

An ageing nursing workforce

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Abstract. There are well documented workforce shortages in nursing. Many strategies have been suggested to resolve the issue, including increasing migration or training places, changing skill mix or nurses' roles, redesigning nursing work, and greater use of unregulated or unlicensed workers. One of the contributing and growing factors is the ageing of the workforce, but methods of retaining older employees have been given very little attention.

This paper examines the impact of ageing on individuals, the ageing nursing workforce and the implications for government policy given its current status.

What is known about the topic? A generation of 'baby boomer' nurses are reaching retirement age. The nursing workforce is in crisis due to there being less entrants to the workforce as a result of lower birth rates, wider choices of career, and nurses leaving the profession for less stressful, more satisfying jobs.

What does this paper add? This paper outlines the necessity for the employment of retention strategies for older nurses in the workforce. It dispels myths about the functional capabilities of ageing nurses.

What are the implications for practitioners? Health managers should canvass ageing nurses to discover strategies that would encourage them to extend their working life. Only then could it become feasible to plan practical solutions to ease the global nursing shortage.

Workforce shortages in nursing are endemic and the focus of a great deal of discussion. Many strategies have been suggested to resolve the issue, including increasing migration or training places, changing skill mix or nurses' roles, redesigning nursing work, and greater use of unregulated or unlicensed workers. However, a factor given relatively little prominence in the debate is methods of retaining older employees who, in most developed countries now, form a substantial and growing component of the workforce.

As the generation of 'baby boomers' (those born in the 20 years following World War II) are now reaching retirement age, the number of workers leaving the workplace will increase over the next 20 years. This phenomenon is not unique to nursing but has a greater workforce impact because it is a service industry, relying very heavily on person-power rather than technology in its work. Also, as a predominantly female profession, many nurses have taken time off to have a family, which limits their earning and pension capacity; and more recently, in increasing numbers, these same staff are now relied on to provide care for elderly parents. Concurrently, there will be fewer entrants to the workforce as a result of the lowered birth rate in developed countries from the late 1960s onwards.^{1,2} Given the contraction and ageing of the workforce, employers will have to devise ways of re-engaging with older workers.^{3,4} This paper explores the impact of ageing on individuals and implications for a nursing workforce which is

ageing. Factors for consideration by employers will also be discussed.

The extent of the problem

Projections by the Australian Bureau of Statistics show that the proportion of people in the workforce aged between 55 and 64 will continue to rise.^{5,6} Currently, people in this age group have lower workforce participation rates than younger age groups. This is particularly so for women, with a rapid decline in participation rates for those between the ages of 50 and 54 years.⁶ Should this trend continue, as the 55 to 64 years age group increases proportionately, there will be a serious and deleterious impact on future labour supply⁵ (p. 7). Australia falls behind many other OECD (Organisation for Economic Co-operation and Development) countries in its workforce participation rates of mature workers.⁷ Many years ago, warnings were sounded that the trend of encouraging early retirement was perhaps an imprudent short-term strategy.⁸ We may be seeing the results of this policy today.

The ageing of the workforce is reflected in the nursing profession. The average age of employed nurses in developed countries ranges from 35 years in Singapore to 44 years in Canada, Iceland, and New Zealand, whereas the average age of all nurses in the United States is 46.8 years.⁹ The most recent

Australian information, reporting 2005 nursing census data, indicated that 35.9% of employed registered nurses were aged 50 years or more, a rise from 25.1% in 2001.¹⁰ The average age of Australian registered nurses is now 45 years. The International Council of Nurses (ICN) predicts that over the next 10 to 15 years industrialised countries will experience a large exodus from the workforce. Nurses will be retiring just at the time when an ageing population will require an increased workforce to care for them.

The age at which a nurse retires is important. In 2004,¹¹ New South Wales data were used as an example to estimate and project retirement losses of nurses to address two questions:

- What is the impact of nurse retirements on the overall supply of nurses in NSW if the current supply works until the age of 65?
- What is the impact of loss rates on the current supply in NSW if nurses leave the workforce at the age of 58, when many are first eligible to receive retirement benefits?

The authors suggested that the loss that could be anticipated by 2004 if nurses retired when they first became eligible for retirement benefits at age 58 was 7328. However, if they retired instead at age 65 then only 4139 nurses would be lost in the same timeframe. Further analysis revealed that if a strategy could be designed that allowed retention of 100% of 50–54-year-old registered nurses (RNs), 75% of 55–59-year-old RNs and 50% of 60–64-year-old RNs, then potentially 2139 staff could be retained in the state by 2004, including 1926 RNs. However, there is little evidence to suggest that nurses are currently working or prepared to keep working until the age of 65 because of the challenges and related health issues experienced in today's work environments.¹¹

The feasibility of retaining older workers is set in the context of an overall improvement in health status, increased longevity and a decline in the number of jobs that require hard physical labour.¹² However, nursing work is still physically and emotionally demanding and stressful and there is still a prevalence of unacceptably high workloads.^{13–19} An understanding of the effects of ageing on the ability of older nurses to continue to participate in the workforce is foundational to developing policy encouraging them to do so.

Issues associated with retaining older workers

In recent years there has developed a growing literature relating to the effects of ageing on older workers but little consensus. In an extensive review of literature relating to the effect of ageing on work performance, Koopman-Boyden and MacDonald²⁰ found that views are dichotomous and arguments range from the view that successful ageing is related to continuing activity into old age, to a view of gradual mutual withdrawal between the individual and society.²⁰ There is some argument that there is decline in productivity with age where there is a need for problem solving skills, new learning and speed in task performance, whereas productivity can be maintained at a high level where experience and verbal ability are needed.²¹ On the other hand, Hardy and Baird²² contend that age and performance are generally unrelated but that older workers are disadvantaged by recent technological developments which in themselves are inflexible and unaccommodating of variability and do not take the

needs of older people into account. They conclude that the ability of older people to learn new skills is related to the era in which they were originally educated, and this is reflected in their ability to accommodate new technology, which may require better design in order to accommodate the skill sets of older workers.²²

In an extensive review of data obtained in animal and human studies of the ageing brain and the effect of exercise, Churchill and his colleagues deduced that although physical exercise may selectively affect particular cognitive functions, there is considerable diversity in outcomes overall for the older person.²³ In a presentation related to the mining industry, Parker²⁴ argued that there is over-concentration on the physical capabilities of the older worker. He acknowledged a decreased resistance to physical stress with a resulting increase in fatigue, a tendency to take longer to recover from injury, and a decreased ability to cope with shift work. However, he contends that older workers compensate for these drawbacks with extensive experience and knowledge, and managers would do well to place increased focus on these attributes.²⁴ This view is supported by Hardy and Baird.²²

Overseas, in response to figures in the European Union which demonstrated a changing demographic profile of the workforce, attention was turned to the physical and mental effects of ageing.²⁵ In a longitudinal study of Finnish blue collar workers, a number of issues were identified. Changes in physical work capacity are concentrated on the cardiovascular and musculoskeletal systems, body structure and some sensory systems. It was demonstrated that a low cardiorespiratory capacity could have negative effects on the long-term health of workers occupied in moderately physical jobs. This was particularly so of women occupied in nursing and home work. The conclusion drawn is that in an ageing population of female workers, physical workloads should decrease with advancing age and that regular exercise should be a regular feature of personal routines. Likewise, there can be pronounced changes in musculoskeletal capacity after 45 to 50 years of age. It was found that this was particularly relevant for blue collar workers. However, the evidence indicates that the physical nature of such work does not prevent a decline in musculoskeletal function. It is suggested that for male workers, physical workload should reduce with age and that regular exercise should be introduced to compensate for the decline. Thus, a balanced solution for an ageing workforce should be that a normal age-related fitness level is maintained by workers and the normal age decline in physical activity should guide the physical workload of jobs.

Mental functional capacity can be defined as 'the ability to perform tasks that require intellectual and other kinds of mental effort'²⁵ (p. 548). Perhaps the most important changes in mental function are related to the decrease of precision and the speed of perception, however, in the course of one's career, the actual functions of information processing change very little. It is argued that some cognitive functions such as verbal command and the ability to process complex problems improve with age. The weakening of physical capacity does not affect the improvement of mental capacity. Ilmarinen²⁵ contends that there is little difference between age groups in the performance of jobs; performance is the same in 'skill demanding' and 'speed demanding' jobs. The concept that there are changes which occur throughout an individual's working life had not been

readily embraced by managers at the time of Ilmarinen's study. The fit of human resources to new demands and the incorrect assumption that older workers are less competent led to the displacement of many workers over 55. Overall, these study findings²⁵ point to the need for the training of supervisors in age-related issues, the implementation of appropriate age-related ergonomics, the implementation of workplace exercise programs and the introduction of tailored training in newer technologies for older workers.

The literature explores other issues of ageing in relation to work. In his extensive discourse, Parker²⁴ raises many points:

- The process of ageing is variable from person to person, with widely ranging functional capacity demonstrated; a 50-year-old worker can function equivalently with a 25-year-old worker, whereas a 45-year-old may have the functional capacity of an 80-year-old.
- Although the relationship between age and the occurrence of injury is inconclusive, older workers may take longer to recover from injury and are more likely to be severely injured than younger workers, whereas certain areas of the body, particularly the lower back, are more prone to injury in the older worker.
- The known circadian disruption of shift workers which increases the risk of sleep deprivation through a decrease in the quantity and quality of sleep is magnified with age from the mid 30s onward. Shift workers report increasing difficulty in coping with shift work from 40 years onwards and performance of older workers is significantly decreased across night shifts.

Difficulties with shift work are supported by Muecke²⁶ who reviewed the literature relating to nurse rostering, shift work and fatigue. The review supports the notion that shift workers in general are at risk of fatigue decreasing performance in the workplace, which has a negative impact on patient care. This risk is particularly increased for workers 40 years and over.

There is a perception that older workers undertaking multiple roles, such as caring for aged parents, are more prone to illness. However, in an analysis of a longitudinal retirement survey conducted in Britain, the researchers found few statistically significant relationships between workers undertaking simultaneous roles and their health.²⁷ It can be concluded that older workers who also have a family caring role will not necessarily have a reduced capacity to cope in the workplace.

A further problem for older workers is a perception of age discrimination. There is concern that ageism, while not a new phenomenon, will gain prominence as the workforce ages, with negative stereotyping causing substantial disadvantage. In a survey exploring employee perceptions, it was demonstrated that older workers who feel they have been discriminated against are more likely to retire early.²⁸ These authors also found that older workers may also feel 'locked in' or 'trapped' in the present workplace through a perception that they will be discriminated against elsewhere. They are therefore reluctant to find a new workplace.

Policy responses

Australian governments have acknowledged the issue of the ageing workforce.^{29–35} Business and trade union leaders have

also supported strategies for the retention of older workers.^{35–40} There is evidence that the policy of several state governments has been adjusted to incorporate the recommendations of federal government reports.^{41–47} At the workplace level, examples of policy for accommodating older workers can be found,^{41,48} however it is very difficult to find reports of the implementation of such policy and evidence that it improved retention of older workers.

In Australia, there is wide acknowledgement of the looming crisis in the ageing nursing workforce resulting from the imminent retirement of older nurses.^{11,18,49,50} However, apart from research which seeks to highlight the problem^{11,50} there is little evidence that the health industry has grasped the complex issue of implementing measures to assist nurses to remain in the workforce beyond the present average age of retirement should they wish to do so.

The way forward

Research overseas, although sparse, indicates that there are several measures that may assist in the retention of older nurses. In the report 'Nurses over 50: Options, decisions and outcomes' undertaken for the UK-based Joseph Rowntree Foundation, Watson, Manthorpe and Andrews⁵¹ found that policy eminently suitable for the retention of older employees was in fact aimed at younger employees. The authors recommend that the contribution of older nurses should be recognised through human resource policy, where professional development needs are addressed, flexible working options are made more available and pension and superannuation provisions are not adversely affected by those flexible working arrangements.⁵¹ The authors further recommend that there is a need for research into job redesign to address the issues of heavy workload and stress for older nurses.⁵² Others suggest that specific roles focusing on aspects of work such as admission and discharge processes could be developed for older nurses.⁵³ Investment in improvements to the workplace and equipment designed to prevent physical injury is also strongly recommended.^{53–55} Canadian research by Lavoie-Tremblay *et al.*⁵⁶ recognised that little is known about measures for the retention of older nurses. Identifying from the literature factors contributing to an optimal psychosocial environment for nursing, the authors developed a decision framework for managers considering retention strategies. The framework encompassed the dimensions of optimal psychosocial demand, sufficient decision-making latitude, adequate support from superiors, adequate support from colleagues, balance between effort and reward, predictability of work and meaning of work. By matching the domains to responses from a large survey of nurses focusing on factors influencing retention, the authors concluded that the introduction of a participatory style of management would address the needs of older nurses for recognition of and respect for their expertise through consultation, continual sharing of knowledge and sharing of power, allowing nurses to propose workplace solutions, prioritise actions and participate in applying them.⁵⁶ Reports from the United States reflect the recommendations from Canada and the United Kingdom, particularly in relation to adapting dimensions of nursing work to accommodate the physical changes of ageing.^{54,55} Nevertheless, internationally

there are few reports of successful implementation of such strategies: those that exist relate to implementation in a single organisation and do not cover evaluation, for example.⁵³

There is no readily available published evidence that similar research or policy adjustment focusing on older nurses has been undertaken in Australia. It appears that older nurses have not been asked their retirement intentions, nor have they been canvassed for strategies that would encourage them to extend their working life, even for a short period, beyond their expected retirement age. The attitudes of senior health service managers towards older nursing employees and their retention is unknown. Without understanding the issues for this cohort of nurses, it is impossible to plan for future retention. Do senior managers really wish to facilitate the retention of older nurses? There is wide scope for Australian research into this field and potential for improving the lot for the whole nursing workforce through valuing and retaining the contributions and expertise of older nurses.

Conclusion

The issue of an ageing workforce has been acknowledged as one of great importance by the former Australian Government and its senior politicians espousing the need for mature workers to continue to participate in the workforce.⁵⁷ A major report produced for the Australian Treasurer and the Council of Australian Governments reviewed the likely impact of an ageing population on Australia's overall productivity and economic growth, the economic implications for labour supply and for unpaid work such as caring and volunteering and their potential fiscal impact on federal, state and local government.⁵⁸ To date, the new federal Labor government has not placed particular emphasis on this issue. However, it is clear that one strategy for resolving the shortage of skilled nurses is to focus on their continued participation in the workforce. To do so requires understanding what will motivate them to continue, what employers can do to minimise the impact of heavier workloads and the physical effects of ageing, and the measures policy makers can implement to support their retention.

Competing interests

The authors declare that they have no competing interests.

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