ACCESS TO AND SUPPORT FOR CONTINUING PROFESSIONAL EDUCATION AMONGST QUEENSLAND NURSES: 2004 AND 2007

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Abstract

This paper reports on the findings of a prospective exploratory study related to nurses' self-reports of continuing professional education access and support gathered from two postal surveys undertaken in 2004 and 2007 of 3,000 nurses in Queensland, Australia. Over 85% of the nurses reported they had access to continuing professional education activities. However, it is apparent that the majority of these activities are either partially or completely self-funded. Further, between 2004 and 2007 the amount of financial support provided by employers for continuing education and training activities has decreased significantly. While there were differences between 2004 and 2007, the major barriers to being able to attend continuing professional education were financial (could not afford the fee involved; could not afford to take unpaid leave to attend). The third major barrier in both 2004 and 2007 was having the time to undertake the activity. Analysis for difference between nurses in different geographical locations indicated that distance remains a major barrier for nurses in rural and remote areas. These quantitative findings were supported by the qualitative findings on nurses' work where 'education and training' was, overall, the fifth highest ranked issue requiring further attention.

Key Words:

Continuing professional education, employer support, geographical influences, barriers, financial support

INTRODUCTION

Regardless of the terminology used (continuing professional education, continuing education, life-long learning, knowledge translation) there is a large amount of

literature around the need for practising nurses to undertake regular education and training (Furze, 1999). Whilst acknowledging that the terms may have slightly different meanings, for the purpose of this paper, the term continuing professional education (CPE) will be used to describe the knowledge and skills transfer undertaken by practising nurses with the aim of maintaining competence to practice (DeSilets, 2007, Gallagher, 2006).

Part of a larger study into the working lives of nurses in Queensland undertaken in October 2007, this paper explores whether, similar to other nurses internationally, these nurses are unable to access the education and training they believe they need (Furze, 1999). It also explores the levels and type of employer support and current barriers to accessing CPE. As a similar study was carried out in October 2004, and where data collection permits, comparisons are made across years.

BACKGROUND/LITERATURE

Nurses participate in CPE for many and varied reasons. In some countries such as the United States of America and the United Kingdom, nurses are required to demonstrate set requirements for mandated hours of CPE to be able to renew their registration (Anon, 2008, Edmunds, 2007, Gallagher, 2006, Kelly, 2007). In other countries, such as Australia, nurses have a professional responsibility through codes of professional conduct to remain competent (Gallagher, 2006). On their yearly registration renewal, in some States of Australia (for example, Queensland) nurses must declare they are competent to practice. The registering authority (the Queensland Nursing Council) can, and does, undertake random audits of nurses at which time the nurse must

demonstrate continuing competence. Attendance at CPE is one activity that the nurse can use to demonstrate competence (Penz et al., 2007).

It is thought, therefore, that mandatory requirements for CPE is one way to ensure continuing competence and therefore protection of the public (Furze, 1999, Gallagher, 2006). However, there is debate about how effective mandatory CPE is with regard to the acquisition of skills and knowledge of practising nurses. Several studies have noted that the level of motivation, and the importance thus ascribed to attendance at specific CPE activities, will affect the uptake and outcomes of any CPE activity (Apgar, 2001, Furze, 1999, Gallagher, 2006, Penz et al., 2007).

Whether CPE is mandatory or optional, nurses have to be motivated to participate in CPE activities (Furze, 1999). The reasons for the motivation to participate in an individual program would vary from nurse to nurse (as would also the education needs), but an overall aim would be to improve their professional competence (Furze, 1999). However, if the nurse is not motivated to change a behaviour, no amount of CPE (whether mandatory or voluntary) will be effective (Furze, 1999, Gallagher, 2006).

Motivation for participation in CPE can come from the individual nurse or their employer (Berridge et al., 2007, McWilliam, 2007). Regardless of the criticisms of the effectiveness of CPE, it is not an optional extra for practising nurses if they are to maintain or further develop their knowledge and skills. CPE has become increasingly important as regulating authorities increase their requirements of, or begin to establish, the amount of mandating hours of CPE required as part of demonstration of continuing competence to practice (DeSilets, 2007, Nolan et al., 1995).

The discussion around CPE is complicated. There are supporters of CPE and its importance as well as those who believe that CPE requires significant improvements. Major criticisms of past and current CPE programs have included:

- Many programs developed do not involve the nurse as an active learner.
 Rather they are passive participants in the learning programs (McWilliam, 2007);
- Most CPE programs do not build or encourage critical appraisal of the evidence being presented (McWilliam, 2007);
- Many CPE programs are designed as "one size fits all". They do not recognise the different learning needs, preferences and styles of individuals, nor the context of practice (Charles & Mamary EM, 2002, Gallagher, 2006);
- Rarely is the outcome of CPE evaluated with regard to its effects on improved patient care (Furze, 1999); and
- Nurses often cannot see a clear relationship between CPE, improved care and nursing practice (Gallagher, 2006).

In addition to these criticisms of CPE programs, there are also well documented barriers to nurses wishing to access CPE programs. These include:

 Their accessibility. They are often inaccessible to nurses who are geographically distant to the provider (Hill & Alexander, 1996, Penz et al., 2007);

- Lack of employer support. Many employers are neither aware of the CPE needs of their own staff or have their own agenda for the programs they support (Bibb et al., 2003, Gallagher, 2006, Penz et al., 2007);
- Family commitments which restrict the flexibility of the nurse's availability. Additionally, inflexible work hours, which also impact on staff with family commitments, have been found to be a barrier to accessing CPE (Gallagher, 2006, Nolan et al., 1995, Penz et al., 2007);
- Staffing levels/workloads. Many studies in Australia, the UK and the USA have reported on the impact of staffing shortages on the ability of the employer to replace the person seeking to attend CPE in work time (Bibb et al., 2003, Gallagher, 2006, Sen, 2005);
- Type of hours worked/type of staff. Other studies have linked the type of nurse (registered, licensed/enrolled) to their ability to access CPE.
 Additionally, those who work shift work, are casually employed, more junior and work part-time, are less likely to be able to access CPE to the level of full-time permanent staff (Nolan et al., 1995, Ofosu, 1997);
- Nurses are often expected to self-fund or partially fund the CPE activities (Nolan et al., 1995). Additionally, the activity is often carried out in the nurse's rather than the employer's time (Gallagher, 2006, Nolan et al., 1995).

In recognition that CPE activities require time and funding, several countries have introduced financial incentives to assist nurses access CPE (Anon, 2007, Calov-Dalton, 2007). For example, in Queensland Australia, under the most recent industrial award, nurses employed in the public system (by Queensland Health) are provided with monetary incentives to assist with CPE activities. If the funds are not expended within a set time period, the nurse can draw the funds as a lump sum. Similar benefits have also been available to nurses in the United Kingdom (Furze, 1999). However, concern has been voiced that nurses may use the funds provided for other uses other than CPE activities.

METHODS

In 2004 and 2007 a prospective exploratory study was undertaken of members of the Queensland Nurses' Union (QNU) – the major industrial body for nurses in Queensland. The aim of both projects was to identify the factors impacting upon nursing work in Queensland. The research questions asked were:

- 1. From the perspective of members of the QNU, what are the factors impacting upon nursing work in Queensland?
- 2. How satisfied are members of the QNU with nursing work in Queensland?
- 3. Have perceptions of and satisfaction with nursing work changed over the study period?

A stratified random sampling design was employed with the sampling frame restricted to financial members of the QNU. The strata included were the three largest employment sectors in Queensland. All nurses (registered, enrolled and assistants-innursing) who were members of the QNU at the time of the study and who were employed in the public (State government), private (for profit and not-for-profit providers) and aged care (public and private) sectors were eligible to participate. To ensure adequate levels of precision in estimating key measures, 1000 nurses from each of the three sectors were invited to participate, with an expected response rate of around 50%. These surveys were posted in the month of October in both 2004 and 2007.

The Tool

The questionnaire was originally designed and pre-tested in 2001. Only minor changes were incorporated in both 2004 and 2007 as a comparison of changes in responses was of particular interest. The questionnaire contained 77 questions in 2004 and 75 questions in 2007. The questionnaire was divided into eight sections. Previous publications have outlined the questionnaire (XXX). This paper reports on one section of the questionnaire which gathered data on nurses' professional development (education and training opportunities).

Sample

In 2007, there were 1192 responses to the 3,000 posted surveys constituting a response rate of 39.7% as compared to 44.9% in 2004.

Ethics approval

Ethics approval was obtained in 2004 from the Human Research and Ethics Committee (HREC) of the University of Southern Queensland and in 2007 from the HREC of the University of Queensland and the University of Southern Queensland.

In order to ensure confidentiality the following processes for survey distribution and data collection were adopted: the QNU supplied a set of codes they could link to names and sectors. These codes were used for the random sampling procedure; the researchers provided sealed unaddressed envelopes to the QNU. The packages

contained: a Plain Language Statement, a letter from the Union, the questionnaire [each individually coded], and a reply paid envelope. The code on the questionnaire was repeated on the outside of the envelope which allowed the QNU to match the code to an individual member, address and send the material. Any returned unopened envelopes were returned directly to the QNU. The process ensured that the researchers were unable to match the codes to individual respondents. As only deidentified data (codes removed) were supplied to the QNU, the QNU were unable to match responses to individual members.

Data analysis

In 2007, as in 2004, all quantitative and qualitative data were scanned into the software program Verity Teleform (V9.0 Berity Inc, Sunnyvale, CA, USA). The data were extensively screened and anomalies logged, checked and corrected where appropriate. Analyses were undertaken using SPSS Version 15. Comparisons between sectors in the 2007 survey have been made on an item-by-item basis using descriptive and inferential statistical tools as appropriate to the scale of measurement. Additionally, the 2004 and 2007 results were compared within each sector.

The textual data were scanned into the Teleform program and checked. Following checking the textual data were transferred into an Excel TM program. Owing to the textual limitations of this program, the data were then transferred into a Word TM document. Random checks of data transcription were carried out. Two of the researchers (AT, DH) undertook an independent thematic analysis. Following the completion of the analysis, the two researchers compared themes and agreement was reached on meanings that differed. The textual data were then quantified and

presented as overall and sector data for each question. Thick descriptions were identified by the sector in which the nurse was employed.

Limitations to the study

The strategy for both surveys has been to distribute the surveys equally (33% in each sector) between the private, public and aged care sectors (with community/domicillary nurses included into the public and private sectors). In 2007, overall returns in these categories were almost perfect at 33.3% private, 32.7% public and 31.3% aged care with the additional 2.6% accounted for by 'other' and 'agency' responses.

If QNU membership is taken into consideration, a limitation of this sampling method is under-representation of nurses in the public sector (who comprise approximately 70% of QNU members), while there is an over-representation of nurses from the private and aged care sectors (who comprise approximately 15% each of QNU membership).

There is always concern that surveys are representative of other demographic variables. However, to assess the possibility of non-response bias, checks were made in both years against the QNU database in each sector regarding the distributions of sex, age and job designation. There is no evidence of any sex bias nor of bias by job designation within any sector. In all three sectors there was evidence that older nurses were relatively over-represented. However, this issue is clouded by the QNU database being incomplete – the ages of about 20% of members are unknown. When all facts are considered we believe that the effect of this apparent bias is insufficient to make a substantive impact upon the findings of the study.

RESULTS

Access to education

In 2004 and 2007 nurses were asked to provide an indication if they believed they had access to professional development at their workplace. In 2004, 88.4% (n= 1290) of nurses indicated they had access. A non significant ($\chi^2 = 2.456$, p=.117) rise to 90.1% of the respondents (n=1146) occurred in 2007.

Sector differences were apparent in both years (Table 1, 2004 $\chi^2 = 7.770$, p=.028, 2007 $\chi^2 = 12.703$, p=.002). Nurses employed in the public sector were more likely to report adequate access than those in other sectors. Comparison of 2004 and 2007 data indicated there were year effects within the public acute sector only ($\chi^2 = 6.124$, p=.047) where "yes" responses increased and the "no" responses decreased (see Table 1). A similar but non significant trend ($\chi^2 = 1.053$, p=.591) was seen in the private acute sector for "yes" responses. No trend was seen in the aged care sector ($\chi^2 = 1.326$, p=.515).

Table 1 Access to training opportunities for each sector for 2004 and 2007(percent)

Access	Aged care	Public acute	Private acute
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	2004	2007	2004	2007	2004	2007
No	10.8	9.6	5.7	2.9	10.3	8.0
Yes	87.5	87.6	92.6	96.2	85.9	88.4
105	87.5	87.0		90.2	63.9	00.4
Don't know	1.8	2.9	1.7	1.0	3.8	3.6
Total	399	346	350	312	418	361

Further analysis of the data took place to ascertain if there were any differences in access according to:

- the employment level of the registered nurses (the lower the designated level [i.e. level 1], the more likely are the nurses to provide direct patient care)
- the type of nurse (registered, enrolled, assistant)
- the length of time in nursing
- the length of time expected to continue to work in nursing
- the length of time they had been employed in their current position
- their age
- their gender
- if they were employed on a temporary or permanent basis
- if they worked full-time or part-time
- their geographical location (by postcode and using the Australian Standard Geographical Classification).

Overall data analysis of the both the 2004 and 2007 data, found that nurses who had been employed in their current position the least amount of time, were more likely to have more access to professional development ($\chi^2 = 12.794$, p=.002). In 2004, only 4.5% of nurses who had been employed less than one year indicated that they did not have access to professional development as compared to 14.2% for 1-2 years and between 9-11% for subsequent years. In 2007, the comparative figures were 1.7% for the first year, 8.8% for 1-2 years and between 7.7% and 10.0% for subsequent years.

Financial support for work related education

Nurses were asked to identify the level of financial support from their employer to attend their education and training activities. The data in Table 2 indicate that nurses were more likely to be fully paid than partially paid. Comparison across years for this question is not possible as the manner of answering this question differed. However, across sectors a significant lower proportion of nurses in the public sector in both years reported no payment for their CPE (in both years p<.05 for comparison of public versus the other two sectors).

Table 2: Financial support for education and training from employer (percent).

	2004			2007		
	aged	public	private	aged	public	private
Fully paid	41.3	56.2	52.5	42.8	43.6	46.3
Partially paid	30.8	27.1	24.0	8.7	11.1	8.2
Not paid	25.9	15.9	22.3	25.0	19.7	27.1

The type of funding support was then elicited from the respondents (see Table 3). Overall, nurses in all sectors were more likely to receive funding in the form of payment of registration fees, followed by travel, then for meals and accommodation. Within each of the three sectors "no support" increased (p<.001 for each comparison) between 2004 and 2007.

Type of training	Aged Care		Public		Private	
	2004	2007	2004	2007	2004	2007
Registration fees	17.5	17.7	25.2	22.2	23.8	24.3
Travel	11.1	14.0	15.4	17.1	9.1	8.7
Meals	15.4	3.6	11.9	6.3	9.7	4.9
Accommodation	6.8	0	11.6	0.9	4.7	0.1
No support	53.8	63.5	48.4	64.0	49.1	65.6

Table 3: Type of support given by employer (percent)

Barriers to training

In 2004 and 2007, the respondents were asked to identify the barriers to accessing education and training to the level they would desire. Inability to pay the fees, time, could not afford leave and lack of relief staff were all selected as the principal barriers to training or education activities (see Table 4). In 2004 "family commitments" (not offered in 2007) was also major reason for not undertaking training.

Analysis for barriers by part-time and full-time employment revealed that in 2004 "family commitments" was a higher barrier for full-time ($\chi^2 = 9.078 \text{ p} = .003$) than in part-time employees. None of the other barriers differed according to part-time or full-time employment (p>.134 in all cases).

Table 4 Reasons for not attending professional development (percent)

Barrier	2004	2007
You could not afford the fee involved	48.5	39.8
You lacked the time	30.3	37.3
You could not afford to take unpaid leave	33.8	33.4
Relief staff were not available	26.6	31.8
Family commitments prevented	28.3	-
Access was difficult because of distance	20.3	18.9
Your employer could/would not provide leave	19.4	22.0
You lacked the information on what was available	15.8	18.1
You did not know your training/professional leave entitlements	-	15.0
Other	5.2	7.1
Total Respondents	649	544

There were no significant sector effects. No analyses were undertaken comparing years as two options differed between the years. However, as shown in Table 4 the ranking stays almost the same.

Geographic impact

The data were analysed to ascertain if there were any differences between nurses employed in remote, rural or metropolitan areas with regard to barriers to education and training (see Table 5). The rural classification used in this study was the Australian Standard Geographical Classification. (Australian Institute of Health and Welfare, 2004)

 Table 5. Reason for educational activities and continued training limitation –

 rural versus metropolitan – percent.

Barriers to education and training	Geographical Location			
	Brisbane	Rural	Remote	
You could not afford the fee involved	17.5	23.3	14.0	
You lacked the time	16.8	20.4	17.0	
You could not afford to take unpaid leave	9.5	8.3	7.0	
Relief staff were not available	16.6	15.7	17.0	
Access was difficult because of distance	5.0	16.3	21.1	
Your employer could/would not provide leave	15.3	19.2	14.6	
You did not know your training/professional	8.5	7.0	5.8	
leave entitlements				

Statistically significant differences were found between the responses and geographical location. For example, nurses in rural areas were more likely to report they could not afford the fee involved ($\chi^2 = 7.401$, p=0.025). Nurses in rural and remote areas were more likely to report difficulties in access due to distance from the provided program ($\chi^2 = 46.457$, p=0.001).

Perceptions of improvements to nursing work

In 2007, the respondents were asked, using an open-ended question design, to list five key strategies that could improve nursing or nursing work. A total of 877 respondents provided a total of 3351 responses to this question. Not all respondents provided five

strategies, responses ranging from one through to five. Additionally, some respondents provided more than five strategies.

Table 6 shows the top five strategies identified overall. It also demonstrates some differences in the findings between the sectors. Education and training was ranked fifth overall as a key strategy that would improve nursing and nursing work. Nurses in the private sector were the least likely to identify the need for a strategy linked to education and training.

Table 6: Top five themes identified to improve nursing or nursing work
(percent)

Theme	Private	Aged Care	Public	Average of
				sectors
Workload	85	83.7	86.6	85.10
Remuneration	40.7	64.7	37.9	47.77
Students	44.3	38.4	35.8	39.50
Conditions	45.1	37.9	31	38.00
Education & Training	27.2	34.9	34.1	32.07

Thematic analysis of the text revealed that the majority of nurses across all sectors believed there should be better financial or other support. This was particularly noted by nurses in community health, aged care and the private sector. *More opportunity for professional development – education that is affordable to more. (aged care)*

Greater access to education. Course costs very high at a time when educating your children is more important. (private)

More opportunities for education and study leave to enable nurses to attend seminars etc (in private all our study is expected to be in our own "limited" time and our own expense). (private)

Nurses also wished for increased financial support to undertake further education. As one nurse noted:

More help (financial and otherwise) for nurses furthering education. (aged care)

Respondents also identified the need for education and training to be held outside the capital city of Brisbane to allow nurses from rural and regional areas better access. For example:

More widely spread educational conferences in regional areas e.g. Ausmed run conferences regularly in Bris[bane] but rarely ... [in the north of the State]. (aged care nurse)

Other respondents believed that there should be staff employed to allow them to leave the work unit to attend education and training programs. Nurses from all sectors noted that the lack of relief staff was problematic.

Increase regular/experienced staff employed to a particular unit to allow off time for NOA commitments (i.e. education/research) (public)

Extra staff to cover those staff what want or need to go to inservice training sessions. (*private*)

Access to professional development and either in-house or external. Adequate staffing to support this. (community health)

Between 2004 and 2007, the Queensland government changed the nurses' award and provided educational allowances for nurses employed in the public sector (Queensland Health). Only one nurse commented on this benefit and believed that:

Some people need to be made to attend in-services and use their professional development money – not be paid out after 2 years [if it is not used] (public)

DISCUSSION

The results from the quantitative data suggest that the majority of nurses in Queensland perceive they have good access to education and training. Further, this access has improved slightly between 2004 and 2007. Nurses in the public sector are more likely to report ease of access and there was a statistically significant increase in this sector between 2004 and 2007. However, there was also an increase (but not statistically significant) in the private sector over the two studies. In contrast to previous studies, these findings suggest that access to CPE is not a significant problem in this cohort of nurses. (Furze, 1999)

In contrast to previous studies (Hill & Alexander, 1996, Penz et al., 2007), but in congruence with other studies (Field, 2002), analysis of the 2007 data did not find any difference between access to education and training by rural versus metropolitan based nurses. However, similar to other Australian (Hill & Alexander , 1996) and Canadian studies (Penz et al., 2007) it did find that nurses in rural and remote areas were more likely to identify the cost of CPE and the distance they have to travel as major barriers to CPE.

Employer support for CPE activities can take the form of financial support, paid leave and provision of relief staff. In the 2007 study less than 50% of the respondents were provided with full or partial re-imbursement of CPE expenses. There was a significant drop in payment (both fully and partially) between 2004 and 2007. In both 2004 and 2007, nurses employed in the public sector were less likely to report they received no payment and this had decreased slightly between 2004 and 2007. The lack of funding to offset the cost of CPE for practising nurses has long been recognised as a significant barrier both within Australia and internationally. (Furze, 1999, Nolan et al., 1995) The inability (or unwillingness) of employers to fully fund CPE activities particularly disadvantages those nurses who are on lower incomes or who have higher living costs (for example a young family). (Furze, 1999) The industrial award funding available in the public sector in Queensland may have contributed to the slight increase in this sector, however, the increase is much lower than expected.

Reflecting the lack of fully funded CPE activities, over 60% of all nurses in this study reported no support from their employer. Similarly, nurses in 2007 were more likely than those in 2004 to report no support was given. While recognising that it is believed that some partial contribution to CPE is necessary, these data do not suggest a joint responsibility between the employer and the employee. (Nolan et al., 1995)

Similar to the lack of paid financial support, no support for other education and training activities has increased between 2004 and 2007 in all three sectors. This decrease in the likelihood of support for CPE for practising nurses is disturbing and requires further exploration as to the causes. It could reflect the current economic climate within Australia, or may reflect a trend away from non-award entitlements. We are not aware of any similar findings that have been reported elsewhere.

While there were no differences reported between the sectors on barriers to CPE, the findings of this study reflect the results of some previous studies, but also contrast with others. For example, similar to other studies, data from 2004 and 2007, indicate that lack of funding remains a major barrier. Similarly the lack of relief staff, of employer support, a lack of time, the influence of distance, of the impact of rising workloads, and the lack of information have all previously been reported. (Apgar, 2001, Bibb et al., 2003, Furze, 1999, Gallagher, 2006, Nolan et al., 1995, Sen, 2005) In contrast to other studies, the type of nurse (AIN, EN, RN), (Robertson et al., 1999), the seniority of the nurse, (Penz et al., 2007), and the age of the nurse (Ofosu, 1997)

were not found to have any significant impact on the participants access to CPE in either 2004 or 2007.

The 2007 qualitative data reported in this study confirm the quantitative findings. Significantly the importance of education and training was ranked third overall in the issues that the profession wished addressed. The nurses in this study reflected the poor input of employers to the costs of CPE. They also requested an increase in other support such as leave.

While other papers will report on the findings with regard to the workload issues in the 2007 study, it is apparent that the lack of nurses to relieve practising nurses is impacting upon access to CPE.

CONCLUSION

This study suggests that the majority of nurses do have access to CPE. The reported barriers are similar to other findings from studies internationally, particularly in the UK and the USA. It highlighted the continuing disadvantage of rural and remote nurses who are disadvantaged by distance and costs with regard to accessing CPE.

The data suggest that the primary source of funding for CPE in this cohort of nurses is themselves – that is the majority of CPE activity is self rather than employer funded. Comparisons of the input of employer CPE support between 2004 and 2007 suggests an alarming decline. The reasons for this decline are not known. The introduction of financial assistance in the award of nurses in the public sector, does not seem to have had the impact one would expect. While more nurses in this sector report access, they do not report a large difference in the availability of employer supported funding. It is possible that the comment made by one respondent that these CPE funds were not seen by many nurses in the public sector as supporting CPE, but rather as additional income, may be influencing the results of this study.

There is an international trend for CPE hours to become compulsory for registration. If this is the case, regardless of the recognition that some partial self-funding is desirable, the results of this study suggest that Queensland nurses have a considerable way to go before they could be seen to be support by their employers in the pursuit of professional excellence.

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