Advanced training for primary care and general practice nurses: enablers and outcomes of postgraduate education

Christine M. Hallinan^A,B and Kelsey L. Hegarty^A

^AGeneral Practice and Primary Health Care Academic Centre, Melbourne Medical School, The University of Melbourne, 200 Berkeley Street, Carlton, Vic. 3053, Australia.
^BCorresponding author. Email: hallinan@unimelb.edu.au

Abstract. The aims of the present study were to understand enablers to participation in postgraduate education for primary care nurses (PCNs), and to explore how postgraduate education has advanced their nursing practice. Cross-sectional questionnaires were mailed out in April 2012 to current and past students undertaking postgraduate studies in primary care nursing at The University of Melbourne, Victoria, Australia. Questionnaires were returned by 100 out of 243 nurses (response rate 41%). Ninety-one per cent (91/100) of the respondents were first registered as nurses in Australia. Fifty-seven per cent were hospital trained and 43% were university educated to attain their initial nurse qualification. The respondents reported opportunities to expand scope of practice (99%; 97/98), improve clinical practice (98%; 97/99), increase work satisfaction (93%; 91/98) and increase practice autonomy (92%; 89/97) as factors that most influenced participation in postgraduate education in primary care nursing. Major enablers for postgraduate studies were scholarship access (75%; 71/95) and access to distance education (74%; 72/98). Many respondents reported an increased scope of practice (98%; 95/97) and increased job satisfaction (71%; 70/98) as an education outcome. Only 29% (28/97) cited an increase in pay-rate as an outcome. Of the 73 PCNs currently working in general practice, many anticipated an increase in time spent on the preparation of chronic disease management plans (63%; 45/72), multidisciplinary care plans (56%; 40/72) and adult health checks (56%; 40/72) in the preceding 12 months. Recommendations emerging from findings include: (1) increased access to scholarships for nurses undertaking postgraduate education in primary care nursing is imperative; (2) alternative modes of course delivery need to be embedded in primary care nursing education; (3) the development of Australian primary care policy, including policy on funding models, needs to more accurately reflect the educational level of PCNs, PCN role expansion and the extent of interprofessional collaboration that is evident from research undertaken to date. Nurses with postgraduate education have the potential to increase their scope of practice, take on a greater teaching role and provide more preventive and chronic disease services in primary care. Policies aimed at increasing access to education for nurses working in primary care would strengthen the primary care nursing profession, and enhance the delivery of primary health care services in Australia.

Additional keywords: autonomous practice, capacity building, chronic disease management, policy, preventive health.

Received 28 April 2014, accepted 13 October 2014, published online 7 January 2015

Introduction

Primary care nursing is an increasingly important dimension of primary care in Australia and around the globe (Laurant et al. 2005; Jolly 2007; Keleher et al. 2007; Parker et al. 2009; DiCenso et al. 2010). In this study, ‘primary care nursing’ refers to the nursing services provided by a nurse outside of the acute setting, such as the services provided by nurses in the general practice setting. The evolution of an advanced role for nurses in primary care has been driven by multiple local, national and global factors, which include policies delivered in light of the changing health needs of consumers, health-care funding sustainability, general practitioner (GP) workforce shortage, and increasing GP workloads (Watts et al. 2004; Halcomb et al. 2006; Jolly 2007). These drivers are consistent with those that have resulted in role development for nurses in the US, UK and Canada (Atkin and Lunt 1996; Sibbald et al. 2006; Kaasalainen et al. 2010; Institute of Medicine 2011).

Advanced nursing practice is recognised as practice progressing towards a locus of expertise, or a position ahead of the ‘status quo’ in terms of attributes such as: clinical skill, evidence-based knowledge and leadership capacity (Atkins and Ersser 2000). The term ‘advanced practice nurse’ (APN) is a generic title that encapsulates several varying nomenclatures including nurse practitioner, clinical nurse specialist, nurse consultant and advanced general practice nurse (DiCenso et al. 2010; Fitzgerald et al. 2012; King et al. 2012). The International Council of Nurses (ICN) (International Council of Nursing 2001) definition of an APN is a registered nurse, who has
acquired an expert knowledge base, which incorporates complex decision-making skills and clinical competencies for expanded practice beyond the usual practice scope. The ICN also embeds into this definition an opportunity for credentialing and recommends a Masters degree qualification at entry level (International Council of Nursing 2001). In a consensus statement made by Australian peak nursing bodies in 2008, leadership, teamwork and post registration education were included into the definition (Australian Primary Health Care Nurses Association (APNA) 2008). An Australian primary care nursing resource entitled ‘Supporting advanced nursing and development in general practice’ (SANDS in GP 2012) provided a definition that specifically related to APNs in the general practice setting:

The advanced registered nurse in general practice uses postgraduate education and broad experience in general practice to make evidence-based decisions, often in complex situations. The advanced registered nurse has the ability to initiate change towards direct patient care and outcomes, including health promotion and intersectoral collaboration. The advanced registered nurse, as a member of the general practice team, has an active role in leadership, management, education, research and health service design, in response to and in anticipation of patient population needs. (McGorm 2012)

In the UK, the Royal College of Nursing (2012) defines advanced nursing practice as a level of practice (rather than a role or job title), which has a central focus on direct care provision and which incorporates education, research and management. In Canada and the US, the definition of an APN is more expansive and includes an emphasis on leadership and the requirement for attainment of an educational qualification at postgraduate Masters level (DiCenso et al. 2010; Institute of Medicine 2011). Across North America, postgraduate programs have been delivered to nurses for over 40 years (Kaasalainen et al. 2010; Institute of Medicine 2011). However, attainment of qualifications has, and continues to be, challenged by constraints such as varying levels of pre-registration nurse education, a limited number of education programs at a Masters level, reduced access to higher education courses in rural and remote communities and a reluctance for governments to fund Masters level nursing courses (Martin-Misener et al. 2010; Institute of Medicine 2011). Masters qualifications are yet to be mandated in the UK for advanced practice (Royal College of Nursing 2012).

In Australia, Masters level qualifications have been mandated by the Nursing and Midwifery Board of Australia for nurses working at an advanced level as an endorsed nurse practitioner (NP) (Nursing and Midwifery Board of Australia 2013). The Nursing and Midwifery Board of Australia (2013) also recommends educational preparedness up to a Masters level for APNs who work in primary care; however, this qualification is yet to be mandated. It was found in research undertaken by Watts et al. (2004) and Parker et al. (2011) that many Australian primary care nurses who viewed their nursing practice as practice at an advanced level, had not yet gained a Masters degree, nor had they attained an educational level up to that of a Bachelors degree (Watts et al. 2004; Parker et al. 2011). The studies found that perceptions of practice at an advanced level appeared to correlate more strongly with work experiences rather than the attainment of postgraduate qualifications (Watts et al. 2004; Parker et al. 2011).

The opportunity to showcase members working in advanced practice is an important characteristic of professional groups that aim to advance their professional standing (Manley 1997; Atkins and Ersser 2000; Kucera et al. 2010). Currently, primary care nurses working in Australian general practice have several role models who demonstrate clinical expertise. Yet, they have a limited number of high profile primary care nurses (PCNs) who reflect the broader advanced practice role resulting from the combination of a breadth of clinical experience and the attainment of formal qualifications at a postgraduate level (Parker et al. 2011).

The articulation of a well-defined career pathway promotes the expansion of nursing scope of practice and facilitates the delivery of more autonomous patient care by nurses (Parker et al. 2009; DiCenso et al. 2010; Martin-Misener et al. 2010; Institute of Medicine 2011). Both educational qualifications and clinical experience are recognised as determinants of nursing scope of practice, and professional, regulatory and organisational guidelines determine the level of nurse autonomy in the delivery of patient care (Weston 2010). Hence, a well-defined pathway, which maps out the educational, clinical, professional, regulatory and organisational trajectories, would facilitate the preparedness of nurses to take on an advanced role and enable APNs to augment the provision of health services to patients in the primary care setting.

In Australia, funding initiatives over the past decade have resulted in a rapid increase in the number of nurses working in primary care, and has led to the development of more advanced roles for nurses (Watts et al. 2004; Halcomb et al. 2006; Jolly 2007; Keleher et al. 2007; Parker et al. 2009). Strategies to extend PCN roles in Australia included the funding of general practice networks to provide informal professional and educational support (Department of Health and Ageing (DoHA) 2005; Phillips et al. 2008; Parker et al. 2010). A comprehensive and systematic postgraduate educational pathway is critical to prepare Australian PCNs for advanced practice; however, to date, educational pathways have been established in varied forms and in an ad hoc manner, across various jurisdictions (Watts et al. 2004; Halcomb et al. 2009; Parker et al. 2009, 2011).

In the Australian context, there are no specific educational and clinical requirements for nurses aiming to work at entry level practice in the primary care setting. There are also no
current educational prerequisites that need to be satisfied for nurses to commence a postgraduate course in primary care nursing. Currently, there are numerous courses that are delivered at various educational levels, across a variety of settings, offering education in many aspects of primary care nursing (Australian Primary Health Care Nurses Association 2012). There are also a smaller number of higher degree postgraduate courses offering educational qualifications in primary care nursing in the university sector (Australian Primary Health Care Nurses Association 2012). The higher education courses enable the attainment of primary care nursing qualifications, from a Certificate to a Masters level, across areas of specialisation including women’s health, chronic disease management, immunisation and mental health.

In spite of much evidence on the impact of nurses in primary care (Laurant et al. 2005; Keleher et al. 2007), there is a paucity of published research on nurses’ preparedness to work at any level in primary care (Ali et al. 2011), and limited research on access to, and outcomes of, participation in postgraduate education. This study sought to understand enablers to participation in formal postgraduate education for PCNs and aimed to explore how postgraduate studies had enabled PCNs in general practice to work in an advanced role. In particular, this research explored the enablers to, and outcomes of, postgraduate distance education in primary care nursing at The University of Melbourne. The research also examined how access to this education has supported advanced roles for PCNs in general practice.

**Methods**

A cross-sectional questionnaire was mailed to all current and past students enrolled in postgraduate Primary Care Nursing (PCN) courses at The University of Melbourne, Australia, from 2007 to 2012. Student details were accessed through The General Practice and Primary Health Care Academic Centre student database. The sampling frame consisted of nurses from metropolitan, rural and remote geographical areas who were, or had previously enrolled in, a single subject, Certificate, Diploma and Masters primary care nursing courses in the Postgraduate Coursework Program at Melbourne Medical School, The University of Melbourne.

Past students who had up-to-date telephone and email address details were contacted to confirm their mailing address before the mail out of a post card primer was conducted. The purpose of the post card primer was to notify students of an impending questionnaire. A questionnaire package was mailed out in April 2012. Included in the questionnaire package was an invitation letter, information sheet and a self-addressed stamped envelope. Over the following 6 weeks, non-respondents, defined as past and present students included in the mail out who did not respond at all, were followed up with either a telephone call or an email. Those who agreed to participate were re-sent a questionnaire package.

The questionnaire was constructed incorporating knowledge gained from a literature review. The printed questionnaire booklet included structured and unstructured questions. It collected demographic data on age, gender and nursing background. Likert scales (1–5) were used to measure the degree of importance placed on postgraduate education enablers and level of agreement across a range of course outcomes. The questionnaire was piloted on eight PCNs working in general practice who were recruited by an outer metropolitan Medicare Local organisation. Minimal revision was required. The research was given ethics approval by the Human Ethics Advisory Group at The University of Melbourne.

Quantitative data was analysed using SPSS-20 (version 20.0, released 2011, IBM SPSS Statistics for Windows; IBM Corp., Armonk, NY, USA). Descriptive statistics were used to describe main trends and analyse differences in the data. Frequency tables, bar graphs and cross tabulations were used to report the distribution trends on postgraduate education enablers and outcomes. The differences between hospital-trained and university-educated PCNs were examined in relation to postgraduate study type, such as differences in participation in a single subject, Certificate, Diploma or Masters level education. Also examined were differences in the type of credential attained, such as differences in the attainment of specific qualifications such as Pap testing qualifications and immunisation practice between the hospital-trained and university-educated groups. Other differences in outcomes between the hospital-trained and university-educated groups were not explored, as the aims of the study did not include the explicit examination of these variances. Although differences in career and educational trajectories in hospital-trained versus university-educated nurses are interesting and worth mentioning, with continued attrition of the hospital-trained workforce, the differences will, in time, become less relevant.

Microsoft Excel 2010 (Office 2010; Microsoft Corporation, Redmond, WA, USA) was used to code, categorise and compare responses from the open-ended questions. The coding process incorporated an iterative and reflexive process, where data was systematically organised in clusters to enable the identification and development of themes (Crabtree and Miller 1999). The responses were thematically analysed for repeating and emergent themes by CMH. Analysis included collaboration and legitimation by KLH to ensure validity of results (Crabtree and Miller 1999).

**Results**

**Demographics**

Questionnaires were returned by 100 out of 243 nurses (response rate=41%). All participants (n=100) were female, with a mean age of 46 years (range = 24–69 years). The year of completion of initial nurse education ranged from 1965 to 2010 (median = 1990). Most participants (91%; 91/100) were first registered as nurses in Australia. Many were affiliated with one or more professional nursing organisations. Seventy-five per cent (75/100) were members of the Australian Nursing Federation, 40% (40/100) were members of the Australian Primary Health Care Nurses Association (formally Australian Practice Nurse Association), 7% (7/100) were members of The Australian College of Nursing (formally Royal College of Nursing Australia) and 4% (4/100) belonged to the Australian College of Nurse Practitioners.
Qualifications and education

Of the respondents, 57% (57/100) were hospital trained and 43% (43/100) were university educated for attainment of their primary nursing qualification. Overall, 58% (58/100) reported a Bachelor degree qualification (note: a Bachelor degree qualification may have been acquired either as a university degree for initial nursing registration, or alternatively acquired as a Bachelor degree post registration where hospital-trained nurses undertake university studies to gain a Bachelor degree in nursing after initial registration).

Forty-nine per cent (49/100) of respondents, including those who were current students, reported undertaking single subject studies in the PCN program. Studies at Certificate level were reported by 12% (12/100) of respondents and 23% (23/100) of respondents reported embarking on studies at a Diploma level. Eleven per cent (11/100) reported studies at a Masters level in either primary care nursing, advanced nursing practice or in public health. One respondent reported both a Masters level and a NP qualification, and five respondents reported working towards endorsement as a NP.

When asked about the completion of specific courses in the PCN program at The University of Melbourne, over 2.5 times as many hospital trained nurses (71%; 34/48) reported completion of studies at single subject level compared with their university-trained colleagues (29%; 14/48). The opposite pattern was evident in Diploma level studies. Sixty-seven per cent (8/12) of university educated nurses reported completion of studies at Diploma level, this compares with 33% (4/12) of hospital trained nurses, who reported completion of studies at the same academic level. Studies completed at the Certificate and Masters level were evenly distributed between the hospital trained and university educated nurses. The number of respondents reporting higher education qualifications at Certificate and Masters was 10 and eight, respectively.

Respondents were also asked to list the nursing credentials that were attained as a result of postgraduate education. Credentials listed by respondent included certifications that enabled independent Pap test provision (67%; 67/100), the provision of immunisation services (61%; 61/100), asthma education (8%; 8/100), diabetes education (3%; 3/100) and the provision of mental health services (1%; 1/100). Seventy-eight per cent (78/100) of respondents listed multiple credentials.

When looking at the primary care credentialing qualifications of the hospital trained cohort compared with the university educated cohort, disparity is evident. Of the 67 nurses reporting a credentialed Pap test qualification, a greater proportion of hospital trained nurses reported the Pap test qualification (70%; 47/67) compared with university educated nurses (30%; 20/67). Sixty-one per cent (37/61) of the hospital trained nurses had gained an accredited immuniser qualification compared with their university educated colleagues (39%; 24/61). It was not possible to ascertain potential anomalies in initial nurse qualifications and attainment of credentialing in asthma, diabetes and mental health care, as the number of respondents reporting certification in these areas was low, with 8% (8/100) and 3% (3/100) of nurses reporting these qualifications, respectively. Only one respondent (1%; 1/100) reported a credentialed mental health qualification.

Enablers for postgraduate education

Respondents were asked about the extent of influence (from great extent to none at all) of factors that contributed to the decision to enrol in postgraduate studies in primary care nursing. Ninety-nine per cent (97/98) of respondents reported the desire to expand their scope of practice as having at least some influence on enrolment in the primary care nursing course. Other influencing factors included the intention to improve clinical practice (98%; 97/99), increase work satisfaction (93%; 91/98) and practice more autonomously (92%; 89/97) (Fig. 1). Factors selected as enabling postgraduate studies in the higher education sector, from great to some extent, were access to scholarships (75%; 71/95), access to distance education (74%; 72/98), prior university experience (64%; 62/97) and support from work colleagues (62%; 61/99) (Table 1).

Outcomes of postgraduate education

The time period since completion of postgraduate studies in primary care nursing at The University of Melbourne was up to 6 years for some respondents, as the database included all students enrolled in courses from 2007 to 2012. All respondents were asked how their scope of practice had changed since completion of postgraduate education; most respondents (98%; 95/97) reported an increased scope of practice as a result of postgraduate education. When asked to consider how much they agreed (from strongly agree to disagree) with statements regarding outcomes of postgraduate education (71%; 70/98) of respondents agreed that an increase in job satisfaction was an outcome. Fifty per cent (49/98) reported a greater teaching role and 39% (38/97) reported an increased respect from doctors as course outcomes. Only 29% (28/97) agreed that an increase in pay rate was a course outcome (Table 2).

Respondents were asked to consider how much they agreed with statements relating to how postgraduate education had impacted on the activities they undertake in the primary care setting. Seventy-one per cent (68/96) of respondents agreed that they were undertaking more advanced activities, which directly related to newly acquired knowledge. Furthermore, 48% (45/94) agreed with the statement that they were now undertaking new activities that did not necessarily relate to the course. Fourteen per cent (13/93) of respondents indicated there was no change in their activities and 2% (2/93) of respondents agreed with the statement that they were now doing less advanced activities than they were prior to undertaking postgraduate studies.

Nurses in general practice

Seventy-three per cent (73/100) of the past and present students were currently working in a general practice. Of this group, 62% (45/73) were employed in just one general practice and 58% (42/73) were employed in a permanent capacity. The mean number of hours worked was 26 (range = 0–48) h/week. The majority (85%; 62/73) of nurses worked in privately owned general practices that typically had five or more GPs and 2–4 PCNs. Approximately two-thirds (64%; 47/73) worked in practices located in rural and remote areas of Australia and just over one-third (36%; 26/73) worked in practices in
metropolitan areas. The other respondents not working in general practice were providing nursing services in the community and mental health sectors. One respondent was working as a clinical supervisor in an aged care facility and another respondent was working as an educator at a university.

Primary care nurses currently working in general practice were asked about the work they do in general practice. Many nurses anticipated an increase in the time spent on the preparation of chronic disease management plans (63%; 45/72), multidisciplinary care plans (56%; 40/72) and adult health checks (56%; 40/72) in the preceding 12 months (Table 3). The majority (90%; 66/73) of nurses indicated that their clinical expertise and the general practice partners (79%; 55/70) influenced the work they did in general practice.

Major themes

The survey contained some open-ended questions relating to the enablers for postgraduate education and the impact of postgraduate education on career and working life. Respondents were asked about the factors they believed influenced and enabled the undertaking of further education. One open-ended question asked about the specific working life outcomes that resulted from undertaking studies in primary care nursing. Another open-ended question asked about how the course impacted on their work activities. Eighty-six respondents provided responses to the open-ended questions. Most of the responses were in either single- or tri-sentence form. Some responses were very dense, with numerous paragraphs of feedback that were rich in detail. Three major themes emerged from the data. Two of the themes related to career advancement associated with undertaking postgraduate education, and the other theme related to the barriers that impeded enhanced working life outcomes after undertaking postgraduate education.

**Theme 1: nurses with postgraduate education considered they increased capacity through the delivery of education, preventive care, women’s health and chronic disease management services**

Many respondents felt further education increased the capacity of health service delivery through the use of the nurse in more advanced roles, enabling the provision of more preventive health and chronic disease management services in the primary care setting.

*I now have more of an interest in preventive activities in General Practice and the wider community.* (R19)

*I have increased patient one on one time and more involvement with chronic disease management and health promotion.* (R206)

*I have set up chronic disease education clinics and began introducing GPMPs (chronic disease care plans). I have also produced education booklets on antenatal education and have begun antenatal classes.* (R140)

*I can now deliver diabetes education sessions to patients.* (R118)

The need for women’s health services to be delivered by a female provider was also cited as a factor influencing the uptake of further education by respondents.
Respondents also cited the teaching of preventive health and increased the amount of nurse-delivered education to patients. Enablers in

Table 1. Enablers for postgraduate education in primary care nursing

<table>
<thead>
<tr>
<th>Enablers</th>
<th>Influence of enablers for postgraduate training (% of nurse responses)</th>
<th>Extent of agreement with listed course outcomes after undertaking postgraduate education (% of nurse responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Great extent (%)</td>
<td>Moderate extent (%)</td>
</tr>
<tr>
<td>I accessed a scholarship to undertake the course (n = 95)</td>
<td>57</td>
<td>14</td>
</tr>
<tr>
<td>The course was by distance education (n = 98)</td>
<td>43</td>
<td>15</td>
</tr>
<tr>
<td>My workplace approved my funded leave (n = 97)</td>
<td>23</td>
<td>6</td>
</tr>
<tr>
<td>I had support from my work colleagues (n = 99)</td>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td>I have had prior university study experience (n = 97)</td>
<td>17</td>
<td>28</td>
</tr>
<tr>
<td>My workplace reimbursed the course fees (n = 98)</td>
<td>18</td>
<td>7</td>
</tr>
<tr>
<td>I could easily access the university IT support services (n = 97)</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>I had access to a work computer (n = 98)</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>I could easily access the university academic support services (n = 98)</td>
<td>6</td>
<td>19</td>
</tr>
<tr>
<td>My travel costs were funded by my workplace (n = 98)</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>I had friends and family who could help me with my study (n = 97)</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>I had an academic mentor (n = 97)</td>
<td>2</td>
<td>8</td>
</tr>
</tbody>
</table>

Table 2. Outcomes of postgraduate education in primary care nursing

<table>
<thead>
<tr>
<th>Course outcome</th>
<th>Extent of agreement with listed course outcomes after undertaking postgraduate education (% of nurse responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>My job satisfaction has increased (n = 98)</td>
<td>71</td>
</tr>
<tr>
<td>I have a greater teaching role in my workplace since undertaking the course (n = 98)</td>
<td>50</td>
</tr>
<tr>
<td>I have more respect from doctors after completing the course (n = 97)</td>
<td>39</td>
</tr>
<tr>
<td>My working life has not changed (n = 96)</td>
<td>42</td>
</tr>
<tr>
<td>My peers look up to me more (n = 96)</td>
<td>35</td>
</tr>
<tr>
<td>The course has not advanced my career (n = 96)</td>
<td>37</td>
</tr>
<tr>
<td>I am now treated differently by my patients (n = 96)</td>
<td>25</td>
</tr>
<tr>
<td>I have changed career path as a result of the study (n = 97)</td>
<td>34</td>
</tr>
<tr>
<td>My pay rate has increased (n = 97)</td>
<td>29</td>
</tr>
</tbody>
</table>

Table 3. Anticipated changes in nursing activity for primary care nurses

<table>
<thead>
<tr>
<th>NA, not applicable; SNAP, smoking, nutrition, alcohol, physical activity</th>
<th>General practice activity</th>
<th>Anticipation of change in time spent on an activity over the next 12 months (% of nurse responses)</th>
<th>Chronic disease management to students and colleagues as an outcome.</th>
</tr>
</thead>
<tbody>
<tr>
<td>General practice activity</td>
<td>Increase (%)</td>
<td>No change (%)</td>
<td>Decrease (%)</td>
</tr>
<tr>
<td>Immunisation (n = 73)</td>
<td>34</td>
<td>53</td>
<td>10</td>
</tr>
<tr>
<td>Child health check (n = 72)</td>
<td>48</td>
<td>32</td>
<td>3</td>
</tr>
<tr>
<td>Adult health check (n = 72)</td>
<td>56</td>
<td>35</td>
<td>0</td>
</tr>
<tr>
<td>Assessment of SNAP (n = 73)</td>
<td>47</td>
<td>36</td>
<td>1</td>
</tr>
<tr>
<td>Health promotion advice (n = 73)</td>
<td>49</td>
<td>44</td>
<td>0</td>
</tr>
<tr>
<td>Women’s health check (n = 73)</td>
<td>48</td>
<td>38</td>
<td>3</td>
</tr>
<tr>
<td>Preparation of a chronic disease management plan (n = 72)</td>
<td>63</td>
<td>25</td>
<td>1</td>
</tr>
<tr>
<td>Preparation of a multidisciplinary care plan (n = 72)</td>
<td>56</td>
<td>32</td>
<td>1</td>
</tr>
</tbody>
</table>

I have been more involved in preventive care with women’s health. I have been able to promote information advice for women and have increased the amount of women having Pap smears from 30% to 60% within our practice. (R168)

I now do Pap tests because there was a lack of appointments available for pap tests, and male Drs preferred not to do Pap tests. (R041)

Many patients have enquired if I was able to perform Pap tests, so I responded by doing the course. (R84)

I now often act as 1st point of call if women have women’s health issues and are reluctant to see male GP. I am often able to reassure them and facilitate an appointment and follow up with GPs. (R34)

The Pap test provider course has given patients more options. (R204)

I tend to get most of the smears booked into the practice. (R80)

In addition, respondents reported postgraduate education increased the amount of nurse-delivered education to patients. Respondents also cited the teaching of preventive health and
I am now teaching medical students and nurses since undertaking the Pap course. (R16)

I now have more of an advisory role. (R30)

The Drs will come to me to ask about the immunisation especially when they are about immunising a child. (R80)

I believe that I have a greater ability to educate especially with my younger patients, patient follow up is now better in the clinic with me following up for the Drs. (R186)

Theme 2: postgraduate education enhanced autonomy and facilitated an expanded scope of practice

Respondents also considered that postgraduate education enhanced autonomy and facilitated an expanded scope of practice. Many respondents listed opportunities for an increased scope of practice as both a course aim and course outcome. Those who indicated they had an expanded scope of practice described the delivery of health-care services to patients that they had previously not been credentialed to do, such as Pap test provision and the management of diabetes patients.

I am now able to see patients for women’s health appointments and previously this was not possible due to not having the qualifications, the course has broadened my scope of practice. (R148)

The Pap test provider course has widened my scope at the practice and given patients more options. (R204)

I now independently run diabetes clinics. (R131)

I now have increased knowledge which equals an increased scope. (R30)

Those describing factors associated with enhanced autonomy indicated that as well as being able to provide services they were not previously qualified to deliver, they were also supported by the practice to take on leadership roles and deliver care to patients independent of the GP.

I am now working autonomously and am able to debate appropriate care. (R30)

More autonomy in terms of dealing with patients, including family planning concerns, I have more an advisory role now. (R36)

Working independent, self-directed now – not just hand maiden to doctor’s orders. Feel more part of a team approach to improve patient’s health outcome. (R265)

The training encourages nurses to be more autonomous and take leadership role. (R135)

I have patients booked for me. Before I would just assist doctors and follow their orders. Now I am able to consult patients alone and only consult doctors if I think the case needs an opinion. (R85)

With my qualifications I have been able to secure myself senior roles. I am well respected by the management and I am able to contribute to policy change. (R183)

I believe the course made me likely to be employed in remote clinics as it added to my skill base and increased the level of care I can offer. (R44)

Theme 3: career outcomes of postgraduate education are limited by general practice financial issues

Another theme emerging from the data included respondents reporting career outcomes being limited by general practice financial issues. Factors such as the removal of fee-for-service and the removal of incentive payments for practice nurse (PN) activity, and the lack of GP understanding of the business case supporting an expanded scope of nursing practice were reported as factors limiting education outcomes. In particular, they considered that the work they did was directly related to opportunities for the practice to be remunerated through GP or PN Medicare Benefit Schedule item access.

I have very supportive GP’s, but the bottom line is always money. The government has removed the item numbers for which nurses had recognition and helped bring money into the practice, but since then most of the decisions is about how nurses can still improve practice finances…Patient’s still identify the nurse giving immunisation and doing Pap tests, but generally the doctor seems to be taking on these tasks as they need to generate an item number when the patient is seen. (R64)

I completed the Pap and immunisation subjects mainly because of the previous Medicare funding for nurses. Unfortunately this is all my role is most of the time as I work. (R195)

After doing the Pap credentialing course – my bosses decided they wanted to do their own PAP testing – fearful of legal implications – very exasperating. (R150)

It’s difficult with most of the MBS items no’s [numbers] taken away from nurses; it’s hard to know what direction practice nursing is going to be able to take now. (R76)

Discussion and Conclusion

Advanced nursing practice in the primary care setting has the capacity to address: (1) primary care workforce issues (Watts et al. 2004; Jolly 2007; Joyce and Piterman 2011); (2) the burdens associated with the increasing prevalence of chronic disease (Keleher et al. 2007; Joyce and Piterman 2011); (3) the demands associated with managing the complex care needs of an ageing population (Laurant et al. 2005); and (4) the increased emphasis on the delivery of preventive care (Keleher et al. 2007). Higher education is viewed as critical to the development of advanced nursing practice (Watts et al. 2004; Laurant et al. 2005; Martin-Misener et al. 2010; Parker et al. 2011). This study found scholarship access and distance education as major enablers to undertake postgraduate education.

Interestingly, disparities were evident in the qualification level reported by respondents. The evidence demonstrated that many more respondents undertook single subject courses
compared with other courses such as those at Certificate, Diploma or Masters level. This disparity may reflect the exposure of nurses to the Nursing in General Practice (NiGP) initiative that was delivered to Australian general practices from 2001 to 2012. The NiGP involved the provision of Commonwealth Government-funded scholarships to nurses for access to subsidised single subject courses across all jurisdictions (Jolly 2007). Some single subject courses, such as the Pap test and immunisation provision were delivered cost free as part of this program.

Factors influencing nurses to undertake postgraduate studies in primary care were associated with personal and professional aspirations of the nurse, the capacity building strategies within the general practice and evolving population health needs. This is consistent with other previous studies examining further education of nurses in general practice (Pascoe et al. 2006, 2007; Halcomb et al. 2009; Parker et al. 2011). Also consistent with other Australian research in the area, were barriers to postgraduate education and the need for access to scholarships and distance education to reduce the impact of study earning capacity and family responsibilities (Pascoe et al. 2006, 2007; Parker et al. 2011; Henderson et al. 2014). The general practice barriers that limited the outcomes of postgraduate education were also consistent with those described by Joyce and Piterman (2011) and Parker et al. (2011) in studies examining the work of practice nurses. These barriers, relating to the funding landscape of general practice in Australia and the optimisation of general practice finances, were also similar to those cited in a review of the literature undertaken by Henderson et al. (2014).

The nurses also indicated that workplace factors, such as funded leave, collegial support and reimbursement of course fees were enablers for postgraduate education. In spite of financial support being viewed as an enabler, a large number of nurses (90%; 88/98) reported the funding of travel costs by the workplace as a factor that did not enable postgraduate study (Table 1). This may have been due to most education being undertaken via distance education thereby reducing requirement for travel.

Pearce et al. (2011) examined relationships within general practice teams, and concluded the organisational climate is highly influential in terms of roles for nurses and the use of funding initiatives to support role development. Lack of respect from members of the general practice team after completion of education was also reported by nurses. Further research is required around the complex area of team roles and organisational climate in the general practice setting.

This research was limited by the 41% response rate; however, this response rate is comparable with that of prior studies undertaken around primary care nursing (Pascoe et al. 2006, 2007; Halcomb et al. 2009; Jasiak and Passmore 2009; Joyce and Piterman 2009, 2011; Parker et al. 2011; Australian Medicare Local Alliance 2012). Strengths of the study included the small amount of missing data and the quantity of open-ended responses received.

Recommendations emerging from the findings include: (1) an increased access to scholarships for nurses undertaking postgraduate education in primary care nursing is imperative. As there is currently no allocated Commonwealth Supported Places (CSP) funding for postgraduate primary care nursing courses delivered in the tertiary sector, the allocation of CSP would assist nurses working in general practice to complete studies without the financial burdens associated with unsubsidised higher education degrees; (2) alternative modes of course delivery need to be embedded in the provision of primary care nursing education. Options would include the delivery of web-based distance education courses and the use of innovative information technology services. This would increase access to postgraduate education and in particular would promote the uptake of postgraduate education by nurses who reside in rural and remote locations; (3) the development of Australian primary care policy, including funding models, need to more accurately reflect the level of PCN education, PCN role expansion and extent of interprofessional collaboration that is evident from research undertaken to date.

Nurses with postgraduate education have the potential to increase their scope of practice, take on a greater teaching role and provide more preventive and chronic disease services in primary care. Policy aimed at increasing access to education for nurses working in primary care would strengthen the primary care nursing profession and enhance the delivery of primary health care services in Australia.

Conflicts of interest
None declared.

Acknowledgements
This was a collaborative project between the General Practice and Primary Health Care Academic Centre at The University of Melbourne, and the Northern Division of General Practice.

References


Jolly R (2007) Practice nursing in Australia (Department of Parliamentary Services Social Policy Section Commonwealth of Australia: Canberra) Available at http://parlinfo.aph.gov.au/parlinfo/search-summary/summary.w3p;query=Author%3d%5c.Jolly%2c%5c.R%2c%5c&SearchCategory_Phase%3d%22publications%22%20Author%3d%22jolly%2c%20r%22&source=org.mozilla.en-US.official.client=firefox.&channel=mp%26source=hp&gc_r=cr&ei=v%2AeKZVpUtOvC08geox4DQBOw [Verified 8 October 2014]


