

2017

# “Mental health day” sickness absence amongst nurses and midwives: workplace, workforce, psychosocial and health characteristics

Scott Lamont

Scott Brunero

Lin Perry

Christine M. Duffield

*Edith Cowan University*, [c.duffield@ecu.edu.au](mailto:c.duffield@ecu.edu.au)

David Sibbritt

*See next page for additional authors*

---

[10.1111/jan.13212](https://doi.org/10.1111/jan.13212)

Originally published as: Lamont,S.,Brunero,S., Perry,L.,Duffield, C.M.,Sibbritt, D., Gallagher, R., Nicholls, R. (2017). ‘Mental health day’ sickness absence amongst nurses and midwives: workplace, workforce, psychosocial and health characteristics. *Journal of Advanced Nursing*. 73(S), 1172 - 1181.

Original article available [here](#)

This Journal Article is posted at Research Online.

<http://ro.ecu.edu.au/ecuworkspost2013/2567>

---

**Authors**

Scott Lamont, Scott Brunero, Lin Perry, Christine M. Duffield, David Sibbritt, Robyn Gallagher, and Rachel Nicolls

ORIGINAL RESEARCH: EMPIRICAL RESEARCH–  
QUANTITATIVE‘Mental health day’ sickness absence amongst nurses and midwives:  
workplace, workforce, psychosocial and health characteristics

Scott Lamont, Scott Brunero, Lin Perry, Christine Duffield, David Sibbritt, Robyn Gallagher & Rachel Nicholls

Accepted for publication 8 November 2016

Correspondence to S. Lamont:  
e-mail: Scott.lamont@health.nsw.gov.au

Scott Lamont RMN MN (Hons) RN  
Clinical Nurse Consultant  
Mental Health Liaison Nursing, Prince of  
Wales Hospital, Sydney, Australia

Scott Brunero BHSc M.Nurs. (nurs prac)  
RN  
Clinical Nurse Consultant  
Mental Health Liaison Nursing, Prince of  
Wales Hospital, Sydney, Australia

Lin Perry MSc PhD RN  
Professor of Nursing/Research and Practice  
Development  
Nurse Education and Research Unit, South  
Eastern Sydney Local Health District and  
Faculty of Health, University of Technology  
Sydney, Australia

Christine Duffield PhD FACN RN  
Director Centre for Health Services  
Management/Professor of Nursing and  
Health Services Management  
Faculty of Health, University of Technology  
Sydney, New South Wales, Australia  
and  
Edith Cowan University, Perth, Western  
Australia, Australia

David Sibbritt B.Math M Med Stat PhD  
Professor of Epidemiology  
Faculty of Health, University of Technology  
Sydney, Australia

continued on page 1173

LAMONT S., BRUNERO S., PERRY L., DUFFIELD C., SIBBRITT D., GALLAGHER R. & NICHOLLS R. (2017) ‘Mental health day’ sickness absence amongst nurses and midwives: workplace, workforce, psychosocial and health characteristics. *Journal of Advanced Nursing* 73(5), 1172–1181. doi: 10.1111/jan.13212

### Abstract

**Aim.** To examine the workforce, workplace, psychosocial and health characteristics of nurses and midwives in relation to their reported use of sickness absence described as ‘mental health days’.

**Background.** The occupational stress associated with the nursing profession is increasingly recognized and nurse/midwifery absenteeism is a significant global problem. Taking a ‘mental health day’ as sickness absence is a common phenomenon in Australian health care. No previous studies have empirically explored the characteristics of nurses and midwives using such sickness absence.

**Design.** Online cross-sectional survey.

**Methods.** Survey comprising validated tools and questions on workplace and health characteristics was distributed to nurses and midwives in New South Wales, Australia, between May 2014 - February 2015. Sample characteristics were reported using descriptive statistics. Factors independently predictive of ‘mental health day’ reportage were determined using logistic regression.

**Results.** Fifty-four percentage of the  $n = 5041$  nurse and midwife respondents took ‘mental health days’. Those affected were significantly more likely to be at younger ages, working shifts with less time sitting at work; to report workplace abuse and plans to leave; having been admitted to hospital in previous 12 months; to be current smokers; to report mental health problems, accomplishing less due to emotional problems and current psychotropic medication use.

**Conclusion.** Specific characteristics of nurses and midwives who report taking ‘mental health day’ sickness absence offer healthcare administrators and managers opportunities for early identification and intervention with workplace measures and support frameworks to promote well-being, health promotion and safety.

**Keywords:** absenteeism, general health, mental health, nurses, presenteeism, sickness, workforce, workplace

Robyn Gallagher PhD RN  
 Professor of Nursing  
 Charles Perkins Centre and Sydney Nursing  
 School, University of Sydney, Australia

Rachel Nicholls PhD RN  
 Research Fellow  
 Faculty of Health, University of Sydney,  
 Australia

#### Why is this research needed?

- Occupational stress in the nursing profession is being increasingly recognized as a major risk factor for a range of adverse health outcomes.
- There has also been little exploration of sickness absence specifically in relation to mental health and well-being amongst nurses and midwives.
- Taking a 'mental health day' as sickness absence is anecdotally a common phenomenon in Australian health care, although little is known empirically about its use.

#### What are the key findings?

- This study indicates a pattern of suboptimal health and well-being of nurses and midwives taking 'mental health days'.
- A distinctive cluster of characteristics emerged as predictive of reported use of this form of sickness absence.

#### How should the findings be used to influence policy/practice/research/education?

- Nursing and midwifery managers should adopt screening and early identification of absenteeism patterns in the nursing workforce.
- Organizations which invest in employee welfare programs may benefit from reduced absenteeism, improved employee well-being, with resultant better patient health outcomes.
- Consideration should be given as to whether participants who take 'mental health days' as sickness absence are also 'sick' while at work; a concept referred to as presenteeism.

## Introduction

Absenteeism presents multiple challenges for managers in all fields. Particular considerations for nurse managers accrue due to the need to ensure 24-hour patient care; from the size and significant financial costs of the nursing workforce; because of the impact of absences on team members and team outcomes (Davey *et al.* 2009). Australian nurse absenteeism data are scarce (Hall 2005); however, one study involving 62 nursing

units across three states in Australia between 2008–2010 identified an overall average prevalence of 26.2%; and as high as 35% on one unit (Duffield *et al.* 2015). National data from Canada estimate that health professionals (including nurses) in general are 1.5 times more likely to be absent from work than workers in other industries, with average sickness absence days per person per annum ranging from 12 - 15 (Davey *et al.* 2009). In the UK National Health Service (NHS) in 2012/2013, nurses took on average 10.6 days per annum compared with 9.5 in other health professions (Jones-Berry 2013). An estimated 4.6% of nursing working days are lost through absenteeism each year in the UK NHS (Scott 2011). In lost days alone, therefore, absenteeism in nursing warrants attention.

## Background

Occupational stress is increasingly recognized as a major risk factor for a range of deleterious health outcomes (Ebert *et al.* 2014) and interest is growing in exploring workplace and psychosocial factors related to absenteeism. Nurses' occupational stress is reported to be highly prevalent with estimations ranging from 45.5% (Al-Makhaita *et al.* 2014) - 60% (Buerhaus *et al.* 2006). Occupational stressors in nursing are linked to high workload, low support and other workplace and psychosocial factors (Siu 2002, Albini *et al.* 2011, Farquharson *et al.* 2012). In health care in general, occupational stressors include work overload, excess responsibility, time pressures and role conflict; whilst indices of work strain include anxiety, depression, mood disorder, elevated blood pressure and increased stress hormone production (Albini *et al.* 2011). Unsurprisingly, adverse health outcomes can potentially result from exposure to these job stressors and associated strains. Studies of the nursing workforce have sought to explore associations between such domains and absenteeism. For example, one Canadian study ( $n = 17,437$ ) found absenteeism significantly associated with lower autonomy and higher job strain (Enns *et al.* 2015). In Hong Kong, low involvement (defined as commitment displayed towards employees by the organization), younger age, greater psychological distress and lower job satisfaction were significantly linked to greater absence (Siu 2002). A systematic review of 16 studies of hospital nurse absenteeism (primarily involving nurses from the USA—seven studies—and Canada—three studies) concluded that 'burn out' and stress significantly predicted nurse absenteeism, whereas greater job satisfaction and organizational commitment was significantly linked to reduced absence (Davey *et al.* 2009). Amongst Scottish healthcare telephone support nurses, work-family conflict (work impinging on family) significantly predicted reduced job satisfaction and intention to leave and increased absenteeism (Farquharson *et al.* 2012).

This literature flags linkages to stress, distress, ‘burn out’ and work-family conflict, clearly suggesting that mental well-being and mental health may play a significant part in sickness absence. Taking a ‘mental health day’ (MHD) as sickness absence is anecdotally a common phenomenon in Australian health care, although little is known empirically about the use of such forms of sickness absence. There has also been little exploration of sickness absence specifically in relation to mental health and well-being amongst nurses and midwives. For the purposes of this paper, a MHD is defined as any self-reported sickness absence which participants attribute to their mental well-being. Examination of the work and health profile of those who self-report taking such forms of sickness absence may shed light on an aspect of workforce well-being which has, to date, received little attention. This in turn could indicate ways to address or improve workplace well-being and reduce sickness absence amongst nurses and midwives.

## The study

### Aim

This paper reports findings from the ‘Fit for the Future’ survey of nurses’ health in the state of New South Wales (NSW), Australia. The aim of this component was to examine the workplace, workforce, psychosocial and health characteristics of nurses and midwives in relation to their reported use of ‘mental health days’ as reasons for sickness absence.

### Design

A descriptive cross-sectional survey design, using an online questionnaire, was used to investigate the health and well-being of NSW nurses and midwives; this was available May–August 2014 and December 2014–February 2015.

### Setting and participants

All classifications of employed nurses and midwives in NSW were eligible for the study. In this state, nurse classifications include: 1) unlicensed nurses such as Assistants in Nursing; 2) Enrolled Nurses; and 3) Registered Nurses from new graduate to Clinical Nurse/Midwifery Specialist levels (which we designated as front-line clinicians, as they spend the majority of their work role in direct patient contact); Nurse Practitioner and Clinical Nurse/Midwifery Consultant roles; clinical and non-clinical Nurse/Midwifery Managers and Nurse/Midwifery Educators at varying degrees of seniority and a range of academic and research positions.

National board estimates suggested 88,319 nurses (Registered and Enrolled) and 9524 midwives could have been eligible to participate (Nursing and Midwifery Board of Australia 2015). Assistants in Nursing (AINs) were also recruited, although the total number of this unregulated workforce in NSW is not known. Primary recruitment occurred via emails sent directly to all nurses with membership of the NSW Nurses and Midwives Association (NSWNMA).

### Data collection

Potential participants were emailed a link to the anonymous survey which was lodged on the Qualtrics Survey platform (2009). By default, each individual link can only be used once in the Qualtrics system. Recruitment of non-members of NSWNMA was sought via local journal advertisements and health authority newsletters, specialist interest groups and networks. Survey reminder emails were sent three times to the NSWNMA membership.

### Measures

The questionnaire included demographic information, workforce, health and well-being variables. The outcome variable ‘mental health day’ was determined by initially asking participants how many sick days they had taken in previous 12 months and subsequently asking, ‘How many of these sick days would you classify as ‘mental health days?’ Predictor variables included demographic variables similar to those contained in Australian Census data (Australian Bureau of Statistics 2011b). Workforce variables relating to role, setting and contractual details were developed for the pilot study (Perry *et al.* 2015a); workplace abuse (Tucker *et al.* 2010) and injuries (Brown *et al.* 1996) were determined by single item questions derived from respective literature. Health and well-being variables comprised questions from established surveys relating to general health and hospital admissions, disease diagnoses and symptoms (Brown *et al.* 1996, Perry *et al.* 2015b). Health related well-being was determined using the Short Form 12-Item Health Survey version 2 (Ware *et al.* 1996), whilst sleep disturbance was determined using the Insomnia Severity Index (Bastien *et al.* 2001).

### Ethical considerations

The study was approved by the South Eastern Sydney Local Health District and University of Technology Sydney Human Research Ethics Committees. Information about the study was available on the survey webpage and informed consent was presumed with submission of a completed online questionnaire.

## Data analyses

The data were entered and analysed using the IBM SPSS Statistics Version 22.0. Overall mean scores were used and imputed where relevant for missing values (multiple item response and less than 20% missing values); other missing values were treated on a case basis. Sample characteristics were reported using descriptive statistics; nurses who reported taking any vs. no MHD were compared using chi-squared or independent samples *t*-tests. Factors independently predictive of MHD reportage were determined using logistic regression (stepwise backward elimination process) with variables entered into the model selected based on statistical significance in preliminary bivariate analyses: significance was set at  $P < 0.25$  during preliminary bivariate analysis and  $P < 0.05$  for regression analysis. The Hosmer-Lemeshow test was used to determine the goodness of fit of the logistic regression model.

## Validity, reliability and rigour

The survey comprised several validated self-assessment tools and questions drawn from existing questionnaires (either directly or modified for this participant group). Additional items were developed by the authors, based on literature review, consultation and preliminary/pilot surveys. The majority of the questionnaire was tested for comprehensibility and responsiveness in a preliminary study of nurses ( $n = 381$ ) working in two hospitals in Sydney, Australia, in 2013 (Perry *et al.* 2015a, b).

## Results

A total of 5446 completed questionnaires were submitted; of these, 385 (7%) were excluded because < 50% of questionnaire items were complete and 20 because respondents were not practicing in NSW. The final sample comprised 5041 respondents (approximately 5% of potentially eligible participants), of whom 2728 reported taking MHDs. The sample was predominantly female (88.5%), with mean age 47.9 (SD 11.5) years and mean length of work experience 21.4 (SD 12.8) years. Almost 40% of respondents had postgraduate qualifications; the majority worked in 'front-line' clinical roles (70.6%); in metropolitan health services (65.7%); and in hospital settings (59.6%). The sample was spread across most specialties, with half working full time (53.6%) and shifts (days and nights compared with 'office hours'; 53.1%). Of the entire sample, a median of three sick days were reported as taken in the previous 12 months (IQR: 1–6). Of those who reported taking any MHD ( $n = 2728$ ), the median number of MHDs taken in the previous 12 months was two days (IQR: 1–4).

## Demographic and workplace characteristics

Comparisons between participants who reported taking no vs. any MHD are presented in Table 1. Participants were more likely to report taking this form of sickness absence (MHD) if they were younger ( $t = 6.443$ ,  $P < 0.001$ ), in a 'front-line' clinical role ( $\chi^2 = 10.106$ ,  $P < 0.001$ ), worked shifts ( $\chi^2 = 30.023$ ,  $P < 0.001$ ), spent little to no time sitting at work on a usual day ( $\chi^2 = 23.501$ ,  $P < 0.001$ ), or undertook heavy/ demanding work all or most of the time on a usual day ( $\chi^2 = 12.446$ ,  $P < 0.001$ ). Those taking MHDs were also more likely to have experienced some form of workplace abuse ( $\chi^2 = 43.270$ ,  $P < 0.001$ ) and injury at work in the previous 12 months ( $\chi^2 = 6.479$ ,  $P = 0.011$ ) and to report they had plans to leave their job within the next 12 months ( $\chi^2 = 48.619$ ,  $P < 0.001$ ).

## General health characteristics

Compared with those with no MHD sickness absence, those who took MHDs were more likely to report poor to fair overall general health ( $\chi^2 = 4.487$ ,  $P = 0.034$ ), be current smokers ( $\chi^2 = 26.234$ ,  $P < 0.001$ ) and to have experienced severe tiredness sometimes or often in previous 12 months ( $\chi^2 = 16.040$ ,  $P < 0.001$ ). They were also more likely to report accomplishing less than desired in the previous 4 weeks due to their physical health ( $\chi^2 = 12.437$ ,  $P < 0.001$ ), yet less likely to have been admitted to hospital in the previous 12 months ( $\chi^2 = 23.884$ ,  $P < 0.001$ ) (Table 1).

## Mental health characteristics

There were significant differences between those who did and did not have MHD sickness absence in several mental health-related characteristics. Those who reported such sickness absence were more likely to reveal some form of psychiatric diagnosis during their lifetime ( $\chi^2 = 69.509$ ,  $P < 0.001$ ); to have experienced symptoms of a common mental disorder (CMD; such as anxiety or depression) sometimes or often in the previous twelve months ( $\chi^2 = 86.712$ ,  $P < 0.001$ ) and to currently take psychotropic medications (defined as any medication used to treat a mental disorder;  $\chi^2 = 37.769$ ,  $P < 0.001$ ) (Table 2). Nurses and midwives who reported taking MHDs were also more likely to report recent feelings of being downhearted and depressed ( $\chi^2 = 61.908$ ,  $P < 0.001$ ), accomplishing less than they would have liked ( $\chi^2 = 87.148$ ,  $P < 0.001$ ) and performing work or activities less carefully than usual due to emotional problems ( $\chi^2 = 77.048$ ,  $P < 0.001$ ). Conversely those who took MHDs were less likely to report feeling calm and peaceful in the previous 4 weeks ( $\chi^2 = 45.723$ ,  $P < 0.001$ ) (Table 2).

**Table 1** Demographic, workplace and general health characteristics of nurses who reported taking no compared with any 'mental health days'.

Variable	Took no 'mental health days' ( <i>n</i> = 2313)	Took any 'mental health days' ( <i>n</i> = 2728)	P-value
	N (%)	N (%)	
Age	2068 (46.3)	2394 (53.7)	<0.001
Years as Registered Nurse	49.17 (11.07)	46.96 (11.69)	6.443*
	2171 (46.2)	2530 (53.8)	<0.001
	22.58 (12.62)	20.48 (12.86)	5.635*
	<b>Total</b>	<b>Total</b>	
	N (%)	N (%)	
<b>Workplace</b>			
Front-line clinical role?	2276	2688	<0.001
Yes	1582 (69.5)	1978 (73.6)	10.106 <sup>†</sup>
Shift work (days and nights)?	2312	2726	<0.001
Yes	1326 (57.4)	1769 (64.9)	30.023 <sup>†</sup>
Plans to leave current job?	2306	2714	<0.001
Yes	409 (17.7)	704 (25.9)	48.619 <sup>†</sup>
Any workplace abuse?	2313	2728	<0.001
Yes	1577 (68.2)	2086 (76.5)	43.270 <sup>†</sup>
Any injury at work in previous 12 months	2313	2728	0.011
Yes	625 (27)	826 (30.3)	6.479 <sup>†</sup>
Little to no sitting at work on a usual day?	2061	2391	<0.001
Yes	853 (41.4)	1163 (48.6)	23.501 <sup>†</sup>
Heavy or demanding work some or all of the time on a usual day?	2031	2352	<0.001
Yes	653 (32.2)	876 (37.2)	12.446 <sup>†</sup>
<b>General health</b>			
Very poor to fair general health?	2309	2722	0.034
Yes	310 (13.4)	423 (15.5)	4.487 <sup>†</sup>
Admission to hospital in previous 12 months?	2304	2708	<0.001
Yes	453 (19.7)	392 (14.5)	23.884 <sup>†</sup>
Severe tiredness in previous 12 months?	2313	2728	<0.001
Yes	946 (40.9)	1269 (46.5)	16.040 <sup>†</sup>
Accomplished less than would like in past 4 weeks as result of physical health?	2108	2463	<0.001
Yes	481 (22.8)	674 (27.4)	12.437 <sup>†</sup>
Current smoker?	2086	2440	<0.001
Yes	212 (10.2)	373 (15.3)	26.234 <sup>†</sup>

\*Independent samples *t*-test.<sup>†</sup>Pearson's chi-squared test.

### Sleep characteristics

Nurses and midwives who took MHDs were more likely to report moderate to very severe ratings on all sleep problem items: difficulty falling asleep ( $\chi^2 = 40.220$ ,  $P < 0.001$ ), staying asleep ( $\chi^2 = 17.146$ ,  $P < 0.001$ ), waking too early ( $\chi^2 = 10.008$ ,  $P = 0.002$ ) and sleep problems interfering with current functioning ( $\chi^2 = 65.576$ ,  $P < 0.001$ ) (Table 2); higher total insomnia severity index scores were significantly more frequent ( $t = -7.431$ ,  $P < 0.001$ ) (Table 2).

### Predicting who takes mental health days

Multivariate logistic regression was conducted to identify variables predicting membership of the group taking MHDs, entering the variables exerting statistically significant bivariate effect (Tables 1 & 2). Ten independent significant predictors emerged in the regression model (Table 3). Those who took MHDs were 42% more likely to report experiencing problems with CMDs in the previous 12 months; were 40% more likely to be a current psychotropic medication user and 39% more

**Table 2** Mental health and sleep characteristics of nurses who reported taking no compared with any 'mental health days'.

Variable	No 'mental health days' ( <i>n</i> = 2313) Total N (%)	Any 'mental health days' ( <i>n</i> = 2728) Total N (5)	<i>P</i> -value test score
<b>Mental health</b>			
Lifetime any psychiatric diagnosis?	2313	2727	<0.001
Yes	482 (20.8)	852 (31.2)	69.509 <sup>‡</sup>
Currently taking psychotropic medications?	2313	2728	<0.001
Yes	273 (11.8)	492 (18.0)	37.769 <sup>‡</sup>
*CMD in previous 12 months?	2313	2728	<0.001
Yes	389 (16.8)	780 (27.9)	86.712 <sup>‡</sup>
Feeling calm and peaceful in past 4 weeks?	2121	2470	<0.001
No	289 (13.6)	527 (21.3)	45.723 <sup>‡</sup>
Feeling downhearted and depressed in previous 4 weeks?	2119	2473	<0.001
Yes	501 (23.6)	847 (34.2)	61.908 <sup>‡</sup>
Accomplished less than would like in past 4 weeks as result of emotional problems?	2100	2476	<0.001
Yes	319 (15.2)	657 (26.5)	87.148 <sup>‡</sup>
Did work or activities less carefully than usual in past 4 weeks due to emotional problems?	2103	2469	<0.001
Yes	189 (9.0)	444 (18.0)	77.048 <sup>‡</sup>
<b>Sleep</b>			
Moderate to very severe difficulty falling asleep?	2092	2468	<0.001
Yes	532 (25.4)	841 (34.1)	40.220 <sup>‡</sup>
Moderate to very severe difficulty staying asleep?	2113	2494	<0.001
Yes	673 (31.9)	940 (37.7)	17.146 <sup>‡</sup>
Moderate to very severe problem waking up too early?	2080	2456	0.002
Yes	610 (29.3)	828 (33.7)	10.008 <sup>‡</sup>
Sleep problem interfering with current functioning somewhat to very much?	2225	2602	<0.001
Yes	499 (22.4)	857 (32.9)	65.576 <sup>‡</sup>
Total Insomnia Severity Index Score**; <i>n</i> (%)	1930 (46)	2258 (54)	<0.001
Mean (SD)	7.15 (5.5)	8.44 (5.7)	-7.431 <sup>†</sup>

\*CMD, common mental disorder.

\*\*0–7 = No clinically significant insomnia; 8–14 = Subthreshold insomnia; 15–21 = Clinical insomnia (moderate severity); 22–28 = Clinical insomnia (severe).

<sup>†</sup>Independent samples *t*-test.

<sup>‡</sup>Pearson's chi-squared test.

likely to accomplish less than they desired due to emotional problems. They were more than half as likely again to have plans to leave their current job within the next 12 months, were 25% more likely to have experienced some form of workplace abuse in the previous twelve months and somewhat likely to be younger. They were around 30% more likely to work shifts or to be current smokers. Conversely, they were around 17% less likely to spend time sitting at work on a usual day and almost half as likely to have experienced any hospital admission in the previous twelve months (Table 3).

## Discussion

This study adds to the international literature on mental health issues in nurses and midwives by considering the distinguishing

characteristics of those who report taking MHDs. This phenomenon is under-studied and not well-understood but has the potential to result in significant loss of productivity in the healthcare sector. A distinctive cluster of characteristics emerged as predictive of reported use of this form of sickness absence. These nurses and midwives were more often younger, working shifts and on their feet a lot; were more likely to have experienced workplace abuse and to plan to leave their jobs. They were more likely to report experiencing CMD symptoms, use psychotropic medication and perceive they under-accomplished.

Overall, those who reported taking MHDs were less likely to have been recently hospitalized than nurses who did not report taking them. This appears somewhat at odds with the general picture of a group that appeared under particular stress



**Table 3** Predictive modelling of usage of 'mental health days'; logistic regression.

Predictor variable	Odds ratio	95% C.I.	P-value
Younger age	0.987	0.980, 0.993	<0.001
Plans to leave current job	1.548	1.298, 1.846	<0.001
Any workplace abuse	1.251	1.062, 1.473	0.007
Admission to hospital in previous 12 months	0.542	0.447, 0.657	<0.001
Currently taking psychotropic medications	1.409	1.137, 1.745	0.002
*CMD in previous 12 months	1.422	1.181, 1.713	0.001
Accomplishing less due to emotional problems	1.392	1.084, 1.789	0.01
Current smoker	1.293	1.035, 1.615	0.024
Sitting at work less often on a usual day	0.822	0.692, 0.977	0.026
Shift worker	1.316	1.109, 1.562	0.002

\*CMD: common mental disorder.

Hosmer and Lemeshow  $\chi^2 = 14.106$ ,  $df = 8$ ,  $P = 0.079$ .

and strain, reflected by their reported mental health-related characteristics and bivariate analyses which flagged greater fatigue and worse sleep problems. This perhaps underscores that these nurses were not seeking hospitalization for management or resolution of their particular symptom characteristics. These variables ceased to exert significant independent effect when entered into multivariate analysis, indicating these symptoms were subsumed by the greater impact of the mental health symptom cluster. Overall, a pattern emerged of a symptomatic specific subgroup of nurses, for whom taking MHD sickness absence may well be part of a self-management strategy.

The predictive model highlighted several important issues for health sector managers. Experience of any kind of workplace abuse (from patients, relatives, colleagues, managers) predicted the reportage of MHDs. A plethora of research identifies the occurrence and frequency with which nurses experience this and its deleterious effects on well-being (Lamont *et al.* 2012, Edward *et al.* 2015). Shift work was another predictive factor and rotating shifts involving nights and unsociable hours have been closely linked to many adverse physical and psychological health outcomes (Martinez & Ferreira 2012, Devore *et al.* 2013). Current or recent CMDs and current usage of psychotropic medication were also flagged, although it is unclear whether psychotropic medication use reflects presence of a mental disorder or is perhaps being used off-label (Brunero *et al.* 2016). The occupational stress and work characteristics associated with the nursing profession have long been acknowledged to contribute to development of CMDs, placing staff at high risk of anxiety and depression (Ebert *et al.* 2014). High rates of these disorders have been reported amongst nurses internationally: for example, depressive symptoms and

depression in 38% and 42% of South Korean nurses, respectively (Kim *et al.* 2009, Yoon & Kim 2013); in Australia, 14% ( $n = 53$ ) of nurses of two hospitals reported a history of mental health disorder (and others indicated non-disclosure) with 6% ( $n = 22$ ) currently taking psychotropic medication (Perry *et al.* 2015b). Study findings indicate it behoves managers to be sensitive to the potential effects of workplace abuse, difficulties with shift-working and early indications of CMD symptoms.

Absenteeism has important financial and care quality implications. Australian 2009/2010 data indicated that 55% of workers (in any occupation, not just nursing) who experienced stress or other mental conditions were absent from work for 5 days or more in the previous 12 months (Australian Bureau of Statistics 2011a). Clearly it will be important for nurse and midwifery managers to use the information from this study to facilitate early recognition of signs that staff are affected and to initiate prompt, proactive response and supportive intervention. To date, very few rigorous workplace-based lifestyle health promotion programs have had nurses as the target group (Chan & Perry 2012).

A plan to leave employment within the next 12 months was the strongest predictor of taking MHDs. Retention in health care and particularly in nursing, is a global problem with persistent shortages projected in most countries (Chan & Perry 2012, Duffield 2015); our study findings (Perry *et al.* 2016), like reports from the United States, indicating that one in five intend to leave the profession (Tschannen *et al.* 2010). Many workplace characteristics linked to intention to leave are available for modification by managers; for example, high demand (e.g. time constraints on time to task completion, work distribution, time to talk with patients) and low control (e.g. lack of autonomous task prioritization and completion) (Hasselhorn *et al.* 2008). Both are modifiable and within managers' sphere of influence to change; this study supports the importance of such initiatives for their potential effect on absenteeism rates and workforce retention and individual employee well-being.

Finally, smoking also featured in the predictive model for those taking MHDs. Smoking prevalence in the profession is one of the more researched topics in the generally under-researched field of nurses' health and linked to occupational stress and coping strategies. A high prevalence of health problems is found in those unable to succeed with smoking cessation (Chan & Perry 2012, Happell *et al.* 2013). Once again, this is a readily visible flag for nurse managers.

### Implications of study findings

This study indicates a pattern of suboptimal health and well-being of nurses and midwives taking MHDs; consideration should be given as to whether these participants are also 'sick'

while at work; a concept referred to as presenteeism (Letvak *et al.* 2012). This has received less attention than absenteeism, but may be a significant predictor of future and long-term absenteeism (Rantanen & Tuominen 2011, Skagert *et al.* 2012). Managerial discussion on absenteeism is clearly warranted, with consideration of interventions to help reduce absences. Health managers and administrators are, however, cautioned that attempts to decrease absenteeism could inadvertently lead to cultures of presenteeism, where staff feel pressured to be at work whilst ‘sick’, which subsequently has a further impact on employee well-being, productivity and healthcare outcomes (Gaudine & Gregory 2010, Scott 2011). It behoves managers, therefore, to establish absenteeism initiatives that seek to identify and address, where possible, the source problems underpinning absenteeism, rather than applying a punitive approach. These study findings may be helpful to progress this.

Organizations which invest in employee welfare programs may benefit from reduced absenteeism, improved employee well-being and subsequent staff retention with resultant better patient health outcomes, especially if reduction in presenteeism also ensues. Organizational commitment and development of sustainable processes, systems and resources aimed at improving the health of individuals is likely to yield a wide array of benefits (Brunero & Lamont 2010). Health organizations in the United Kingdom have reported significantly reduced staff absenteeism with modest investment in a specialist nurse role focussed on return to work of absent nurses, with processes involving periodic phone calls to absent nurses (Scott 2011) and with employment of specialist mental health nurses, manager training, flexible working programs, psychological therapies for staff and access to specialist allied health and education (Jones-Berry 2013). Little is known empirically about the prevalence or outcomes of such programs in Australia, although workplace culture studies have examined the benefits of addressing seemingly inflexible workplace systems on well-being, morale and retention of health professionals (Lamont *et al.* 2009). As a first step organizations should adopt screening and early identification of absenteeism patterns in the nursing workforce (Martinez & Ferreira 2012, Yoon & Kim 2013). Cultures to embrace proactive and supportive intervention should follow.

Given the paucity of information on this topic, further research is clearly warranted. Alternative measurement approaches to retrospective recall and self-report should be considered and measures that have been proposed include frequency of spells of absence per individual, total length of absence during a specified period, incidence rate, cumulative incidence and duration of absence spells (Stapelfeldt *et al.* 2012).

## Limitations

There are some considerations when interpreting these findings. Firstly these were self-report data and it is likely that respondents underestimated their absenteeism. Perhaps those with less absenteeism and better health may have been more inclined to participate; considering the content of the survey, those who did participate may have been inclined to report better health as a result of their professional status as healthcare providers. This ‘social desirability’ is commonly encountered with healthcare surveys (Lamont *et al.* 2014).

Compared with population numbers, responses appeared limited, but as it was impossible to know how many nurses received and accessed email to obtain the questionnaire link, accurate response rates are thus incalculable. The size of the survey response was large and considered adequate for a web based survey; however, caution is noted in the representativeness of the findings as this study was a ‘snapshot’ of a sample in one Australian state. Finally, cross-sectional designs are limited in their inability to determine cause and effect; findings are therefore limited to predictive associations.

## Conclusion

Nursing is a demanding profession which requires attention to maintenance of staff health and well-being to provide safe patient care and optimal outcomes. Absenteeism in the profession is a recognized global problem and an understanding of influential multifactorial workplace and individual factors offers opportunities to at least go some way to addressing its high prevalence and costs. Study findings indicate that nurses and midwives who take MHDs have specific workplace and health profiles which offer healthcare organizations opportunities to implement workforce measures to ameliorate their need to do this and reduce such absences. Study findings indicate characteristics that should flag consideration of how such nurses and midwives might be supported to retain their health and well-being and their positive presence in the workforce.

Whilst there is an onus on professionals to be responsible and accountable for their own well-being, it is likely that this alone will not be adequate to obtain and maintain working environments conducive to the well-being of all in them. Managers, administrators and policy makers are also charged with developing and maintaining working environments, systems and support frameworks which promote nurse well-being and health promotion. Healthcare organizations which have successfully introduced well-being programs and reduced absenteeism should be benchmarked and role model their practice for the profession.

## Funding

This study was funded by an Australian Research Council Linkage grant with partner organization the New South Wales Nurses and Midwives Association.

## Conflict of interest

No conflict of interest was declared by the authors in relation to the study itself. Note that Robyn Gallagher is a JAN editor but, in line with usual practice, this article was subjected to double blind peer review and was edited by another editor.

## Author contributions

All authors have agreed on the final version and meet at least one of the following criteria [recommended by the ICMJE (<http://www.icmje.org/recommendations/>)]:

- substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data;
- drafting the article or revising it critically for important intellectual content.

## References

- Albini E., Zoni S., Parrinello G., Benedetti L. & Lucchini R. (2011) An integrated model for the assessment of stress-related risk factors in health care professionals. *Industrial Health* 49(1), 15–23.
- Al-Makhaita H.M., Sabra A.A. & Hafez A.S. (2014) Predictors of work-related stress among nurses working in primary and secondary health care levels in Dammam, Eastern Saudi Arabia. *Journal of Family & Community Medicine* 21(2), 79.
- Australian Bureau of Statistics (2011a) 4102.0–Australian Social Trends, Jun 2011: Work and Health. Vol. 2015.
- Australian Bureau of Statistics (2011b) Census Dictionary Australia 2011. Vol. 2016.
- Bastien C.H., Vallieres A. & Morin C.M. (2001) Validation of the Insomnia severity index as an outcome measure for Insomnia research. *Sleep Medicine* 2(4), 297–307.
- Brown W., Bryson L., Byles J., Dobson A., Manderson L., Schofield M. & Williams G. (1996) Women's health Australia: establishment of the Australian longitudinal study on women's health. *Journal of Women's Health* 5(5), 467–472.
- Brunero S. & Lamont S. (2010) Mental health liaison nursing, taking a capacity building approach. *Perspectives in Psychiatric Care* 46(4), 286–293.
- Brunero S., Wand A.P., Lamont S. & John L. (2016) A point prevalence study of the use of psychotropic medication in an acute general hospital. *International Psychogeriatrics* 28(6), 967–975.
- Buerhaus P.I., Donelan K., Ulrich B.T., Norman L. & Dittus R. (2006) State of the registered nurse workforce in the United States. *Nursing Economics* 24(1), 6.
- Chan C.W. & Perry L. (2012) Lifestyle health promotion interventions for the nursing workforce: a systematic review. *Journal of Clinical Nursing* 21(15–16), 2247–2261.
- Davey M.M., Cummings G., Newburn-Cook C.V. & Lo E.A. (2009) Predictors of nurse absenteeism in hospitals: a systematic review. *Journal of Nursing Management* 17(3), 312–30.
- Devore E.E., Grodstein F. & Schernhammer E.S. (2013) Shift work and cognition in the Nurses' health study. *American Journal of Epidemiology* 178(8), 1296–300.
- Duffield C. (2015) Nursing workforce sustainability: australia. In *Nursing Workforce Sustainability: The International Connection* (Buchan J. ed.), International Centre on Nurse Migration, Philadelphia.
- Duffield C.M., Roche M.A., Dimitrelis S., Homer C. & Buchan J. (2015) Instability in patient and nurse characteristics, unit complexity and patient and system outcomes. *Journal of Advanced Nursing* 71(6), 1288–1298.
- Ebert D.D., Lehr D., Boß L., Riper H., Cuijpers P., Andersson G., Thiart H., Heber E. & Berking M. (2014) Efficacy of an Internet-based problem-solving training for teachers: results of a randomized controlled trial. *Scandinavian Journal of Work Environment Health* 40(6), 582–96.
- Edward K.L., Stephenson J., Ousey K., Lui S., Warelow P. & Giandinoto J.A. (2015) A systematic review and meta-analysis of factors that relate to aggression perpetrated against nurses by patients/relatives or staff. *Journal of Clinical Nursing* 25(3–4), 289–299.
- Enns V., Currie S. & Wang J. (2015) Professional autonomy and work setting as contributing factors to depression and absenteeism in Canadian nurses. *Nursing Outlook* 63(3), 269–277.
- Farquharson B., Allan J., Johnston D., Johnston M., Choudhary C. & Jones M. (2012) Stress amongst nurses working in a healthcare telephone-advice service: relationship with job satisfaction, intention to leave, sickness absence and performance. *Journal of Advanced Nursing* 68(7), 1624–1635.
- Gaudine A. & Gregory C. (2010) The accuracy of nurses' estimates of their absenteeism. *Journal of Nursing Management* 18(5), 599–605.
- Hall L.M. (2005) *Quality Work Environments for Nurse and Patient Safety*. Jones & Bartlett Learning, Sudbury, Massachusetts.
- Happell B., Reid-Searl K., Dwyer T., Caperchione C.M., Gaskin C.J. & Burke K.J. (2013) How nurses cope with occupational stress outside their workplaces. *Collegian* 20(3), 195–199.
- Hasselhorn H.M., Conway P.M., Widerszal-Bazyl M., Simon M., Tackenberg P., Schmidt S., Camerino D. & Muller B. (2008) Contribution of job strain to nurses' consideration of leaving the profession—results from the longitudinal European nurses' early exit study. *Scandinavian Journal of Work, Environment & Health* 34(6), 75.
- Jones-Berry S. (2013) Too much pressure: NHS employers must invest in nurses' wellbeing. *Nursing Standard* 28(2), 12–3.
- Kim J.-H., Hyun M.-Y. & Kim S.-Y. (2009) Job stress, depression, social support and coping strategies of clinical nurses. *Korean Journal of Occupational Health Nursing* 18(2), 219–231.
- Lamont S., Walker P. & Brunero S. (2009) 'Teaching an old dog new tricks': a practice development approach to organizational change in mental health. *Practice Development in Health Care* 8(2), 65–76.

- Lamont S., Brunero S., Bailey A. & Woods K. (2012) Breakaway technique training as a means of increasing confidence in managing aggression in neuroscience nursing. *Australian Health Review* 36(3), 313–319.
- Lamont S., Brunero S., Lyons S., Foster K. & Perry L. (2014) Collaboration amongst clinical nursing leadership teams: a mixed-methods sequential explanatory study. *Journal of Nursing Management* 23(8), 1126–1136.
- Letvak S.A., Ruhm C.J. & Gupta S.N. (2012) Original research: nurses' presenteeism and its effects on self-reported quality of care and costs. *AJN The American Journal of Nursing* 112(2), 30–38.
- Martinez L.F. & Ferreira A.I. (2012) Sick at work: presenteeism among nurses in a Portuguese public hospital. *Stress & Health* 28(4), 297–304.
- Nursing and Midwifery Board of Australia (2015) *Nurse and Midwife registrant data: December 2014*. APHRA, Melbourne.
- Perry L., Gallagher R. & Duffield C. (2015a) The health and health behaviours of Australian metropolitan nurses: an exploratory study. *BMC Nursing* 14(1), 45.
- Perry L., Lamont S., Brunero S., Gallagher R. & Duffield C. (2015b) The mental health of nurses in acute teaching hospital settings: a cross-sectional survey. *BMC Nursing* 14(1), 15.
- Perry L., Gallagher R., Duffield C., Sibbrett D. & Nicholls R. (2016) Does nurses' health affect their intention to remain in their current position? *Journal of Nursing Management* 24(8), 1088–1097.
- Qualtrics (2009) *Qualtrics Research Suite Software*. Qualtrics, Provo.
- Rantanen I. & Tuominen R. (2011) Relative magnitude of presenteeism and absenteeism and work-related factors affecting them among health care professionals. *International Archives of Occupational & Environmental Health* 84(2), 225–30.
- Scott G. (2011) Staff sickness requires a balanced approach. *Nursing Standard* 26(13), 1.
- Siu O.L. (2002) Predictors of job satisfaction and absenteeism in two samples of Hong Kong nurses. *Journal of Advanced Nursing* 40(2), 218–29.
- Skagert K., Dellve L. & Ahlberg G. Jr (2012) A prospective study of managers' turnover and health in a healthcare organization. *Journal of Nursing Management* 20(7), 889–99.
- Stapelfeldt C.M., Jensen C., Andersen N.T., Fleten N. & Nielsen C.V. (2012) Validation of sick leave measures: self-reported sick leave and sickness benefit data from a Danish national register compared to multiple workplace-registered sick leave spells in a Danish municipality. *BMC Public Health* 12(1), 661.
- Tschannen D., Kalisch B.J. & Lee K.H. (2010) Missed nursing care: the impact on intention to leave and turnover. *Canadian Journal of Nursing Research* 42(4), 22–39.
- Tucker S., Harris M., Pipe T.B. & Stevens S.R. (2010) Nurses' ratings of their health and professional work environments. *American Association of Industrial Nurses Journal* 58(6), 253–267.
- Ware J.E. Jr, Kosinski M. & Keller S.D. (1996) A 12-item short-form health survey: construction of scales and preliminary tests of reliability and validity. *Medical Care* 34(3), 220–233.
- Yoon S.L. & Kim J.H. (2013) Job-related stress, emotional labor and depressive symptoms among Korean nurses. *Journal of Nursing Scholarship* 45(2), 169–76.

The *Journal of Advanced Nursing (JAN)* is an international, peer-reviewed, scientific journal. *JAN* contributes to the advancement of evidence-based nursing, midwifery and health care by disseminating high quality research and scholarship of contemporary relevance and with potential to advance knowledge for practice, education, management or policy. *JAN* publishes research reviews, original research reports and methodological and theoretical papers.

For further information, please visit *JAN* on the Wiley Online Library website: [www.wileyonlinelibrary.com/journal/jan](http://www.wileyonlinelibrary.com/journal/jan)

#### Reasons to publish your work in *JAN*:

- **High-impact forum:** the world's most cited nursing journal, with an Impact Factor of 1.917 – ranked 8/114 in the 2015 ISI Journal Citation Reports © (Nursing (Social Science)).
- **Most read nursing journal in the world:** over 3 million articles downloaded online per year and accessible in over 10,000 libraries worldwide (including over 3,500 in developing countries with free or low cost access).
- **Fast and easy online submission:** online submission at <http://mc.manuscriptcentral.com/jan>.
- **Positive publishing experience:** rapid double-blind peer review with constructive feedback.
- **Rapid online publication in five weeks:** average time from final manuscript arriving in production to online publication.
- **Online Open:** the option to pay to make your article freely and openly accessible to non-subscribers upon publication on Wiley Online Library, as well as the option to deposit the article in your own or your funding agency's preferred archive (e.g. PubMed).