Job satisfaction of Australian nurses and midwives: A descriptive research study

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KEY WORDS

nurses, midwives, stress, job satisfaction, quantitative.

ABSTRACT

Objective
To assess factors linked with job satisfaction of Australian nurses and midwives.

Design
Descriptive survey.

Setting
Public hospital, aged care facility and community health centres.

Subjects
A total of 562 enrolled and registered nurses and midwives were selected by convenience sampling when they attended professional conferences. The return rate was 41.4 per cent. A sample size of 550 was used to calculate overall results for job satisfaction.

Main outcome measure
Factors contributing to nurses’ and midwives’ job satisfaction.

Results
The majority (96%) of this sample of nurses and midwives were moderately or highly satisfied with their work and this was not diminished by experiencing moderate amounts of work-related stress. Factors positively related to high levels of job satisfaction were 1) enjoying their current area of practice; 2) feeling well-suited to the particular type of work; 3) wanting to stay in their current area of practice; and 4) having no intention of leaving the profession.

Conclusion
For this group of professionally engaged nurses and midwives, enjoying their work and perceiving themselves as well-suited to it were the major contributory factors for job satisfaction. The finding that nurses and midwives are dealing with moderate effects of stress does not reflect as job dissatisfaction. This finding is important because it challenges existing belief that stress may be a cause of job dissatisfaction.
INTRODUCTION

Given the present critical shortage of nurses and midwives, it is imperative to explore how both nurses and midwives perceive their jobs, so that strategies might be identified to enhance the quality of their working lives and improve retention (Australian Institute of Health and Welfare, 2006). The purpose of this study is to provide information and insight into sources of stress for nurses and midwives, and the impact of these on their job satisfaction. Assessment of nurses’ and midwives’ job satisfaction is essential to address target areas of concern for workplace stress. Specifically, this paper asks – Ultimately, what are the factors linked with job satisfaction and how does this relate to staff stress levels? This could have a powerful effect on the already critical national nursing shortage but it might also have an effect on the retention of nurses and midwives, reducing the numbers leaving the profession.

RELEVANT LITERATURE

The literature indicated that nurses and midwives are experiencing significant stress and burnout. Other than a few studies, four focusing on Victorian nurses (Kent and Lavery 2007; Pinikahana and Happell 2004; Barrett and Yates 2002; O’Connor and Jeavons, 2002;) three focusing on mental health nurses (Taylor and Barling 2004; Hummel and Caputi 2001; Clinton et al 1995), two in Queensland (Spooner-Lane and Patton 2008; AIHW 2006) and one in Sydney focusing on violence and abuse from patients (Carstairs and Trenoska 2002), all other studies are based on nurses and midwives working in countries other than Australia. All of these stress and burnout studies used a variety of reliable and valid questionnaires including The Maslach (1986) Burnout Inventory and the Nursing Stress Scale (developed by Gray-Toft and Anderson 1981). The Maslach (1986) Burnout Inventory, which uses three separately scored subscales was a model for the five subscale questionnaire used for this study.

In recent years, the number of tools which have been developed by nurses that assess the workplace has increased (Rattray and Jones 2007). Hurrell, Nelson and Simmons (1998) reported that choosing a tool to measure stress poses a perplexing challenge. Edwards and Burnard (2003) report that there are several established reliable and valid measures for measuring stress outcomes and stressors but investigators feel there is a need to continue to develop new instruments. Lambert and Lambert (2001) recommend that more studies be undertaken in other countries as there is a plethora of studies in the United Kingdom and United States of America. On this basis alone, there is good reason to conduct more research focusing on stress and burnout issues relating to nurses and midwives working in Australia.

In Victoria, Healy and McKay (2000) using the Nursing Stress Scale found that even though most nurses in their study reported being satisfied in their present positions, 67 per cent had thought about leaving the nursing profession. Environmental stressors, including low staffing levels and excessive workloads, accounted for this. Improving working conditions for nurses and midwives might not only reduce stress levels but might also encourage nurses and midwives to stay in the profession (Healy and McKay 2000). Other studies have found that stress appears to be a major determinant of nurses’ job dissatisfaction levels, and that increased stress levels in nurses leads to career dissatisfaction (Hoffman and Scott 2003; Delvaux et al 1988). These findings equate to Beaudoin and Edgar’s (2003) and Healy and McKay’s (2000) studies which found that those who were satisfied in their work were less stressed than those who were dissatisfied.
RESEARCH PAPER

RELATED THEORY

The five main subscales used for the questionnaire were work environment, psychosocial effects of stress, job satisfaction, exhaustion, and pressure and motivation. This conceptual framework of this research project relates to the three major work theories: the Effort-Reward Imbalance (Vroom 1964), Karasek’s (1979) Demand-Control Model and the Person-Fit Theory (Mansfield et al 1989). Table 1 displays a representation of how the themes, categories, and subscales are linked within this conceptual framework.

METHOD

Development of questionnaire

The research process began with the development of a questionnaire based on a comprehensive literature review. A prior publication (Skinner et al 2007) describes a study that established validity and reliability of the questionnaire used in this current study. A convenience sample of a mixture of registered nurses and midwives working in different clinical arenas who attended professional conferences were used. As nurses and midwives who attend conferences are more likely to be more educated and motivated and possibly financially supported by their employer; the results cannot be generalised and therefore must be considered a limitation of this study. The sample was selected because of geographical accessibility. However, this limitation is offset by the large sample size (N = 550) and by the use of a valid and reliable tool. Ethics approval was obtained from the appropriate authorities. Sample size (a priori) and power (post hoc) were calculated using the relevant statistical parameters (Table 1).

Table 1: Sample Size and Power Calculations- 2-tailed

<table>
<thead>
<tr>
<th></th>
<th>Alpha level - probability</th>
<th>1 - beta level –power</th>
<th>Effect size</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>A priori</td>
<td>0.05 (α)</td>
<td>0.8 (1 – β)</td>
<td>r = 0.12</td>
<td>540</td>
</tr>
<tr>
<td>Post hoc</td>
<td>0.05 (α)</td>
<td>0.81 (1 – β)</td>
<td>r = 0.12</td>
<td>562</td>
</tr>
</tbody>
</table>

Classification and coding legends for questionnaire

Relevant questions from the questionnaire were categorised into the following subscales: work environment, psychosocial stressors, issues of control, job satisfaction, exhaustion and individual responses. As identified in the literature, questions which related to a particular subscale were grouped accordingly. For the majority of the questions, individual responses to stress and burnout experiences were identified by using a rating scale which designated how often these occurred (Roberts and Taylor 1998). As part of a standard valid methodology, such scales comprise, in most cases, between five and ten points (Schneider et al 2003). The scales used as part of this research range from five and nine points.

Factor analysis

Factor analysis was calculated a priori for the pilot study and as a post hoc analysis to statistically define subgroups for the questionnaire. It is vital to report a priori the number of factors expected to emerge (Rattray and Jones 2007). Factor analysis was also calculated to establish construct validity for the questionnaire to confirm factorial validity of underlying attributes or different questions on a scale (Polit and Hungler 1997). Pervin (1996) states that factor analysis is exceedingly useful in determining groups or clusters of items or behaviours that go together. For each respondent, an individual subset of measures was included in an overall score to produce subscale results for the entire sample. Each individual’s scores were added for those particular questions relating to that subscale and then this individual overall score was scored as low, moderate or high (Table 2). Percentages were then calculated for the entire sample of nurses and midwives for the subscale job satisfaction.
Table 2: Scoring Levels for Job Satisfaction Subscale

<table>
<thead>
<tr>
<th>Level for job satisfaction subscale</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>High satisfaction</td>
<td>0-6</td>
</tr>
<tr>
<td>Moderately satisfied</td>
<td>7-14</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>15-21</td>
</tr>
<tr>
<td>Overall score</td>
<td>0 to 21</td>
</tr>
</tbody>
</table>

Development of questionnaire’s subscales using factor analysis

As in the pilot study (with some questions deleted and moved into different subscales), the first part of the questionnaire used for the main study included 37 questions relating to stress and burnout within the nursing and midwifery profession, which included questions about job satisfaction. There is a growing consensus about the need to measure the perceived frequency of incidence of stress-related episodes in the workplace or, in other words, the perceived frequency of occurrence and severity of stressful events in workplaces (Vagg and Spielberger 1999). The pilot study’s results initiated the development of the relevant subscales. All subscales except job satisfaction were modified for the main study following factor analysis as only those questions which were reliable were used. Specific indices were used for the subscales (Table 3). These five subscales, provided a way of determining and assessing individual responses to stress and burnout workplace issues for respondents instead of an overall score from many variables within the questionnaire.

Table 3: Stress Subscales / Indices for Main Study

<table>
<thead>
<tr>
<th>Major theme</th>
<th>Category</th>
<th>Subscale</th>
<th>Questions</th>
<th>Indices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress</td>
<td>Job compatibility</td>
<td>Job satisfaction‑5‑item scale</td>
<td>Being suited to the work</td>
<td>0‑4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Overall score</td>
<td>Enjoying the type of work</td>
<td>0‑4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0‑21</td>
<td>Wanting to change area of practice</td>
<td>0‑3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Leave professional discipline</td>
<td>0‑3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Frequency of job dissatisfaction</td>
<td>0‑7</td>
</tr>
</tbody>
</table>

QUESTIONNAIRE RETURN RATE AND DEMOGRAPHICS

Questionnaire return rate

Response rates in research studies among health professionals are usually poor (Ng et al 1999). The return rate of 41.4 per cent for this study is comparable to other published research findings with large samples investigating stress and burnout, however it leaves undefined the impact of the issues under study on the 58.6 per cent of nurses and midwives in the original sample who did not respond to the questionnaire.

DEMOGRAPHICS - COMPARISON OF NATIONAL WORKFORCE WITH STUDY SAMPLE

Important to the findings of this research was the review of previous, similar studies and whether findings from this study seemed congruent or otherwise with the work of others. The following demographics were therefore pertinent in relation to discussion and analysis of levels of stress for nurses and midwives from this study (Table 4). The age range for this study was similar to national statistics. In 2005, the average age in this study was 45 years which was also similar to national statistics (43.2 years in 2004). The questionnaire identified that nurses and midwives in this study worked slightly more average (fulltime, part‑time and casual) hours per week (34.5 hours) as compared with the national sample (33.1 hours) (AIHW 2006).
Table 4: Comparison of Age and Hours Worked Per Week Between Study and National Samples

<table>
<thead>
<tr>
<th>Age %</th>
<th>&lt;25</th>
<th>25-34</th>
<th>35-44</th>
<th>45+</th>
<th>Total %</th>
<th>Total number</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;25</td>
<td>S  = 0</td>
<td>S = 14.3</td>
<td>S = 71.4</td>
<td>S = 14.3</td>
<td>100</td>
<td>S = 7 1.3%</td>
</tr>
<tr>
<td></td>
<td>N  = 10.5</td>
<td>N = 14.3</td>
<td>N = 72.4</td>
<td>N = 2.7</td>
<td></td>
<td>N = 8,512 3.7%</td>
</tr>
<tr>
<td>25-34</td>
<td>S  = 18.3</td>
<td>S = 18.3</td>
<td>S = 50</td>
<td>S = 13.3</td>
<td>100</td>
<td>S = 60 10.9%</td>
</tr>
<tr>
<td></td>
<td>N  = 29.4</td>
<td>N = 18.3</td>
<td>N = 49.1</td>
<td>N = 3.2</td>
<td></td>
<td>N = 47,958 21%</td>
</tr>
<tr>
<td>35-44</td>
<td>S  = 34.1</td>
<td>S = 25.4</td>
<td>S = 30.1</td>
<td>S = 10.4</td>
<td>100</td>
<td>S = 173 31.5%</td>
</tr>
<tr>
<td></td>
<td>N  = 39.3</td>
<td>N = 21.8</td>
<td>N = 36.1</td>
<td>N = 2.8</td>
<td></td>
<td>N = 76, 556 33.5%</td>
</tr>
<tr>
<td>45-54</td>
<td>S  = 18.7</td>
<td>S = 24</td>
<td>S = 46.9</td>
<td>S = 10.4</td>
<td>100</td>
<td>S = 241 43.9%</td>
</tr>
<tr>
<td></td>
<td>N  = 26.7</td>
<td>N = 25.1</td>
<td>N = 45</td>
<td>N = 3.1</td>
<td></td>
<td>N = 68,304 30%</td>
</tr>
<tr>
<td>55+</td>
<td>S  = 13.2</td>
<td>S = 29.4</td>
<td>S = 42.6</td>
<td>S = 14.7</td>
<td>100</td>
<td>S = 68 12.4%</td>
</tr>
<tr>
<td></td>
<td>N  = 33.3</td>
<td>N = 23.8</td>
<td>N = 40.8</td>
<td>N = 2.1</td>
<td></td>
<td>N = 26,899 11.8%</td>
</tr>
<tr>
<td>Total %</td>
<td>S  = 22.6</td>
<td>S = 24.4</td>
<td>S = 41.7</td>
<td>S = 11.3</td>
<td>100</td>
<td>S = 549 100%</td>
</tr>
<tr>
<td></td>
<td>N  = 31.7</td>
<td>N = 22</td>
<td>N = 43.4</td>
<td>N = 2.9</td>
<td></td>
<td>N = 228,230 100%</td>
</tr>
</tbody>
</table>

Legend = S = this study sample N = national sample

RESULTS

Figure 1 displays that the majority (96%) of this sample of nurses and midwives showed moderate to high job satisfaction levels and a small percentage (4%) were dissatisfied in their work. The decision was made to further explore this surprisingly large and positive perspective about job satisfaction by examining the differences between those who professed moderate satisfaction and those who described high satisfaction. The following four components evolved from factor analysis: perceptions of enjoying and being suited to the particular type of work are related to factors linked with job compatibility and satisfaction; and additionally, in wanting to change area of practice or leave the profession altogether.

Figure 1: Job Satisfaction (N=550)

Individual components for job satisfaction

- The majority (96%) of nurses and midwives indicated they think they are suited to the work they are doing either frequently, most of the time or always.
- The majority (94.8%) of this sample of nurses and midwives reported they are doing the kind of work they like either frequently, most of the time or always.
- Almost half (48.6%) of nurses and midwives in this sample did not want to change their area of practice. Almost half (48%) said ‘yes’ they did or sometimes did want to change their area of practice.
• The majority (55.2%) of nurses and midwives in this sample did not want to leave the professional discipline, although more than two-fifths (41.2%) of the sample said ‘yes’ they did or sometimes did want to leave. More nurses and midwives (55.2%) were certain they did not want to leave the professional discipline than the 48.6 per cent that were certain they did not want to change their area of practice.

• The majority (57.6%) of nurses and midwives reported they experienced job dissatisfaction at least once a month.

• Age was negatively associated with job dissatisfaction ($r = -0.122$, $p<0.01$)

**DISCUSSION**

**Overall job satisfaction**

The overall level of job satisfaction for this sample of nurses and midwives identified the majority (96%) showed moderate to high satisfaction levels and only a small percentage (4%) were dissatisfied in their job. Generally, the nurses and midwives in this study were satisfied with their work. It is important to note that other studies have also indicated positive job satisfaction (Billeter-Koponen and Freden 2005; Wheeler and Riding 1994). Interestingly, the majority (57.6%) of nurses and midwives reported that they experienced job dissatisfaction at least once a month. Job dissatisfaction is one of the leading causes of nurses leaving the profession (Edwards and Burnard 2003); however for this study high levels of frequent experiences of dissatisfaction were not apparent.

This study suggests that even though a large number of nurses and midwives described experiencing stress, somewhat paradoxically, they seem to be content with their work. The findings that nurses and midwives are dealing with moderate effects of stress do not reflect as job dissatisfaction, but as stress related to the workplace environment or their own psychosocial reactions and responses. It might also imply that nurses have developed coping strategies to deal with stressful situations, such as talking to or debriefing with other colleagues (Wong et al 2001).

**Being suited to the work**

The overwhelming majority (96%) of this study’s respondents stated they frequently or more often thought they were suited to their work. This could be an explanation as to why the majority (96%) of this study’s respondents are satisfied in their work. Stress-related conditions might be warning signs that there is a mismatch between certain individuals and their jobs (Toohey 1996).

**Enjoying the type of work**

The vast majority (94.8%) of this study of nurses and midwives stated they frequently or more often enjoyed their work. The inference that can be drawn from this is, even though indicating they experience moderate levels of stress, they remain in the profession as they basically enjoy their work. The NSW Nurses Association (2008) has recently presented a submission which identifies nurses remaining in the profession because of rewards gained from their caring professional work, although the NSWNA (2008) considered this might not be enough to retain nurses in the workforce over the long term. Further research in this area could clarify this interesting phenomenon.

**Wanting to change the area of practice**

Changing the area of practice has been seen as a specific solution to stress and this has been evident in previous research (McGrath et al., 2003). This study found that over one tenth (10.4%) did want to change their area of practice with nearly four-fifths (37.6%) sometimes wanting to change. Other nurse studies found similar results (Pinikahana and Happell 2004; McGrath et al 2003; McKenna et al 2003).
Wanting to leave the professional discipline

The majority (55.2%) of this study’s respondents did not want to leave their professional discipline. This reinforces the view that, even though the nurses and midwives in this study seem to be dealing with stress issues, many do not wish to leave or change their workplace and / or professional choices. They might have also become accustomed to the stress they are experiencing, thinking it is the ‘norm’ for their workplace and/or profession.

Only a small proportion (7.6%) of this study’s respondents wanted to leave the professional discipline. So, even though almost half (48%) of this sample of nurses and midwives did at least sometimes want to change their area of practice, the majority (55.2%) did not want to actually leave their professional discipline. This finding suggests they might simply need to change their current area of nursing or midwifery, rather than leave the profession entirely. The sizeable number who indicated they would consider a change in professional discipline could reflect the participants are fully aware of the very large number of professional opportunities available to nurses and midwives. This is an important finding.

Frequency of job dissatisfaction

Over one third (33.6%) of this study’s respondents had at some time (no time frame stated) considered leaving the profession, implying a certain amount of job dissatisfaction, paralleling other studies (McGrath et al 2003; McKenna et al 2003; Olofsson et al 2003). It would seem unrealistic to expect respondents to never consider leaving their profession. The generally high level of job satisfaction indicated that respondents generally enjoyed their work and this needs to be considered when dealing with stress.

This study also found that being older was associated with job satisfaction, meaning that older nurses and midwives were more satisfied in their work than younger ones. This finding complements other results in this study, specifically that younger nurses and midwives were experiencing more stress than older ones. Older nurses were more likely to have experienced many work scenarios thus managing and understanding ambiguous or problematic work situations with certainty (Kent and Lavery 2007). The reasons for this seem poorly understood, hence another reason for the importance of this research.

CONCLUSION

Even though a large majority (94.8%) of these nurses and midwives frequently or more often enjoyed their work, a third of them considered leaving from time to time. It is evident from these results that for nurses and midwives enjoying their work is not enough to prevent them from thinking about seeking workplace change or leaving the profession entirely. Further exploratory, qualitative research could pursue this interesting and important dynamic.

The majority (96%) of this sample of nurses and midwives were moderately to highly satisfied with their work. Enjoying the work and perceiving themselves as suited to their particular type of work related to nurses’ and midwives’ job satisfaction. This finding is important and should help focus appropriate organisational and professional change strategies. Being younger was also associated with job dissatisfaction for this sample of nurses and midwives. Using this knowledge in creative and positive ways would seem to be a strategy of choice; mentoring programs and team building concepts would be useful. Better utilisation of more experienced, satisfied nurses in supportive, role modelling capacity would seem strategic.

It is evident that the nurses and midwives in this study, despite their descriptions and experiences of stress, continue to work in their profession as they enjoy what they do. Managers could escalate all efforts to foster and further develop collegial and respectful relationships in full appreciation of the outcomes of this research. Nurses and midwives currently working in the system need to be appropriately praised and rewarded by
senior management for their good work to enhance morale and camaraderie so that they feel they are being recognised and valued for the work they enjoy doing and for which they feel suited. This research identifies the very positive levels of enjoyment and satisfaction described by the nurses and midwives despite the acknowledged highly stressful work. Recognising and balancing these seemingly conflicting factors needs to be considered when developing appropriate supportive human resource workplace strategies.

REFERENCES


