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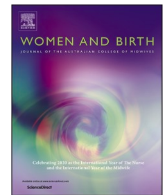

A national survey of Australian midwives' birth choices and outcomes

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ABSTRACT

Background: Maternity care in Australia is predominantly provided by midwives, many who give birth. There is a paucity of research on midwives' own childbearing preferences and experiences.
Aim: To explore midwives childbirth preferences and outcomes when giving birth to their first child in Australia, after qualifying as a midwife.
Methods: An online national survey. Data were analysed using descriptive statistics.
Findings: 447 midwives responded, with the majority of midwives indicating a preference for a normal vaginal birth with a known care provider under a continuity of midwifery care model. For midwives who were first time mothers, 66% had normal vaginal births, 16.3% had an instrumental birth, and 16.8% had caesarean births. Over 85% of midwives received the model of care they wanted and 45% had continuity of midwifery care. While a quarter of midwives wanted a homebirth,11.2% achieved this. Over three quarters (75.4%) of midwives were cared for by a care provider of their choosing.
Discussion: There was a difference in models of care accessed and birth outcomes between midwives and other women giving birth for the first-time in Australia. Australian midwives appear to have the advantage of clinical and scientific knowledge to navigate the maternity care system to get the birth care and outcomes they want.
Conclusion: It is possible that professional experience, insider knowledge, and existing relationships with other midwifery friends and colleagues, affords midwives a higher degree of agency and autonomy when it comes to getting the maternity care and birth outcomes that they want.

Statement of significance

Problem or Issue

The majority of maternity care providers in Australia are midwives who have given birth or are of childbearing age. Despite this, there is a paucity of research on the personal childbearing experiences and choices of women who are midwives.

What is already known?

Midwives have a preference for normal vaginal births and may be able to use their knowledge and access to maternity care to achieve agency and autonomy in their birth choices. Little is known specifically about midwives' birth and maternity care preferences and outcomes in Australia.

What this paper adds?

First time mothers who are also midwives have a high rate of continuity of midwifery care, out of hospital birth and normal vaginal births, and lower rates of instrumental births and caesareans than other women. Midwives' professional experience and insider knowledge may be an advantage in navigating the system and achieving their birth choices.

1. Introduction

The birth of a child is a key life transition for many women. In preparation for childbirth, women make choices about how they want to be cared for, who they want as their care provider, where they want to give birth, and the type of birth they want [1]. A recent systematic review of women's birth preferences found that the majority of women prefer a normal vaginal birth, with only a small number of women in high-income countries preferring a caesarean [2]. Internationally, and within the Australian context, research has shown women also want continuity of care, as this is important in developing a relationship with

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their care providers [3,4].

In Australia, midwives provide the majority of maternity care within the public health system, and most of the intrapartum and postnatal care within the private obstetric system. The latest workforce report in Australia, shows there are around 21,142 midwives (14,280 full-time equivalent), 98.9% are women with an average age of 47years [5]. An Australian study on midwifery workforce retention reported 47% of respondents had taken time out of midwifery during their career, with the most common reason being to care for dependent children [6]. Another study from South Australia on the pain relief preferences of pregnant women, midwives and obstetricians, revealed that 70% of the midwives surveyed had at least one birth [7]. These findings suggest that many midwives in Australia will have, or will be planning to have children at some point during their career. Despite this, there appears to be a paucity of research on the childbearing experiences of midwives.

The limited literature available on midwives' birth experiences, indicates that similar to the general population of women, midwives' preference is to have a normal vaginal birth [8,9]. The difference however is, that midwives have additional professional knowledge they draw on when making decisions and accessing care for their own pregnancy and birth care [10]. In the United Kingdom, midwives reported achieving increased agency and autonomy by relying on their professional knowledge to negotiate with their caregivers. This knowledge however, was also shown to increase their anxieties and potentially caused conflict between their position as midwives and their experience of giving birth [10].

The literature also highlights the importance of midwives having control over their birth experience to achieve a positive transition to motherhood. A study of UK midwives and nurses' changes in clinical practice following childbirth, found the perceived level of control over their pregnancy and birth affected how they perceived their overall birth experience [11]. Furthermore, their perceived level of control impacted on how well they transitioned into motherhood. Midwives and nurses who achieved control were able to transition to motherhood well, whereas those who perceived a lack of control exhibited more symptoms of postnatal depression (PND) [11].

Similar to reports from childbearing women, midwives have also reported negative or traumatic birth experiences [12]. In a study of trauma and fear amongst Australian midwives, 41.6% indicated they had experienced trauma during their own labour and birth [13]. For those midwives reporting negative or traumatic births, this was connected to receiving obstetric interventions, and or care they described as being akin to being assaulted [13]. In a study of post-traumatic stress among midwives, more than one-fifth of midwives (22%) reported a traumatic experience when giving birth themselves [14]. Midwives who have experienced their own traumatic births have a twofold increase in risk for developing PTSD, with a possibility of re-traumatisation after witnessing traumatic births in the workplace[14]. Not only does it affect midwives both professionally and personally[14], but has the potential to affect how midwives provide maternity care to women [11].

The impact of the personal experiences of childbirth on professional practice midwives and nurses [11] reported positive changes in practice, such as being better able to relate to parents, having increased empathy and sympathy, and having a greater insight into their practice. Alternatively however, there were also reports of negative changes, including having lower tolerance, being less capable of giving and having a different commitment to the job than they had prior to becoming a mother [11].

Given the limited amount of literature on midwives' birth experiences in Australia, there is need for research into midwives' own birth preferences, outcomes and experiences of birth, and how their experience might impact on clinical practice. The findings may help inform maternity care for this unique group of professional women as they transition into motherhood.

2. Participants, ethics and methods

An online national survey collected both quantitative and qualitative data exploring the experiences of pregnancy and birth in women who are midwives in Australia. The survey collected data on two distinct groups of midwives: (a) those who have only given birth after qualifying as a midwife, and (b) those who have given birth before *and* after becoming a midwife. The aim of this paper is to report on findings examining the pregnancy care and birth preferences and outcomes of midwives who gave birth within Australia, after qualifying as a midwife.

2.1. The survey

A search of the literature was unable to identify a validated measure specifically related to midwives' birth choices, outcomes, and experiences of childbirth; therefore, a survey instrument was specifically designed for this study. The survey questions were developed using two approaches. First, questions were developed based on the findings of previously published research on midwives' experiences of pregnancy, birth, and breastfeeding [8, 10, 11, 13–32]. Research on women's experiences of childbirth and the care received during pregnancy, labour and birth, and the postnatal periods were also used [33–35]. Second, a number of questions taken from instruments measuring different aspects of women's childbirth experiences including: the Homebirth in Australia Survey [36], the Mother's Autonomy and Decision-making (MADM) scale [37], the Mothers on Respect (MOR) index [37,38] and the Childbirth Experience Questionnaire (CEQ) [39] was also used in the development of the survey. Qualtrics survey software [40] was used to build the survey and collect the survey data. The random code generator function within the Qualtrics software was used to generate a random code for each midwife to enable them to save their responses and return to the survey and complete it at their own pace.

2.1.1. Survey development

The first part of the survey collected demographic details, such as: age, year of registration, how many years midwives worked before having their first child, and the model of care they worked in before they gave birth to their first child. Birth details for their first child, and subsequent births, were also collected. Midwives' preferences for their first pregnancy and birth care, and birth outcomes were sought, with questions on the type of birth, place of birth, model of care and the maternity care provider they wanted, as well as the reasons for their preferences.

The second section of the survey related to the midwives' experiences of receiving care in Australia, including antenatal, labour and birth, and postnatal care. Midwives also provided details on any obstetric or infant complications, and their care during complications. The next section focused on questions related to their perception of how their midwifery knowledge impacted on the care they received, and included questions related to fear, anxiety, and their overall experience. The final section of the survey explored any impact or changes their own birth experience had on their professional practice.

The survey was pilot tested on a group of 15 midwifery professionals and colleagues who had given birth after becoming a midwife**.** Midwives known to the authors were invited to pilot the survey instrument. They were asked to complete the online survey and make notes of questions that were difficult to understand, and to suggest any changes that could improve the survey. Based on feedback from the pilot testing phase, the format of some questions was changed to simplify and shorten the length of the survey.

2.2. Participants

The survey was advertised to midwives who were: female, over the age of 18 years; were able to read, speak and write in English, had completed midwifery education, and who had been pregnant and given

birth in Australia after obtaining a midwifery qualification (in Australia or elsewhere). Male midwives were not included in the survey as they did not give birth.

Social media was used to recruit midwives to participate in the survey. The first author created a Facebook page called *Midwives Becoming Mothers*, and friends and colleagues were invited to like and share the page. The creation of an 'event' on the Facebook page provided an opportunity for midwives to register as 'going' or 'interested' in the 'event,' and thus, they would be notified when the survey was released. With the release of the survey, a short recruitment video was added to the Midwives Becoming Mothers Facebook 'event' page, asking midwives to participate in the survey. This video was viewed 9200 times and shared 133 times on Facebook. In addition to the use of social media, a paid advertisement consisting of two emails containing the survey link was sent out by the Australian College of Midwives, which at the time of distribution reported > 4000 members [41]. Other social media platforms such as Twitter and LinkedIn were also utilised to maximise and capture midwives who were not Facebook users or members of the ACM.

2.3. Data analysis

Analysis of the quantitative data was completed using STATA version 17 [42]. The survey data was initially cleaned and de-identified before importing to STATA. For ease of data analysis, frequencies of the Likert Scale points were grouped according to whether midwives agreed (Completely Agree, Strongly Agree, Somewhat Agree) or disagreed (Completely Disagree, Strongly Disagree, Somewhat Disagree) with the survey question or statement.

Using STATA descriptive statistics, frequencies and percentages were generated. Frequency reports for each relevant variable were collected and the data was formulated into tables for interpretation.

2.4. Ethical considerations

Ethics approval was granted from Western Sydney University Human Research Ethics Committee (H12709). Midwives were provided with a detailed participant information sheet and informed consent was built into the commencement of the survey. Confidentiality of data was maintained using password protected computers and deidentified data during the analysis of findings. Midwives were informed that they were able to withdraw from the research at any time without consequences to them, and to have their data removed by contacting the first author and providing their random code. Research questions involving experiences of childbirth have the potential to evoke a variety of emotional responses. Because of this, midwives were able to click on a link to a list of support services that they could access should they experience any distress while completing the survey.

3. Findings

Seven hundred and thirty-seven midwife participants commenced the survey and a total of 566 midwives from across all Australian states and territories completed the survey. A total of 447 midwives gave birth to their first baby in Australia after receiving their midwifery qualification. A further 22 midwives who were working in the Australian health care setting at the time of the survey, gave birth to their first baby after receiving their midwifery education but gave birth overseas. Fifteen midwives who completed the survey reported having had a baby during their midwifery training and again after becoming a midwife, and 82 midwives gave birth to a baby before as well as after becoming a midwife. This paper reports on the 447 midwives who gave birth in Australia to their first baby after becoming a midwife.

3.1. Participant characteristics

At the time of completing the survey, 58.2% of midwives were between 25 and 44 years of age, with 41.6% being 45 years or older, and one midwife being under 25 years. Births were reported over a range of years from 1959 to 2019, however 69% of the births occurred between 2000 and 2019. Most midwives were Australian born (85.91%) and completed their midwifery training in Australia (92.8%). The majority of midwives practised in NSW (32%), QLD (20%), and Victoria (19%). Seventy-eight percent of the respondents held both midwifery and nursing registrations; 18% held midwifery registration only, with the remaining 4% reporting they were not registered at the time of completing the survey (retired or not practising in midwifery). The sociodemographic information is found in Table 1.

Table 1
Sociodemographic information.

Participants n = 447	N (%)
Age at time of survey (years)	
< 25 years	1 (0.2)
25–29	46 (10.3)
30–34	90 (20.1)
35–39	73 (16.3)
40–44	51 (11.4)
>45 years	186 (41.6)
Age at time of birth of first child (years)	
< 25 years	19 (4.2)
25–29	184 (41.2)
30–34	171 (38.3)
35–39	56 (12.5)
40–44	15 (3.4)
>45 years	2 (0.5)
Year of first birth	
2015–2019	162 (36.2)
2010–2014	73 (16.33)
2005–2009	41 (9.17)
2000–2004	33 (7.38)
1995–1999	46 (10.29)
1990–1994	44 (9.84)
1985–1989	29 (6.49)
1980–1984	10 (2.24)
Pre 1980	9 (2.01)
Country of birth	
Australia	384 (85.9)
New Zealand	9 (2.0)
United Kingdom	28 (6.3)
United States	2 (0.4)
Canada	1 (0.2)
Others	23 (5.2)
Country of midwifery training	
Australia	415 (92.8)
New Zealand	2 (0.4)
United Kingdom	26 (5.8)
Canada	1 (0.2)
Europe	3 (0.6)
Current midwifery registration in Australia	
Yes	433 (96.9)
No	14 (3.1)
Type of registration held	
Registered Midwife	81 (18.1)
Registered Midwife & Nurse	348 (77.9)
Not currently registered	18 (4.0)
Predominant place of practice	
ACT	15 (3.4)
NSW	145 (32.4)
NT	10 (2.2)
QLD	89 (19.9)
SA	21 (4.7)
TAS	6 (1.3)
VIC	87 (19.5)
WA	41 (9.2)
Multiple states	12 (2.7)
Not currently practicing as a midwife	21 (4.7)
Number of children	
1	144 (32.2)
2	185 (41.4)
3	86 (19.2)
>4	32 (7.2)

Table 2
Midwives' birth preferences vs birth outcomes.

Mode of birth *(n = 447)*	Preferred N (%)	Outcome N (%)
Normal vaginal birth (total)	**428 (95.8)**	**295 (66.0)**
Vaginal birth	295 (66.0)	232 (51.9)
Vaginal birth in water	133 (29.8)	54 (12.1)
Vaginal breech	N/A	7 (1.6)
Stillbirth	N/A	2 (0.45)
Caesarean birth (total)	**1 (0.2)**	**77 (17.2)**
Elective (medical reasons)	1 (0.2)	16 (3.6)
Emergency	N/A	61 (13.7)
Instrumental birth (total)	**N/A**	**75 (16.8)**
Forceps	N/A	44 (9.8)
Vacuum	N/A	31 (6.9)
No expectations or preferences for mode of birth	**18 (4.0)**	**N/A**
Place of birth *(n = 447)*		
Within the hospital setting (total)	**337 (75.4)**	**392 (87.7)**
Public Hospital	173 (38.7)	271 (60.6)
Private Hospital	44 (9.8)	59 (13.2)
Birth centre (connected to a labour ward)	91 (20.4)	38 (8.5)
Birth centre (not connected to a labour ward)	29 (6.5)	12 (2.7)
Planned homebirth (transferred to hospital)	N/A	12 (2.7)
Outside the hospital setting (total)	**110 (24.6)**	**55 (12.3)**
Planned homebirth (birthed at home)	N/A	50 (11.2)
Unplanned birth at home	N/A	4 (0.9)
Freebirth	0 (0)	0 (0)
Born in ambulance/car before arrival to hospital	N/A	1 (0.2)
Model of care *(n = 447)*	**Preferred % *(n)***	**Outcome % *(n)***
MGP/Caseload	191 (42.7)	151 (33.8)
Privately Practising Midwife	65 (14.5)	50 (11.2)
Private Obstetrician in Public Hospital	59 (13.2)	72 (16.1)
Private Obstetrician in Private hospital	47 (10.5)	57 (12.8)
Public Hospital Midwifery (e.g., midwives clinic)	33 (7.4)	74 (16.6)
GP Shared Care	14 (3.1)	24 (5.4)
MGP / Caseload with Private Obstetrician	8 (1.8)	N/A
Multiple models of care	23 (5.2)	7 (1.6)
No preference for model of care	1 (0.2)	N/A
Other	6 (1.3)	5 (1.1)
Public Hospital High risk clinic	N/A	7 (1.6)

3.1.1. Midwives' childbirth preferences and outcomes for the birth of their first child

Details of midwives' pregnancy care and birth preferences compared to outcomes (actual mode of birth, place of birth, and the model of care), is shown in Table 2.

3.2. Mode of birth

In this study, 96% of midwives indicated a preference for a normal vaginal birth (NVB) for the birth of their first child. Of the midwives who reported wanting a NVB, 29.8% wanted to have a NVB in water.

Despite the high preference for a NVB, only 66% of midwives actually had a normal vaginal birth. In total, 9.4% of midwives had a forceps birth, and 6.9% had a vacuum birth. A total of 16.8% of midwives had a caesarean section with 13.2% of these being emergency caesareans and 3.6% being elective caesareans due to medical reasons.

3.3. Place of birth

Birthing within a public hospital setting was the preference for 38.7% of midwives, with 9.8% preferring a private hospital, and 26.9% wanted to give birth in a birth centre. Nearly one quarter (24.6%) of midwives wanted to give birth outside the hospital setting, specifically indicating a preference for a home birth for the birth of their first child. Freebirth was not selected as a preference by any of the midwives.

Eighty-eight percent of midwives gave birth in the hospital setting: 60.6% in a public hospital, 13.2% in a private hospital, 8.5% in an alongside birth centre, 2.7% in a freestanding birth centre and 2.7% who planned a homebirth were transferred to a hospital. Of the quarter of midwives who wanted to have a homebirth, 11.2% had a planned birth at home. There were four unplanned births at home.

3.4. Model of care

Over half (57.3%) of the midwives sought out midwifery continuity of care models, with 42.7% wanting Midwifery Group Practice (MGP), and 14.5% preferring a privately practising midwife. A smaller number chose a private obstetrician in a public hospital (13.2%), or private hospital (10.5%) or General Practitioner (GP) shared care (3.1%). While the majority of midwives selected either a midwifery or medical continuity of care model (89.3%), 7.4% midwives indicated a preference for public hospital midwifery, non-continuity of care options. Only one midwife indicated she had no preferences for model of care. Over 85% of midwives received the model of care they wanted.

3.5. Choice of individual care provider

Three quarters (75.4%) of midwives reported that they were able to choose their individual maternity care provider for their antenatal, labour and birth care. They made this decision based on having previously worked with the care provider, knowing them personally as a friend, or knowing that their own professional knowledge and experience as a midwife would be respected by their chosen care provider (Table 3).

3.6. Reasons for choosing place of birth

Midwives were asked to respond to statements about their reasons for their preferred place of birth (Table 4). The statements were adapted from the Homebirth in Australia Survey [36].

Over 75% of midwives said they wanted to give birth within the hospital system for the following reasons: they believed their maternity care provider would acknowledge and respect their professional knowledge and experience; they had a pre-existing professional relationship with the care provider; and hospital births were considered the normal place to give birth, compared to homebirths.

3.7. Reasons for wanting to birth outside the hospital setting

A quarter of the midwives said they wanted to give birth outside the hospital system, specifically wanting a homebirth, however, for various reasons only 11.2% had a home birth. Reasons for this choice included wanting to choose: their care provider, continuity of midwifery care, the birthing environment, and to limit birth interventions. Many of the midwives choosing this option believed there was a higher chance of

Table 3
Reasons for their choice of individual care provider.

Statement about reasons for choosing individual care provider N = 337* I chose my maternity care provider because: -	Agree N (%)	N/A N (%)	Disagree N (%)
I knew him/her professionally (I had worked with them in a professional capacity/is a colleague)	289 (85.8)	4 (1.2)	44 (13.1)
I knew him/her personally (I chose them because I would consider my maternity care provider as a friend)	196 (58.2)	6 (1.8)	135 (40.1)
I knew that he/she would acknowledge and respect my professional midwifery knowledge and experience, and this was important to me	325 (96.4)	1 (0.3)	11 (3.3)

* Of the 447 midwives, 337 reported being able to choose their individual care provider for their antenatal and labour and birth care

Table 4
Reasons for their choice of place of birth.

Statements about reasons for wanting to birth in hospital	Agree N (%)	Disagree N (%)	N/A N (%)
Reasons for wanting a normal vaginal birth in a hospital (N = 320)*			
Avoiding complications			
I wanted to birth in hospital because I was afraid/ worried about complications that could occur if I gave birth at home	198 (61.9)	107 (33.4)	15 (4.7)
I had heard about too many awful/traumatic/ complicated births in the homebirth setting and wanted to avoid this	67 (20.9)	237 (74.1)	16 (5.0)
I feel there is a higher risk of obstetric emergencies occurring within a homebirth setting	41 (12.8)	276 (86.3)	3 (0.9)
Safety			
I feel that hospital births are safer than homebirths	141 (44.1)	173 (54.1)	6 (1.9)
I feel that homebirths are unsafe	52 (16.3)	265 (82.8)	3 (0.9)
I have witnessed too many obstetric emergencies and my choice to birth in hospital was related to knowing that there is easily accessible medical intervention available if I developed complications	233 (72.8)	83 (25.9)	4 (1.3)
Control			
I felt that birthing at hospital would provide me with a sense of control and autonomy that would not be possible in the homebirth setting	89 (27.8)	212 (66.3)	19 (5.9)
Continuity of care with known and trusted care providers			
I have worked as a midwife in the model of care that I chose for my own pregnancy and birth care	191 (59.7)	119 (37.2)	9 (2.8)
I am currently or have previously been employed as a midwife in the hospital I chose to give birth at	232 (72.5)	85 (26.6)	3 (0.9)
I knew my maternity care provider professionally (I have previously worked with him/her in a professional capacity/is a colleague)	255 (79.7)	61 (19.1)	4 (1.3)
I knew my maternity care provider personally (I would consider him/her a friend)	165 (51.6)	145 (45.3)	10 (3.1)
I believed that my maternity care provider would acknowledge and respect my professional midwifery knowledge and experience	302 (94.4)	13 (4.1)	5 (1.6)
Reasons for wanting to birth (no preference for mode of birth) in hospital (N = 16)**			
Avoiding complications			
I gave birth in hospital because I was afraid/worried about complications that could occur if I gave birth at home	7 (43.8)	9 (56.3)	0
I had heard about too many awful/traumatic/ complicated births in the homebirth setting and wanted to avoid this	5 (31.3)	10 (62.5)	1 (6.3)
Safety			
I have witnessed too many obstetric emergencies and my choice to birth in hospital was related to knowing that there is easily accessible medical intervention available if I developed complications	14 (87.5)	2 (12.5)	0
There is easily accessible medical intervention in hospital if I developed complications	15 (93.8)	1 (6.3)	0
Continuity of care with known and trusted care providers			
I have worked as a midwife in the model of care that I chose for my own pregnancy and birth care	12 (75)	3 (18.8)	1 (6.3)
I am currently or have previously been employed as a midwife in the hospital I chose to give birth at	11 (68.8)	4 (25.0)	1 (6.3)
I knew my maternity care provider professionally (I have previously worked with him/her in a professional capacity/is a colleague)	11 (68.8)	4 (25)	1 (6.3)
I knew my maternity care provider personally (I would consider him/her a friend)	9 (56.3)	7 (43.8)	0
I believed that my maternity care provider would acknowledge and respect my professional midwifery knowledge and experience	15 (93.8)	0	1 (6.3)

* A response to each statement was mandatory, to continue the survey, therefore each row adds up to n = 320.
** A response to each statement was mandatory to continue the survey, therefore each row adds up to n = 16.

intervention and lack of privacy if they gave birth in hospital. Being able to choose their birth positions, and have immediate and uninterrupted skin-to-skin contact with their baby, were other factors influencing their decision to birth outside the hospital system.

Midwives indicated that there were numerous elements within the hospital setting that they were trying to avoid by giving birth at home, including: time pressure, induction of labour, pain relieving drugs, coercion, continuous electronic foetal monitoring, a negative hospital experience, and the risk agenda of the hospital (see Tables 5 and 6).

4. Discussion

This study is one of the first to investigate the childbearing choices and birth outcomes of Australian women who are midwives. The aim was to report on the birth care preferences and birth outcomes of midwives' first birth after becoming a midwife. A total of 447 midwives from across Australia completed the national survey. Midwives in this study made specific choices regarding the birth care and outcomes they wanted, and for the most part were able to achieve their choices. We found that midwives having their first baby had a higher normal vaginal birth rate, lower birth intervention rate than a comparable Australian population.

Ninety six percent of Australia primiparous midwives wanted to have a NVB birth. A strong preference for a NVB was also reported in Polish [43], British [8] and Swedish [44] midwives. Despite this only 66% of midwives in this study had a NVB and 17% had a caesarean section. The caesarean rate of Australian midwives was higher than Swedish midwives (11%) [44], though lower than Chinese midwives (75.6%) with 47.4% being non-medically indicated elective caesareans [45]. These differences in rates of caesarean section for midwives, reflect between country differences for women.

When comparing these findings to the general population of primiparous women in Australia, primiparous midwives had a higher normal vaginal birth rate (66%). The latest Australian data reports that only 39.5% of first-time mothers gave birth vaginally in 2019 [46]. The rate of instrumental births for primiparous midwives in this study was 16.3% (compared to 23.2% in the Australian data for 2019) and caesarean section rate was 16.8% (compared to 37.3% in the Australian data for 2019) [46]. As midwives reported their first birth across a large time period, direct comparisons to the latest AIHW report cannot be made, but historical data shows a similar trend. Although easily comparable data is not available, between the years 2000 and 2004, 15.2% of primiparous midwives who responded to this survey had a caesarean compared to 25.8% of all primiparous women in Australia in the year 2000 [47]. Similarly, between the years 2010 and 2014, 19.2% of primiparous midwives who responded to this survey had a caesarean section, compared to 32.6% of all primiparous women in Australia in 2010 [48]. In contrast to the international research, there was no difference in the caesarean rate between Swedish midwives and the general population [44] but there was a significantly higher caesarean rate in Norwegian midwives (15.3%) compared to the general population (12.8%) [49]. There could be various reasons for the contrasting statistics, such as the education of midwives in different countries, financial incentives for obstetricians, and cultural differences.

Midwives in this study reported a preference for less intervention during childbirth, which could be attributed to their high level of motivation for a NVB, and their professional knowledge about factors that facilitate a normal vaginal birth. Midwives are also in the position of experiencing the full spectrum of birth in their role, as they are present at all births in Australia. This may also inform their birth choices in a way other health providers and other women giving birth do not get to experience. While women make decisions about their preferred mode of birth and interventions based on the information they are able to access, and or are provided with by their maternity carers [43], midwives have learned about the benefits of vaginal birth as part of their professional education and through clinical practice [43]. Hence, their preferred use

Table 5
Reasons for wanting to have a homebirth (n = 110).

Statements about reasons for wanting a homebirth n = 110*	Agree N (%)	Disagree N (%)	N/A N (%)
Avoiding complications			
I think that there is a higher chance of obstetric emergencies occurring within the hospital setting	98 (89.1)	12 (10.9)	0
I had witnessed too many awful/traumatic/ complicated births in the hospital setting and wanted to avoid this	87 (79.1)	23 (20.9)	0
I have witnessed too many obstetric emergencies in the hospital setting and this influenced my decision to give birth outside the hospital setting	85 (77.3)	25 (22.7)	0
Control			
I wanted to have control over the birthing environment	108 (98.2)	2 (1.8)	0
I wanted to remain in control over who my maternity care provider was	108 (98.2)	2 (1.8)	0
I wanted to remain in control over the interventions I would allow	108 (98.2)	1 (0.9)	1 (0.9)
I was more likely to have the type of birth that I wanted if I gave birth at home	106 (96.4)	4 (3.6)	0
I felt that birthing at home would provide me with a sense of control and autonomy that would not be possible in the hospital setting	104 (94.6)	5 (4.6)	1 (0.9)
I felt there was a greater risk of loss of control over external factors (such as the birthing environment, the maternity care provider, and the interventions) if I birthed in hospital	104 (94.6)	6 (5.5)	0
The risk of loss of control over these external factors was the main reason for choosing to birth outside the hospital system	88 (80.0)	19 (17.2)	3 (2.7)
I feel that there is a lack of privacy in the hospital setting	106 (96.4)	4 (3.6)	0
There is interference with normal labour by staff in the hospital setting	108 (98.2)	2 (1.8)	0
There is a higher chance of intervention in the hospital setting	107 (97.3)	1 (0.9)	2 (1.8)
Immediate and uninterrupted skin-to-skin contact with my baby and early attachment	93 (84.6)	17 (15.5)	0
A choice of birth position/s	93 (84.6)	17 (15.5)	0
Choices regarding the birth of the placenta (e.g., how long the cord is attached, natural or managed delivery)	92 (83.6)	18 (16.4)	0
Access to a waterbirth	90 (81.8)	17 (15.5)	3 (2.7)
Continuity of care with known and trusted care providers			
I knew my maternity care provider professionally (I have previously worked with him/her in a professional capacity/ is a colleague)	76 (69.1)	32 (29.1)	2 (1.8)
I knew my maternity care provider personally (I would consider him/her a friend)	65 (59.1)	42 (38.2)	3 (2.7)
I believed that my maternity care provider would acknowledge and respect my professional midwifery knowledge and experience	106 (96.4)	3 (2.7)	1 (0.9)
There is a lack of continuity of care in the hospital setting	101 (91.8)	9 (8.2)	0
Access to continuity of midwifery care	97 (88.2)	10 (9.1)	3 (2.7)
The individual practitioner	96 (87.3)	12 (10.9)	2 (1.8)

* A response to each statement was mandatory to continue the survey, therefore each row adds up to n = 110.

Table 6
Elements of hospital related factors that midwives wanted to avoid.

Birthing outside the hospital system to avoid things (N = 110)	Agree N (%)	N/A N (%)	Disagree N (%)
Statement "I wanted to give birth outside the hospital system to avoid the following:"*			
Time pressure	103 (93.6)	0	7 (6.4)
Induction	99 (90.0)	2 (1.8)	9 (8.2)
Pain relieving drugs	99 (90.0)	1 (0.9)	10 (9.1)
Coercion	98 (89.1)	1 (0.9)	11 (10.0)
Continuous electronic fetal monitoring	98 (89.1)	0	12 (10.9)
A negative hospital experience	97 (88.2)	0	13 (11.8)
Risk agenda of the hospital	97 (88.2)	1 (0.9)	12 (10.9)
Hospital staff that do not support normal birth	94 (85.5)	0	16 (14.6)
A hospital environment that does not support normal birth	94 (85.5)	0	16 (14.6)
Hospital staff/strangers	94 (85.5)	1 (0.9)	15 (13.6)
Artificial rupture of membranes	94 (85.5)	0	16 (14.6)
Hospital policies	93 (84.6)	0	17 (15.5)
Forceps	93 (84.6)	0	17 (15.5)

* A response to each statement was mandatory to continue the survey, therefore each row adds up to n = 110.

of non-pharmacological methods of pain relief such as water immersion, may possibly be due to their awareness of it as being effective in managing pain and reducing the use of regional anaesthesia [50].

Whilst most midwives wanted to birth in hospital, a quarter of all midwives in this study indicated a preference to have a homebirth. Although only 11.2% of midwives had a planned homebirth, this is still considerably higher than the general population where only 0.2% of primiparous women in Australia in 2019 were able to have a homebirth [46]. This is in effect 56 times higher than in the general population. These low homebirth rates for women have been partly attributed to the lack of publicly funded homebirth programs in Australia, and the strict, low-risk criteria that needs to be met to be accepted into these programs, as well as a lack of insurance and funding for midwives [51]. Whilst it would seem that primiparous midwives would also be subjected to the same lack of publicly funded homebirth programs in Australia, the large difference in homebirth rates, could suggest other nuanced factors involved in achieving their birth care choice. These factors could include their knowledge of the need for early booking of their preferred model of care, and knowledge and access to private midwives. Their pre-existing network of carer options in friends and colleagues may also give them greater access to their preferences.

In addition to place of birth, midwives identified a strong desire to receive care within a continuity of midwifery care model. Our study showed that 57.3% of midwives wanted to be cared for in midwifery led continuity of care models, and 45% of midwives received this type of care. In comparison, it is estimated that only 10% of women in Australia have access to continuity of midwifery care [52]. Our findings suggest that midwives have a high degree of agency in accessing their desired model of care for their own pregnancy and births. A systematic review found that continuity of midwife -led care can lead to less intervention and more maternal satisfaction with care [53]. It is likely that midwives' knowledge of the many benefits of continuity of care and its advantages in achieving a normal vaginal birth played a role in their motivation for accessing this type of care.

Midwives who responded to this survey appeared to have an advantage in navigating the maternity care system, especially in obtaining their preferred individual care provider. Three quarters of the midwives reported that they were successful in obtaining the individual care provider of their choice for their antenatal, labour and birth care. For these midwives the choice of care provider was important as they wanted to have their professional knowledge and experience in midwifery respected by their chosen care provider A high number of midwives chose their individual care provider because they were a

friend and/or colleague. Choosing friends and colleagues as care providers could be related to the need for a trusted known provider. In an Australian study, women who chose privately practising midwives, wanted a relationship with their midwife that involved depth and was based on mutual trust and respect which developed over time [54]. While women can build this relationship when in continuity of care models, the midwives in this study would have already established this relationship due to their friendship. Midwives in the UK, particularly within the hospital setting, have reported having their opinions and concerns being dismissed and disregarded by their maternity caregivers [10]. These midwives had to argue and prove their understanding of obstetric risks before their choices were finally respected by their care provider [10]. In a quantitative study of Australian midwives [13], authors found that 41.6% of midwives experienced their birth as traumatic due to receiving intervention, as well as care that they described using terms such as 'assaulted', 'aggressive', 'demeaning', 'intimidation' and 'bullying'. It is possible that the midwives in our study made specific choices about who they wanted as caregivers to avoid unnecessary interventions, and as a means of maintaining autonomy and control over their birth experience.

Choosing to be cared for by a friend however, can pose a potential conflict of interest. According to the Nursing and Midwifery Board of Australia (NMBA) [55], midwives who have a dual relationship with the woman they are caring for may compromise midwifery care outcomes, and should take care when giving professional advice to a woman (e.g., family member or friend). Where a dual relationship exists the NMBA encourages the reassignment of the woman to other midwives [55]. In this light, being an insider, knowing maternity care providers on a professional and personal capacity, could thus be limiting for midwives, if they are to practice within their boundaries, and could pose a dilemma for many midwives.

5. Limitations

A limitation of this study was the use of an online survey as the method of data collection. Therefore, this survey was limited to midwives who had access to a stable internet connection, a computer and or a smart device. The use of social media to recruit midwives also poses the same limitations, however we also used advertising through the ACM to reach those who do not use social media. This survey was voluntary and also lengthy; therefore, it is possible that midwives with an interest in this topic may have responded, creating a possible response bias. Whilst the survey was pilot tested prior to recruitment, how midwives interpreted, made meaning and responded to the questions may differ. Furthermore, midwives reported births over a wide range of years, therefore direct comparisons between birth outcomes and the latest data on the general population [46] might not be directly comparable.

6. Conclusion

Our findings highlight that women who are midwives, generally have high rates of normal vaginal births, and low intervention rates, such as caesarean section. Midwives also had a comparably higher homebirth rate when compared to other women in Australia. These statistics could be due to their position as knowledgeable experts in maternity care. Midwives as insiders of the maternity care system can draw on other midwife friends and colleagues to provide care and support. It is possible that their insider knowledge affords them a higher degree of agency and autonomy when it comes to navigating the complex maternity system leading to birth outcomes that are more aligned with their choices.

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