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Midwifery group practice workforce in Australia: A cross-sectional survey of midwives and managers

Leonie Hewitt [a,*,1,2], Ann Dadich [b,3,4], Donna L. Hartz [a,5,6], Hannah G. Dahlen [a,7,8]

[a] School of Nursing and Midwifery Western Sydney University, Locked Bag 1797, Penrith, NSW 2751, Australia
[b] School of Business Western Sydney University, Locked Bag 1797, Penrith, NSW 2751, Australia

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ABSTRACT

Background: Despite robust evidence on the benefits of midwifery group practice (MGP), there remains difficulties with implementing and sustaining the model. However, contemporary data on the MGP workforce and how each model has been operationalised are limited. This constrains an understanding of the factors that help or hinder implementation and sustainability of MGP.

Aim: To describe the characteristics of Australian MGPs and the factors that help or hinder sustainability.

Methods: A national cross-sectional survey was undertaken in Australia between March 2021 and July 2022, inclusive. Quantitative data were analysed using descriptive analysis while qualitative data were analysed using content analysis.

Findings: Of 669 survey responses, 579 were midwives and 90 were managers. The mean years of experience for clinical midwives was eight years, and 47.8% (almost twice the national average) completed a Bachelor of Midwifery (BMid). Half (50.2%) the models provided care for women of all risk. Midwives resigned from MGP because of the MGP work conditions (30%) and how the service was managed or supported (12.7%). Managers resigned from MGP because of role changes, conflict with their manager, and limited support. Almost half (42.6%) of MGP managers also managed other areas, leading to heavy workloads, competing demands, and burnout.

Conclusion: The BMid appears to be a common educational pathway for MGP midwives, and many MGP services are providing care to women with complexities. Flexible practice agreements, organisational support and appropriate workloads are vital for recruitment, retention, and sustainability of MGP.

Statement of significance

Problem or issue

There is limited contemporary data on MGP workforce and the many ways MGPs have been operationalised throughout Australia might clarify what is required to promote staff retention and model sustainability.

What is already known

Difficulties in implementing and sustaining MGP services are multifactorial and include stakeholder understanding and commitment to the model, staff recruitment, and retention.

What this paper adds

* Corresponding author.
E-mail addresses: leonie.hewitt@outlook.com (L. Hewitt), A.Dadich@westernsydney.edu.au (A. Dadich), D.Hartz@westernsydney.edu.au (D.L. Hartz), H.Dahlen@westernsydney.edu.au (H.G. Dahlen).
[1] ORCID: 0000–0002-9899–6613
[2] Twitter Handle: @leonie_hewitt
[3] Twitter Handle: @ann_dadich
[4] ORCID: 0000–0001-5767–1794
[5] Twitter Handle: @DonnaLHartz
[6] ORCID: 0000–0002-4964–2106
[7] Twitter Handle: @hannahdahlen
[8] ORCID: 0000–0002-4450–3078

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We provide contemporary data regarding the MGP workforce and problems identified. The BMid appears to be the most common educational pathway for midwives working in MGP.

Introduction

Background

Midwifery group practice (MGP) caseload care is a publicly funded model where childbearing women have a known midwife who provides continuity of carer, throughout their pregnancy, birth, and postpartum period. Midwives work in a group to cover for time off and backup, and collaborate with doctors as required [1]. Continuity of midwifery-led care has robust evidence showing improved outcomes for both mothers and babies when compared with other models of care [2]. Some of the first Australian models appeared in the 1990 s [3] and have since become more accessible to both childbearing women and midwives who want to provide relational care, and work to their full scope of practice [4]. However, MGP can be difficult to implement and sustain, with issues like funding; support; and workforce shortage [4]. Insufficient recruitment might be due to midwives being deterred by: the on-call requirement; increased responsibility; or inflexibility of the service [5]. Not encouraging new grads into MGP, means that some services miss the opportunity to 'grow their own' [6]. MGP managers are integral to retaining staff by: ensuring the MGP is functioning sustainably; being responsive to what the midwives require; resolving tensions within and outside the group; and educating other core services on the benefits of MGP [7]. Sustaining the workforce including the manager requires a commitment from senior managers to support, value,and prioritise the MGP [5]. Funding should not be an argument given the research that has shown how cost effective MGP is, yet it remains a perceived barrier for some institutions to implement this program [4,8].

There are alternative models to MGP that provide midwifery-led continuity of care. Private midwifery care [9] and team midwifery [1], are examples of this, although team midwifery has less continuity. Nevertheless, MGP is the most common way for women to access a known, primary midwife, throughout the maternity continuum in Australia [10]. Unfortunately, obtaining operational information on these models and other midwifery specific data like education, workforce, and regulation are often challenging [11].

Obtaining data specific to midwifery is necessary to monitor workforce shortfalls, educational requirements, and the accessibility of MGP models for women; it is also necessary to ascertain what is happening in the midwifery profession. For example, in 2016, Dawson and colleagues [4] estimated that only 8% of women had access midwifery-led continuity of care in Australia. In 2022, 14.8% of the models in Australia were MGP [10]. While informative, this does not clarify how many women access MGP. The Australian National Health Workforce Dataset provides information on the number of midwives who work in MGP, which increased from 937 in 2016–1094 in 2019 [12]. However, to calculate the number of women who could access MGP care, more information on each MGP service is needed. Data are required on the number of midwives providing MGP care, the full-time equivalent (FTE) of each midwife and their caseload (number of women each midwife cares for) requirement per FTE.

Although one of the oldest professions [13], midwifery was integrated into nursing about a century ago and became a post registration nursing certificate [14]. Because of this, most midwifery workforce data are still enmeshed with nursing data. Although there have been recent efforts to separate these data, accurate data are difficult to obtain [11]. In the past 25 years in Australia, there have been changes that have improved the midwifery profession's visibility and quality of practice. These include national midwifery registration standards and regulation laws, the expansion of midwifery continuity models, and the introduction of the Bachelor of Midwifery (BMid), where students are not required to have a nursing degree first [11]. The BMid is a three-year degree, to promote midwifery as a distinct profession, advocate woman-centredness and prepare graduates to confidently provide continuity of care [15]. However, there are multiple pathways to registration as a midwife in Australia; these include a post-graduate pathway for nurses, as well as undergraduate double nurse/midwife degrees and the BMid [16]. The regulatory board for midwifery – the Nursing and Midwifery Board of Australia – continues to blend midwifery and nursing professions, albeit with discreet registers. Furthermore, the BMid is also under scrutiny and threat of viability because of escalating costs, restrictive clinical education models and limited public awareness [11,15].

Contemporary data on the MGP workforce in Australia are limited, and access to these data could inform ways to improve and sustain MGP. Although there are many ways to operationalise an MGP model to meet the needs of a community, a health service, women, and midwives [17], a recent UK study found that "many UK midwives are not currently able or willing to change the way they work to implement continuity"[18]. Having flexible ways of operationalising the models might be more appropriate and sustainable. Sharing knowledge of how services operationalise MGP might provide the information needed to tailor MGPs to suit all stakeholders [7]. Being aware of what midwives require to sustain their practice, and what managers require to optimally manage a service, might also help to implement more sustainable models [5,19].

This study is part of a large research program to clarify the conditions that optimise MGP management in Australia. This is achieved by examining the MGP manager's role and the attributes that enable them to lead and sustain MGPs. This paper presents an overview of: MGP models with reference to the consumers they target; where care is provided; the population of MGP midwives and managers; as well as factors that help or hinder the sustainability of the model.

Methods

Study design and data collection

A national survey was undertaken as the second phase of a larger, mixed methods study. Participants from the first phase (withheld-for-blind-review) were invited to pilot-test the survey. Six participants offered feedback, which was used to refine the survey. Approximately 1094 midwives were estimated to work in MGP [12]. A representative sample of 278 responses from midwives was deemed adequate from a population of approximately 1000 midwives working in continuity of care models. This was calculated using a 5% margin of error and a 95% confidence index. We were pleased to exceed this with around half of midwives working in MGP models in Australia responding to this survey. Participants were recruited via social media and advertisements posted in member emails from the Australian College of Midwives and Women's Health Care Australasia. Participants were invited to complete the survey if they were working (or had been within the previous five years) as an MGP midwife, MGP manager (Midwifery Unit Manager with direct clinical oversight), or senior manager (Strategic or Operational only) with responsibilities that include MGP. Once they commenced the survey, they were asked to self-identify which position they held and were taken to the end of the survey if they chose 'none of the above'. The survey was designed using the online survey platform, Qualtrics®[20]. Survey data were collected from 30th March 2021 until the 22nd of July 2022, inclusive to accommodate disruptions caused by the COVID-19 pandemic and to reach as many participants as possible. During this time most services went through a rapid change with many midwives being unable to provide the care they wanted to, one-to-one care increasingly moved to online, postnatal care was reduced, MGP care was cut back and in some cases MGP services were closed [21].

The survey was designed to explore MGP midwives' and managers' views and included seven sections. This article presents participants'

demographic information, MGP model conditions (who the model caters for and where care is provided), and some employment conditions. Participants were invited to respond to open ended questions to expand on the closed item responses or where further explanation was required.

Ethics

The study was approved by Western Sydney University Human Research Ethics Committee (approval number: withheld-for-blind-review). Participants were offered detailed information (via a link) at the beginning of the survey and asked whether they consented, if they responded as 'no' they were taken to the end of the survey. Survey responses were anonymous and thus participant responses could not be withdrawn after submission.

Quantitative analysis

Descriptive analysis of the demographic items of the survey was undertaken (See Table S1: Survey Questions). Survey data were cleaned to remove 121 surveys that had not completed all the demographic information, as well as contributions from participants who were not an MGP midwife, manager, or executive manager of an MGP service, within the previous five years. Without basic demographics completed the aim of the survey would not have been met and the data would not have been useful. Quantitative data were analysed calculating descriptive statistics, frequencies, percentages, means, and independent sample *t*-test using IBM SPSS software [22].

Qualitative analysis

Content analysis was performed on the qualitative data using NVivo [23]. Content analysis was used to ascertain and quantify patterns in text [24]. This approach has a long history in the social sciences, with many variations, attracting critique [25]. Although some researchers do not define it as qualitative research, others argue that content analysis is qualitative research with some quantitative elements [26].

An inductive/conventional approach was used to gain direct information from the raw data as described by Hsieh and Shannon [27]. This was achieved by (re)reading the open-ended text, noting keywords or phrases that captured the meaning of the text. Once preliminary phrases were identified, text was coded using these phrases or codes. New codes were added as phrases were found that did not fit with existing codes. Some codes were combined while others were split into other subcategories. Once the codes were organised into main categories and subcategories, the authors discussed and critiqued these. The final codes were reported in narrative form accompanied by the frequency distribution of responses (number count) and percentage.

Researcher position

As midwives with extensive experience providing midwifery care and leadership of continuity of midwifery care models, three authors have an insider's perspective. One of the researchers is not a midwife, providing an outsider's perspective, encouraging reflexive approaches to the analysis. These insider and outsider views helped us to draw on our individual strengths and expose any biases that might have resulted from extended immersion in the field.

Findings

Participant backgrounds

Of the 790 participants, 669 responded to all the demographic items, representing half of the survey items, and so were included. Responses were received from MGP midwives ($n = 579$, 86.5%) managers of MGP services ($n = 68$, 10.2%), and senior managers of services that offered an MGP ($n = 22$, 3.3%, see Table 1). Most participants were born in Australia ($n = 525$, 78.5%), with others born in Europe ($n = 92$, 13.7%), or New Zealand and Pacific Islands ($n = 29$, 4.3%), among other locations. Eight (1.2%) participants identified as Aboriginal or Torres Strait Islander, close to the national percentage of indigenous midwives of 1.3% [12].

The largest proportion of participants was over 50 years of age ($n = 207$, 31.0%); however, the mean age of midwives was 38 years, and the mean age of managers was 46 years. The largest proportion of participants had practiced as a midwife between five to nine years ($n = 175$, 26.2%). The mean years of midwives' experience was eight years and for the managers, it was 18 years. The largest proportion of participants had entered midwifery via a BMid ($n = 297$, 44.4%). However, some participants had completed a master's ($n = 153$, 24.0%) or doctoral degree

Table 1
Midwives' Demographics and Characteristics ($n = 669$).

Position		Participants	Percentage
	MGP midwife	579	86.5
	MGP manager	68	10.2
	Senior manager of an MGP service	22	3.2
Indigenous status			
	Yes, Aboriginal and/or Torres Strait Islander	8	1.2
	Rather not say	3	0.4
Ethnicity			
	Australia	525	78.5
	Europe	92	13.7
	New Zealand and Pacific Islands	29	4.3
	North, South and Central America	14	2.0
	Africa and Middle East	2	0.29
	North, South and Central Asia	7	1.0
States and Territories working			
	New South Wales	216	32.3
	Queensland	192	28.7
	Victoria	84	12.6
	South Australia	59	8.8
	Western Australia	64	9.6
	Tasmania	16	2.4
	Northern Territory	20	3.0
	Australian Capital Territory	18	2.7
Remote, Rural, and Metropolitan Area Classification			
	Metropolitan Area	558	68.4
	Rural	175	26.1
	Remote	35	5.2
	Missing	1	0.1
Age range (years)			
	21–29	128	19.1
	30–39	171	25.6
	40–49	163	24.4
	50 and over	207	31.0
Years practising midwifery			
	0–9	340	50.9
	10–19	152	22.8
	20–29	93	13.9
	30 or more	82	12.3
	Not a midwife	2	0.3
Midwifery qualification			
	Bachelor of midwifery	297	44.4
	Graduate diploma in midwifery	176	26.3
	Double nursing/midwifery degree	66	9.9
	Hospital certificate in midwifery	94	14.1
	Other	32	4.8
	Not a midwife	2	0.3
	Missing	2	0.3
Highest level of education		**Participants (n=637)**	**Percentage**
	Hospital certificate	27	4.2
	Qualification from Technical and Further Education or diploma	7	1.0
	Undergraduate university degree	271	42.5
	Postgraduate diploma	169	26.5
	Postgraduate Masters' degree	153	24.0
	Doctorate	5	0.8
	Missing	5	0.8

($n = 5$, 0.8%, see Table 1). Almost half the clinical MGP midwives ($n = 276$, 47.8%) completed a BMid, while the largest proportion of managers entered midwifery via a graduate diploma ($n = 36$, 40%). According to registration data from the same years, the percentage of midwives working in MGP who completed a BMid is close to twice the percentage of those working nationally as 'midwife only' registered midwives (2021, 24.4% and 2022, 26.9%) [28].

Although most midwives worked fulltime ($n = 345$, 59.6%), of those who worked part-time, almost one-quarter had reduced to part-time work after initially working fulltime ($n = 54$, 23.1%). Almost one-fifth of the midwives no longer worked in MGP ($n = 102$, 17.6%), while close to one-quarter of the managers had ceased working as an MGP manager ($n = 16$, 23.5%). Over forty percent of MGP managers also managed another service as well as MGP ($n = 29$, 42.6%, see Table 2).

Reasons midwives reduced or ceased MGP work

Midwives reduced to part-time employment or left MGP, because: of how it was managed; of personal reasons; or the MGP work conditions (see Table 3). While one-quarter of the participants left for personal reasons ($n = 57$, 25.4%), of these one-third left due to pregnancy or birth ($n = 14$, 33.3%). The rest described dissatisfaction with one or more aspects of the service – namely, how it was managed or the impact on their lifestyle.

MGP work conditions

MGP was found to be an all-consuming lifestyle for some, especially when working fulltime. The reasons cited for this assessment included limited work-life balance, an excessive workload, burnout, stress, and being on-call, with some citing multiple reasons. Although some of the MGP work condition, concerns might be dealt with by effective management, some may also be the result of being on-call and the ebbs and flow of MGP where there are quiet times followed by times that are extremely busy. Of the participants that had reduced to part-time or left MGP these factors were reported by 51.9% ($n = 118$):

> I felt like my family and life came second to my women because I felt that I always had to be there for them. Being on call 24 h a day is exhausting and even on days off there is an expectation and a want to go in and deliver your ladies. On days off I would still check my phone and respond to messages when I wasn't away from home. Knowing all your colleagues are busy makes you very reluctant to pass jobs on (*ID222*).

Table 2
Working Arrangements.

Midwives Full Time Equivalent (FTE)	Participants (n=579)	Percentage
Fulltime	345	59.6
0.9 FTE	18	3.1
0.8 FTE	132	22.8
0.7 FTE	48	7.2
0.6 FTE	9	1.6
0.5 FTE	25	4.3
0.4 – 0.2 FTE	2	0.4
Midwives still employed in MGP		
Yes	477	82.4
No	102	17.6
Midwives reduced to part-time after starting fulltime	**Participants (n=234)**	**Percentage**
Yes	54	23.1
No	180	76.9
Manager still managing MGP	**Participant (n=68)**	**Percentage**
Yes	52	76.5
No	16	23.5
Manager managing other services as well as MGP		
Yes	29	42.6
No	39	57.4

Table 3
Midwife Reasons for Reducing or Ceasing MGP Employment.

Main Category Subcategory	Quotes (n)	Percentage
Personal reasons		
Maternity, personal or family reasons	57	25.1
MGP work conditions		
Poor work life balance, excessive workload, stress, on-call, burnout	118	51.9
Culture		
Bullying, poor culture, poor group dynamics	14	6.1
How it was managed		
Issues with how MGP was managed and supported	29	12.7
Model changed, service closed, contract ended	9	3.9

Being available to the women and the group practice on a full-time basis was difficult for many midwives. Having a family made it even harder. Consequently, some reduced to a part-time position to enable them to continue working in the model:

> Huge commitment and detriment to personal life, I have a young family and need to balance work/life better! (*ID554*).

> Too many women a year [40] allocated at full time in an all-risk model. Too overwhelming and felt I wasn't providing depth of care, only breadth (*ID104*).

While some midwives worked part-time, they were still required to be on-call the same as a full-time midwife. For others, part-time employment within the MGP model was not an option. However, some MGP services only offered part-time employment. While this might be to improve sustainability, some midwives preferred full-time employment:

> I dropped to 0.8 (FTE) but was still on-call the same as full timers (*ID607*).

> MGP not offering part-time (*ID505*).

> There is no option to work full-time. I've worked as part time for almost 18 months and would actually prefer full-time, but it is not offered (*ID48*).

Bullying and poor organisational culture

Bullying and poor organisational culture explained why some midwives stopped working in MGP ($n = 14$, 6.1%). Some reported feeling bullied because of working differently, causing some to cease midwifery. Limited support and poor cohesion among MGP members also contributed to midwives leaving MGP:

> I started up another MGP that was more a medical model. I was bullied by some of the midwives. I believe due to me speaking up for giving women all their choices and promoting informed decision making (*ID436*)

> I left the profession due to workplace bullying (*ID411*).

> Lack of support from core staff and team issues (different ways of working on call) it became quite stressful with little time out" (*ID639*).

How the model was managed and supported

Issues with how the model was managed and supported accounted for why some midwives left MGP, or reduced to part-time employment ($n = 29$, 12.7%). Some were concerned by the managers' strategic

direction, preventing the MGP from reaching its full potential. On a practice level, they described limited or no leave provisions including cover for sick leave, poor rostering, and limited resources. Some midwives stated that managers were ineffective, not committed to the model or offered limited support. Others needed more options and flexibility around their work conditions and better financial compensation:

> Misguided direction from senior management, lots of barriers put in place preventing fully functioning MGP in a rural setting (*ID330*).

> No flexible working arrangements on return from maternity leave (*ID338*).

> Burn out, lack of managerial and clinical support. Unreasonable hours that I felt weren't compensated appropriately financially (*ID270*).

MGP manager issues

The reasons some managers left MGP were because they had moved into other positions, or had their positions downgraded ($n = 10$, 22.2%). However, others described issues like that of the midwives. They spoke of conflict with executive managers, and concerns over the work environment.

Executive managers

Almost one-quarter of the managers described conflict with their line manager and limited support ($n = 11$, 24.4%, see Table 4). Most concerns with executive managers involved barriers to model improvement or expansion:

> Conflict with exec management over MGP management. I wanted to expand the service by adding more midwives to the team, and I wanted to employ more early career midwives, exec didn't agree (*ID56*).

Nurses are often in positions representing and managing both nursing and maternity services in Australian hospitals, and there are few midwives in executive management positions [29]. This might be because nursing is a much larger professional group than midwifery, or that midwives are not assuming executive positions. However, some managers found it difficult to be managed by a different profession:

> Being managed by a nurse is equivalent to a dentist managing an engineer as per Joy Alcocks recent article. It was ridiculous. (*ID289*)

Work environment

In addition to the MGP, almost half of the managers managed other areas ($n = 29$, 42.6%, see Table 2). While some managers reported no issue with this ($n = 3$, 6.6%, see Table 4), others reported their work environment was a major concern ($n = 21$, 46.6%). They cited poor culture, competing demands, a heavy workload, and burnout:

Table 4
Managers' Comments on Managing an MGP.

Main Category Subcategory	Quotes (*n*)	Percentage
Change in position		
Position downgraded, personal caseload removed, moved to another position	10	22.2
Executive management		
Conflict with management, no support	11	24.4
Work environment		
Poor culture, burnout, workload too heavy, competing demands	21	46.6
No issues	3	6.6

> Splitting myself between 3 models of care and 2 different hospital sites is difficult. Never enough time to feel like I've completed anything well. Always rushed, competing demands, multiple personalities that don't always agree with the other models (*ID442*).

Because managing an MGP might differ from what hospital ward managers encounter, there might be limited understanding from both. This might be especially true when MGPs are based offsite from the hospital, hindering communication between MGP and hospital clinicians. Although the managers found managing other areas challenging, one manager recognised benefit in seeing the health service from a wider viewpoint:

> Managing other services means I can't dedicate as much time as I would like to grow and build our MGP, however it also means I have a broader view and advocate for MGP across all maternity services (*ID218*).

Where MGP was provided

Midwives working in MGP responded from every Australian state and territory, with survey responses from most states and territories roughly equating to or higher than the jurisdictions' rate of employed midwives. The exceptions were Western Australia ($n = 64$, 9.6%) and Victoria ($n = 84$, 12.6%), as the proportion of participants from these states was underrepresented [30]. The greatest proportions of participants worked in New South Wales ($n = 216$, 32.3%) and Queensland ($n = 192$, 28.7%, see Table 1). Most midwives worked in MGP models located in major metropolitan centres ($n = 458$, 68.4%), just over a quarter of midwives worked in MGPs in rural areas ($n = 175$, 26.1%), and there were 35 (5.2%) midwives working in remote MGP services. This was assessed using the Rural, Remote and Metropolitan Areas (RRMA) index via the Health Workforce Locator, and the RRMA filter [31].

Care was provided mostly through public hospitals ($n = 640$, 95.6%). During birth, midwifery care was offered in various settings, with most women giving birth in a hospital birthing suite ($n = 584$, 61.7%). While MGP was traditionally implemented to care for women of low obstetric risk [32], this survey revealed half of the MGP services operated as 'all risk models' ($n = 336$, 50.2%, see Table 5). This means there were more options of MGP care for women with complexities, with some MGPs specifically targeting women with high obstetric risk factors ($n = 23$, 3.4%).

Table 5
MGP Operationalisation.

MGP Arrangements	Participants (*n*=669)	Percentage
MGP model or models (services can have more than one MGP)		
Low risk model	154	23
Low risk entry, no exit	183	27.4
All risk model	336	50.2
High risk model	23	3.4
None of the above	39	5.8
MGP is situated within:		
Public Hospital	640	95.6
Private Hospital	4	0.6
Neither	25	3.7
Women give birth in: (multiple answers accepted)	**Participants (*n*=946)**	**Percentage**
Free-standing birth centre	31	3.2
Alongside birth centre	110	11.6
Birth centre	73	7.7
Birth unit, birthing suite, or labour ward	584	61.7
The home	124	13.1
Community centre	2	0.2
Aboriginal and/or Torres Strait Islander birthing service	22	2.3

Discussion

This study explored contemporary data on MGP models across Australia with reference to: the consumers they target; where care is provided; a population of 579 MGP midwives and 90 managers; as well as factors that help or hinder the sustainability of the model. Research has focused on the benefits, satisfaction, and sustainability of midwifery-led models [2, 33–38]; however, contemporary data on the MGP workforce are limited with little understanding of how the models are operationalised. This knowledge might help to identify facilitators and barriers to MGP sustainability. This study extends Dawson and colleagues' [4] research, which reported on the availability and characteristics of caseload midwifery in Australia in a study on maternity managers views.

MGP for all women

Since most MGP intrapartum care (61.7%) was provided in a hospital birth suite, with onsite medical support as required, it seems appropriate that MGP should cater for women experiencing complexities. Although high-level evidence on midwifery-led continuity of care supports the care of healthy pregnant women [2], the trend of continuity of midwifery care for women with obstetric and social risk factors might be increasing. While previous research indicated that one-third of models were 'all risk' [4], this study found that 50% of models were 'all risk'.

Although recent studies demonstrated favourable outcomes for women with complexities who have received MGP care [39,40]. There is some debate about the strength of the evidence relating to MGP care for these women [39]. Some authors suggested that larger appropriately powered studies are required to evaluate cost, resource use, and clinical outcomes [40]. However, most studies suggest that all women (including those with complexities), benefit from equitable access to MGP care [41,42].

This study also found that most MGP services are offered in the public sector, and very few are offered in the private sector (0.6%). A recent study indicated that women want to choose their doctor, but also have access to midwifery-led care in the private sector [43]. Since there is a deficit of these models in the private sector, there is an opportunity for obstetricians to consider midwifery continuity models to be incorporated into private hospitals.

How midwives were educated

The midwife participants' mean age was 38 years – less than the national midwife mean age of 45 years in 2019 and 47.3 years in 2022 [12,44]. Their mean years of experience was only eight years, and they were more likely to have completed a BMid. The participant rates from each jurisdictions' midwifery workforce were fairly representative, with the exception of Western Australia and Victoria. This underrepresentation might reflect the predominate double degree/postgraduate entry point into midwifery in both states [45,46] and the absence of the BMid.

A higher rate of midwives working in MGP who had completed a BMid might indicate this form of education encourages midwives to provide MGP care. This could be due to the longer education in midwifery specific subjects and clinical environments, compared to the postgraduate or double degree pathways. There might also be more extensive exposure to this model while being a student compared to other midwifery education programs due to the longer period. Future midwives attracted to the BMid might also have different priorities to those seeking a nursing pathway first or a combined nursing and midwifery pathway (double degree). However, McKellar and colleagues indicated that in direct consultation with consumers, the BMid curricula was underpinned by a feminist philosophy, promoting woman-centred care to prepare midwives to work in continuity of care [15]. Although all midwifery educational pathways promote these qualities the BMid might offer more exposure due to the length of midwifery specific study [47]. It is therefore important to ensure the BMid continues to be available to educate midwives in all states and territories so that midwifery-led continuity of care models grow. Blended nursing/midwifery educational approaches might not be fit-for-purpose to ensure a future woman-centred workforce [11]. Combining nursing science (closely related to the medical model) and midwifery philosophies might not encourage graduates to pursue woman-centred continuity of care [45].

However, the BMid is constantly under scrutiny [11]. This is partly because the workforce is deemed less versatile for rural and remote settings, highlighting the continued focus on nursing, with limited recognition of the uniqueness of the role and scope of a midwife [48]. Other reasons the BMid is threatened, despite being in high demand is: cost; issues with providing clinical experience; and limited visibility within nursing [15]. Since there is a preference for the double (or dual) degree in both Western Australia and Victoria over the BMid [46,48], the future workforce of midwifery continuity of care models in these states might be also threatened. Further evidence of the value of midwife centric programs, like the BMid is seen in countries with the highest midwifery-led continuity in the world, like New Zealand, which educates its midwives via a three-year direct entry BMid [16].

Sustaining midwives

Only sixty percent of MGP midwives worked full-time, suggesting that many health services were supporting part-time employment. However, the findings suggest that some health services are not offering part-time positions or that the on-call does not reflect the part time hours. Job sharing might be a solution for these services, effectively making two part time midwives a full-time equivalent reducing the on-call and the load on other midwives in the group. Some health services require MGP midwives to work part-time, presumably to reduce burnout and promote sustainability. This arrangement would only work in states and territories that renumerated MGP midwives at a rate that provided financial stability on part-time contracts. Yet, there are different renumeration agreements across Australia, with some states paying considerably less than others [49]. If the pay level enabled midwives to work part-time, it might improve the work-life balance. This in turn might alleviate stress and anxiety, and potentially prevent burnout, especially if the on-call requirements were also reduced. Midwives in this study said they left MGP due to inflexible working conditions during pregnancy and being unable to work part-time after having children. Although more continuity of carer is achievable with midwives working fulltime, a service that supports childbearing women should also support the childbearing midwives. While some services employed part-time MGP midwives, on-call hours do not always reflect part-time hours. Reducing work hours might sustain some midwives in their MGP role; but it only addresses some of the problems midwives highlighted.

Limited support, bullying, and poor organisational culture caused some midwives to leave MGP. Although midwives who provide continuity of care can experience less burnout than midwives working in standard care, bullying and limited support (as reported in this study) can compromise organisational culture. It can erode trust and collaboration, silence dissent, foster disengagement, and disillusionment with work, decrease productivity and the quality of work, and ultimately contribute to burnout [50,51]. MGP might offer some protection to burnout, but some midwife characteristics might put them at risk, as found in this study. Over half the midwife participants reported practising midwifery for under ten years – and according to Mathews and colleagues [51], they have a higher risk of burnout. Catling and colleagues [52] found that MGP can marginalise midwives who work within a hospital, leading to hostility. Collegial support, reciprocity, good managerial support, positive outcomes, and the ability to form relationships with women are vital in supporting a healthy, positive work environment [5,52]. Although it is important for MGP midwives to have collegial support from fellow MGP group members [53], it is also

important for midwives to have the support of core midwives [5].

To sustain an MGP, a positive relationship with the manager is essential [5,19]. Catling and colleagues noted that managers were responsible for laying the foundations for organisational culture and responding to unacceptable behaviour or workplace bullying [50]. It is also their responsibility to ensure open lines of communication and that MGP midwives feel supported, feel trusted, and can put their families first [19]. Of course, this might be asking a lot of a manager who manages other services as well as the MGP.

Sustaining managers

Just under half of the participating managers described the difficulty of managing their myriad responsibilities, particularly when they managed additional services. This might arise from a historical belief that midwives are self-managing and autonomous; thus, the MGP manager has a lighter workload than other ward managers [54]. However, some participating managers reported leaving MGP because of a heavy workload. This warrants concern given that limited manager stability can reduce MGP sustainability [19].

Supporting the model in an optimal way is very difficult for managers that manage competing interests [19]. Hewitt and colleagues [19] described how the manager is pivotal to MGP, assuming a different role to that of most health service managers. For instance, MGP managers must ensure midwives can provide woman-centred care by facilitating midwife-centred management. This requires them to: be available to the midwives; know what is happening within the model; communicate with stakeholders to debunk myths; and improve understanding of how MGP midwives work along with the benefits of the model [5].

Some managers stated that limited support from executive managers contributed to their decision to leave MGP. Since their role differs from that of other health service managers, they might not have as much collegial support; it is therefore important that executive managers support them [55]. Some managers noted that limited executive manager support for MGP hindered its growth. This might reflect a hierarchical, industrialised culture [56], the deficit of midwifery executive managers relative to nursing executive managers [29], and/or limited understanding about the importance of MGP [55]. Nursing executives in an organisation might not: value the autonomous nature of MGP; appreciate midwives being on-call as a responsive workforce instead of working shifts; or recognise the significance of the relationship between midwives and women [55]. Limited midwifery representation at executive levels might also be the reason that MGP has taken so long to be implemented across Australia [29]. Without high level executive support for the model, MGP remains an 'add on' to the mainstream hospital, contributing to an 'us and them' culture, and limited support of MGP managers [19]. As midwifery is recognised as a separate discipline to nursing there is an increased urgency for midwifery representation at executive and national levels from midwives who understand models of care, who promote midwifery visibility and who support MGP midwives and managers [29].

Limitations

Given that approximately 1094 midwives were estimated to work in MGP [12], this survey had about a 50% response rate of the available MGP midwifery workforce. As such, the responses might not reflect the responses of all Australian midwives. The survey also will not be able to inform decisions made by maternity service providers in other countries. The midwives and managers who responded might have done so due to personal biases or other motivations – as such, responses might not reflect all MGP midwives and managers. However, to our knowledge, this is one of the largest surveys of the Australian MGP workforce and has the advantage of capturing insights from both MGP midwives and managers. The scope and depth of this study was limited in order to optimise survey completion. Further probing of workforce issues and conditions might have been useful. These include limited exploration of workplace arrangements for on call management, roster flexibility and personal family life details. Because this study was undertaken during the COVID-19 pandemic, the responses might have been shaped or limited due to the extra pressure health workers were under during this time.

Recommendations

This study has clear implications for midwives, managers, scholars, and policymakers. For midwives, it is imperative to escalate poor behaviour to managers and encourage flexibility within the MGP. It is also vital that midwives can express their needs for future model planning. For managers, the models need to be supported and managed to deal with the identified cultural problems of working in an MGP within a hospital. Midwives and consumers need to have opportunities to contribute to the ongoing service planning to ensure the model works for both. Executive managers should be aware of the need for MGP support and the need to ensure the manager can properly manage the MGP. For scholars: future research should consider the factors that keep some midwives in MGP positions for long periods. Ongoing research is required to show how models have changed over time to promote sustainability, including the impact of family life on these models. Detailed working arrangements also need to be captured including: caseload numbers; practice arrangements; days off; and all working conditions. A review of midwifery continuity of care for women with complexities is urgently required to encourage service providers to confidently offer this care to all women. Research is also required to investigate the impact of non-midwifery managers and senior managers on the success of midwifery models of care. Further research is also required on the workload of MGP managers regarding managing other services and the impact of managers in smaller units taking a caseload. For policy makers, the BMid should be prioritised and expanded as it is an important pathway towards staffing continuity of care models for women in Australia. There is currently a threat and a trend in the other direction which is concerning. A national approach is required to reimburse midwives adequately for the contribution and commitment that is expected to work in MGP. Midwifery needs to be recognised as a separate profession to nursing and midwifery specific data that is reliable should be readily available.

Conclusions

To sustain MGP services, working conditions need to reflect staff requirements to ensure adequate staffing (retention and recruitment) of both midwives and managers. Midwives are asking for flexible work conditions, manageable workloads, appropriate renumeration, with adequate support from managers and core services. MGP Managers also require support from their line managers and a workload that allows them to adequately manage the MGP. Since the BMid appears to be a common educational route for MGP midwives, it might be an important pathway to staffing MGP services. MGP is no longer a service for women without obstetric risk with many MGP services providing care for women with complexities.

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Ethical Statement

Ethical approval of the study was granted by Western Sydney University Human Research Ethics Committee, HREC Approval Number H13428, 10th September 2019. The study was undertaken according to research ethics guidelines, participation was voluntary, and informed consent was obtained from all participants.

CRediT authorship contribution statement

Leonie Hewitt: Conceptualization, Formal analysis, Data curation, Investigation, Writing – original draft. **Ann Dadich:** Supervision, Writing – review & editing, Validation. **Donna Hartz:** Supervision, Writing – review & editing, Validation. **Hannah Dahlen:** Supervision, Writing – review & editing, Validation, Project administration.

Declaration of Competing Interest

None declared.

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Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at doi:10.1016/j.wombi.2023.09.002.

References

[1] N. Donnolley, K. Butler-Henderson, M. Chapman, E. Sullivan, The development of a classification system for maternity models of care, Health Inf. Manag. 45 (2) (2016) 64–70, https://doi.org/10.1177/1833358316639454.
[2] J. Sandall, H. Soltani, S. Gates, A. Shennan, D. Devane, Midwife-led continuity models versus other models of care for childbearing women, Cochrane Database Syst. Rev. 4 (2016), CD004667, https://doi.org/10.1002/14651858.CD004667.pub5. PubMed PMID: 27121907.
[3] D.L. Hartz, J. White, K.A. Lainchbury, H. Gunn, H. Jarman, A.W. Welsh, et al., Australian maternity reform through clinical redesign, Aust. Health Rev. 36 (2) (2012) 6. -. PubMed PMID: 104499141. Language: English. Entry Date: 20120927. Revision Date: 20150711. Publication Type: Journal Article.
[4] K. Dawson, H. McLachlan, M. Newton, D. Forster, Implementing caseload midwifery: Exploring the views of maternity managers in Australia – A national cross-sectional survey, Women Birth 29 (3) (2016) 214–222, https://doi.org/10.1016/j.wombi.2015.10.010. PubMed PMID: 116108348. Language: English. Entry Date: 20180427. Revision Date: 20180427. Publication Type: Article.
[5] L. Hewitt, A. Dadich, D.L. Hartz, H.G. Dahlen, Management and sustainability of midwifery group practice: Thematic and lexical analyses of midwife interviews, Women birth: J. Aust. Coll. Midwives 35 (2) (2022) 172–183, https://doi.org/10.1016/j.wombi.2021.05.002.
[6] A.M. Cummins, C. Catling, C.S.E. Homer, Enabling new graduate midwives to work in midwifery continuity of care models: A conceptual model for implementation, Women birth: J. Aust. Coll. Midwives 31 (5) (2018) 343–349, https://doi.org/10.1016/j.wombi.2017.11.007.
[7] L. Hewitt, H.G. Dahlen, D.L. Hartz, A. Dadich, Leadership and management in midwifery-led continuity of care models: A thematic and lexical analysis of a scoping review, Midwifery 98 (2021), 102986, https://doi.org/10.1016/j.midw.2021.102986.
[8] E.J. Callander, V. Slavin, J. Gamble, D.K. Creedy, H. Brittain, Cost-effectiveness of public caseload midwifery compared to standard care in an Australian setting: a pragmatic analysis to inform service delivery, Int. J. Qual. Health Care 33 (2) (2021), https://doi.org/10.1093/intqhc/mzab084.
[9] E. Wilkes, J. Gamble, G. Adam, D.K. Creedy, Reforming maternity services in Australia: Outcomes of a private practice midwifery service, Midwifery 31 (10) (2015) 935–940, https://doi.org/10.1016/j.midw.2015.05.006.
[10] Australian Institute of Health and Welfare. Maternity models of care in Australia, 2022. In: AIHW, editor.: Australian Government; 2022. p. 1–26.
[11] J.E. Gray, R.M. Smith, Any action? Reflections on the Australian Midwifery Action Project, Women birth: J. Aust. Coll. Midwives 30 (3) (2017) 177–183, https://doi.org/10.1016/j.wombi.2017.02.008.
[12] Australian Government, Factsheet Midwifery 2019. In: care DoHaA, editor. Canberra, 2020.
[13] Ngangk Yira Research Centre for Aboriginal Health and Social Equity MU. Aboriginal women share their birthing stories for the first time 2021 [17/04/2023]. Available from: ⟨https://www.murdoch.edu.au/news/articles/aboriginal-women-share-their-birthing-stories-for-the-first-time⟩.
[14] K. Fahy, Corrigendum to "An Australian history of the subordination of midwifery" [Women and Birth 20 (2007) 25–29], Women Birth: J. Aust. Coll. Midwives 20 (3) (2007) 141, https://doi.org/10.1016/j.wombi.2007.08.001.
[15] L. McKellar, K. Graham, A. Sheehan, J.-A. Fleet, M. Sidebotham, L. Sweet, Examining the transformation of midwifery education in Australia to inform future directions: An integrative review, Women birth: J. Aust. Coll. Midwives 36 (2) (2023) 155–166, https://doi.org/10.1016/j.wombi.2022.11.010.
[16] S. Pairman, M. Gray, Professional frameworks in Australia and New Zealand, in: S. Pairman, S. Tracy, H.G. Dahlen, L. Dixon (Eds.), Professional Frameworks for Practice in Australia and New Zealand In Midwifery: Preparation for Practice 4e, 4th ed..,, Churchill Livingstone Elsevier, Sydney, 2019, pp. 217–247.
[17] S. Crowther, M. Ross-Davie, D. Davis, N. Donnolley, Ways of Providing Midwifery Continuity of Care, 2 ed, in: C. Homer, P. Brodie, J. Sandall, N. Leap (Eds.), Midwifery Continuity of Care: A Practical Guide, Elsevier, Amsterdam, 2019, pp. 53–73, 2 ed.
[18] B. Taylor, F. Cross-Sudworth, L. Goodwin, S. Kenyon, C. MacArthur, Midwives' perspectives of continuity based working in the UK: A cross-sectional survey, Midwifery 75 (2019) 127–137, https://doi.org/10.1016/j.midw.2019.05.005.
[19] L. Hewitt, A. Dadich, D.L. Hartz, H.G. Dahlen, Midwife-centred management: a qualitative study of midwifery group practice management and leadership in Australia, BMC Health Serv. Res. 22 (1) (2022) 1203, https://doi.org/10.1186/s12913-022-08532-y.
[20] Qualtrics. Qualtrics, 2023, Available from: ⟨https://www.qualtrics.com/au/⟩.
[21] V.M. Stulz, Z. Bradfield, A. Cummins, C. Catling, L. Sweet, R. McInnes, et al., Midwives providing woman-centred care during the COVID-19 pandemic in Australia: A national qualitative study, Women birth: J. Aust. Coll. Midwives 35 (5) (2022) 475–483, https://doi.org/10.1016/j.wombi.2021.10.006.
[22] IBM. IBM SPSS software 2023. Available from: ⟨https://www.ibm.com/spss⟩.
[23] Lumivero. NVivo (Version 14) 2023. Available from: ⟨https://lumivero.com/⟩.
[24] V. Braun, V. Clarke, Thematic Analysis: A Practical Guide Los Angeles, Sage, 2022.
[25] M. Schreier, C. Stamann, M. Janssen, T. Dahl, A. Whittal, Qualitative Content Analysis: Conceptualizations and Challenges in Research Practice—Introduction to the FQS Special Issue "Qualitative Content Analysis I", Forum, Qual. Soc. Res. 20 (3) (2019), https://doi.org/10.17169/fqs-20.3.3393.
[26] S. Elo, H. Kyngas, The qualitative content analysis process, J. Adv. Nurs. 62 (1) (2008) 107–115, https://doi.org/10.1111/j.1365-2648.2007.04569.x.
[27] H.-F. Hsieh, S.E. Shannon, Three approaches to qualitative content analysis, Qual. Health Res. 15 (9) (2005) 1277–1288, https://doi.org/10.1177/1049732305276687.
[28] Ahpra. Midwifery 2021/22: data tables 2023. Available from: ⟨https://www.nursingmidwiferyboard.gov.au/News/Annual-report.aspx⟩.
[29] J.E. Adcock, M. Sidebotham, J. Gamble, What do midwifery leaders need in order to be effective in contributing to the reform of maternity services? Women birth: J. Aust. Coll. Midwives 35 (2) (2022) e142–e152, https://doi.org/10.1016/j.wombi.2021.04.008.
[30] Australian Government. Labour market Insight - Midiwives 2021 [updated September 202118/11/2022]. Available from: ⟨https://labourmarketinsights.gov.au/occupation-profile/midwives?occupationCode=2541⟩.
[31] Health Workforce Locator [Internet]. Department of Health and Aged Care, 2022. Available from: ⟨https://www.health.gov.au/resources/apps-and-tools/health-workforce-locator/app?language=en⟩.
[32] J. Sandall, L. Page, C. Homer, N. Leap, Midwifery continuity of care: what is the evidence, in: C. Homer, P. Brodie, N. Leap (Eds.), Midwifery Continuity of Care: A Practical Guide, Churchill Livingstone/Elsevier, Sydney, 2008, pp. 25–46.
[33] S. Tracy, D.L. Hartz, B. Hall, J. Allen, A. Forti, A. Lainchbury, et al., A randomised controlled trial of caseload midwifery care: M@NGO (Midwives @ New Group practice Options), BMC Pregnancy Childbirth 11 (82) (2011).
[34] S. Tracy, A. Welsh, B. Hall, D. Hartz, A. Lainchbury, A. Bisits, et al., Caseload midwifery compared to standard or private obstetric care for first time mothers in a public teaching hospital in Australia: a cross sectional study of cost and birth outcomes, BMC Pregnancy Childbirth 14 (46) (2014) 46, https://doi.org/10.1186/1471-2393-14-46.
[35] McLachlan H.L. Midwifery continuity of care: What is the latest evidence and how can we grow and sustain our models into the future? ACM NSW Conference and AGM; Wollongong; 2018.
[36] C. Homer, Models of maternity care: evidence for midwifery continuity of care, Med. J. Aust. 205 (8) (2016) 370–374, https://doi.org/10.5694/mja16.00844.
[37] A. Hanley, D. Davis, E. Kurz, Job satisfaction and sustainability of midwives working in caseload models of care: An integrative literature review, Women birth: J. Aust. Coll. Midwives (2021), https://doi.org/10.1016/j.wombi.2021.06.003.
[38] A. Gilkison, J. McAra-Couper, S. Crowther, M. Hunter, D. Macgregor, C. Hotchin, Midwifery practice arrangements which sustain caseloading Lead Maternity Carer midwives in New Zealand, N. Z. Coll. Midwives J. 51 (2015) 11–16.
[39] D. Fox, V. Scarf, S. Turkmani, C. Rossiter, R. Coddington, A. Sheehy, et al., Midwifery continuity of care for women with complex pregnancies in Australia: An integrative review, Women birth: J. Aust. Coll. Midwives 36 (2) (2023) e187–e194, https://doi.org/10.1016/j.wombi.2022.07.001.
[40] R.E. Donnellan-Fernandez, D.K. Creedy, E.J. Callander, Cost-effectiveness of continuity of midwifery care for women with complex pregnancy: a structured review of the literature, Health Econ. Rev. 8 (1) (2018) 1–16, https://doi.org/10.1186/s13561-018-0217-3.
[41] J. Allen, S. Kildea, M.B. Tracy, D.L. Hartz, A.W. Welsh, S.K. Tracy, The impact of caseload midwifery, compared with standard care, on women's perceptions of antenatal care quality: Survey results from the M@NGO randomized controlled trial for women of any risk, Birth (Berkeley, Calif.) 46 (3) (2019) 439–449, https://doi.org/10.1111/birt.12436.
[42] C. Fernandez Turienzo, S.A. Silverio, K. Coxon, L. Brigante, P.T. Seed, A. H. Shennan, et al., Experiences of maternity care among women at increased risk of preterm birth receiving midwifery continuity of care compared to women receiving standard care: Results from the POPPIE pilot trial (e.), PloS One 16 (4) (2021), e0248588, https://doi.org/10.1371/journal.pone.0248588.

[43] A.N. Seal, E. Hoban, A. Panzera, J. McGirr, Birthing in regional Australia: women's decision making surrounding birthplace, Aust. Health Rev. 45 (5) (2021) 570–577, https://doi.org/10.1071/AH21067.

[44] Government A. midwives | Labour Market Insights [updated 202122/03/2023]. Available from: ⟨https://labourmarketinsights.gov.au/occupation-profile/midwives?occupationCode=2541#ageAndGender⟩.

[45] K. Yates, M. Birks, H. Coxhead, L. Zhao, Double degree destinations: Nursing or midwifery, Coll. (R. Coll. Nurs., Aust.) 27 (1) (2020) 135–140, https://doi.org/10.1016/j.colegn.2019.07.004.

[46] C.L. Davison, B. McKenzie, Y. Hauck, Looking back moving forward: The history of midwifery in Western Australia, Women birth: J. Aust. Coll. Midwives 35 (5) (2022) e409–e420, https://doi.org/10.1016/j.wombi.2021.10.009.

[47] E. Jefford, S. Nolan, Two parts of an indivisible whole - Midwifery education and feminism: An exploratory study of 1st year students' immersion into midwifery, Nurse Educ. Today 119 (2022), 105589, https://doi.org/10.1016/j.nedt.2022.105589.

[48] Government A. Australia's Future Health Workforce Report - midwives. In: Care DoHaA, editor; 2019.

[49] K. Guilliland, S.K. Tracy, Contemporary Australian and New Zealand midwifery and maternity services, in: S. Pairman, S.K. Tracy, H.G. Dahlen, L. Dixon (Eds.), Midwifery: Preparation for practice 4e, 4th ed..,, Churchill Livingstone Elsevier, Sydney, 2019, pp. 21–47.

[50] C. Catling, C. Rossiter, Midwifery workplace culture in Australia: A national survey of midwives, Women birth: J. Aust. Coll. Midwives 33 (5) (2020) 464–472, https://doi.org/10.1016/j.wombi.2019.09.008.

[51] R.P. Matthews, R.L. Hyde, F. Llewelyn, T. Shafiei, M.S. Newton, D.A. Forster, Who is at risk of burnout? A cross-sectional survey of midwives in a tertiary maternity hospital in Melbourne, Australia, Women birth: J. Aust. Coll. Midwives 35 (6) (2022) e615–e623, https://doi.org/10.1016/j.wombi.2022.02.010.

[52] C.J. Catling, F. Reid, B. Hunter, Australian midwives' experiences of their workplace culture, Women Birth 30 (2) (2017) 137–145.

[53] A. Gilkison, L. Hewitt, Supporting midwives, supporting each other, 4 ed., in: S. Pairman, S.K. Tracy, H.G. Dahlen, L. Dixon (Eds.), Midwifery, Preparation for Practice, Australian College of Midwives; Elsevier, Chatswood, NSW, 2019.

[54] N. Leap, H.G. Dahlen, P. Brodie, S.K. Tracy, J. Thorpe, Relationships the glue that holds it all together, in: L. Davies, R. Daellenbach, M. Kensington (Eds.), Sustainability, Midwifery, and Birth Abingdon, Routledge, Oxon, 2011, pp. 61–74.

[55] L. Hewitt, H. Priddis, H.G. Dahlen, What attributes do Australian midwifery leaders identify as essential to effectively manage a Midwifery Group Practice? Women Birth 32 (2019) 168–177, https://doi.org/10.1016/j.wombi.2018.06.017.

[56] E.C. Newnham, L.V. McKellar, J.I. Pincombe, Paradox of the institution: findings from a hospital labour ward ethnography, BMC Pregnancy Childbirth 17 (1) (2017) 2, https://doi.org/10.1186/s12884-016-1193-4.