© 2020. This manuscript version is made available under the CC-BY-NC-ND 4.0 license http://creativecommons.org/licenses/by-nc-nd/4.0/

Graduating Midwifery Students' Preferred Model of Practice and First Job Decisions: A Qualitative Study.

Corresponding author:

Dr. Lesley Kuliukasa +61 8 92662088 email: I.kuliukas@curtin.edu.au twitter: @lkuliukas

Assoc. Prof. Sara Bayes<sup>b</sup> email: s.bayes@ecu.edu.au twitter: @Dr\_Bayes

Dr. Sadie Geraghty<sup>b</sup> email: s.geraghty@ecu.edu.au twitter: @SadieGeraghty

Dr. Zoe Bradfielda email: zoe.bradfield@curtin.edu.au twitter: @BradfieldZoe

Dr. Clare Davison<sup>b</sup> email: c.davison@ecu.edu.au twitter: @sagefemmeclare

<sup>a</sup> Curtin University School of Nursing, Midwifery & Paramedicine, GPO Box U1987, Perth, Western Australia, Australia 6845

<sup>b</sup> Edith Cowan University, School of Nursing & Midwifery, 270 Joondalup Drive, Joondalup Western Australia, Australia 6027

#### Abstract

Objectives: To explore and describe the preferred model of practice and first job decisions of final stage midwifery students from three Western Australian Universities.

Design: Qualitative descriptive.

Setting: Three Western Australian (WA) universities offering courses leading to registration as a midwife.

Participants: Twenty-seven midwifery students from undergraduate and postgraduate (preregistration) courses.

Methods: Data were collected from recorded interviews and focus groups. Thematic analysis of interview transcripts was used to identify commonalities. Data saturation guided when recruitment ceased and final sample size was achieved.

Findings: Participants' preferred model of maternity care was influenced by learning about and witnessing both autonomous midwifery practice and collaborative care during their studies. The greatest influence was clinical experience, with most preferring a Continuity of Midwifery model (CoM) but first consolidating their practice in a public hospital. Most students reported that they would not choose a private hospital as their first option. Work/life balance was also considered, with some accepting that family commitments and a need to work close to home may prevent them from choosing a CoM model.

Conclusion and Implications: Although many Australian midwifery students start their midwifery course with preconceived ideology of their eventual workplace, the influences of their educators, clinical placement environment, preceptors and Continuity of Care Experience relationships with

women helped determine their final direction. To provide students with the experiences to become woman-centred autonomous practitioners it is important for universities and all maternity care providers to carefully consider their responsibility in how they influence midwifery students in education and practice.

**Keywords**: Student midwife, models of midwifery care, employment choices.

### What is already known about the topic

 Midwifery students value Continuity of Care Experiences (CCE) and the Continuity of Midwifery (COM) model of maternity care.

#### What this paper adds

- Midwifery students are influenced by clinical practice placements and CCE.
- University lecturers influence student thinking through reflection plus exposition and discussion of their own experiences.
- Students feel that they need to consolidate their midwifery practice and skills before joining a CoM model of care.
- Students consider work/life balance when choosing the location and model of first job after graduation.

### **Background**

In Australia, the route of entry to practice midwifery is via either an undergraduate or a postgraduate University course. All Australian pre-registration midwifery courses are designed to meet the National Standards for Midwifery Education laid down by the Australian Nursing and Midwifery Accreditation Council (ANMAC); these standards explicitly state that, Australian midwifery courses must both extoll and provide experience in the continuity of midwifery (CoM) model of maternity care [1]. This requirement is founded in evidence that clearly demonstrates midwifery-led care in a continuity model to effect best outcomes for childbearing women and their newborns [2-4].

Contrary to this evidence, maternity care in all Australian states and territories is still predominantly delivered through a centralised, medically-led approach [5]. In this model, maternity care is overseen and directed by a medical officer; women typically receive antenatal care either in a hospital antenatal clinic, in a private obstetrician's rooms or with a General Practitioner (GP); this care is commonly fragmented care with the woman seeing a different maternity care provider at each visit [6]. Most women then attend hospital for labour, birth and the very early postpartum period, and are subsequently visited at home for a few days following discharge from hospital [7]. Midwives employed in this model typically work in one aspect of the maternity care continuum, either permanently or on a block rotation system [8]. The National Maternity Services Plan [9] brought about a rise in CoM options for women nationally, and as a consequence midwives are increasingly being employed in (CoM) model of maternity care [5]. At the time of writing, however, student placements within these models are not common, with most placed in fragmented hospital-based models to gain their clinical skills and experience.

There is evidence in the published literature regarding student *nurse* perceptions of learning practice environments [10], however there are no studies to date reporting student *midwives'* experiences of

their maternity care clinical placements. This is important to know because midwifery students are reportedly shaped by their many experiences throughout their midwifery course [11], including clinical placement and Continuity of Care Experiences (CCE) [12], which may impact the choices they make regarding employment on graduation.

Midwifery students who spend the majority of their practice experience time in fragmented models of maternity care are very likely to become enculturated into that approach, and if they become familiar with and comfortable in that practice context, they may well feel drawn to seek that type of employment on graduation, so supporting the fragmented system that has been demonstrated to lead to inferior outcomes for women and their newborns. Further, midwives who work in an organisation that is not a good fit for their own values and practice philosophy are less likely to stay [13, 14]. This is significant given global concerns about the adequacy of midwife numbers that drove the World Health Organisation to identify a need for effective midwifery staff retention strategies [15].

The challenge for pre-registration midwifery course convenors in Australia (and likely further afield) is to foster an affinity in students for woman-centred care and continuity models in a climate where that is not what they are predominantly exposed to in practice. Although midwifery curricula in Australian Universities now *theoretically* prepare students to value and work in CoM models of maternity care [1], the influences of clinical placements in fragmented care models and other unknown factors may supersede their theoretical learning.

With more women year by year choosing a CoM model [5, 9], universities require evidence with which to address curricular deficits and employability strategies to optimise the likelihood that students will consider woman-centred practice models as first choice for employment on graduation. This study, in which we explored the model of care that student midwives select for their first job and the influencing factors leading to that decision, addresses a current gap in knowledge and provides a contribution to this body of evidence.

### Method

The aim of this study was to discover the model of care student midwives planned to practice in on graduation as a midwife and the influences that led to that choice. A qualitative descriptive design was used so that participants could be given time and space to consider and explore their options for employment. Researchers collected data from six individual participant interviews and four focus groups in 2017-2018. Approval to conduct the study was obtained from Curtin University (RDHS-19-16), Edith Cowan University (Project No. 13830) and the University of Notre Dame (Project No. 016102F), and there were no conflicts of interest.

The setting for the study was Western Australia (WA), where women have options to birth in a hospital, birth centre or at home, all of which are publicly funded under the government-funded Medicare scheme [16]. Another option is private maternity care wherein a private obstetrician provides antenatal care in obstetric rooms and then manages the labour and birth in a private hospital [17]; rates of intervention are known to be higher in this model of care [18, 19]. A minority of women choose the services of a privately practicing midwife [17].

WA has three universities that offer at least one pre-registration midwifery course. There were five courses leading to registration at the time of the study: two undergraduate (one double degree leading to registration as a nurse and a midwife and one BSc. Midwifery), and three courses for registered nurses wanting to become midwives (one Graduate Diploma of Midwifery with students in a paid employment model, one supernumerary Graduate Diploma of Midwifery, and one Master of Midwifery Practice, also an employment model. In the two employed model courses students they are contracted paid employees with a student midwife contract and form part of the workforce; they remain in one hospital, public or private, metropolitan or rural, for the entire course. The non-employed students are supernumerary and are allocated clinical placements in a variety of secondary and tertiary hospitals in metropolitan and rural areas of WA. All students are also required to follow through at least ten women in Continuity of Care Experiences (CCE) [1], providing antenatal, labour/birth, and postnatal care to women booked at public and private hospitals, midwifery group practices, birth centres and community settings.

Recruitment of students to this study was by an announcement through each university's online learning management system, inviting participation in either a focus group or to be interviewed about their future employment choices. All interviews and focus groups were carried out by members of the research team but none by an academic from the student's own university, to ensure there was no duress or student perception that they had to 'perform' in front of their own lecturer. Six students were interviewed one-to-one, and 21 students participated in 4 focus groups, all face to face in university meeting rooms. Prior to interviews and focus groups, participants were provided with an information sheet and given the opportunity to ask questions of the facilitator; formal consent was then obtained from those willing to participate. All students were their final semester of study. Table 1 provides additional participant information.

Table 1. Student university enrolments

Number of student Interviews	6
Undergraduate supernumerary BSc. Midwifery	1
Undergraduate supernumerary BSc. Nursing, BSc. Midwifery	3
Graduate Diploma, supernumerary	2
Graduate Diploma, employed	0
Number of students participating in Focus Groups	21
Undergraduate supernumerary BSc. Midwifery	19
Undergraduate supernumerary BSc. Nursing, BSc. Midwifery	0
Graduate Diploma, supernumerary	2
Graduate Diploma, employed	0
Master of Midwifery Practice, employed	0

The aim of the focus groups and interviews was to ask midwifery students to discuss their choices for future employment. Semi-structured questions were used to guide students (Table 2.) with added prompts used as necessary from the facilitators, all academics experienced in qualitative research.

Table 2. Interview and Focus Group Questions

- 1. You are coming towards the end of your midwifery course and will soon be applying for Grad programs or midwifery positions. If you were able to apply for any position anywhere in Australia what model of care would you choose?
- 2. Why would you choose that model of care?
- 3. What do you think has influenced you to choose that model?
- 4. What model would prefer not to work in?
- 5. Why?
- 6. What has influenced you to avoid that model?
- 7. Can you think of any specific parts of your midwifery course that have influenced you in your preference of model of care?

All focus groups and interviews were recorded with permission and transcribed. To ensure anonymity, a code was ascribed to all participants. A generic fracturing, grouping and gluing qualitative analysis technique was used to analyse the collected data [20]. A three-stage process was used for analysis in which, stage one involved coding of data into meaningful segments; stage two involved grouping similar codes into sub-categories. Investigators chose to use manual coding, either open or line-by-line, or via NVivo v11 software, according to preference, to reduce the data and then met to discuss concepts or nodes [21]. In stage three, sub-categories that appeared to represent dimensions of similar concept were clustered into multi-dimensional categories resulting in the formation of defined themes and subthemes [22]. Further consideration and discussion by investigators led to the final formation of themes and subthemes, and these are supported by quotes from participants [22, 23].

### **Findings**

Student midwives from three of the five midwifery courses available in WA shared their views via face-to-face interview (n=6) or focus group (n=21) regarding their thoughts on preferred model of care for their first midwifery position after graduation and the influences behind that decision. The students were recruited during the final stages of their courses, undergraduate and postgraduate, from three universities. Quotes supporting themes and subthemes are presented using a confidential coding system. Participants are coded by interview (INT 1-6) or focus group (FG 1-4) with participant numbers for the first three focus groups (e.g. FG1P1). The final focus group comments were not individually coded as ten participants arrived late to the focus group and the vocal differences could not be distinguished on the recording, therefore all students from focus group 4 are all labelled FG4 with no additional participant number.

Analysis of each interview and focus group took place independently by at least two research team members, followed up by a consensus meeting where agreement was reached. Three themes with five subthemes surfaced. The theme that produced the most exposition and discussion with students was 'Clinical Placement', which represents four sub-subthemes (Figure 1.) All themes are now presented using direct quotes from participants to support them.

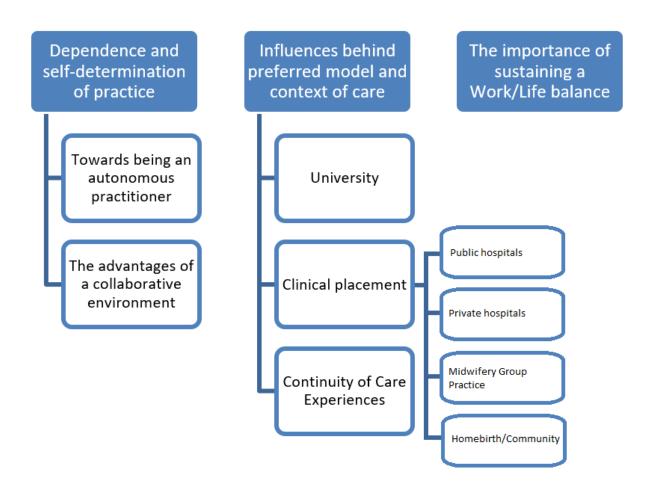


Figure 1. Themes and subthemes

#### Dependence and self-determination of practice

The theme labelled 'Dependence and self-determination of practice' emerged from students demonstrating understanding of the full spectrum of practice responsibility, from being autonomous through to use of collaboration and referral to specialist health practitioners.

#### Towards being an autonomous practitioner

The subtheme, Towards being an Autonomous Practitioner', surfaced as students thought through the reality of being able to identify both freedom and accountability of responsible practice, which was a determining factor for the career choice for INT1: I would go for public...because I like the fact that midwives have a lot of autonomy... and the fact they use a lot of skills... suturing and IV cannulation, which I think is important for a midwife. Midwives who practised to their full scope were highly regarded: I have worked with some midwives from the UK ... had lots of skills and I learned a lot from them... being able to practice with so much autonomy... so that was a big influence (INT2). Evidence-based practice was also inspiring and highly regarded: All the midwives have been fantastic, very evidence based, very empowering. In contrast INT4, considering different career pathways, could see the responsibility that comes with the autonomy of private midwifery practice, which she found daunting: That's super scary...private midwifery... that's a whole nother (sic) level of autonomy and scariness.

### The advantages of a collaborative environment

The second subtheme arose from students considering the value of referral, in the knowledge that there are occasions within midwifery practice when specialist expertise is required, as INT6 acknowledged: I think I'm more open to the idea of medical intervention when necessary and more aware of when it's the right time to intervene. The concept of collaboration was valued by INT5 but only when there was agreement: I find... working hand in hand with doctors works well at times if they're the right doctor and they agree with you. Being able to work in a collaborative environment was mentioned by two students, who felt that the public system offered this: When I've done placements at the public system, it's more you work as a team (INT2) and for FG3P1: Hospital based... get that experience and team support.

### Influences behind preferred model and context of care

Students were able to reflect on how they were influenced towards different models and contexts of care from important sources, summed up by INT2: Going to the different hospitals, seeing the different types of care. And then also our lecturer who's very passionate about woman-centred care. I think those have been my main influences. Other factors mentioned included the importance of the general atmosphere and how staff were treated: Staff support, morale and care was better... it made you want to work there. You look after each other (FG4).

### University

University lecturers and Clinical Facilitators' backgrounds and teaching, together with in-class discussion and feedback inspired and influenced student thinking about the model of care they would decide on for their future career. The lecturer's clinical experience provided context for students: *Probably one thing that influenced is like a lot of my lecturers work is in continuity home birth community environments* (INT4) and *This particular lecturer trained in England where midwives are more autonomous... instilling those values ... knowing what evidence says so that you can be more autonomous in your practice and advocate for the woman (FG1P2).* Class discussion around real clinical scenarios gave students insight into how clinical decisions are impacted by workplace, model of care or primary maternity care provider, as outlined by INT5: *We wouldn't realise how much of the intervention cascade we were seeing until we went back to class... and then the lecturer was saying, did she actually need to have that induction... you'd be challenged.* 

## Clinical Placement

The impact of clinical placement experience on student choice for future career was significant; this was where students were able to witness how things worked, to see the advantages and disadvantages of public and private hospitals, group practice and homebirth or community. The influences of each of these subgroups will be evidenced separately.

### **Public hospitals**

The value of tertiary public hospitals was perceived to be in the level of experience gained. FG4 summed up the need to advance and consolidate her skills in a facility that provided varied practice: I think... you are better off in a tertiary centre that has a grad program ... I do think there is an emphasis on practising midwifery skills in a unit that is managed obstetrically... you get more complex scenarios and develop your skills. This was corroborated by students like FG2P1 who wanted to develop skills for complex situations in anticipation of moving to a different model of care

later: I'm probably leaning towards more hospital based... for the first couple of years, get that experience and team support, build on my knowledge and then move on to something like an MGP, and for INT6: be more aware of when it's the right time to intervene. The opportunity to work with a variety of woman was presented as a reason to choose public hospital care, as described by INT1: I really like working with people from low socio economic areas and from other cultures and ones that maybe need extra support and you don't find that very much in the private system.

#### Private hospitals

The students voiced an overwhelming preference to not work in a private hospital, with the most frequent reason being the perception that midwives in private hospitals were not able to practice within their full scope, for instance within pregnancy care: I'm personally against the private model... I really do enjoy antenatal care as a midwife... you don't really get to do that when you work in a private setting. It's such an important time for educating mothers (INT2). Similarly, INT1 and INT3 felt the midwife's role was diminished generally: The midwives were more like obstetric nurses... because they had to work very much under the direction of the obstetrician, even for normal births (INT1). The hierarchical structure was a problem for FG1P1: There's hierarchy wherever you go but I feel like in the private sector it's 100% about what the obstetrician says. Student values of wanting to provide best care were perceived to be compromised in a private hospital: Because women are vulnerable when they're told what to do -women often say yes.... The wellest (sic) women are having emergency c-sections... these well women are having these poor outcomes (INT5). Being woman-centred was seen to be problematic for students; they perceived a patriarchal system that did not put the woman at the centre: Like there's a lot of stuff that that's simply what the doctor wants and so that's what gets done and it's not modelled around the woman or what she wants (INT4). The issue of safety was also raised, with INT1 suggesting that care in private hospitals was not as rigorous as in the public sector: Practices are safer in the public system and they're more about what is best for the woman rather than what is more convenient or what will make more money and reiterated by FG4; I did see practices that were not good for women (FG4). Negative perceptions of private hospital midwifery practice provided the very reason for FG2P2 to choose the private sector; to right the wrongs: If you want to make waves and make changes we need midwives to get in all areas and work and be the change we want to see... to make a positive difference to each woman's experience (FG4). However students were very realistic about needing a job and for some that meant they were willing to compromise on their ideals: I will take a grad program anywhere, because any experience is better than no experience (FG3P3) and I personally will be applying to private as well as public hospitals to improve my chances (FG2P2).

### Midwifery Group Practice

To work in a model providing continuity of care was the choice made by many students, although they realised that it was a future aim rather than one as an entry level midwife: Continuity is the goal... I'll always be trying to achieve that (FG3P3) and for FG2P3: I would like to just work in continuity... long term definitely MGP. The students spoke of a desire to work in a normal physiological model, with the aim to keep it that way: I like working with normal physiological birth

and trying to make sure that we don't change that into something else (INT4). In contrast two students in one of the focus groups discussed how they could see the advantage that women with complex issues gained from being in an MGP: Indigenous women or drug and alcohol women... where there needs to be MGP... I am interested in an MGP for high risk women (FG4). Building the relationship with the woman was also seen to provide deeper, more comprehensive care: I really value the continuity of care with women.....great way to form a relationship and I think it is a more holistic approach where the midwife can gauge her wishes and desires (FG4). The gold standard level of practice was noticed, with INT5 enthusing: All the midwives have been fantastic, very evidence based, very empowering. She also went on to say how she felt there was alignment, as midwives were 'in tune' with the women: Know what woman wants to achieve, how to help her achieve this and also when things don't go to plan what parts of those might be important to the woman. Another student felt that generally MGP midwives would be supportive of new graduates: You're supported by a team so you know when something does go wildly unexpectedly wrong you know you can hand it over if you need to, being a bit nervous and new (FG3P1). However, MGP was not first choice for everyone, with INT1 admitting that she did not want to be on call: When I had by 10 CCs and they were getting close to their due date, I found that quite stressful knowing that they could call me any hour of the day or night.

# Homebirth/Community

The issues raised for this were similar to MGP but many students saw it as a way to remove themselves from the hospital setting, with one student very interested in a pathway towards homebirth: *I definitely would like to work towards getting onto the community midwifery program and supporting home birth for women (INT6)*, with another student stating her aim was to become an endorsed midwife (INT2). The prospect of working outside of a hospital setting with increased autonomy was too much for INT4: *I'm kind of torn as in that's super scary*.

### Continuity of Care Experience

Regardless of the clinical setting, students were impacted by the privilege and reality of following women over the whole of their childbirth journey with their Continuity of Care Experiences (CCE) as requirements of the course. The passion resulting from the relationships between women and students was clearly articulated by FG3P1: I get very excited about every appointment... and even when I get the text message saying "I think I'm having contractions' I'm like "Ooh! OK!", I'm so excited. The passion and also quality of the relationship was considered by FG3P3 to result from the amount of contact during the pregnancy: I feel closer to the woman the more antenatal appointments I attend with her. In her interview, INT4 stated that following CCEs offered a stark comparison with standard clinical placement: Seeing how different that feels working with women I've just met as opposed to women I've had time to build a relationship with. The students were clearly able to see the benefits to women from the CCE relationship in comparison with what they have witnessed in fragmented care: Women have had four or five different midwives giving them four or five different pieces of advice... they're confused (FG3P3), and they also understood that midwives benefit from the model too: Continuity of care is good for the women but also for us (FG4).

## The importance of sustaining a work-life balance

The realistic practicalities of working close to home or being on-call was raised by some graduating students, like FG4: I like continuity of care and MGP but I am a single mother and realistically I can't be on call. The reality of not being able to join the dream model of care was recognised: I've got a few other personal factors that impact on my life that will impact any decisions I make... Children. Families (FG3P1). Geographical location was also an issue with many students who aimed to work close to where they live, as FG3P2 made clear: I want to be near my home. Another work/life balance issue was feeling comfortable and happy in their preferred maternity unit, as FG3P1 described: I want to work in a small unit, where there is one tea-room and one handover, everyone knows each other. In the same focus group, following the same thread another student added: Where am I going to be happy? I don't want to work in a 'bitchy' environment (FG3P2).

#### Discussion

The aim of this study was to provide valuable and unknown information to midwifery education providers about finishing student midwife views and perceptions of their career preferences and decision-making, as well as insights into the influencing factors. There is currently very little data available in Australia about future plans of graduating midwifery students, as found by Evans et al. [12]. This study builds on the evidence that students value CCE [12, 24, 25] and considers all other influences described by students that impact their first job decision making.

When considering their career choices, participants in our study carefully explored the responsibility of models of care that gave midwives greater autonomy, such as MGP. Participants put forward that they respected midwives who practiced across their full scope, took responsibility and performed advanced skills. Evidence-based practice was highly regarded and demonstrated empowerment to students, as midwives were able to provide quality care and defend their actions. These findings are consistent with the sentinel Australian RCT by Tracy et al. [26], which identified that autonomous decision-making practice increases job satisfaction, also confirmed by other international studies [27-29]. However, although our participants shared how they respected autonomous midwives, some acknowledged that they were not yet ready to take on the responsibility of a CoM model of care and voiced concerns. Findings from an earlier Australian qualitative study, however, quash these concerns: Cummins, Denney-Wilson and Homer [30] found that when graduate midwives were allocated named mentors in COM models, they gained confidence and their transition to practice was improved.

Students in our study acknowledged the influence of their university lecturers on their future career choices. Lecturers' own current and previous practice experiences provided motivation for students to pursue similar careers. Midwifery students also valued in-depth discussion and reflection of clinical scenarios, where the lecturer demonstrated how outcomes are influenced by model of care and maternity care provider. Reflection time in class gave students valuable space to analyse and discuss clinical situations. While there is no published research describing university lecturer influence on midwifery students, in their qualitative descriptive Irish study, Bradshaw, Tighe and Doody found students valued protected time for reflection [31].

Clinical placement experiences proved to be the biggest influencers for students in their future career choice decision making. Australian pre-registration students in our study reported a preference for the public hospital setting, believing that the environment offered midwives greater opportunity to practise midwifery skills and work across all areas, enabling consolidation and

growth. Being able to practice in a variety of settings was acknowledged as a positive attribute of working within a public hospital by Hauck, Bayes and Robertson, [32]. The WA Delphi study authors found that public hospital employment also offered the ability for midwives to be able to work in areas of interest and with supportive colleagues, however they also acknowledged negative concerns, such as poor working conditions, staff shortages and feeling undervalued and unsupported [32].

In contrast to student preference for public hospitals, our findings demonstrated that private hospital settings would not be their first choice. Students in our study described midwives in the private setting as being less autonomous and being required to bow to a hierarchical system in which the obstetricians were at the top. The findings of this study are consistent with the Australian qualitative study of midwives' perceptions of what it means to be 'with woman' in the private system [33]. Dissatisfaction of the system was acknowledged, with midwives voicing their unhappiness about what they visualised as a subservient role in which they "empty the bins and mop up the blood" [33]. Perceptions of unsafe and interventionalist practice were additional reasons for students to state why they would steer away from employment at a private hospital. Higher rates of intervention in obstetric led models of care are well documented [18, 19, 34], also witnessed by students in our study who were outraged that women with the highest determinants of health ended up with such poor outcomes. Equally, students revealed they believed that women in the private sector were in greater need of good midwifery care as they encountered women who missed out on antenatal education, advocacy and support; these concerns were also found among midwives in private hospitals [35].

The ideal model of care for many students was midwifery group practice (MGP), either in birth centre, hospital or community, although for most this was not a realistic first choice due to high levels of responsibility. However, the benefits of mentoring in many disciplines are well-known [36] and although known to be costly [37], are appreciated by new midwifery graduates, who found a named mentor ameliorated their transition from student to new MGP graduate [30]. An alternative option, evaluated highly in a mixed-methods UK study, was that midwives should complete an 'Optimum Birth Module' which increased their readiness to work in midwifery-led settings [38].

For many students the eventual aim to practice in an MGP was a philosophical belief in physiological labour and birth and knowledge that a trusting relationship and one-to-one care can reduce unnecessary intervention, evidenced by Hodnett, Gates, Hofmeyr, Sakala and Weston [39]. Findings from this study also underlined that keeping birth normal relied on midwives being strong advocates for women, which requires a confidence that may not be evident in new graduates. It has been previously identified in an Australian study that graduate midwives' ability to advocate was dependent on their communication skills, confidence and knowing what the woman wants [40], which is useful information to curriculum developers of midwifery programs. A similar call to universities is made by Thompson, Nieuwenhuijze, Low and De Vries [41], who in their Dutch study, argue that midwives in all areas should be able to rise to the role of being powerful advocates for physiological birth and that it is the responsibility of universities to provide the education and experience to enable it.

Findings from the current study indicate that students valued the CCE experiences and described feelings of passion and excitement around the process. It has been well documented in the literature

that CCE is favoured by students, with particular value attached to the relationship with women [24, 42]. Another more recent study, conducted with 19 midwifery students, found that learning aligned with midwifery philosophy is enhanced in the context of COM models (Kuliukas et al). Within our study students were able to see that satisfaction with their relationship and role aligned progressively with the number of appointments attended. These findings complement an Australian study asking women about their satisfaction with CCE students; the retrospective descriptive cohort study found high levels of maternal satisfaction [43]. While students emphasised the value of CCE, there were reservations voiced regarding the stress of being on call from some students. Similar findings regarding caseload burnout have been reported internationally, although recent Australian studies indicate that shift-based midwives are at more risk of psychological stress than CoM midwives [44, 45].

While the focus of our study was on choice of models of care, students indicated that families, commitments and work/life balance would influence their first job choices. These factors align with a cross-sectional Australian study exploring midwifery student's views on caseload midwifery, based on their CCE experiences, in which work-life balance and family commitment were listed as barriers to students choosing this model of care [46]. Students in our study also accepted that choosing a maternity hospital close to home might compromise their philosophical midwifery beliefs but for the interim it would suit their family life better. These factors align with an Australian Delphi study assessing workplace needs, with midwives in the first round focus group identifying that working close to home was important [32]. Elements relating to ease and contentment in the workplace were evident in our findings, with students emphasising the importance of a collegial working environment, evidenced again by the WA Delphi study by Hauck et al. [32].

### **Conclusion**

The challenge for Universities is to maintain midwifery students' affiliation for woman-centred midwifery-led care against the likelihood that they will become enculturated, through continued exposure, to the centralised medically-led approach. Having been theoretically educated to value midwifery-led maternity care but predominantly exposed in practice to medically led models, this study has demonstrated that students still prefer CoM models and that they are not easily enculturated into medical models by clinical placement in such environments but instead are made more aware of the deficits. In contrast the CCE requirement of Australian midwifery courses increased student awareness of the value of continuity of care by a midwife in all varieties of maternity care environments.

#### Limitations

This study was conducted at three WA Universities and findings are specific to the education and preceptorship provided to students enrolled in undergraduate and postgraduate courses within this setting. Although recruitment was open to midwifery students within the five WA university courses, no students from the two employed model courses volunteered to participate; their contribution may have added an additional perspective to the findings. Transferability cannot be assumed across different courses nationally or internationally, where the CCE is not widespread, however, rich description of this WA setting was offered to allow the reader to assess the potential transferability of our findings to other contexts.

### Acknowledgement

The authors gratefully acknowledge and thank the student participants in this study who gave generously of their time and shared their thoughts.

### **Conflict of interest**

The authors have no conflict of interest to disclose.

#### References

- 1. ANMAC, *Midwife Accreditation Standards 2014*. 2014, Australian Nursing and Midwifery Council: Canberra.
- 2. Page, L., *Research on midwifery continuity of care shows many advantages*. British Journal of Midwifery, 2013. **21**(10): p. 690-690.
- 3. Sandall, J., et al., *Midwife-led continuity models versus other models of care for childbearing women.* Cochrane Database of Systematic Reviews, 2016(4).
- 4. Tracy, S.K., 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 and Childbirth, 2014. **14**: p. 46-46.
- 5. COAG Health Council, *Woman-Centred Care. Strategic Directions for Australian Maternity Services*, D.o. Health, Editor. 2019, Creative Common Licence: Canberra.
- 6. Eddy, A., *Midwifery as primary healthcare*, in *Midwifery Preparation for Practice*, S. Pairman, Tracy, S.K., Dahlen, H.G., Dixon, L., Editor. 2019, Elsevier: Sydney.
- 7. Guilliland, K., Tracy, S.K., *Contemporary Australian and New Zealand midwifery and maternity services*, in *Midwifery Preparation for Practice*, S. Pairman, Tracy, S.K., Dahlen, H.G., Dixon, L., Editor. 2019, Elsevier: Sydney.
- 8. Department of Health, *Nursing and Midwifery Workforce 2015*, A.I.o.H.a. Welfare, Editor. 2016: Canberra.
- 9. Hames, K., *National Maternity Services Plan*, D.o. Health, Editor. 2010, The Australian Health Ministers' Conference: Canberra.
- 10. Henderson, A., et al., *Nursing students' perceptions of learning in practice environments: A review.* Nurse Education Today, 2012. **32**(3): p. 299-302.
- 11. Sidebotham, M., et al., *Using the five senses of success framework to understand the experiences of midwifery students enrolled in an undergraduate degree program.* Midwifery, 2015. **31**(1): p. 201-207.
- 12. Evans, J., et al., *The future in their hands: Graduating student midwives' plans, job* satisfaction and the desire to work in midwifery continuity of care. Women and Birth, 2020. **33**(1): p. e59-e66.
- 13. Bloxsome, D., S. Bayes, and D. Ireson, "I love being a midwife it's who I am": A Glaserian Grounded Theory Study of why midwives stay in midwifery. Journal of Clinical Nursing, 2020. **29**(1-2): p. 208-220.
- 14. Geraghty, S., C. Speelman, and S. Bayes, *Fighting a losing battle: Midwives experiences of workplace stress.* Women and Birth, 2019. **32**(3): p. e297-e306.
- 15. World Health Organization UNICEF, Strengthening quality midwifery education for Universal Health Coverage 2030: Framework for action. , W.H. Organisation, Editor. 2019: Geneva.
- 16. DoH(WA). *Department of Health WA. Having a baby*. 2020 [cited 2020; Available from: https://healthywa.wa.gov.au/Healthy-living/Having-a-baby.
- 17. DoH(WA), Having a baby in private care, Department of Health Western Australia, Perth, WA 2020
- 18. Roberts, C., Tracy,S, Peat,B., *Rates for obstetric intervention among private and public patients in Australia: population based descriptive study.* BMJ, 2000. **321**(137).

- 19. Dahlen, H.G., Tracy, S., Tracy, M., Bisits, A., Brown, C., Thornton, C., Rates of obstetric intervention among low-risk women giving birth in private and public hospitals in NSW: a population-based descriptive study. BMJ, 2012. **2**(5).
- 20. Harding, T. and D. Whitehead, *Analysing data in qualitative research*, in *Nursing and Midwifery Research: Methods and Appraisal for Evidence-based Practice*, Z. Schneider, et al., Editors. 2014, Elsevier: Chatswood, NSW. p. 127-142.
- 21. Schneider, Z., et al., *Nursing and midwifery research: methods and appraisal for evidence-based practice.* (4th ed.). 2013, Sydney: Mosby Elsevier.
- 22. Nowell, L.S., et al., *Thematic Analysis: Striving to Meet the Trustworthiness Criteria*. International Journal of Qualitative Methods, 2017. **16**(1): p. 1609406917733847.
- 23. Annells, M., Whitehead, D., *Analysing data in qualitative research*, in *Nursing and Midwifery Research Methods and Appraisal for Evidence Based Practice* Z. Schneider, Whitehead, D., Elliott, D., Editor. 2007, Elsevier: Sydney.
- 24. Gray, J., et al., Students' perceptions of the follow-through experience in 3 year bachelor of midwifery programmes in Australia. Midwifery, 2013. **29**(4): p. 400-406.
- 25. Browne, J., et al., "Continuity of care" experiences in midwifery education: Perspectives from diverse stakeholders. Nurse Education in Practice, 2014. **14**(5): p. 573-8.
- 26. Tracy, S.K., et al., *Caseload midwifery care versus standard maternity care for women of any risk:* M@NGO, a randomised controlled trial. The Lancet, 2013. **382**(9906): p. 1723-1732.
- 27. Collins, C.T., et al., *An evaluation of the satisfaction of midwives' working in midwifery group practice*. Midwifery, 2010. **26**(4): p. 435-441.
- 28. Warmelink, J.C., et al., *An explorative study of factors contributing to the job satisfaction of primary care midwives.* Midwifery, 2015. **31**(4): p. 482-488.
- 29. Yoshida, Y. and J. Sandall, *Occupational burnout and work factors in community and hospital midwives: A survey analysis.* Midwifery, 2013. **29**(8): p. 921-926.
- 30. Cummins, A.M., E. Denney-Wilson, and C.S.E. Homer, *The mentoring experiences of new graduate midwives working in midwifery continuity of care models in Australia*. Nurse Education in Practice, 2017. **24**: p. 106-111.
- 31. Bradshaw, C., S. Murphy Tighe, and O. Doody, *Midwifery students' experiences of their clinical internship: A qualitative descriptive study.* Nurse Education Today, 2018. **68**: p. 213-217.
- 32. Hauck, Y., S. Bayes, and J.M. Robertson, *Addressing the workplace needs of Western Australian midwives: a Delphi study.* Australian health review: a publication of the Australian Hospital Association., 2012. **36**(2): p. 176-183.
- 33. Bradfield, Z., et al., *Midwives 'with woman' in the private obstetric model: Where divergent philosophies meet.* Women and Birth, 2018.
- 34. Lutomski, J.E., et al., *Private health care coverage and increased risk of obstetric intervention.* BMC Pregnancy and Childbirth, 2014. **14**(1): p. 13-13.
- 35. Bradfield, Z., et al., *Emissaries in a foreign land: Western Australian midwives' experiences of being 'with woman' during labour and birth in the private obstetric model.* Women Birth, 2018. **31**(s1): p. S16-S16.
- 36. Beecroft, P.C., et al., *New Graduate Nurses' Perceptions of Mentoring: six-year programme evaluation.* Journal of Advanced Nursing, 2006. **55**(6): p. 736-747.
- 37. Lennox, S., J. Skinner, and M. Foureur, *Mentorship, preceptorship and clinical supervision: Three key processes for supporting midwives.* New Zealand College of Midwives Journal, 2008. **39**(7): p. 7-12.
- 38. Coates, R., et al., A postgraduate Optimum Birth module to increase midwives' readiness to work in midwifery-led settings: A mixed-methods evaluation. Birth, 2019. **46**(3): p. 533-539.
- 39. Hodnett, E.D., et al., *Continuous support for women during childbirth*. Cochrane database of systematic reviews, 2011(2): p. CD003766.

- 40. Hauck, Y., et al., *Graduate midwives' perception of their preparation and support in using evidence to advocate for women's choice: A Western Australian study.* 2015.
- 41. Thompson, S.M., et al., *Creating Guardians of Physiologic Birth: The Development of an Educational Initiative for Student Midwives in the Netherlands.* Journal of midwifery & women's health, 2019. **64**(5): p. 641.
- 42. Browne, J. and J. Taylor, 'It's a good thing...': Women's views on their continuity experiences with midwifery students from one Australian region. Midwifery, 2014. **30**(3): p. e108-e114.
- 43. Tickle, N., et al., Women's experiences of having a Bachelor of Midwifery student provide continuity of care. Women and Birth, 2016. **29**(3): p. 245-251.
- 44. Fenwick, J., et al., The emotional and professional wellbeing of Australian midwives: A comparison between those providing continuity of midwifery care and those not providing continuity. Women and Birth, 2018. **31**(1): p. 38-43.
- 45. Homer, C.S., *Models of maternity care: evidence for midwifery continuity of care.* Medical Journal of Australia, 2016. **205**(8): p. 370-374.
- Dawson, K., et al., Exploring midwifery students' views and experiences of caseload midwifery: A cross-sectional survey conducted in Victoria, Australia. Midwifery, 2015. **31**(2): p. e7.