 1 800 755 7981, website: www.aorn.org

FROM THE EDITOR - Heather Dawson-Byrne

NURSING SHORTAGES AND WHERE TO FROM HERE?

In this issue Professors Rhonda Nay and Alan Pearson venture to throw open for debate the complexity of the current care-giving model both in Australia and overseas and the resultant problems with recruitment and retention.

Their paper contextualises the current debate and outlines many of the reasons for the apparent shortage. Professors Nay and Pearson suggest this leads to an expanding profession with unlicensed workers required to fill the gaps. They offer a solution by suggesting required levels of nurses, their education and their place in the health system.

Nick Santamaria, Sue Daly, Rachael Addicott and Lexie Clayton investigate the validity and reliability of the hospital-in-the-home dependency scale that is designed to measure the overall dependency of patients and therefore the level of nursing care required.

The scale calculates an overall dependency level by rating four dimensions of the provision of Hospital-in-the-Home nursing care. The results suggest that it is valid in measuring adult medical and surgical hospital-in-the-home patient dependency with a strong stability over time in test retest procedures.

Margaret McAllister and Lynette Stockhausen examine and critically reflect on a recent curriculum evaluation that took place within a school of nursing in Australia. The method aimed to foster participation and reveal and problematise aspects of nursing education which had been taken for granted. Through the process of action research a number of tensions were exposed and challenged. Reframed, they offered potential for renewed commitment to nursing education.

Dorothy Scott, Sue Brady and Patricia Glynn look at the role nurse facilitated new mother groups have in fostering the community spirit needed to bring child rearing back into the community arena and prevent social isolation.

The study found a very high level of continuation with the groups suggesting that providing such programs may be an important vehicle for enhancing social support during the transition to parenthood and thus a useful primary intervention.

Cathy Hawes and Judith Clare investigate the issues apparent in one Australian institute as nurse education moved from a college of advanced education culture to a university culture. They offer a model that provides empowerment for nurse academics to enable them to take their rightful place in the academic society of Australian Universities.

In their model, a climate that facilitates change and supports a research structure was introduced with the resulting increase in nurse research evidence of its success.