









## ORIGINAL MANUSCRIPT

# Job satisfaction among small rural hospital nurses: A cross-sectional study

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**Abstract**

**Purpose:** To explore the relationships between job satisfaction, community satisfaction, practice environment, burnout, and intention to leave of nurses working in Australian small rural hospitals.

**Design:** A national cross-sectional survey of 383 nurses from Australian rural public hospitals of less than 99 beds during 2018.

**Methods:** Job satisfaction was measured on a four-point Likert scale. Factors associated with community satisfaction, practice environment, burnout and intention to leave were analyzed using multiple linear regression to explore the predictors of job satisfaction.

**Findings:** Overall job satisfaction was positive, with most nurses moderately ( $n = 146$ , 38.1%) or very satisfied ( $n = 107$ , 27.9%) with their current job. Emotional exhaustion, nurse manager ability, leadership and support of nurses were the most significant predictors of job satisfaction.

**Conclusion:** This study provides new insight into the factors impacting the job satisfaction of nurses working in rural hospitals. The knowledge gained is important to inform strategies to retain nurses in rural areas and, in turn, ensure rural communities have access to quality health care.

**Clinical relevance:** The impact of nurses' job satisfaction on burnout, patient safety, and intention to leave is well recognized; however, there is limited understanding of job satisfaction in a rural hospital context. This study provides an understanding of the factors that impact job satisfaction of nurses working in small rural hospitals and highlights the importance of improving the practice environment to reduce the high attrition rates of this workforce.

**KEYWORDS**

burnout, hospital, job satisfaction, nursing, practice environment, rural

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## INTRODUCTION

Australia is one of the largest countries in the world; yet, has one of the smallest population densities, with only 3.14 people per square kilometer (Population Australia, 2020). Seventy percent of Australians reside in major cities, with the remainder living in regional cities or rural or remote areas (National Rural Health Alliance Inc., 2017). Rural Australian towns can be hours by air from metropolitan areas. The local hospital plays a vital role within these rural communities as it is often the only source of health care for hundreds of kilometers (Baernholdt et al., 2014). Nurses are essential to rural hospitals. They are often responsible for the coordination of patient assessment and treatment and may be, at times, the only clinical staff present in the hospital (Francis et al., 2014). Despite nurses being responsible for the delivery of most health care in rural hospitals, the workforce is aging (National Rural Health Alliance Inc., 2019). Attracting and retaining skilled nurses is one of the greatest challenges facing rural areas internationally (Twigg et al., 2016).

Australian rural communities suffer a higher burden of disease than metropolitan areas, a shorter life expectancy and a higher rate of avoidable deaths (Nancarrow et al., 2015). The greater the distance from metropolitan areas, the higher the rates of chronic disease, injury, lower birthweight infants and poor oral health (Willis et al., 2016). Rurality also increases the prevalence of obesity, smoking and harmful levels of alcohol consumption (Australian Institute of Health and Welfare, 2019). Shortages of health professionals, health care facilities and specialized services may negatively affect access to services and in turn, contribute to this poorer health status (Australian Institute of Health and Welfare, 2020).

Limited research has been conducted about the nursing workforce in rural hospitals both in Australia, and internationally, over the last decade and ongoing staff shortages persist despite initiatives to encourage nurses to work in rural areas (Cosgrave et al., 2018; Smith et al., 2019). Rural hospital nursing has long been perceived as professionally isolated, insufficiently supported by management and with limited access to continuing education and career pathways (Willis et al., 2016). Rural hospital practice may hold limited attraction as a career option for nurses, as rural areas may have insufficient employment options for partners, limited housing options and inadequate facilities for families (Sellers et al., 2019). These factors have, historically, made it difficult to recruit nurses to rural areas.

## BACKGROUND

Rural hospital nurses have to cope with high workloads and often find it difficult to take leave due to the lack of staff to replace them (Hart et al., 2013). They also frequently work additional hours and part-time employees may find themselves working full-time hours to cover workforce shortages (Francis & Mills, 2011). These factors may lead to nurse burnout which, coupled with the aging rural nursing workforce (National Rural Health Alliance Inc., 2019), has a significant impact on workforce attrition (Sasso et al., 2019). This high

attrition rate results in a loss of knowledge and experience which, ultimately, affects the delivery of safe patient care (Buykx et al., 2010; Flinkman et al., 2010). These challenges, and the lack of data on the rural nursing workforce, substantiate the need to investigate factors that affect job satisfaction to attract and retain nurses in the rural clinical setting (Park et al., 2019).

Job satisfaction has been described as a feeling of pleasantness when occupational desires or needs have been fulfilled (Liu et al., 2016). Due to its potential impact on retention and the quality and safety of patient care, job satisfaction has been examined in research on the nursing workforce in varying contexts (Dall'Ora et al., 2015; Halcomb & Bird, 2020). Herzberg's Two Factor Theory of Motivation describes how motivating factors can increase satisfaction, while negative factors can decrease job satisfaction (Herzberg et al., 1959). Increasing job satisfaction within a workplace has the potential to increase the ability to attract and retain staff (Halcomb & Bird, 2020) and is directly related to patient satisfaction (De Simone et al., 2018). However, job dissatisfaction is associated with employee withdrawal, intention to leave and burnout, and can effect productivity, creativity and longevity in a workplace (Liu et al., 2016). Job dissatisfaction is correlated with increased care left undone, which affects the quality and safety of patient care (White et al., 2019).

Existing literature shows that the practice environment, workplace stressors and community and rural life impact job satisfaction of nurses working in rural hospitals (Smith et al., 2019). Given the impact on retention, an understanding of job satisfaction in diverse clinical settings is required (Halcomb et al., 2018). The aim of this paper is to explore the relationships between job satisfaction, community satisfaction, practice environment, burnout, and intention to leave of nurses working in Australian small rural hospitals. This is one aspect of a large survey exploring the experiences of rural nurses across Australia. Other aspects of this larger study are reported elsewhere as they present discrete components of the data (Smith et al., 2020, 2021).

## METHODS

### Study design and setting

A cross sectional online survey collected data over a 10-week period in 2018 from nurses working in small rural public hospitals of less than 99 beds throughout Australia. Prior to commencing data collection ethical approval was granted by the University of Wollongong Human Research Ethics Committee (Approval No 2018/172). Participants were able to stop the survey at any time; participation was voluntary and anonymous.

### Participants

Enrolled (diploma prepared) nurses, registered (baccalaureate prepared or equivalent) nurses and dual registered nurse/midwives employed in the 479 hospitals listed as rural health facilities from the

<https://www.aihw.gov.au/myhospitals> website (Australian Institute of Health and Welfare, 2017) were invited to participate in the study. Public hospitals or multi-purpose services of less than 99 beds that were described as a small hospital or regional hospital were included. Given their different roles and practice scopes, solely registered midwives and nurse practitioners were excluded from the study.

There was no central data source that provides the numbers of nurses working in the included hospitals at the time of the study. Additionally, by necessity, as we used indirect recruitment methods, the number of nurses reached is unclear. As such it is not possible to calculate a response rate or undertake a power calculation as the exact population size is unclear. To this end we sought to recruit as many nurses employed at eligible facilities as possible during the study period.

Several methods were employed to recruit participants. Information packs were mailed to the 479 eligible facilities which included information about the study for nurse managers and flyers to advertise the study. An advertisement about the study was posted on Facebook, Twitter, and LinkedIn. Posts were either made via page administrators or as direct posts on sites that were identified by the research team as being seen by the target group. This included national and state-based groups that were focused on healthcare in rural areas. Posts were subsequently shared and commented on by stakeholders and the target group. These posts included brief study information and a link to the online survey. Lastly, key nursing organizations were contacted to disseminate study information to their membership through newsletters, social media pages, and regular updates. These organizations included the Council of Remote Area Nurses of Australia, the Australian College of Nurses, the Australian Nursing and Midwifery Federation, the National Rural Health Alliance, and Services for Australian Rural and Remote Allied Health. These groups were selected based on either their focus on rural healthcare or the large number of rural nurse members. Reminders were sent to these organizations via email to encourage the dissemination of the survey.

## Survey tool

A 37-item online survey, based on previously validated tools and a literature review (Smith et al., 2019) was developed for this study. As there is no single theory that underpins the depth and breadth of the survey focus, the survey tool was informed by a combination of theoretical approaches to job satisfaction [Herzberg's Two Factor Theory of Motivation (Herzberg et al., 1959)], burnout [e.g. Job Demands/Resources Model (Demerouti et al., 2001)], Work Characteristics Model (Hackman & Oldham, 1975) and intention to leave [e.g. Modeling and Role Modeling Theory (Amos et al., 1983)], the Theory of Reasoned Action (Fishbein, 1976) and the Organizational Commitment Model (Meyer & Allen, 1991).

Three experienced nurse researchers and ten volunteer rural nurses pilot tested the survey. This resulted in minor amendments to wording and formatting before the survey launch. The final survey consisted of participant demographics and hospital characteristics,

and validated instruments that assessed the practice environment (Joyce & Crookes, 2007), quality of care (Ball et al., 2013), care left undone (Ball et al., 2016), career intentions (Dall'Ora et al., 2015), job satisfaction (McManus et al., 2002), as well as community and work community satisfaction (MacLeod et al., 2017). The survey was delivered online via SurveyMonkey (2017).

This paper reports the job satisfaction component of the survey data and examines relationships between demographic characteristics, job satisfaction, community satisfaction, practice environment, burnout, and intention to leave. Given the volume of data, other aspects of the survey are published separately (Smith et al., 2020, 2021).

## Demographics

Demographic items focused on the participant (country of birth, gender, age, registration status, years of nursing experience, years at current workplace, employment status, predominant clinical area of practice) and their workplace (hospital or multi-purpose service and the presence of an emergency department and 24-h medical coverage). Participants were also asked if they spent their childhood living in a rural community and if they spent their childhood living in the community in which they are currently employed.

## Job satisfaction

Job satisfaction was measured by a single item measured on a four-point Likert scale, ranging from very dissatisfied (1) to very satisfied (4), which had been previously used by Sermeus et al. (2011) in the RN4CAST studies. A meta-analysis of single-item measures of overall job satisfaction measures reported reliability coefficient values ranging from 0.63 to 0.72 (Wanous et al., 1997) making them a suitable measure.

## Community satisfaction

Satisfaction with participants' community was assessed by two items designed to assess nurses' satisfaction about living and working in a small, rural community. These items were derived from an existing 12 item instrument on advice from the original author (Henderson-Betkus & MacLeod, 2004) and were measured on a five-point Likert scale, from not satisfied (1) to very satisfied (5).

## Practice environment

The practice environment refers to nurses' working conditions and includes the ability for nurses to work to their full scope of practice (Lake, 2007). The nursing practice environment has been studied since the 1980s to create favorable workplaces (Lake, 2002).

Participants' perceptions of the practice environment were measured using the Nursing Work Index-Revised: Australian (Joyce-McCoach & Crookes, 2011), a tool specific to the Australian context. This tool was derived from the Nursing Work Index-Revised which was constructed to measure magnetism in US hospitals (Aiken & Patrician, 2000; Lake, 2002). The Nursing Work Index-Revised: Australian includes 29 items, which comprise five subscales, measured on a four-point Likert scale, ranging from strongly disagree (1) to strongly agree (4) (Joyce & Crookes, 2007). Joyce-McCoach and Crookes (2011) report that the subscales all have acceptable internal consistency with a Cronbach's alpha above 0.7. The practice environment is considered favorable if the total mean score is above 2.5 (Swiger et al., 2017).

## Burnout

An abbreviated form of the Maslach Burnout Inventory measured participants' burnout (Zuraida & Zainal, 2015). Burnout is the feeling of being emotionally drained in response to excessive stress at work (Dall'Ora et al., 2020). The Abbreviated Maslach Burnout Inventory comprised of nine items in three subscales: emotional exhaustion, depersonalisation, and personal achievement. Each item was scored on a six-point Likert scale, ranging from never (0) to every day (6) (Vijendren et al., 2018). High scores in the emotional exhaustion and depersonalisation subscales indicate high levels of burnout, while high scores in the personal accomplishment subscale indicate low levels of burnout (Zuraida & Zainal, 2015). Cronbach's alpha of 0.65 (Vijendren et al., 2018) / 0.66 (Zuraida & Zainal, 2015) demonstrate acceptable internal consistency and concurrent validity.

## Intention to leave

Participants were asked if they intended to leave employment at their current workplace in the next one year and five years, with a dichotomous 'yes' or 'no' response. This item was guided by the approach used by Dall'Ora et al. (2015).

## Data analysis

Data analysis was performed using the Statistical Package for the Social Sciences (SPSS) version 25 (IBM Corp., 2018). Descriptive statistics including frequencies, percentages, means, and standard deviations were calculated to summarize the data. Pearson's correlations ( $r$ ) were performed to determine the associations between nurses' job satisfaction and the continuous variables. Values of  $<0.3$ ,  $0.3-0.5$ ,  $0.5-0.7$  and  $>0.7$  were considered as negligible, low, moderate and high correlation respectively (Mukaka, 2012). Factors influencing rural nurses' job satisfaction were identified through multiple linear regression analysis of the significant variables from the correlations, using the enter method (Ho, 2013). A  $p$ -value  $<0.05$  indicated statistical significance.

## RESULTS

### Demographics

Of the 543 responses received, 20 (3.7%) were excluded as they completed the consent only. A further 116 (21.4%) responses answered fewer than 12 items and 34 (6.3%) responses ceased the survey before providing any demographic data. Given the limited data provided these responses were excluded. As these responses

TABLE 1 Participant demographics ( $n = 383$ )

Characteristic	<i>n</i>	%
Age		
≤30	36	9.4
31–50	146	38.1
≥51	177	46.2
Data missing	24	6.3
Country of birth		
Australia	316	82.5
UK	21	5.5
New Zealand	7	1.8
Other	14	3.7
Data missing	25	6.5
Registration status		
Registered Nurse (RN)	261	68.1
Enrolled Nurse (EN/EEN)	67	17.5
Registered Nurse/ Registered Midwife (RN/RM)	55	14.4
Workplace type		
Public hospital	296	77.3
Multi purpose service	87	22.7
Hospital size		
<50 beds	340	88.8
50–99 beds	43	11.2
Predominant area of practice		
Regularly work in different clinical areas	145	37.9
Medical/surgical	115	30.0
Critical care	94	24.5
Other	8	2.1
Data missing	21	5.5
Childhood living in a rural community		
Yes	228	59.5
No	131	34.2
Data missing	24	6.3
Childhood living in the community currently employed		
Yes	65	16.9
No	294	76.8
Data missing	24	6.3

provided data for less than 50% of survey items it was inappropriate to use imputation (Segerstrom, 2020). Given that participants stopped completing the survey before responding to all items, there is no reason to expect that this was not random. This left 383 responses included in the analysis (Table 1).

Most participants were registered nurses ( $n = 261$ ; 68.1%), born in Australia ( $n = 316$ ; 82.5%) and female ( $n = 329$ ; 85.9%). The mean age of participants was 47.7 years (Range 20–76 years; SD 12.0). The mean number of years worked as a nurse was 20.8 years (Range 1–54 years; SD 14.1) and the mean number of years at the current workplace was 8.3 years (Range 0–44 years; SD 8.8). More than half ( $n = 228$ ; 59.5%) of the participants grew up in a rural community but less than 17% ( $n = 65$ ) grew up in the community in which they were currently employed.

### Job and community satisfaction

The majority of participants indicated they were either moderately ( $n = 146$ ; 38.1%) or very satisfied ( $n = 107$ ; 27.9%) with their current job. Fewer participants described themselves as a little ( $n = 88$ ; 23.0%) or very dissatisfied ( $n = 35$ ; 9.1%). Satisfaction with community was positive with most participants either very satisfied ( $n = 155$ ; 40.5%) or somewhat satisfied ( $n = 125$ ; 32.6%). Very few participants were mildly ( $n = 18$ ; 4.7%) or not satisfied ( $n = 15$ ; 3.9%).

### Intention to leave

Some 31.1% ( $n = 117$ ) of participants intended to leave their current workplace within the next year; however, more than half of the participants ( $n = 236$ ; 62.8%) intended to leave their current workplace within the next 5 years.

### Correlation between job satisfaction, practice environment and burnout

There was a moderate, positive, significant correlation between job satisfaction with all five subscales of the Nursing Work Index-Revised: Australian, with correlation coefficients ranging from 0.54 to 0.62 ( $p < 0.01$ ) (Table 2). The Abbreviated Maslach Burnout Inventory emotional exhaustion subscale had a moderate, negative correlation with job satisfaction ( $r = -0.58$ ,  $p < 0.01$ ). All other variables had either a low or negligible correlation with job satisfaction.

### Factors associated with Rural Nurses' job satisfaction

A regression model was fitted for factors that had a significant correlation with job satisfaction. Variables that measured participants' intention to leave their workplace were also included, as intention to leave has been identified as an important predictor of nurses' job satisfaction

(Dall'Ora et al., 2015). Therefore, the predictive variables in the final model were collegial nurse-physician relations; staffing and resource adequacy; nurse participation in hospital affairs; nurse manager ability, leadership and support of nurses; nursing foundations for quality of care; emotional exhaustion; and intention to leave within the next one year or five years. Results indicated that the eight factors explained 59.7% of the variance in job satisfaction (adjusted  $R^2 = 0.597$ ,  $F [8, 360] = 66.72$ ,  $p < 0.000$ ). Of these factors, collegial nurse-physician relations; staffing and resource adequacy; nurse manager ability, leadership and support of nurses; emotional exhaustion and intention to leave within the next five years were significant predictors of job satisfaction (Table 3).

## DISCUSSION

This study adds to the limited existing research on the factors that influence the job satisfaction of nurses working in Australian small rural hospitals. Overall, this study demonstrates that nurses working in Australian small rural hospitals have high levels of job satisfaction. High levels of satisfaction are not unusual and measures of satisfaction are often recognized as having a ceiling effect (Halcomb et al., 2018). However, the knowledge gained regarding the factors that impact job satisfaction is important as it may assist nurse managers to design and implement evidence-based strategies aimed at retaining nurses in rural areas. Ensuring an adequate workforce may, in turn, support the delivery of quality care and promote access to health care in rural areas.

The study revealed that collegial nurse-physician relations, staffing and resource adequacy, nurse manager ability, leadership and support of nurses, emotional exhaustion and intention to leave within the next five years were predictors of nurses' job satisfaction. Of these, emotional exhaustion and nurse manager ability, leadership and support of nurses were the most significant predictors. Consistent with the literature, in this study, participants with higher emotional exhaustion reported lower levels of job satisfaction which has been reported as a significant factor in nurses leaving their job (Dall'Ora et al., 2015; Sasso et al., 2019).

The emotional exhaustion subscale refers directly to burnout and describes feelings of being exhausted and overextended by the work being carried out (Maslach & Jackson, 1981). Jahner et al. (2019) found that psychological distress in rural nurses was largely linked to organizational environments, emotional demands of working with patients and managing life-threatening conditions. An association has been found between psychological distress and burnout caused by dual relationships with patients, where personal and professional boundaries become blurred and nurses are required to care for patients and families that may be familiar to them (Jahner et al., 2019). It is worth considering that the close relationships formed with patients and co-workers in the rural context are unique and can have a significant effect on emotional exhaustion and, subsequently, nurses' job satisfaction.

Emotional exhaustion resulting in burnout negatively affects job satisfaction, intention to leave and patient satisfaction (Vahey et al., 2004). Burnout can impair the attention nurses give to patients as nurses experiencing high levels of burnout have lost their ability

TABLE 2 Correlation analysis

	Mean ± SD	1	2	3	4	5	6	7	8	9	10	Abbreviated Maslach Burnout Inventory		
												11	12	13
1. Satisfaction with current job	2.86 ± 0.94	1.00												
2. Did you spend your childhood living in a rural community? (Yes)	(n = 228, 63.5%)	-0.03	1.00											
3. Did you spend your childhood living in the community in which you currently work? (Yes)	(n = 65, 18.1%)	-0.01	0.34 <sup>a</sup>	1.00										
4. Satisfaction with community	4.08 ± 1.07	0.32 <sup>a</sup>	-0.07	-0.13 <sup>b</sup>	1.00									
5. Age	47.74 ± 12.04	0.03	-0.06	0.02	0.08	1.00								
<i>Nursing Work Index-Revised: Australian subscales</i>														
6. Collegial nurse-physician relations	3.16 ± 0.67	0.54 <sup>a</sup>	0.03	-0.01	0.27 <sup>a</sup>	0.00	1.00							
7. Staffing and resource adequacy	2.73 ± 0.74	0.59 <sup>a</sup>	0.04	0.02	0.21 <sup>a</sup>	0.03	0.44 <sup>a</sup>	1.00						
8. Nurse participation in hospital affairs	2.67 ± 0.65	0.57 <sup>a</sup>	-0.02	-0.08	0.23 <sup>a</sup>	0.04	0.51 <sup>a</sup>	0.55 <sup>a</sup>	1.00					
9. Nurse manager ability, leadership and support of nurses	2.87 ± 0.80	0.57 <sup>a</sup>	-0.01	0.01	0.19 <sup>a</sup>	0.05	0.48 <sup>a</sup>	0.52 <sup>a</sup>	0.78 <sup>a</sup>	1.00				
10. Nursing foundations for quality of care	2.99 ± 0.57	0.62 <sup>a</sup>	-0.03	-0.04	0.33 <sup>a</sup>	0.18 <sup>b</sup>	0.56 <sup>a</sup>	0.62 <sup>a</sup>	0.78 <sup>a</sup>	0.71 <sup>a</sup>	1.00			
<i>Abbreviated Maslach Burnout Inventory subscales</i>														
11. Emotional exhaustion	8.15 ± 4.65	-0.58 <sup>a</sup>	0.04	-0.03	-0.32 <sup>a</sup>	-0.09	-0.33 <sup>a</sup>	-0.48 <sup>a</sup>	-0.31 <sup>a</sup>	-0.33 <sup>a</sup>	-0.40 <sup>a</sup>	1.00		
12. Depersonalisation	2.63 ± 3.38	-0.34 <sup>a</sup>	0.07	0.00	-0.13 <sup>b</sup>	-0.19 <sup>b</sup>	-0.13 <sup>b</sup>	-0.27 <sup>a</sup>	-0.22 <sup>a</sup>	-0.25 <sup>a</sup>	-0.32 <sup>a</sup>	0.45 <sup>a</sup>	1.00	
13. Personal accomplishment	14.09 ± 3.36	0.30 <sup>a</sup>	0.02	0.06	0.15 <sup>a</sup>	0.45	0.24 <sup>a</sup>	0.22 <sup>a</sup>	0.20 <sup>a</sup>	0.18 <sup>a</sup>	0.27 <sup>a</sup>	-0.20 <sup>a</sup>	-0.26 <sup>a</sup>	1.00

<sup>a</sup>Correlation is significant at the 0.01 level (2-tailed).<sup>b</sup>Correlation is significant at the 0.05 level (2-tailed).



TABLE 3 Regression analysis of predictors of rural nurses' job satisfaction

Variables	Unstandardised coefficient		Standardized coefficient		<i>p</i>	95% CI	
	$\beta$	SE	$\beta$	<i>t</i>		Lower	Upper
Constant	1.21	0.28		4.37	0.00	0.66	1.75
Collegial nurse-physician relations	0.24	0.06	0.18	4.23	0.00	0.13	0.36
Staffing and resource adequacy	0.21	0.06	0.16	3.55	0.00	0.09	0.32
Nurse participation in hospital affairs	0.09	0.09	0.06	0.94	0.35	-0.09	0.26
Nurse manager ability, leadership and support of nurses	0.18	0.07	0.15	2.70	0.01	0.05	0.31
Nursing foundations for quality of care	0.17	0.10	0.11	1.73	0.08	-0.02	0.38
Emotional exhaustion	-0.06	0.01	-0.30	-7.57	0.00	-0.08	-0.05
Are you likely to leave your current workplace within the next one year?	-0.11	0.08	-0.05	-1.35	0.18	-0.26	0.05
Are you likely to leave your current workplace within the next five years?	-0.19	0.07	-0.10	-2.60	0.01	-0.33	-0.05

Abbreviations: CI, confidence interval; SE, standard error.

to deal with the day to day stresses of their work and this may cause a lack of motivation and a disconnect between the nurse and the patient receiving care (Ross, 2016). All of these factors have detrimental effects on the quality of care and patient safety (Liu et al., 2018). Given the health disparities of these communities and limitations of access to care in rural areas, this is a significant concern.

Nurse managers play a vital role in creating a safe and cohesive work environment to minimize the potential for nurse burnout (Duffield et al., 2009; Liu et al., 2018). Job sharing and flexible work hours have been suggested as strategies to improve the work environment for rural nurses (DeKeseredy et al., 2019). Jahner et al. (2019) recommend that managers facilitate access to debriefing and collegial support for rural nurses, but also recognize that isolation and lack of resources may prevent these services from being available. Formal (provided by supervisors or managers) or informal (provided by family or co-workers) social support reduces emotional exhaustion and resulting burnout and includes providing empathy, trust, civility, and affection in times of stress (Woodhead et al., 2016). Ensuring support services are available to nurses is imperative in providing a work environment that minimizes burnout and reduces intention to leave (Duffield et al., 2009).

The results of this study confirm that nurses with greater job satisfaction were less likely to express a desire to leave their employment within the next five years. Although this is not the first study to report a relationship between intention to leave and job satisfaction among rural nurses (Roberge, 2009), retention of nurses in rural hospitals remains an ongoing challenge. The high attrition rate of rural nurses in Australia is expensive, with an average cost of approximately \$50,000.00 per full-time nurse (Roche et al., 2015). This cost includes not only the recruitment and education of new nurses but also the loss of productivity and costs of temporary cover (Duffield et al., 2014). High attrition rates also cause other less tangible issues within rural hospitals such as reduced staff continuity, poor skill mix, reduced nurse to patient ratios, and higher workloads. All of these factors lead

to increased stress, burnout, and decreased job satisfaction of the remaining staff thus compounding the problem (Mills et al., 2016). Of particular concern are the potential effects on outcomes, with continuity and efficiency affecting the quality and safety of patient care.

Data from this study indicated that a significant number of nurses intend on leaving their current workplace in the next 1 and 5 years. This will have a significant impact on small rural hospitals. Numerous strategies have been used to retain nurses in rural areas with varying results. Although financial incentives have been used to attract health professionals to rural areas they are unlikely to influence nurses' decision to stay (Buykx et al., 2010). Given that satisfaction with rural communities was positive, promoting the favorable aspects of rural life may be useful in attracting nurses to rural communities, and in turn, employment in rural hospitals. This should begin whilst nurses are undertaking their undergraduate education and include rural clinical placements and adequate preparation to practice in a rural facility. The Stronger Rural Health Strategy (Australian Government Department of Health, 2018) included an independent review of the educational preparation of nurses in Australia (Schwartz, 2019) and found one of the largest barriers to nursing students attending rural clinical placements is the cost of travel and accommodation. A recommendation from the review was that nurses be afforded longer regional clinical placements and greater travel subsidies similar to that of medical students. This may attract more nursing students to rural areas and increase their likelihood to return to a rural hospital (Kulig et al., 2015).

## LIMITATIONS

This is the first Australian national study to explore factors associated with rural hospital nurses' job satisfaction. The study draws on a sample spread across a vast geographical area which reflects nurses' high interest in the issues explored. It is, however, impossible

to calculate a response rate as accurate workforce data about the number of nurses employed in rural hospitals in Australia at any one time are not available. Also due to the nature of the survey, data were not able to be aggregated at a hospital or unit level. The results were also not compared with data from metropolitan areas. Additionally, as a cross-sectional survey, data were collected at a single point in time and so may not reflect attitudes over time.

Although there are many theoretical frameworks that explore the nursing workforce, no single theory could be used to explore all the aspects of this study. For this reason, the study was informed by using a combination of theories to explore job satisfaction. Given that little is currently known on this topic, this approach allowed a broad view of the phenomena to be generated by gathering data on relevant concepts and exploring their relationships.

## CONCLUSION

The findings of this study indicate that overall, nurses working in Australian small rural hospitals have high levels of job satisfaction. Emotional exhaustion and nurse-manager ability, leadership, and support of nurses were found to be the most significant predictors of job satisfaction. Additionally, increased job satisfaction decreased participants' intention to leave within the next five years. The importance of job satisfaction regarding nurse burnout, nurses' intention to leave and patient safety is well documented; however, little has been done to address the issues in rural hospitals of Australia. The high attrition rate of rural nurses is an ongoing issue and increasing job satisfaction is one way of counteracting this problem. A focus on improving job satisfaction is of utmost importance if the retention rate of nurses in rural areas is going to be improved. This study provides an important evidence-base for nurse managers to promote job satisfaction and nurse retention in small rural hospitals, subsequently, increasing access to quality health care in rural areas.

## CLINICAL RESOURCES

<https://www.aihw.gov.au/>  
<https://www.health.gov.au/>  
<https://www.ruralhealth.org.au/>  
<https://www.health.nsw.gov.au/rural/pages/default.aspx>

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## CONFLICT OF INTEREST

No conflict of interest has been declared by the authors.

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