

This is the peer reviewed version of the following article: Hammond Athena et al. 2011, 'Same ... Same But Different: Expectations Of Graduates From Two Midwifery Education Courses In Australia', Wiley-Blackwell, vol. 20, no. 15-16, pp. 2315-2324. which has been published in final form at <http://dx.doi.org/10.1111/j.1365-2702.2011.03774.x> This article may be used for non-commercial purposes in accordance With Wiley Terms and Conditions for self-archiving'

Hammond A, Gray J, Smith RM, Fenwick J, **Homer CSE**. (2011) Same ... Same but Different: Expectations of graduates from two midwifery education courses in Australia. *Journal of Clinical Nursing* 20(15-16):2315-24

SAME ... SAME BUT DIFFERENT: EXPECTATIONS OF GRADUATES FROM TWO MIDWIFERY EDUCATION COURSES IN AUSTRALIA

ABSTRACT

Aims and Objectives. To identify the expectations and workforce intentions of new graduate midwives from two different pre-registration educational courses at one Australian university.

Background. In Australia there are two different educational pathways to midwifery qualification; one offered for registered nurses, commonly at a postgraduate level, and the other for non-nurses, at an undergraduate level. The knowledge about midwifery graduates in general is reasonably limited, and there is no specific research that examines the similarities and differences between graduates from the two different courses.

Design. A cross-sectional design was used.

Method. Data were collected by questionnaire from both undergraduate and postgraduate midwifery graduates in 2007 and 2008 at one Australian university. Data were analysed using descriptive statistics.

Results. Almost all the graduates from the two different pre-registration courses intended to enter the midwifery workforce with both groups rating the factors that influenced this decision similarly. There were however significant differences in graduates age and their intention to work part time. Their views of their ideal roles and subsequent uptake into formal new graduate transition programs differed. Graduates from the two courses also reported philosophical differences regarding their concepts of job satisfaction and ways their jobs could be improved.

Conclusions. The graduates from the two different courses showed sufficient significant differences to warrant consideration in current workforce planning for midwifery.

Relevance to clinical practice. The factors that influence the career decisions of new graduate midwives can positively impact educational and workforce planning. The findings may be able to help inform strategies to address turnover and attrition in midwifery.

Key words: midwifery, new graduate, expectations, midwifery education, workforce intentions.

INTRODUCTION

Midwifery, like many health professions, is experiencing workforce shortages (WHO 2006). In many countries, the health workforce is also ageing which has implications for long term sustainability. Adding to these issues are considerable changes in the provision of health care in many countries like Australia, including increased acuity, decreased length of hospital stay and an emphasis on using the available workforce more efficiently and appropriately (Productivity Commission 2005). In midwifery, this has meant changes in models of care and changing philosophies of midwifery practice that has given rise to new forms of education and practice (Homer 2006; Homer, Passant et al. 2008; Commonwealth of Australia 2009; Foureur, Brodie et al. 2009).

Between 1984 and 1993, midwifery education in Australia moved from hospital based training to the tertiary sector (Leap and Barclay 2002). Since this time, the most commonly offered pathway to midwifery registration has been a postgraduate qualification undertaken only after the completion of an undergraduate degree in nursing. Postgraduate midwifery courses are generally twelve months long and students are usually employed in the hospital setting for the duration of the course (Leap 2002). Undertaking midwifery preparation via the postgraduate route after nursing is the most common pathway to midwifery registration across Australia (n=30 courses).

In 2002, after a comprehensive national review of midwifery education (National Review of Nursing Education 2002), a new entry point to midwifery qualification was introduced in the Australian states of Victoria and South Australia (ACMI 1999). This was the Bachelor of Midwifery, a three year undergraduate degree that leads to registration as a midwife. The course is open to applicants who meet the university entrance requirements; applicants may be school leavers or mature age students for whom no previous nursing qualification is required.

Since the 2002 review, legislative changes in a number of Australian states and territories have resulted in the development and implementation of a number of three year undergraduate midwifery courses around the country. In 2002, there were two such courses in Australia, whereas in 2010, there are 11 courses, with at least three more in final planning mode. In New South Wales, the largest state in Australia, the first Bachelor of Midwifery course commenced in 2005 at the University of Technology, Sydney (UTS). At UTS, this course runs alongside the Graduate Diploma in Midwifery, which has prepared registered nurses to practice as midwives for more than 10 years.

Students who commence midwifery education, particularly via the undergraduate route, seem to have clear expectations of their future role. One study from Australia showed that first year midwifery students had a clear understanding of the affective attributes required of a what they considered to be a 'good midwife' but a lesser understanding the knowledge and competence that was necessary (Carolan 2010). An earlier Australian study examined the expectations and experiences of the first cohort of students from a Bachelor of Midwifery program by collecting data at the commencement and completion of each year of the program (Seibold 2005). The study concentrated on the student's experience in the program, especially the practical component of the course and the preferred styles of learning. The results showed that the most contentious was the students' practical experience, especially the organisation, quality and the documentation required. In the United States, a study about the midwifery students' observations of ideal midwifery care in different educational and clinical midwifery settings showed that practice location, rather than espoused theory or type of education program, may influence the experience of students (Lange and Kennedy 2006). These studies and others provide important insights into the experiences and expectations of students but do not specifically address their expectations upon graduation.

Some research in nursing has explored the entry behaviours and expectations of graduates. For example, a study of Australian nursing graduates showed that they entered the workforce with optimistic expectations and a strong commitment to maintain a position in their initial place of employment (Heslop, McIntyre et al. 2001). However, research on the Australian health workforce found a high proportion of new graduate nurses leave the profession after only a few years (Productivity Commission 2005). This disparity between expectations and actual workforce choices may be similar for midwifery graduates but at present this is largely unknown.

As highlighted, there is a paucity of literature about the expectations and workforce intentions of midwifery graduates in Australia (Gum 1999; McCall, Wray et al. 2009). Despite dual entry points to the profession, there is a limited understanding of the similarities and differences between graduates from these two courses. Anecdotally, midwifery educators and industry leaders have suggested that there are differences in the demographic profiles of Bachelor students and Graduate Diploma students (who are also registered nurses), as well as possible differences in expectations and workforce intentions.

In an effort to address this lack of knowledge, a longitudinal cohort study has commenced at UTS to investigate midwifery turnover, retention, experiences and choices. This study is known as

MidTREC (Midwifery Turnover, Retention, Experiences and Choices). This paper presents the first analysis from the MidTREC study, which included participants from the first two Bachelor of Midwifery cohorts and two cohorts of Graduate Diploma of Midwifery graduates. The aim of this analysis was to describe and compare the expectations and workforce intentions of the Bachelor of Midwifery and Graduate Diploma in Midwifery graduates. This is an important first stage of the MidTREC study as it will also provide a baseline for later data comparison of the same group of graduates over the next five years as well as a comparison with future graduating students.

METHODS

Design

A cross-sectional study was undertaken. Data were collected using a questionnaire. The study received university ethical approval and all data were de-identified.

Setting

This research was conducted at the University of Technology, Sydney (UTS), Australia. UTS is a large metropolitan university situated in the capital city of NSW. At the time of this study, UTS conducted the only Bachelor of Midwifery course in NSW.

Sample

The sample consisted of pre-registration midwifery students from the two courses who were due to graduate from UTS in 2007 and 2008 (n=123).

Recruitment and data collection

Participants were recruited during class time in the last week of their studies. Information about the aims and methods of the study was given to students by a facilitator and it was emphasised that participation was voluntary. Participants were given an opportunity to ask questions and seek clarification. Those interested in participating were asked to sign a consent form. Once this was attended, participants received a self-administered semi-structured questionnaire, which they completed in the classroom and returned to the facilitator in a sealed envelope. In the Bachelor of Midwifery (BMid) group, 40 of 44 (90%) students returned questionnaires. In the Graduate Diploma of Midwifery (GradDipMid) group, 83 of 102 (81%) students returned questionnaires. Overall, the response rate was 84%.

The questionnaire was developed by Kirkham and colleagues in the United Kingdom (Kirkham and Morgan 2006; Kirkham, Morgan et al. 2006). It was modified and used in an Australian midwifery workforce study (Sullivan 2010). We used this modified version, changing the terminology to reflect the future rather than the present, for example, we asked 'what do you think will give you job satisfaction' rather than 'what gives you job satisfaction' as in the modified Kirkham questionnaire. The questionnaire has four lists of statements scored using five point Likert scales. The lists of statements asked participants to identify: (a) reasons for staying in midwifery; (b) where they get job satisfaction; (c) what will keep them going as a midwife; and (d) changes that would improve their midwifery jobs. Five response points to the statements in each of these lists were provided. They are; (1) very important, (2) important, (3) not an issue for me, (4) disagree or (5) strongly disagree. In this paper, only the closed questions (quantitative data) are analysed.

Analysis

The quantitative responses were coded and entered into the statistical package PASW Statistics Data Editor (formerly known as Statistical Package for the Social Sciences or SPSS). The five responses points were re-coded with 'positive' statements defined as those that were 'very important' or 'important'. The items on the Likert scales were analysed by reporting those that 80% or more of the whole participant group responded positively. This was done to focus on what matters most to the respondents and what factors most strongly influenced them.

Descriptive statistics and cross tabulation were used. Chi-squared tests were applied to test for differences between the groups between the two groups (BMid and GradDipMid graduates). Only the statistically significant results are reported. An alpha level of 0.05 was used as statistical significance.

RESULTS

There were 40 Bachelor of Midwifery (BMid) graduates (33% of sample) and 83 GradDipMid graduates (67% of sample). Almost all (98%) were women with three men in the Graduate Diploma group. The mean age was 31 years (range 21 to 54 years). BMid graduates were older (mean 37 years) than GradDipMid graduates (mean 28 years). Almost all in the GradDipMid group (98%) had previous Bachelor degree or post-graduate level qualifications, reflecting the entry criteria for the course. In comparison, 55% of the BMid graduates had prior qualifications.

<Table 1 here>

Intention to Practice

Almost all participants intended to practice as midwives following qualification (95% in each group) with over 80% having applied for midwifery positions at the hospitals in which they undertook their clinical practice experience. When asked about the type of positions they had applied for, just over half (55%) applied to do some form of structured new graduate transition program. This was higher in the BMid group (79%) compared with the GradDipMid group (42%). Very few graduates applied to work in a midwifery continuity of care model on graduation (3% BMid versus 6% GradDipMid) although it is known that very few such models were available to new graduates.

Almost half of participants (41%) wanted to work part-time. This differed however between the groups with two thirds (62%) of the BMid group choosing part-time work compared with around one third (31%) of the GradDipMid group. In the BMid group, 42% 'needed' to work part time whereas only 12% of the GradDipMid group 'needed' to work part-time. For the most part, the BMid group choose to work part-time for family reasons (caring for dependent children).

Participants were asked to record their ideal role, job or position on graduation as a midwife. Fifty percent of participants reported that working in a midwifery continuity model was their ideal role. However over two thirds (82%) of the BMid group reported this ideal as opposed to only one third (33%) of the GradDipMid group. In contrast, a role that involved rotation through all the areas (antenatal, labour and birth and postnatal) was the ideal for another one third of the GradDipMid group but only 8% of the BMid group.

Influences to stay in midwifery

The importance within the eight factors that influenced their decision to stay in midwifery upon graduation was ranked by participants. All eight were regarded by more than 80% of participants to be 'very important and important' to their decision to stay in midwifery. Only one factor was regarded as 'very important and important' by 100% of the whole cohort, which was 'use of my midwifery knowledge' (Table 2).

<Table 2 here>

Job Satisfaction and Retention

Participants indicated their potential reasons for staying in midwifery from a list of 24 possible statements. Six were rated as 'very important or important' by 80% or more of participants, including 'I enjoy my job'; 'I feel privileged to be a midwife'; and, 'midwifery is a job I feel passionately about' (the 6 statements are presented in Table 3). Five of these were similar between the groups with 'midwifery is a job I feel passionately about' scoring significantly higher by the BMid group ($p=0.007$).

<Table 3 here>

Almost one third of the overall cohort (30%) reported that their reason for staying in midwifery would be because 'the alternatives to midwifery are not preferable'. This was higher in BMid group (43%) compared with the GradDipMid group (24%) ($p=0.03$). More respondents from the BMid group (65%) felt that 'I don't consider it [midwifery] work, it's just my way of life' compared with the GradDipMid group (44%) ($p=0.03$).

Participants were asked about the factors contributing to potential job satisfaction in the future. There were 14 statements rated as 'very important or important' by 80% or more of participants (the 14 statements are described in Table 3). The top two statements were equally important between the groups: 'feeling like I make a difference to women'; and 'seeing women happy' (Table 2).

A number of factors were rated by less than 80% of the cohort but were statistically significant between the groups. In particular, 63% of the GradDipMid group felt they would get job satisfaction from 'feeling like I make a difference to colleagues' compared with 88% of the BMid group ($p=0.005$). The statement 'feeling valued by colleagues' was also rated different between the groups (95% of BMid versus 79% of GradDipMid; $p=0.008$). Additionally, only 13% of the BMid group felt that the 'adrenaline rush of the hospital' would provide job satisfaction compared with 41% of the GradDipMid group ($p=0.002$).

Participants were asked to identify the supports that would 'keep them going as a midwife'. Five statements were rated as very important or important by 80% of the overall cohort including 'having a positive outlook'; 'putting into the job as much as you want to get out'; and, 'being an experienced midwife' (these 4 are presented in Table 3). Four statements were similar across the groups, with 'taking positive action rather than grumbling' being statistically significantly different (BMid 95% versus GradDipMid 75%; $p=0.02$).

The overall cohort identified 'taking sick leave' (28%) and 'not working full-time' (46%) as potential coping strategies. There were however significant differences between the groups. For example only 13% of BMid graduates as opposed to 35% of GradDipMid graduates cited 'taking sick leave' as an effective coping strategy ($p=0.008$). Likewise, 39% of the GradDipMid group compared to 60% BMid Group 60%) identified 'not working full-time' as a coping strategy ($p=0.03$).

Ways that midwifery could be improved

Twenty-five statements related to how midwifery jobs could be improved. Only two of these statements were rated as 'very important or important' by 80% or more of participants; 'improved salary' and 'greater flexibility in working hours'. In addition, 79% of participants agreed that 'more midwives at work' would be a job improvement. These were similar across the groups.

There were some differences between the groups in this area. Almost all (90%), of the BMid group felt that their jobs would be improved by 'less routine medical intervention with women' compared with only 65% of the GradDipMid group ($p=0.004$). Another difference between the groups was the importance graduates placed on 'feeling more valued by women' (BMid 33% versus GradDipMid 53%; $p=0.04$).

Future Plans

Participants were asked to describe their plans for their midwifery career over the next twelve months. Overall, 27% were planning to move to a different hospital and 38% were planning to move into a different area of midwifery; just over half (51%) were hoping for more clinical responsibility. One fifth (23%) were planning to move into midwifery education, which was similar across both groups. Three graduates (4%) from the GradDipMid course were planning to leave midwifery altogether but none of the BMid group expressed this intention.

DISCUSSION

This paper has presented the initial findings from the MidTREC study, with a particular emphasis on identifying the differences between participants graduating from two different midwifery education courses. The findings suggest that as a whole group, these graduates demonstrated a strong intention to enter the midwifery workforce and a clear wish to practice using the full scope of their midwifery knowledge. The two groups were different in terms of their age and intention to work part time; their uptake into new graduate transitional programs; their concepts of ideal roles

and positions they applied for on entry to the workforce; and their concepts of what would bring them job satisfaction. These differences will be examined in the following discussion.

The association between age and employment status

Participants in the GradDipMid group were, on average, ten years younger than those from the BMid group. The mean age of registered midwives working in Australia is 45.6 years (AIHW 2005; Commonwealth of Australia 2009) and the largest proportion of nurses and midwives working in Australia are between 45 and 49 years of age (AIHW 2009). The mean age of the BMid group is representative of the average age of the Australian midwifery workforce, whilst the GradDipMid groups mean age is below that of both nurses and midwives in the Australian health workforce. This is significant in terms of workforce planning, as older graduates are likely to have a shorter career length and may have more family commitments than younger women (Australian Nursing Federation 2004).

Although the BMid group are undoubtedly older than the GradDipMids, it may be too simplistic to assume that this will be the dominant factor in mediating the length of time they spend in the midwifery workforce. For example, significantly more of the BMid group indicated that they were passionate about midwifery and saw midwifery as a way of life, not just a job. In comparison a higher percentage of the GradDipMid group saw working in midwifery as convenient and a gateway to other things. While two thirds of the GradDipMid group felt midwifery was preferable to general nursing, one third may return to nursing. It is not known whether those who returned to nursing would choose to maintain their midwifery registration.

Although the BMid group were more likely to have family commitments than the GradDipMid group, one could speculate that the GradDipMids will be more likely to leave the workforce at some time in the next decade to have children. Once midwives exit the workforce to begin a family, research suggests that they are unlikely to return to full time work (AIHW 2009). Many Australian states and territories now engage specific strategies to encourage nurses and midwives to re-enter the workforce (Productivity Commission 2005). The influence of these strategies is unclear as there is little Australian data describing the workforce movements and motivations of midwives. This is an area that requires further research to understand the impact of the age difference in these groups of graduates.

In terms of intention to work part-time, we saw significant difference between the groups with twice as many BMids intending to work part time compared to GradDipMids. Overall the preferred work status of participants is in line with 2007 national data that showed nearly half of all registered nurses and midwives worked part time (AIHW 2009). Research carried out by the Australian Institute of Health and Welfare (AIHW) (2009) demonstrates a relationship between the age of nurses and midwives and the number of hours they work. Nurses and midwives in the 25 years and less age group are more likely to work full time compared with those in older age groups (AIHW 2009). In our study, the GradDipMid group had its largest proportion of participants in the 21 to 25 year age group so it is unsurprising that most were looking for full time hours. In the BMid group just over half of participants wanted to work part time. The largest proportion of the BMid group were aged 41 to 45 years. According to the AIHW (2009), 55% of nurses and midwives in this age group are looking for part time work which is reflected in our data.

New graduate transition programs

Participants from both groups showed an equally high intention to enter the midwifery workforce; 95% of both groups were planning to work in midwifery upon graduation. Given current and projected health workforce shortages in Australia, this is a positive finding. The majority of both groups indicated they would be seeking work as new graduates within the hospitals they had attended for clinical practice, although the type of initial employment chosen was quite different.

In NSW, the options for initial employment in the hospital setting are dependent on the educational pathway that the midwifery graduate has undertaken. BMid graduates can apply for formal new graduate positions through a centralised process that is managed by the Department of Health. Hospitals receive funding for each BMid graduate that they employ in this way. In contrast, the GradDipMid graduates, who have already worked in an employed model during their training, apply directly to hospitals for a midwifery position. In some instances GradDipMid graduates may be offered a new graduate transition program by their individual hospital but this does not appear to occur very often.

These circumstances were reflected in this study, with less than half of the Grad Dip group entering the workforce via a formal new graduate transition program. In contrast, just over three quarters of the BMid group applied to enter the workforce through a new graduate transition program. New graduate or 'entry to practice' programs are somewhat controversial. In New Zealand, for example, where the Bachelor of Midwifery is more common than in Australia, Panattiere and Cadman (2002)

have argued that midwives exiting undergraduate midwifery programs (ie those without previous nursing qualification) should have an 'entry-to-practice' program. They believe this is necessary to consolidate the skills that enable new midwives to work autonomously in either a hospital and/or community setting, and in any model of care. In Australia, Passant, Homer and Wills (2003) showed that newly graduated midwives can rapidly develop the skills associated with autonomous practice without engaging in formal new graduate programs.

At present it is unclear what impact the formal new graduate program has on the workforce intentions of new midwives, or whether these programs can influence retention in the midwifery workforce. Once again this is an area that requires more research to understand the impact that uptake into formal new graduate programs have on graduates from the two educational pathways.

The discrepancy between ideal and actual workforce roles

We found a considerable disparity between the stated ideal roles of the participants and the types of positions they applied for on entry to the workforce. Overall, working in a continuity of care model was seen as the ideal role by half of the sample. Continuity of care models are characterised by women receiving care from the same known midwife (or small group of midwives) for the duration of their pregnancy, labour and birth and early postnatal period (Homer, Brodie et al. 2008). However, despite such a high level of role idealisation, only five individuals applied to work in such a model. The majority of the participants indicated that continuity models were either not available or, more frequently, that hospital management did not support them to enter these models as new graduates.

The small numbers of new midwives being given the opportunity to work in continuity models is worrying, particularly considering Australia's current maternity service reform agenda. This agenda clearly articulates that a 'key element of quality maternity care' is the implementation of woman centred continuity of care models, which allow midwives to work to the full scope of their practice (Commonwealth of Australia 2009) (p18). Half of the participants in this study clearly indicate that they would prefer to work in continuity of care models, however there seems to be a persistent belief that new graduates are not able to work in these models. In direct contrast to this, a recent Australian publication, which specifically addresses the staff selection process for continuity models, states that new graduates are 'excellent candidates' and are 'ideally placed' to work in continuity models (Homer, Brodie et al. 2008) (p77). Unless the tension between these two attitudes is resolved it is highly plausible to argue that graduates who are not supported to work

within continuity of care models may be lost to the profession, contributing further to workforce shortages.

Finding job satisfaction

When asked about where they would find their job satisfaction, the two groups felt similarly strongly that making a difference to women was an important factor. Interestingly, just under half of the GradDipMid group also felt that the adrenaline rush of the hospital would contribute to their job satisfaction, although few in the BMid group reported this.

This issue of adrenaline rush is interesting to consider further. Studies show that new graduate nurses prefer to work in areas of intensive and critical care as these areas involve the greatest manipulation of technology, are most strongly aligned with medical practice and give a sense of 'curing' illness and saving lives (Rushwoth and Happell 2000). In midwifery, labour ward and the antenatal ward are the areas where graduate midwives are most likely to experience high levels of technology, the care of significantly unwell women and 'life or death' scenarios. It follows that midwifery graduates who enjoy the adrenaline rush of the hospital are more likely to find satisfaction working on a rotating roster, which will increase their access to labour ward and the antenatal ward, or on the labour ward. Considering this, it is unsurprising that for the GradDipMid group who often have significant 'nursing' experience and expertise, a rotational position is considered equally as ideal as a working in a continuity model

For the BMid group, job satisfaction was linked to normalising care for women. Although valued highly by both groups, it was more important for BMids to provide continuity of care, work in a team who shared their philosophies, to make a difference to colleagues and to have the possibility to assist at homebirths. These factors are all hallmarks of continuity of care models and are difficult to access in the fragmented medical model that is practised in most labour wards (Homer, Brodie et al. 2008). Significantly more BMids than GradDipMids wished to see less routine medical intervention with women, another outcome associated with continuity of care models (Hatem, Sandall et al. 2008). These findings confirm the need to create increased opportunity for new graduate midwives to practice in continuity models, as for many graduates these models are clearly linked to their concepts of job satisfaction.

Job satisfaction, in part, may be influenced by the different educational pathways to midwifery. Specifically, the GradDipMid graduates enter midwifery having already been socialised into the

profession of nursing. Professional socialisation is a process whereby the individual learns the culture specific to that profession (Gray and Smith 1999). Historically, in Australia, midwifery has been seen as a 'specialisation' of nursing and this perception is slow to change both publically and professionally (Brodie 2002; Fahy 2007). All midwifery graduates currently transition into a culture where the majority of their colleagues have come from the nursing profession. Having previous experience in a similar culture may allow the GradDipMid graduates to feel more comfortable in areas that are seen to be similar. This may in part explain why the GradDipMid graduates are more likely to gain job satisfaction from the more technological aspects of midwifery care, whereas the BMid graduates find higher levels of satisfaction in the more midwifery focussed models of care.

It is important to recognise the limitations of this study. The convenience sample of participants is drawn from students who have been educated at the same university, by similar teaching staff. It is not clear whether these findings could be generalised to students from other universities in Australia but given the similarities in the curricula, it is likely that these findings are reflective of other students and courses. Convenience samples, despite a potential lack of generalisability, still provide a unique opportunity to explore particular phenomena, in this case, the expectations of graduating midwifery students (Schneider, Elliott et al 2002). The use of an instrument designed to capture the views of midwives in practice may not be ideal in capturing the future views and aspirations of graduates just entering the field. Further research may consider the development of a specific tool for this purpose. A number of comparisons were made in the analysis which means there is a possibility for a type 1 error, that is finding a difference when one does not really exist. We did not undertake further analyses using techniques to correct for mass significance. Once again, further research is needed to confirm our findings.

When the BMid began in 2005 the course was new, not well known and not well understood by school leavers. The course had been rumoured to be commencing for many years in NSW and the university maintained a database of interested individuals who had made enquiries over a period of at least three years. It is possible that the mean age of the 2007 BMid graduates has been skewed by these circumstances as many of the applicants had waited some time to commence the course. This will become apparent as longitudinal data continues to be analysed.

CONCLUSION

This study has described the demographic profile of midwifery graduates and begins to understand some of the similarities and differences between graduates who have been prepared through two quite different educational pathways in Australia. As a whole group, these graduates demonstrate a strong intention to enter the midwifery workforce and wish to practice using the full scope of their midwifery knowledge. The two groups are significantly different in their age, intention to work part time, work preferences and their uptake into new graduate rotation programs. Likewise the groups expressed a difference in ideal role although making a difference to women was important to both groups. Factors associated with job satisfaction and job improvement were also found to be different. More research is needed to fully understand the impact of these differences and similarities on the workplace choices and career trajectory of newly graduated midwives.

RELEVANCE TO CLINICAL PRACTICE

In Australia there is a long history of poor documentation of the experiences and workforce choices of midwives. In the large majority of instances, midwives have not been identified separately to nurses in terms of health workforce statistics. This has made it extremely difficult to gain insight into the midwifery workforce or the causative factors that influence midwives professional role and career choices. This study has identified factors, of both a philosophical and practical nature, which influence the workplace choices of new graduate midwives. Through this research we can begin to understand more about what kind of professional roles new graduate midwives are hoping to occupy in the workforce and how best to cater to the diverse needs of graduates from different educational courses.

Increased understanding of the connections between midwifery education courses and workforce choices can significantly impact educational and workforce planning. Issues of staff turnover and attrition are ongoing in Australian midwifery; this research provides opportunity to create meaningful change that can positively impact these issues.

ACKNOWLEDGEMENTS

We thank the participants in this study who took the time to complete the survey.

CONFLICT OF INTEREST

The authors are lecturers in the courses in this paper. Students were under no obligation to participate in the study and their final results were not dependant on their participation. We do not feel that our involvement in teaching poses a conflict of interest in relation to this study.

CONTRIBUTIONS

Study Design (CH, RS, JG)

Data Collection and Analysis (AH, JF, RS, JG, CH)

Manuscript Preparation (AH, JF, RS, JG, CH)

References

- ACMI (1999) *Reforming Midwifery: A Discussion Paper on the Introduction of Bachelor of Midwifery Programs into Victoria*. Australian College of Midwives (Victorian Branch), Melbourne.
- AIHW (2005) *Nursing and Midwifery Labour Force 2003*. Australian Institute of Health and Welfare, Canberra. Available at <http://www.aihw.gov.au/publications/index.cfm/title/10146> (accessed 15 June 2010).
- AIHW (2009) *Nursing and Midwifery Labour Force 2007*. Australian Institute of Health and Welfare Canberra. Available at <http://www.aihw.gov.au/publications/index.cfm/title/10724> (accessed 15 June 2010).
- Australian Nursing Federation (2004) Submission to the Productivity Commission Research Study: Implications of the Ageing of Australia's Population. Available at: www.pc.gov.au/_data/assets/pdf_file/0010/14320/sub036.pdf <http://www.pc.gov.au/_data/assets/pdf_file/0010/14320/sub036.pdf> (accessed 21 April 2010).
- Brodie P (2002) Addressing the barriers to midwifery -- Australian midwives speaking out. *Australian Journal of Midwifery* **15**: 5-14.
- Carolan, M. (2010). "The good midwife: commencing students' views." *Midwifery*. Corrected proofs available from **doi:10.1016/j.midw.2010.03.012**
- Commonwealth of Australia (2009) *Improving Maternity Services in Australia: Report of the Maternity Services Review*. Commonwealth of Australia, Canberra. Available at http://www.healthinsite.gov.au/news/Improving_Maternity_Services_in_Australia (accessed 15 June 2010).
- Fahy K (2007) An Australian history of the subordination of midwifery. *Women and Birth* **20**: 25-29.
- Foureur M, Brodie P & Homer CSE (2009) Midwife-centered versus woman-centered care: A developmental phase? *Women & Birth* **22**: 47-49.
- Gray M & Smith L (1999) The professional socialization of diploma of higher education in nursing students (Project 2000): a longitudinal qualitative study. *Journal of Advanced Nursing* **29**: 639-647.
- Gum L (1999) *Factors Which Affect the Career Decisions of New Graduate Midwives in Victoria*. RMIT Nursing: Royal Institute of Technology, Melbourne.
- Hatem M, Sandall J, Devane D, Soltani H & Gates S (2008): Midwife-led versus other models of care for childbearing women. *Cochrane Database of Systematic Reviews* Issue 4. Art. No.: CD004667. DOI: 10.1002/14651858.CD004667.pub2.
- Heslop L, McIntyre M & Ives G (2001): Undergraduate student nurses' expectations and their self-reported preparedness for the graduate year role. *Journal of Advanced Nursing* **36**, 626-634.
- Homer CSE (2006) Challenging midwifery care, challenging midwives and challenging the system." *Women and Birth* **19**: 79-83.
- Homer C, Brodie P & Leap N (2008). *Midwifery Continuity of Care: A Practical Guide*. Sydney, Elsevier.
- Homer CSE, Passant L, Brodie PM, Kildea SK, Leap N, Pincombe J, Thorogood C (2008) The role of the midwife in Australia: Views of women and midwives. *Midwifery* **25**: 673-691.
- Kirkham M & Morgan R (2006) *Why Midwives Return and their Subsequent Experience*. Women's Informed Childbearing and Health Research Group, Sheffield. Available at www.rcm.org.uk/EasySiteWeb/GatewayLink.aspx?allId=9142 (accessed 15 June 2010).

- Kirkham M, Morgan R & Davies C (2006) *Why Do Midwives Stay?* Women's Informed Childbearing and Health Research Group: University of Sheffield, Sheffield. Available at www.rcm.org.uk/EasySiteWeb/GatewayLink.aspx?allId=9145 . (accessed 15 June 2010).
- Lange G & Kennedy H (2006) Student Perceptions of Ideal and Actual Midwifery Practice. *Journal of Midwifery & Women's Health* **51**: 71-77.
- Leap N (2002) Identifying the practice component of Australian midwifery education programs: Results of the Australian Midwifery Action Project (AMAP) Education Survey. *Australian Midwifery Journal* **15**: 15-23.
- Leap N & Barclay LM (2002). National Review of Nursing Education: Midwifery Education, Literature Review and Additional Material (Revised Edition) Available at <http://www.dest.gov.au/archive/highered/nursing/pubs/midwifery/1.htm#1> (accessed 10 April 2006).
- McCall L, Wray N & McKenna L (2009): Influence of clinical placement on undergraduate midwifery students' career intentions. *Midwifery* **25**, 403-410.
- National Review of Nursing Education (2002) *Our Duty of Care*. Commonwealth of Australia, Canberra. Available at http://www.dest.gov.au/archive/highered/nursing/pubs/duty_of_care/default.html. (accessed 15 June 2010).
- Panettiere M & Cadman T (2002): Do new graduate midwives need extra support? *Kai Tiaki: Nursing New Zealand* **8**, 18-20.
- Passant L, Homer C & Wills J (2003): From student to midwife: the experiences of newly graduated midwives working in an innovative model of midwifery care. *Australian Journal of Midwifery* **16**, 18-21.
- Productivity Commission (2005) *Australia's Health Workforce, Research Report*. Australian Government, Canberra. Available at <http://www.pc.gov.au/projects/study/healthworkforce/docs/finalreport>. (accessed 15 June 2010).
- Rushwoth L & Happell B (2000): Psychiatric nursing was great but I want to be a 'real' nurse: Is psychiatric nursing a realistic choice for nursing students? *Australian and New Zealand Journal of Mental Health Nursing* **9**, 128-137.
- Seibold C (2005). The experiences of a first cohort of Bachelor of Midwifery students, Victoria, Australia. *Australian Journal of Midwifery* **18**: 9-16.
- Schneider Z, Elliott D, LoBiondo-Wood G. & Haber J. (2002) *Nursing research: Methods, critical appraisal and utilisation*, Mosby, Sydney, Australia.
- Sullivan K (2010). *The factors that contribute to midwives in one Area Health Service in NSW staying in midwifery (Master of Midwifery Hons thesis)*. Available from <http://epress.lib.uts.edu.au/dspace/handle/2100/1125>. Sydney, University of Technology Sydney.
- WHO (2006). *The World Health Report 2006: Working Together for Health*. Geneva, World Health Organization.