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Optimising the continuity experiences of student midwives: an integrative review

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Optimising the continuity experiences of student midwives: an integrative review

Abstract

Background: In several countries, midwifery students undertake continuity of care experiences as part of their pre-registration education. This is thought to enable the development of a woman-centred approach, as well as providing students with the skills to work in continuity models. A comprehensive overview of factors that may promote optimal learning within continuity experiences is lacking.

Aim: To identify barriers and facilitators to optimal learning within continuity experiences, in order to provide a holistic overview of factors that may impact on, modify and determine learning within this educational model.

Methods: An integrative literature review was undertaken using a five-step framework which established the search strategy, screening and eligibility assessment, and data evaluation processes. Quality of included literature was critically appraised and extracted data were analysed thematically.

Findings: Three key themes were identified. A central theme was relationships, which are instrumental in learning within continuity experiences. Conflict or coherence represents the different models of care in which the continuity experience is situated, which may conflict with or cohere to the intentions of this educational model. The final theme is setting the standards, which emerged from the lack of evidence and guidance to inform the implementation of student placements within continuity experiences.

Conclusion: The learning from continuity experiences must be optimised to prepare students to be confident, competent and enthusiastic to work in continuity models, ultimately at the point of graduation. This will require an evidence-based approach to inform clear guidance around the intent, implementation, documentation and assessment of continuity experiences.

Keywords

Student midwives; Midwifery education; Continuity of care; Caseloading; Curriculum

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Statement of significance

Problem or issue

There is a lack of coherence and clarity around the implementation and educational intent of the continuity experiences of student midwives.

What is already known

With increasing impetus to make continuity of midwifery care models available for women, there is a need to ensure student midwives are sufficiently educated for employment in this model at point of graduation.

What this paper adds

Continuity experiences are a complex intervention in the education of student midwives. Research is needed to guide their optimal provision, to provide the clarity and cohesion that will allow continuity experiences to become central to midwifery education.

Optimising the continuity experiences of student midwives: an integrative review

1. **Introduction**

There is mounting evidence of the benefits of midwifery-led continuity of care for women and their babies, both in terms of birth outcomes and experiences over the childbearing period[1, 2, 3, 4, 5, 6, 7]. This is reflected in maternity policy which increasingly mandates for the implementation and widening of access for women to continuity models of midwifery care[8, 9, 10]. Continuity models of care can vary in design, but the underlying aim is that the woman receives care from a known midwife who is the lead professional throughout pregnancy, birth and the postnatal period. Ultimately, care should be based around the needs of the woman, and the development of a trusting relationship is key[11].

As well as being of benefit to women, working in continuity models of care has been shown to be beneficial for midwives and their wellbeing. When compared to midwives employed in standard models of care, midwives working in continuity models have been found to have lower levels of anxiety, depression and burnout, have a more positive attitude to work, and report greater levels of autonomy, professional recognition and job satisfaction[12, 13, 14]. With the current work patterns and demands, midwives are suffering from stress, anxiety, depression and burnout[15]. Many midwives consider leaving the profession due to factors such as dissatisfaction with their role, the organisation of care, poor staffing levels, and the quality of care they are able to provide[16, 17]. Working in continuity models has been suggested as a way of maintaining a healthy workforce and improving retention of midwives within the service[13, 14].

In many countries, implementation of continuity models has been slow[18, 19], and despite the evident benefits many midwives do not want to work in these models of care[20, 21]. Concerns include the potential for unpredictable working hours, insufficient staff, not being able to

achieve a work-life balance, and worries around caring responsibilities and family commitments[20, 21].

In a study carried out by Taylor et al[21], midwives reported that they would leave the profession if asked to work in this way. They also felt that these models of care were unlikely to achieve the improved outcomes claimed, or to be implemented successfully due to resistance among staff. The authors also comment on the challenges in upscaling implementation of this model under the current circumstances. These inconsistencies between the evidence and these prevalent discourses, may be due in part to limited experience of working in these models and a lack of exposure to the benefits they can provide[22]. A proposed method of addressing these challenges is to embed meaningful continuity experiences into the curriculum in order to prepare student midwives to be confident and enthusiastic about working in these models[18, 19].

Student midwives are required to gain experience providing continuity of care as part of their pre-registration midwifery education[23, 24]. However, there is a lack of guidance within midwifery education standards around context and content of continuity experiences. The Australian education standards stipulate a minimum of ten continuity experiences, while the United Kingdom standards provide no guidance regarding the number of experiences that should be attained[23, 24]. Furthermore, a previous review conducted by Tierney et al[25], highlighted that limited evidence was available on how best to embed continuity experiences within the midwifery curriculum and called for further research in this area.

Through the inclusion of continuity experiences in pre-registration midwifery education, there is the opportunity to provide a highly valuable learning experience as well as to prepare midwives to be confident and competent to work in continuity models of care. However, there is a need for guidance around how to facilitate optimal learning from these experiences.

The aim of this integrative review is to identify barriers and facilitators to optimal learning within continuity experiences, in order to provide a holistic overview of the factors that impact on, modify and determine learning within this educational model.

2. **Methodology**

The integrative literature review methodology allows for the inclusion of varied and diverse perspectives thus enabling a holistic understanding of complex concepts to be formed[26] and was therefore considered appropriate for the multifactorial influences informing continuity experiences. A framework adapted by Whittemore and Knafl[26] specifically for integrative reviews has been used in order to enhance methodological rigour. This framework takes a systematic approach including the five key stages of (1) problem identification; (2) literature search; (3) data evaluation; (4) data analysis and (5) presentation.

Within existing literature continuity experiences may be referred to as caseloading, case holding, continuity experiences, or follow through experiences. For the purpose of this paper the term continuity experience(s) will be used and the model within which these are situated will be defined where possible.

2.1. **Problem identification**

A comprehensive overview of facilitators and barriers to learning within continuity experiences is lacking and was therefore considered timely, given the identified need for midwives to be optimally prepared to work in continuity models at point of registration.

2.2. **Literature search**

A literature search of the CINAHL and MEDLINE databases as well as the Cochrane Library was performed, and reference lists were screened for relevant publications. Search terms used were midwi*; continuity of care; student, midwifery; education, midwifery; student, experiences; education, clinical; and new graduates. Screening and eligibility assessment were undertaken independently by two reviewers. Papers were eligible for inclusion if they

were published from 2010 to the present date, English language, in peer reviewed journals, and considered facilitators or barriers to students' experiences or learning from continuity of care experiences. This ten year timeframe was considered appropriate as embedding of continuity experiences within the curriculum has slowly evolved since its introduction resulting in paucity of relevant literature prior to this period. As an integrative review, qualitative and quantitative primary research was considered, as well as theoretical articles. The search returned one hundred articles and after removing duplicates, applying inclusion and exclusion criteria, and screening abstracts and full text publications for relevance, a total of twelve papers were included in this review (Fig. 1).

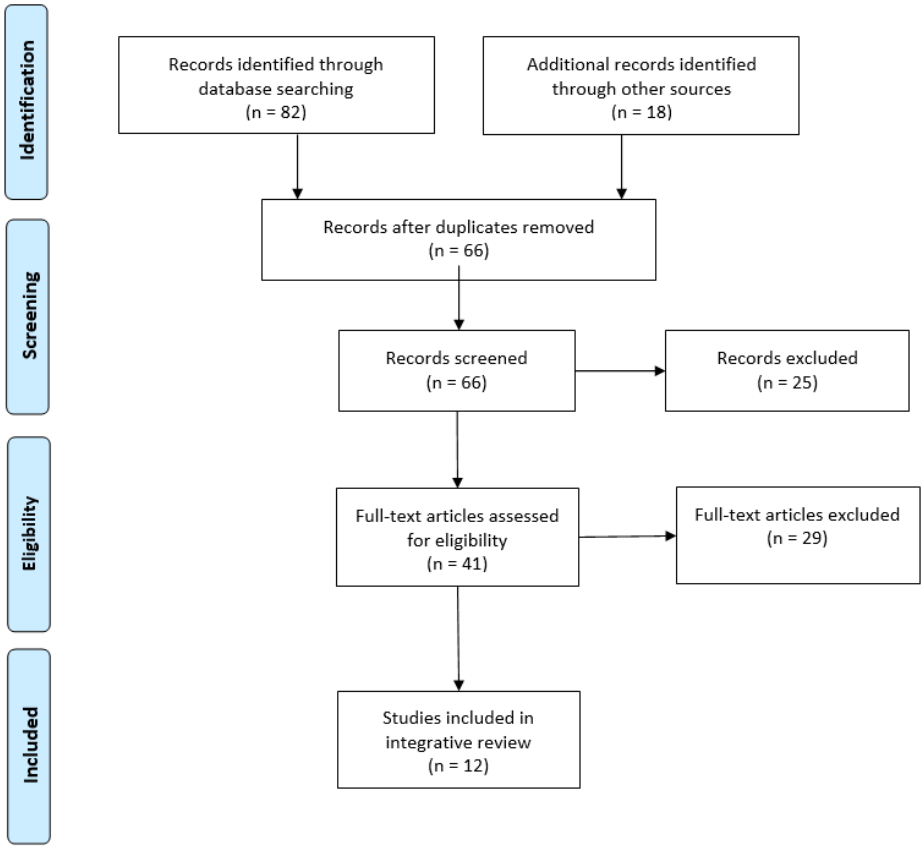

Fig. 1. Results of the literature search illustrated in a PRISMA[27] flow diagram.

2.3. **Data evaluation**

The quality of the twelve identified papers was assessed by two independent reviewers using an appropriate appraisal tool for the study design (Appendix 1). There were five mixed

methods papers, five qualitative papers, and two reviews. The Joanna Briggs Institute (JBI) Critical Appraisal Checklist for Text and Opinion[28] was adopted for the discussion papers and the Mixed Methods Appraisal Tool (MMAT)[29] was employed for the remaining papers. All twelve of the identified papers were included following critical appraisal of quality.

Table 1. Barriers and facilitators to student learning represented thematically.

Theme	Subtheme	Barriers	Facilitators
Relationships	With women	Demands of course requirements[37] Impact on course requirements[30, 40] Difficulties achieving a work-life balance[30, 34, 36, 37, 40] On-call nature[30, 36] Emphasis on numbers[33, 34, 35, 40, 41] Prescriptive requirements/seen as a tick-box exercise[41] Minimal contact requirement[39] Students left to manage professional boundaries[33] Blurring of professional boundaries[35, 36]	Focus in program on relationships[39] Understanding that attending appointments is a priority[32] Strategies to achieve a work life balance within caseload practices[37] Flexible program delivery[31, 32, 37, 38] Flexible way of working[36] Involvement in all of pregnancy, birth and postpartum[31, 34, 38] Supportive frameworks within the cirriculum[36] Strategies within the curriculum that facilitate a work-life balance[37] Focus on underlying intent and building relationships rather than numbers[33, 41] Guidance around professional boundary setting[31, 35, 36, 40] Continuity coordinator[35]

	With mentor	Short placements[36] Unknown mentor[31, 36, 39, 41] Unsupportive or assertive mentor[36] Lack of confidence[35]	Continuity of mentor[31, 37, 38] Known and trusted mentor[36, 38] Supportive mentor[35, 36] Close student-midwife relationship[38] Strategies within curriculum to enhance confidence[35]
	With team	Short placements[36] Supervision by unknown clinicians[41] Difficult relationships with clinicians[30] Feeling a hinderance/ignored in placement[34, 35, 39] Clinicians unaware of role of student[39] Students not notified when women in labour[33, 35] Lack of confidence[35]	Continuity of placement site[37] Building of relationships with placement team[37, 39] Supportive team members/clinical learning environment[34, 37] Value of student recognised[31, 32, 35, 39] Development of future workforce seen as a shared responsibility[31, 35, 39] Collaboration between education providers and maternity services to ensure students are supported[39] Strategies within curriculum to enhance confidence[35]

Conflict or coherence		Continuity experience within fragmented model of care[31, 33, 37, 38, 41]	Placement within a caseload model of care[31, 37, 38, 41] Embedding continuity experiences within placement in a caseload model[31, 37, 41] Mentors that practice with a women-centred philosophy[37]
Setting the standards	A surface approach	Seen as an additional part of the program[31] Little input or support from academic staff[31, 33, 35] Seen as in competition with other course requirements[41] Prescriptive requirements[33, 40] Lack of clear understanding of purpose[31] No clear approach with regard to expectations, intention, or assessment of experiences[41] Conflicting advice and confusion regarding documentation[33, 34]	Systems that support and monitor experiences[40] Continuity toolkit[35] Continuity experiences from first year[34, 39] Clear guidance around expectations[31] Focus on underlying intent[33] Seen as a primary way of gaining midwifery skills[41] Clear guidance with regard to documentation[33] Documentation to assist with learning[33, 34] Meaningful reflection on experiences[31, 34]

	Providing a foundation	Lack of evidence to guide the scope or quantity of continuity experiences[31, 37] Lack of consistency with implementation[31, 41] Lack of guidance around intention, learning outcomes or assesment[31, 41]	Establishing underlying intent[31, 35] Consistent, evidence-based approach[41] Clear guidance around measurable learning outcomes[31] Clear guidance in midwifery standards for education around the intent and expected learning outcomes[31]
	Curriculum coherence	A surface approach to continuity experiences is taken[31] Seen as an additional part of the course[33] Seen as a tick-box exercise[41] Lack of clear understanding of purpose[31] No clear approach with regard to expectations, intention, or assessment of experiences[41] Lack of guidance around intention, learning outcomes or assesment[31, 41] Should be seen as a primary way of gaining midwifery skills[31, 41]	Prioritisation of continuity experiences in program[31, 32] Building program around continuity experiences[31] Alignment of program philosophy with learning outcomes[31] Alignment of coursework with continuity experiences[35] Program with strong commitment to continuity and underlying relationships[31, 32, 38, 39] Continuity at the core of and across the cirriculum[31] Assessment to include continuity e.g. meaningful reflection and comparing different models of care [31, 34] Flexible program delivery[31, 32, 37, 38]

2.4. **Data analysis**

Each article was read and re-read to identify barriers, facilitators and influencing factors to student learning from continuity experiences. Characteristics of included studies are presented in Appendix 2. Barriers and facilitators were initially collected from all included papers and are documented thematically in table 1. Themes began to emerge in an iterative process with 'relationships' identified as a key theme; as relationships were found to be central to the learning to be gained from continuity experiences. 'Conflict or coherence' developed as a second theme, as it became clear that the model of care in which continuity experiences are carried out may have a significant impact on learning. The final theme is 'setting the standards' which represents a lack of evidence-informed guidance to direct the implementation and provision of continuity experiences.

2.5. **Presentation**

Themes developed during data analysis were refined and presented in the following discussion which represents a critical analysis and synthesis of data from the twelve papers.

3. **Findings**

Continuity experiences were found to be highly valuable to student midwives to student midwives[30, 31, 32]. For many they were felt to be an essential aspect of their midwifery education that should be mandatory[33]. They facilitated consideration of the wider aspects of women's lives and fostered women-centred, holistic care[31, 34, 35, 36]. Additionally, providing insight into this way of working influenced aspirations with regard to future employment[30, 33, 37, 38]. However, often students worried about certain aspects of continuity, such as finding a work-life balance[30, 34, 36, 37], and for some the experience discouraged them from the prospect of working in this way[30].

There are many variations within and around the continuity experience that will impact upon how continuity is experienced by students, the learning to be gained, and how these experiences will ultimately influence developing midwifery philosophies and career goals.

These variations include the model of care in which continuity experience takes place, the mentor and healthcare team, how the university implements and supports continuity experiences, and the strength and reality for students of the underlying philosophy and values of the program[31, 39, 40, 41]. All of these factors may influence how relationships, the central theme, develop and are experienced and valued.

3.1. **Relationships**

The importance of relationships for students, and for women, was a clear theme throughout the literature. Relationships with women, with mentors, and with the wider healthcare team are widely recognised as key in the experience of continuity for students[30, 32, 33, 34, 38, 39]. These relationships are fundamental to the learning of student midwives; they provide insight into the role of continuity for women as well as for midwives, and are central to the development of critical thinking, confidence, advocacy and autonomy[29, 31, 36, 38, 39]. They foster the building of skills around the needs of women and can provide the consolidating experiences necessary for readiness for professional practice[31, 38].

Through the development of relationships, students are provided with an understanding of the wider needs of the women in their care[33, 34]. Students are motivated to take responsibility for their own practice and to acquire the skills and knowledge that meets the needs of the women in their care[33, 36, 38]. Additionally, they provide insight for students, into psychosocial influences on pregnancy and birth, as well as the short- and long-term effects of decisions and interventions[33, 34]. In this way, relationships facilitate the provision of care that is responsive to women's preferences and wider requirements, as opposed to care that ticks the box of what has to be covered in a particular appointment[38]. Ultimately, relationships are the conduit for woman-centred care. They are inherent to the advancement of confidence and competence, and as students gradually build their skills around women, to the development of a holistic midwifery philosophy and professional identity[36, 38, 39].

3.1.1. **Barriers to learning from relationships**

One of the main challenges associated with continuity experiences appears to be difficulty balancing the requirements of continuity experiences with those of the course, as well as other commitments such as paid employment and childcare arrangements[30, 34, 36, 37, 40]. These competing demands can reduce ability to fully engage with women and can result in students just going through the motions in order to meet requirements[33, 37, 40]. Academic work and university attendance can suffer as a result, with students reportedly re-submitting assignments and faking documentation just to get through stipulated requirements[33, 40]. This lack of engagement may be exacerbated by an emphasis on achieving a set number of continuity experiences[33, 35, 41]. According to one student surveyed by Grey et al[34], "the women become just another number that you need signed off". This superficial, tick-box approach is at odds with woman-centred care and learning how to build therapeutic relationships with women[35, 41]. However, evidence is lacking as to whether these challenges are due to a requirement for a set or high number of continuity experiences[31]. Dawson et al[30] suggest the significance may lie in the quality of the experiences, rather than the numbers required, while Carter et al[37] found that, when continuity experiences were embedded in a caseload model of care, most students were able to complete more than the minimum required number of continuity experiences. It is suggested that instead of concentrating on or reducing numbers requirements, there is a need to identify and focus on the underlying intent of continuity experiences[33, 41] and to structure midwifery curricula around this educational model[31].

While competing educational demands and difficulties achieving a work-life balance may result in some students taking a 'surface approach'[31] to continuity experiences[33, 35], other students go 'above and beyond' in their approach[35]. The desire to form relationships and to meet women's needs facilitates women-centred care, but at times it resulted in students surpassing the boundaries of expected professional practice[35]. There is often a lack of guidance for students around expectations and requirements with regard to professional

relationships[33], and this highlights the importance of clear guidance and understanding of professional boundary setting in preparation for continuity experiences, as well as for future practice[35, 40].

While relationships can be transformational to the learning of student midwives[38], they may at times be significantly challenging and represent a considerable barrier to learning[35, 36, 38, 39]. Often within the clinical environment, students are left feeling as if they are a burden, without any real role[35, 39]. Moreover, supervision by unsupportive or assertive clinicians can evoke anxiety and reduce the ability of students to advocate for women in their care[36]. In these cases, relationships can be significantly disempowering, and may inhibit the development of confidence and competence[36, 39]. These relationships are not conducive to learning and it is suggested that the role of students in providing continuity for women, as well as in providing a valuable contribution to the service needs to be recognised as a means of countering some of these challenges[31, 32, 35, 39]. In addition, there is a need for increased input from education providers to ensure that students are welcomed within the clinical environment[39, 40]. McKellar et al[35] suggest the introduction of a continuity coordinator, one of the roles of which would be to support students as they undertake continuity experiences, and to ensure that their role is recognised and valued. It is essential that there is a sense of belonging and an ability to freely enquire within placement areas. This is necessary to facilitate confidence and critical thinking, and to optimize personal and professional growth[35].

3.2. **Conflict or coherence**

While evidence and policy support the implementation and scale up of continuity models of care, the majority of women currently receive care within a fragmented hospital-based model of care[37, 38]. As a result, most midwifery students will carry out continuity experiences in a system where women may be cared for by multiple healthcare professionals, the student can be supervised by different mentors, and the focus may often be on tasks to be completed[38, 41]. This model of care may be at odds with the learning aims of the continuity experience and

may be a barrier to providing women-centred[33, 38, 41]. It is suggested that for students to truly experience the intricacies of working in a caseload model, they should carry out their continuity experiences within a caseload model of care[37, 38, 41]. This may be necessary for student to build the skills needed for woman-centred decision making, and to witness and develop advocacy and autonomy[38, 41].

When students are placed within a caseload model of care, they are provided with deep insight into how caseload models work, as well as how midwives' decisions and actions are made and centred around women[37, 38]. According to one student cited by Sidebotham and Fenwick[38], placement within a caseload model provides "a much better understanding of how the midwife thinks and plans rather than just does". These experiences are found to be inspiring for students and are reported to have a positive impact on their desire to work in caseload models as qualified midwives[37, 38]. Furthermore, by immersing student midwives in caseload models of care, they have the opportunity to integrate theory into practice and to 'practice all of their skills all of the time', which facilitates the development of a sense of purpose, capability and resourcefulness[38].

In addition, placement within continuity models can foster the development of close, trusting student-mentor relationships, which can be highly beneficial to learning and can facilitate a mutual understanding of learning needs and ways of working[37, 38]. This can enhance the growth of confidence and competence as well as maturing professional identity[37, 38].

3.3. **Setting the standards**

3.3.1 **A surface approach**

There appears to be a lack of clear understanding of the purpose of continuity experiences[31], as well as confusion around required numbers and documentation[33,34.] This can result in the perception of a 'surface approach' to continuity experiences[31]. They are seen as an additional requirement of the program, in competition with other course requirements, rather than a primary way of gaining midwifery skills[31, 41].

There is often a lack of explicit guidance from academic staff around how to manage these experiences and this can add to the feeling that they are just another tick-box exercise[33, 35], when these experiences should be viewed as the principle way of gaining midwifery skills and knowledge[31, 41]. In addition, structures should be in place within the curriculum to support students and to fully prepare them in respect to expectations and documentation[35, 36, 40]. Furthermore, documentation and meaningful reflection can be used to facilitate learning[33]. McKellar et al[35] suggest a 'continuity toolkit' which would include guidance around expectations, as well as resources for learning that students can add to as their experience and knowledge accumulates.

3.3.2. **Providing a foundation**

An overarching finding of this review was variation in the way in which continuity experiences are implemented and regulated within universities, which arises from a lack of research, clarity and guidance as to their intent, expected learning outcomes, documentation and assessment[31, 37, 41].

It is suggested that an evidence-based approach to continuity experiences is required, whereby research into providing optimal continuity experiences can inform clear and consistent guidelines within midwifery standards for education[31, 35, 41]. Continuity experiences should form a key component of the midwifery curriculum[31, 32], which should be built around these experiences and the underlying philosophy of continuity[31, 32, 38, 39]. In this way, students are provided with clear program values and expectations, where relationships take precedence[32, 38, 39]. Furthermore, flexible program delivery may allow students to focus on their continuity experiences, and will counter some of the challenges experienced with attaining a work-life balance[31, 32, 37, 38]. In this way, coherence of theory and practice allows the development of confidence and competence, and advocacy and autonomy, as the students' professional midwifery identity is encouraged and enabled to thrive[37, 38].

4. **Discussion**

It is clear from the results of this integrative review that there are many variables that may interact to mould, alter and define the learning and experiences of student midwives while undertaking continuity experiences. This is evident in the divergent approaches taken by different education providers and the contrasting experiences and aspirations of student midwives[31, 33, 35, 37, 38]. However, it has also become clear that a foundation for continuity experiences is lacking, and that the provision of a solid evidence base for this learning model may allow it to take centre stage in the education of student midwives.

4.1. **Understanding the intent of continuity experiences**

There is an explicit need to determine and define the intended learning outcomes of continuity experiences in order that this educational model is evidence-based and can fulfil its potential as a learning experience[31, 35, 41]. This will require research into learning to be gained, so that clear guidance can be provided around the intent, expected learning outcomes, assessment and documentation of continuity experiences[25, 31, 35, 41]. There is also a need to determine whether achieving set numbers facilitates learning from these experiences, and if so, what this numbers requirement should be.

In addition, there are differences around when continuity experiences begin within the midwifery curriculum. In the United Kingdom, continuity experiences usually begin eighteen months into the program, by which time there is an element of autonomy that enables students to practice under indirect supervision[36]. In Australia however, continuity experiences are often a feature from the beginning of the program[33, 39]. This early exposure may provide students with incremental learning opportunities and a sense of their developing ability, confidence and professional identity[39]. However, it can result in students being left as an observer[39]. Learning differences between features such as these are worth investigation, so that all aspects of the implementation of continuity experiences are informed by evidence.

There is also a need to determine the documentation required of continuity experiences, as well as how they can optimally be assessed[25]. Approaches suggested include opportunities for meaningful reflection, documentation that provides learning and personal development opportunities, and assessment of knowledge of continuity through the critique of different models of care[31, 34].

When there is a solid evidence base on which to base continuity experiences, this should translate with consistency to universities and to students, so that the intent and expectations of continuity experiences are clear. This clarity may assist in reducing the confusion and the superficial approach that has been associated with continuity experiences[31, 33, 40].

4.2 **Supportive cultures for students**

Research is needed into ways to optimally support students through continuity experiences, both from the point of view of education providers and clinical placements. Support is needed within midwifery education and relationships within clinical placements need to be enhanced. Students should feel welcomed and able to enquire, to allow optimal learning from these experiences[35]. Raising awareness around the value and intent of continuity experiences, as well as increasing collaboration between clinicians and education providers will assist in this[39, 42].

As Taylor et al[21] found, many midwives do not believe that widespread implementation of this model of care is achievable, or that it will provide the intended improvement in outcomes. There is a need to determine whether and how this influences student midwives' learning from continuity experiences, as well as their intention to work in this model of care. In addition, Dawson et al[30] found that students would prefer a period of consolidation prior to working in continuity models of care. It would be of benefit to establish the basis for this, whether it is influenced by the feeling amongst some professionals that this consolidation is required[19, 43], or whether it is due to inadequate preparation for transitioning into continuity models of care.

4.3. **Student-mentor relationships**

The student mentor relationship may be key in determining learning to be gained as well as the quality of continuity experiences[35, 36, 37, 38]. While challenging relationships can leave students anxious and vulnerable and can diminish confidence and resourcefulness[36], trusting student-mentor relationships can be transformational, facilitating deep insight and learning, as well growth in confidence and readiness for the transition to practise[38]. There is a need to define the factors that influence student-mentor relationships, as well as ways in which to establish and maintain trusting and supportive partnerships between students and midwives. The development of tools that allow evaluation of learning from placement experiences, such as that recently devised by Griffith et al[44] may assist in this.

4.4 **Caseload models for continuity experiences**

Placing students within caseload models of care may provide the ultimate continuity learning experience for student midwives. Carrying out continuity experiences within caseload models was found to provide the opportunity for deep holistic, woman-centred learning, as well as in depth insight into autonomous midwifery practice[37, 38]. Furthermore, working within a caseload model was found to be a consolidating experience for students, enhancing a sense of professional identity[37, 38]. It also allows students to visualise how they can transition into this way of working as qualified midwives[31, 38].

By embedding continuity experiences within caseload models of care, this educational model has the ability to fulfil its proposed purpose of exposing students to the practicalities and values of caseload working, facilitating the practice of women-centred care, and fostering the development of a professional identity and ability to work in these models at the point of graduation[25, 31, 32, 38, 39].

Indeed, many authors highlight the importance of carrying out continuity experiences within caseload models of care[31, 37, 38, 41, 42]. By exposing students to the reality of continuity within caseload models of care, there is the potential to alter discourses surrounding this way of

working. By exposing students to the reality of caseloading, of how it can work for women and midwives, there may be more coherence between the evidence and the reality. According to Newton et al[22], the resulting increase in understanding between the different models of midwifery care can be transformational in altering perceptions around this way of working. In this way, through the exposure of student midwives to caseload models of care during pre-registration education, there may be the opportunity to enhance the long-term sustainability of this model of care[31, 38].

4.5 **Curriculum coherence**

There is a critical need to move away from the surface approach to continuity experiences[31]. Instead, programs should be built around continuity, and continuity should be prioritised within the curriculum[31, 32]. Along with a program philosophy that is based firmly on women-centred care and relationships, this provides curriculum coherence for students[31, 32, 38, 39].

This coherence of educational philosophy and expected practice will enhance the learning to be gained through the development of relationships. In this way, there is increased potential for the development of confidence and competence, of critical thinking and advocacy, and of woman-centred holistic care. When students feel welcomed and valued within their placements and there is clear guidance with regard to expectations and intent, this will allow the development of a confident midwifery philosophy and a competent professional identity. In addition, coherent program values based firmly on a midwifery philosophy will facilitate the development of resourcefulness, capability, sense of purpose and a strong midwifery philosophy which can transcend culture and context of practice[45, 46]. This will facilitate confidence and competence in student midwives when they are faced with situations they find professionally or clinically challenging.

Just as continuity of care is a complex intervention within which many variables exist that may alter the experience and outcomes for women[47, 48]; continuity experiences have many variables which may affect the learning outcomes for students. There is a need to

understand which variables work and which don't in order to optimise learning for students and experiences and outcomes for women. This focus on midwifery education and getting it right for contemporary practice is essential for the implementation and sustainability of emerging continuity models of care.

6. **Conclusion**

The data indicates that some programs are implementing continuity of care experiences with evidence of meaningful and indeed transformational learning, yet other programs struggle to secure optimal learning from this educational model. While this review identifies many of the barriers to optimal continuity experiences, it also illuminates potential strategies to enhance learning to be gained. Relationships have been identified as essential to the learning and ultimately are the conduit for woman centred care. As such, relationships should form the foundation on which we base the pedagogy of continuity experiences, and midwifery curriculum should be based within and around this paradigm.

There is a need for a 'ground-up approach', whereby continuity experiences are unified and optimised through the provision of evidence-based guidelines to inform implementation, learning outcomes, documentation and assessment. This clarity of intent should be translated to all involved in the provision and undertaking of continuity experiences. However, guidelines alone may not resolve all challenges associated with the implementation of continuity experiences. Cultural change may also be required to address existing contextual and relational barriers, and learning is required from areas where these elements have been optimised. Collectively, this can drive continuity experiences from a strong coherent foundation to take place as central to the learning experiences of student midwives.

7. **Limitations**

With the exception of one paper from the United Kingdom, all other papers included in this review are from Australia. This could limit relevance to other settings. However, it is

envisaged that within counties that have a similar midwifery education system and particularly policy legislating the widening of access to continuity, this paper will provide useful direction with regard to the continuity experiences of student midwives. There is a lack of research however, specifically aimed at identifying barriers and facilitators to learning, and this paper will therefore enhance knowledge in this area.

8. **Future direction**

As the implementation of continuity models proceeds, there is a growing demand for midwives to work in these areas, as well as increasing potential to provide student placements within these. There is a need therefore to optimise this opportunity for students to gain valuable learning experiences within these placements, in order to equip them with the skills and evidence to enable transition into these models at point of graduation. Learning gained from the increasing presence of continuity models within countries such as the United Kingdom and Australia, will provide an integrated, unified, and evidence-based approach to the provision of placements within continuity models of care.

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Appendix 1.

Table 1. Quality appraisal of included literature.

Paper	Question number used by each tool to guide quality assessment							Include/exclude
	JBI Explanation of Text and Expert Opinion critical appraisal tool							
	1		2	3	4	5	6	
Ebert et al[41]	Yes		Yes	Yes	Yes	Yes	Yes	Include
Gamble et al[31]	Yes		Yes	Yes	Yes	Yes	Yes	Include
	MMAT Section 1: Qualitative studies							
	S1	S2	1.1	1.2	1.3	1.4	1.5	
Gray et al[33]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Include
McKellar et al[35]	Yes	Yes	Can't tell	Yes	Yes	Yes	Yes	Include
Rawnson[36]	Yes	Yes	Can't tell	Can't tell	Yes	Yes	Yes	Include
Sidebotham & Fenwick[38]	Yes	Yes	Yes	Can't tell	Yes	Yes	Yes	Include
Sweet & Glover[39]	Yes	Yes	Can't tell	Yes	Yes	Yes	Yes	Include

MMAT Section 5: Mixed methods studies

	S1	S2	5.1	5.2	5.3	5.4	5.5	
Carter et al[37]	Yes	Yes	No	Yes	Yes	Yes	Yes	Include
Dawson et al[30]	Yes	Yes	No	Yes	Yes	Yes	Yes	Include
Gray et al [34]	Yes	Yes	No	Yes	Yes	Yes	Yes	Include
McLachlan et al[40]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Include
Tickle et al[32]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Include

Key to abbreviations: JBI – Joanna Briggs Institute, MMAT – Mixed Methods Appraisal Tool.

Appendix 2.

Table 2. Summary of included papers.

Paper and location	Aim/objective	Design	Key elements from findings
Carter et al Australia[37]	To explore student midwives' experiences of an innovative continuity model of care placement	Mixed methods, descriptive cohort. Online student survey (n=16). Descriptive statistics and content analysis. Caseload model	Placement within a caseload model was thought to be beneficial to learning and the development of relationships and confidence. The importance of a supportive mentor-student relationship to learning was highlighted. Some students however had experienced stress due to course requirements, including hours required to provide continuity and clinical skills acquisition
Dawson et al[30] Australia	To evaluate student midwives' experiences of undertaking COCEs as well as their employment intentions following graduation	Mixed methods. Survey of midwifery students (n=129). Descriptive statistics and content analysis. Continuity experiences	Students were positive about the continuity and the importance of relationships. However, some students worried about on call and impact on work-life balance as well as family responsibilities. While many reported wanting to work in a caseload model, they wanted to do so after consolidation of skills and having gained experience elsewhere

Ebert et al[41] Australia	To explore issues around the numbers and hours requirements in midwifery education, including those of continuity experiences	Review/discussion. Continuity experiences	No single or clear approach to continuity experiences. The focus on numbers devalues the importance of and ability to provide women-centred care. Continuity experiences can be seen as another tick-box exercise rather than a primary way of learning midwifery skills
Gamble et al[31] Australia	To identify the underlying educational intent of continuity experiences	Discussion/review. Continuity experiences	Continuity experiences foster confidence and resilience, and influence career goals. However, concerns are raised around the lack of guidance as to the intent, expected learning outcomes, and assessment of continuity experiences. The authors also emphasise that programs should be designed with continuity at their core and guiding delivery
Gray et al[34] Australia	To gain insights into student midwives' experiences of continuity experiences as well as the value and learning gained from these	Mixed methods. Online survey of midwifery students (n=101). Descriptive statistics and thematic analysis. Continuity experiences	The value of continuity experiences and being able to form relationships was recognised by student midwives. Many felt however that too many were required to enable them to do them properly, and they were often seen as an additional part of the course rather than an integral part of the curriculum. In addition, there was confusion around expected documentation.

Gray et al[33] Australia	To understand the impact and learning associated with the follow-through experience for third year midwifery student	Qualitative descriptive. Telephone interviews with former and current students (n=28). Data analysed by thematic analysis Continuity experiences	Students identified the importance of relationships which facilitated trust, as well as the motivation to learn and do right for women in their care - relationships were seen as key to learning. However, as a result of the numbers requirement, students felt were often just going through the motions. This is recognised as contrary to the underlying philosophy of this model and the need to focus on the quality and underlying intent is highlighted
McKellar et al[35] Australia	To identify the challenges and potential supportive strategies for student midwives undertaking continuity experiences	Qualitative. Focus groups with education providers and students and a survey with students (n=69). Thematic analysis. Continuity experiences	Need to identify the underlying intent of continuity experiences and to link theory and practice. Explicit guidance around expectations and establishing boundaries are lacking and are required. The importance of a supportive mentor and confidence are highlighted. Supportive strategies identified include a continuity toolkit

McLachlan et al[40] Australia	To explore experiences of the follow-through experience, from the point of view of student midwives and academics	Mixed methods. Cross-sectional online survey involving students (n=401) and academics (n=35). Descriptive statistics and content analysis. Continuity experiences	Follow-through experience recognised as a valuable and essential learning opportunity for students. Major concerns raised around the requirement for numbers which it was felt impacted on coursework as well as personal commitments. The authors warn against prescriptive requirements for these experiences. Also highlight the need for systems that support, facilitate and monitor the experiences and ensure clear boundaries are established
Rawnson[36] England	To gain insight into student midwives' experiences and learning from caseloading	Qualitative. In-depth semi-structured face-to-face interviews (n=8) and thematic analysis of data. Continuity experiences	Caseloading found to be highly beneficial in promoting student's confidence and self-belief. The mentor's attitude was pivotal in determining learning to be gained. While some enjoyed the flexible way of working, others found it stressful and difficult to juggle with other commitments. Suggest the inclusion of boundary setting in the curriculum

Sidebotham & Fenwick[38] Australia	To explore third-year midwifery students' experiences of undertaking placement within a caseload model of care	Qualitative descriptive. Semi-structured telephone interviews (n=12) and thematic analysis. Caseload model of care.	Placement provided in-depth understanding of how caseloading worked as well as the importance of time and relationships. The midwife-student-woman relationship was key in facilitating learning and the development of professional identity – the close student-mentor relationship was particularly important. Recommend flexible program delivery.
Sweet and Glover[39] Australia	To identify strengths, weaknesses and ways to improve the student continuity of care experience.	Discussion paper based on previous qualitative study. Focus groups and thematic analysis. Continuity experiences.	Continuity experiences provide the opportunity for midwifery students to experience and reflect upon and compare care provided within different models and by different care providers. This affords the opportunity for professional development. However, often students feel unwelcome within the clinical environment and the development of stronger relationships between universities and placement areas is recommended to ensure students are integrated as part of the team.

Tickle et al[32] Australia	To explore women's experiences of having continuity of care provided by a midwifery student.	Mixed methods. Paper-based survey of women (n=237) cared for by a midwifery student. Continuity experiences.	Women valued continuity provided by student midwives and satisfaction increased with number of visits attended. The mean number of antenatal visits attended was 6.59 and for postnatal visits was 5.11. The authors stipulate that the curriculum has a strong commitment to continuity, and that its delivery is flexible to facilitate attendance at appointments and the development of relationships.