



200605221

## **Choosing to be a Nurse, Remaining a Nurse and Leaving Nursing in Western Australia: Nursing Workforce Issues in the Twenty-first Century**

Margaret Nowak, Graduate School of Business, Curtin University of Technology

### **Abstract**

*The paper provides an introduction to a set of papers reporting on a research program in Western Australia designed to address issues relating to the choice to train for and become a nurse and aspects of the nursing experience which influence the retention of nurses in the health workforce. The paper provides contextual information about the Australian and Western Australian nursing workforce at the time of the research and changes to nurse training and workplace structures and cultures over the preceding ten years. Details of the research program and research strategy are outlined and the data collection process is described in detail. The paper then provides a discussion of the five papers in this issue and some of the policy issues that they raise.*

### **Introduction**

In this issue of the *Australian Bulletin of Labour* a set of related articles report on a research program<sup>1</sup> which was designed to explore the choice to train for and become a nurse and aspects of the nursing experience which influence the retention of nurses in the health workforce. The research program was initiated partly as an outcome of questions as to the potential to attract new entrants to the traditional female dominated service occupations of nursing and teaching, in an era when the occupations open to women had expanded to encompass the full range of careers. This study focused on nurses.

This questioning was in the context of reported problems in recruiting nurses in Australia (Senate Community Affairs Committee 2002; DEandWR 2002), forecast shortfalls in future supply (Human Services Victoria 1999; HDWA 1995; Preston 2002), an ageing nurse workforce and a flurry of government reports

into nursing workforce issues. In the four years 1999-2002, reports relating to nursing recruitment, retention and training were commissioned by each of the Australian state and territory governments (with the exception of ACT) and by the Commonwealth Government. The trigger for these reports was that Australian health authorities were experiencing another of the periodic 'nursing shortages' that are endemic in the industry, both here and overseas (Friss 1994; Grumbach, Ash, Seago Spetz and Coffman 2001; Nowak 2000). The reports, which were reviewed by Bloch and Nowak (2003) for this research program, document a very consistent pattern of evidence that nurses were stressed, dissatisfied with their workplaces and, in increasing numbers, either withdrawing from the nursing workforce or moving to regain some control of their work/life balance through casualising their employment with agency work .

The research program sought in-depth analysis of the questions: who are our nurses, what is their current attitude to nursing and what are the perceived drivers of their attitudes? It explored aspects of the motivation for their original decisions to become nurses. The research program also sought data on the career motivations and expectations of working life expressed by new tertiary education entrants and young women in year 12. The objective is to provide analysis which will assist health authorities in achieving nursing workforce renewal and optimal retention of both new nurses and existing nurses.

The background and context for the research program reported on in this issue are outlined in the following section. This is followed by details of the research design and the data collection. Research limitations are discussed and a summary of the papers in this issue is provided. In conclusion, some of the policy issues raised by the papers are introduced.

### **Background and Context**

The context is one of an ageing nursing workforce. Between 1993 and 2003 the average age of nurses rose from 39.5 years to 43.1 years (AIHW 2003). Preston (2002) has projected that by 2006 the largest age group in nursing will be in the 45 to 49 age bracket. The ABS estimates the average age of withdrawal from the labour force by women as 58 years, while that from full-time work is almost two years lower (ABS, 2005). An implication of this ageing of the nurse workforce is that in the next ten years, as older nurses retire, there will be a growing deficit of experienced nurses. Without intervention at the entry level there will also be a resulting decline in people of working age holding nursing qualifications.

Studies have shown that Australian school leavers do not have a favourable impression of nursing as a potential career and that nursing was stereotyped by them

as a female occupation (NSW Health Department 2000; Donovan Marketing and Communications Research 1998), This has translated into a changing demographic profile for undergraduate nursing students; Australian Institute of Health and Welfare data show that less than 40 per cent of undergraduate nursing students were aged less than 20 and the average age of entrants to undergraduate programs stood at 24.5 years (AIHW, 2000).

Nursing remains one of the most persistently feminised workforces in Australia. Just 8.2 per cent of registered nurses are male while 6.8 per cent of enrolled nurses are male (AIHW, 2003). This picture has barely changed in 20 years, at a time when other previously segregated professional groups such as physiotherapy have recorded significant increases in male practitioners (ABS, 1999) and females have moved strongly into professional areas previously dominated by males (medicine, law, and accounting); females now represent approximately 37 per cent of the accounting workforce (ABS, 2003). Thus, when we ask questions about decisions to be a nurse, to remain a nurse or to leave the profession, we cannot escape the fact that, for the vast majority of nurses, the framework within which the decision is made is that of the female. There are no indicators which suggest that this position will change significantly in the foreseeable future.

In the 20 years preceding this study nurse training had been transformed from its previously hospital based 'apprenticeship-like' training system to tertiary education based certification. The decision to make this shift was agreed by Commonwealth and State health ministers in 1984 (Francis and Humphreys 1999 p. 82), although the shift was not completed until 1993 when the last major group of hospital based diploma students completed training. The last major new intakes in hospital based training occurred in 1991. The two systems of training ran parallel intakes between 1988 and 1992 (AIHW 2000). Thus, the current Australian Registered Nurse (RN) workforce comprises those who were originally hospital trained (the majority) and a younger group whose initial certification is through tertiary education. Conversion to degree status was undertaken by about 20 per cent of hospital trained nurses in the 1990s.

Regulation of nursing registration comes within state government jurisdiction and falls under various state Nursing Acts; administration is undertaken by nurse registration authorities (Gibson and Lawson 1996). The relevant body in Western Australia is the Nurse's Registration Board. The Australian Nursing Council Incorporated (ANCI), set up in 1992, provides a forum to assist a coordinated Australia-wide approach to issues of concern to nurses including course accreditation (Gibson and Lawson 1996 p.8).

The period leading up to this research had also been one of significant workplace

change for nurses in Australia. The Royal Australian Nursing Federation had pushed for, and had accepted Australia wide, a new career structure for RNs (HDWA 1990, p. 6), which was implemented in the late 1980s. In Western Australia this commenced in June 1987. The new structure provided for five levels in a matrix structure across four functional groupings: clinical, management, staff development and research. Above the level 1 RN the structure in WA (mirrored in the rest of the country) for the clinical stream involved level 2 Clinical Nurse (CN), level 3 Clinical Nurse Specialist (CNS) and level 4 Coordinator, Clinical Nursing. The Director of Nursing (DON) is level 5, (HDWA 1990 p. 7). The other streams have similar levels although, with the exception of the management stream, the numbers of staff involved are small. The introduction of the career structure had involved major organisational change within the hospital sector. The career structure, along with the move of training to tertiary education, was not universally accepted by either nurses or other health professionals and this spawned a further series of enquiries (Perrett and Monck 1990; HDWA 1990).

Within Western Australia this change was concurrent with other changes in nursing practice on the hospital ward ('the nursing process') and with major regionalisation and reorganisation of the Health Department (HDWA 1990, p. 10). Further restructuring of state health services in Western Australia was implemented as a result of a review in 2001 (Ministry of Health, WA 2001). The changes in practices, organisational and reporting structures and a tightening bottom line focus were mirrored in other states and territories in Australia during this same period (Gough and Fitzpatrick 2001).

This climate of rapid change has impacted significantly on nurses' work environment over the period leading up to 2000-03 when the research program reported in this set of papers was undertaken. Coupled with this have been negative perceptions of nursing as a career (Department of Health and Aged Care 2000, p. 8) and the perception in nursing of declining public respect for nurses, well documented in the numerous nursing reviews undertaken in Australia over the past ten years.

### **Research Program**

The research reported here was undertaken with support from the Australian Research Council (ARC) and the Health Department of Western Australia (HDWA). The program was designed to examine the issues relating to the choice to train for and become a nurse and aspects of the nursing experience that influence the retention of nurses in the health workforce. A significant focus of the research, in an era when the occupations open to women have expanded to encompass the full range of careers, was on the attitude to nursing careers of potential new entrants to nursing who were in the final year of school or the first year of tertiary

education. While it was deemed important to consider nurse retention strategies, renewal of the ageing nursing workforce will be dependent on the attraction of new trainees. Thus the objectives of the research were:

- to develop an understanding of the factors affecting the decision to become a nurse with specific reference to a range of variables including attitudes to work, career and society, role models including family, and career advice; and
- to analyse factors influencing the decision to remain within or exit the nursing profession.

The question of renewal through migration was not a focus of the research program. It is recognised, however, that the ageing nursing workforce and identification of nurse 'shortages' is widespread (Buchan and O'May 1998; Buerhaus 1998; Canadian Health Services Research Foundation 2001). Concern about the impact of systematic international recruitment on skills available in source countries became the subject of discussion of a Commonwealth Code of Practice in 2001 (Commonwealth Secretariat, 2001).

The research strategy adopted was to survey two groups: registered nurses (RNs) registered in 2002 (the WA RN Survey 2002) with the Western Australian Nurses Registration Board and first year tertiary education students at the five Western Australian (WA) tertiary institutions who commenced their study in 2003 (the Student Survey, 2003). The two surveys were designed to capture respectively the attitudes and experiences of the current nurse workforce and the tertiary education entrants for whom nursing was a potential career option. The Student Survey involved a more than proportionate sampling of students in nursing. In addition, a set of in-depth interviews with young women in the final year of school sought to explore further the attitudes and career decision environment and processes of young women (Career in Young Women's Lives study 2002).

### **Data Collection**

The two survey instruments used in the research which is the subject of the papers in this issue of the Australian Bulletin of Labour are detailed here and will not be revisited in detail in the individual papers.

#### ***The WA RN Survey 2002***

The RN Survey was distributed with the assistance of the Nurses Registration Board to 5,000 nurses registered with the Board in August/September 2002. A total of 1,884 survey instruments were completed and returned, a response rate

of 38.3 per cent. Respondents were broadly representative of the profession in Western Australia, except that males were somewhat under-represented in the returns (5.1 per cent compared with the national figure of at least 7.2 per cent) 2. Full information relating to data is available in the technical paper for the survey (Nowak, Preston, Dockery, McCabe and Naude 2002).

The survey instrument was designed in keeping with the range of issues emerging in the reports of State enquiries and issues emerging in pilot focus groups of RNs. Summary data were reported in McCabe, Nowak and Preston (2003).

The questionnaire was structured in seven sections covering:

- Decision to become a nurse
- Features and characteristics of the job
- Work environment
- Attitudes to nursing
- Attitudes to gender at work
- Education
- Demographic and background characteristics

The survey included two open-ended questions. One of these related to a question about whether the respondent would choose nursing if they were making the decision now, and if not why not; what has changed. The other, at the end of the instrument, allowed for comments or suggestions that the respondent would like to make about nursing or other issues covered in the survey. Responses to this second open-ended question were overwhelming in their number; 1,256 or 66 per cent of the 1,884 respondents made comments and we coded 1,564 responses over the two questions. The issues covered and the comprehensive nature of the comments have made this a very valuable source of data telling us how nurses feel and what they would like to see happen about their issues. They form the basis of the paper presented by Nowak and Bickley.

The demographic data collected are generally consistent with published data on Western Australian RNs and provide valuable background to the attitudes and concerns of the respondents. The average age of survey respondents was 44 years, which is in line with the Australian data discussed earlier; 66 per cent of respondents were aged 40 and over. Australian citizens comprised 75 per cent of respondents, while 24 per cent had the status of permanent resident. The bulk of

respondents had children (73 per cent) while for 42 per cent there were dependent children. Only 20 per cent were neither married nor living in relationships. In line with the age distribution of these nurses, for 73 per cent their first qualification as RNs was a hospital based diploma (27 per cent a tertiary degree); around 20 per cent of those with the hospital based diploma had subsequently converted this to a degree.

The public sector employed 61 per cent of the nurses, 33 per cent were employed in the private sector and 6 per cent in the community/not-for-profit sector. Teaching hospitals employed 44 per cent of respondents and other hospitals 29 per cent; nursing homes/hostels employed only 7 per cent while 10 per cent were employed by the community health services. The bulk of these nurses were metropolitan based, 77 per cent; this compares with 84 per cent reported in AIHW (2005). RN level 1 nurses comprised 49 per cent of respondents, which is in line with the proportion of WA registered nurses at level 1. Level 2 RN comprised 25 per cent, Clinical Nurse Specialist almost 6 per cent and nursing management comprised just over 6 per cent; the remaining positions cover staff development, research and other. Of the practising RNs in the survey, only 36 per cent worked full-time. This figure is lower than the 44.7 per cent reported for WA (AIHW 2005).

### ***The Student Survey 2003***

The Student Survey 2003 was developed to look at issues in occupational choice at the point where a decision had recently been taken about tertiary study courses. Care was taken to ensure that there was correspondence, where possible, between the two questionnaires (RN and Student) on questions related to career choice, attitudes to nursing as a career and gender issues.

It was assumed that the issues and values in consideration when making decisions on study and career and the influences on the decisions would be very fresh for new undergraduates. The survey instrument was mailed to a random sample of 4,500 first- year university students in WA in 2003. The Tertiary Institutions Service Centre and Notre Dame University respectively drew the samples and distributed the questionnaires.

The sampling frame was designed to reflect the range of courses and universities in WA. Over-sampling of nursing students was, however, specified as part of the broader study of career choice and nursing. The response rate achieved was 34 per cent (1,503). Of the respondents, 67.3 per cent were female. The over-representation of nursing students, predominantly female, contributed a small amount to the disproportionately high female response. With nursing students excluded, the response was 63.5 per cent female.

The design of the survey instrument had regard to the Career in Young Women's Lives study and the literature on occupation and career choice. The instrument was piloted with university students.

The survey instrument covered five broad areas:

- Demographics and family
- Parents' education and work
- The experience of school
- Expectations about life and work
- Community/general perceptions/beliefs

The demographic data show that the bulk of respondents were recent school leavers, with 87 per cent of respondents in the age group 17 to 19; 5 per cent of respondents were aged between 20 and 24, while 7 per cent were aged 25 and over. Of the respondents, 96.3 per cent were studying full-time. Respondents were evenly split between those who had attended private schools and those who had attended public schools. The students came largely from relatively well educated backgrounds. Of the valid responses, 39 per cent indicated that mother's highest qualification was university degree and above while the comparable figure for father's qualification was 42 per cent. A further 29 per cent of both mothers and fathers had either TAFE qualifications or secondary school completion.

### **Career in Young Women's Lives**

This research focused specifically on the attitudes and career decision making of young women in year 12 within three WA schools. The research involved in-depth interviews with thirty young women and was undertaken in the second half of 2002 at the time when these young women would have been immersed in making their final choices for work and study in the subsequent year.

#### ***Limitations***

In Career in Young Women's Lives, the in-depth interviews with young women focused specifically on women's career decision making. A complementary study to look at the career decisions of young men and the fact that young men fail to be attracted to nursing would be valuable. The research team, however, saw no evidence to refute the assumption that, in the foreseeable future, renewal of the nursing workforce will depend overwhelmingly on the attraction of women into nursing and that this will occur in the context of a continued broadening of the



work/career options open to women.

There is ongoing debate in relation to the role of gender in career choice decision making (Betz and Fitzgerald 1987; Fassinger 1990; O'Brien and Fassinger 1993), which suggests that a 'generic' model of career choice is not relevant to the gendered context of young women's career decisions and thus does not provide the necessary insights about the work/career choices of female nurses. The Career in Young Women's Lives study was recognition by the research team of the need for such insights.

Nursing workforce renewal can also potentially source new workers through immigration and through 'second career' entrants. Immigration, though useful, has limited impact and in the current international nursing labour market net gains may be small or indeed negative. Permanent immigrant nursing numbers for Australia ran at 800-1,000 per year 1993 to 1999 with a further 100 to 400 temporary visas (AIHW, 2000). At the same time Australian nurses travelled overseas (in 1997 the number doing so was 3,800). 'Second career' or mature new entrants to nursing are currently a substantial component of new nursing student numbers. Australian Institute of Health and Welfare data on nursing student average age were outlined earlier in the discussion of background to the study. The research program was able to gain data on this group only to the extent that they were TISC entry students to tertiary education within our 2003 Student Survey participants; new nursing students who, for example, transfer from other courses in tertiary education would not be included. Detailed analysis of the mature entry category of students in the sample has not yet been completed.

### **Papers in this Study**

We begin with the question 'Who Are Our Nurses?' Preston sets the answer to this question within a longitudinal framework by providing comparative Australia-wide data from the 1981 and 2001 censuses. She demonstrates that nursing has remained a highly feminised occupation and that, somewhat contrary to other feminised occupations, there has been considerable decline in the proportion of nurses in full-time work over that 20 year period. Data on age and marital status for 2001, however, reveal a picture for nurses that differs little from the group of other feminised professions selected for comparison. This is the context for the WA RN Survey 2002. Preston then selects four aspects of the WA RN Survey 2002 data for further exploration: relative pay, preferred hours of work and rostering, work/family balance and qualifications.

The discussion of relative pay is important, as there appear to be some conflicting messages on pay arising from the research program. The pattern of pay relativity

in 2001 for nurses, Preston found, is reflective of that for the other feminised occupations selected for comparison. Preston demonstrates that the relative pay of nurses (and teachers) declined in the 1990s relative to Average Weekly Ordinary Time Earnings and a range of other comparators selected for discussion. The WA RN Survey 2002 data demonstrate that the nurses did perceive their pay as low relative to other jobs requiring similar skills both within and outside the health industry. While over 80 per cent perceived the low pay relativity, however, only some 50 per cent were fairly or very dissatisfied with pay. It is interesting to note also that McCabe, Nowak and Mullen (herein) find that pay was not included in the list of most strongly held reasons for selecting nursing as a career. We have to assume that, at the time they selected nursing, many current nurses may have understood the relativities that applied; but they may also have considered that their professional career options were limited by prevailing expectations and opportunities for young women. It is notable, however, that Preston shows that younger nurses were more dissatisfied with pay than nurses 35 years and over, while the younger cohort of nurses also placed more emphasis than the older cohort on some of the extrinsic rewards of nursing (McCabe et al. herein). Dockery and Barns (discussed below) show that young people who choose nursing place less priority on long-term financial rewards and greater emphasis on working with people and on family. Nevertheless, they found that perceived poor remuneration of nurses was a specific reason given by students and the young women interviewed for not choosing to become nurses. It is clear that further research is needed to identify the role that relative pay needs to be accorded to attract the required renewal of the nursing workforce.

Dockery and Barns develop a comparative profile of those young people who choose to be a nurse relative to those who choose other careers. They combine three data sources: the Student Survey 2003, Career in Young Women's Lives (from this research program), and data from the Longitudinal Surveys of Australian Youth (LSAY). They confirm that very few males are attracted to nursing. Their analysis shows that those who plan to be nurses are less successful academically, on average, than female students who plan to go to university, and are from lower socio-economic groups. The article identifies other interesting patterns among nursing aspirants linking family composition to occupational choices. This is linked with a discussion of the importance of gender roles in society and the family in relation to career choice.

Dockery and Barns show that those choosing nursing, relative to other young people surveyed, tend to have an affinity for caring and place greater emphasis on balancing work and family than on career success. Overall, preference is given by those aspiring to be nurses to intrinsic over extrinsic rewards. This finding is consistent with that of McCabe et al, discussed below, that existing nurses

placed greater emphasis on intrinsic rewards. The results reported by Dockery and Barns tend to support the proposition that those who choose to nurse do understand the relative pay position of nurses. Nevertheless, it seems to be also fair to say that those who choose not to nurse do see low relative pay as one of the disincentives.

In another interesting parallel with the results from the WA RN Survey 2002 (McCabe et al. herein), Dockery and Barns find that those young people who chose nursing, relative to other young people surveyed, appear to seek earlier financial returns, while the availability of financial support for training is given greater emphasis. They note that this may reflect differences in the socio-economic backgrounds of those aspiring to nursing. It does suggest that training support may provide one avenue to encourage increased entry of young women in nursing.

McCabe, Nowak and Mullen discuss the evidence from the WA RN Survey 2002 on why respondents chose to be a nurse when they originally made the decision. They find that the factors reported by these nurses as having had the greatest influence on their decision to become nurses can be grouped under the broad category of intrinsic attraction of nursing. This category included aspects such as 'ability to help others', 'interesting and challenging work' and 'ability to work closely with people'. Another key element in the decision for these nurses was the 'employment security' aspects of nursing, covering issues such as 'job security', 'skills always in demand' and 'ability to leave the workforce and return later'. Only a minority of the nurses in the study rated the extrinsic rewards as a factor in their initial decision to undertake nursing. This is consistent with the findings of Dockery and Barns using the 2003 Student Survey data.

McCabe, Nowak and Mullen use a comparison of two cohorts within the total data set to analyse how the reported reasons for choosing to be nurses may be different for younger nurses compared with their older colleagues. In particular, they find a significant difference between the two groups on the importance of some of the factors grouped as extrinsic rewards, with younger nurses placing greater emphasis on issues such as 'flexible hours of work', 'pleasant working conditions' and 'responsibility and autonomy'. These issues do have implications for policy makers and administrators seeking to retain younger nurses.

The open-ended questions in the WA RN Survey 2002 provided a wealth of evidence, sometimes passionately expounded, about how nurses are experiencing their workplaces and their working lives and constructive ideas for change. Nowak and Bickley provide an analysis of those experiences in the context of the values and ethos of professionalism (Malin, Wilmot and Manthorpe 2002) and the issues raised within the context of New Public Management (NPM). The paper adopts

an interpretative approach and uses qualitative analysis of the perceptions and experiences of respondents revealed in this data. It argues that respondent nurses' experiences of change in the health industry have created feelings of dissonance, at the professional level, in respect to the original reasons they chose to nurse and at an ideological level in terms of the values they see as enacted in the health system. The paper argues that compliance with the managerial imperatives of NPM have become the centre of resistance to workplace change for nurses. The issues raised in this paper have system-wide implications which can be contrasted with the organisational or micro issues of the final paper.

Naude and McCabe follow on from the issues raised in *Nurses Voices*. In previous research (Naude and McCabe 2003) they had identified reasons specific to a pilot group of three hospitals that motivated nurses to remain working with the organisation. They note that the literature supports the proposition that hospitals where turnover rates are low demonstrate higher than average quality of nursing care (Buchan 1999). In this paper they draw together a set of leadership and management strategies which respond to the retention issues raised by nurses and which are within the control of the individual health organisations.

### **Concluding Discussion**

The data for this research program were from Western Australia only. The research team have, however, immersed themselves in the material from the other Australian states and territories. The context and the experiences in Western Australia have resonance throughout the Australian nursing workforce and this gives force to the research findings.

The research focused on recruitment and retention issues for the nursing workforce. In an era when the occupations open to women have expanded to encompass the full range of careers, the research focus on recruitment to renew the ageing nursing workforce centred on the attraction of nursing to new young workforce entrants. The research has identified that the attraction of nursing hinges significantly on a range of intrinsic interests of the individual and the perceived match to the characteristics the nursing role is seen to embody. These interests can be summed up as a focus on people relationships and the role of caring. Media representations and the feedback of those currently in the health system are two potential sources of both positive and negative information which can affect the perceptions of the nursing role.

To increase the attraction of nursing for young people, who are shown to have a generally unflattering view of nursing as a career, health authorities may need to focus on two issues which were important to those choosing to nurse: job

security/job flexibility and financial support for training. While pay does not top the list of issues for existing nurses, there is clearly recognition among young people that nursing is relatively low paid; broadening the attraction of nursing as a career option amongst young people will require attention to the relative pay question.

This research focused its attention in relation to new recruits largely on those making their first career choice. Further work needs to be done to consider the issues which resonate for those who choose nursing as workforce re-entrants or for second careers.

The focus on workforce retention issues is at two levels: the system-wide issues such as managerialism and, related to that for the public sector New Public Management, and the individual workplace issues which affect commitment to the organisation. The research provides evidence that managerialism is the focus of feelings of dissonance expressed by nurses between their values and expectations of the job and their experiences of the role in practice. They perceive that the focus on 'patient care', which they believe to be the essence of their professional practice, is compromised by the requirements placed on them by NPM and managerialism. The dissonance experienced could be accepted as evidence that the change process is either incomplete or has not been appropriately communicated and implemented. It seems to us likely, however, that it reflects a clash between the professional culture of nurses and the managerial culture of administrations. If an understanding of nurses' professional concerns and an appreciation of the appropriate resourcing for nursing care is to be achieved, it will be critical to explore and to research the 'value' provided by 'care' through its contribution to the overall health outcomes.

There remain actions which can be taken at the individual organisational level to attract and retain nurses. Possible leadership and management actions and interventions are highlighted in the final paper, where it is argued these could also be expected to contribute to the quality of patient care.

There is a range of data and issues arising from the research which it has not been possible to consider within this set of papers. They include further data relating to work and family balance, rostering, further education and a range of issues for nurses revolving around workplace relations, bullying and violence, and professional esteem. These will be the subject of future papers.

### **Appreciation:**

*The Nurses and young people who participated in the various parts of our study were generous with their time and thoughtful with their inputs. The research team thank those involved and have sought to represent their views faithfully.*

**Endnotes:**

1. The research team would like to express appreciation to those external groups who assisted with the research data collection and specifically the Nurses Registration Board, TISC and Notre Dame University. We wish to acknowledge the support of the Australian Research Council who provided funding that made the research possible. Finally, thank you to The Department of Health WA and to Dr Phil Della who supported us and facilitated the collection of data..
2. This figure was sourced from unpublished Australian Bureau of Statistics supercube data 'q5\_aug96.srd'

**References**

- Australian Bureau of Statistics (ABS) (1999), *Physiotherapy Services Australia, 1997-1998*, Cat No. 8668.0., ABS, Canberra.
- ABS (2003), *Accounting Practices, Australia. 2001-2002*, Cat No. 8668.0., ABS, Canberra.
- ABS (2005), *Australian Labour Market Statistics: Cat. No. 6105, January* ABS, Canberra.
- Australian Institute of Health and Welfare (AIHW) (2000), *Nursing Labour Force 1999*, Australian Institute of Health and Welfare, Canberra.
- AIHW (2003), *Nursing Labour Force 2001*, AIHW National Health Labour Force Series No. 26, Canberra. Retrieved: 18 October, 2004, from <http://www.aihw.gov.au/publications/hwl/nurslf01/nurslf01.pdf>
- AIHW (2005), *Nursing and midwifery labour force 2003*, AIHW National Health Labour Force Series, cat.no.HWL 31, Canberra.
- Betz, N. and Fitzgerald, L. (1987), *The Career Psychology of Women*, Academic Press, San Diego.
- Bloch, M. and Nowak, M. (2003), *A Review of Select Australian Nursing Reviews*, WEPAU, Discussion Paper Number 28, Curtin University of Technology, Perth, Australia. from <http://www.cbs.curtin.edu.au/research/wepau>
- Buchan, J. (1999), 'Still Attractive After All These Years? Magnet Hospitals in a Changing Health Care Environment', *Journal of Advanced Nursing*, vol. 30, pp. 100-108.
- Buchan, J. and O'May, F. (1998), 'Nursing Supply and Demand: Reviewing the Evidence', *Nursing Times*, vol. 94, pp. 60-63.

- Buerhaus, P. I. (1998), 'Is Another RN Shortage Looming?', *Nursing Outlook*, vol. 46, pp.103-108.
- Canadian Health Services Research Foundation (2001), *Commitment and Care: The Benefits of a Healthy Workplace for Nurses, Their Patients and the System. A Policy Synthesis*, Canadian Health Services Research Foundation.
- Commonwealth Secretariat, (2001), *Commonwealth Code of Practice for International Recruitment of Health Workers*, 13th Commonwealth Health Ministers Meeting, Christchurch, November 25-29, 2001.
- Department of Employment and Workplace Relations (DE and WR) (2002), *National Skills Shortage List*, Canberra.
- Department of Health and Aged Care (2000), *Rethinking Nursing: National Nursing Workforce Forum*, Canberra. from <http://www.health.gov.au> Report.
- Donovan Marketing and Communications Research (1998), *Research to Assist the Development of a Campaign to Promote Nursing as a Career*, Donovan Marketing and Communications Research Consultants, Perth. Retrieved: December, 1998,
- Fassinger, R. (1990), 'Casual Models of Career Choice in Two Samples of College Women', *Journal of Vocational Behaviour*, vol. 36, pp. 225-248.
- Francis, B. and Humphreys, J. (1999), 'Rationalisation and Professionalisation: A Comparison of the Transfer of Registered Nurse Education to Higher Education in Australia and the UK', *Comparative Education*, vol. 35, pp. 81-96.
- Friss, L. (1994), 'Nursing Studies Laid End to End Form a Circle', *Journal of Health Politics, Policy and Law*, vol. 19, pp. 597-631.
- Gibson, T. and Lawson, D. (1996), *Credentiaing Advanced Nursing Practice and Accreditation of Continuing Education Programs: An Exploration of Issues and Perspectives*, Discussion Paper Number 4, Royal College of Nursing, Australia.
- Gough, R. and Fitzpatrick, M. (2001), *Reluctant Managers: Nurses Surviving Despite the Bottom Line*, School of Management Working Paper Series 4/2001, Victoria University of Technology, Melbourne.
- Grumbach, K. Ash, M. Seago, J.A. Spetz, J. and Coffman, J. (2001), 'Measuring Shortages of Hospital Nurses: How Do You Know a Hospital with a Nursing Shortage When You See One?', *Medical Care and Research Review*, vol. 58,

pp. 387-403.

- Health Department of Western Australia (HDWA) (1990), *Report of the Nurses Career Structure Evaluation Committee*, Perth.
- Health Department of Western Australia (1995), *Nurse Workforce Planning Project*, Perth.
- Human Services, Victoria (1999), *Nurse Labourforce Projections, Victoria, 1998-2009*, Department of Human Services, Victoria, Public Health and Development Division, Melbourne.
- Malin, N. Wilmot, S. and Manthorpe, J. (2002), *Key Concepts and Debates in Health and Social Policy*. Open University Press, Buckingham.
- McCabe, R. Nowak, M. and Preston, A. (2003), *Under Pressure: Report on the Western Australian Nurse Workforce in 2002*, WEPAU, Curtin University of Technology, Perth.
- Ministry of Health, Western Australia (2001), *Report of the Health Administrative Review Committee*, Perth.
- Naude, M. and McCabe, R. (2003), *Magnet Hospital Research Report: Western Australia*, Graduate School of Business, Curtin University of Technology, Perth, Australia.
- New South Wales (NSW) Health Department (2000), *New South Wales Nursing Workforce Research Project*, NHR Consortium, Nursing Branch, New South Wales Health Department, Sydney.
- Nowak, M. (2000), *The Nursing Labour Market in WA: The Story of a Complex Micro-Labour Market in a Deregulating Environment*, WEPAU, Discussion Paper Number 06, Curtin University of Technology, Perth, Australia. from <http://www.cbs.curtin.edu.au/research/wepau>
- Nowak, M. Preston, A. Dockery, M. McCabe, R. and Naude, M. (2002), *2002 Survey of Registered Nurses*, WEPAU, Technical Paper, Curtin University of Technology, Perth, Australia. from <http://www.cbs.curtin.edu.au/research/wepau>
- O'Brien, K. and Fassinger, R. (1993), 'A Casual Model of the Career Orientation and Career Choice of Adolescent Women', *Journal of Counselling Psychology*, no. 40, pp. 456-469.
- Perrett, M. and Monck, A. (1990), *Review of the Career Structure of Nurses in the Australian Capital Territory*, Australian Capital Territory Government,



Canberra.

Preston, B. (2002), *Australian Nurse Supply and Demand to 2006*, Australian Council of Deans of Nursing, Burwood, Victoria.

Senate Community Affairs Committee (2002), *Inquiry into Nursing. The Patient Profession: Time for Action*, Commonwealth of Australia, Canberra.