

GUEST EDITORIAL - Brendan McCormack, DPhil(Oxon), BSc(Hons) Nurs, PGCEA, RGN, RMN.

Brendan McCormack is Professor of Nursing Research, University of Ulster and Director of Nursing Research and Practice Development, Royal Hospitals Trust, Belfast, Northern Ireland.

DEVELOPING PRACTICE: INDIVIDUAL AND ORGANISATIONAL RESPONSIBILITIES

Health care practice is currently dominated by discussions about the need for evidence-based practice. Much of this discussion adopts a reified perspective of this issue, with the underlying assumption being that: 'the evidence exists, if only we knew how to access it and use it!' This perspective is evident in the drive towards the development of approaches that enable practitioners to read literature critically, make sense of published literature in their own practice and change the culture of practice within their sphere of influence.

Despite growing acknowledgement within the research community that the implementation of research into practice is a complex and 'messy' task, conceptual models describing the process still tend to be uni-dimensional, suggesting some linearity and logic.

Ironically, despite a plethora of research and publications about organisational development, learning cultures, barriers to research utilisation, practice development, effective practice cultures and staff empowerment, there remains a 'top down' academically driven inductive approach to the utilisation of research in practice and an over-reliance on 'normative-reeducative' strategies, ie strategies that are based on traditional notions of education, dissemination and utilisation through protocol and guideline development. While such frameworks have superficial appeal, if applied literally, they often fail to help those involved in change processes capture their complexity thereby reducing the potential for successful implementation and practice development. If these approaches really did result in successfully changing practices, then we wouldn't continue to have as many concerns about the quality of practice 'on the ground' and the reality of the use of evidence in practice.

In much of the research policy and reports of strategic development initiatives it is not recognised that the reality of practice is messy, complex and enmeshed in ethical conflict. Practice is contextually located and embedded in multiple cultures that are created and re-created by the 'actors' in that context. Individuals can influence the context of practice but this influence can only be translated into sustainable change when the culture is receptive to it. Cultural change happens from 'within' and Manley (2000) refers to this as 'workplace culture', ie the multiple cultures that make up the setting of practice (the workplace or context).

In a concept analysis of practice development, Garbett and McCormack (2002, p.100) highlight the role that practice development plays in bringing about such

changes to the context of practice. Practice development is defined as:

'...a continuous process of improvement designed to promote increased effectiveness in patient-centred care. It is brought about by enabling health care teams to develop their knowledge and skills and, in doing so, transform the culture and context of care. It is enabled and supported by facilitators who are committed to systematic, rigorous and continuous processes of change that will free practitioners to act in new ways that better reflect the perspectives of both service users and service providers.'

The key element of this definition is the emphasis on practice development being a continuous commitment to improvement that focuses on the implementation of effective patient-centred care. However, this is not just about the changing of particular practice interventions, but necessitates a focus on changing the context and cultures in which care is delivered at individual client, organisational and strategic levels. Developing patient-centred practices requires both 'personal bravery' and supported development to make the necessary changes. The personal bravery arises from individual recognition of the need for change that necessitates the practitioner to be 'self-critical' and reflective in order to find different ways of working. In addition, once the recognition of a need for change is identified then issues within the organisation may need to be challenged in order to create a learning culture to support sustained development. Thus, the achievement of sustained high quality patient-centred care is not just the responsibility of individual nurses, but instead it requires active organisational commitment to supporting practising nurses in developing practice. While individual nurses clearly have a responsibility for the quality of their practice and the way that practice develops, much organisational change is needed to realise the full potential of what is possible in practice.

In terms of dealing with the kinds of contextual factors that may come into play when developing practice, it could be argued that a key activity is planning for, and anticipating, the problems that may arise. It would appear that clear planning is more likely to take place when funding or some other form of support is being sought or if an accreditation process is being entered into. Being clear about values and beliefs is an important first step. Similarly, being clear and realistic about what can be achieved is also vital. Ensuring managerial support may be helpful in terms of securing assistance and resources. One strategy to achieve this would seem to be identifying local change with initiatives on a regional or national level. It is also important to be strategic in recruiting support from

influential stakeholders to influence key groups. Increasingly service users have assumed key importance as stakeholders. Being clear about the roles and responsibilities of those involved in change may prevent conflict, confusion and disillusion. Ensuring that mechanisms are in place to ensure that feedback can be given to those involved and those with an interest in practice change is important in terms of evaluation and as a means for being responsive to problems as they arise.

Resources to underpin practice development work are important, not only in terms of money, but also supervision, support, knowledge, skills, time and motivation. However, it is clear that these are hard to come by and there is a persistent perception of practice development as a poor relation to research. Nonetheless, it could be argued that a systematic approach to practice development that takes account of the complexity and variety of clinical practice could be organised so as to provide an account of the 'messiness' of practice. Such an

account is the only way that a picture of the processes and outcomes of practice development can be compiled. Such an organisation of practice development work can allow for the spontaneous response to ideas from practice settings and give space for all the strategies that may need to be employed to secure progress. But without any sense of direction or intent it is unlikely that the effect of practice development activities on practice itself can be described, valued or promoted. The key challenge therefore is for academic and service organisations to develop meaningful partnerships in the generation, translation, implementation and utilisation of knowledge in practice, using models, frameworks and approaches that embrace the realities of practice.

REFERENCES

- Manley, K. 2000a. Organisational culture and consultant nurse outcomes: Part 1, Organisational culture. *Nursing Standard*, 14(36):34-38.
- Garbett, R. and McCormack, B. 2002. A concept analysis of practice development. *Nursing Times Research*. 7(2):100.
-

BEHAVIOUR OF OLDER PEOPLE ADMITTED FOR RESIDENTIAL RESPITE CARE

Christine C. Neville, RN, RPN, MHSc, FANZGMHN, is Lecturer, University of Southern Queensland, Queensland, Australia

Dr Gerard J.A. Byrne, BSc(Med), MBBS, PhD, FRANZCP, is Associate Professor, University of Queensland and Director of Geriatric Psychiatry, Royal Brisbane Hospital, Queensland, Australia

Accepted for publication February 2002

Key words: aged, behaviour, dementia behavior disturbance scale, dementia, nursing research, respite care

ABSTRACT

The aim of this pilot study was to determine whether residential respite care is used because of disruptive behaviour displayed by older people. The specific objectives were to 1) characterise older people being admitted for residential respite care, 2) obtain a preliminary estimate of the proportion of older people in residential respite care because of disruptive behaviour, and, 3) examine the relationship between residential respite care and disruptive behaviour. A quantitative approach using a cross-sectional survey was employed. The respite recipients were 35 older people with a mean age of 81.5 years (range 67-96 years). The respite recipients had been admitted for residential respite care to aged care hostels and nursing homes in a provincial city and its surrounding rural area. Nurses rated disruptive behaviour using the Dementia Behavior Disturbance Scale (DBDS). Additional reliability data for the DBDS are provided. The study found that the largest specific group of residential respite care users were widows (31.4%) who lived alone in their own home. The reason for over half (51.4%) of the residential respite admissions was to give a carer a 'break' from the older person. Although a large proportion (80%) of respite recipients were rated as having disruptive behaviour, the proportion of admissions because of disruptive behaviour was much less (28.6%). People with dementia (37.1%) scored significantly higher than people without dementia on the DBDS [$F(1,33)=15.57, p<0.001$]. Older people with dementia were prescribed a greater number of psychotropic medications. It is concluded that despite residential respite care being offered primarily to assist with carer burden it is not being used mainly for older people whose behaviour is problematic for the carers.

INTRODUCTION

In Australia, the tightening of access to permanent nursing home care has created a huge demand for respite care (Gibson 1998). Respite services can be provided at a day centre, nursing home, hostel, hospital or in-home. They can be provided on a planned or an emergency basis. The duration of respite care can vary from hours to days to months. The spectrum of respite care ranges from impersonal 'sitting' services to structured, small group activities geared to individual needs and abilities. This paper will only focus on residential respite care.

The Australian Institute of Health and Welfare (1999, p.86) defines a respite admission as: 'a short-term admission to a residential aged care facility for respite purpose' and respite care as 'an alternative care arrangement with the primary purpose of giving the carer or care recipient a short-term break from their usual care arrangement'.

There were very large increases in approved respite bed-days for Australian nursing homes (143%) and hostels (34%) between 1991 and 1995, albeit from a low base (2%) (Choi and Liu 1998). Respite care accounted for some 47% of 39,652 admissions to residential aged care facilities during the first six months of 1998 (Australian Institute of Health and Welfare [AIHW] 1999).

Characteristics of permanent and respite residents differ. In 1998, the average length of stay for permanent residents was 128 weeks and for respite residents it was 3.5 weeks (AIHW 1999).

On discharge from the residential care facility, 5% of permanent residents returned to the community whereas 74% of respite recipients returned to the community. Respite recipients were more likely than permanent nursing home or hostel residents to be married and prior to admission be living in a house or flat either alone or with a spouse or/and children (AIHW 1999). The number of respite admissions and level of dependency is likely to rise as the population ages.

Associated with the trend toward population ageing, there has been an increase in the number of people

suffering from age-related, neurodegenerative disorders such as dementia (Finkel and Cooler 1996). The Department of Community Services and Health (1990) estimated that dementia affects 5% of persons over the age of 65 years and approximately 20% of persons over the age of 80 years. It is anticipated that age-specific prevalence rates will remain stable. However, the overall prevalence rate will greatly increase due to the ageing of the population (Jorm and Korten 1988). The clinical syndrome of dementia is characterised by cognitive impairment, psychiatric symptoms, neurological symptoms, problems with activities of daily living and disruptive behaviour (American Psychiatric Association 1994). These may all be a burden to carers.

Disruptive behaviour includes aggression, wandering, general psychomotor overactivity, vocalisations, abnormal sleep/wake cycle and inappropriate sexual behaviours (Cohen-Mansfield and Billig 1986). Disruptive behaviour has been identified as the strongest predictor of carer burden (Coen et al 1997) and will often precipitate admission to a residential care facility (Swearer 1994). Several Australian studies (Brodsky et al 2001; Rosewarne et al 1997; Miller et al 1995; Gray et al 1992) have reported the prevalence of disruptive behaviour in the nursing home population as between 29% and 90%.

In an attempt to reduce the frequency and severity of disruptive behaviour in people with dementia, treatment with psychotropic medications is common practice in Australia (Rosewarne et al 1997). However, empirical studies supporting the usefulness of psychotropic medication in treating disruptive behaviour are limited, with problematic medication side effects compounding the dilemma (Borson and Raskind 1997). There is also a paucity of well-structured studies supporting the efficacy of non-pharmacological strategies for disruptive behaviour (Opie et al 1999).

To date, very little research has investigated the prevalence of disruptive behaviour in older people who have been admitted for residential respite care and no Australian studies could be identified. In Homer and Gilleard's (1994) English study, 58 carers and their elderly dependants with a medical diagnosis of stroke or dementia were studied during a hospital respite admission. Using the Clifton Assessment Procedures for the Elderly Behaviour Rating Scale (CAPE-BRS; Pattie and Gilleard 1979), nursing staff recorded a mean score of 15.2 ($SD=7.0$) from a possible range of 0 to 36 with higher scores indicating more disability. A similar finding was reported in a United States study conducted by Hirsch et al (1993) who rated the behaviour of 39 residential respite care recipients using the Functional and Behavioral Scale for Advanced Dementia (FABSAD; Hirsch et al 1993). Nursing staff recorded a mean score of 24.4 ($SD=6.8$) from a possible range of 10 to 50 with higher scores indicating worse behavioural problems. The findings from these two studies indicate a moderate level of behavioural disturbance in English and United States patients admitted for residential respite care.

Although disruptive behaviour is both common and a major contributor to carer burden it remains unclear whether it is an important reason for older people being admitted for residential respite care. To help address this question a pilot study was undertaken of older people admitted for residential respite care in a provincial Australian city.

METHODS

The research ethics committee of the University of Southern Queensland approved the study protocol. The nurses and the respite recipients (or their substitute decision makers for the cognitively impaired) gave informed consent.

Directors of 18 aged care facilities (two nursing homes and 16 hostels) that offered residential respite care in the provincial city of Toowoomba and the surrounding rural districts were asked to participate. Logistical considerations meant that only those facilities within a one-hour drive of Toowoomba could be included and that the study was conducted over a three-month period. One nursing home and one hostel did not participate because the study coincided with an accreditation process and the directors of nursing felt it would be too difficult to do both. The total number of beds in the one participating nursing home was 78, with one bed designated for respite care. The total number of beds in the 15 participating hostels was 690, with 24 beds designated for respite care. A consecutive series of 43 people aged 65 years and over admitted for residential respite care was approached and 35 (81.4%) agreed to participate. Sixteen nurses participated in the study.

The following socio-demographic and medical data were obtained for each respite recipient: gender, age, usual person they reside with, residence prior to admission, medical problems including dementia, current medications, and, reason for admission. The respite recipient's nurse indicated whether or not the admission was related to the person's behaviour. Data were obtained by the nurses from the respite recipients' clinical records. Data was not obtained from the respite recipients themselves because of the potential for recall bias. Information was not obtained from relatives because not all respite recipients had relatives, whereas a nurse was available for all respite recipients.

Respite recipients were rated for the frequency of disruptive behaviour by the nurses using the Dementia Behavior Disturbance Scale (DBDS; Baumgarten et al 1990). The DBDS was selected after a review of available disruptive behaviour rating scales for older people (Neville and Byrne 2001a). The reference period for the DBDS is the preceding week, which makes it ideal for respite care studies, because the average length of stay is 3.5 weeks (AIHW 1999). This rating scale was developed to measure the behavioural dimension of the dementia syndrome. The 28 items reflect specific observable

behaviours likely to cause stress to the caregiver. A nurse familiar with the respite recipient completed the DBDS. Each item was rated on a 5-point frequency scale ranging from 0 (never) to 4 (all the time). Scores may range from 0 to 112, with higher scores indicating greater behavioural disturbance. High scores on the DBDS were significantly associated with increased duration and severity of dementia. Using two samples ($n=96$) of community dwelling dementia patients, the scale was found to have a high internal consistency of 0.84, a moderate test-retest reliability of 0.71 and a validity rating of 0.73 (Baumgarten et al 1990).

In an unpublished study conducted by Neville and Byrne (2001b), 10 home caregivers and 10 nurses were recruited to assess the inter-rater and test-retest reliability of the DBDS for 10 older people admitted for residential respite care. Each home caregiver and nurse completed the

DBDS during the respite admission. A parallel questionnaire, containing the same items but arranged in a different order, was completed one week later. Using the intraclass correlation coefficient, the inter-rater reliability for the total score was 0.93; $F(9,198) = 13.71$, $p = 0.0001$. This suggests that the DBDS can be used reliably across observers. The test-retest reliability was good for nurses 0.942, $p = 0.000$ and moderately good for home caregivers 0.778, $p = 0.0024$.

After checking and editing, data were stored on a purpose-designed computer database prior to analysis using SPSS for Windows 10.0 (Statistical Package for the Social Sciences Inc. 1999). After the means and standard deviations were determined, differences between respite recipients with and without dementia were evaluated by analysis of variance (ANOVA).

Table 1: Number and percentage of respite recipients who exhibited behavioural symptoms.

Dementia Behavior Disturbance Scale items	Dementia (n=13) No. (%)	Non-dementia (n=22) No. (%)	Both samples (n=35) No. (%)
Lack of interest in daily activities	10 (77)	9 (41)	19 (54)
Wakes up at night for no obvious reason	8 (62)	8 (36)	16 (46)
Asks same question repeatedly	6 (46)	4 (18)	10 (28)
Is incontinent of urine	7 (54)	4 (18)	11 (31)
Makes unwarranted accusations	5 (39)	3 (14)	8 (23)
Is incontinent of stool	5 (39)	2 (9)	7 (20)
Gets lost outside	5 (39)	2 (9)	7 (20)
Sleeps excessively during the day	6 (46)	3 (14)	9 (26)
Wanders in the house at night	5 (39)	0 (0)	5 (14)
Loses, misplaces or hides things	5 (39)	4 (18)	9 (26)
Wanders aimlessly during the day	5 (39)	0 (0)	5 (14)
Repeats the same action over and over	6 (46)	4 (18)	10 (28)
Is verbally abusive, curses	4 (31)	0 (0)	4 (11)
Refuses to be helped with personal care	2 (15)	3 (14)	5 (14)
Dresses inappropriately	2 (15)	1 (5)	3 (9)
Moves arms or legs in a restless or agitated way	2 (15)	1 (5)	3 (9)
Refuses to eat	1 (8)	2 (9)	3 (9)
Cries or laughs inappropriately	1 (8)	0 (0)	1 (3)
Empties drawers or closets	1 (8)	0 (0)	1 (3)
Hoards things for no obvious reason	2 (15)	0 (0)	2 (6)
Overeats	2 (15)	0 (0)	2 (6)
Makes inappropriate sexual advances	1 (8)	0 (0)	1 (3)
Screams for no reason	1 (8)	0 (0)	1 (3)
Makes physical attacks (hits, bites, scratches, kicks, spits)	1 (8)	0 (0)	1 (3)
Paces up and down	0 (0)	1 (5)	1 (3)
Throws food	1 (8)	0 (0)	1 (3)
Destroys property or clothing	1 (8)	0 (0)	1 (3)
Exposes private body parts	0 (0)	0 (0)	0 (0)

RESULTS

Of the 35 respite recipients, 24 (68.6%) were female and 11 (31.4%) were male. The mean age of the respite recipients was 81.5 years ($SD=7.11$, range=67-96). One male was divorced, eight males were married and two males were single. Of the 24 females, 17 were widowed, one was divorced, four were married and two were single. Three males lived alone and eight lived with their spouses, whereas 12 of the females (11 widows, one single) lived alone, four with their spouses and eight with other family members. Of the total sample, 12 (34%) were married. Prior to admission for residential respite care, 21 (60%) lived in their own home, eight (22.8%) were in hospital, four (11.4%) were in someone else's home and one (2.8%) was residing in a nursing home. Of the total sample 13 (37.1%) had a diagnosis of dementia.

In each case, the nurse was asked an open-ended question about their understanding of why the person was admitted for residential respite care. A break from caring for the respite recipient was the reason stated for 18 (51.4%) of the 35 respite recipients. Thirteen (72.2%) of these people had a diagnosis of dementia. Other reasons included the respite recipient being unable to cope on their own (8; 22.9%), followed by post-hospitalisation (physical problems) (4; 11.4%), familiarisation to residential care (3; 8.6%) and awaiting permanent residential care placement (2; 5.7%).

Of the 18 respite recipients whose reason for respite care was to give the carer a break, eight (22.9%) were reported as having behavioural problems. One of the post hospitalisation respite recipients and one person unable to cope on their own also had behavioural problems. In addition to the open-ended question about the reason for admission, nurses were asked specifically if the admission related to the respite recipient's behaviour. Nurses indicated that 10 of 35 (28.6%) admissions were related to the respite recipient's behaviour.

The mean nurse-rated DBDS score was 8.6 ($SD=12.21$, range 0-51). Respite recipients whose respite admission was reported to have been related to their behaviour obtained higher DBDS mean scores than respite recipients whose respite admission was reported not to have been related to their behaviour [23.70 vs 2.56; $F(1,33)=56.204$, $p<0.001$]. The 22 (62.9%) respite recipients without dementia recorded a mean DBDS score of 3.36 ($SD=4.64$, range=0-19) whereas the 13 (37.1%) respite recipients with dementia recorded a mean score of 17.46 ($SD=15.78$, range=1-51), a significant difference [$F(1,33)=15.57$, $p<0.001$]. Only seven (20%) respite recipients of the total sample showed no DBDS behaviours whereas 28 (80%) showed one or more DBDS behaviours even though these were not necessarily displayed all of the time. The number and proportion of respite recipients who exhibited disruptive behaviour as rated by the nurses can be found in Table 1.

Of the 13 respite recipients with a diagnosis of dementia, nine (69.2%) were prescribed psychotropic

medications. Of the 22 respite recipients who did not have dementia, 13 (59%) were prescribed psychotropic medications. However, seven (70%) of the 10 respite recipients who were admitted to respite care because of behavioural problems were being prescribed psychotropic medications. The type of psychotropic medication and the proportion of respite recipients being administered the medication was as follows: sedative - eight (22.9%); antidepressant - 10 (28.6%); antipsychotic - six (17.1%); cognitive enhancer two (5.7%); and, antianxiety - one (2.9%).

DISCUSSION

Residential respite care programs are one way of supporting carers of older people living at home. There are a variety of reasons why residential respite care is used and it is likely that for some older people residential respite care delays or prevents permanent placement in an aged care facility (Lawton et al 1989). In order to accurately determine the care needs of residential respite care recipients, their characteristics must be considered because they differ from permanent residents in aged care facilities. One important factor that may be considered in evaluations is disruptive behaviour, as disruptive behaviour is one of the most stressful aspects of care giving and frequently a precursor to permanent placement in an aged care facility.

The present study identified that widows who lived alone in the community were the largest single group admitted for residential respite care. The most common reason for using residential respite care was 'giving carers a break' (whether they resided with the respite care recipient or not). It may be the case that caring for an older person who resides elsewhere may be as stressful as living with them in the same residence (Almberg et al 1997). In some situations, it may be more beneficial if carers and care recipients are supported to live together as an extended family thus mitigating some of the worry of relatives not being there all the time.

Almost half of the respite recipients in the category of 'giving the carers a break' had behaviour problems. Disruptive behaviour is as stressful to carers as cognitive and functional disabilities (Coen et al 1997). Thus, it is likely that disruptive behaviour is a strong reason for seeking residential respite care. Using the DBDS, older people with dementia were rated by nurses as having more disruptive behaviours than older people without dementia. This finding reaffirms those of earlier studies that highlighted the presence of disruptive behaviour in older people with dementia (Nagatomo et al 1997; Chappell and Penning 1996; Baumgarten et al 1990).

The older people diagnosed with dementia were prescribed a greater number of psychotropic medications. While there may be some possible reduction in the frequency of disruptive behaviours due to the effects of these medications (Class et al 1997), the disruptive behaviour persisted in the group treated with psychotropic

medications. This suggests that non-pharmacological interventions still have a major role to play in the management of behavioural problems in older people with dementia (Opie et al 1999).

In the interpretation of the results, several limitations should be taken into account. The sample size is small and this reflects the fact that even though the study was conducted over a three-month period in 16 aged care facilities, there were only 25 beds available for residential respite care. However, there have been no other studies of this kind conducted in Australia and the study used the DBDS, a valid and reliable scale for measuring disruptive behaviour.

CONCLUSION

One purpose of residential respite care is to relieve the burden of caring for an older person. The strongest predictor of carer burden has been identified as disruptive behaviour, particularly for carers of older people with dementia. Despite the prevalence of disruptive behaviour in respite recipients it is not the main reason older people are being admitted for residential respite care. Whether these people are being excluded or their respite needs are being met adequately elsewhere are questions worthy of further study.

REFERENCES

- Almberg, B., Grafstrom, M. and Winblad, B. 1997. Caring for a demented elderly person: Burden and burnout among caregiving relatives. *Journal of Advanced Nursing*. 25:109-16
- American Psychiatric Association. 1994. *Diagnostic and Statistical Manual of Mental Disorders (Fourth Edition) DSM-IV*. Washington DC: American Psychiatric Association.
- Australian Institute of Health and Welfare (AIHW). 1999. *Residential aged care facilities in Australia 1998: A statistical overview*. Canberra: AIHW and Department of Health and Family Services.
- Baumgarten, M., Becker, R. and Gauthier, S. 1990. Validity and reliability of the dementia behavior disturbance scale. *Journal of the American Geriatrics Society*. 38:221-6.
- Borson, S. and Raskind, A. 1997. Clinical features and pharmacologic treatment of behavioral symptoms of Alzheimer's disease. *Neurology*. 48:S17-S24.
- Brodsky, H., Draper, B., Saab, D., Low, L., Richards, V., Paton, H. and Lie, D. 2001. Psychosis, depression and behavioural disturbances in Sydney nursing home residents: Prevalence and predictors. *International Journal of Geriatric Psychiatry*. 16:504-12.
- Chappell, N.L. and Penning, M. 1996. Behavioural problems and distress among caregivers of people with dementia. *Ageing and Society*. 16:57-73.
- Choi, C.Y. and Liu, Z. 1998. The use of nursing homes and hostels for respite care. *Australasian Journal on Ageing*. 17(2):76-80.
- Class, C.A., Schneider, L. and Farlow, M.R. 1997. Optimal management of behavioural disorders associated with dementia. *Drugs Aging*. 10(2):95-106.
- Coen, R.F., Swanwick, G.R.J., O'Boyle, C.A. and Coakley, D. 1997. Behaviour disturbance and other predictors of carer burden in Alzheimer's disease. *International Journal of Geriatric Psychiatry*. 12:331-6.
- Cohen-Mansfield, J. and Billig, N. 1986. Agitated behaviors in the elderly: A conceptual review. *Journal of the American Geriatrics Society*. 34:711-21.
- Department of Community Services and Health. 1990. *The problem of dementia in Australia*. Canberra: Australian Government Publishing Service.
- Finkel, S.I. and Cooler, C. 1996. Clinical experiences and methodological challenges in conducting clinical trials on the behavioural disturbances of dementia. *International Psychogeriatrics*. 8(2):151-64.
- Gibson, D.M. 1998. *Aged care: Old policies, new problems*. Cambridge: Cambridge University Press.
- Gray, L.C., Farish, S.J. and Dorevitch, M. 1992. A population-based study of assessed applicants to long-term nursing home care. *Journal of the American Geriatrics Society*. 40:596-600.
- Hirsch, C.H., Davies, H.D., Boatwright, F. and Ochango, G. 1993. Effects of a nursing-home respite admission on veterans with advanced dementia. *The Gerontologist*. 33(4):523-8.
- Homer, A.C. and Gilleard, C.J. 1994. The effect of inpatient respite care on elderly patients and their carers. *Age and Ageing*. 23:274-6.
- Jorm, A.F. and Korten, A.E. 1988. A method for calculating projected increases in the number of dementia sufferers. *Australian and New Zealand Journal of Psychiatry*. 22(2):183-9.
- Lawton, M.P., Brody, E.M. and Saperstein, A.R. 1989. A controlled study of respite service for caregivers of Alzheimer's patients. *The Gerontologist*. 29(1):8-16.
- Miller, R.J., Snowdon, J. and Vaughan, R. 1995. The use of the Cohen-Mansfield Agitation Inventory in the assessment of behavioral disorders in nursing homes. *Journal of the American Geriatrics Society*. 43(5):546-9.
- Nagatomo, I., Iwagawa, S. and Takigawa, M. 1997. Abnormal behavior of elderly people residing in institutions of medical and social welfare systems. *Psychiatry and Clinical Neurosciences*. 51:53-6.
- Neville, C.C. and Byrne, G.J.A. 2001a. Behaviour rating scales for older people with dementia: Which is the best for use by nurses? *Australasian Journal on Ageing*. 20(4):166-72.
- Neville, G.C. and Byrne, G.J.A. 2001b. Reliability of the dementia behavior disturbance scale in older people admitted for residential respite care. Unpublished study.
- Opie, J., Rosewame, R. and O'Connor, D.W. 1999. The efficacy of psychosocial approaches to behaviour disorders in dementia: A systematic literature review. *Australian and New Zealand Journal of Psychiatry*. 33:789-99.
- Pattie, A.H. and Gilleard, C.J. 1979. *Clifton assessment procedures for the elderly manual*. Sevenoaks, Kent: Hodder and Stoughton.
- Rosewame, R., Opie, J., Bruce, A., Ward, S., Doyle, C. and Sach, J. 1997. *Care needs of people with dementia and challenging behaviour living in residential facilities*. Canberra: Commonwealth Department of Health and Family Services.
- Statistical Package for the Social Sciences (SPSS) Inc. 1999. *SPSS for Windows, version 10.0*. Chicago: SPSS.
- Swearer, J.M. 1994. Behavioral disturbances in dementia. In J.C. Morris, (ed.). *Handbook of dementing illnesses*. New York: Marcel Dekker.

HEALTH CARE WORKERS' KNOWLEDGE OF HEPATITIS C AND ATTITUDES TOWARDS PATIENTS WITH HEPATITIS C: A PILOT STUDY

Thea F. van de Mortel, RN, BSc(Hons), MHIthSc, ICCert, FCN(NSW), MRCNA, is Lecturer, School of Nursing and Health Care Practices, Southern Cross University, Australia

Accepted for publication May 2002

Key words: hepatitis C, health care workers, knowledge, attitudes, practices, discrimination

ABSTRACT

A questionnaire was developed to determine health care workers' (HCWs) knowledge of, and attitudes towards, hepatitis C in order to inform an education strategy to prevent discrimination towards hepatitis C-positive patients. The study's aim was to determine the questionnaire's reliability and validity. Fifty-eight of 100 questionnaires distributed to HCWs were returned. The internal consistency of the scale was 0.7 following the removal of one item. The face validity of the instrument was high. It was found that a number of demographic variables impacted on HCWs' level of knowledge regarding hepatitis C and their willingness to care for patients with hepatitis C. Further research with a larger sample size is needed to clarify these issues.

INTRODUCTION

Hepatitis C is an infectious disease caused by the hepatitis C virus (HCV) (National Health and Medical Research Council (NHMRC) 1997). Hepatitis C is still poorly understood, in part because the virus has only recently been identified. The genome of HCV was isolated in 1988, and a serological test was developed in 1990 (Crofts et al 1999a; Lowe and Cotton 1999). The HCV has a tendency to mutate rapidly, which makes it genetically unstable (Olmstead 1996). The rapid change in viral antigens makes it difficult for the immune system to clear the virus, consequently there is a high rate of chronicity (Farci et al 1994). Around 80% of HCV-infected persons go on to develop chronic hepatitis, up to 20% will develop cirrhosis of the liver and around 5% will develop hepatic cancer (Lowe and Cotton 1999; NHMRC 1997). The rapid mutation rate also means that there is no licensed, effective vaccine against HCV, and that gamma globulin is not an effective prophylactic therapy (NHMRC and ANCA 1996). Persons with chronic hepatitis C can be treated with interferon monotherapy, or with interferon and ribavirin combination therapy (Hepatitis C Council of NSW 2001). Neither of the treatments is highly effective with only 15-20% of patients treated with interferon alone, and 35-50% of patients treated with combination therapy showing a sustained response (ie absence of viral RNA for at least six months after cessation of treatment) (NHMRC 1997).

Recent estimates indicate that approximately 210,000 persons are chronically infected with HCV in Australia (Hepatitis C Council of NSW 2001). An additional 11,000 people are becoming infected each year (NHMRC 1997). The primary mode of transmission in Australia is via injecting drug use (IDU) (~90% of cases) (Lowe and Cotton 1999). Sexual transmission and mother-to-child transmission are rare. Transmission via contaminated blood transfusion has been a major factor in the past, however, a recent study estimated that the risk of acquiring HCV from a blood transfusion in Victoria was around one in 234,000 donations (Whyte and Savoia 1997).

The greatest risk of transmission to health care workers is via a contaminated needlestick or sharps injury. There

have been 31 documented cases of transmission by this mode, whereas there have been only three documented cases of transmission by a blood splash to the conjunctiva or mucous membranes (Crofts et al 1999a; Ippolito et al 1998; Rosen 1997; Sartori et al 1993). The risk of contracting HCV from a contaminated needlestick or sharps injury depends on factors such as the infected person's viral load and the amount of blood transferred (Olmstead 1996). The rate of seroconversion following a needlestick has been as high as 10% when viral RNA was detected in the serum of the source (Mitsui et al 1992). The NHMRC and ANCA (1996) suggests that transmission rates via needlestick injuries range from 2-10%. However, a review by Crofts et al (1999a) showed an average seroconversion rate of 1.9%, whilst Olmstead (1996) reported an average seroconversion rate of 3.5% based on five studies which used more accurate second generation diagnostic tests.

The NHMRC and ANCA (1996) recommend that all health care workers follow 'standard precautions' to protect against the transmission of all blood-borne viruses. These precautions include safe handling and disposal of sharps into sharps containers, the use of personal protective equipment to prevent exposure to blood or body fluids, and hand washing following patient contact. A recent study that examined the efficacy of chlorine-based solutions versus polyphenolic disinfectants in inactivating HCV, found that the latter solutions inactivated the virus more completely and more quickly, thus polyphenolic disinfectants may be more useful for managing blood spills (Agolini et al 1999).

HCV presents a substantial cost to the community. Shieff (1998) estimated that the direct and indirect costs associated with those persons already infected with HCV in Australia were \$107 million per year. Each new 1,000 persons infected are estimated to cost an additional \$46.6 million over 50 years. Any strategy that can slow the rate of new HCV infections has the potential to result in substantial savings for the community and benefit those individuals who would otherwise be infected.

Difficulties with access to health care may arise for persons with HCV due to the stigma attached to the disease and to IDU (Crofts et al 1999a). One study found that 83% of 37 HCV-infected persons surveyed experienced substantial discrimination as a result of their illness, and around 46% of the incidents occurred in a health care setting (Crofts et al 1999b). A previous study of discrimination against persons with another blood-borne virus, Human Immunodeficiency Virus (HIV), demonstrated that discrimination may be manifested by:

- avoidance of contact with infected persons;
- use of unnecessary isolation precautions;
- refusal to care for infected patients; and,
- staff differentiating between what they see as innocent victims deserving of care and those who brought the disease on themselves (Wang and Patterson 1996).

A review of Australia's response to HCV by the Commonwealth Department of Health and Aged Care (Lowe and Cotton 1999), indicated that discrimination by HCWs may act as a barrier preventing HCV-infected persons from accessing diagnostic services and treatment. One of the recommendations of the review was that training programs be developed and implemented to reduce discrimination against HCV-infected persons in the health care environment. This may reduce the transmission of HCV by:

- improving access to diagnostic testing thus increasing the awareness of HCV status in at-risk persons; and,
- improving access to treatment, thus reducing infectivity and risk of further transmission.

In order to develop a successful program, it is important to determine what HCWs know about hepatitis C and how this knowledge informs their actions and attitudes towards HCV-positive persons. While no data have been published on these factors in relation to HCV, several factors have been shown to influence the attitudes of HCWs towards persons infected with HIV. Health care workers tend to react more positively towards patients with HIV if:

- the staff member personally knows someone with Acquired Immunodeficiency Syndrome (AIDS) or has had experience caring for a patient who is HIV positive (Bowman et al 1994; Gershon et al 1994);
- they have higher scores on knowledge tests in relation to HIV (Gignac and Oermann 1991); or,
- the HCW has a lower perception of their own risk of contracting HIV (Ficarotto et al 1991).

Health care workers' knowledge of HIV/AIDS tends to be higher if they personally know someone with AIDS (Gershon et al 1994) or if they have a lower perception of their own risk of contracting HIV (Ficarotto et al 1991). The association between either homosexuality or IDU and AIDS caused respondents in some studies to feel negatively towards persons with AIDS (Lohrmann et al 2000; Bormann et al 1995; Glad et al 1995; Leasure et al 1995).

STUDY DESCRIPTION

A search of Medline and CINAHL revealed no studies that examined these factors in relation to HCV. Thus, a questionnaire was developed to determine HCWs' knowledge of, and attitudes towards, HCV in order to inform a strategy to prevent discrimination towards HCV-positive patients and thus improve patient access to testing and health care programs.

The questionnaire was designed to answer the following questions (adapted from Lohrmann et al 2000):

1. What is the level of knowledge of HCWs regarding hepatitis C?
2. What attitudes do HCWs have regarding HCV-positive patients?

3. How willing are HCWs to care for people who are HCV-positive?
4. Is there a relationship between HCWs' backgrounds and their knowledge levels, attitudes towards, and willingness to care for HCV-infected persons?
5. Is there a relationship between HCWs' knowledge levels, and their attitudes towards, and willingness to care for HCV-infected persons?

The specific aim of this study was to determine the reliability and validity of the questionnaire and highlight any problems in its design prior to administering it to a wider sample.

METHODS

The survey instrument

Following a literature review, a questionnaire was created to examine the knowledge, attitudes and practices of HCWs in relation to hepatitis C. The questionnaire had a demographics component that elicited information on the age, gender, profession, years of experience as a HCW, and highest qualifications of the respondents. Four

questions examined whether the respondent personally knew anyone who had HCV, if they had cared for a HCV-positive person in the last six months, or if they had either a needlestick/sharps injury in the previous 12 months or a splash of blood or body fluids to the eyes or mucous membranes. The answer alternatives were 'yes', 'no' or 'don't know'. There was also a 13-question component that examined the HCWs' knowledge of HCV (Table 1) (see the sources of information in the introduction) followed by a Likert scale consisting of 17 statements on attitudes and practices in relation to HCV-positive persons. Some of the questions in the 'attitudes and practices' section were adapted from the Fear of AIDS scale developed by Wang and Paterson (1996). A score of one indicated the person strongly disagreed with the statement, while five indicated strong agreement. The final section was designed to test the face validity of the questionnaire and asked for any comments on the issues raised or on the clarity and design of the questionnaire.

Subjects

The questionnaire was piloted in 2001 with a group of registered nurses (RNs), doctors, wardspersons (WPs),

Table 1: Responses to knowledge questions (correct answers in brackets).

QUESTION	%
9. The risk of contracting hepatitis C from a contaminated needlestick injury is: (1-10%)	20.7% correct 10.3% underestimated 43.1% overestimated 25.9% don't know
10. The number of people currently infected with hepatitis C in Australia is thought to be (pick the closest number): (200,000)	19% correct 15.5% underestimated 13.8% overestimated 51.7% don't know
11. New hepatitis C infections are thought to be occurring at the rate of approximately: (10,000/year)	8.6% correct 39.6% underestimated 1.7% overestimated 50% don't know
12. The primary way hepatitis C is transmitted in Australia today is: (injecting drug use)	48.3% correct
13. Hepatitis C is caused by a: (virus)	72.4% correct
14. The greatest risk of contracting hepatitis C in a health care setting is via: (needlestick/sharps injury)	34.5% correct
15. The precautions that I should take to avoid infection with hepatitis C in the health care setting include: (hand washing; not recapping needles; wearing mask, gown and gloves when I suspect I might be exposed to blood or body fluids; disposal of sharps into sharps containers) Source: NH&MRC (1996)	All right 0% Some right 94.8% None right 5.2%
16. Blood spills from someone infected with hepatitis C are most effectively cleaned up with: (phenolic) Source: Agolini et al. (1999)	1.7% correct
17. There is an effective vaccine for hepatitis C. (false)	75.9% correct
18. If one is exposed to hepatitis C via a needlestick injury, there is an effective, licensed prophylactic therapy in Australia. (false)	34.5% correct
19. What percentage of people who are infected with hepatitis C develop chronic hepatitis? (~80%)	12.1% correct 51.7% underestimated 36.2% don't know
20. What percentage of people infected with hepatitis C develop liver cancer? (~5%)	13.8% correct 10.3% underestimated 31% overestimated 44% don't know
21. The current drugs licensed for the treatment of chronic hepatitis C in Australia are (tick any that apply): (interferon, interferon and ribavirin combination therapy)	All right 0% Some right 20.7% None right 79.3%

and physiotherapists (PTs) at a 250-bed Australian hospital. One hundred questionnaires were distributed to the critical care unit, the medical superintendent, and the physiotherapy and wardspersons departments.

Study design

Directors of the various participating departments were given a copy of the information sheet, which described the study aims, one week prior to the study being conducted and were asked to bring the study to the attention of their staff. Following distribution of the questionnaires, respondents were given the option of returning the questionnaire by mail, or by placing it in one of several ballot boxes in the hospital, which were cleared daily by the researcher. The researcher was available two hours daily in the critical care unit to answer queries regarding the study. The answers to the knowledge questions were made available to each department a week after completion of data collection. The anonymity of respondents was maintained throughout the study. Participation in the study was voluntary.

Ethics clearance

Approval for this study was gained from the relevant Human Research Ethics Committees (HREC), which were constituted and operated according to the guidelines of the National Health and Medical Research Council of Australia. In order to satisfy conditions imposed by the HREC, the hospital in which the study was conducted, and the exact time period during which the study was carried out have not been identified.

Statistical analyses

Data analyses were carried out using the Statistical Package for Social Sciences (SPSS 6.1). Descriptive statistics were initially used to analyse the variables. As it was a condition imposed by the HREC that participants' responses be anonymous, it was not possible to use a test-retest technique to assess the instrument for reliability, however, Cronbach's alpha was used to assess the reliability index of items in Section C 'attitudes and practices'. A relationship of 0.7 was selected as the acceptable criterion level (Jackson and Furnham 2000). Three groupings of related items had a Cronbach's alpha score of greater than 0.7 (Table 2). The relationships between these groupings, and between the knowledge scores and groupings were examined using a Pearson's correlation test. The sample size was insufficient to conduct a factor analysis (Munro 1997).

Table 2: Results of subscale analysis

Name of subscale	Question number	Cronbach's alpha
Willingness to treat	25,32,33,34,37,38	0.7026
Perception of personal risk	22,26	0.7035
Risk-taking personality	24,29	0.7466

The relationships between score on the knowledge test and demographic variables were examined using one-way analysis of variance (ANOVA) for items with more than

two groups, and with an independent samples t-test for items with two groups (Zar 1999). Similar approaches were used to analyse the relationships between knowledge score and personally knowing someone with HCV, caring for someone with HCV in the previous six months, having a sharps injury in the previous 12 months or having a splash to the eyes or mucous membranes of blood or body fluids. Tukey's Honestly Significant Difference (HSD) test was used for post hoc analyses to determine which of the groups differed from each other (Pallant 2001). As this was a pilot study, the sample size within the different demographic groups was insufficient to conduct multivariate statistical analyses.

RESULTS

Respondents

One hundred questionnaires were distributed and 58 questionnaires were returned: 15 from WPs, 18 from PTs, 20 from RNs and five from doctors.

Demographics

The bulk of participants were between the ages of 20-30 (43%; n=25), while 34.5% (n=20) were aged 31-40, 15.5% (n=9) were aged 41-50, 5% (n=3) were aged 51-60, and 2% (n=1) were over 60. 35% (n=20) had 1-5 years of experience as a health care worker, 29% (n=17) had 6-10 years, 14% (n=8) had 11-15 years, 3% (n=2) had 16-20 years, and, 19% (n=11) had greater than 20 years experience. Tertiary qualifications were held by 78% (n=45) of respondents, while 22% (n=13) had either secondary school qualifications, certificate level qualifications or other unspecified qualifications. 64% (n=37) of respondents were females and 36% were males (n=21).

16% (n=9) of respondents personally knew someone who had HCV, 59% (n=34) had contact with a HCV-positive patient in the previous six months, 9% (n=5) had experienced a sharps injury in the previous 12 months, and over one-third (36%; n=21) had a splash to the eyes or mucous membranes of blood or body fluids whilst at work.

Knowledge of hepatitis C

The majority of staff answered 11 of the 13 questions incorrectly (Table 1). Questions 15 and 21 were worth two marks each as one mark was awarded for getting the answer partially right and two marks were awarded for getting all the answers right. Thus, the total marks were out of 15. Knowledge scores ranged from 1-10 (mean 4.6 ± 0.3 sem).

Knowledge scores were significantly higher if the staff member had recently had contact with an HCV-positive patient (mean 5.24±0.59) when compared with those who couldn't remember if they had (mean 2.55±0.50) (1-way ANOVA, F=7.2160, p=0.0017; Tukeys HSD 0.05). Knowledge also differed significantly between professional groups (1-way ANOVA, F=10.5779,

$p=0.000$). Post hoc analysis (Tukey's HSD 0.05) showed that doctors (mean 8.0 ± 0.83) scored significantly higher on the knowledge test than the other groups, and RNs (mean 5.35 ± 0.37) scored significantly higher than PTs (mean 3.72 ± 0.48) and WPs (mean 3.40 ± 0.45). Scores on the knowledge test were also higher in the group with more than 15 years experience (mean 5.77 ± 0.47) compared to those with one to five years experience (mean 3.75 ± 0.52) (1-way ANOVA, $F=3.2666$, $p=0.0282$; Tukey's HSD 0.05). There were no significant relationships between the level of knowledge and the other demographic variables: age, gender and qualifications.

Attitudes towards HCV-infected persons

The majority of respondents (88%; $n=51$) reported that they did not treat persons with HCV differently to other patients, did not try to avoid looking after patients with

HCV, (87%; $n=50$), or avoid spending time with them (85%; $n=49$), and 69% ($n=40$) reported that they were comfortable touching someone with HCV (Table 3). Almost 90% ($n=52$) felt that it was the duty of health care workers to care for people with HCV and 85% ($n=49$) were not influenced by the way the person acquired HCV. Three-quarters of respondents ($n=43$) rarely if ever worried about acquiring HCV in the workplace, although only 45% ($n=26$) felt they were at low risk of contracting HCV in the workplace.

Forty five percent ($n=26$) agreed or strongly agreed that mandatory testing upon admission to hospital was not necessary, although just over half ($n=30$) of the respondents felt that patients undergoing surgery should be tested compulsorily. Just under three-quarters (72%; $n=42$) agreed or strongly agreed that patients who were

Table 3: Responses to the attitudes and practices statements

STATEMENT	STRONGLY DISAGREE	DISAGREE SURE	NOT AGREE	AGREE	STRONGLY
22. I frequently worry about acquiring hepatitis C because of my work.	13.8%	55.2%	5.2%	20.7%	3.4%
23. Our profession has a responsibility to treat people infected with hepatitis C.	1.7%	3.4%	3.4%	46.6%	43.1%
24. I prefer an exciting, unpredictable life.	19.0%	44.8%	15.5%	10.3%	6.9%
25. I try to avoid looking after patients infected with hepatitis C.	29.3%	56.9%	3.4%	3.4%	5.2%
26. My risk of becoming infected with hepatitis C through my work is low.	12.1%	25.9%	15.5%	36.2%	8.6%
27. It is not necessary for patients to undergo mandatory testing for hepatitis C upon admission to hospital.	6.9%	27.6%	19.0%	31%	13.8%
28. All patients undergoing surgery should be tested for hepatitis C to protect the staff looking after them.	1.7%	31%	13.8%	37.9%	13.8%
29. I enjoy taking risks in life.	22.4%	46.6%	8.6%	17.2%	1.7%
30. Patients who know that they have hepatitis C should disclose their infective status to the people caring for them.	5.2%	15.5%	5.2%	43.1%	29.3%
31. I use Standard Precautions to protect myself when ever I suspect I might be exposed to body fluids.	0	1.7%	0	50%	46.6%
32. The way the patient caught hepatitis C influences the way I treat him/her.	37.9%	46.6%	6.9%	5.2%	1.7%
33. When looking after a patient with hepatitis C, I try to spend as little time with them as possible.	25.9%	58.6%	8.6%	5.2%	0%
34. If I know someone has hepatitis C, I treat them differently to other patients.	31.0%	56.9%	6.9%	3.4%	0%
35. I have no problem looking after someone with hepatitis C regardless of how they caught the disease.	1.7%	3.4%	3.4%	63.8%	25.9%
36. Touching someone infected with hepatitis C doesn't make me uncomfortable.	1.7%	10.3%	17.2%	48.3%	20.7%
37. I can't always follow Standard Precautions because my patient's needs come first.	27.6%	55.2%	8.6%	3.4%	3.4%
38. My workplace has a strong commitment to occupational health and safety.	12.1%	8.6%	13.8%	39.7%	24.1%

HCV-positive should disclose their infective status to their carers.

Attitude scale analysis

Cronbach's alpha was used to measure the internal consistency of the attitude scale. Cronbach's alpha was 0.6671 for the scale overall, however, the scale reached an alpha of 0.7003 if Question 30 was deleted. The value of Cronbach's alpha improved slightly if the scale was divided into three subscales, which were named 'willingness to treat', 'perception of personal risk', and 'risk-taking personality' (Table 2). Willingness to treat persons with HCV was correlated significantly with perceptions of personal risk (Pearson's correlation coefficient =0.2839, $p=0.032$), (ie the lower the person perceived their risk the more willing they were to care for persons with HCV). Willingness to treat was not significantly correlated to risk-taking behaviour ($p=0.052$).

Relationship between knowledge and attitudes

No significant relationships were noted between knowledge scores and attitudes to caring for HCV-positive persons.

Relationships between background factors and attitude subscales

Knowing someone personally who had HCV, having recently cared for a HCV-positive patient, or having had a needlestick injury or splash incident were not related significantly to willingness to treat persons with HCV, with feelings of personal risk, or with a risk-taking personality. There were several significant relationships between demographic factors and the scales. Staff with 11-15 years of experience were less willing to treat patients with HCV than persons with less or more experience (1-way ANOVA, $F=2.8241$, $p=0.0474$; Tukey's HSD 0.05). Perceptions of personal risk of acquiring HCV in the workplace were lower amongst PTs than amongst RNs and WPs (1-way ANOVA, $F=5.6065$, $p=0.002$; Tukey's HSD 0.05), and staff with degrees saw themselves as at lower risk than staff with secondary school education only (1-way ANOVA, $F=2.3592$, $p=0.0436$; Tukey's HSD 0.05).

Validity test

No criticisms were made of the design and clarity of the questionnaire. One person commented that the questionnaire was easy to fill out. Several staff members commented on their lack of knowledge of HCV and on the need for in-service on the topic. One person suggested that the value of a questionnaire was limited if the person who developed it did not have clinical experience. One staff member expressed anger that he or she usually did not find out someone had HCV until a week after they had contact with the patient.

DISCUSSION

Overall, the knowledge of health care workers regarding HCV was poor. Whilst the bulk of respondents identified most of the precautions that should be taken in

the workplace to prevent HCV transmission, none of the respondents correctly identified all of the measures required, only one respondent correctly identified the most effective solution to treat blood spills, and only 35% correctly identified the major risk factor for contracting HCV in the workplace. Those staff members who had the most experience, who had recently cared for someone with HCV, and who had the greatest contact with blood and body fluids and the most responsibility for patient care (ie RNs and doctors), had the greatest knowledge regarding HCV. It may be that staff learnt more about HCV through caring for someone who had it, or that the knowledge they had was more easily retained through reinforcement via clinical practice. Similarly, a study which examined the association between nursing students' backgrounds and their knowledge levels regarding AIDS, found that those who had cared for an AIDS patient had a higher level of knowledge than those who had not (Lohrmann et al 2000).

Respondents also had a tendency to underestimate the incidence of HCV infection in the population and the degree of chronicity associated with HCV, but a substantial proportion overestimated the risk of contracting HCV by needlestick injury in the workplace. A previous study demonstrated that staff overestimated the risk of contracting HIV, and that the perception of risk was influenced by occupation and by having cared for a patient with HIV (Brusaferro et al 1997). Similarly, in this study perception of risk was influenced by profession, however, these perceptions were probably relatively accurate as PTs who felt their risk was low were not required to handle used sharps and may have had considerably less contact with blood and body fluids than the other groups. Those staff who perceived their risk of contracting HCV in the workplace was low were also more willing to care for persons with HCV. Similarly, a study by Kagan (1986), found that nursing students who had a lower fear score were more willing to care for patients with AIDS than those who had a high fear score. Despite the fact that it is considerably easier to contract HCV via a needlestick than HIV, the percentage of staff who felt at high risk of contracting HCV was considerably lower than those who felt at high risk of contracting HIV (38% vs 63%-85%) (Hossini et al 2000, Wallack 1989).

Similarly, the percentage of staff who agreed with mandatory testing on admission was lower than that reported for studies which examined HCWs' views on mandatory testing for HIV (35% vs 66%) Hossini et al 2000. It may be that HCV is rightly considered a less dangerous virus than HIV by HCWs and so they are less concerned about it (Bennett 1998). It was interesting that staff did not have a blanket response to compulsory testing. Whilst just under three-quarters of staff agreed that patients should disclose their infective status, only half felt that testing prior to surgery should be compulsory, and just over one-third agreed with mandatory testing on admission. Respondents may have felt there was a lower inherent risk of contracting HCV from non-surgical patients.

The majority of staff appeared to be willing to care for persons infected with HCV. While early studies on the attitudes and practices of staff towards persons with HIV

showed a high level of discriminatory attitudes and practices, some more recent studies have shown that attitudes may now be less negative, perhaps reflecting more favourable media attention and greater contact with HIV-positive persons (Lohrmann et al 2000, Snowden 1997). The same may be true for HCV, although it again may also be that staff perceive HCV as less threatening than HIV.

Surprisingly, knowledge levels were not correlated significantly with willingness to care for patients with HCV, despite such correlations in other studies examining HCWs' attitudes to HIV (Tierney 1995, Gignac and Oermann 1991). This may be due to the fact that knowledge scores overall were fairly low, which did not allow sufficient variation to fully test this hypothesis. Data obtained from a larger sample in a wider range of workplaces may provide a more comprehensive picture.

Limitations

The ability to attribute causality and to extrapolate the findings in this study is limited by the cross-sectional study design and the small sample size. In addition, because the study design made it impossible to compare the characteristics of responders with non-responders, the results may have been biased. The primary aim of this study was to determine the clarity, reliability and validity of the questionnaire and the questionnaire was both reliable and had high face validity. The results, despite their limitations, provide some information that may be of benefit to HCWs, on a topic that has been neglected in the literature to date.

CONCLUSION

The study identified a substantial lack of knowledge among all groups of health care workers surveyed which suggests that staff are greatly in need of education programs on HCV. Nurses and doctors, in particular, have a duty to provide informed care to their patients and also have a role in providing health education based on fact.

Additionally, as the perception of risk was shown to influence HCWs' willingness to care for patients with HCV, further education on the risks of contracting HCV in the workplace, and on methods to protect oneself from transmission may increase the willingness of HCW to care for HCV-infected persons thus reducing discrimination towards these people in the health care setting. Further studies examining these factors are needed.

REFERENCES

Agolini, G., Russo, A. and Clementi, M. 1999. Effect of phenolic and chlorine disinfectants on hepatitis C virus binding and infectivity. *American Journal of Infection Control*. 27(3):236-9.

Bennett, J. 1998. Fear of contagion: A response to stress? *Advances in Nursing Science*. 21(1):76-87.

Bormann, J.E., Brent, S.B. and Mood, D.W. 1995. The effect of an AIDS diagnosis on undergraduate nursing students' care of dying patients. *Nurse Educator*. 20(6):15-21.

Bowman, J.M., Brown, S.T. and Eason, F.R. 1994. Attitudes of baccalaureate nursing students in one school toward acquired immune deficiency syndrome. *AIDS Education and Prevention*. 6(6):535-41.

Brusaferro, S., Martina, P., Puzolante, L. and Gasparini, V. 1997. Epidemiological study on knowledge, attitudes and behaviour of health care workers with respect to HIV infection. *Medicina del Lavoro*. 88(6):495-506.

Crofts, N., Thompson, S. and Kaldor, J. 1999a. *Epidemiology of the hepatitis C virus*. Technical Report Series No. 3 Communicable Diseases Intelligence. Canberra: Commonwealth Department of Health and Aged Care.

Crofts, N., Louie, R. and Loff, B. 1999b. The next plague: Stigmatisation and discrimination related to hepatitis C virus infection in Australia. *Health and Human Rights*. 2(2):87-97.

Farci, P., Alter, H.J., Wong, D.C., Miller, R.H., Govindarajans, S., Engle, R., Shapiro, M. and Purcell, R.H. 1994. Prevention of HCV infection in chimpanzees after antibody-mediated in vitro neutralisation. *Proceedings of the National Academy of Science, USA*. 91(16):7792-6.

Ficarotto, T.J., Grade, M. and Zegans, L.S. 1991. Occupational and personal risk estimates for HIV contagion among incoming graduate nursing students. *Journal of the Association of Nurses in AIDS Care*. 2(1):5-11.

Gershon, R.R., Curbow, B., Kelen, G., Celantano, D., Lears, K. and Vlahov, V. 1994. Correlates of attitudes concerning human immunodeficiency syndrome among hospital workers. *American Journal of Infection Control*. 22(5):293-99.

Gignac, D. and Oermann, M.H. 1991. Willingness of nursing students and faculty to care for patients with AIDS. *American Journal of Infection Control*. 19(4):191-7.

Glad, J.A., Tan, W. and Erlen, J.A. 1995. Fear of AIDS, homophobia and occupational risk for HIV: A staff development challenge. *Journal of Nursing Staff Development*. 11(6):313-9.

Hepatitis C Council of NSW. 2001. An Australian HCV snapshot. *Hepatitis C Factsheet*. 1-2.

Hossini, C.H., Tripodi, D., Rahhali, A.E., Bichra, M., Betito, D., Curtes, J.P. and Verger, C. 2000. Knowledge and attitudes of health care professionals with respect to AIDS and the risk of occupational transmission of HIV in two Moroccan hospitals. *Sante*. 10(5):315-21.

Ippolito, G., Puro, V., Petrosillo, N., De Carli, G., Micheloni, G. and Magliano E. 1998. Simultaneous infection with HIV and hepatitis C following occupational conjunctival blood exposure. *JAMA*. 280(1):28.

Jackson C.J. and Furnham A. 2000. *Designing and analysing questionnaires and surveys: A manual for health professionals and administrators*. London: Whurr publishers.

Kagan, K. 1986. Baccalaureate nursing students' attitudes towards patients with Acquired Immunodeficiency Syndrome (AIDS). *Dissertation Abstracts International*. 47(06B):2372.

Leasure, R., McKenney, L.A. and Merrill, A. 1995. Factors influencing baccalaureate nursing students' attitudes towards persons living with AIDS. *Journal of Professional Nursing*. 11(5):299-305.

Lohrmann, C., Valimaki, M., Suominen, T., Muinonen, U., Dassen, T. and Peate, I. 2000. German nursing students' knowledge of and attitudes to HIV and AIDS: Two decades after the first AIDS cases. *Journal of Advanced Nursing*. 31(3):696-703.

Lowe, D. and Cotton, R. 1999. *Hepatitis C: A review of Australia's response*. Canberra: Commonwealth Department of Health and Aged Care.

Mitsui, T., Iwano, K., Masuko K., Yamazaki, C., Okamoto, H., Tsuda, F., Tanaka, T. and Mishiro S. 1992. HCV infection in medical personnel after needlestick accident. *Hepatology*. 16(5):1109-14.

Munro, B.H. 1997. *Statistical methods for health care research*. Philadelphia: Lippincott.

National Health and Medical Research Council and Australian National Council on AIDS (NHMRC and ANCA). 1996. *Infection control in the healthcare setting: Guidelines for the prevention of transmission of infectious diseases*. Canberra: AGPS.

National Health and Medical Research Council. 1997. *A strategy for the detection and management of hepatitis C in Australia*. Canberra: AGPS.

Olmstead, R. 1996. What is the risk of acquiring hepatitis C for health care workers and what are the recommendations for prophylaxis and follow-up after occupational exposure to hepatitis C virus? *American Journal of Infection Control*. 24(5):411-5.

Pallant, J. 2001. *SPSS survival manual*. Chicago: Allen & Unwin.

Rosen, H. 1997. Acquisition of hepatitis C by a conjunctival splash. *American Journal of Infection Control*. 25(3):242-7.

Sartori, M., La Terra, G., Aglietta, M., Manzin, A., Navino, C. and Verzetti, G. 1993. Transmission of hepatitis C via a blood splash into the conjunctiva. *Scandinavian Journal of Infectious Diseases*. 25(2):270-1.

Shiell, A. 1998. *Economic analyses for the review of the Hepatitis C Action Plan*. Canberra: Commonwealth of Australia.

Snowden, L. 1997. An investigation into whether nursing students alter their attitudes and knowledge levels regarding HIV infection and AIDS following a 3-year programme leading to registration as a qualified nurse. *Journal of Advanced Nursing*. 25(6):1167-1174.

Tierney, A. 1995. HIV/AIDS-knowledge, attitudes and education: A review of the research. *Journal of Clinical Nursing*. 4(1):13-21.

Wallack, J. 1989. AIDS anxiety among health care professionals. *Hospital and Community Psychiatry*. 40(5):507-110.

Wang, J. and Paterson, J. 1996. Using factor analysis to explore nurses' fear of AIDS in the United States of America. *Journal of Advanced Nursing*. 24(2):287-95.

Whyte, G.S. and Savoia, H.F. 1997. The risk of transmitting HCV, HBV or HIV by blood transfusion in Victoria. *Medical Journal of Australia*. 166(11): 584-6.

Zar, J.H. 1999. *Biostatistical analysis*. 4th ed. Upper Saddle River: Prentice Hall.

NURSING AND HEALTH CARE IN SWEDEN

Linda Shields, PhD, FRCNA, NH&MRC, is a Public Health Research Fellow, Mater Children's Hospital, an Adjunct Senior Lecturer, University of Queensland, a Visiting Fellow, Queensland University of Technology, Brisbane, Australia, a Visiting Fellow, Örebro University, Sweden and University of Northumbria, Newcastle-upon-Tyne, England.

Inger Kristensson-Hallström, Associate Professor, is a Clinical Lecturer, Children's Hospital/Department of Caring Sciences, University Hospital, Lund, Sweden

Birgitta Andershed, RNT, Dr Med Sci, is a Senior Lecturer, Department of Caring Sciences, Örebro University, Örebro, Sweden

Karin Jackson, RNT, MScN, is a Postgraduate Student, Department of Caring Sciences, Örebro University, Örebro, Sweden

Mats Eriksson, RN, BScN, is a Postgraduate Student, Linköping University, Linköping, Sweden

Accepted for publication April 2002

ACKNOWLEDGEMENTS

The first author (LS) is supported by the National Health and Medical Research Council of Australia Public Health Postdoctoral Fellowship Number 997096 and the Winston Churchill Memorial Trust, and the second author (IK-H) is supported by the South Swedish School of Nursing.

Key words: nursing, primary health care, Sweden

ABSTRACT

Sweden, one of the Nordic countries, has a long history of social justice and equality of access to health care. Nursing plays an important role in this and nursing education is of a high standard. The aim of this paper is to describe Sweden's health system and nursing within it, thereby giving Australian nurses information which may generate an interest in, and provide background for, collaborative work. It is part of a series initiated by the first author who visited Sweden, Iceland and England in 2000 under the auspices of a Churchill Fellowship, and who has returned to Sweden and England to continue work begun during the Fellowship.

Sweden's health service is characterised by an ethic of egalitarianism and high standards; primary health care plays a large role and tertiary health care is easily accessible. Nursing in Sweden is of a high standard, with devolvement of responsibility and decision-making to those working in the wards and units. Nursing education has been influenced by the historical development of nursing in Europe and today, Swedish nurses enjoy a high standard of university education with government support readily available to make specialist education accessible. Because of the similarities in both the cultures, and nursing, in Australia and Sweden, Australian nurses would find Sweden a wonderful country in which to implement cross-cultural, collaborative work. This paper provides background knowledge for such collaboration.

INTRODUCTION

Australia and Sweden are alike in many ways, both culturally and politically. However, geographically they are two of the most distant countries on the globe. The numbers of people who travel between Australia and Sweden are small when compared to travel between Australia and, for example, Britain. Consequently, few Australian nurses are able to take the opportunity to become more familiar with Sweden. The aim of this descriptive paper is to provide Australian readers with knowledge of Sweden, its social and health care systems and how nursing fits within those systems, and a brief background is given on Swedish history. The paper provides some comparisons with selected Australian health parameters, and describes the system of inpatient care, primary health care, the education of health professionals, the role of clinical nursing and nursing research. By understanding how other health systems work, and nursing within them, international collaborations can grow. In this way, all benefit. By knowing about how health care is delivered in Sweden, Australian nurses will be able to access opportunities provided for cross-cultural links, research projects and possibly funding.

This paper is part of a series on the health care systems of countries visited by the first author during visits to Iceland, Sweden and England under the auspices of a Churchill Fellowship (Shields 2000). Articles which describe the health care systems of the visited countries and Australia to respective audiences in the nations involved are being published (Shields and Kristjánsdóttir 2001).

A description of Sweden

A brief summary of the history of Sweden is important to understand how their present health care system came into being. Sweden, a Nordic country, has Norway on one border, Finland on the other. Its early history included Stone and Bronze Age civilizations followed by the Vikings. Sweden's history has been turbulent, with periods of war and conflict with its neighbours interspersed with long periods of peace. The various states which made up medieval Sweden were unified in 1280. It was part of the Hanseatic League of traders but remained a largely agrarian society. Following the Napoleonic wars, the French Marshall, Bernadotte, was elected to the Swedish throne and the present day Royal Family is descended from him (Bendure 1999).

Sweden has not been involved in any wars since the beginning of the 19th Century and has maintained a foreign policy of non-alignment in peacetime and neutrality during war. It played an active role in the setting up of both the League of Nations and the United Nations and has been a full member of the European Union since 1994 (Bendure 1999). With abolition of the absolute monarchy in the 19th Century, a new constitution based on Montesquieu's model and characterised by the separation of powers was introduced (Umeå University 1997). Since then, Sweden has had a parliamentary government.

Sweden was one of the least developed countries of Europe well into the 20th Century, when one-fifth of the population emigrated to America to find a better way of life in a land free of poverty. Since the end of World War II, Sweden has become a leading industrial nation, with a high standard of living and a socialist welfare state (Bendure 1999). In 2000, Sweden's Gross National Income (GNI) per capita was US\$26,780 compared with Australia's which was US\$20,530. (The World Bank [2001] defines GNI thus: 'GNI per capita (GNP per capita) is the gross national income, converted to US dollars ... divided by the midyear population') and is the currently recognised indicator of economic status in the world. While there is some difference between GNI for Australia and Sweden, both countries are still classed as 'high income' by the World Bank (2001). For most Swedes, income tax rates are similar to Australia's, although they pay 25% value added tax (Swedish National Tax Board 2000) and various local taxes implemented by local government agencies.

Sweden had one of the first social security systems in the world and social welfare remains a cornerstone of public policy. Employers and employees together pay social security contributions to cover pensions, health insurance and other social benefits. Health care and social welfare are seen as public sector responsibilities, and are administered by a national social insurance system. Health care is either free or heavily subsidised and medicines and medical aids are funded. Generous allowances are available for those who have to care for ill, dying or disabled family members at home, for example, in every family parents are allowed 60 days per year on 80% of full pay to care for each sick child, and this can be extended for another 60 days. Maternity leave gives parents up to one-year leave on full pay and three months on reduced pay.

Parents are supposed to share this time equally and most fathers spend some months on paternity leave. The parents also receive tax-free child allowances, equal for everyone, until the child's 16th birthday. All education - primary, secondary, technical and tertiary - is free, books are subsidised and generous student loans available, making tertiary education readily and equitably accessible.

Egalitarianism pervades Swedish society and culture, despite the paradox of having a royal family. Responsibilities are acknowledged and taught as part of the concept of individuals' rights. Swedes take an active role in their society, for example, even though voting is not compulsory, up to 95% of people voted in previous elections, though in the latest election this decreased to 81%. Teaching about rights and responsibilities begins at an early age at home and is an integral part of all formal education. It is a criminal offence in Sweden to smack a child (Ministry of Justice Sweden 1983, 1999). Housework and child rearing is often shared between partners, and subsidised child day care is available for all working and/or studying parents. The rights that are such an integral part of Swedish culture are concomitant with responsibilities and in practice this often means that a balance is sought between accessing services and contributing to those services.

Health parameters

Table 1: Selected health characteristics, Sweden and Australia. (World Health Organization 2001a-d)

	SWEDEN	AUSTRALIA
Total population	8,841,000	18,063,000
IMR	3.8	5.5
MMR	0.1	0.1
Life expectancy - males	77.1	76.8
Life expectancy - females	81.9	82.2
Health spending/capita/year	1,943	1,601
Immunisation rate	99%	86%
Number of nurses	821	830
Number of doctors	311	240

IMR: infant mortality rate expressed as /1,000 live births

MMR: maternal mortality rate expressed as /100,000 births

Life expectancy at birth

Health spending in US dollars per capita per year

Immunisation rate of all children

Number of nurses and doctors expressed as /100,000 population

World Health Organization (WHO, 2001) statistics are used in this section. Sweden, like Australia, holds some of the world's best health statistics and some are compared in Table 1. Many health parameters differ little between the two countries, and while it is not possible to give an exegesis of them all here, those included are easily understood and provide a picture of the state of health of the Swedish population. Life expectancy in Australia is similar to Sweden (WHO 2001a) and rates for deaths from diseases such as diabetes, heart disease and malignancies are higher in Sweden than Australia as seen in Table 2

(WHO 2001b). When death rates by causes and age groups are compared, deaths in children and young people are higher in Australia. It is beyond the scope of this paper to examine these findings, but further work is planned.

Sweden's immunisation rate is higher than Australia's (WHO 2001c) and the cause of the difference is probably cultural. In both countries, immunisation services are free and readily accessible to all. The community health system in Sweden is efficient, comprehensive and its use is an integral part of Swedish culture, in other words, people are enculturated to use the primary health care services as part of normal life. In Australia, preventive health services are often poorly used or ignored.

Death rates from motor vehicle accidents, especially in young males, are higher in Australia. Swedish drink driving legislation is more stringent than Australia's, with fines imposed for alcohol levels over 0.02% (Institute of Alcohol Studies 2000) and this may contribute to the lower motor vehicle accident death rates, though no research was found to corroborate this. Rates for deaths by drowning were lower in Sweden than Australia, only marginally so when deaths are examined in total, but when the 'toddler' (1-3 year-old) age group is separated, then a large difference is seen. It is well known that Australian children in the 1-5 year age group are at a high risk of drowning because of the large number of back yard swimming pools (Fenner 2000, Pitt and Balanda 1998), so these numbers are not unexpected.

Youth suicide is lower in Sweden than in Australia, though it is difficult to postulate reasons for this. There is

some suggestion that the rate of young Swedish men attempting suicide is decreasing (Allebeck et al 1996), while Australian research indicates the rates are rising (Wilkinson and Gunnell 2000).

Nursing numbers per population are similar in Sweden and Australia, though Sweden has more doctors (WHO 2001d). The worldwide nursing shortage has affected Sweden since the early 1990s, while Australia has only recently begun to feel its full effect (Queensland Nurses' Union 2000; Australian Institute of Health and Welfare 1999). The other figure of note in Table 1 is the amount of health spending per capita per year, with the Swedish government allocating substantially more than Australia (WHO 2001e).

The health situation is to some extent similar in Sweden and Australia. In both nations, cardiovascular conditions account for a large number of all deaths (WHO 2001), problems from allergic conditions have grown (Meza and Gershwin 1997), the proportion of overweight individuals is increasing (Swedish Association for the Study of Obesity 2001, NHMRC Working Party on the Prevention of Overweight and Obesity 2001), and the numbers of elderly people are rising substantially. Sweden has one of the world's largest elderly populations and soon 20% of the population will be aged 65 or over (Swedish Institute 1999), and a similar figure is projected for Australia (Grey 2001).

Table 2: Death rates by selected causes and sex, expressed as per 100,000 population. Sweden 1996, Australia 1995 (World Health Organization 2001e)

Causes of death	Sex	Sweden		Australia	
Malignant neoplasms	M	248.1		209.8	
	F	221.8		160.0	
Diabetes mellitus	M	17.9		4.5	
	F	17.6		4.4	
Hypertensive disease	M	6.7		4.7	
	F	8.7		7.3	
Acute myocardial infarction	M	180.4		108.5	
	F	127.9		90.4	
Ischaemic heart disease	M	113.3		67.9	
	F	101.0		56.5	
Maternal mortality rate	F	0.1		0.1	
			15-24 years		15-24 years
Motor vehicle accidents	M	7.5	12.7	14.7	31.1
	F	3.6	4.4	6.5	10.3
Drownings			Age 1-4 years		Age 1-4 years
	M	1.5	0.8	1.9	6.9
	F	0.4	0	0.7	3.4
Suicide			15-24 years		15-24 years
	M	20.0	12.0	19.0	23.1
	F	8.5	4.6	5.1	6.1

Management and quality care

Swedish society has three political and administrative levels - central government, county or regional councils and local authorities. About 20 county councils are responsible for the provision of health services. The different areas have a population between 60,000 and 1.7 million people. The county councils also collaborate at a national level. The central government lays down basic principles for health services through laws and ordinances. The most important of these is the Health and Medical Services Act of 1982 (National Board of Health and Welfare Sweden 1982a), which states that all services shall be based on respect for the patient's integrity and his/her right to make autonomous decisions. Other laws regulate qualifications, obligations and responsibilities of personnel, professional confidentiality, and patients' records. There has been a move from specific, detailed regulations toward broader legislation which includes performance appraisal and accountability reporting of results and performances within the services.

The Ministry of Health and Social Affairs is responsible for developments in areas such as health care, social insurance and social issues, and in 1994, a set of regulations (rewritten in 1997) was issued stating that all health services shall include a system for continuous quality improvement. The National Board of Health and Welfare (NBHW) review and evaluate services provided to determine their correspondence with identified goals. Another government agency engaged in evaluation work is the Swedish Council of Technology Assessment in Health Care (2001) which reviews and synthesises current knowledge in relevant fields and existing scientific materials to provide basic data to enable evidence-based decision-making.

About 50 national health care quality registers provide a knowledge base for continuous improvement applications (NBHW Sweden 1996). Every person working in health care is encouraged to report incidents or accidents to their manager; these are compiled by every ward and hospital and are used as an indicator in local quality assurance assessment. If, in connection with care or treatment, a patient suffers a serious injury or illness, the institution providing the care is obliged to report this to the NBHW. Where faults or negligence are attributable to members of staff, (nurses, doctors and others), this can be referred by patients, relatives or managers to the National Medical Disciplinary Board, a judicial government authority. This Board decides on disciplinary measures (warning or admonition) or can remove the person from the professional register (Swedish Institute 1999).

Inpatient care

Health services in Sweden are characterised by funding which allows the implementation of extensive and efficient services. For conditions that require hospital treatment, medical services are provided at county level and regional level. Hospitals are divided into the following categories:

- Regional (tertiary) hospitals, which provide specialised treatment and care;

- District general hospitals, which provide specialised treatment;
- General hospitals, which do not have specialised wards, but staff may include specialists;
- Nursing homes for patients who, after diagnosis, can be treated and cared for outside the general or regional hospitals;
- Rehabilitation centres for patients who, after diagnosis, need specialised rehabilitation for varying periods of time;
- Hospital lodgings, which are for patients needing long-term observation or treatment but who can care for themselves;
- Nursing and occupational homes for the mentally handicapped or ill and disabled people; and
- Hostels for outpatients who are unable to live at home at the time of treatment.

There are some private hospitals and practitioners, and individuals may choose to use (and pay for) their services. Patients have the freedom to choose where and by whom they wish to be given medical attention.

County medical services are available at some 80 central country hospitals and district county hospitals. Here, care is provided in a number of specialist fields, partly as inpatient and partly outpatient care. County medical services include psychiatric care, increasingly being provided as outpatient services. The regional medical system operates at nine regional hospitals, which have a wider range of specialist and sub-specialist areas than those at country level, for example neurosurgery, thoracic surgery and highly specialised laboratories (Swedish Institute 1999).

Adult patients pay a nominal daily fee for hospital admission while children receive free care. The average length of stay in Swedish hospitals in 1997 was five days for medical beds, five for surgical and 24 for psychiatric (Nordic Medico-Statistical Committee 2000). The number of days for both short-term and long-term care per person per year has decreased in recent years in most age groups resulting in a reduction in the number of inpatient beds. People with mental handicaps have, in the main, left institutional care and now live in the community.

During recent years there has been a change in Swedish health care towards more involvement of relatives, a stronger focus on primary health care and the introduction of new models of care, for example hospital based home care and day care. This has resulted in an increase in the level of acuity of patients in both hospitals and in nursing homes, and a centralisation of the most acute inpatient care at hospitals. This development will continue into the future.

Primary health care

Community health services in Sweden are well planned, efficiently conducted and widely used. Each district has a community health centre (*Vårdcentral*), one doctor for every 2,000 people and one child health nurse for every 500 children under the age of six years, although these numbers can vary and are determined by local health authorities (NBHW Sweden 1982a; NBHW Sweden 1994;

Magnusson 1999; Jansson 2000). Adults pay to use these services, children under 18 years do not. Initial access to the services is by telephone, sometimes via a receptionist. A new system is being developed under which nurses operate a telephone consulting service. Callers are directed to an answering machine if the nurse is busy and the call is returned. The nurse can give advice over the telephone, or give the caller an appointment with a nurse or doctor. A patient may visit the clinic, be seen by a triage nurse and referred to the appropriate health professional. Referral to specialists is via medical and nursing staff, except in paediatrics where parents are entitled to present independently either to a private specialist or to a hospital. Except for emergencies, admission to hospital is usually through the *Vårdcentral*. Everyone in Sweden is free to choose the health centre, family doctor and hospital they wish to attend. In 1992, a guarantee of a standard of care for patients was introduced, ensuring that primary care services offer help the day of first contact, provision of a general practitioner service within eight days and specialist consultation within three months. This guarantee aims to reinforce the position of the patient as the primary focus in all care services.

Care is coordinated throughout the life span, and colloquially, is said to be 'womb to tomb'. Antenatal care is provided at the *Vårdcentral*, and at the final antenatal visit/class parents meet the baby health clinic nurse. He/she visits every baby at home soon after birth and at eight months of age. At the eight months of age home visit the focus is on injury prevention (NBHW Sweden, 1992a 1992b). Under Swedish law every school must employ at least one qualified school nurse (Department of Education Sweden 1985; Ministry of Education and Science Sweden 1992c) and school nurses work closely with the *Vårdcentral*. Nurses and doctors are mandated to report child abuse (NBHW Sweden 1980).

Screening services (breast, pap smear, testicular examination and others) are provided, as well as sexual health and immunisation clinics. Older people who become dependent on others for care can be housed in a community-run nursing home which often is attached to the *Vårdcentral*. Provision of health services for the elderly, disabled people and people suffering from long-term mental illness is the responsibility of the community authorities (NBHW Sweden, 1982b, 1982c, 1982d).

The *Vårdcentral* has a laboratory for basic pathology tests; many have facilities for radiological investigation, though complicated procedures are done in hospitals. Allied health services such as physiotherapy, speech and occupational therapy, social work and dietetics are available. Because of Sweden's large immigration program many health centres treat people from several different countries. The effects of these immigration programs on health services are similar to those found in Australia which service the multi-ethnic population. Language and cultural differences influence the workload of the *Vårdcentral*, and migrants are helped to understand the Swedish community health service with publications in different languages, and by cross-cultural education for health workers (NBHW Sweden 1995).

Swedish people make full use of health services and have an appreciation of the importance of self-care and well being. Health education and advertising stresses the importance of primary health care and how it can be accessed (Bergstrand 2000). Most organisations have gymnasium and sport and recreation facilities for their employees, and staff are encouraged to use them. People take advantage of available social security benefits and consequently are able to utilise benefits such as sick leave, carers' payments and other entitlements appropriately. Swedes know the advantages of health screening and illness prevention, and access services, though women are more likely to do so than men (NBHW Sweden 1998a). The health system is efficient, cost effective and provides extremely well coordinated care to the Swedish people. Cultural factors facilitate the full use of the system as people are used to accessing these community and screening services rather than having a heavy reliance on hospital and tertiary care.

The history of nursing education in Sweden

The development of nursing education in Europe had three main influences - the deaconess education system in Germany, Florence Nightingale, and the Red Cross. Eriksson (1985) classified development of Swedish nursing education into four periods: 1) the 'pre-theoretical' period, 1851-1920; 2) the 'medical-centred' period, 1920-1966; 3) the 'multi-sciences' period, 1966-1977; and, 4) the 'nursing sciences' period from 1977.

The first nursing school, situated in the *Diakonissanstalten* in Stockholm was opened in 1851 and was based on the deaconess schools in Germany. Florence Nightingale studied at the deaconess school at Kaiserwerth in 1851 (Florence Nightingale Museum 2001). The next school was opened in 1867 by the newly formed Red Cross and the third was begun in 1884 by the Swedish monarch, Queen Sofia. During this first period, many hospitals set up schools of their own controlled by the director of the hospital, usually a physician. Medical officers controlled the education of nurses and their work, and the length and quality of the courses varied. The 'medical-centred period' of nursing education saw it become state-controlled and it was during this time that education became focused on medical knowledge and techniques, in line with the development of specialities within medicine itself. During the 'multi-sciences period' nursing subjects were supplemented with topics such as sociology and psychology. The focus of the content was mostly on anatomy, physiology, pharmacology and diseases and was in later times criticised as too specialised and too technology-orientated (Kapborg 1995, 1998). It was at this time that nurses under training were given the status of students rather than being counted as ward staff (Derbring and Stölten 1992).

The 'nursing sciences period' began in 1977 when reforms in the higher education sector brought nursing education under direct control of the National Swedish Board of Universities and Colleges. A shift in emphasis demanded that nursing education be grounded in sciences and be connected with research and that it be taught as a specific subject grounded in a holistic view of the

individual (Derbring and Stölten 1992). The latest reforms in nursing education have ensured it is now regulated by the *Higher Education Act* (Ministry of Education and Science Sweden 1992c) and the EES-law which provides guidelines for organisation and curriculum content and bringing nursing education in line with the requirements of the European Union (Kapborg 1995). Nursing degrees, which are designated Bachelor of Science now require a three-year course of study.

Specialist postgraduate programs are available in specialist areas such as midwifery, emergency care, general care, public health, paediatrics, psychiatric care and care of the elderly, and in generic fields such as administration, leadership and teaching. Postgraduate research programs for masters and doctoral degrees is open to all health professionals. The minimum length of a doctoral programme is four years.

Within nursing positions in the hospitals, there are allowances for time off for study, financial support is given to allow nurses to undertake extra education and subsidised childcare is sometimes provided. Education is highly valued in Swedish society and this carries over into health care, where education, both formal as in university courses, and within the health services with in-service and continuing education, is widely available to all health professionals.

Students in Sweden can obtain state support (National Agency for Higher Education 2001) which consists of combinations of study grants and study loans (which must be repaid). Amount of support is often based upon sustained level of income. There are high expectations of success within academia and students in all disciplines work hard to meet those demands.

Nursing regulation in Sweden

On graduation with a nursing degree, one must register with the National Board of Health and Welfare (NBHW Sweden 2001). About 20 professions, most in the health care sector and including medicine are regulated legislatively and have protection of title. Disciplinary action for a nurse can include prosecution by the NBHW with a reminder or a warning or loss of licence (NBHW Sweden 1998b). Warnings and reminders occur, but it is unusual for a nurse to lose his/her licence to practice. The legislation places restrictions on those who can be registered as nurses, and nurses who practice complementary therapies cannot use the title 'nurse' while they are so doing (NBHW Sweden 1998b). Swedish nurses are insured vicariously through their work and the Swedish Association of Health Professionals (*Vårdförbundet* 2001). The average salary for a Swedish nurse is about 17,000-18,000 Swedish crowns (Aus\$3,000-3,200) per month before tax; for an administrator 22,000-24,000 Swedish crowns (Aus\$4,000-4,350) (*Vårdförbundet* 2001). Comparatively, the cost of living is higher in Sweden than Australia, with petrol over double the cost and a large expense necessary for heating and special clothing for the severe winters.

Nurses and research

Research by nurses has developed rapidly during the last few decades and is integral to the education of health care professionals. Nursing students are trained to use research reports and evidenced based care in their work. The Swedish Council on Technology Assessment in Health Care (2001) supports a special group whose focus is evidence based nursing. The first doctoral theses in caring/nursing research appeared in 1978. Heyman (1995) categorised 65 theses into subject areas and examples included nursing of patients with a variety of illnesses, alternative symptoms or disabilities, nursing in the start and at the end of life, nursing of the elderly, patients' and staff's experiences within health care, nurse education and theory/concept development. Currently, there are about 400 nurses in Sweden who have completed a doctoral dissertation. Assessment for all doctoral studies in Sweden, encompasses: a) production of a thesis; plus, b) publication of four or five papers in international, peer-reviewed journals during the period of study; and, c) an oral public defence of thesis with a chosen opponent before three to five examiners. All these requirements must be met before a doctoral degree is awarded. There are 16 professors in nursing though it is difficult to compare these figures with Australia because the requirements for professorial level appointments differ a great deal between the two countries.

CONCLUSION

Culturally, Sweden and Australia have many similarities and this is echoed in the health services of each country. This paper gives an overview of the Swedish health service and how nursing fits within it. Sweden's health service is characterised by an ethic of egalitarianism and high standards. Primary health care has an important part to play in keeping the population healthy and access to this system is facilitated by readily available access to its services and by enculturation of the Swedish people to its use. Tertiary health care also is easily accessible, and hospitals are well maintained and managed with a large range of specialities available.

Nursing in Sweden is of a high standard, with devolvement of responsibility and decision-making to those working in the wards and units. The nursing shortage, which is affecting health services across the world, is having an effect in Sweden as nurses cannot be found to maintain the high levels of staffing that were an integral part of health care. Nursing education has been influenced by the historical development of nursing in Europe augmented by Nightingale principles. Swedish nurses now enjoy a high standard of university education and government support is available to make specialist education accessible. However, it is now being as affected by the nursing shortage as the clinical areas.

Nurses in both countries can benefit from cross-cultural exchanges and recent legislation signed by the Swedish and Australian governments providing work permits for people up to the age of 30 years will facilitate this, at least amongst younger nurses. Cross-cultural experiences are always valuable and Sweden, with its wonderful scenery, high standard of living and warm and friendly people is an ideal place for Australian nurses to consider visiting.

REFERENCES

- Allebeck, P., Brandt, L., Nordstrom, P. and Asgard, U. 1996. Are suicide trends among the young reversing? Age, period and cohort analyses of suicide rates in Sweden. *Acta Psychiatrica Scandinavica*, 93(1):43-48.
- Australian Institute of Health and Welfare. 1999. *Nursing Labour Force*. Australian Government Printing Service. Canberra: Australian Institute of Health and Welfare. Available from URL: www.aihw.gov.au.
- Bendure, G. 1999. *Lonely Planet: Scandinavia and Baltic Europe*. Hawthorn: Lonely Planet Publications Pty. Ltd.
- Bergstrand, M. 2000. *Health education conversations: Communicative strategies in consultations between district nurse and patient*. Unpublished dissertation. Stockholm: Stockholm University (in Swedish).
- Department of Education Sweden 1985. *Educational Act 1985:1100; Chapter 14*. Stockholm: Department of Education. (in Swedish).
- Derbring L. and Stöhlen C. 1992. *Linking nursing education with research: Vision and reality*. Doctoral dissertation, Lund University. Stockholm: Almqvist and Wiksell International (in Swedish with English summary).
- Eriksson, K. 1985. *Vårddidaktik*. Stockholm: Almqvist and Wiksell (in Swedish).
- Fenner, P. 2000. Drowning awareness. Prevention and treatment. *Australian Family Physician*, 29(11):1045-1049.
- Florence Nightingale Museum. *The Florence Nightingale story*. London: Florence Nightingale Museum. Available from URL: www.florence-nightingale.co.uk/
- Grey, L. 2001. *Two year review of aged care reforms*. Canberra: Commonwealth Department of Health and Aged Care. Available from URL: www.health.gov.au/accf/2yr_rvw/download/finalrep.pdf.
- Heyman, I. 1995. *The emergence of nursing research in Sweden. Doctoral theses written by nurses 1974-1991*. Gothenburg: Bokförlaget Daidalos (in Swedish).
- Institute of Alcohol Studies. 2000. *Drink drive limits and penalties in the European Union*. St Ives: Institute of Alcohol Studies. Available from URL: www.ias.org.uk/factsheets/drinkdriving.htm#anchor4961779.
- Jansson, A. 2000. *The nurse in primary health care with focus on child health care*. Dissertation. Lund: Lund University (in Swedish).
- Kapborg I. 1998. Nursing education in Sweden: Development from vocational training to higher level education. *Journal of Advanced Nursing*, 27:372-378.
- Kapborg, I. 1995. Evaluation of Swedish nursing education and professional practice. Doctoral dissertation. Studies in educational sciences 4. Stockholm University. Stockholm: HLS Förlag.
- Magnusson, M. 1999. *Child health services: Effectiveness and parental satisfaction*. Dissertation. Uppsala: Uppsala University (in Swedish).
- Meza, C. and Gershwin, M.E. 1997. Why is asthma becoming more of a problem? *Current Opinion in Pulmonary Medicine*, 3(1):6-9.
- Ministry of Education and Science Sweden. 1992c. *Högskolelag*. (Act of Higher Education) SFS 1992:1434. Stockholm: Ministry of Education and Science (in Swedish).
- Ministry of Justice Sweden. 1983. *The Swedish Law: The parents and children code, chapter 6, section 1*, 1983:47. Stockholm: Ministry of Justice (in Swedish).
- Ministry of Justice Sweden. 1999. *The Swedish Penal Code chapter 3, section 5 DS 1999:36* <http://justitie.regeringen.se/propositioner/mmm/ds/pdf/Penalcode.pdf> Stockholm: Ministry of Justice (in Swedish).
- National Agency for Higher Education. 2001. *Education policy*. Stockholm: National Agency for Higher Education. Available from URL: www.hsv.se.
- National Board of Health and Welfare Sweden. 1980. *Socialtjänstlagen 620 §71* Stockholm: Department of Social Welfare. (in Swedish).
- National Board of Health and Welfare Sweden. 1982a. *Health and Medical Services Act, SFS 1982:763 §5*. Stockholm: National Board of Health and Welfare (in Swedish).
- National Board of Health and Welfare Sweden. 1982c. *SFS 1982:763 §31*. Stockholm: National Board of Health and Welfare (in Swedish).
- National Board of Health and Welfare Sweden. 1982d. *SFS 1982:763 §18-25*. Stockholm: National Board of Health and Welfare (in Swedish).
- National Board of Health and Welfare Sweden. 1992a. *Guidelines for advice for parents on injury prevention*. Stockholm: National Board of Health and Welfare (in Swedish).
- National Board of Health and Welfare Sweden. 1992b. *Studies of health in child care*. Stockholm: National Board of Health and Welfare (in Swedish).
- National Board of Health and Welfare Sweden. 1994. *Child Health Care: Child health care services in Sweden. Aims, surveillance programme and directions for the future*. Stockholm: National Board of Health and Welfare (in Swedish).
- National Board of Health and Welfare Sweden. 1995. *Health and welfare for refugees*. Stockholm: National Board of Health and Welfare: Available from URL: www.sos.se (in Swedish).
- National Board of Health and Welfare Sweden. 1996. *Quality system in health care*. SOSFS 1996:24. Stockholm: National Board of Health and Welfare (in Swedish).
- National Board of Health and Welfare Sweden. 1998a. *Yearbook of Health and Medical Care. Stockholm: National Board of Health and Welfare*: Available from URL: www.sos.se (in Swedish).
- National Board of Health and Welfare Sweden. 1998b. *Lag om yrkesverksamhet på hälso- och sjukvårdens område SFS 1998:531*. Stockholm: National Board of Health and Welfare (in Swedish).
- National Board of Health and Welfare Sweden. 2001. *Basic medical training with the EU/EEA. National Board of Health and Welfare*. Available from URL: www.sos.se/hs/bu/eu/eng.htm.
- National Board of Health and Welfare Sweden. 1982b. *Health and Medical Services Act 1982. SFS 1982:763 §18*. Stockholm: National Board of Health and Welfare (in Swedish).
- National Health and Medical Research Council of Australia. 2001. *Report of NHMRC working party on the prevention of overweight and obesity*. Canberra: National Health and Medical Research Council of Australia.
- Nordic Medico-Statistical Committee. 2000. *Length of stay*. Copenhagen: Nordic Medico-Statistical Committee. Available from URL: www.nomnos.dk/Nomstats/nomstats.htm.
- Pitt, W.R. and Balanda, K.P. 1998. Toddler drownings in domestic swimming pools in Queensland since uniform fencing requirements. *Medical Journal of Australia*, 169(10):557-558.
- Queensland Nurses' Union. 2000. *Nursing Shortages Predominate in National Skill Shortages List*. Brisbane: Queensland Nurses' Union. Available from URL: www.qnu.org.au/nursingshortages.htm.
- Shields, L. 2000. *The delivery of family-centred care in hospitals in Iceland, Sweden and England: A report for The Winston Churchill Memorial Trust*. Canberra: The Winston Churchill Memorial Trust. Available from URL: www.churchilltrust.org.au.
- Shields, L. and Kristjansdottir, G. 2001. Nursing and health care in Iceland. *Collegian* 8(2):32-35.
- Swedish Association for the Study of Obesity. 2001. *Obesity in Sweden. Göteborg*: Swedish Association for the Study of Obesity. Available from URL: www.iotf.org/oonet/sweden.htm.
- Swedish Council on Technology Assessment in Health Care. 2001. *SBU*. Stockholm: Swedish Council on Technology Assessment in Health Care. Available from URL: www.sbu.se/sbu-site/index.html.
- Swedish Institute. 1999. General facts on Sweden. FS 99 ac NC. Stockholm: Swedish Institute. Available from URL: www.si.se/e_infoweden/653.cs?dirid=1358.
- Swedish National Tax Board. 2000. *Tax Yearbook of Sweden 2000*. Stockholm: Swedish National Tax Board. Available from URL: www.rsv.se/english/index.html (in Swedish).
- The World Bank Group. 2001. *Country data: Data profiles*. Available from URL: www.worldbank.org/data/countrydata/countrydata.html.
- Umeå University. 1997. *The history of Sweden*. Umeå: Umeå University. Available from URL: www.informatik.umu.se/sweden_info/SI/history.html.
- Vårdförbundet. 2001. Stockholm: *Vårdförbundet*. Available from URL: www.vardforbundet.se (in Swedish).
- Wilkinson, D. and Gunnell, D. 2000. Youth suicide trends in Australian metropolitan and non-metropolitan areas, 1988-1997. *Australian and New Zealand Journal of Psychiatry*, 34(5):822-8.
- World Health Organization. 2001a. *Basic health indicators*. Geneva: World Health Organization. Available from URL: www-nt.who.int/whosis/statistics/.
- World Health Organization. 2001b. *Mortality data*. Geneva: World Health Organization. Available from URL: www-nt.who.int/whosis/statistics/.
- World Health Organization. 2001c. *Immunization statistics*. Geneva: World Health Organization. Available from URL: www-nt.who.int/whosis/statistics/.
- World Health Organization. 2001d. *Health personnel*. Geneva: World Health Organization. Available from URL: www-nt.who.int/whosis/statistics/.
- World Health Organization. 2001e. *Statistical data from the World Health Report 2000*. Geneva: World Health Organization. Available from URL: www-nt.who.int/whosis/statistics/.

MENTORING: IMPROVING TRANSITION TO PRACTICE

Karen Theobald, PhD, RN, BAppSC, GCertHigherEd, MHScNurs, SEDA, MRCNA, is a Lecturer in Nursing, Queensland University of Technology, Australia

Marion Mitchell, RN, RM, CHN, BN(Hons), GCertHigherEd, MRCNA, is a Associate Lecturer in Nursing, Griffith University, Australia

Accepted for publication February 2002

Key words: mentoring, clinical practice, nursing students, graduate transition

ABSTRACT

Nurse graduates indicate the transition from student of nursing to registered nurse (RN) is a difficult conversion. This impending change of role and accompanying higher expectations placed upon newly graduating RNs causes concern for students as their Bachelor of Nursing program nears completion. A career mentor scheme is suggested as a way to better prepare final year students for this transition. Evaluations indicate the positive impact the scheme has made on both mentors and mentees as it has enhanced their career development.

INTRODUCTION

The role of a RN in today's health care facilities is complex and demanding. Students of nursing undertake university study to prepare both theoretically and practically to undertake this role. Although students have a structured university program which supports their development to fulfil the expectations of the workplace, consistently, finishing students voice their feelings of being underprepared for their impending change in status.

A nursing mentor scheme is suggested as a way to promote assimilation of final year students of nursing into the complex arena of health care. This paper discusses the Queensland University of Technology's (QUT), Australia, nursing mentor program in relation to similarly named overseas programs. In the QUT nursing mentor program, final year students of nursing, are allocated for a period of one university year to an RN, who volunteers his/her time to be involved in the nursing mentor program. Within the students' university program, they already have 10 weeks where they attend prescribed, assessed, clinical practice for five days a week (four weeks in semester one and six weeks in semester two). This clinical practicum is considerable and has evolved in response to feedback from both graduating students and employers who considered graduating students were underprepared for their role as beginning level RNs. Despite the increased clinical hours within the final year, students continue to describe feeling inadequate about their preparation for transition to practice. In response to students' feedback, the QUT School of Nursing in 1992, became part of the inaugural university wide, Career Mentor Scheme program. Other participating disciplines included geology and journalism.

The QUT mentee is defined as a final year student who voluntarily, seeks additional professional guidance from an experienced RN. This model defines mentoring as: 'a developmental, caring, sharing, and helping relationship where one person invests time, know-how and effort in enhancing another person's growth, knowledge and skills...' (Shea 1994, p.13). It also includes '...professional nurturing and guiding the novitate'

(Butterworth 1992, p.11) with the experienced practitioner providing ‘...sponsorship, guidance, education and personal assistance’ (Bidwell and Brasler 1989, p.23) to a novice.

This RN or mentor, acts as a guide, professional colleague, tutor, supporter or informal counsellor. The QUT mentorship program does not involve any component of student assessment and this is thought to be a particular strength over schemes outside Australia. Rather, the scheme promotes the development of a professional and sometimes personal relationship between individuals intent on improving the mentee’s transition to practice.

QUT has indemnity insurance cover which is already in existence for students’ clinical practicums, and this cover has been extended to include the Career Mentor Scheme program. The indemnity insurance ensures legal issues are examined and facilitates flexibility of activities within the mentorship relationship. This paper suggests that ‘social learning theories’ explain the theoretical underpinnings of the learning processes that occur within the QUT nursing mentor program. The benefits, limitations and mentor/mentee responses to the QUT program are also discussed.

SETTING THE SCENE

Historically, nurse education programs were based upon the concepts of formal apprenticeships. Apprentices (trainee nurses) were under the tight control of a master practitioner (the ward sister) whilst engaged in labour of low skill and knowledge complexity requiring minimal specialisation (Maggs 1983). Recent changes in the social climate coupled with rapid advancement in medical technology and practices have radically altered the nature of nursing today. Current nursing practice reflects sophisticated specialised nursing knowledge and skill in a collaborative patient care environment, thereby placing increasing burdens of accountability on nursing staff. A substantial change in practice has also occurred with changes to the education system to university-based programs which see nursing students entering complex practice environments as students rather than workers. Consequently, students’ clinical experience is reduced and the emphasis during this time has an educational focus rather than being task orientated.

Students’ limited periods of time within clinical practice settings reduces their ability to develop proficiency as clinicians (Theobald, Nancarrow and McCowan 1999). However, upon graduation they are expected to assume the role of RN with full responsibility for the care of a group of clients. Many institutions provide beginning RNs with a period where they work alongside an experienced nurse (preceptorship), however, this option is at the discretion of the facility and is not afforded to all graduates. Clare (1991) writes of the situation for new graduates in New Zealand in the early 1990s and

comments that ‘cost effectiveness... means cuts in the nursing workforce. This situation has inevitable consequences for student experience and for beginning graduate responsibilities’ (p.19). One may speculate that graduates experience reduced support during cost cutting exercises, which is potentially detrimental to their development and the subsequent care of clients.

One strategy to assist beginning level practitioners to prepare for the complex health care context is the use of mentoring partnerships. The suggested QUT model accrues a limited financial burden to the university and the health care facility involved, as the mentors volunteer for no financial gain. The university accepts responsibility for the organisation of the program and nurse academics organise the program as part of their academic role with administrative support from the university-wide mentor scheme coordinator.

Currently, the program is organised toward the end of the second year of the Bachelor of Nursing program when students are informed about the program and invited to register an expression of interest in becoming a mentee. Subsequently, early within the student’s final year, a second invitation is given to formally participate in the scheme. Students are required to complete a registration form containing demographic details, their clinical areas of interest and the goals they hope to achieve within the program. In addition, students need to submit a brief curriculum vitae. Prior to the commencement of the mentorship program, all students are expected to attend a briefing session where an overview of the aims and objectives of the scheme are discussed again with particular reference to the strategies which they may wish to utilise with their mentor. All students who complete these requirements are included within the program and a mentor is provided for them.

Mentoring in nursing is not a new concept. Florence Nightingale, used a mentor style program to promote the concepts and philosophies that she espoused (Tucker-Allen et al 1992; Steele and Baker 1992). The partnerships that Nightingale encouraged between qualified nurses and trainees were based on caring, sharing, support relationships (Tucker-Allen et al 1992) to enhance nursing practice. Such relationships can be equated to the mentorship programs of today. These programs are used to promote the positive transition for nursing graduates into clinical practice settings (Bidwell and Brasler 1989). Transition to practice includes socialisation into the work place (Dorsey 1992), acquisition of psychomotor nursing skills (Butterworth 1992; Hart and Rotem 1994), and promotion of effective communication (Woodrow 1994).

Socialisation into the norms and practices of nursing, and the feeling of acceptance by nurses in general (Goran 2001; Spouse 1998), is integral to the development of new graduates within the workplace (Stevens and Crouch 1998). Moreover, Woodrow (1994) suggests that mentoring offers students of nursing the opportunity to develop into caring professionals through direct

involvement with clinical practice in partnership with one's mentor, thereby reducing the theory practice gap.

Authors from the United Kingdom (UK) (Foy and Waltho 1989; Lee 1989; Woodrow 1994; Neary 2000; Neary, Phillips and Davis 1996) suggest that the mentor/mentee relationship should occur with a student or new graduate being paired with a more experienced nurse from the same or different clinical area. Authors, however, lack consistency in their definition and conception of mentoring. For example, Neary (2000) observed that the role of the mentor was ill defined with the overlapping of roles between assessor, supervisor and mentor. Phillips (1994) further suggests that the terms preceptor or personal tutor also refer to the mentoring relationship. This term confusion is more extensive than just the UK context. Stewart and Krueger (1996) highlight within the US, that studies discussing mentoring are inconsistent in their definition and 'despite wide use of the concept of mentoring in the nursing literature, most authors have either failed to define it or have viewed it as static.' (p.312).

A significant feature of the UK model, is the varying degrees of assessment required as part of the mentee/mentor relationship (Foy and Waltho 1989; Lee 1989; Woodrow 1992; Maggs 1994; Neary 2000; Neary et al 1996). Woodrow (1992) suggests this extends the boundaries of the role of the mentor. In fact, assessment '...may be detrimental to the development of positive interpersonal relationships necessary for mentorships to function' (p 814).

In North America, Stewart and Krueger (1996) utilised evolutionary concept analysis to examine mentoring in nursing. They identified six facets of the mentoring concept. These concepts included: mentoring centres on a teaching and learning relationship; both mentor and mentee gain from the mentoring partnership; the primary focus is on enhancing the career of the mentee; mentoring acknowledges the knowledge levels of both parties; the relationship can extend for many years; and, appreciation is shown by the mentee when they act as a mentor in the future. The emphasis of the American model appears to centre on extending the relationship for a number of years, and enhancing the career development of the mentee (Carey and Campbell 1994; Stewart and Krueger 1996). Enhancing the career development of the mentee may be during the completion of the bachelor degree (Bidwell and Brasler 1989; Tucker-Allen et al 1992) or during subsequent employment as an RN (Carey and Campbell 1994; Stewart and Krueger 1996; Vance 1982). One study (Tucker-Allen et al 1992) has as its focus the retention of black American students who were mentored by black academics. However, Carey and Campbell (1994) suggest the professional career development and mentoring role progress along a continuum for the mentee, as they become more experienced in their professional role.

At QUT, the goal of the mentorship program is to facilitate transition to professional practice. In order to

achieve this, the mentorship program utilises current practising RNs as mentors to support final year students. Each student's registration form indicates areas of nursing interest and preferences and it is with this information that mentor and mentee are allocated. For example, a student indicating an interest in a future career in the operating room, will be allocated where possible, with a perioperative nurse. This ability to individualise the program to suit the needs of the partnership, promotes success of the arrangement which continues over the duration of the mentee's final year of study. Conversely, Lo and Brown (2000), Australian nurse academics, advocate the use of mentor arranged clinical practice providing second year students with block clinical placements where they are mentored by RNs. This reflects a need in their particular undergraduate program, as their program does not offer continuous blocks of clinical practice for their students. Lo and Brown's (2000) program is designed for second year students and appears to have a clinical skill focus as opposed to the QUT program which emphasises assisting the transition of final year students into the professional workforce. Some examples of the activities undertaken by QUT mentee/mentor partnerships are: assisting with preparation for future workplace interviews; attending hospital run inservice and educational seminars; undertaking clinical practice; and, the discussion of legal and ethical issues effecting nursing practice. The unique value of the QUT program is in the flexible nature, lack of formal assessment and stepping-stone to RN pathway.

SOCIAL LEARNING THEORY

An understanding of the learning processes that occur during a mentor program can be explained by social learning theories. For example, Krumboltz's Social Learning Theory of Career Decision Making was formulated to address the question of why people enter particular educational programs or occupations, why they may change and why they may express various preferences for different occupational activities at selected points in their lives (Mitchell and Krumboltz 1996). Mitchell and Krumboltz (1996) put forward four categories, which they consider influence the career decision-making path for any individual: genetic endowment and individual abilities; environmental conditions and situations; learning experiences; and, ways to approach responsibilities (Mitchell and Krumboltz 1996).

This Social Learning Theory of Career Decision Making suggests that personal beliefs and the work situation shape one's approach to learning new skills and may ultimately affect one's professional goals and performance (Gow 1996; Mitchell and Krumboltz 1996). Therefore, it is important to introduce reality checks and encourage students to expand their capabilities and interests in the workplace. Decisions should not be based entirely on existing concepts and preparation for changing

work tasks in an environment where one may not assume occupation stability is a way to empower them in career decisions (Goran 2001; Mitchell and Krumboltz 1996).

The QUT style mentorship program is fundamentally based upon the Career Decision Making Theory as it incorporates a learning context which provides an opportunity to undertake clinical skills and a diverse range of patient situations facilitated by the support and guidance of a nurse mentor. The mentor provides the reality check and stimulus to explore new areas. Moreover, mentorship is a potentially successful learning strategy (Rolfe-Flett 1995) which promotes career choice and development (Goran 2001; Pelletier and Duffield 1994; Woodrow 1994). It provides a forum for discussion, and is considered a potential generator of knowledge and expertise (Barlow 1991; Faugier 1992). Thus, it can be argued that career mentoring enables individuals to gain experience and psychomotor skill development outlined in Krumboltz's theory. Career mentoring '... expands both mentor and mentee capabilities and interests, prepares individuals for change, and empowers participants through its self-directive approach' (Theobald et al 1999, p.3). This self-directed approach focuses on meeting the needs of the mentee through the generous support, counselling, teaching and sharing of ideas offered by the mentor (Shea 1994).

THE ROLE OF THE MENTOR

Seminal work by Darling (1984) presented the process of mentoring whereby individuals are guided, taught and influenced in their life's work in important ways. Darling (1984) proposed a paradigm in which she identified three aspects to the role of mentor: inspirer, investor and supporter. These characteristics suggest that the role of a mentor lies outside the traditional boundaries of academic nurse education (Darling 1984) and offers justification for the utilisation of clinicians as mentors rather than the US model with academic mentors.

Unlike the passive process of role modelling, mentoring is long term (Bidwell and Brasler 1989) and may involve career counselling, clinical role modelling, and consultation on professional issues (Butterworth 1992; Pelletier and Duffield 1994; Goran 2001). The mentor may utilise one or more of these approaches in their relationship with their mentee. The approach the mentor assumes, is in part, dependent upon consultation and the needs expressed by the mentee. A degree of self-motivation by the mentee is integral to the success of the mentoring partnership. This, together with a committed mentor, is fundamental to a successful partnership. The mentor can assist the mentee to establish personal goals and plan their achievements, facilitate the learning of specific clinical skills and encourage professional behaviour through appropriate role modelling and discussion.

RESPONSIBILITIES OF THE MENTEE

Ideally, the mentee takes on the responsibility for their self-directed learning and exploration. The mentee is expected to be able to communicate his/her learning needs and feelings about various situations in which they are involved (Simonsen 1997). In the authors' experience, effective communication and personal commitment on the part of the mentee and mentor is critical to the fundamental success of the partnership. Prior to being accepted into the nursing mentor program, it is important that the coordinators of the program ensure that students understand and recognise that the scheme is an additional demand on their time and personal resources. Students are advised that approximately two hours per week should be set aside when envisaging embarking on the program. To this end, QUT requests students wishing to participate in the scheme to submit a brief curriculum vitae, and outline their reasons for wanting to be part of the scheme, and their thoughts on how their goals can be met. This is not intended as an onerous task but rather to stimulate the student to think about the context of the program and how best they can utilise their potential mentor. As stated previously, aspects of this information are used by the academic coordinators of the program to pair the mentees with suitable mentors. Successful pairing has demonstrated predominately positive benefits associated with the mentor scheme, however there are some limitations which will be discussed shortly.

BENEFITS

The authors suggest that the greatest advantage of the QUT nursing mentor scheme, is that it is offered on a voluntary basis and as such attracts participants who are motivated to enhance the transition process. A number of authors state that mentorships have the potential to greatly enhance the acquisition of clinical skills at a time and pace that suits the learner (Lo and Brown 2000; Faugier 1992; Theobald et al 1999). Proficiency in the performance of clinical skills is an area that most concerns final year students and potential employers. The suggested QUT mentorship program, promotes the acquisition of clinical skills by enabling access to a positive learning environment free of any clinical assessment and any other constraints associated with the existing university program.

Each year toward the end of the mentor scheme, mentees and mentors receive a short evaluation questionnaire (eight items) and a reply paid envelope, inviting them to provide feedback on the Career Mentor Scheme. The questions are open-ended and as such allow participants the opportunity to express particular issues about various aspects of the scheme. Questions include how the scheme could be improved, the benefits of the scheme to the student, career choice (consolidation or change) and what activities worked well for the mentee/mentor. Since inception of the scheme the

responses have provided considerable feedback. Demographic data are also gathered on the questionnaire and the data are added to the pre-existing mentor scheme database for use during future programs. Discussion relating to benefits and limitations of the career mentor scheme are a summary of the responses gathered over the past five years.

Nursing students at QUT have consistently reported that there are major advantages in participating in the Career Mentor Scheme, and as one respondent wrote, it provides 'insight and understanding into a hospital ward culture'. This has been identified by others (Dorsey 1992; Butterworth 1992; Woodrow 1994) to be beneficial in the transition process. The student considered that being able to access a hospital ward allowed them to seek broader learning opportunities with their mentor. They had the opportunity to ask a wide range of questions that they felt unable to, when undertaking their required assessable clinical practicum. Another positive benefit of the scheme was that students were able to focus on establishing personal and professional relationships with nursing clinicians and other health professionals because of the extended nature of the program over the entire year.

Many students reported how they appreciated being introduced to a challenging professional environment by their professional 'buddy'. Comments made by students suggest this intimate support system is highly beneficial, enhancing student confidence and skill acquisition within the clinical environment. The possibility of being able to develop professional links with not only the mentor but a variety of nursing colleagues in the ward and hospital environment has also been discussed as a real plus by some students (Butterworth 1992).

Some examples of written comments received from the yearly evaluation of the QUT program, include the following benefits:

- 'I really felt part of a nursing team when people got to "know me" where I worked with my mentor';
- 'I feel less frightened now about next year when I will be expected to function as a registered nurse';
- 'It was a great way to gain skills at a time that suited me, knowing that I wasn't being assessed';
- 'The Mentor Scheme enabled me to receive more practical experience under relaxed conditions with a mentor who was tuned into the needs of a transitioning student'.

The questionnaires revealed that the activities undertaken by mentees and mentors were diverse and innovative. Such a range of activities within the program may reflect not only the individual needs of the mentees but also the broad range of activities and personal characteristics the mentors offer the partnership. For example, the opportunity to meet a mentor in her/his workplace to discuss the mentor's role in the organisation is viewed as insightful and helpful by students. Students have discussed being able to have an explanation of

workplace policies, procedures and infrastructure by his/her mentor as being invaluable to the enhancement of their confidence in the workplace.

A number of students reported that their mentor has been able to offer scholarly assistance in regard to clinically focussed assignments. On occasion, mentors have provided feedback and assistance regarding a student's resume and career direction. Some mentors/mentees comment that they have entered into discussions of contemporary issues about various aspects of nursing and related health disciplines. For example, case-mix, diagnosis related groups, hospital acuity systems and ethics of health care resources are among topics that students have debated with their mentor.

Without a doubt, the most favourably reported activity in which the mentees and mentors engage is working together to undertake supervised patient care. Undergraduate students state that they value the one to one ratio with their mentor as they rarely experience this in their university program. Students consider that being able to attend and participate at health service educational forums and in-service programs an added bonus to enhance their professional development. The data suggest that the frequency and type of activities vary depending upon the mentor's time, professional commitments and the student's responsibilities and particular interests.

Mentors indicate that they too benefit from the program as they gain insight into current graduating student issues. Some mentors comment that they enjoy spending time supporting enthusiastic students at the beginning of their career when a receptive ear and guiding hand is of such benefit. Still others consider that 'mentoring allows them to give something back to the profession in a worthwhile manner'. The mentor's participation within the program is frequently added to their curriculum vitae and is viewed favourably by employers. There are limitations to the program, however, and these will be outlined in the following section.

LIMITATIONS

Not all of the 340 third year students are able to participate in the program due to the limited number of mentors, however, to date, all those students who have applied have been accommodated. Progressively over the eight years, QUT has increased its numbers from 15 to 50 pairs. The academic coordinators annually recruit additional potential mentors for the following year's program by speaking individually with colleagues and directors of nursing to increase the mentorship program's capacity.

Student feedback over the eight-year period indicates that even with the best of intentions, it is difficult during the student's final year to find adequate time to spend with their mentor as a result of the extended clinical program and part time work and family commitments. Time

limitations for mentees coupled with mentors who are busy professionals with personal and social lives present challenges to the relationship. Student feedback on their questionnaire response form indicates that in some circumstances, restrictions were imposed at the work place, which challenged their relationship and reduced learning opportunities. For example, if the mentor has a management role in the ward it can be difficult for him or her to spend the time that the mentee requires, as the priority is given to client care. Students identified that sometimes their mentor was too busy to devote time to their needs.

Another limitation identified by both mentors and mentees relates to communication difficulties. As the mentor and mentee matching is based solely on the student's area of clinical interest, sometimes issues arise in relation to communication difficulties. In the past these relationships have been improved by the coordinators liaising and negotiating with each party to promote more effective communication and understanding.

During the first years of the program, feedback responses from less experienced mentors focused on the lack of clarity of the expectations of the university and the mentee. QUT has attempted to address this issue through a pre-briefing session where information and suggestions on participation strategies are provided with the opportunity for the mentors and mentees to meet for the first time. Written information brochures are given to the participants outlining the objectives, suggested activities and academic support contact details. A de-briefing session is also provided which allows participants to reflect on the successes and limitations of the program for future improvements.

RECOMMENDATIONS/FUTURE DIRECTIONS

Given the limited numbers of mentors available, it is imperative to enlist the support of existing mentors and hospital administrators (Lo and Brown 2000; Pelletier and Duffield 1994) in the recruitment of future mentors. By encouraging existing mentors to nominate colleagues who may be interested in being involved in future mentor schemes, together with a supportive management, mentor numbers participating in the scheme will continue to grow.

To promote success, the mentee and mentor can be encouraged to meet promptly after the launch of the scheme with a view to planning and negotiating the mentee's goals and objectives. Planning needs to consider the personal commitments of both parties and importantly, the university component of their final year. It may be helpful for the student if their mentor is available to debrief with them about issues arising during this extended period of clinical practice.

As discussed earlier, one of the more challenging issues with a mentorship program is the occasional communication difficulties that can occur between

mentors and mentees. Matching pairs based on clinical interest and goals alone does not always provide for harmonious relationships. Perhaps developing a more comprehensive questionnaire for mentor/mentees to complete to join the scheme, including their desires, capabilities and style of learning may assist to better match pairs. Alternatively, although time consuming, undertaking a brief interview of the mentee and mentors may circumvent some of the problems identified but this too would not be fool proof. An alternative method is to encourage potential mentees to seek their own mentor to join the program, thus with the knowledge that they have an existing compatible partnership.

The authors suggest that the prebrief session should be made a mandatory requirement for all participants to enhance communication of expectations concerning the scheme. Inviting a past mentee/mentor to talk about the positive benefits and pitfalls that they encountered may offer good support and stimulate meaningful discussion at the prebrief launch. Offering a mid year workshop or seminars on a topic of interest to mentees/mentors may also be a helpful idea to keep interest in the scheme and show commitment from the university (Lo and Brown 2000). Mentors and mentees should be invited to suggest areas of interest for these seminars or workshops.

In order to facilitate more efficient and easier communication a participating university could offer email access to participating mentors. This additional mode of communication would allow coordinators of the mentorship program and students who already have access to email, a more efficient way to communicate and provide support.

CONCLUSION

This paper has highlighted that the word mentor has a different application outside the Australian context. From the perspective of the QUT program, the nursing mentor scheme involves a final year nursing student being paired with an RN who volunteers their time and resources to promote the professional development of a student in his/her transition to the role of RN.

Mentoring is suggested as a strategy for the enhancement of learning and the Social Learning Theory of Career Decision Making (Mitchell and Krumboltz 1996) is suggested as a theoretical foundation on which to base its application. The application of the role of the mentor and mentee is pivotal to the success of the mentor program. The pairing of mentees with mentors of similar interest, together with liaison when communication difficulties occur assists and supports the program. There are a number of benefits and limitations for those participating in the scheme and this paper has outlined suggestions for minimising the negative outcomes. Following eight years of experience with this program, the authors suggest there is an overwhelming feeling of the positive nature of such a program in enhancing the transition for final year students of nursing.

REFERENCES

- Barlow, S. 1991. Impossible dream: Why doesn't mentorship work in UK nurse education? *Nursing Times*. 87(1):53-54.
- Bidwell, A.S. and Brasler, M.L. 1989. Role modeling versus mentoring in nursing education. *IMAGE Journal of Nurse Scholarship*. 21(1):23-25.
- Butterworth, T. 1992. Clinical supervision as an emerging idea in nursing, in: Butterworth, T. and Faugier, J. (eds.). *Clinical Supervision and Mentoring in Nursing* (3-18). Manchester: Chapman and Hall.
- Carey, S.J. and Campbell, S.T. 1994. Preceptor, mentor and sponsor roles: Creative strategies for nurse retention. *Journal of Nursing Administration*. 24(12):39-48.
- Clare, J. 1991. Professional disunity: The effect on preparation for practice. *Nursing Praxis in New Zealand*. 6(3):19-21.
- Darling, L. 1984 'What do nurses want in a mentor?' *Nursing Administration*. 14(10):42-44.
- Dorsey, K. S. 1992. Built space and the socialisation of nursing students. *Western Journal of Nursing Research*. 14(5):632-644.
- Faugier, J. 1992. The supervisory relationship. In: Butterworth, T. and Faugier, J. (eds.). *Clinical Supervision and Mentoring in Nursing*. Manchester: Chapman and Hall. 18-37.
- Foy, H. and Waltho, B. 1989. The mentor scheme: Are learner nurses benefiting? *Senior Nurse*. 9(5):24-25.
- Goran, S.F. 2001. Mentorship as a teaching strategy. *Critical Care Nursing Clinics of North America*. 13(1):119-129.
- Gow, K. 1996. Coaching as the link between school, community and the workplace. *Australian Journal of Career Development*. Spring: 22-26.
- Hart, G. and Rotem, A. 1994. The best and the worst: Students' experiences of clinical education. *Australian Journal of Advanced Nursing*. 12(3):26-33.
- Lee, H. 1989. Them and us: Closing the gap between theory and practice. *Senior Nurse*. 9(8):17-19.
- Lo, R. and Brown, R. 2000. A clinical teaching project: Evaluation of the mentor arranged clinical practice by RN mentors. *Collegian*. 7(4):8-10, 12-13, 42.
- Maggs, C. 1983. *The Origins of General Nursing*. London: Croom Helm.
- Maggs, C. 1994. Mentorship in nursing and midwifery education. *Nurse Education Today*. 14(1):22-29.
- Mitchell, L. and Krumboltz, J. D. 1996. Learning theory of career choice and counselling. In Brown, D. and Brooks L. *Career choice and development: Applying contemporary theory to practice*. 3rd ed. San Francisco: Jossey-Bass.
- Neary, R.M. 2000. Supporting students' learning and professional development through the process of continuous assessment and mentorship. *Nurse Education Today*. 20(6):463-474.
- Neary, M., Phillips, R. and Davis, B. 1996. The introduction of mentorship to Project 2000 in Wales. *Nursing Standard*. 10(25):37-39.
- Pelletier, D. and Duffield, C. 1994. Is there enough mentoring in nursing? *Australian Journal of Advanced Nursing*. 11(4):6-11.
- Phillips, R.M. 1994. Providing students support systems in Project 2000, nurse education programme. The personal tutor role of nurse teachers. *Nurse Education Today*. 14:216-222.
- Rolf-Flett, A. 1995. *The mentoring workbook*. Sydney: Synergetic Management.
- Shea, G. 1994. *Mentoring, helping employees to reach their potential*. New York: American Management Association.
- Simonsen, P. 1997. *Promoting a development culture in your organisation: Using career development as a change agent*. California: Davies-Black Publishing.
- Spouse, J. 1998. Learning to nurse through legitimate peripheral participation. *Nurse Education Today*. 18(5):345-351.
- Stevens, J. and Crouch, M. 1998. 'Frankenstein' nurse! What are schools of nursing creating? *Collegian*. 5(1):10-15.
- Stewart, B.M and Krueger, L. E. 1996. An evolutionary concept analysis in nursing. *Journal of Professional Nursing*. 12(5):311-321.
- Theobald, K., Nancarrow, E. and McCowan, C. 1999. A career development-enhancing strategy for university students in transition to employment. *Australian Journal of Career Development*. 8(2):3-7.
- Tucker-Allen, S., Steele, R. and Baker, S. 1992. Mentoring role of black nursing faculty members. *The Association of Black Nursing Faculty Journal*. Fall: 89-92.
- Vance, C.N. 1982. The mentor connection. *Journal of Nursing Administration*. 12(4):7-13.
- Woodrow, P. 1994. Mentorship: perceptions and pitfalls for practice. *Journal of Advanced Nursing*. 19(4):812-818.

THE CLINICAL ENVIRONMENT: A SOURCE OF STRESS FOR UNDERGRADUATE NURSES

*Malcolm Elliott, DipHSci(Nurs), BN, MN, IC Cert, Cardiac Cert,
is a Lecturer in the Department of Nursing, University of
Wollongong, Australia*

Accepted for publication April 2002

Key words: clinical environment, education, undergraduate, stress

ABSTRACT

The clinical area is an important learning environment for undergraduate nursing students. Unfortunately, it can also be a source of significant stress and anxiety for students and there are a number of reasons for this. Much can be done to help alleviate this stress and create a positive learning environment for students. This paper explores the literature to ascertain the common sources of stress for undergraduate students in the clinical area. It also reviews strategies for improving the quality of the learning experience.

INTRODUCTION

In the 1980s New South Wales, Australia, transferred nursing education from the hospital-based apprenticeship system to the tertiary sector. The assumption underlying this transfer was that tertiary education would prepare nurses who were better able than their hospital-based colleagues to meet the challenges of nursing in the future (Perry 1988, p.19). With this transfer universities became solely responsible for the education of student nurses and their preparation for registration. They also assumed responsibility for coordinating the education of nursing students in the clinical area.

One of the many criticisms of undergraduate nursing courses is that they do not contain sufficient clinical experience for students. It is certainly true that nursing students in tertiary programs receive fewer and briefer clinical placements than their hospital-based contemporaries (Perry 1988, p.19). However, Battersby and Hemmings (1991, p.31) suggest that the quantity of time spent in the clinical area may not be as significant as the quality of the experience and guidance the student receives.

Regardless of the amount of time students spend in the clinical area, it can be a very stressful experience. Students are often thrust into foreign surroundings, not knowing the staff, patients or the ward routine. The patients and staff may have high expectations of them, even though they are 'just a student'. The clinical facilitator may also expect them to perform to a certain level even though they are still learning. Students may be expected to be familiar with pathophysiological or pharmacological concepts they have not yet addressed in their studies.

This manuscript reviews the literature related to clinical education and focuses on sources of stress experienced by students in the clinical area. Through understanding the nature and causes of these stressors, nursing academics and clinical facilitators can improve the quality of the clinical learning experience for undergraduates. The areas addressed include clinical supervision, assessment and preceptorship. Recommendations are made for improving the quality of the learning experience.

Disillusionment

Beck and Srivastava (1991) surveyed 94 undergraduate nursing students to investigate their perception of level and source of stress. The data were collected using a questionnaire consisting of three instruments: one to measure general distress and psychiatric disorders; one to describe a recent stressful event as well as stressors from academic, financial, clinical and interpersonal areas; and, a profile sheet to obtain demographic and background information about selected characteristics of the environment and mediating factors (Beck & Srivastava 1991, p.128). Although this study did not focus on the clinical environment, the atmosphere created by the clinical facilitator was ranked as one of the most stressful items. The study found that the students experienced relatively high levels of stress, and quite alarmingly, that the prevalence of psychiatric symptoms was higher in undergraduate nursing students than in the general population (Beck and Srivastava 1991, p.131).

Disillusionment may also occur because of misconceptions about what the nursing role involves. Students may have chosen a nursing career because of their desire to help people but often they are not prepared to deal with the complexities of the world of nursing (Beck and Srivastava 1991, p.128). Experiencing reality shock or realising the realities of the job can make students doubt their career choice (Beck 1993, p.490). The professional education experience can be very stressful and the high incidence of distress in the educational years may lead to impairment in the practising years of the professional (Beck and Srivastava 1991, p.127).

Sources of stress

Learning in the clinical setting creates challenges that are absent from the classroom: facilitators have little control of environmental conditions; students must combine the use of cognitive, psychomotor and affective skills to respond to individual client needs; client safety must be maintained whilst he or she is cared for by a student; and, facilitators must monitor client needs as well as student needs (Windsor 1987, p.151). Beck (1993) surveyed 18 undergraduate nursing students about their initial experiences in the clinical area. The students' written descriptions were analysed and the significant statements extracted. Some of these were: anxious and nervous; afraid of hurting the patient; no self-confidence; uncomfortable with the equipment; overwhelming; felt incompetent or abandoned; confusing and shocking; felt scared and ignorant; and, felt stupid and worthless (Beck 1993, p.493). These data were clustered into six themes which were: pervading anxiety; feeling abandoned; perceiving self as incompetent; encountering reality shock; doubting nursing as a choice of career; and, uplifting consequences. Although the sample size was small, the findings are still relevant to nursing education today. Beck (1993, p.496) concluded that students need more time to reflect and verbalise their feelings; a climate needs to be created in which less than perfect behaviour at

new skills is acceptable; and, faculty need to concentrate on the positive instead of the negative.

Pagana (1988) explored the initial medical-surgical nursing experience of 262 undergraduate students. The students were approached during the first week of their clinical experience and asked to participate. The survey tool contained open-ended questions which asked the respondent to describe the stresses, challenges and threats they were experiencing. The majority (77%) of students expressed feelings of inadequacy. Other stressful issues were fear of making mistakes (34%), fear of the unknown (28%), the clinical facilitator (26%), feeling scared (19%), and, the threat of failing (14%). The feelings of inadequacy were related to inexperience and lack of knowledge and were reinforced when trying to absorb large amounts of knowledge in a short time. Other sources of these feelings included the high expectations of others, being actively responsible for nursing care or being asked to perform procedures they were not familiar with. Feelings of inadequacy have much to do with the attitude and practices of ward staff (Nolan 1998, p.626). This is a contentious issue because the ward staff may not understand the undergraduate curriculum or may be reluctant to allow students to practise relevant procedures (Naphthine 1996, p.22).

Sources of stress in the clinical environment

Exploitation, in which the students are used as de facto rostered staff members is not uncommon. This may occur if staff are not familiar with the curriculum or aware of the goals and roles of students. It may also occur because senior staff are more concerned about the budget than patient safety. Exploitation is a potential source of stress for students as they are trying to please the clinical facilitator, the university and the ward staff, whilst trying to 'pass' the clinical placement (Naphthine 1996, p.23). This situation creates the threat of failing which causes more anxiety for students.

Harming the patient by making an error or mistake is another source of anxiety for students (Pagana 1988; Wilson 1994). This is a particular concern because of students' limited knowledge bases. Students are concerned not only about harming another human being but also about the implications for their careers. Kleehammer et al (1990) also found that one of the highest levels of anxiety expressed by students concerned fear of making mistakes. They surveyed 92 nursing students over a four-year period. The survey tool addressed 16 different issues including communication and procedural aspects of patient care, interpersonal relationships with health care providers and interactions with members of faculty. Apart from making mistakes, other anxiety producing issues included clinical procedures, hospital equipment, talking with physicians, being late and being observed and assessed by a member of faculty. Other similar potential sources of anxiety identified included unfamiliar clinical

procedures, hospital equipment, talking with physicians, being late and evaluation.

The 'social component' of the clinical setting also brings with it feelings of fear and anxiety, which affects the students' responses to their learning environment (Nolan 1998). This social component may include the complexities of the medical and nursing hierarchies. Unfortunately, these fears are frequently intensified by faculty demand for a near-perfect performance (Wong and Wong 1987, p.508). Being constantly watched by staff and facilitator, as well as being formally assessed is a major constraint on confidence and learning (Nolan 1998, p.625), although feeling abandoned is not an uncommon experience either (Beck 1993).

Improving the quality of the clinical learning experience

The stressful nature of the clinical environment for undergraduate nursing students has been described. Many students complain however that they do not spend enough time in the clinical area, although it is probably the quality of the experience rather than the quantity that makes the most difference. What therefore can be done to improve the quality of the clinical learning experience?

Adequate preparation by students for clinical practice has been credited with 'making all the difference in the world' (Windsor 1987, p.152). This preparation may include being familiar with assessment tasks, knowing who the clinical facilitator will be or reading the institution's policy on infection control. All these things can occur before the student arrives in the clinical area. Adequate preparation may also include teaching students priority setting and problem-solving skills early in the undergraduate program (Beck and Srivastava 1991, p.132). Students should also be encouraged to recognise the influence they exert over their own clinical learning environment and to proactively work to create the kind of environment which will best meet their learning needs (Dunn and Hansford 1997, p.1303).

Clinical supervision

The clinical facilitator has been identified as a potential threat to students (Pagana 1988). Terms used by students to describe the facilitator include intimidating, threatening, demeaning, impatient, strict and demanding (Pagana 1988, p.421). Unfortunately facilitators often lack any tertiary teaching background (Naphthine 1996, p.21). As such their ability to guide, supervise, direct and teach students may be inadequate or completely absent. However the reasons such a person could be employed as a facilitator may include budgetary constraints or limited availability and thus choice of other suitable staff (Naphthine 1996, p.23).

Registered Nurses (RNs) working on wards in which students undertake clinical learning experiences should be adequately prepared and supported for their role in student learning (Dunn and Hansford 1997, p.1303). For example, this may involve the RN having a reduced patient

workload so that adequate time can be spent teaching and supervising the student. Students should be made to feel they are an important part of the nursing team. Students appreciate recognition for their contribution to patient care and are disappointed when their work is not acknowledged (Hart and Rotem 1994, p.28).

Wong and Wong (1987) suggest the following for improving the quality of clinical education: pairing of veteran and novice staff members in clinical instruction; utilisation of senior faculty as role models in clinical settings; faculty development programmes on clinical instruction; and, careful selection of candidates for clinical faculty appointment. Wood (1992, p.406) suggests early instructor sensitivity to possible student problems in the clinical situation. She presented the findings of a descriptive and exploratory study aimed at identifying non-traditional student nurse issues. Although the sample size was small, stress was a key factor in five of the situations studied and it actually affected the students' nursing care. She also suggests (p.406) that initial tasks in the clinical area should be relatively simple and straightforward to develop student self-confidence.

ASSESSMENT

Whilst observation and evaluation are necessary aspects of the clinical learning environment, they should be performed in a supportive, non-threatening manner and be used for formative guidance, not just summative evaluation (Kleehammer et al 1990, p.186). This again emphasises the importance of utilising clinical facilitators who are competent and skilled and who know how to teach. Students should not feel that someone is looking over their shoulder waiting for the opportunity to criticise. Instead they should feel that they have immediate help and support available to guide them through difficult tasks at any time they need it. Feelings of incompetence can be decreased by creating a climate for learning where less than perfect 'behaviour' is acceptable (Beck 1993, p.494). Opportunities should be made available for students to reflect and verbalise their feelings about their clinical experiences, be they positive or negative.

Preceptorship

Preceptorships are a useful way of reducing stress in the undergraduate student and fostering their development in the clinical area. Preceptorships are a one-to-one reality-based clinical experience in which the RN supervises the learning experience of the student (Peirce 1991, p.244). The preceptor is an expert nurse who assists students to achieve predetermined clinical learning goals through the use of modelling and subsequent student practise of appropriate nursing behaviour (Perry 1988; Dilbert and Goldenberg 1995). The use of preceptors in nursing is based on the androgogical premise that a one-to-one relationship facilitates effective learning (Clayton, Broome and Ellis 1989, p.73). In the undergraduate degree, the preceptor's roles include reducing transitional

stress and promoting socialisation (Beattie 1998, p.15). Preceptorship is being used frequently in nursing education to facilitate the acquisition of clinical competence by the student (Ferguson and Calder 1993, p.32).

A clear distinction, however, must be made between preceptor and mentor because although these terms are often used interchangeably, they are not the same. Mentoring is concerned with making the most of human potential (Morton-Cooper and Palmer 1993). It focuses on the development of a deeper relationship between mentor and protégé, capable of influencing major career changes and promoting self-actualisation in both participants (Madison 1994, p.17). Preceptorship relates more closely to an educational relationship (Coates and Gormley 1997). It has a narrower emphasis on individualised teaching, learning and support in the clinical environment (Nearby 2000). Burnard (1990, p.351) states the preceptor is more clinically active, more of a role model, and more concerned with the teaching and learning aspects of the relationship than a mentor. Interestingly, the English National Board (2001) defines a mentor as a nurse who facilitates learning and supervises and assesses students in the practice setting. This is similar to the definition of a preceptor.

Preceptorship is said to enhance the performance of nurses, whilst preceptors remain stimulated educationally and professionally by the experience (Bain 1996, p.105). Perry (1988, p.22) believes that preceptorships have the potential to enhance student learning in tertiary nursing courses by utilising the teaching skills of expert nurses already employed in service settings. However, the assumption being made by Perry (1988) is that if a nurse is an 'expert', he or she will possess teaching skills. Naphthine (1996, p.21) says it is a myth that because one is a good clinical nurse, he or she will have knowledge of teaching and learning principles, and will be a good teacher.

The specific role or function of a preceptor, therefore, needs to be clearly defined so that the preceptee can gain the most from the experience. In one study (Coates and Gormley 1997), RNs who acted as preceptors listed their most important duties as role model, teacher and supervisor. The least important were assessor, critic and protector.

A preceptor also needs to be chosen carefully. Too rigid selection criteria will restrict selection to availability rather than ability of preceptors (Bain 1996, p.106). Preceptorships should be constructed in response to specific learning needs of the student and developed independently of learner characteristics such as age, gender and social class (Perry 1988, p.23). A situation in which RNs are chosen as preceptors because it is their turn or because there is no else more suitable, will contribute to problems with the establishment of a positive student-teacher relationship, which precedes the facilitation of meaningful learning (Beattie 1998, p.16).

The potential advantages of incorporating preceptorship programs into nursing education include their value in: transferring theory into practice; aiding in the transmission of desired nursing behaviours throughout the profession; engendering creative synthesis in nursing practice; and, initiating the basis for mentoring and future collegial networks (Perry 1988, p.20). Preceptorship also provides close supervision and allows immediate feedback on performance (Reilly and Oermann 1992). Jairath et al (1991) found that a preceptor program promotes assumption of behaviours consistent with the professional nursing role and thus facilitates the transition from student to professional nurse. Packer (1994, p.412) believes that preceptorships eliminate the reality shock experienced by students. Another advantage is the cost. One-to-one instruction by faculty is prohibitive due to the expense whilst using qualified ward staff acting as preceptors is not (Clayton et al 1989, p.74).

Preceptorship does, however, have its weaknesses or limitations. These may include the demands of work taking over learning; the difficulty in monitoring the progress of one student in isolation from the others; preceptors lacking educational qualifications or ability; and, preceptor burnout (Grealish and Carroll 1998, p.7).

COLLABORATION

Collaboration between the higher education and health care sectors is essential if the clinical learning environment is to best meet the needs of undergraduate nursing students (Dunn and Hansford 1997, p.1301). This collaboration should aim to establish creative models for clinical education which take into account current health and education socioeconomic reforms (Dunn and Hansford 1997, p.1301). For example, the nursing unit manager and clinical facilitator could cooperate in the development and implementation of strategies to enhance the acceptance of students as fully participating members of the ward team (Dunn and Hansford 1997, p.1302).

CONCLUSION

Exposure to the clinical environment is an important part of any undergraduate nursing curriculum. The clinical environment can, however, be a source of stress and anxiety to students. There are numerous strategies that can be used to reduce the impact of these stresses and to improve the quality of the clinical learning experience for students. The use of competent, skilled and empathic facilitators is one. Preceptorship is another.

Although nursing education has been in the university setting for many years, the use of the clinical environment as a learning or teaching experience is yet to be maximised. Academics, educators and clinicians have many options available to them to improve this situation.

REFERENCES

- Bain, L. 1996. Preceptorship: A review of the literature. *Journal of Advanced Nursing*. 4(1):104-107.
- Battersby, D. and Hemmings, L. 1991. Clinical performance of university nursing graduates. *Australian Journal of Advanced Nursing*. 9(1):30-34.
- Beattie, H. 1998. Clinical teaching models: A review of the role of preceptor in the undergraduate nursing program. *Australian Journal of Advanced Nursing*. 15(4):14-19.
- Beck, C. 1993. Nursing students' initial clinical experience: A phenomenological study. *International Journal of Nursing Studies*. 30(6):489-497.
- Beck, D. and Srivastava, R. 1991. Perceived level and sources of stress in baccalaureate nursing students. *Journal of Nursing Education*. 30(3):127-133.
- Bumard, P. 1990. The student experience: Adult learning and mentorship revisited. *Nurse Education Today*. 10(5):349-354.
- Clayton, G., Broome, M. and Ellis, L. 1989. Relationship between a preceptorship experience and role socialization of graduate nurses. *Journal of Nursing Education*. 28(2):72-75.
- Coates, V. and Gormley, E. 1997. Learning the practice of nursing: Views about preceptorship. *Nurse Education Today*. 17(2):91-98.
- Dilbert, C. and Goldenberg, D. 1995. Preceptors' perceptions of benefits, rewards, supports and commitment to the preceptor role. *Journal of Advanced Nursing*. 21(6):1144-1151.
- Dunn, S. and Hansford, B. 1997. Undergraduate nursing students' perceptions of their clinical learning environment. *Journal of Advanced Nursing*. 25(6):1299-1306.
- English National Board. 2001. *Placements in focus: Guidance for education in practice for health care professions*. Online: www.enb.org.uk (accessed 3 November 2001).
- Ferguson, L. and Calder, B. 1993. A comparison of preceptor and educator valuing of nursing student clinical performance criteria. *Journal of Nursing Education*. 32(1):30-36.
- Grealish, L. and Carroll, G. 1998. Beyond preceptorship and supervision: A third clinical teaching model emerges for Australian nursing education. *Australian Journal of Advanced Nursing*. 15(2):3-11.
- Hart, G. and Rotem, A. 1994. The best and worst: Students' experiences of clinical education. *Australian Journal of Advanced Nursing*. 11(3):26-33.
- Jairath, N., Costello, J., Wallace, P. and Rudy, L. 1991. The effect of preceptorship upon diploma nursing students' transition to the professional nursing role. *Journal of Nursing Education*. 30(6):251-255.
- Kleehammer, K., Hart, L. and Keck, J. 1990. Nursing students' perceptions of anxiety-producing situations in the clinical setting. *Journal of Nursing Education*. 29(4):183-187.
- Madison, J. 1994. The value of mentoring in nursing leadership: A descriptive study. *Nursing Forum*. 29(4):16-23.
- Morton-Cooper, A. and Palmer, A. 1993. *Mentoring and preceptorship: A guide to support roles in clinical practice*. London: Blackwell Scientific.
- Napthine, R. 1996. Clinical Education: A system under a pressure. *Australian Nursing Journal*. 3(9):20-24.
- Neary, M. 2000. *Teaching, assessing and evaluation for clinical competence: A practical guide for practitioners and teachers*. Cheltenham: Stanley Thornes.
- Nolan, C. 1998. Learning on clinical placement: the experience of six Australian student nurses. *Nurse Education Today*. 18(8):622-629.
- Packer, J. 1994. Education for clinical practice: An alternative approach. *Journal of Nursing Education*. 33(9):411-416.
- Pagana, K. 1988. Stresses and threats reported by baccalaureate students in relation to an initial clinical experience. *Journal of Nursing Education*. 27(9):418-424.
- Peirce, A. 1991. Preceptorial students' view of their clinical experience. *Journal of Nursing Education*. 30(6):244-250.
- Perry, M. 1988. Preceptorship in clinical nursing education: A social learning theory approach. *Australian Journal of Advanced Nursing*. 5(3):19-25.
- Reilly, D. and Oermann, M. 1992. *Clinical teaching in nursing education*. 2nd edn. New York: National League for Nursing.
- Wilson, M. 1994. Nursing student perspective of learning in a clinical setting. *Journal of Nursing Education*. 33(2): 81-86.
- Windsor, A. 1987. Nursing students' perceptions of clinical experience. *Journal of Nursing Education*. 26(4):150-154.
- Wong, J. and Wong, S. 1987. Towards effective clinical teaching in nursing. *Journal of Advanced Nursing*. 12(4):505-513.
- Wood, V. 1992. An examination of selected current student nurse issues. *Nurse Education Today*. 12(6):403-408.

THE ROLE OF A PSYCHIATRIC CONSULTATION LIAISON NURSE IN A GENERAL HOSPITAL: A CASE STUDY APPROACH

Julie Sharrock, RN, PsychCert, CritCare Cert, BEd, MHSc(PsychNurs), is Psychiatric Consultation-Liaison Nurse and Honorary Research Fellow, The Centre for Psychiatric Nursing Research and Practice, The University of Melbourne, Australia

Associate Professor Brenda Happell, RN, BA(Hons), DipEd, PhD, is Director, Centre for Psychiatric Nursing Research and Practice, School of Postgraduate Nursing, University of Melbourne, Australia

Accepted for publication February 2002

Key words: case study, consultation-liaison, general hospital, mental health problems, mental health nurses, psychiatric nurses

ABSTRACT

Growing support for the role of the psychiatric consultation-liaison nurse in assisting general nurses in caring for patients experiencing mental health problems in the general hospital environment is evident from the relevant literature. However, there remains a paucity of research which examines the process of this nursing role or its impact on outcomes for nurses and patients. This paper seeks to contribute to the literature in articulating the role of the psychiatric consultation-liaison nurse using a case study approach to describe the role of the nurse in assessing the needs of, and, planning and providing care to two general hospital patients experiencing mental health problems, and the general nurses caring for them.

INTRODUCTION

There is a growing body of evidence to suggest that nurses working in general hospital settings do not generally consider themselves adequately prepared, skilled or experienced to care for patients with mental health problems (Sharrock 2000; Bailey 1998; Gillette et al 1996; Bailey 1994; Whitehead and Mayou 1989). This issue is not always restricted to the question of skill and knowledge but also relates to the scope of practice. A study of emergency nurses found that they questioned their role in the care of patients with mental health problems and did not see it as part of their 'real' work (Gillette et al 1996). In giving priority to the physical needs of patients, emergency nurses often actively avoid patients with mental health problems (Gillette and Bucknell 1996). A lack of resources and difficulty in accessing psychiatric expertise have been identified as compounding the nurses' perception of their inadequacy in meeting the mental health needs of patients (Bailey 1998; Gillette et al 1996).

There has been considerable anecdotal evidence to suggest the availability of skilled psychiatric nurses to health professionals working in non-psychiatric services has been shown to positively influence the care of patients with mental health problems in that setting. However, there has been little systematic research or evaluation to substantiate such claims.

Roberts (1998) undertook a qualitative study of nursing staff on an haematology ward in Britain. The nurses found the regular services provided by the Psychiatric Consultation Liaison Nurse (PCLN) to be highly valuable, particularly his psychiatric knowledge and expertise, objectivity and counselling skills. The availability and accessibility of the PCLN were considered very important in the provision of this service. However, this study was limited in that it was small (n=3) and the group interview was conducted by the PCLN providing service to the

participants, which may have impacted upon the honesty and reliability of the comments made by participants.

In Canada, a satisfaction survey was undertaken of nurses using the PCLN service within a general hospital. The evaluation was based on 75 referrals over a three-month period (Newton and Wilson 1990). The findings of this study also highlighted the importance of accessibility, availability and clinical expertise of the PCLN as valued aspects of that service.

Attempts at demonstrating cost-effectiveness of the PCLN have been made. An American study estimated that the provision of family therapy within a community hospital contributed to savings of \$65,000 over an eight-month period (Ragaisis 1996). The effect of PCLN contact on the care of patients who required 'sitters' (lay people employed to provide constant observation of patients considered at risk) in a large general hospital in the USA was also undertaken (Talley et al 1990). The hypothesis was that PCLN contact with staff would improve documentation of mental status of patients and reduce resource utilisation and untoward incidents in relation to patients requiring 'sitters'. This was not found to be the case. A limitation of this study was that the subjects were considered too 'heterogenous' and that many variables other than PCLN intervention influenced the decisions about the use and discontinuation of 'sitters'. In contrast, another American study (Mallory et al 1993) demonstrated a significant decrease in general nursing resource utilisation in the majority of patients who were referred to the consultation-liaison service and received consultation by both consultation-liaison nursing and consultation-liaison medical staff.

An Australian project evaluated the role and function of the psychiatric nurse consultant within the emergency department (Gillette et al 1996). The consultants in this study were found to undertake a role and function similar to the PCLN in the USA. Improved access and decreased length of stay for patients experiencing mental health problems in the emergency department and improved patient satisfaction were significant findings. Emergency department staff reported increased confidence and improvements in staff attitudes, knowledge and skills in relation to this group of patients. Since the completion of this project the number of psychiatric nurses employed within emergency departments in Victorian hospitals has increased significantly. It must be noted that models of service delivery vary (Mental Health Branch Victoria 2000) and there is, to some degree, a lack of clarity between the triage role of mental health clinicians based in emergency departments or crisis teams, and psychiatric consultation-liaison nursing.

Further studies that evaluate the role of the PCLN and how it may effect outcomes are clearly needed. The clients of the PCLN include both staff and patients (Newton and Wilson 1990), and evaluation of the PCLN role ideally should therefore include both client groups. The impact of

the PCLN on nurses and other health professionals, patients and their families in a broad range of settings must be considered. Evaluative research to identify the level of satisfaction with PCLN services on the part of patients, families, nurses and other health care professionals is undoubtedly an important approach to research that must be followed through. Equally important, however, is an in-depth understanding of how the PCLN works with individual patients, nurses and treating teams, and how the outcomes of interventions make a difference to the patients concerned.

AIM OF THE STUDY

The primary aim of this study was to provide a more detailed knowledge of and greater insight into the role and function of the PCLN. The use of a case-study approach allows a detailed exploration of how the PCLN's interventions are developed and delivered in direct response to the presenting problems of the patient. The specific research question addressed in this paper is: 'what specific skills and interventions are used by the PCLN in providing care for patients experiencing mental health problems?'

THE RESEARCH SETTING

This research was undertaken at the Austin and Repatriation Medical Centre (A&RMC), an 800-bed tertiary teaching hospital in north-eastern metropolitan Melbourne, Victoria, Australia. The A&RMC campuses provide general and specialist medical-surgical inpatient, day and outpatient care. Specialist services include cardiothoracic, spinal cord injury, neurology, oncology, urology, renal and aged care. Liver, renal and bone marrow transplant, cardiovascular, neurological and orthopaedic surgery is also provided. The Royal Talbot Rehabilitation Centre (RTRC) operates on a third site and offers specialist services for patients with a range of disabilities arising from spinal cord injury, orthopaedic and arthritic conditions, amputation, head injury, stroke and various other neurological conditions. The A&RMC and RTRC currently provide services to 66,700 inpatients and 120,000 outpatients a year.

The PCLN provides psychiatric nursing consultation to nurses and other health care professionals working within non-psychiatric general hospital services in order to achieve integrated and holistic care of patients with mental health problems. Each consultation aims at facilitating effective staff interventions when a patient presents with a mental health problem. Staff are provided with advice, guidance and education in relation to the mental health needs of patients. A consultation could include working directly with the patient and his or her relatives. It also includes working indirectly by providing assistance to the primary treating team in the development of a plan of care for the patient. In addition, the PCLN acted as a resource

to the A&RMC for educational and policy development purposes on mental health care issues and as a link between general and psychiatric services.

The Consultation-Liaison Psychiatry Service operates in conjunction with the non-psychiatric services of the A&RMC and RTRC to provide psychiatric and mental health care to the patients using these services. In addition to the nurse position, the Consultation-Liaison psychiatry team consists of part-time consultant psychiatrists, psychiatric registrars and one family medicine practitioner. Links are established with clinical psychologists who provide consultation-liaison psychology services to A&RMC patients.

METHODOLOGY

Research design

This study was conducted as part of a larger evaluation of the role of the PCLN as a nurse practitioner. Ethics approval was granted from the A&RMC to conduct the study including the collection of case studies to describe the role of the PCLN. The section of the study described in this paper used a case study approach to provide detailed information on the role of the PCLN in relation to two clients experiencing mental health problems within a general hospital environment. The advantage of the case study approach is that it enables the collection and reporting of in-depth information that is difficult to obtain by any other method (Wilson 1989). While acknowledging the limitation of lack of generalisability, this process enabled a greater understanding of the PCLN role and its potential contribution to the health care outcomes of general hospital patients experiencing mental health problems.

The case study approach is more concerned with what can be learned from an individual situation than in comparing this situation to others (Stake 1994). Although we cannot establish a single or definitive approach to the PCLN role, we are able to increase understanding of the complexities of the role and how it may be used in a supportive manner within the general hospital environment.

Population and sample

The two case studies presented in this paper were patients of the A&RMC. They were selected on the basis of the diversity of their histories and presenting problems, which enabled a broad range of the skills, knowledge and interventions of the PCLN to be described.

Data collection and analysis

The routine collection of data is an integral part of the role of the PCLN. Information collected at each referral includes medical surgical history, psychiatric history, reasons underlying referral to PCLN and, presenting problems (as observed by PCLN, where relevant).

Documentation of the PCLN intervention, follow up and evaluation were also made.

Data were therefore already available for the two selected patients. However, after their selection, the PCLN sought and documented more detailed information which was collected under the following headings: Mode of referral; Assessment; Interventions (for the patient, family and significant others, and the treating team); and, Outcomes. This process occurred according to routine practice but with more detailed documentation of follow up and outcomes. This approach enabled a degree of consistency in the collection of data, while allowing for the individuality of each participant to be included. This is congruent with the use of a case study approach (Stake 1994).

The method of data collection used provided the framework for the analysis of data. Data are presented in the manner in which they were collected. An overview of the two case studies will now be presented. Identifying features of the individuals and their presentation have been altered to protect their identity.

THE CASE STUDIES

Tina

Tina was a 26-year-old married woman who was referred to the PCLN three days post surgery for removal of an ovarian tumour. Tina began experiencing episodes of anxiety on her first post-operative day. The results of the pathology had not been obtained because of external difficulties. There was a slim chance the tumour was malignant.

Referral

The referral was made by the nurse caring for Tina. The PCLN was requested to see Tina to help her with the anxiety episodes. The referring nurse also sought advice as to what she could do to help Tina. The referring nurse had raised the idea of a PCLN referral with Tina and the latter indicated she was keen for some assistance.

Assessment

The initial assessment of the request took place with the general nurse initiating the referral. The PCLN decided to interview Tina directly given that she was receptive to the idea of assistance and there were likely to be some straightforward and useful interventions that could readily be put into place. The fact the referral was made on a Friday afternoon, with the possibility Tina would be discharged at the weekend, meant there was limited time to liaise with the Consultation-Liaison registrar. Tina was interviewed in the presence of her husband Keith (with Tina's permission).

Tina presented as an articulate, intelligent woman deeply distressed by her recent operation. In particular, Tina was upset by the unexpected wait for her results and

that her recovery was hindered by a wound infection. She was extremely cooperative at interview and there was obvious openness and caring between Tina and Keith. Keith was also distressed about Tina's anxiety and was keen to assist if he could.

Tina described experiencing her first 'anxiety attack' one day post operatively. She described 'funny feelings all over', dizziness, weakness in the legs, feelings of fear and loss of control. She had used some relaxation strategies she had learned once, mainly trying to imagine herself elsewhere, but had limited success as frightening thoughts of dying came into her mind. She was tearful when describing her symptoms and clearly anxious about her prognosis. She described herself as a 'high achiever' and 'perfectionist', a view Keith supported.

Her past medical history was uneventful. She did not smoke or use drugs but did drink alcohol, sometimes to calm herself down at the end of a busy day. She had an aunt on her father's side who had 'problems', possibly panic attacks. No other psychiatric history in her family was noted. Upon questioning Tina did recall having similar episodes as a teenager but they were fleeting in comparison, 'not as bad as this' and they 'went away of their own accord'.

The staff reported that Tina was recovering quite well but became very uptight once the results were delayed. Her anxiety was worse at night and she was having difficulty sleeping. No sedative had been ordered because Tina had initially been reluctant to use medication but was now reconsidering this.

Interventions

Although Tina's situation may appear routine and less involved than would be the case where a variety of florid symptoms of psychosis was involved, a number of interventions were initiated by the PCLN. Each intervention is briefly described:

Direct care of the patient: Tina was assessed drawing on information from herself, her family, the staff and the clinical file. She was provided with supportive counselling and education. Supportive counselling refers to providing Tina with the opportunity to verbalise her concerns, to which the PCLN responds with understanding and compassion. The support provided extends further to working with Tina to identify the strengths she possessed and how these might be used to overcome her current state of anxiety. Education included alternative relaxation techniques, supported by written material for future reference. Tina was given an opportunity to practise relaxation techniques in the presence of the PCLN.

Tina was provided with the telephone number of the PCLN so she could make contact after discharge to discuss how things were going. She was also provided with information on community resources that she could choose to access.

Direct care of the family: The PCLN provided Keith and Tina's mother with information as to the anxiety state Tina was experiencing. They were encouraged to continue to be available to and supportive of Tina, and provided with some approaches and strategies they could use to assist Tina at times of distress.

Advice and guidance to the treating team: Feedback was given to the team about the PCLN's assessment and Tina's suggested management plan. Guidance was also provided to the medical officer who agreed to prescribe night sedation.

Education: Information (written and oral) was provided to the staff so that they could support Tina through her periods of anxiety and talk her through her relaxation techniques as required.

Link with Consultation-Liaison psychiatry: Telephone contact was made with the Consultation-Liaison Psychiatrist who agreed that Tina's symptoms were suggestive of panic attacks. It was planned to offer Tina an outpatient consultation-liaison psychiatry appointment for further assessment. Tina was given the contact number of the outpatients department to arrange an appointment directly with them if she wished.

Outcome

Tina was discharged on the Sunday as planned after receiving the pathology results that revealed a benign tumour. She contacted the PCLN the next week saying that the anxiety had settled and she did not want to pursue the consultation-liaison psychiatric outpatients appointment. Tina was encouraged to be mindful of her vulnerability to anxiety and to seek help early if the anxiety attacks returned. Tina resolved to look further at her anxiety and purchased a self-help book and relaxation tape recommended by the PCLN.

Adam

The nurse unit manager of the Rehabilitation Unit requested the input of the PCLN in the care of a man admitted for rehabilitation after sustaining significant injuries as a result of a motorbike accident. Almost simultaneously, the Consultation-Liaison psychiatrist requested the input of the PCLN because he had identified significant potential issues when discussing the case with the psychiatric registrar.

Background

Adam was a 30-year-old single man who was transferred to the rehabilitation unit from an orthopaedic unit of a general hospital where he had been admitted three months earlier. In the motorbike accident he had sustained multiple fractures to his lower limbs that had resulted in an above knee amputation of his right leg. His left leg had also been fractured and had multiple skin grafts applied. This leg was healing well. He had a permanent colostomy as a result of abdominal injuries.

Assessment by the psychiatric registrar

The Consultation-Liaison Psychiatric Registrar had seen Adam when he was first admitted to the rehabilitation unit. The registrar managed to obtain a comprehensive history from Adam, his family and the referring hospital. She offered Adam ongoing psychiatric support which he refused. He stated that he was 'not a nutcase' and refused further contact with her. The Consultation-Liaison psychiatric registrar's assessment was that Adam was a man with significant narcissistic and antisocial personality traits who was having difficulty adjusting to the disability resulting from his injury.

Adam had a history of marijuana and alcohol use since his teens. He had used heroin occasionally in the past. Prior to the accident, Adam described having periods of depression that he managed to get over himself. He had one accidental heroin overdose in the past and on reflection, he felt that he knew he was taking too much but did not care. He had been in contact with a community drug and alcohol service for assistance with some degree of success in decreasing his heroin use.

Adam's hospitalisation in the orthopaedic unit was marked with episodes of anger and verbal aggression usually directed at the treating team and his family. His relationship with his previous employer and colleagues was strained leading to ongoing tension in his job and the trend that fights seemed to 'follow Adam where ever he went'. While his colleagues had rallied together to raise funds to support Adam, they rarely visited. This further angered Adam because he believed that they were responsible for the accident.

Since Adam's arrival on the ward, five days earlier, he had left the ward on one occasion without informing staff. He became intoxicated and was returned to the unit by the police after creating a disturbance at the local hotel. On return to the unit his blood alcohol level was high and he had evidence of cannabis use from his urine drug screen. This incident had resulted in conflict with the staff about alcohol and drug use, compliance with treatment and leaving the ward without informing staff.

Interventions

Given Adam's refusal to allow psychiatry to have direct involvement, the PCLN was unable to provide care directly to Adam. The PCLN was nevertheless able to assess and provide support to the care of Adam via the following means:

Assessment and monitoring of the patient via the staff: Details of the patient's history were obtained through discussion with staff and through a review of the clinical file. Adam's progress was monitored through regular contact with the staff.

Direct care of the family: Adam's family were accepting of support from the PCLN and the psychiatric registrar even though Adam was steadfast in his refusal to see the 'psychs' as he called them.

Development of a care plan: The PCLN initiated a meeting with the treating team to ascertain their concerns, identify the care issues and develop a care plan. A supportive behavioural approach was taken to Adam's care. Part of the care plan included a rehabilitation agreement that was signed by the staff and Adam.

Education: Regular formal education sessions were initiated. These included an opportunity for staff to discuss and problem-solve the care issues in relation to Adam. Nursing, allied and medical staff attended these sessions. Theoretical information on personality disorder and its management, depression, suicide, drug and alcohol abuse, and adjustment to disability and illness was provided through formal education sessions. Written material was also provided.

Advice and guidance: The PCLN was available during business hours to discuss issues of concern with staff. All the staff used this opportunity. It greatly assisted staff to keep the goals of rehabilitation in focus and maintain a consistent approach to Adam.

Link with drug and alcohol support services: Adam agreed to the involvement of a local drug and alcohol agency to provide support to him during his admission. He wanted to curb his alcohol intake but was adamant in his desire to continue smoking marijuana.

Outcome

Adam's stay in hospital was marked with a number of crises, usually in response to Adam being in conflict with his friends, family or staff. He had talked about 'topping' himself on occasion, but no attempts at self-harm were made. Adam discharged himself against medical advice after two months in rehabilitation. He was able to mobilise on crutches but was not able to successfully manage a leg prosthesis. The after-hours psychiatric registrar assessed him as competent to make the decision to leave hospital. He denied suicidal ideation at the time of discharge and his mood had been stable over the previous two weeks. He was encouraged to maintain outpatient rehabilitation with the team. He refused ongoing psychiatric support but agreed to continue with counselling for alcohol dependence. The staff were left with concerns for Adam's welfare but recognised that he could not reach his full rehabilitation potential at that point in time because of his difficulty in coming to terms with his disabilities. An offer for readmission for rehabilitation at a later date should he wish to pursue this was made to Adam upon leaving.

DISCUSSION

The presentation of the two case studies enables a greater understanding of the role of the PCLN in relation to patients experiencing mental health problems within a general hospital environment. The diversity of the experiences and presenting problems of the two patients provides some broad insight into the manner in which the PCLN tailors interventions to suit the individual needs of the patient, patients' family and the staff providing care.

This paper demonstrates the potential for autonomous practice despite the complexity of this pivotal role. In caring for these two patients the PCLN performs a number of interventions drawing upon expert skill and knowledge as a psychiatric nurse. These interventions include the assessment and monitoring of the patient's needs either through direct interaction with the patients themselves, or where this is not possible or not relevant, through detailed discussion with staff, family and an extensive review of the clinical file.

Where appropriate, the PCLN provides direct care to the patient, for example through the provision of support and counselling. The PCLN contributes to the development of a patient care plan. This is particularly significant in supporting staff dealing with symptoms or behaviours they find difficult or challenging. The intervention of the PCLN in these cases enabled a more consistent approach to patient management which is likely to reduce the sense of frustration frequently experienced by general hospital staff when they feel unable to cope with patients experiencing mental health problems.

The provision of advice, guidance and education are interventions crucial to the role. Depending on circumstances, these services are offered to the patient, the family and to the treating team. Verbal information is generally supported by written material which remains available for future reference. The expertise of the PCLN is also called upon to provide clarification of patient status in relation to the *Mental Health Act of Victoria (1986)*, and to liaise with relevant services including consultation psychiatry, psychiatric services and drug and alcohol services.

What is clear from this paper is the capacity for the PCLN to make a difference to the lives of patients experiencing mental health problems within the general hospital and their family and the staff who provide care and treatment. There is, as the case studies clearly demonstrate, no magic solution, nor are we guaranteed of a happy ending, but the provision of support and specific psychiatric nursing skills can positively effect the outcomes for these patients and those who care for them.

The case study approach is frequently criticised for its lack of generalisability. However, the more our society moves towards an evidential and outcomes focus, the more research of this type becomes indispensable. Not only does it enable the articulation of specific skills, but it provides a means through which the impact of the PCLN role can be examined and appreciated. The same might not be true for all patients receiving this service, but this does not diminish the potential of the role as demonstrated.

CONCLUSIONS AND RECOMMENDATIONS

The content of this paper makes a contribution to further articulating, understanding and appreciating the role of the psychiatric consultation-liaison nurse within the general hospital environment. The use of a case study

method enabled a detailed description of the approach taken by the PCLN in response to referrals made on behalf of patients experiencing mental health problems. This has provided a greater understanding of the process of assessment, developing and implementing interventions for staff and patients, and for monitoring the outcomes of intervention. In light of the paucity of research articulating the role of the PCLN, this study has made an important contribution to the development of new nursing knowledge.

While this study has contributed to the body of knowledge, considerably more research is required to more clearly articulate the role of the PCLN and determine the impact of PCLN intervention on patient outcomes. The importance of the PCLN role is largely due to the lack of knowledge, skills and confidence of general nurses in caring for patients experiencing mental health problems. By defining the skills and knowledge of the PCLN, identification of the educational needs of general nurses in relation to caring for patients with mental health problems will become clearer and enable in-service education programs to be developed to address these educational needs.

REFERENCES

- Bailey, S. 1994. Critical care nurses' and doctors' attitudes to parasuicide patients. *Australian Journal of Advanced Nursing*. 11(3):11-17.
- Bailey, S. 1998. An exploration of critical care nurses' and doctors' attitudes towards psychiatric patients. *Australian Journal of Advanced Nursing*. 15(3):8-14.
- Gillette, J. and Bucknell, M. 1996. Transforming emergency department culture: The impact of the psychiatric nurse consultant. In *Culture and caring: Caring and culture*. Australian and New Zealand College of Mental Health Nurses 22nd annual conference. Auckland: Australian and New Zealand College of Mental Health Nurses Inc. 397-403.
- Gillette, J., Bucknell, M. and Meegan, E. 1996. Evaluation of psychiatric nurse consultancy in emergency departments project. Royal Melbourne Institute of Technology Bundoora: Faculty of Nursing, Australia.
- Mallory, G.A., Lyons, J.S., Scherubel, J.C. and Reichelt, P.A. 1993. Nursing care hours of patients receiving varying amounts and type of consultation/liaison services. *Archives of Psychiatric Nursing*. 7(6):353-360.
- Mental Health Branch 2000. Review of implementation suicide prevention funding: Enhancement of area mental health services. Melbourne: Mental Health Branch, Department of Human Services, Victoria.
- Newton, L. and Wilson, K.G. 1990. Consultee satisfaction with a psychiatric consultation-liaison nursing service. *Archives of Psychiatric Nursing*. 4(4):264-270.
- Ragaisis, K.M. 1996. The psychiatric consultation-liaison nurse and medical family therapy. *Clinical Nurse Specialist*. 10(1):50-56.
- Roberts, D. 1998. Nurses' perceptions of the role of liaison mental health nurse. *Nursing Times*. 94(43):56-57.
- Sharock, J.L. 2000. Striving for competence in providing mental health care: A grounded theory analysis of nurses' experiences. Unpublished Master of Health Science (Psychiatric Nursing) Thesis, Royal Melbourne Institute of Technology University, Bundoora, Victoria.
- Stake, R.E. 1994. Case Studies. In *Handbook of Qualitative Research*. Denzin, B. and Lincoln, Y. eds. Sage Publications. Thousand Oaks.
- Talley, S., Davis, D.S., Goicoechea, N., Brown, L. and Barber, L.L. 1990. Effect of psychiatric liaison nurse specialist consultation on the care of medical-surgical patients with sitters. *Archives of Psychiatric Nursing* 4(2):114-123.
- Victorian Government 1986. Mental Health Act No 59. Melbourne: Government Printer for the State of Victoria. Australia.
- Whitehead, L. and Mayou, R. 1989. Care of the mind. *Nursing Times* 85(45):49-50.
- Wilson, H.S. 1989. *Research in Nursing*. 2nd Ed. Addison-Wesley Inc. United States.

INDEX TO AUSTRALIAN JOURNAL OF ADVANCED NURSING, VOLUME 19, SEPTEMBER 2001-AUGUST 2002

A

abortion, spontaneous (1):8-14
 acute care (2):8-13
 adapting to diabetes (2):26-32
 adolescents (3):15-24
 age and quality of life (2):33-40
 aged care
 falls from bed (2):8-13
 and malnutrition in hospital (3):45
 aggression (2):41
 AJAN see also journals
 history (2):5
 writing and submission guidelines (1):50-51, (2):42-43, (3):46-47,(4):46-47
 antenatal education (3):32-38
 Apgar scoring system (1):46
 Australian authors, published nursing research by (4):15-20

B

balloon cuffing (2):20-25
 bedrails, role of (2):8-13
 behaviour management for staff working in a non-psychiatric rehabilitation environment (4):21-26
 Bennett, Lydia see van Leeuwen, Marina
 Berggren, Lyn see Helmrich, Susan
 Blount, Diane see Buzio, Amanda
 bone loss in women linked to fizzy drinks (3):45
 Borbasi, Sally see Wilkes, Lesley
 Breier-Mackie, Sarah; and Newell, Christopher J.: 'Home parenteral nutrition: an ethical decision making dilemma' (4):27-32
 burnout (2):41
 Buzio, Amanda; Morgan, John; and Blount, Diane: 'The experiences of adults with cerebral palsy during periods of hospitalisation' (4):8-14

C

caffeinated fizzy drinks and bone loss in women (3):45
 cancer patients, TPN for (4):27-32
 caregiver, family (3):25-31
 case study
 clinical practice tools (2):14-19
 coping with diabetes (2):26-32
 dementia and the family caregiver (3):25-31
 early miscarriage (1):8-14
 nurses' decisions to use non-pharmacological therapies (1):27-35
 patient falls from bed (2):8-13
 pregnant women's experiences of hospital care in Victoria (3):32-38
 published nursing research by Australian authors (4):15-20
 reflective writing (1):15-19
 relationship between quality of life, health and self-esteem (2):33-40
 role of high school community nurses (3):15-24
 rural and remote nursing (1):36-45
 seeking help for postnatal depression (3):39-44
 suprapubic urinary catheters in home-based patients (2):20-25
 caseload variability (1):40-41
 catheters, suprapubic urinary (2):20-25
 cerebral palsy, hospital experiences of adults with (4):8-14
 change (2):26-32
 Chapman, Rose see Downie, Jill
 childbirth (3):32-38
 childbirth-related deaths, increase (2):41
 CIS (critical incident stress) (1):46
 clinical care
 and early miscarriage (1):12
 clinical practice tools (2):14-19
 Clinton, Michael see Moyle, Wendy
 cognitive decline (3):25-31
 community
 health nurse, role (3):15-24
 nursing (2):20-25
 companionship, loss of (3):25-31
 competency indicators (1):20-26
 complications, fewer ICU nurses mean more (3):45
 computer-assisted learning (4):33-37

coping
 with diabetes (2):26-32
 with loss (3):25-31
 cotswales, role of (2):8-13
 Courtney, Mary see also Keogh, Samantha J.
 Yacopetti, Jane; James, Catherine; Walsh, Anne; and Montgomery, Mary:
 'Queensland public sector nurse executives: professional development needs' (3):8-14
 CPR (cardiopulmonary resuscitation), heavy toll of (1):46
 cranberry juice reduces recurrent UTIs (2):41
 Creedy, Debra see Harvey, Joan
 critical care nurses experience CIS (1):46
 cultural preparation (1):40

D

Dawson, Heather: 'Salute to the future' [editorial] (2):5
 Dawson-Byrne, Heather: 'Nurturing nursing research' [editorial] (1):5
 death
 anticipation (3):25-31
 childbirth-related (2):41
 and dying in Western culture (4):38-44
 more likely for weekend hospital admissions (2):41
 decision making, ethical (4):27-32
 dementia
 and the family caregiver (3):25-31
 risk reduced by leisure activities (4):45
 depressive disorders, exercise improves mood in (1):46
 'Developing and implementing clinical practice tools: the legal and ethical implications' (Keogh, Courtney) (2):14-19
 diabetes, coping with (2):26-32
 diagnostic tests, indigenous Australians less likely to have (4):45
 'Difficulty in removing suprapubic urinary catheters in home based patients: a comparative descriptive study' (Jannings, Kelly) (2):20-25
 disability
 having a (2):33-40
 hospital experiences of adults with a (4):8-14
 distance education (4):33-37
 Downie, Jill; Chapman, Rose; Orb, Angelica; and Juliff, Dianne: 'The everyday realities of the multi-dimensional role of the high school community nurse' (3):15-24
 'The dynamics of coping and adapting to the impact when diagnosed with diabetes' (Lo, MacLean) (2):26-32

E

education see nursing education
 educational needs, access to (1):41-42
 Edwards, Helen see Moyle, Wendy
 'Embracing collaborative research' [editorial] (McMillan) (3):5
 emotional support, need for (1):12-13
 employment (2):33-40
 ethical decision making (4):27-32
 ethical implications (2):14-19
 'The everyday realities of the multi-dimensional role of the high school community nurse' (Downie, Chapman, Orb, and Juliff) (3):15-24
 exercise improves mood in depressive disorders (1):46
 'The experience of seeking help for postnatal depression' (Halopainen) (3):39-44
 'The experiences of adults with cerebral palsy during periods of hospitalisation' (Buzio, Morgan, Blount) (4):8-14
 'Exploring nursing leadership' [editorial] (McMillan) (4):5

F

'Factors influencing nurses' decisions to use non-pharmacological therapies to manage patients' pain' (Helmrich, Yates, Nash, Hobman, Poulton, Berggren) (1):27-35
 falls (2):8-13
 family caregiver and dementia (3):25-31
 fears (3):25-31
 feminist perspective of pregnancy and childbirth (3):32-38
 Field, Tanya: 'Internet-based education for enrolled nurses: could it be e-effective' (4):33-37
 FitzGerald, Mary see also Pearson, Alan
 'Reflections on nursing' [guest editorial] (3):7
 fizzy drinks and bone loss in women (3):45

Francis, Dawn see Usher, Kim
frustration (2):41, (3):25-31

G

gender and quality of life (2):33-40, (4):45
Grasso, Jillian see van Leeuwen, Marina
grief (3):25-31
guilt (1):12, (3):25-31

H

Halopainen, Debbi: 'The experience of seeking help for postnatal depression' (3):39-44
happiness (2):33-40
Harvey, Joan; Moyle, Wendy; and Creedy, Debra: 'Women's experience of early miscarriage: a phenomenological study' (1):8-14
Hawes, Cathy see Wilkes, Lesley
health care
 holistic notion (4):27-32
 system in Victoria (3):32-38
information on the Internet (1):46
outcomes, rural and remote population (1):36-45
promotion and education (3):15-24
and self-esteem (2):33-40
Helmrich, Susan; Yates, Patsy; Nash, Robyn; Hobman, Alan; Poulton, Valda; and Berggren, Lyn: 'Factors influencing nurses' decisions to use non-pharmacological therapies to manage patients' pain' (1):27-35
high school community nurse, role (3):15-24
Hobman, Alan see Helmrich, Susan
holistic care (1):27-35
home health care for cancer patients (4):27-32
'Home parenteral nutrition: an ethical decision making dilemma' (Breier-Mackie, Newell) (4):27-32
hospital
 admissions, weekend (2):41
 care in Victoria (3):32-38
 experiences of adults with cerebral palsy (4):8-14
hysteresis (2):20-25

I

ICU (intensive care unit) nurses, fewer (3):45
indigenous Australians less likely to have diagnostic tests (4):45
information technology (4):33-37
injuries (2):8-13
institutionalisation and dementia (3):25-31
Internet and health information (1):46
'Internet-based education for enrolled nurses: could it be effective' (Field) (4):33-37
interpersonal support for women with PND (3):39-44
'Into the twenty-first century: what future for nursing?' [guest editorial] (Vaughan) (4):7
intravenous administration sets, accuracy and condition (4):45

J

James, Catherine see Courtney, Mary
Jannings, Wendy; and Kelly, Mary: 'Difficulty in removing suprapubic urinary catheters in home based patients: a comparative descriptive study' (2):20-25
journalling (1):15-19
journals, published research in nursing (4):15-20
Juliff, Dianne see Downie, Jill

K

Kelly, Mary see Jannings, Wendy
Keogh, Samantha J.; and Courtney, Mary: 'Developing and implementing clinical practice tools: the legal and ethical implications' (2):14-19
Kermode, Stephen; and MacLean, Doug: 'A study of the relationship between quality of life, health and self-esteem' (2):33-40

L

labour (3):32-38
leadership
 exploring nursing (4):5
 and management skills and knowledge (3):8-14
legal implications (2):14-19

leisure activities, dementia risk reduced by (4):45
'Limit setting: a useful strategy in rehabilitation' (Sharrock, Rickard) (4):21-26
'Living with loss: dementia and the family caregiver' (Moyle, Edwards and Clinton) (3):25-31
Lo, Ruth; and MacLean, Doug: 'The dynamics of coping and adapting to the impact when diagnosed with diabetes' (2):26-32
loss (1):11, (3):25-31

M

MacLean, Doug see Kermode, Stephen; Lo, Ruth
malnutrition and screening (3):45
marriage (2):33-40
maternal health nurses and PND (3):39-44
May, D. see Wilkes, Lesley
McKinnon, Margaret M.: 'The participation of volunteers in contemporary palliative care' (4):38-44
McMillan, Margaret
 'Embracing collaborative research' [editorial] (3):5
 'Exploring nursing leadership' [editorial] (4):5
'Measuring the outputs of nursing research and development in Australia: the researchers' (Wilkes, Borbasi, Hawes, Stewart, May) (4):15-20
mechanical ventilation (2):14-19
medical professionals and PND (3):39-44
mental health care (4):21-26
metabolic syndrome (4):45
metabolism, effects of shift work on (4):45
midwifery models of care (3):32-38
miscarriage, early (1):8-14
models of care (3):32-38
Montgomery, Mary see Courtney, Mary
Morgan, John see Buzio, Amanda
'Moving from technical to critical reflection in journalling: an investigation of students' ability to incorporate three levels of reflective writing' (Usher, Tollefson, Francis) (1):15-19
Moyle, Wendy see also Harvey, Joan
Edwards, Helen; and Clinton, Michael: 'Living with loss: dementia and the family caregiver' (3):25-31

N

Nash, Robyn see Helmrich, Susan
neonatal death risk, predictor of (1):46
Newell, Christopher J. see Breier-Mackie, Sarah
Northern Territory, rural and remote nursing (1):36-45
nurses
 access to educational needs (1):41-42
 attitudes to
 and beliefs about non-pharmacological therapies (1):27-35
 and knowledge about cerebral palsy (4):8-14
 critical care (1):46
 cultural preparation (1):40
 frustration, aggression and burnout (2):41
 high school community (3):15-24
 ICU, fewer (3):45
 lack of resources (1):39
 personal safety (1):42
 and PND, maternal health (3):39-44
 professional
 development needs of executive (3):8-14
 and social isolation (1):42
 radiation risks (3):45
 variability in caseload (1):40-41
nursing
 community (2):20-25
 future for (4):7
 historical perspective (1):6-7
 indicators for continuing competence (1):20-26
 journals (4):15-20 see also AJAN
 leadership
 exploring (4):5
 and management skills and knowledge (3):8-14
 practice and early miscarriage (1):13-14
 reflections on (1):6-7, (2):6-7, (3):7
 rural and remote role (1):36-45
nursing education (1):15-19
 via the Internet (4):33-37
nursing research

by Australian authors in nursing journals (4):15-20
embracing collaborative (3):5
nurturing (1):5
nursing students, preregistration (1):15-19
'Nurturing nursing research' [editorial] (Dawson-Byrne) (1):5
nutrition for advanced cancer patients, home parenteral (4):27-32

O

obesity, effects of shift work on (4):45
online learning (4):33-37
Orb, Angelica see Downie, Jill
organisational support
for non-pharmacological therapies (1):27-35
for rural and remote nursing role (1):36-45

P

paediatric patients (2):14-19
pain management (1):27-35
palliative care, participation of volunteers in contemporary (4):38-44
'The participation of volunteers in contemporary palliative care' (McKinnon) (4):38-44
patient
behaviour, managing challenging (4):21-26
ethics of TPN at home for advanced cancer (4):27-32
health outcomes
linked to nurse staffing (1):46
linked to rural and remote nursing (1):36-45
'Patient falls from bed and the role of bedrails in the acute care setting' (van Leeuwen, Bennett, West, Wiles, Grasso) (2):8-13
Pearson, Alan; and FitzGerald, Mary: 'A survey of nurses' views on indicators for continuing competence in nursing' (1):20-26
personhood, loss of (3):25-31
PND (postnatal depression), seeking help for (3):39-44
policy, Federal Government rural health (1):36-45
Poulton, Valda see Helmrich, Susan
'Pregnant women's experiences of models of care in some hospitals in Victoria' (Schneider) (3):32-38
professional and social isolation (1):42
professional development needs of executive nurses (3):8-14
professional licensing (1):20-26
public sector nurse executives, Queensland (3):8-14

Q

quality of life (2):33-40, (4):27-32
'Queensland public sector nurse executives: professional development needs' (Courtney, Yacopetti, James, Walsh, Montgomery) (3):8-14
questionnaire, hospital experiences of adults with cerebral palsy (4):8-14

R

radiation risk to nurses leads to new guidelines (3):45
'Reflections on nursing' [guest editorial] (FitzGerald) (3):7
'Reflections on nursing' [guest editorial] (Roper) (2):6-7
'Reflections on nursing: a time of challenge and choice' [guest editorial] (Roy) (1):6-7
reflective practice and writing (1):15-19
regulation, nursing (1):20-26
rehabilitation staff, guidelines on the strategy of limit setting for (4):21-26
relationships, quality of (2):33-40
research see also nursing research
roundup from nursing and medical journals (1):46, (2):45, (3):41, (4):45
researchers, nursing (4):15-20
residual socialisation (2):26-32
resources, lack of (1):39
restraints (2):8-13
Rickard, Nonie see Sharrock, Julie
Roper, Nancy: 'Reflections on nursing' [guest editorial] (2):6-7
Roy, Sr Callista: 'Reflections on nursing: a time of challenge and choice' [guest editorial] (1):6-7
rural and remote nursing role (1):36-45

S

safety, personal (1):42
'Salute to the future' [editorial] (Dawson) (2):5

Schneider, Zevia: 'Pregnant women's experiences of models of care in some hospitals in Victoria' (3):32-38
screening for malnutrition may improve outcomes (3):45
self-esteem (2):33-40
sexual relationships (2):33-40
Sharrock, Julie; and Rickard, Nonie: 'Limit setting: a useful strategy in rehabilitation' (4):21-26
shift work and metabolism (4):45
socialisation, residual (2):26-32
South Australia, rural and remote nursing (1):36-45
spirituality (2):33-40
Stewart, M. see Wilkes, Lesley
stress (2):33-40, (3):25-31
students see nursing students
'A study of the relationship between quality of life, health and self-esteem' (Kermode, MacLean) (2):33-40
support for women experiencing postnatal depression (3):39-44
suprapubic urinary catheters (2):20-25
survey
continuing competence in nursing (1):20-26
hospital experiences of adults with cerebral palsy (4):8-14
professional development needs of Queensland public sector nurse executives (3):8-14
'A survey of nurses' views on indicators for continuing competence in nursing' (Pearson, FitzGerald) (1):20-26
syndrome X (4):45

T

teaching strategies (1):15-19
therapeutic relationships and milieu (4):21-26
therapies, non-pharmacological (1):27-35
Tollefson, Joanne see Usher, Kim
TPN (total parenteral nutrition) in cancer therapy (4):27-32
transitions, coping with (2):26-32

U

umbilical blood pH values (1):46
uncertainty (1):11-12
Usher, Kim; Tollefson, Joanne; and Francis, Dawn: 'Moving from technical to critical reflection in journaling: an investigation of students' ability to incorporate three levels of reflective writing' (1):15-19
UTI (urinary tract infection) reduced by cranberry juice (2):41

V

van Leeuwen, Marina; Bennett, Lydia; West, Sandra; Wiles, Valda; and Grasso, Jillian: 'Patient falls from bed and the role of bedrails in the acute care setting' (2):8-13
van Manen, M. (1):15-19
Vaughan, Barbara: 'Into the twenty-first century: what future for nursing?' [guest editorial] (4):7
Victoria
pregnant women's experiences of models of care in some hospitals in (3):32-38
rural and remote nursing (1):36-45
volunteers in palliative care, participation of (4):38-44

W

Walsh, Anne see Courtney, Mary
web-based learning (4):33-37
weekend hospital admissions more likely to die (2):41
West, Sandra see van Leeuwen, Marina
Wiles, Valda see van Leeuwen, Marina
Wilkes, Lesley; Bobasi, Sally; Hawes, Cathy; Stewart, M.; and May, D.: 'Measuring the outputs of nursing research and development in Australia: the researchers' (4):15-20
'Women's experience of early miscarriage: a phenomenological study' (Harvey, Moyle, Creedy) (1):8-14
writing and submission guidelines for AJAN (1):50-51, (2):42-43, (3):46-47, (4):46-47

Y

Yacopetti, Jane see Courtney, Mary
Yates, Patsy see Helmrich, Susan