The Nursing Labour Market in WA: The Story of a Complex Micro-Labour Market in a Deregulating Environment.

by

Margaret J. Nowak

Women's Economic Policy Analysis Unit Curtin University of Technology

Discussion Paper Series 00/1

April 2000

Women's Economic Policy Analysis Unit (WEPAU), c/o Department of Economics, Curtin Business School, Curtin University of Technology, GPO Box U 1987, Perth 6845.

http://www.cbs.curtin.edu.au/cbs/research/wepau

I Introduction

During 1999 a series of publicly funded television advertisements aimed at School leavers appeared in Western Australia (WA) extolling the virtues of nursing as a potential career. Such an attempt by a government instrumentality to influence the supply side of a professional labour market is quite remarkable in the Australian context.

These advertisements were one response to the widely held perception in the Health industry that there is a "shortage" of nurses. Similar concerns about "a shortage of trained nurses" (Guardian, Nov. 1999) are echoed in the UK, US, New Zealand.

The picture in this micro labour market is very interesting in relation to individual labour supply decisions, changing social conditions for women in the labour market, and the broader issues of labour market rigidity and monopsony within a generally deregulating environment. These issues are canvassed in the remainder of this paper. Starting with a discussion of the nursing 'shortage', the paper then proceeds to a discussion of nurse relative wages and conditions, monopsony power and overseas experience. A summary discussion concludes the paper.

II "THE SHORTAGE" OF NURSES

The perception of a "nursing shortage" was built on observations by the employers about recruitment problems, use of agency nurses, vacancies and supply and demand projections out to 2020 by the Health Department of WA (henceforth HDWA).

Employer observations included:

- ◆ The requirement now to advertise nursing positions whereas for many metropolitan hospitals applicants approached them in the past;
- Positions remaining vacant for an average of 13 weeks; long vacancy periods and high numbers of vacancies in some specialities;

 Shortage of senior general nurses reported by metropolitan tertiary hospitals and rural services.

Data on nurse registrations, employed nurse numbers and age data for the nursing labour force help to develop the picture.

Nurse Registrations and Employment

Registrations of Enrolled Nurses (EN) in Australia and WA have declined steadily (by over 20%) in the 1990's. Over the same time employed Registered Nurses (RN) nurses declined in Australia and WA, declined by up to 25 per cent in the mid 1990s but returned to roughly the levels of the early 1990s at the end of the decade.

Table 1: Registration of Registered and Enrolled Nurses, 1992-2000

| | WA | | Australia | |
|-----------|--------|-------|-----------|--------|
| | RN | EN | RN | EN |
| 1992 | 18,049 | | | |
| 1993 | 18,643 | 6,054 | 212,630 | 68,825 |
| 1994 | 18,430 | 5,855 | 213,568 | 65,107 |
| 1995 | 18,359 | 6,146 | 207,910 | 59,625 |
| 1996 | 17,824 | 6,262 | 204,676 | 56,616 |
| 1999-2000 | 19,147 | 4,735 | 214,493 | 53,271 |

Source: Nursing Labour Force 1993 and 1994, Australian Institute of Health and Welfare, Table 3, p.8; and Nurses Board, WA & other states

The really striking figures, however, are those for the age distribution of employed nurses, Australia and WA. In 1994 the mean age of the WA nursing workforce was 41.3 years. By 1996 it had increased to 42.1. Table 2 shows that the average age of the WA nursing labour force has increased quite steadily over the past 15 years. Given that the full time equivalent nurse workforce participation rate has, to date, more than halved after age 54, the continued ageing of the nursing labour force does suggest potential for future imbalance in the available workforce. The

remainder of this paper examines influences on nurse labour supply and demand outcomes.

Table 2: Distribution of Nursing Workforce by Age, 1981 to 1994

| | 15-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65+ | | |
|-----------|-------|-------|-------|-------|-------|-----|--|--|
| | % | | | | | | | |
| WA | | | | | | | | |
| 1981 | 33.3 | 29.6 | 19.2 | 12.4 | 4.9 | 0.4 | | |
| 1986 | 23.3 | 35.3 | 23.9 | 12.7 | 4.4 | 0.4 | | |
| 1991 | 14.6 | 33.5 | 30.3 | 16.2 | 5.1 | 0.3 | | |
| 1994 | 5.8 | 27.4 | 33.3 | 23.3 | 7.7 | 0.5 | | |
| Australia | | | | | | | | |
| 1994 | 4.5 | 25.0 | 33.4 | 36.6 | 10.1 | 0.5 | | |

Source: Australian Institute of Health and Welfare

Influences on nursing labour supply

(a) Training

The training for nurses in Australia shifted from hospital and nursing school based to tertiary education courses over the period 1989 – 1992. This does mean that there is a lag of three to five years between changes in decisions about nursing as a career and the impact of these on the supply of new nurses for employment. Prior to this, hospital based trainees immediately provided some support in the work place.

From the early 1990s there has been a continuous decline Australia wide in the number of commencing students in Diploma and Bachelor nursing courses. DEETYA figures show commencing students peaked at 13,242 in 1992. The latest available data, 1995 show a decline to 11,608. It is apparent that demand for entry to nursing education places has continued to decline subsequent to 1995. First preferences for tertiary education places have continued to decline while demand from school leavers is said to have "collapsed". Universities in WA report that as the school leaver demand falls, an increasing proportion of new students are mature

age. "School leavers are not choosing nursing". A similar pattern is reported from other states. A 1997 study in NSW, "Who wants to be a nurse?", investigated attitudes to nursing as a career and found great negativity (Lawler, Ahern, Stanley and West, 1997).

(b) Participation

Sloan and Robertson's (1988) study, using the 1981 census data, identified two other potentially important issues in nursing supply.

- Women with nursing qualifications exhibited the highest level of nonparticipation in the workforce of the qualified professionals investigated and;
- women with nursing qualifications tended to have the lowest reported use of those qualifications in their own industry (i.e. could be seeking non-nursing work).

Data from the 1991 census Household Sample Files show that since 1981 there has been an increase in the labour force participation rate of women with nursing qualifications, although this increase reflects a social trend for all women. In 1991 45 per cent of the sample reported having a nursing qualification, although only 42.5 per cent had nurse registration (Birch, 1999).

(c) Net Migration

In the 1990s, in contrast to the 1980s, the additions to the stock of nurses from net migration appear to be relatively small. In 1995 for Australia as a whole 363 overseas educated nurses were assessed as eligible to practice by the Australian Nursing Council. This is equivalent to about 25 per cent of the levels of net migration experienced in the 1970s and 1980s.

5

Quotation from the School of Nursing at Curtin University of Technology.

A similar decline was experienced in WA. Hence, since WA trained nurses made up only 50 per cent of total WA employed nurses over the period 1989 – 1994 the collapse in inward migration of nurses has impacted significantly on new supply. ²

Labour Market Indicators: WA Nurses

Hard data are not readily available at this micro labour market level. The HDWA reported its vacancy rate in 1998 at around three per cent of workforce, which is not particularly high. However, it appears that vacancies are persistent especially in rural areas and for some positions. In March 1997, HDWA reported vacancy duration as averaging 13 weeks for RN's and 23 weeks for mental health nurses. Anecdotally, we know that vacancies are often covered by "agency" nurses. Hence the data may understate the problem, since if the expectation of filling a vacancy is low it may not be reported as such.

Unemployment of nurses seeking nursing work amounted to just three per cent of the Australian nursing labour force in both 1993 and 1994. Later figures are not available. However, a local survey of nursing graduates in 1994 corroborated this picture of low unemployment. Of 131 responses from recent graduates of Curtin, only 0.8 per cent reported being unemployed (Nowak 1994). Given that national unemployment rates were then over 10 per cent and new graduate unemployment rates were approximately 5 per cent, these figures do suggest a relatively tight nursing labour market.

A further indicator of tight labour markets is the rate of labour turnover. High levels of turnover are suggestive of workers either leaving the workforce or confident of other positions being available. Figures for the 1st half of 1997 (HDWA), show turnover rates of 11 per cent for RN's overall, 12 per cent in non-teaching hospital positions and 13 per cent in rural locations, all rates relatively high for a professional labour force.

The use of 1994 as a reference point reflects data constraints. Statistics on migration flows beyond 1994 are not readily available. These estimates are from the HDW Nurse Workforce Planning Project 1995.

Labour supply and demand projections

The HDWA projections of supply and demand for nurse's to 2020 project virtually unchanged supply with demand almost doubling in 25 years. This gives a low-end projected shortfall of 1000 full-time equivalent (FTE) nurses in 2000 rising to 12,000 FTE in 2020. The high-end projections are respectively 1370 FTE and 15,400 FTE.

In looking at projections of supply, however, the wage assumptions are critical. If the assumption is that the "relative' wage position of nurses remains unchanged (i.e. compared with other health professionals or other tertiary trained professionals) then figures for supply are based on trend, corrected for tertiary education completions and work force age structure, and project the existing position to the chosen end date.

However, in the circumstances of projected demand increases caused by an ageing population, if the market mechanism is unrestricted in its operation, relative wages increase. Relative wage increases would both increase supply (the job now relatively more attractive in remuneration) and restrict demand (as employers seek to achieve economies in the use of relatively more expensive labour). We would then expect that the so called 'shortage' will self correct. However, this self correction involves assumptions about the wage adjustment mechanism in operation. The actual structure of the labour market for nurses and the effect this has on the assumptions required to be met for a flexible market are considered further later in this paper.

Overseas Experience:

The problem in nursing labour markets is not confined to Australia. It is one which is the experience of all the "Anglo-Saxon" economies (Friss 1994, Scott 1996, Winnell 1990, Robinson 1994) and over a long period (Bashford 1997, Gray 1987). A review of this literature also suggests that official responses which concentrate on subsidised training, working conditions, and attracting nurses from elsewhere have been panaceas rather than solutions.

Friss (1994) has studied this pattern for the USA. Her comment on the history of the problem and the approaches used in the USA deserve consideration.

Since then (1915) countless studies, reports and commissions have attempted to explain and solve perceived shortages of registered nurses, which have occurred regularly ..., Usually, their recommendations have hinged on nurses changing their image.the real issues of nursing work....are a narrow pay range, little extra pay for working on undesirable shifts, disincentives for full-time work, pay unrelated to education and education unconnected to job level. (ibid., p597).

Friss, (p 618), commenting on the USA nursing labour market, states 'shortages' should be "temporary occurrences that can be eliminated most effectively by not interfering with the market, but by letting nurses' wages rise in a timely, rather than lagged manner". The following section discussions issues associated with nurse relative wages in Australia.

III RELATIVE WAGES AND CONDITIONS

Internal documents of the Health Workplace and Workforce Advisory Board listed perceived "poor conditions/pay for work done and level of responsibility", "loss of career structure positions and opportunities, lack of recognition for experience skills", "unequal distribution of resources" as factors responsible for the current supply decline. One commentator noted "pay is low compared to other professionals doing the same level of study".

Anecdotal evidence provided to the researcher supported this perception of low pay is held, along with a sense of grievance. It yielded comments such as "can be a level 1 nurse for 40 years".

Recent survey research for HDWA confirmed that pay relative to perceived responsibility and workload/career path is the major issue for working nurses (BIZTRAC, 1998).

In their 1988 study, Sloan and Robertson compared nursing with other female intensive occupations such as the therapies and teaching. Their conclusion (based on 1981 census data) was that nursing has been a relatively lowly paid occupation, even in relation to predominantly female occupations. Their data are interesting

because they were able to move beyond comparison of awards to look at the distribution of earnings. Earnings take into account penalty rates received for work conditions such as unsocial hours, making such comparisons particularly important. Nevertheless, nurses were shown as relatively low paid by comparison with other highly feminised professional occupational groups (notably other parademidcal groups, teachers and librarians). Approximately five per cent of general certificated nurses reported incomes in 1981 of \$18,000 and above compared with between 15 to 22 per cent for other health professionals and 25 per cent and above for social workers, tertiary qualified teachers and librarians. Hence, even with penalties for the substantial component of unsocial hours worked, expected lifetime earnings of nurses appear likely to fall well below those of equally qualified female in alternative professions.

Recent unpublished work Birch (1999) using 1991 Census data shows that nurses after correction for the skills, qualification, experience, overtime work and other factors known to affect earnings, nurses are still at a significant earnings disadvantage relative to other professional groups such as those in the Health Industry, business Professionals and the police.

Information on award rates and the range of award rates (Appendix A) supports the expectation that the relative position is probably unchanged. The important focus in relation to this is not starting rates of pay, but the range of rates, the speed with which experience leads to additional pay, and the proportion of the profession achieving career progression and moving into the top pay ranges. Rewards for specialisation via qualifications is also an issue.

The Issues

At the system wide level, pay rates and earnings become a labour market issue. The labour market model proposes that both the amount of labour which is supplied (supply) by individuals and the amount individual employers seek to employ (demand) are determined by the wage rate the market as a whole establishes. Extra demand of itself can push the wage up, additions to supply will depress the wage. The labour market model also tells us that the perception of "shortage" is the result,

either of lags in the response of labour supply (because of education needs) to an increase in wages, or alternatively, failure of the wage to respond to demand as the result of some inflexibility (e.g. a centralised award system) or a dominant purchaser (oligopsonist or monopsonist) setting the industry wage.

We also know that, in the responsiveness of supply to changes in pay rates/earnings, it is relative pay not absolute levels which impacts on long-term supply. In this respect, it is interesting to note that in a recent survey of WA school leavers, nurses were perceived as relatively lowly paid, "...the pay is poor for what they do; other jobs that have shifts are much better paid", ..."dead end job"..."not a proper profession" (Hearn and Sheahan, 1998)

What is happening in this labour market which creates this relatively persistent perception of "crisis" in nursing labour markets across a number of similar economies, all of them with deregulating and deregulated labour markets?

Two elements possibly operating in tandem, are canvassed below: monopsony/oligopsony; and unionisation.

Monopsony/oligopsony

While health consumption expenditure as a proportion of Gross Domestic Product (GDP) has remained fairly stable over the past 10 years a combination of increasing demand and tight government budgets has provided an air of crisis and stringency in the health sector.

Health funding is complex in Australia. State governments have responsibility for public health and run the public hospital system. However, partial funding for state hospital and other health responsibilities is provided through the central government. Given that the major fund raiser is not responsible for funds disbursement, the link between funding and service is broken and the central government has incentive to keep funds tight.

The position for the workforce is confounded further by the fact that the aged care sector, which is also an employer of nurses, is largely privately run or run by not-for-profit organisations and funded directly from the central government (plus some input from residents). There is a small but vibrant private hospital sector.

State Governments employ approximately 70 per cent of nurses; most of these are employed in hospitals. The central government, through its control of expenditure for nursing homes has also bought pressure to bear on health budgets and hence pay and conditions for a further 16 to 20 per cent of nurses.

The remaining employers of nurses (about 10 to 15 per cent of the total labour force), community services, doctors surgeries and private (often small) hospitals, follow the lead of the public sector.

The budget for nursing looms very large in the budgets of all hospitals (usually around 50 per cent of total). The comment by one hospital executive is telling; "pay is low compared to other health professionals..." he said "...however, numbers are too high for this to change".

As noted by a number of researchers (Link and London, 1975) in the USA, the nursing labour market embodies the classic requirements for a monopsony,. Nurses possess specialised skills for which close alternative occupations are few.

In the Australian institutional environment the usual measures for gauging whether monopsony or oligopsony exists (e.g. concentration ratio or entropy measure using an enterprise basis) may be misleading. The structural features of the market at a State level are such that for about 85 per cent of the nurses employed funds are effectively "controlled" by the two levels of government, even while measurement based on the "enterprise" would show substantially lower levels of concentration.

We expect the monopsonist/oligopsonist to set a wage below the marginal revenue product of the labour; as a result the monopsonist/oligopsonist is likely to report vacancies at the established wage rate (even though this wage rate provided for the optimum outcome for the employer).

It is also rational for the monopsonist (oligopsonists) to seek to influence the supply of qualified labour coming onto the market through various forms of education/training and immigration (as the alternative to the price mechanism to bring forth supply).

On the face of it the nursing labour market in WA has exhibited the characteristics of an oligopsonist market: low relative rates of pay given training and experience, persistent reports of "shortage" and "vacancies" which can be quite long-term, considerable energy from employers expended in increasing supply by influencing immigration rates positively, through pressures to increase training places and in the latest series of advertisements, to increase the take-up of training places by school leavers.

Unionisation

One potential offset to monopsonist/oligopsonist power is unionisation. Since the 1980s nurses have become more unionised. Union coverage of registered nurses is about 45 per cent. Coverage is by the Australian Nurses Federation (ANF) - is a "strong" and fairly militant union. Elsewhere in Australia the ANF also covers Enrolled Nurses, but in Western Australia EN's are covered by the Miscellaneous Worker's Union, an equally strong and militant union with wide coverage in the health sector.

In negotiations with the public sector these two unions have fought hard for industry wide wage settlements. For RN's, the ANF was also involved in the initial negotiations for a "nursing career structure" (late 1980s) which sought to establish the parameters for career progression of nurses. This structure has very strong continued support from the union although current restructuring of hospitals and growth of clinical directorates has resulted in a loss of autonomy for the nursing area along with loss of hierarchical positions within that structure.

A program of research investigating the reality of monopsony power in Australia must, therefore, also address the extent of moderating union influence.

IV CHANGES IN SOCIAL STRUCTURE

The Nursing Labour Market as a Professional Market

There is considerable evidence that nurses characterise themselves as health professionals. This feeling was heightened by the move of training into tertiary education. Hence on the supply side, the forces at work are occupational choice and relative incomes and working conditions.

(a) Occupational choice

It can no longer be assumed that large numbers of school leavers have a vocation for nursing and will unshakingly pursue that. Nursing courses must increasingly compete for applicants with other tertiary courses. A 1997 NSW study entitled "Who wants to be a nurse" found that other career options considered by school leavers, (in order of preference) were education, arts, humanities, social science, science and business (Lawler, et al., 1997)

Social change, which has opened up a much wider range of course and career options for women, reinforces the message that nursing courses have to compete with other tertiary courses for students.

Crockett (1996) has shown that through the 1980s, while professions such as nursing remain highly segregated, there was a significant movement of women into a range of professions where, in the early 1980s they were not heavily represented. Hence in 1981, only 12 listed professions had 25 per cent or more female participants compared with 22 professions in 1991.

(b) Relative Incomes and Working Conditions

There is considerable evidence that decisions on course selection are strongly influenced by economic considerations such as relative pay and career opportunities and perceptions about lifestyle. Further, there is evidence that students are reasonably well informed about these (Keane *et al.* 1997, Easterlin 1995).

Data comparing nursing and non-nursing professionals salary scales (Appendix A) show that career progression opportunities for nurses are less extensive. Anecdotal evidence supplied to the author is that the development of clinical directorates in the public system has further eroded the quantum of nurse career opportunities. The data on nursing levels, available only for 1993 and 1994, do indicate a very truncated career ladder existing at that time. Over 53 per cent of RNs in WA were working as Level 1 RNs in 1993, rising to 54 per cent in 1994. Yet over 70 per cent of nurses are over 35 years and hence we would expect, well into their 'careers'.

V CONCLUSION

While to the employers the current nursing labour market gives the appearance of a shortage of nurses, care is needed in the interpretation of what this means and why it has occurred. Use of the term "shortage" suggests that there is an easy answer through increasing the flow of new nursing graduates and/or the flow of qualified nursing immigrants.

The analysis here suggests that without a change in the underlying reward structure in nursing, actions to increase the flow into the market may prove to be unsuccessful while they will be costly. This is because appropriate applicants will not present or alternatively will have a short sojourn, in the end only raising the rate of flow out of the industry.

This conclusion is reached on the basis of the observed decline in the nursing workforce, evidence that the attraction of nursing as a career has declined, while existing nurses are exiting the industry, seemingly in increasing numbers.

There are a host of workplace related irritations and problems, all within the ability of individual employers to investigate and address. However, the persistence and strength of the decline and the evidence that it is not localised suggest the system-wide problems will prevail over individual actions.

There is strong evidence that nursing is facing competition from more attractive employment options for the young women who are notionally qualified to undertake

a nursing qualification, as well as for many women with existing nursing qualifications. At the same time, evidence presented is strongly suggestive of a monopsonist or oligopsonist structure in the industry that does not allow the competitive adjustment to equilibrium wages.

The relative rewards (a combination of pay level and career progression prospects) available to nurses, when put against the workplace conditions and impact on lifestyle of nursing work, are not adding up for potential and existing nurses.

In the face of this declining attraction the industry has not adjusted its relative reward structure. A strongly unionised workforce has ensured that starting rates of pay have retained some comparability with those for other tertiary graduates. However, the lifetime earnings profile or career earnings profile has not kept up for nurses and this is confirmed by median salaries from 1996 census data. (Career Council of Australia, 1999, p26)

The words of Friss (1994) in relation to the US remind us that the nursing workforces in other Anglo Saxon economies are likely to be experiencing the same conditions.

Problems in nursing labour markets are the result of continued social change on the supply side opening more professions to women while on the demand side the purchaser of nursing services operates with many of the powers of a monopsonist/oligopsonist.. The highly unionised nature of this profession in Australia currently may mean that those pay adjustments which are won will favour the entry level positions both because of perceived equity and because these positions predominate. This however, compounds perceptions of poor career and earnings prospects and hence problems with the attraction of the profession.

VI REFERENCES

- Australian Institute of Health and Welfare (1997) Nursing Labour Force 1993 and 1994, National Health Labour Force Series Number 9, Australian Institute of Health and Welfare, Canberra.
- Bashford, A. (1997) Starch on the collar and sweat on the brow: self sacrifice and the status of work for nurses. Journal of Australian Studies, 52: 67-80.
- Battersby, D. et al (1990) Factors influencing the turnover and retention of registered nurses in NSW hospitals, New South Wales College of Nursing, March 1990.
- Belcher, D.W. (1979) Pay equity or pay fairness? Compensation Review, 2: 31-37.
- Birch, E. (1999), <u>The Rate of Return to Education: A Study of Nursing Credentials</u>" Curtin University of Technology, Department of Economics, unpublished Honours Thesis.
- BIZTRAC (1998) <u>Junior Registered Nurses Labour Force Survey</u>, Research Report prepared for the Health Department of WA by BIZTRAC, Faculty of Business and Public Management, Edith Cowan University, November.
- Blau, F.D. & Ferber, M.A. (1991) Career plans and expectations of young women and men, Journal of Human Resources, 26(4): 581-607.
- Booton, L. A. & Lane, J. I. (1985) "Hospital market structure and the return to nursing education", Journal of Human Resources, 20 (2).
- Career Council of Australia (1999) Graduate Starting Salaries 1998.
- Crockett, G.V. (1996) Shifts in Gender Segregation in Professional Occupations in Australia 1981-1991. Australian Bulletin of Labour, Vol 20(4): 265-274.
- Donovan Research (1998) Research to Assist the Development of a Campaign to Promote Nursing as a Career. HDWA Mimeo.
- Easterlin, R.A. (1995) Preferences and prices in choice of career: the switch to business, <u>Journal of Economic Behaviour and Organisation</u>, 27(1): 1-34.
- Fox, S. (1987) The origins of wastage from nursing, <u>The Australian Journal of Advanced Nursing</u>, 5(1): 11-17.
- Friss, L. (1994) Nursing studies laid end to end form a circle <u>Journal of Health</u> <u>Politics, Policy and Law</u> 19(3): 595-631.
- Gray, A.M. (1987) The economics of nursing Working paper 2, Nursing Policy Studies Centre, University of Warwick.

- Hearn, G. and Sheahan, A. (1998), <u>Research to Assist the Development of a Campaign to Promote Nursing as a Career</u>, Research Report prepared for the health Department of WA by Donovan Research, December.
- Jones, B. (1997) 'Nurses, the next generation', Viewpoint 4(3): 30-34.
- Link, C. R. & Landon, J. H. (1975) 'Monopsony and Union Power in the Market for Nurses', <u>Southern Economic Journal</u>, 41(4), pp 649-659.
- New South Wales Department of Health (1985) Report of the results from phone-in, Nurses not currently employed in the nursing workforce, February 1985.
- Lawler, J., Ahern, M., Stanley, A. and West, S. (1997), Who Wants to be a Nurse?, Research Report prepared for the Health Department of NSW by the Sydney Nursing Research Centre, The University of Sydney.
- Nowak, M. (1998) Supply Demand Ratio Imbalance of Nursing Staff in Western Australia, Report for the Workplace and Workforce Advisory Board (mimeo).
- Nowak, M. & Haw, L. (1994) <u>Labour force experience of recent nursing graduates</u>, Unpublished report for Curtin School of Nursing, Labour Market Research Centre.
- Nowetner, P.M. (1988) 'Adverse effects of organisational structures on nursing'. Proceedings of the Olive Anstey International Nursing Conference.
- Robinson, S. (1994) 'Professional development in midwifery findings from a longitudinal study of midwives careers'. <u>Nurse Education Today</u>, 14(3): 161-176.
- Sloan, J. & Robertson, F. (1988) 'A labour market profile of nurses in Australia, Australian Bulletin of Labour, 14(3): 507-528.
- Scott, H. (1996) Nurse shortages: Why are nurses leaving the NHS, <u>British Journal</u> of Nursing, 5(18).
- Williams, G. & Slater, K. (1995) Absenteeism in nursing: A longitudinal study, <u>Asia Pacific Journal of Human Resources</u>, 34(1).
- Winnell, A.M. (1990) The nursing shortage: Crisis in health care, <u>ACORN Journal</u>, 3(1).

APPENDIX A

Table A1. Salary Comparisons

| LEVEL | NURSES* | INTERNS** | RESIDENTS* | REGISTRARS** | ALLIED HEALTH GROUP# (eg. Physio's, Dietitians, etc) | | |
|---------|---------|------------------|-------------------------|-------------------------|--|--------|------------------|
| 1.1 | 27,971 | | | | | | |
| 1.2 | 29,318 | | | | | | |
| 1.3 | 30,670 | | | | | | (1 st |
| 1.4 | 32,027 | | | | L3 | 30,777 | increment |
| 1.5 | 33,379 | | | | То | 33,724 | Year 1) |
| 1.6 | 34,733 | | | | | , | , |
| 1.7 | 36,083 | | | | L4 | 34,418 | |
| 1.8 | 37,435 | 40,282 | | | То | 38,047 | |
| | , | (starting point) | | | | , - | |
| Level 2 | 38,787 | (| | | L5 | 38,838 | |
| | 39,692 | | | | То | 42,196 | |
| | 40,591 | | | | | , | |
| | 41,491 | | 43,146 | | | | |
| | , | | (2 nd point) | | | | |
| Level 3 | 44,008 | | | | | | |
| | 45,042 | | | | L6 | 44,414 | |
| | 46,077 | | 46,072 | | То | 48,400 | |
| | 47,107 | | (3 rd point) | | | , | |
| | , | | 47,849 | 49,700 | L7 | 49,651 | |
| Level 4 | 52,624 | | (4 th point) | (5 th point) | То | 52,880 | |
| | 56,644 | | | , , , | | , | |
| | 60,658 | | | | L8 | 55,280 | |
| | | | | | То | 57,248 | |
| Level 5 | 52,624 | | | | | - , - | |
| | 56,066 | | | | | | |
| | 60,658 | | | | | | |
| | 65,255 | | | | | | |
| Level 6 | | | | | | | |
| From | | | | 53,491 | | | |
| То | | | | , | | | |
| Level 7 | | | | | | | |
| From | | | | 56,686 | | | |
| То | | | | 00,000 | | | |
| | | | | | | | |
| Level 8 | | | | | | | |
| From | | | | 60,026 | | | |
| То | | | | | | | |
| Level 9 | | | | | | | |
| From | | | | 62,380 | | | |
| То | | | | | | | |
| Level | | | | | | | |
| 10 | | | | 65,950 | | | |
| From | | | | 33,000 | | | |
| То | | | | | | | |

Footnotes to Table A1 in Appendix A:

- * Nurses' Rates: Calculated using Weekly rate x 52. Based on EBA rates and including final 3% increase effective 1/1/97.
- # Allied Health Group: Rates include 3^{rd} Round 5 per cent increase effective 1/1/97; Dietitians = Levels 3/5 to 7; Physiotherapists = Levels 3/5 to 8.
- ** Intern, Resident and Registrar rates: Base annual salary at 1/1/97 Based on collective Workplace Agreement 1996.