



Review Article

The psychological impact of working as a midwife in Australia: Findings from a scoping review

Kirsten Small ^{a,b,*}, Chanelle Warton ^a, Jennifer Fenwick ^c, Kathleen Baird ^c, Zoe Bradfield ^d, Caroline Homer ^a

^a Global Women's and Newborn's Health Group, Burnet Institute, Melbourne, Victoria, Australia

^b School of Nursing and Midwifery, Griffith University, Loganholme, Queensland, Australia

^c School of Nursing and Midwifery, University of Technology Sydney, Sydney, New South Wales, Australia

^d School of Nursing, Curtin University, Perth, Western Australia, Australia

ARTICLE INFO

Keywords:

Midwifery

Burnout

Anxiety

Depression

Empowerment

Job satisfaction

Trauma

Scoping review

ABSTRACT

Background: Burnout, stress, trauma and other psychological health issues are major drivers of attrition, absenteeism, and reduced workplace engagement for midwives. Given the central roles midwives play in providing quality maternity care, it is important to monitor the mental and emotional health of midwives and to understand factors that are associated with a higher or lower incidence of problems. The aim of this review was to report on empirical literature pertaining to the psychological impact of midwifery work for midwives working in Australia.

Methods: The Joanna Briggs scoping review methodology was used. MEDLINE, Embase, Emcare, Maternity & Infant Care Datacare, CINAHL and SCOPUS were searched to identify research pertaining to the psychological impact of midwifery work for Australian midwives.

Results: A total of 26 papers met inclusion criteria. Midwifery work in Australia carried a significant psychological burden, with high rates of burnout, emotional exhaustion, depression, anxiety, and stress. Most midwives had witnessed traumatic events. Working in continuity of midwifery carer models was associated with lower rates of mental health concerns, while younger midwives and those with fewer years in the workforce were negatively impacted.

Discussion: Midwives in Australia are impacted significantly by their work; especially by burnout, the impact of witnessing traumatic events, depression, stress and anxiety, and moral distress. Midwifery continuity of carer models were protective for psychological impacts.

Conclusions: Effective workplace interventions to better support the midwifery workforce, including access to continuity models, are required to sustain Australia's high quality maternity care system.

Introduction

Midwives play an important role in the provision of quality maternity care (World Health Organization, 2024). There is concern that there are insufficient numbers of midwives globally (Nove et al., 2024). Increased rates of midwives leaving the profession (attrition) would have a significant impact on the maternity workforce and undermine clinical safety.

Psychological health concerns, including burnout, stress, and trauma, are recognised as major drivers of attrition for midwives

(Donnelly et al., 2024; Moncrieff et al., 2023; Stoll and Gallagher, 2019; redacted for review). These concerns are associated with higher rates of absenteeism (Matthews et al., 2019), presenteeism (working while unwell) (Jiang et al., 2023), reduced organisational commitment (Segal and Kagan, 2025), and suicide (Milner et al., 2016); each of these contributing to the size and productivity of the workforce. There are also strong links between health professional burnout and reductions in the quality and safety of healthcare (Salyers et al., 2017). Having a psychologically robust midwifery workforce is therefore an important aspect of a high-quality maternity care system.

Abbreviations: CBI, Copenhagen burnout inventory; CoMC, continuity of midwifery carer; PTSD, post traumatic stress disorder.

* Corresponding author at: Global Women's and Newborn's Health Group, Burnet Institute, Melbourne, Victoria, Australia.

E-mail address: kirsten.small@burnet.edu.au (K. Small).

<https://doi.org/10.1016/j.midw.2025.104377>

Received 15 December 2024; Received in revised form 4 March 2025; Accepted 11 March 2025

Available online 16 March 2025

0266-6138/© 2025 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

The prevalence and predictors of burnout in midwives reported in the international literature have been reviewed in recent years (Albendin-Garcia et al., 2021; Sidhu et al., 2020; Suleiman-Martos et al., 2020). The impact of traumatic experiences on the mental health of midwives has also been reviewed (Aydin and Aktas, 2021; Bingham et al., 2023). We were unable to identify literature reviews specifically examining depression, anxiety, stress, or other symptoms of poor psychological health among midwives in Australia.

The COVID-19 pandemic represents a recent challenge to the psychological health of health professionals, and the impact of this on midwives has recently been reviewed (Uchimura et al., 2024). The reviewers reported that the pandemic had a significant impact on midwives' psychological health, with increased rates of intention to leave the profession and presenteeism.

Our review was conducted as part of the Midwifery Futures project. The project goal was to understand the current state of the Australian midwifery workforce. The Midwifery Futures survey of the Australian midwifery workforce identified that 37 % of midwives had contemplated leaving the profession (Homer et al., 2024). Among midwives considering leaving, 49 % indicated that psychological health issues played a role in this consideration, and 60 % reported feelings of

burnout.

While Australian studies contributed to the international literature reviews (Albendin-Garcia et al., 2021; Aydin and Aktas, 2021; Bingham et al., 2023; Sidhu et al., 2020; Suleiman-Martos et al., 2020), findings for Australia were not reported separately, other than to note that work-related burnout assessed by the Copenhagen Burnout Inventory (CBI) was highest among Australian midwives (Sidhu et al., 2020). Therefore, the aim of this review was to report on the current state of empirical literature pertaining to the psychological impact of midwifery work on midwives working in Australia.

Methods

A scoping review was undertaken using a Joanna Briggs Institute scoping review methodology (Peters et al., 2022). This approach was chosen as it best met the project goals of providing a broad understanding of the issues affecting the Australian midwifery workforce. A protocol for the review was developed but was not publicly registered. Searches were conducted across MEDLINE, Embase, Emcare, Maternity & Infant Care Database, CINAHL, and SCOPUS on September 6, 2023. Databases were selected in collaboration with a health librarian to cover

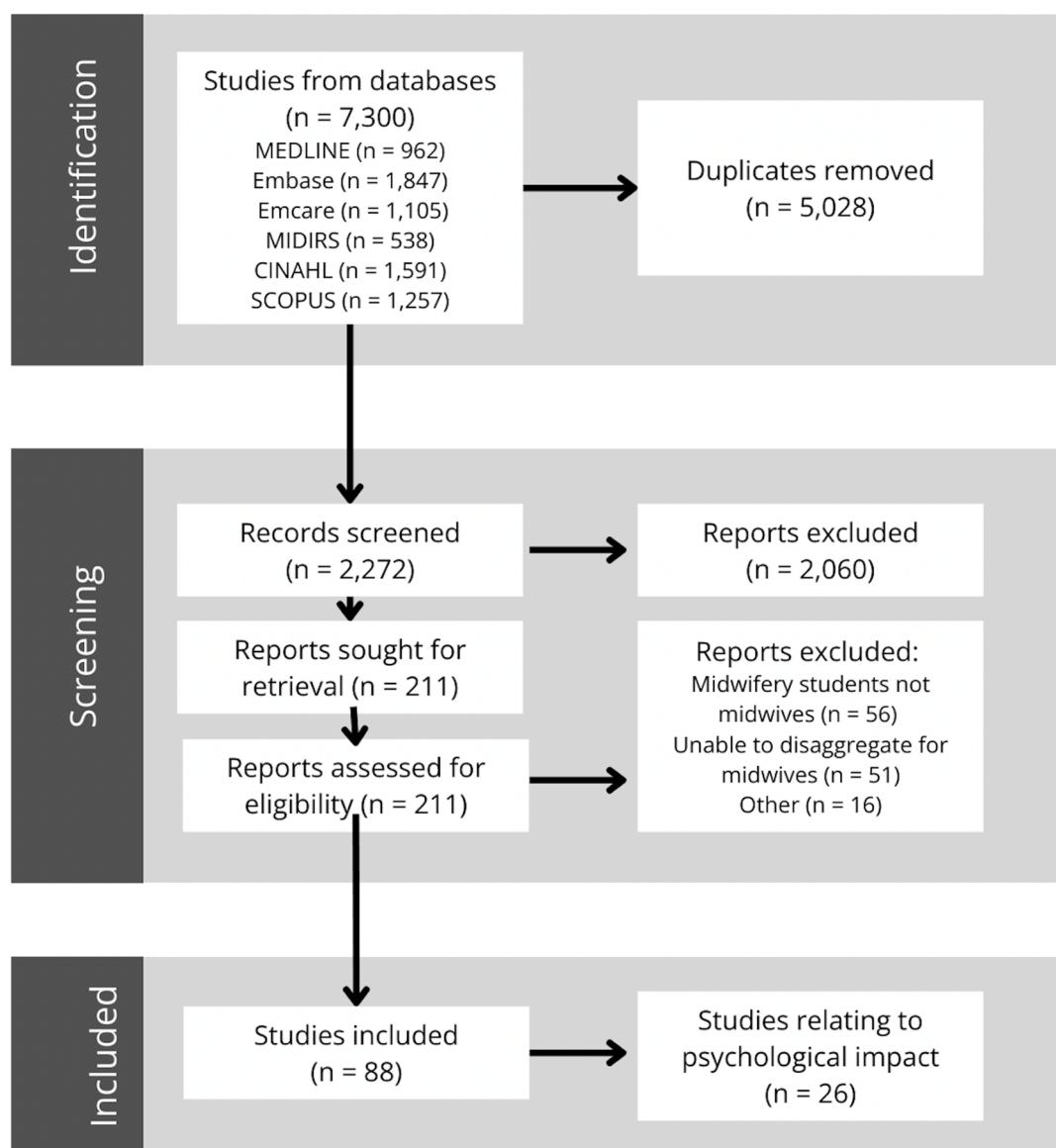


Fig. 1. Summary of selection process and outcomes.

a wide range of midwifery, nursing, allied health, and biomedical literature. Search terms for the broader review aimed to capture empirical literature relating to workforce issues and education needs of midwives in Australia (Supplement 1).

Peer-reviewed journal articles focusing on the workforce issues or educational needs of midwives in Australia were eligible for inclusion. This included empirical research where the participants were midwives

or managers of midwives. Midwifery students who were employed as an Assistant in Midwifery or Registered Undergraduate Student of Midwifery were included as they contributed to the workforce. Articles were included if published from 2003 to 2023 to ensure they reflected the current workforce. Included publications were limited to the English language. Articles were excluded when Australian midwives were included alongside other populations (i.e. inclusion of midwives

Table 1
Studies included for analysis.

Author(s)	Publication Year	Title	Location	Methodology	Instrument(s) Used
Collins et al.	2010	An evaluation of the satisfaction of midwives' working in midwifery group practice	SA	Quantitative	Midwifery Process Questionnaire
Sullivan, Lock & Homer	2011	Factors that contribute to midwives staying in midwifery: A study in one area health service in New South Wales, Australia	NSW	Quantitative	
Jordan et al.	2013	Level of burnout in a small population of Australian midwives	QLD	Quantitative	Copenhagen Burnout Inventory (CBI)
Mollart et al.	2013	Factors that may influence midwives work-related stress and burnout	NSW	Quantitative	Maslach Burnout Inventory Human Services Survey
Reiger & Lane	2013	'How can we go on caring when nobody here cares about us?' Australian public maternity units as contested care sites	VIC	Qualitative	
Newton et al.	2014	Comparing satisfaction and burnout between caseload and standard care midwives: findings from two cross-sectional surveys conducted in Victoria, Australia	VIC	Quantitative	CBI; Midwifery Process Questionnaire
Hildingsson et al.	2016	Midwifery empowerment: National surveys of midwives from Australia, New Zealand and Sweden	National	Quantitative	Perceptions of Empowerment in Midwifery Scale - Revised
Catling, Reid & Hunter	2017	Australian midwives' experiences of their workplace culture	National	Qualitative	
Creedy et al.	2017	Prevalence of burnout, depression, anxiety and stress in Australian midwives: a cross-sectional survey	National	Quantitative	CBI; Depression, Anxiety and Stress Scale
Leinweber et al.	2017a	A socioecological model of posttraumatic stress among Australian midwives	National	Quantitative	PTSD Symptom Scale Self-Report; Interpersonal Reactivity Index; Job Content Questionnaire; Traumatic Events in Perinatal Care List
Leinweber et al.	2017b	Responses to birth trauma and prevalence of posttraumatic stress among Australian midwives	National	Quantitative	TEPCL; PTSD Symptom Scale Self-Report
Fenwick et al.	2018a	Personal, professional and workplace factors that contribute to burnout in Australian midwives	National	Quantitative	CBI
Fenwick et al.	2018b	The emotional and professional wellbeing of Australian midwives: A comparison between those providing continuity of midwifery care and those not providing continuity	National	Quantitative	CBI; Perceptions of Empowerment in Midwifery Scale - Revised; Depression, Anxiety and Stress Scale
Dawson et al.	2018	Comparing caseload and non-caseload midwives' burnout levels and professional attitudes: a national, cross-sectional survey of Australian midwives working in the public maternity system	National	Quantitative	CBI; Midwifery Process Questionnaire
Harvie, Sidebotham & Fenwick	2019	Australian midwives' intentions to leave the profession and the reasons why	National	Quantitative	
Sheehy et al.	2019	Midwifery pre-registration education and mid-career workforce participation and experiences	NSW	Quantitative	Maslach Burnout Inventory Human Services Survey; Practice Environment Scale – Nursing Work Index; Perceptions of Empowerment in Midwifery Scale - Revised
Toohill et al.	2019	Trauma and fear in Australian midwives	QLD	Quantitative	Practice Concerns Scale
Catling & Rossiter	2020	Midwifery workplace culture in Australia: A national survey of midwives	National	Quantitative	Australian Midwifery Workplace Culture instrument
Lewis et al.	2020	The practice reality of ward based midwifery care: An exploration of aspirations and restrictions	WA	Qualitative	
Sheehy et al.	2021	Understanding workforce experiences in the early career period of Australian midwives: insights into factors which strengthen job satisfaction	NSW	Qualitative	
Catling et al.	2022	Midwifery workplace culture in Sydney, Australia	NSW	Quantitative	Australian Midwifery Workplace Culture instrument
Foster et al.	2022	Exploring moral distress in Australian midwifery practice	National	Qualitative	
Matthews et al.	2022b	Who is at risk of burnout? A cross-sectional survey of midwives in a tertiary maternity hospital in Melbourne, Australia	VIC	Quantitative	CBI
Matthews et al.	2022c	Factors associated with midwives' job satisfaction and experience of work: a cross-sectional survey of midwives in a tertiary maternity hospital in Melbourne, Australia	VIC	Quantitative	Midwifery Process Questionnaire; CBI
Oliver & Geraghty	2022	A mixed-methods pilot study exploring midwives' job satisfaction: Is being of service to women the key?	National	Quantitative	Nursing Workplace Satisfaction questionnaire
Sheehy & Baird	2022	A qualitative study of early career Australian midwives' encounters with perinatal grief, loss and trauma	National	Qualitative	

practising outside of Australia or professions other than midwifery) but results were not stratified to permit midwives data to be extracted separately. Articles relating to midwifery students who were not employed in midwifery work were also excluded.

The title and abstract of unique results were screened independently by two researchers (either AA, BB and/or CC) against inclusion criteria. The full text versions of included studies were subsequently similarly screened (Fig. 1). Conflicts in selection were resolved by CC. Covidence software supported the screening and data extraction steps. Data pertaining to the psychological impact of midwifery work for midwives were extracted for analysis by two independent researchers, with the most complete version used. In accordance with scoping review methodology recommendations, no critical appraisal of included articles was completed (Peters et al., 2021). A descriptive approach, rather than an interpretive process such as content or thematic analysis was used, aligned with the aim of reporting on the current state of the literature in this field.

Results

In total, 88 studies met the inclusion criteria for the larger review. Of these, 26 reported on the psychological impact of midwifery work on Australian midwives and were thus included for this analysis (Table 1). Most studies employed quantitative research methodologies ($n = 20/26$, 77 %) and half recruited participants across Australia ($n = 13/26$). Professional satisfaction, empowerment, burnout, the impact of witnessing traumatic events, depression, stress and anxiety, and moral distress were assessed in the literature.

Burnout

The relationship between burnout and midwifery work was investigated in nine studies. The Copenhagen Burnout Inventory (CBI) was utilized by seven studies (Table 2). The CBI has three subscales: personal, work-related and client-related burnout (Kristensen et al., 2005). Scores of 50 to 74 are considered indicative of moderate burnout. Scores between 75 and 99 indicate high burnout, while a score of 100 demonstrates severe burnout (Borritz et al., 2006).

Personal burnout refers to a person's experience of physical and psychological fatigue and exhaustion (Kristensen et al., 2005). Personal burnout was common among midwives, with 45 % to 68 % of midwives working in non-continuity of midwifery carer models (non-CoMC) scoring 50 or more on this scale (Creedy et al., 2017; Dawson et al., 2018; Jordan et al., 2013; Matthews et al., 2022b; Newton et al., 2014). The mean subscale score for personal burnout among midwives working in non-CoMC models was consistent with moderate burnout in most studies (Table 2) (Creedy et al., 2017; Fenwick et al., 2018a, b; Jordan et al., 2013; Matthews et al., 2022b; Newton et al., 2014). When it was reported, between 11 % to 17 % of midwives scored high levels of personal burnout (Creedy et al., 2017; Matthews et al., 2022b). While some studies reported no indications of severe personal burnout (Matthews et al., 2022c), one indicated a small number (1 %) of midwives experienced severe personal burnout (Creedy et al., 2017).

Employment factors associated with personal burnout among midwives included limited leave from their professional role (Fenwick et al., 2018a; Jordan et al., 2013), poor work-life balance (Fenwick et al., 2018a), being a midwife for under 20 years (Fenwick et al., 2018a), and working part-time (Jordan et al., 2013). Area of work was also associated with personal burnout, with highest levels of personal burnout reported by midwives working in non-CoMC models (Dawson et al., 2018; Fenwick et al., 2018a; Newton et al., 2014) or postnatal services (Jordan et al., 2013). Personal factors associated with personal burnout included not having children and being younger than 35 years of age (Fenwick et al., 2018a; Jordan et al., 2013).

Work-related burnout reflects physical and psychological fatigue and exhaustion perceived as relating to a person's employment (Kristensen

Table 2

Mean Copenhagen burnout inventory scores for Australian midwives.

Author, date	Population	Personal burnout score >50	Work burnout score >50	Client-related burnout score >50
Jordan et al., 2013	Midwives at a single service in southeast Queensland	57	57	9
Newton et al., 2014	Midwives working in a continuity of midwifery carer (CoMC) model at baseline	35	35	0
	Midwives in a non-CoMC model at baseline	59	46	8
	Midwives working in a CoMC model at 2 years	14	5	5
	Midwives in a non-CoMC model at 2 years	49	40	5
Creedy et al., 2017	Midwives around Australia	65	44	10
Dawson et al., 2018	Midwives working in Australian public hospitals	41	39	5
Fenwick et al., 2018a	Midwives around Australia	Not reported	Not reported	Not reported
Fenwick et al., 2018b	Midwives working in a CoMC model	10	5	4
	Midwives in a non-CoMC model	36	23	8
Matthews et al., 2022b	Midwives at one Victorian tertiary hospital	69	51	10

*significantly different from midwives working in CoMC, $p < 0.05$.

et al., 2005). The proportion of midwives experiencing work-related burnout varied from 35 % to 57 % (Creedy et al., 2017; Dawson et al., 2018; Jordan et al., 2013; Matthews et al., 2022b; Newton et al., 2014). Mean scores for this subscale ranged from 27.3 to 50.9 (Table 2). Between 6 % and 7 % of midwives indicated high levels of work-related burnout, and few to no (0 % - 0.1 %) participants reported severe work-related burnout (Creedy et al., 2017; Matthews et al., 2022b).

Employment factors associated with work-related burnout were dissatisfaction with leave and work-life balance, holding registration between 2 and 5 years, location of practice, and principal area of work (Fenwick et al., 2018a). Midwives working in the state of Victoria, on rotating shift patterns, or management positions reported the highest levels of burnout; whereas those working in South Australia or in CoMC models, antenatal care only, or administrative and research roles reported the lowest levels (Dawson et al., 2018; Fenwick et al., 2018a, b). Personal factors associated with work-related burnout were not having children and being aged younger than 35 years (Fenwick et al., 2018a; Jordan et al., 2013).

Client-related burnout is defined as a person's physical and psychological fatigue and exhaustion as perceived to be related to their work with clients (Kristensen et al., 2005). Client-related burnout was reported to be low across all studies, ranging from 8.3 to 25.3 (Table 2). Between 9 % to 12 % of midwives were identified as experiencing moderate levels of client-related burnout (Creedy et al., 2017; Jordan et al., 2013; Matthews et al., 2022b), while only 1 % of midwives had high levels of client-related burnout (Creedy et al., 2017; Matthews et al., 2022c). Employment factors associated with client-related burnout included dissatisfaction with leave and work-life balance (Fenwick et al., 2018a), working for fewer than 10 years (Jordan et al.,

2013), and being registered for 5 to 20 years (Fenwick et al., 2018a). Midwives working in rural and remote areas, and in CoMC models, were less likely to report client-based burnout (Fenwick et al., 2018a, b). Age was also associated with client-related burnout, with studies reporting that midwives aged between 40 and 49 years (Fenwick et al., 2018a) or over 50 years had higher scores (Jordan et al., 2013).

The Maslach Burnout Inventory Human Services Survey was used to assess burnout in two studies (Mollart et al., 2013; Sheehy et al., 2019). The Maslach Burnout Inventory Human Services Survey measures burnout across three subscales: emotional exhaustion, depersonalisation, and personal accomplishment (Maslach et al., 1996). The emotional exhaustion subscale relates to feelings of being emotionally overextended and fatigued by one's work. In one study, 60.5 % of midwives scored moderate to high burnout on this scale (Mollart et al., 2013), with moderate levels of emotional exhaustion reported in the other (Sheehy et al., 2019). Absence of exercise or caring for greater numbers of women with multiple psychological issues were associated with higher emotional exhaustion subscale scores (Mollart et al., 2013).

Depersonalisation measures impersonal responses towards clients (Maslach et al., 1996). Nearly 30 % of midwives were reported to have moderate to high levels of depersonalisation, which was significantly associated with working on night duty only compared to other shift types (Sheehy et al., 2019). Midwives considering leaving the profession had more emotional exhaustion and depersonalisation than those who were not, and there was less depersonalisation among midwives working in CoMC models (Sheehy et al., 2019).

The personal accomplishment subscale measures feelings of competence and achievement in one's work (Maslach et al., 1996). Thirty percent of midwives were identified as having low feelings of personal accomplishment (Mollart et al., 2013). Working night duty shifts or having 11 to 20 years of experience in the profession were significantly associated with lower feelings of personal accomplishment (Mollart et al., 2013).

Depression, anxiety and stress

The Depression, Anxiety, and Stress Scales are designed to measure these three related emotional states (Lovibond and Lovibond, 1993). Two studies used the Depression, Anxiety and Stress Scale with midwives (Creedy et al., 2017; Fenwick et al., 2018b). The proportion of midwives scoring between moderate to extremely severe for depression was 17 %, while 20 % scored between moderate to extremely severe for anxiety, and 22 % scored similarly for stress (Creedy et al., 2017). Midwives working in CoMC had lower levels of anxiety and depression than those working in other models, with no difference in stress (Fenwick et al., 2018a, b).

Professional (dis)satisfaction

Professional satisfaction is measured as one of four domains in the Midwifery Process Questionnaire. Four papers reported on this score (Collins et al., 2010; Dawson et al., 2018; Matthews et al., 2022c; Newton et al., 2014). Among midwives at a Victorian hospital, 85 % of those surveyed had a positive attitude as measured by the professional satisfaction domain (mean score 0.61) (Matthews et al., 2022c). In one study, midwives working in CoMC models had higher rates of professional satisfaction for than those in non-CoMC models (Dawson et al., 2018), with no difference between these populations at the commencement of a separate longitudinal study (Newton et al., 2014). Midwives who continued to work in a CoMC model showed improvements in their professional satisfaction scores over time (Collins et al., 2010; Newton et al., 2014).

The Nursing Workplace Satisfaction Questionnaire also assesses satisfaction, with 54 % of midwives surveyed indicating full or partial agreement with the statement that their job provides a lot of satisfaction (Oliver and Geraghty, 2022). Professional satisfaction among midwives

was positively impacted by three factors: being able to provide high quality care to women and their families (Collins et al., 2010; Harvie et al., 2019; Oliver and Geraghty, 2022; Sheehy et al., 2021; Sullivan et al., 2011), working alongside colleagues with a good work ethic (Collins et al., 2010; Lewis et al., 2020), and being able to provide care aligning with midwifery philosophy (Collins et al., 2010; Oliver and Geraghty, 2022).

On the other hand, professional dissatisfaction was associated with staff shortages (Catling et al., 2017; Harvie et al., 2019; Oliver and Geraghty, 2022; Reiger and Lane, 2013), poor staff retention, inadequate meal breaks and leave, shift work, being on-call, feeling they were providing unsafe care (Lewis et al., 2020; Oliver and Geraghty, 2022), poor pay (Harvie et al., 2019; Sheehy et al., 2021), poor work-life balance (Reiger and Lane, 2013), a culture of mistrust, and having limited opportunities to work in CoMC models (Harvie et al., 2019). Other sources of dissatisfaction included the medicalisation of workplaces as this impacted midwives' abilities to practice autonomously and in a way that aligned with midwifery philosophy (Catling et al., 2022; Sheehy et al., 2021). Lack of managerial support or micro-management were also associated with job dissatisfaction (Lewis et al., 2020; Oliver and Geraghty, 2022). One midwife described how "a lot of staff in this hospital have significant mental health issues. This is a very stressful job and there is zero support, zero support for that... we don't have a strong support structure for our staff who work in high pressure situations." (Lewis et al., 2020, p. 356).

Professional dissatisfaction and dissatisfaction with the organisation of midwifery care were two common motivations for intentions to leave the profession (Harvie et al., 2019; Sullivan et al., 2011). When asked about their reasons for considering leaving the profession, midwives working in a CoMC model were less likely to indicate dissatisfaction with their professional role, or with the organisation of midwifery care than midwives in non-CoMC models (Harvie et al., 2019).

Many midwives did not feel adequately acknowledged by the hospital for their work, contributing to feelings of unfairness and helplessness (Catling et al., 2017; Collins et al., 2010; Matthews et al., 2022b). Midwives who felt unsupported by managers were more likely to have considered leaving their job or the profession (Hildingsson et al., 2016). In one study, 53 % of the midwifery participants had a negative attitude score within the professional support domain of the Midwifery Process Questionnaire (Matthews et al., 2022c). Improvements in attitude among midwives in this domain were seen following the implementation of and experience in a CoMC model (Matthews et al., 2022c), which aligns with other research in which midwives working in a CoMC model were more likely to feel their concerns were taken seriously (Catling et al., 2017).

Professional empowerment

Using the Perceptions of Empowerment in Midwifery Scale-R, Hildingsson and colleagues compared perceived empowerment between midwives in Australia and midwives working in New Zealand or Sweden (Hildingsson et al., 2016). Australian midwives scored low in the domains of autonomy and professional recognition. The authors speculated that this may reflect challenges for Australian midwives to gain professional identity distinct from nursing and to achieve autonomy of practice relative to medicine.

Experiences of bullying

Most midwives were aware of bullying and conflict within their workplace, or had experienced workplace bullying themselves (Catling et al., 2017). "Horizontal violence" between midwives was highlighted as an ongoing concern (Catling et al., 2017), with midwives working in CoMC models perceiving a level of resentment and marginalisation from midwives working in non-CoMC models in the same health service (Catling et al., 2017). Bullying was linked by midwives to "us and them"

cultures and hierarchical structures, noting that new midwifery staff and students were particular targets (Catling et al., 2017; Sheehy et al., 2021). Workplace culture was closely linked to wellbeing and morale among midwives, as well as their ability to work effectively in their professional roles (Catling et al., 2017). Midwives reported mental fatigue from having to stand up for unfairness towards other staff, such as early career midwives (Catling et al., 2017). Bullying contributed to physical symptoms of stress and intentions to leave the workplace for some midwives (Catling et al., 2017).

Impact of witnessing traumatic events

Witnessing traumatic events during midwifery care provision was common. In one study, 67.2 % of midwives reported witnessing a traumatic birth event (Leinweber et al., 2017a) and, in another 85.4 % reported exposure to traumatic birth experiences in their professional capacity (Toohill et al., 2019). Traumatic birth events included disrespectful, poor, or abusive care (Leinweber et al., 2017a; Toohill et al., 2019); and/or death or injury (Leinweber et al., 2017a). In one qualitative study exploring early career midwives' experiences, after witnessing a traumatic event some reported leaving midwifery altogether or moving into roles where providing intrapartum care was not a requirement (Sheehy and Baird, 2022).

Midwives who had witnessed traumatic events recalled feeling helplessness, horror, fear, concern, guilt, anger, and powerlessness (Leinweber et al., 2017a, b; Sheehy and Baird, 2022). In one study, 17 % of midwives who completed the Post Traumatic Stress Disorder (PTSD) Symptom Scale Self-Report scored "probable" for PTSD (Leinweber et al., 2017b). In this study, feelings of horror, guilt, fear, and responsibility associated with witnessing a traumatic birth event increased the risk for probable PTSD among midwives (Leinweber et al., 2017b).

Workplace factors such as feeling unsupported, or fear of litigation, exacerbated perceptions of distress and trauma (Sheehy and Baird, 2022; Toohill et al., 2019). Greater numbers of hours worked per week was associated with an increased likelihood of probable PTSD (Leinweber et al., 2017b). There were no associations between probable PTSD and age, length of registration, number of births attended, or educational qualifications (Leinweber et al., 2017b). One study noted that a lack of exposure to and / or preparation for perinatal loss or other traumatic birth events during pre-registration education, left some early career midwives feeling unprepared for this aspect of practice (Sheehy and Baird, 2022).

Moral distress

One qualitative study explored midwives' experiences of moral distress in Australia (Foster et al., 2022). They defined moral distress as psychological harm incurred following actions or inactions that oppose an individual's moral values. All midwives ($n = 14$) in the study were able to describe clinical experiences where their moral integrity or judgement were compromised resulting in moral distress. Moral distress was a cumulative effect of repeated exposure to such situations, rather than the result of a singular event. Differences in practice beliefs and philosophies with medical personnel, midwifery colleagues, or a health service were identified as a cause of moral distress. Some midwives also reported moral distress when their beliefs contrasted to the decision of the woman they were caring for (for example, when women were undergoing an abortion) (Foster et al., 2022).

Moral distress resulted in midwives feeling unable to function in their role in a way they perceived as professional satisfying or safe. The personal and professional impacts of moral distress varied considerably between midwives and appeared to relate to years of practice. Midwives with fewer than 5 years' experience focused on the immediate impacts of moral distress, such as crying and feelings of frustration or guilt, whereas midwives with greater experience described chronic consequences, including emotional fatigue, burnout, anxiety, and depression.

Several midwives had taken temporary leave to manage their mental and emotional wellbeing relating to their experience of moral distress (Foster et al., 2022).

Discussion

This review aimed to explore research examining the psychological impact of midwifery work in Australia on midwives. High rates of personal and work-related burnout and emotional exhaustion were reported. Approximately one in five midwives reported symptoms of depression, anxiety, and stress. Most midwives had witnessed traumatic events with many reporting subsequent traumatic stress. Midwives also reported bullying, moral distress, and relative disempowerment. Midwifery work in Australia therefore carries a significant psychological burden. Despite these challenges, most midwives reported their work as professionally satisfying. Working in CoMC models, being able to provide high quality care to women and their families, working alongside colleagues with a good work ethic, and being able to provide care aligning with midwifery philosophy were all protective factors.

The Australian experience reflects findings seen in other countries. Higher levels of personal and work-related burnout are reported than for client-related burnout (Sidhu et al., 2020; Suleiman-Martos et al., 2020). Younger age and fewer years in the profession were often associated with higher work-related burnout scores (Amir and Reid, 2020; Hildingsson et al., 2024, 2013; Hunter et al., 2019; Mohammad et al., 2020; Paul et al., 2022; Vaiciene et al., 2022). Working in CoMC models was associated with lower burnout scores and reduced the impact of exposure to trauma (Albendin-Garcia et al., 2021; Aydin and Aktas, 2021; Bingham et al., 2023; Jepsen et al., 2017; Sidhu et al., 2020). Other work-related variables that protected against burnout included having autonomy and support in the workplace, professional recognition, positive work environments; and having sufficient staffing, resources, and pay (Albendin-Garcia et al., 2021; Sidhu et al., 2020; Suleiman-Martos et al., 2020). Adequate social support in the workplace also helped mitigate the impact of exposure to trauma (Aydin and Aktas, 2021; Bingham et al., 2023).

Evidence supports organisation-based interventions including the establishment of reflective practice groups, CoMC models, balanced workloads, and improved rostering and support as effective approaches to reducing burnout and improving coping (Anchors et al., 2024; Moran et al., 2023). Younger midwives are disproportionately impacted by the impact of psychological distress and represent a significant loss of professional potential if they leave the profession early in their career. Robust approaches that specifically support younger midwives are likely to represent an effective investment. For example, early career midwives in New Zealand are supported through a government funded mentorship program that seems highly effective. (Pairman et al., 2016).

The 2019 Woman-centred care: strategic directions for Australian maternity services report (Commonwealth of Australian Governments Health Council, 2019) focused on the provision of maternity care with safety, respect, choice, and access. Issues for the midwifery profession were not explicitly explored. The report acknowledged that maternity professionals were at risk for burnout, but no recommendations were provided to might mitigate this risk. More recently the FUSCHIA report examined the state of midwifery in the state of Victoria (Matthews et al., 2022a), noting a significant proportion of midwives reported mental health issues, including burnout. To address this, the report recommended improvements to midwives' working conditions, with greater flexibility, support for midwives to work in CoMC models, balanced workloads, improved workplace culture, and increased professional recognition.

Strengths and limitations

A strength of this review is the number of papers from only one country, highlighting the importance of these issues. It is commendable

that so many studies have been undertaken providing a unique and much needed opportunity for this synthesis. The papers included in the review, however, were identified through a search strategy that was boarder than the research question. As such, it is possible that relevant papers may have been missed, though we believe this is unlikely. Evidence regarding burnout scores for midwives who were, or were not, working in CoMC models was not derived from clinical trials. Midwives who chose to, or were selected to work in CoMC models, may have different levels of resilience and personal support that contribute to the findings.

Recommendations

Urgent action to prevent psychological harm for Australian midwives in their work lives and to support and promote psychological wellbeing is vital to ensure a robust and effective midwifery workforce. The Australian literature on burnout would benefit from further exploration in a systematic review with meta-analysis. Understanding the specific features of CoMC that provide psychological protection for midwives would be useful to inform the ongoing development of models of midwifery care. As organisations make changes designed to better support midwives, implementation research would help to determine whether these changes are effective, for whom, and under what circumstances.

Conclusion

While most Australian midwives report professional satisfaction, burnout, anxiety, depression, stress, and trauma related symptoms were common. Younger midwives, those with fewer years in the profession, and who were not working in CoMC models were more affected. Workplace factors including workload, access to leave and meal breaks, flexible rostering, and adequate support mitigated dissatisfaction. Effective workplace interventions to better support the midwifery workforce are required to sustain Australia's high quality maternity care system.

Statement of significance

Issue

Poor psychological health for midwives are major drivers of attrition, absenteeism, and reduced workplace engagement. High rates of burnout among health professionals have been linked to lower healthcare quality and safety.

What is already known

High rates of burnout and trauma for midwives are reported in international reviews. No prior reviews have focused on the psychological health of Australian midwives.

What this paper adds

Australian midwives work is psychologically impactful, particularly in relation to burnout, trauma, depression, anxiety, stress, and moral distress. Midwifery continuity of carer models were protective against harmful impacts.

Author agreement

This article is the author's original work. The article has not received prior publication and is not under consideration for publication elsewhere. All authors have seen and approved the manuscript being submitted. We abide by the copyright terms and conditions of Elsevier.

Ethics approval

Not applicable.

Consent for publication

Not applicable.

Availability of data and materials

The search strings are provided as a supplement.

Funding

This Midwifery Futures project was funded by the Nursing and Midwifery Board of Australia. CH is funded through an Investigator Grant from the Australian National Health and Medical Research Council. The funders had no role in the design, conduct, or analysis of this research. The Board supported the decision to publish and were given the opportunity to provide feedback on the paper.

CRediT authorship contribution statement

Kirsten Small: Writing – original draft, Methodology, Formal analysis, Conceptualization. **Chanelle Warton:** Writing – review & editing, Writing – original draft, Data curation, Conceptualization. **Jennifer Fenwick:** Writing – review & editing, Methodology. **Kathleen Baird:** Writing – review & editing. **Zoe Bradfield:** Writing – review & editing. **Caroline Homer:** Writing – review & editing, Supervision, Project administration, Funding acquisition, Data curation, Conceptualization.

Declaration of competing interest

I can confirm that none of the authors have a conflicting interest in relation to this paper.

Acknowledgments

We wish to acknowledge the assistance provided by Alfred Hospital librarian, Lorena Romera, in refining the search criteria.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at [doi:10.1016/j.midw.2025.104377](https://doi.org/10.1016/j.midw.2025.104377).

References

- Albendin-Garcia, L., Suleiman-Martos, N., Canadas-De la Fuente, G.A., Ramirez-Baena, L., Gomez-Urquiza, J.L., De la Fuente-Solana, E.I., 2021. Prevalence, related factors, and levels of burnout among midwives: a systematic review. *J. Midwifery. Womens Health* 66 (1), 24–44. <https://doi.org/10.1111/jmwh.13186>.
- Amir, Z., Reid, A.J., 2020. Impact of traumatic perinatal events on burnout rates among midwives. *Occup. Med.* 70 (8), 602–605. <https://doi.org/10.1093/occmed/kqaa156>.
- Anchors, Z.G., Arnold, R., Bressington, C.A., Moreton, A.E., Moore, L.J., 2024. Effectiveness of interventions on occupational stress, health and well-being, performance, and job satisfaction for midwives: a systematic mixed methods review. *Women Birth* 37 (5), 101589. <https://doi.org/10.1016/j.wombi.2024.02.005>.
- Aydin, R., Aktas, S., 2021. Midwives' experiences of traumatic births: a systematic review and meta-synthesis. *Eur. J. Midwifery* 5, 31. <https://doi.org/10.18332/ejm/138197>.
- Bingham, J., Kalu, F.A., Healy, M., 2023. The impact on midwives and their practice after caring for women who have a traumatic childbirth: a systematic review. *Birth* 50 (4), 711–734. <https://doi.org/10.1111/birt.12759>.
- Borritz, M., Rugulies, R., Bjorner, J.B., Villadsen, E., Mikkelsen, O.A., Kristensen, T.S., 2006. Burnout among employees in human service work: design and baseline findings of the PUMA study. *Scand. J. Public Health* 34 (1), 49–58. <https://doi.org/10.1080/14034940510032275>.

- Catling, C., Rossiter, C., 2020. Midwifery workplace culture in Australia: a national survey of midwives. *Women Birth* 33 (5), 464–472. <https://doi.org/10.1016/j.wombi.2019.09.008>.
- Catling, C., Rossiter, C., Cummins, A., McIntyre, E., 2022. Midwifery workplace culture in Sydney, Australia. *Women Birth* 35 (4), e379–e388. <https://doi.org/10.1016/j.wombi.2021.07.001>.
- Catling, C.J., Reid, F., Hunter, B., 2017. Australian midwives' experiences of their workplace culture. *Women Birth* 30 (2), 137–145. <https://doi.org/10.1016/j.wombi.2016.10.001>.
- Collins, C.T., Fereday, J., Pincombe, J., Oster, C., Turnbull, D., 2010. An evaluation of the satisfaction of midwives' working in midwifery group practice. *Midwifery* 26 (4), 435–441. <https://doi.org/10.1016/j.midw.2008.09.004>.
- Commonwealth of Australian Governments Health Council, 2019. Woman-centred care. Strategic Directions For Australian maternity Services.
- Creedy, D.K., Sidebotham, M., Gamble, J., Pallant, J., Fenwick, J., 2017. Prevalence of burnout, depression, anxiety and stress in Australian midwives: a cross-sectional survey. *BMC Preg. Childbirth* 17 (1), 13. <https://doi.org/10.1186/s12884-016-1212-5>.
- Dawson, K., Newton, M., Forster, D., McLachlan, H., 2018. Comparing caseload and non-caseload midwives' burnout levels and professional attitudes: a national, cross-sectional survey of Australian midwives working in the public maternity system. *Midwifery* 63, 60–67. <https://doi.org/10.1016/j.midw.2018.04.026>.
- Donnelly, E., Lee, J., Donnellan-Fernandez, R., 2024. Understanding attrition of early career midwives in Australia. *Women Birth* 37 (4), 101636. <https://doi.org/10.1016/j.wombi.2024.101636>.
- Fenwick, J., Lubomski, A., Creedy, D.K., Sidebotham, M., 2018a. Personal, professional and workplace factors that contribute to burnout in Australian midwives. *J. Adv. Nurs.* 74 (4), 852–863. <https://doi.org/10.1111/jan.13491>.
- Fenwick, J., Sidebotham, M., Gamble, J., Creedy, D.K., 2018b. The emotional and professional wellbeing of Australian midwives: a comparison between those providing continuity of midwifery care and those not providing continuity. *Women Birth* 31 (1), 38–43. <https://doi.org/10.1016/j.wombi.2017.06.013>.
- Foster, W., McKellar, L., Fleet, J.A., Sweet, L., 2022. Exploring moral distress in Australian midwifery practice. *Women Birth* 35 (4), 349–359. <https://doi.org/10.1016/j.wombi.2021.09.006>.
- Harvie, K., Sidebotham, M., Fenwick, J., 2019. Australian midwives' intentions to leave the profession and the reasons why. *Women Birth* 32 (6), e584–e593. <https://doi.org/10.1016/j.wombi.2019.01.001>.
- Hildingsson, I., Fahlbeck, H., Larsson, B., Johansson, M., 2024. Increasing levels of burnout in Swedish midwives - A ten-year comparative study. *Women Birth* 37 (2), 325–331. <https://doi.org/10.1016/j.wombi.2023.10.010>.
- Hildingsson, I., Gamble, J., Sidebotham, M., Creedy, D.K., Guilleland, K., Dixon, L., Pallant, J., Fenwick, J., 2016. Midwifery empowerment: national surveys of midwives from Australia, New Zealand and Sweden. *Midwifery* 40, 62–69. <https://doi.org/10.1016/j.midw.2016.06.008>.
- Hildingsson, I., Westlund, K., Wiklund, I., 2013. Burnout in Swedish midwives. *Sex. Reprod. Healthc.* 4 (3), 87–91. <https://doi.org/10.1016/j.srhc.2013.07.001>.
- Homer, C., Small, K., Warton, C., Bradfield, Z., Fenwick, J., Gray, J., Robinson, M., 2024. Midwifery futures: building the future Australian midwifery workforce. <https://www.nursingmidwiferyboard.gov.au/News/Midwifery-Futures.aspx>.
- Hunter, B., Fenwick, J., Sidebotham, M., Henley, J., 2019. Midwives in the United Kingdom: levels of burnout, depression, anxiety and stress and associated predictors. *Midwifery* 79, 102526. <https://doi.org/10.1016/j.midw.2019.08.008>.
- Jepsen, I., Juul, S., Foureur, M., Sørensen, E.E., Nørh, E.A., 2017. Is caseload midwifery a healthy work-form? – A survey of burnout among midwives in Denmark. *Sex. Reprod. Healthc.* 11, 102–106. <https://doi.org/10.1016/j.srhc.2016.12.001>.
- Jiang, W., Wang, Y., Zhang, J., Song, D., Pu, C., Shan, C., Al-Yateem, N., 2023. The impact of the workload and traumatic stress on the presentism of midwives: the mediating effect of psychological detachment. *J. Nurs. Manage* 2023, 1–10. <https://doi.org/10.1155/2023/1686151>.
- Jordan, K., Fenwick, J., Slavina, V., Sidebotham, M., Gamble, J., 2013. Level of burnout in a small population of Australian midwives. *Women Birth* 26 (2), 125–132. <https://doi.org/10.1016/j.wombi.2013.01.002>.
- Kristensen, T.S., Borritz, M., Villadsen, E., Christensen, K.B., 2005. The Copenhagen Burnout Inventory: a new tool for the assessment of burnout. *Work Stress* 19 (3), 192–207. <https://doi.org/10.1080/02678370500297720>.
- Leinweber, J., Creedy, D.K., Rowe, H., Gamble, J., 2017a. Responses to birth trauma and prevalence of posttraumatic stress among Australian midwives. *Women Birth* 30 (1), 40–45. <https://doi.org/10.1016/j.wombi.2016.06.006>.
- Leinweber, J., Creedy, D.K., Rowe, H., Gamble, J., 2017b. A socioecological model of posttraumatic stress among Australian midwives. *Midwifery* 45, 7–13. <https://doi.org/10.1016/j.midw.2016.12.001>.
- Lewis, L., Barnes, C., Roberts, L., McLeod, L., Elliott, A., Hauck, Y.L., 2020. The practice reality of ward based midwifery care: an exploration of aspirations and restrictions. *Women Birth* 33 (4), 352–359. <https://doi.org/10.1016/j.wombi.2019.08.010>.
- Lovibond, S.H., Lovibond, P.F., 1993. *Manual For the Depression Anxiety Stress Scales*. Psychology Foundation Monograph.
- Maslach, C., Jackson, S.E., Leiter, M., 1996. *Maslach Burnout Inventory*. Consulting Psychologist Press, Palo Alto, CA.
- Matthews, R.P., Forster, D., Hyde, R., McLachlan, H., Newton, M., Mumford, S., Shafiei, T., Llewellyn, F., Cullinane, M., Cooklin, A., 2022a. FUSCHIA: future proofing the midwifery workforce in Victoria. A state-wide cross-sectional study exploring health, well-being and sustainability.
- Matthews, R.P., Forster, D., Shafiei, T., Newton, M., Hyde, R., Llewellyn, F., Farrell, T., 2019. Burnout, absenteeism and intention to leave the workplace and/or profession amongst midwives working at a tertiary maternity service in Melbourne, Australia: findings from the 'EXPERT' study. *Women Birth* 32, S29–S30. <https://doi.org/10.1016/j.wombi.2019.07.235>.
- Matthews, R.P., Hyde, R., Llewellyn, F., Shafiei, T., Newton, M.S., Forster, D.A., 2022b. Who is at risk of burnout? A cross-sectional survey of midwives in a tertiary maternity hospital in Melbourne, Australia. *Women Birth* 35 (6), e615–e623.
- Matthews, R.P., Hyde, R., Llewellyn, F., Shafiei, T., Newton, M., Forster, D.A., 2022c. Factors associated with midwives' job satisfaction and experience of work: a cross-sectional survey of midwives in a tertiary maternity hospital in Melbourne, Australia. *Women Birth* 35 (2), e153–e162. <https://doi.org/10.1016/j.wombi.2022.02.010>.
- Milner, A.J., Maheen, H., Bismark, M.M., Spittal, M.J., 2016. Suicide by health professionals: a retrospective mortality study in Australia, 2001–2012. *Med. J. Aust.* 205 (6), 260–265. <https://doi.org/10.5694/mja15.01044>.
- Mohammad, K.I., Al-Reda, A.N., Aldalaykeh, M., Hayajneh, W., Alafi, K.K., Creedy, D.K., Gamble, J., 2020. Personal, professional and workplace factors associated with burnout in Jordanian midwives: a national study. *Midwifery* 89, 102786. <https://doi.org/10.1016/j.midw.2020.102786>.
- Mollart, L., Skinner, V.M., Newing, C., Foureur, M., 2013. Factors that may influence midwives work-related stress and burnout. *Women Birth* 26 (1), 26–32. <https://doi.org/10.1016/j.wombi.2011.08.002>.
- Moncrieff, G., Cheyne, H., Downe, S., Hunter, B., 2023. Factors that influence midwives' leaving intentions: a moral imperative to intervene. *Midwifery* 125, 103793. <https://doi.org/10.1016/j.midw.2023.103793>.
- Moran, L., Foster, K., Bayes, S., 2023. What is known about midwives' well-being and resilience? An integrative review of the international literature. *Birth* 50 (4), 672–688. <https://doi.org/10.1111/birt.12756>.
- Newton, M.S., McLachlan, H.L., Willis, K.F., Forster, D.A., 2014. Comparing satisfaction and burnout between caseload and standard care midwives: findings from two cross-sectional surveys conducted in Victoria, Australia. *BMC Preg. Childbirth* 14, 426. <https://doi.org/10.1186/s12884-014-0426-7>.
- Nove, A., Boyce, M., Neal, S., Homer, C.S.E., Lavender, T., Matthews, Z., Downe, S., 2024. Increasing the number of midwives is necessary but not sufficient: using global data to support the case for investment in both midwife availability and the enabling work environment in low- and middle-income countries. *Hum. Resour. Health* 22 (1), 54. <https://doi.org/10.1186/s12960-024-00925-w>.
- Oliver, K., Geraghty, S., 2022. A mixed-methods pilot study exploring midwives' job satisfaction: is being of service to women the key? *Eur. J. Midwifery* 6, 25. <https://doi.org/10.18332/ejm/146087>.
- Pairman, S., Dixon, L., Tumilty, E., Gray, A., Campbell, N., Culvert, S., Lennos, S., Kensington, M., 2016. The midwifery first year of practice programme. Supporting New Zealand midwifery graduates in their transition to practice. *N. Z. Coll. Midwives J.* 52, 12–19. <https://doi.org/10.12784/nzcomjnl52.2016.2.12-19>.
- Paul, N., Limprecht-Heusner, M., Eichenauer, J., Scheichenbauer, C., Barnighausen, T., Kohler, S., 2022. Burnout among midwives and attitudes toward midwifery: a cross-sectional study from Baden-Württemberg, Germany. *Eur. J. Midwifery* 6, 46. <https://doi.org/10.18332/ejm/150582>.
- Peters, M.D.J., Godfrey, C., McInerney, P., Khalil, H., Larsen, P., Marnie, C., Pollock, D., Tricco, A.C., Munn, Z., 2022. Best practice guidance and reporting items for the development of scoping review protocols. *JBI Evid. Synth.* 20 (4), 953–968. <https://doi.org/10.11124/JBIES-21-00242>.
- Peters, M.D.J., Marnie, C., Tricco, A.C., Pollock, D., Munn, Z., Alexander, L., McInerney, P., Godfrey, C.M., Khalil, H., 2021. Updated methodological guidance for the conduct of scoping reviews. *JBI Evid. Implement.* 19 (1), 3–10. <https://doi.org/10.1097/XEB.0000000000000277>.
- Reiger, K., Lane, K., 2013. 'How can we go on caring when nobody here cares about us?' Australian public maternity units as contested care sites. *Women Birth* 26 (2), 133–137. <https://doi.org/10.1016/j.wombi.2012.11.003>.
- Salyers, M.P., Bonfils, K.A., Luther, L., Firmin, R.L., White, D.A., Adams, E.L., Rollins, A. L., 2017. The relationship between professional burnout and quality and safety in healthcare: a meta-analysis. *J. Gen. Intern. Med.* 32 (4), 475–482. <https://doi.org/10.1007/s11606-016-3886-9>.
- Segal, K., Kagan, I., 2025. Traumatic experiences, quality of life, and organizational commitment among midwives: a cross-sectional study. *Birth* 52 (1), 112–122. <https://doi.org/10.1111/birt.12868>.
- Sheehy, A., Baird, K., 2022. A qualitative study of early career Australian midwives' encounters with perinatal grief, loss and trauma. *Women Birth* 35 (6), e539–e548. <https://doi.org/10.1016/j.wombi.2022.01.009>.
- Sheehy, A., Smith, R.M., Gray, J.E., Homer, C.S.E., 2019. Midwifery pre-registration education and mid-career workforce participation and experiences. *Women Birth* 32 (2), e182–e188. <https://doi.org/10.1016/j.wombi.2018.06.014>.
- Sheehy, D.A., Smith, M.R., Gray, P.J., Homer, C.S.E., 2021. Understanding workforce experiences in the early career period of Australian midwives: insights into factors which strengthen job satisfaction. *Midwifery* 93, 102880. <https://doi.org/10.1016/j.midw.2020.102880>.
- Sidhu, R., Su, B., Shapiro, K.R., Stoll, K., 2020. Prevalence of and factors associated with burnout in midwifery: a scoping review. *Eur. J. Midwifery* 4, 4. <https://doi.org/10.18332/ejm/115983>.
- Stoll, K., Gallagher, J., 2019. A survey of burnout and intentions to leave the profession among Western Canadian midwives. *Women Birth* 32 (4), e441–e449. <https://doi.org/10.1016/j.wombi.2018.10.002>.
- Suleiman-Martos, N., Albendin-Garcia, L., Gomez-Urquiza, J.L., Vargas-Roman, K., Ramirez-Baena, L., Ortega-Campos, E., De La, Fuente-Solana, E.I., 2020. Prevalence and predictors of burnout in midwives: a systematic review and meta-analysis. *Int. J. Environ. Res. Public Health* 17 (2). <https://doi.org/10.3390/ijerph17020641>.

- Sullivan, K., Lock, L., Homer, C.S., 2011. Factors that contribute to midwives staying in midwifery: a study in one area health service in New South Wales, Australia. *Midwifery* 27 (3), 331–335. <https://doi.org/10.1016/j.midw.2011.01.007>.
- Toohill, J., Fenwick, J., Sidebotham, M., Gamble, J., Creedy, D.K., 2019. Trauma and fear in Australian midwives. *Women Birth* 32 (1), 64–71. <https://doi.org/10.1016/j.wombi.2018.04.003>.
- Uchimura, M., Miyauchi, A., Takahashi, M., Ota, E., Horiuchi, S., 2024. Mental health of midwives during the COVID-19 pandemic: a scoping review. *Jpn. J. Nurs. Sci.* 21 (4), e12612. <https://doi.org/10.1111/jjns.12612>.
- Vaiciene, V., Blazeviciene, A., Macijauskiene, J., Sidebotham, M., 2022. The prevalence of burnout, depression, anxiety and stress in the Lithuanian midwifery workforce and correlation with sociodemographic factors. *Nurs. Open* 9 (4), 2209–2216. <https://doi.org/10.1002/nop2.948>.
- World Health Organization, 2024. Transitioning to Midwifery Models of care: Global Position Paper. Geneva.