FACTORS THAT INFLUENCE NEW GRADUATES' PREFERENCES FOR SPECIALITY AREAS

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Abstract

In 2012 all District Health Boards in New Zealand participated in a national pilot of the Advanced Choice of Employment system to recruit graduating and newly graduated registered nurses into two supported first year of practice programmes, namely the 'Nurse Entry to Practice' and 'Nurse Entry to Specialty (mental health)' programmes. The system requires applicants to choose in order of preference up to four District Health Boards and three clinical areas where they would like to work. This paper reports a survey of nurses who had registered with the Nursing Council of New Zealand in 2012 and explored factors that influenced their preference for three government priority specialty areas: primary health care, mental health and aged-related residential care. A self-reported survey and a non-probability sample of new graduate nurses was used. The response rate was 34% (n=287). Data were analysed descriptively. The results indicate that new graduate nurses prefer to work in surgical or medical areas to consolidate their technical skills. These experiences are thought to provide a good foundation for future career development. Clinical placement experiences have an important influence on choice of practice setting. Preference for an area is linked to positive experiences as a student. The government priority areas were seen as complex areas and a new graduate needs appropriate support to work there. Supported first year of practice programmes are more available in hospital settings than primary care or aged residential care and therefore influence where nurses choose to work. Finally, nurses who are educated for the profession are disinclined to fill workforce gaps, but desperation for a job often drives them into areas where they have little interest.

Key words

New graduate nurse; baccalaureate nurse; career choice; first year of practice; survey

Introduction

In 2012 all District Health Boards (DHBs) in New Zealand participated in a national pilot of the online Advanced Choice of Employment (ACE) system to recruit graduating and newly graduated registered nurses. These nurses enter one of two supported first year of practice programmes: the 'Nurse Entry to Practice' (NETP) programme or the 'Nurse Entry to Specialist Practice (mental health)' (NESP) programme offered in DHBs and by some private providers. The online ACE system requires the graduating or newly graduated nurse to choose in order of preference up to four DHBs and three clinical areas where they would like to work. Nurse Entry to Practice Programmes were first established

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in 2005 when the then Minister of Health announced new funding to ensure DHBs provided a supported first year of practice for newly registered nurses (Nursing Council of New Zealand, n.d.). In 2007 this scheme was extended from acute areas to cover newly registered nurses in age-related residential care and primary health care. Many of the DHBs offering NETP programmes also require the nurses to complete a postgraduate paper offered by a Nursing Council approved tertiary education provider. The NESP programme is specifically for those newly registered nurses working in mental health and addiction services. The NESP varies slightly from NETP in that NESP requires the nurses to complete a postgraduate certificate as part of their supported programme (Te Pou, 2015).

Background

The research literature is replete with surveys of final year student nurses who have been asked to rank their preference to work in a range of clinical practice areas as registered nurses (Birks, Al-Motlaq, & Mills, 2010; Ganz & Kahana, 2006; Halcomb, Salamonson, Raymond, & Knox, 2012; Koskinen, Hupli, Katajisto, & Salminen, 2012; Larsen, Reif, & Frauendienst, 2012; McCann, Clark, & Lu, 2010; Shen & Xiao, 2012; Stevens, 2011; Stevens & Crouch, 1998). The relative popularity of some clinical practice areas over others is therefore well known. The most common methods of data collection are by survey using forced choice and free-text responses, and interviews or focus groups. Invariably the findings are that the desirability of cardiac care, intensive care, emergency department, and acute medical/surgical settings is high. These clinical practice areas are viewed as 'high-tech', dynamic and life-saving. Conversely, aged care and mental health settings are viewed as 'low-tech' areas, are considered boring and unfulfilling, and are consistently the least desirable areas to work as a newly registered nurse. Community health (the term used in the literature to describe all nurses who work outside of hospitals or long-term care) features less often, but where it is included, it ranks with the other low-tech less 'dynamic' areas (Leh, 2011). These preferences have changed very little over the last 20 years at least (see Happell, 1999; Stevens & Dulhunty, 1997). Nonetheless, workforce shortages in three government priority areas (mental health [MH], age related residential care [ARRC] and primary health care [PHC]) suggests there is need to better understand the factors that influence graduating nurses' choice of clinical practice setting in New Zealand (Ministry of Health, 2015). This paper reports on a national survey of recently graduated registered nurses and explored the factors that influenced their preference for employment with particular reference to the three government priority specialty areas.

Review of the Literature

Studies were identified for this review through searching PubMed and the EBSCO platform databases, which included Medline, CINAHL Plus, Academic search premier and Health source (Nursing/Academic edition, Education source and PsychINFO). The key words and MeSH terms used in the search were 'students, nursing', 'specialties, nursing', 'choice', 'career choice', 'education, nursing', 'baccalaureate' and 'new graduate nurse'. The search was limited to quantitative and qualitative studies published from 2006 onwards unless key earlier studies warranted inclusion. In addition, the choice of area of practice in the first year following graduation had to feature in the research findings for the study to be included in the review. A total of 15 studies were chosen to review. There was no New Zealand research published on the topic.

A critical thread throughout the literature concerns the disproportionate emphasis placed by undergraduate teaching staff on acute care environments and development of the associated technical skills (McCann et al., 2010). Indeed some curriculum contain little or variable gerontology content (Prentice, 2012). Despite the fact that most acute care is provided to those who are over 65 years, invariably, the emphasis in the curricula on acute care is at the expense of more 'basic' subjects

such as long-term care contexts for older people (Stevens & Crouch, 1998). The attitude of teaching staff towards age care settings is noted by students (Abbey et al., 2006) and although not overtly negative, the higher value and importance of high-tech environments is made clear when juxtaposed against the low-tech or basic nursing environments typical of aged care settings (Stevens & Crouch, 1998). These authors also noted the qualifications of those academics who design and deliver the majority of the curriculum and found few qualifications amongst staff in non-acute areas of nursing. There is an argument that supports the transferability of acute care skills to non-acute environments, but this may not always be apparent to students.

Stevens (2011) acknowledges the influence of the curriculum on choice of specialty area for a graduating nurse, but suggests that clinical placement experiences may have a more profound influence. In the context of aged care, Brown, Nolan, Davies, Nolan and Keady (2008) report negative experiences of some students in 'impoverished' environments where standards of care are poor due in part to resource related factors. Impoverished environments are described as having inadequate physical surroundings, insufficient resources and equipment, and little investment in staff training, little opportunity for advancement, poor pay, and poor staffing levels. More time spent in these environments as students, or employment as health care assistants, correlates to decreased preference for aged care as a career destination (Stevens, 2011). Conversely, some aged care environments described as 'enriched', were inspiring and staffed by skilled, knowledgeable and approachable staff who provided excellent care to patients and mentorship to students. Placement experiences such as these had an important impact on choice to work with older people as registered nurses (Abbey et al., 2006; Brown et al., 2008).

Stevens and Crouch (1998) suggest that where nurses' work resembles the curative work of medicine, the more prestigious and attractive that environment becomes to newly registered nurses. Furthermore, the status accorded to various high-tech and low-tech environments is reinforced by society (Gouthro, 2009; Stevens, 2011), and by gender stereotypes where some clinical practice areas are considered to be inherently more suitable for females than males. For example, woman are thought to be more suited to school nursing, paediatrics, and home health areas, whereas mental health, critical care and emergency departments are perceived as more suitable for men (Roth & Coleman, 2008). Indeed, more men than women want to work in critical care areas (Halcomb et al., 2012), and more women than men in public health (Larsen et al., 2012).

Community health settings are viewed by some final year students as lacking in prestige due to their low-tech nature and lack of rigour compared to hospital placements. Students worry that their education and high-tech skills will be under-utilised and ultimately lost in a community health environment, or that a background in medical/surgical nursing is necessary first (Leh, 2011). Similarly, the intention to work in public health more than one year after graduation was found by Larsen et al. (2012) to be twice as high as that at graduation. These authors suggest that recruitment strategies should be focussed on more experienced nurses.

Gouthro (2009) reports that student nurses' perception of mental health nursing is similar to that of aged care and community health with respect to its second class status, its absence of technological tools, and lack of focus on curing illness. Again, the quality and diversity of clinical placement experiences significantly impact on these attitudes and is reflected in mental health being consistently ranked low as a desirable career option (Ganz & Kahana, 2006; Happell & Gaskin, 2013; McCann et al., 2010). A systematic review of 21 studies about student nurses attitudes towards mental health nursing found that while theoretical preparation and longer clinical

placement improves overall attitude, there is no evidence that these factors result in more graduates beginning careers in mental health (Happell & Gaskin, 2013).

The discussion thus far has concerned intrinsic motivation variables that are related to career intentions. Extrinsic motivation variables too have a bearing, and may override personal preferences for a particular specialty area due to the practicalities associated with accepting a position. Examples are the geographical location, salary, hours of work, opportunity for professional development and advancement, and fees rebate incentive schemes (Birks, Al-Motlaq, & Mills, 2010; Larsen et al., 2012; Lea et al., 2008).

Views about where to work may also be influenced by other people such as family members, recently graduated nurses especially if they are from the same programme, and the immediate peer group (McCann et al., 2010). A decision to work in one area may also be a strategic decision to gain clinical experience that will contribute to a nurse's long-term career plans. In sum, and as Prentice (2012) points out, it is not one factor, but a combination of clinical experiences, theory, personal characteristics and practicalities that determine where a new graduate will choose to work.

Method

Aim

The aim of the study was to explore the factors that influence new graduate preferences for a particular clinical setting in New Zealand.

Design

The study was a descriptive cross-sectional electronic survey using a non-probability sample of nurses who had registered with the Nursing Council of New Zealand (NCNZ) in 2012.

Ethical considerations

The ethical aspects of the study were evaluated by peer review, judged to be low risk and therefore formal ethical approval was via notification to the relevant University Human Ethics Committee.

Sample

The total number of new graduate nurses in 2012 was 1620. Of these, 839 had agreed to receive emails and survey invitations for research purposes from the NCNZ. An invitation to participate in the survey and a hyperlink to the online survey (hosted by the Survey Monkey platform) was emailed to these nurses by Nursing Council administration staff in July 2013. A reminder email was sent out two weeks later. Two-hundred and eighty-seven nurses responded to the survey giving a response rate of 34%.

Survey tool

The literature about the preferences for clinical practice area of newly graduated nurses informed the development of the electronic survey questions. Questions were grouped into three main categories about the undergraduate curricula, clinical placement experiences, and personal circumstances that have a bearing on choice, as well as the inclusion of demographic questions. The survey questions were a mix of forced choice and short answer which allowed for further comment to expand on or clarify forced choice responses. Review by senior nursing academics and staff of the Office of the Chief Nurse confirmed the questions were appropriate for meeting the aim of the research.

Data analysis

The data were exported from Survey Monkey into an Excel spreadsheet, and then imported into SPSS version 20 (IBM SPSS Inc, 2014) for analysis. The data were checked for errors following the method described by Pallant (2013), then analysed using fundamental descriptive techniques. Most of the variables are categorical, but where variables

are continuous, measures of central tendency are reported. Figures were produced using Microsoft Excel. Thomas' (2006) general inductive approach was utilised to analyse the written or text responses provided by participants. This data analytic method is commonly used to reduce, sort, organise and make sense of qualitative data "… without the constraints imposed by structured methodologies" (p.238). The written responses were read and key categories formulated in relation to the focus of each of the short answer questions.

Results

The median age of new graduate respondents was 27 (range = 20 to 56 years), with a mode of 22 years that is commensurate with a new graduate cohort. Similar to the wider nursing workforce, 95% (n=272) are female. Although there were responses from graduates of all the education institutions that provided BN programmes, the sample was not distributed in proportion to the graduating population from each institution (range = 5 to 30).

Choice of clinical practice area

When new graduates applied for a position using the ACE portal they were required to nominate up to three preferred clinical practice areas. Figure 1 shows the choices made (n=284). The areas are ranked according to first choice. The first nine areas are almost identical to the rankings published in the Ministry of Health document *The recruitment of new graduate nurses in New Zealand* which used the entire ACE cohort and is 4.5 times larger. With regard to the three government priority areas of PHC, ARRC and MH, chi-square goodness-of-fit tests[1][2][3] indicate there were no significant differences in the proportion of respondent's preferences in this survey to those reported in the Ministry of Health data (Ministry of Health, 2015). Respondents were invited to comment on what had attracted them to their top three choices. Typical words associated with these choices were positive: *enjoy, passion, fast paced, high acuity, challenge, variety, satisfaction, rewarding,* and *solid experience.* Many cited positive clinical placement experiences in these areas.

Factors influencing choice of clinical practice area

The factors that influence preference for clinical practice area are shown in figure 2 and are ranked according to influence. The need to consolidate nursing skills in a hospital environment is the most important factor

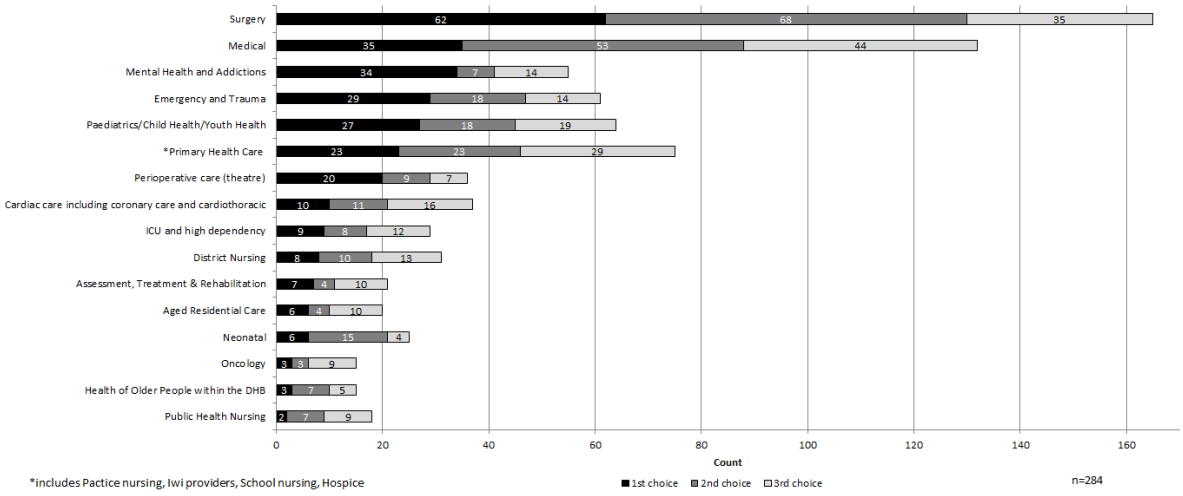

Figure 1: Choice of clinical practice area

[1] primary care, $X^2(2, n=271) = .919, p < .63$

[2] aged care, $X^2(2, n=271) = 4.25, p < .11$

[3] mental health $X^2(2, n=271) = .343, p < .84$

(58%, n=167), followed by long term career plans and the availability of a NETP or NESP programme. A chi square analysis shows a highly significant relationship between the importance of consolidating nursing skills in the hospital and a later question that asked if they were concerned about losing skills outside the hospital, X2(6, n=237) = .52.584, p=.000. These findings indicate there is a perception amongst graduate nurses that they should consolidate their nursing skills in the hospital environment before embarking on employment outside the hospital. Short answer responses were consistent with this finding: *"Felt med-surg nursing would be the best area to work to give me that base knowledge".*

Career plans

Choice of clinical area was related to the respondents career plans or trajectory for 78% (n=209) of respondents who answered this question (n=269). There were many short answer responses about participants' career plans, indicating that respondents had carefully considered their nursing future. For example,

> *Continue gaining experience within the hospital setting, do some post graduate study then maybe branch out into primary health care during which I hopefully will have found my niche in nursing.*

Advanced nursing practice roles and expectations of postgraduate study featured prominently in the short answer responses:

> *Currently I am working in an inpatient unit to further my clinical skills within the mental health sector with a view to possibly transition into community mental health nursing (with further study prospects), then work towards working as a DAO [Duly authorised officer] in the Psychiatric Assessment Triage Team (Crisis Team). Hopefully later there will be a position within primary/rural health further up the coast for me to work with Māori whanau/hapu and iwi.*

Availability of NETP or NESP programmes

A total of 78% (n=223) of respondents identified that the availability of NETP and NESP programmes influenced their choice of clinical setting. Successfully securing a place on a NETP or NESP programme meant that some graduates made a conscious decision to work in an area of practice they were not necessarily interested in.

> *I am currently on the NESP programme as I was not given a position on the NETP. Due to this set back I now no longer know how I can continue along my*

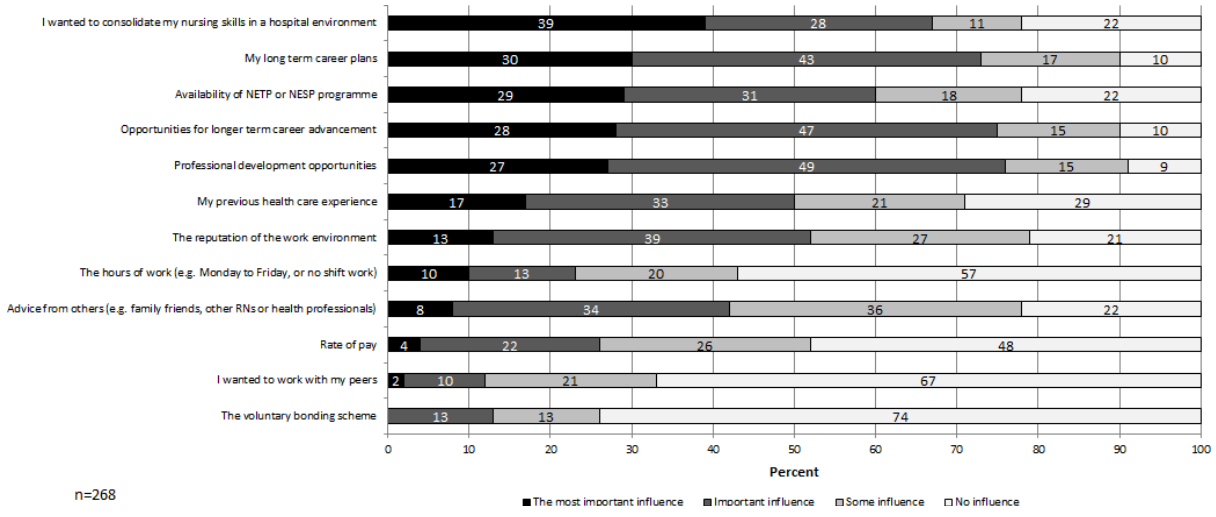

Figure 2: Factors influencing preference of clinical practice area

previous career plan as the only experience I have is in mental health which is a field I do not want to work in.

Those who were not successful in securing a NETP placement through the ACE system made contact with other DHBs who still had vacancies, as well as making sure NETP programme coordinators were aware that as a new graduate they were prepared to wait until a vacant position in a future intake became available.

I arranged to meet with the NETP programme co-ordinator and gave her my CV. I went through an interview as a position became available and I was offered a NETP position to start in Jan 2013.

Geographical area

Sixty-two percent (n=178) of respondents agreed it was important they stay in the same geographical area after degree completion. Reasons for wanting to stay are shown in figure 3. Staying close to friends and family and family responsibilities such as older parents or having children at school were ranked as having the 'most important' and 'important' influences, followed by partner's employment. Another influence on wanting to stay in the same geographical area was because *"I know the area and the culture of the DHB through placements".*

Attractors to government priority areas

Respondents were asked to identify the things that would have attracted them as new graduates to the government priority areas of ARRC, MH and Primary Health Care.

Age Related Residential Care:

A number of respondents said there was nothing that would attract them to working in ARRC with comments like *"Only if I had to"*. Others identified financial rewards or incentives, for example *"… better incentives such as higher pay or money towards paying of student loans and education opportunities".* Occasional references were made related to the level of skill needed to work in the sector: *I probably would've preferred to work in aged care rather than theatre because of the clinical skills I could have gained.*

Other respondents suggested they would be attracted to working in ARRC if more support was provided to new graduates:

More peer support for new grads - at the moment new grads are often left working in charge of night shifts/admin of meds/supervising unregistered staff with no peer support at all - making it unsafe for those new to nursing.

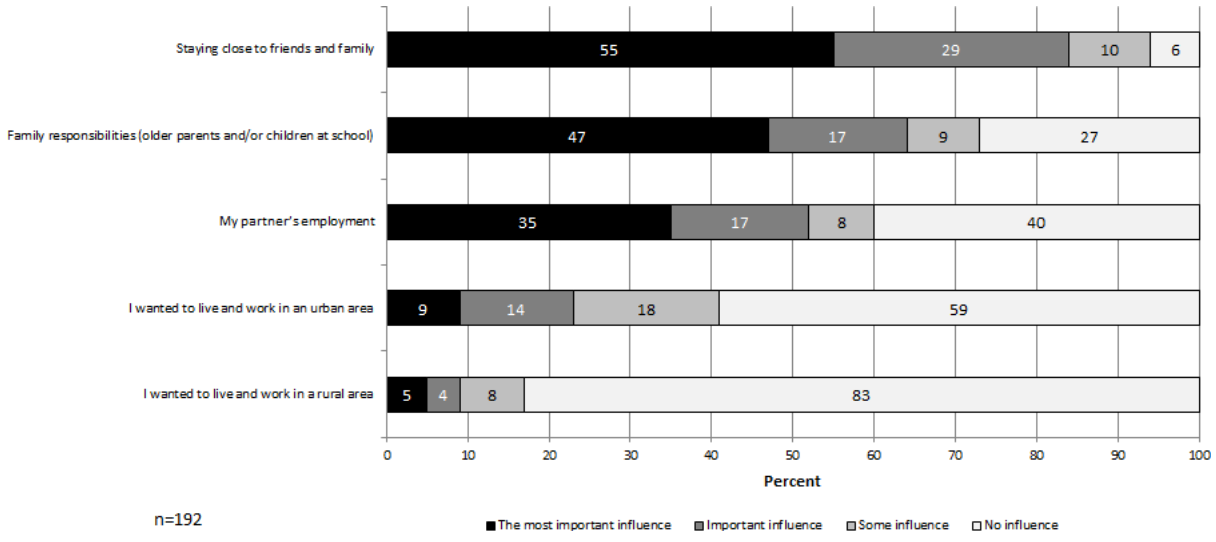

Figure 3: Influences to stay in same geographical area

Mental Health:

Some respondents identified that there were no incentives that would entice them to work in MH. As identified above, several participants said financial incentives would influence them to work there: *"ridiculously good pay"* and *"if I knew I could swap easily to other areas of nursing without much difficulty".* The idea of working in MH was not ruled out for some respondents as identified by comments such as *"I enjoyed this in training however wanted to have a solid understanding of medical and surgical nursing at the beginning of my career and might pursue this area in the future";* and, *"Not ready yet. Don't have enough life experience".*

Primary Health Care:

As with ARRC and MH, some were not interested at all in PHC. Other common factors that would entice new graduates to work in the PHC setting included money and greater levels of support. For example, *"I love primary health but I have a very big student loan and I decided it was not paying enough to cover my loan as compared to shift work";* and, *"I feel in primary care I need to have the confidence of working without much support".*

Consistent with earlier comments about the need to consolidate nursing skills in the hospital environment, several respondents commented that initially working in the acute care environment was important and they would work in PHC later in their careers. For example, *"I would consider primary health later after a few years in acute care nursing"* and *"I was told that it would help if I had a good clinical foundation [working in the acute care setting] before going into primary care".*

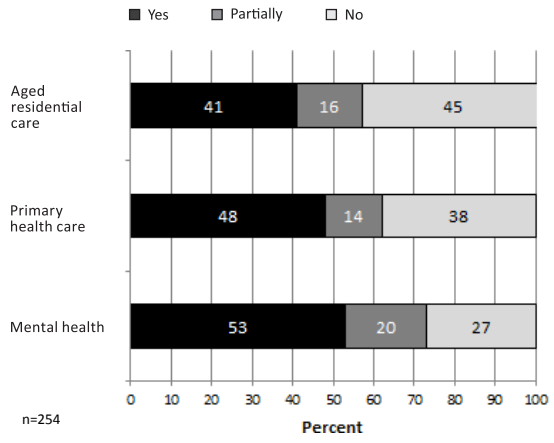

Figure 4: Influence of clinical placements on choice of clinical area

Others felt there were not enough jobs in PHC:

> *I would have liked to work in primary care but just felt there were not the jobs available in this area. One of my classmates who did her last clinical placement in primary care still does not have a job. Also this area has a reputation for potentially being very unsupported especially if you are in a small practice and the other nurse doesn't agree with you being there or doesn't like you. This could be an issue in an aged care facility too.*

Clinical placement experiences

Clinical placement experiences in ARRC, PHC and MH were a strong influence on choice of practice area as a new graduate (figure 4). Short answer responses elaborated on the influence of student placement experiences and choice of clinical area. These were loosely categorised as positive and negative responses with examples provided in table 1.

Discussion

The purpose of this research was to explore factors that influence new graduate preferences for a particular clinical setting. Consistent with findings in the published research, the need to consolidate nursing skills in a hospital environment was ranked as the 'most important' or 'important influence' in choosing this setting. Working outside the hospital was perceived to lead to a loss of nursing skills (Leh, 2011; Shen & Xiao, 2012). Technical nursing skills are perceived by graduates to be consolidated in secondary and tertiary level hospitals and this may account for new graduate nurses preferring employment in surgical and medical areas (Brown et al., 2008; Halcomb

Table 1: Examples of clinical experiences during the BN that influenced choice of clinical area

POSITIVE COMMENTS	NEGATIVE COMMENTS
"Mental health placement was very good - it gave me insight into what the work involved - and from this placement I knew that it wasn't up my alley. Primary Health Care: I specifically asked to have my placement at [name of primary care service] as I knew they had an amazing philosophy and support in place - this largely influenced my desire to work in an organisation that has a philosophy congruent with theirs. Aged care: My placement here was in first year - I found it wasn't really my type of nursing - and from working as a Caregiver prior to entering nursing, I was not exactly 'taken' by the RN's role in this area".	*"Mental health was not a placement I enjoyed. I learnt what I needed to be able to know how to work with mental health patients in a hospital setting, however, from my placement I knew I wasn't suited to be a mental health nurse so I was not interested in applying for the mental health nursing new graduate programme".*
"Aged care was our first clinical, generally in rest homes. The main focus was consolidating patient care principles and the beginning of patient assessment … I had very good experiences in my mental health clinical. I very much considered this as an option for my new graduate year but I did not choose it because I would like to spend time in a general setting also and I did not want to become specialised in mental health so early in my career."	*"I think the style of nursing in mental health was not really my style, I'm more a task orientated person. And my 3rd year placements in Mental health and PHC were not very encouraging, and somewhat lacking for me, so I did not choose this area".*
"It intrigued me regarding mental health although I felt that my level of knowledge and assessment skills would need to increase prior to going into those environments, although I wouldn't rule this out in the future. I felt primary health nurses were very knowledgeable and I felt I couldn't do my patients justice if I went straight into one of these environments. I also feel as a new grad that the support was perhaps not up to standard and the potential for becoming isolated probable. I felt I could definitely work in aged care, however felt that lack of support and isolation were very prominent. And also a lack of variety was another large factor in my choice away from aged care."	*"Experience in aged care showed that there was a low nurse to patient ratio with the majority of care provided by health care assistants. I found this to be negative as a lot of the care provided was not a level required to provide excellent or even adequate care a majority of the time. I will not work in this area unless a major shift in the way these services are provided, meaning a higher nurse to patient ratio plus higher skilled health care assistants. Primary health care would need a relevant NETP program to support new entrant nurses as many community facilities were not keen to provide or link in with the NETP program".*

et al., 2012). These experiences are thought to provide a good foundation for future career development.

Similar to findings by Leh (2011), a range of influences were identified which varied widely according to the career plans of nurses, the availability of a NETP or NESP programme, and the influence of clinical experiences offered by the various education institutions. The personal circumstances of individual nurses may override all these factors and the opportunity to work in a preferred area appears to be carefully weighed against the need to stay in the same geographical area due to the needs of family, and the often urgent need to be in paid employment (Prentice, 2012).

The career plans of new graduates were ranked as the second most important influence on choice of clinical practice area. Detailed plans were provided by respondents demonstrating considerable thought had gone into a planned career trajectory that often included clear expectations of postgraduate study and advanced practice roles (Ganz & Kahana, 2006; Happell & Gaskin, 2013; McCann et al., 2010). New graduates educated for the profession were disinclined to fill workforce gaps, but desperation for a job drives them into areas where they have little interest.

The third most important factor influencing preference for clinical practice area, and a problem that is unique to New Zealand, was the availability of a NETP or NESP programme. The NETP programme is not universally available in primary care or aged related residential care, and NESP has limited placements. Given the importance placed on getting into a structured and supported first year of practice programme, and the encouragement to consolidate nursing skills in a hospital (medical/surgical) setting, new graduates nurse chose settings where these programmes were offered.

The three government priority areas of PHC, MH and ARRC were recognised by students as complex areas that need good support to work in safely. Comment was also made about the professional isolation of these areas. Career plans indicated that nurses may want to work in these areas in the future when they had a broader range of experience and expertise to bring to their practice. There were many positive views expressed about eventually working in each of the government priority areas, particularly in ARRC.

Limitations to this study include a non-probability sample, a response rate of 34% and the potential for non-response bias. Response bias refers to potential differences in view and experience between those who chose to respond to the survey and those who did not respond (Polit & Beck, 2008). The findings are not generalisable due to the non-probability sample and the reasonably low response rate. However, the choice of clinical practice areas the findings in this study report are representative in relation to previously published Ministry of Health data (Ministry of Health, 2015).

Conclusion

Clearly evident in the data was the preference to work in an acute hospital environment as opposed to ARRC, PHC or MH. This is unsurprising as for many years newly registered nurses have preferred to work in acute settings. There is a consistent sense of newly registered nurses feeling they should consolidate their learning by working in the hospital setting before moving to what they consider to be more challenging and less supportive contexts. Managing this preference requires a range of strategies if the goal is to have more newly registered nurses working in areas such as PHC and MH. Understanding their preference and working, with some urgency, to improve the strategies in PHC, MH and ARRC to support new graduate nurses seems important. Furthermore, the tertiary education sector needs to be aware of the impact and influence attitudes expressed by nurse educators have on the choices students make regarding place of employment post registration. Therefore, the findings from this study can inform future workforce planning in relation to clinical area of choice for new graduates.

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