Please cite this article as:


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AN EXPLORATION OF THE MIDWIFERY CONTINUITY OF CARE PROGRAM AT ONE AUSTRALIAN UNIVERSITY AS A SYMBIOTIC CLINICAL EDUCATION MODEL

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Abstract

Objective
This discussion paper analyses a midwifery Continuity of Care program at an Australian University with the symbiotic clinical education model, to identify strengths and weakness, and identify ways in which this new pedagogical approach can be improved.

Background
In 2002 a major change in Australian midwifery curricula was the introduction of a pedagogical innovation known as the Continuity of Care experience. This innovation contributes a significant portion of clinical experience for midwifery students. It is intended as a way to give midwifery students the opportunity to provide continuity of care in partnership with women, through their pregnancy and childbirth, thus imitating a model of continuity of care and continuity of carer.

Methods
A qualitative study was conducted in 2008/9 as part of an Australian Learning and Teaching Council Associate Fellowship. Evidence and findings from this project (reported elsewhere) are used in this paper to illustrate the evaluation of midwifery Continuity of Care experience program at an Australian university with the symbiotic clinical education model.

Findings
Strengths of the current Continuity of Care experience are the strong focus on relationships between midwifery students and women, and early clinical exposure to professional practice. Improved facilitation through the development of stronger relationships with clinicians will improve learning, and result in improved access to authentic supported learning and increased provision of formative feedback. This paper presents a timely review of the Continuity of Care experience for midwifery student learning and highlights the potential of applying the symbiotic clinical education model to enhance learning.

Conclusion
Applying the symbiotic clinical education framework to evidence gathered about the Continuity of Care experience in Australian midwifery education highlights strengths and weaknesses which may be used to guide curricula and pedagogical improvements.
INTRODUCTION

The midwifery profession espouse the concept of woman centred care that includes continuity of care and carer for women, although this is not universally practised in Australia (Pairman et al. 2010). In professions such as midwifery, students need a range of experiences in a variety of occupational settings to develop capacity for their professional practice (Billett 2002). Midwifery education programs have traditionally been based on models similar to nursing, whereby students undertake theoretical learning and early skill development in University, and are placed in clinical environments for practice based experiences predominantly in tertiary level teaching hospitals (McKenna and Rolls 2007).

With the introduction of the three year Bachelor of Midwifery program in Australia in 2002, a pedagogical innovation called the Continuity of Care (CoC) experience was commenced. The CoC experience has been designed as a way to afford students the opportunity to follow women through their pregnancy and childbirth working in partnership. This innovation is based on experiences where midwifery students engage with pregnant women through the period leading up to and immediately after the birth of their baby. The peak Australian Midwifery regulatory authorities adopted the recommendation that students undertake a minimum of 30 CoC experiences in the 3-year Bachelor of Midwifery program (Australian College of Midwives Inc. 2006). The required number of CoC experiences was amended in 2010 to 20 over the three years.

Whilst mandating the inclusion of CoC experiences, there was a dearth of guidance on how to embed these within the curriculum to optimise student learning (Glover 2003). At the study university, midwifery students are required to recruit and manage their own caseload of women for these 20 CoC experiences. At the completion of each CoC experience, students are required to write a brief reflection of their learning. This is documented in a reflective portfolio for summative assessment. Students experience the woman’s pregnancy care, birth and post natal care in whichever clinical setting is chosen by the woman. The longitudinal involvement of the student in a woman’s pregnancy and birth experience predicates the likelihood of continuity. It is timely to evaluate the value and benefit of the CoC to learning and to identify ways in which this pedagogical approach can be improved.

One approach to evaluate a clinical education program is to analyse it using the symbiotic clinical education model documented in the medical education literature (Worley 2002; Worley 2002; Prideaux et al. 2007). The symbiotic clinical education model asserts that effective health professional education requires integration of the many components (depicted in interlocking axes) to be effective, and that clinical education programs that do not achieve symbiosis will be less effective and less sustainable (Prideaux et al. 2007). Therefore, the aim of this discussion paper is to determine how well the midwifery CoC experience performs as a symbiotic clinical education model. The symbiotic clinical education model will be described and then, using data from a recent study on one CoC program, the strengths and weakness of the program as a form of symbiotic clinical education will be presented.

SYMBIOTIC CLINICAL EDUCATION

The symbiotic clinical education model, also known as the 4R model, is a model that has developed from medical education scholarship in Australia. Symbiosis as a clinical education concept had previously been raised (Bligh et al. 2001), however it was the work of Worley and Prideaux that developed the symbiotic clinical education model (Prideaux et al. 2007). The emphasis of this model is on achieving ‘symbiosis’ or mutual benefit, whereby clinical education adds value to—and occurs in the context of—clinical practice, health service delivery and personal and professional development. A symbiotic curriculum should become a win-win situation among all stakeholders (Prideaux et al. 2007).
The symbiotic clinical education model outlines ideal mutually reinforcing relationships across four principal axes: the personal, clinical, institutional and social axes, and highlights the interrelatedness between each of them (Prideaux et al. 2007). The student—or the learner—is embedded in the middle of the model, depicting student focused teaching and learning (Figure 1).

**Personal axis**
The personal axis of the symbiotic model reflects the importance of individuality in clinical education. It promotes the exploration and consideration of differing personal and professional values, attitudes and behaviours, and their influence on teaching and learning (Prideaux et al. 2007). One of the most important learning activities for students is to develop their personal principles to align with professional expectations (Prideaux et al. 2007).

With symbiotic clinical education, effective teaching and learning is dependent on the development of relationships which takes time and interactions, and requires mutual support and respect. Therefore clinical models which afford significant time to develop relationships offer greater student support and can build the mutual benefit necessary for symbiosis. When students are enabled to develop effective working relationships with clinicians and clients they gain a sense of belonging within the community of practice (Worley 2002). This assists the development of professional identity.

**Clinical axis**
The clinical axis reflects the importance of client based learning in clinical education. Incorporating the student into the clinician-client relationship in a meaningful way facilitates ‘authentic learning’ and enables students to access the multidisciplinary team for their learning (Worley 2002; Prideaux et al. 2007). By engaging students in routine care, authentic learning is occurring within the process of health service delivery which creates a mutually beneficial environment.

Students’ agency is pivotal to this axis. They need to be prepared and willing to be immersed in practice and focus on their own learning needs. Early and continued exposure to practice is important to maintain a person centred care approach (Prideaux et al. 2007). By effectively engaging students in client based learning, they will be less inclined to focus on tasks or skills, but rather enabled to apply their learning to more complex processes to solve every day clinical practice problems.

**Institutional Axis**
This axis highlights the interdependence of both the health services and university for producing quality graduates and improving client care (Prideaux et al. 2007). The health service offers the authentic learning opportunities, while the university offers scholarship and research to improve clinical practice and education (Prideaux et al. 2007). Authentic supported learning is defined as learning that is constructivist, inquiry based and has work value (Prideaux et al. 2007). For this to be achieved students need to be enabled to make a significant and worthwhile contribution to the work of the clinical teams, while constructing their own learning under the guidance of clinicians.

**Social axis**
The social axis reflects the importance of clinical education ensuring it meets the needs of both the community which the institution aims to serve and the government policy and priorities (Prideaux et al. 2007). This axis demonstrates how health professional education is embedded within the broader complexity of society. The relationship between community needs, community involvement, government policies and financial support, is fundamental to
achieving a symbiotic curriculum and meeting the learning needs of students (Worley 2002; Prideaux et al. 2007).

THE STUDY
A research study was conducted in 2008/9 that sought to understand the midwifery learning that occurs through the CoC experience and to identify ways to improve teaching and learning in this innovative pedagogic model. A qualitative research approach was used to investigate the intent and enactment of the CoC experiences for midwifery students. Ethical approval was obtained from the University Social and Behavioural Research Ethics Committee and all participants provided informed consent.

All current students in the Bachelor of Midwifery program and midwifery academic staff at the time of the study were invited to participate through focus group discussions. The 20 graduand students that completed the Bachelor of Midwifery in 2007 were invited to participate through submission of their Midwifery Learning portfolios. An information sheet, introductory letter and consent form were provided to all prospective participants to gain informed consent.

Focus groups were conducted with first, second, and third year Bachelor of Midwifery students in their year groups to explore their perceptions and experiences of the CoC experience. This step wise approach enabled us to identify the progression of students' experiences across the three year program. Fourteen students took part in these focus groups. One focus group was held with four midwifery academic staff to explore their perceptions of the CoC experience. All focus groups were audio recorded and transcribed verbatim by a professional secretarial service. The transcripts were then checked for accuracy and anonymised (by LS). In addition, reflective portfolios recording CoC experiences across the three years of the program were collected from graduate students. A total of one hundred and eighty reflective write-ups were collected from six graduates.

These data were individually and collectively analysed thematically to identify pedagogical aspects of the program. All of the data were examined and coded by two researchers individually, and then compared and discussed collectively, to identify key areas and themes of pedagogical concern. The software package NVivo 8 was used to assist data management and coding. The primary results of the study are described in much detail elsewhere (Sweet and Glover 2011). The data was further analysed using the symbiotic framework. This paper draws on the data and findings of the study, and applies them to the symbiotic clinical education model as an evaluative framework.

CONTINUITY OF CARE EXPERIENCE AND SYMBIOSIS
The purpose of this paper is to analyse the CoC experience, as accounted throughout the described study, in relation to the symbiotic clinical education model. Analysis of the data has demonstrated some aspects where symbiosis is achieved but also highlights many areas which do not achieve symbiosis; and warrant further development for improved clinical education.

Personal axis
The CoC experience was effective in providing early student exposure to midwifery practice. This motivated students to learn, and assisted in developing their professional identities as midwives.

1st year: Positive would be that it's hands on and it's mums and babies and it's just what we're going to be doing eventually and you get to do it straight up. Yeah. It's just exciting.

Being actively engaged in the CoC experience did assist students in developing and/or confirming a woman centred care philosophy.
Students recognised that the CoC experiences afforded them longitudinal involvement with women which enabled them to develop a meaningful relationship to learn about pregnancy and childbirth. Students in the early stages of their program of study invested more than the requisite time in developing these relationships, while students later in the program found the time pressure significant and undertook only the minimum number of interactions with women. Students felt a need to be useful for the women – to give something back for involving them in their childbearing experience.

1st year: If I’m following a woman through I want to attend to her enough in the antenatal period that I feel like I’m actually offering something in the birth room, not just being the observer who’s learning

Students recognised the need to develop a relationship with the women to be engaged in clinical practice, and in so doing developed their own agency.

Students expressed great challenge in meeting the competing commitments of the CoC experience, traditional block placements, and ongoing university classroom requirements. In order to balance these, the curriculum requirement was for intermittent interactions with the pregnant women. Students recognised this as not being representative of real CoC and challenged the underlying philosophy.

3rd year: One thing I’ll say is that you ask for continuity of care but you only ask us to attend two antenatal and two postnatal so where is the continuity? Because in reality, continuity of care is going to every single appointment.

The pedagogical approach of the CoC experience is one of student led learning. The student negotiates engagement and ongoing interactions with the woman and her health care providers. Some students struggled with the need to recruit women independently and self manage their CoC experiences and learning. Similarly the program taught students to negotiate their own learning opportunities with clinicians and women.

3rd year: So first year I was very hesitant and I wouldn’t put myself out there. Whereas third year you know you need the experience and you know that you need to expose yourself to certain opportunities so you’ll find yourself saying to a midwife well this is what I really need to achieve, can we do that?

The pedagogical arrangement of the CoC experience resulted in the student being aligned with the woman and not the health care providers. This is in contrast to the traditional clinical placement model whereby a student is placed in the health service and provides care to whoever engages with that service. Being with the woman and her family resulted in strong relationships between the student and the woman. In first year, students often did not have the requisite knowledge to understand the physiological and/or pathophysiological conditions of the women they had recruited. This prompted them into some independent study to find requisite knowledge.

Students’ experience with healthcare providers varied depending on the model of care being used by the woman. Situations where women were seen by different professionals at every visit hindered the development of relationships between the student and health care providers, which limited learning opportunities.

3rd year: If you’re on clinical and you’re allocated to the midwife, …she can get a feel for what you’re like and then she’ll give you a wider scope whereas if you’re with a follow through you’ve got to work a lot harder to earn the respect of the midwives because you’re an appendage of the woman, you’re not an appendage of the midwife.

This intermittent engagement with varied health service providers hampered regular feedback and limited opportunities for mentoring, coaching and professional socialisation. Students did recognise that the CoC experience exposed them to many different clinicians which allowed them to identify good and bad role models to base their own practice. When
students found midwives they perceived as good role models they often tried to continue engaging with the women who were cared for by these midwives.

**Clinical axis**

The CoC experience requires the midwifery student to engage with the health service through the conduit of pregnant women seeking care. The student experience is therefore dependent firstly on the women, and secondly on the clinicians. The concept of client-based learning and client as educator is a strength of the CoC experience. Students learn from the women themselves, and from the healthcare provided to these women by the clinicians, which consolidates their women centred care philosophy.

1st year: Because you’re seeing the whole range of different models, different hospitals. … I imagine when you’re on clinical you’re under the supervision of a particular person and doing things their way; you’re not so woman focused. Whereas when you’re sitting with a woman and hearing her comments before and after the appointments, then you’re really looking at it from her point of view.

Students often described the feedback they received from women about their own care and that of the clinicians, both of which informed learning.

2nd year: I think you’re in a situation with the women but then you also get her feedback afterwards and what your perspective might be at the time might change quite dramatically once you hear what she’s thought about it herself, or how it’s helped her or not helped her.

This feedback was highly valued by the students and a great motivator for their involvement.

Ideally, clinical education should be based on authentic experiential learning and not merely observation of practice. Engagement with clinical practice requires the development of relationships between students and clinicians, which is dependent on time and interactions.

Students spoke of the many clinicians being unaware of the student role in the CoC experience, and varied willingness to engage them in clinical practice. Students expressed significant frustration when the clinicians ignored their presence and did not engage them in authentic learning.

3rd year: We patchwork what will become our practice from all the midwives that we work with and some are great and some are not so great and some we like the things they do and others we think god I would not do that when I’m out there, that’s one thing I won’t do. So not even just what we’re learning clinically but it’s what we’re learning that we can then pass on when we’re in that role.

When a student had frequent and regular contact with the clinician they were able to develop an effective relationship which supported their engagement with routine clinical care.

Authentic supported learning was therefore very dependent on their relationship with clinicians.

1st year: Some of them stand out of the crowd yeah definitely. Especially if you see the same one, and after a few weeks like I saw one [midwife] for a few of the visits, and she knew me, so she targeted me to ask me ‘so remember we did this last time? Now explain it me this time’. Then next time she had me do it myself and that was with the palpation. … She wanted me to learn.

Midwifery students engage with the CoC experience from the very beginning of the midwifery degree. The CoC experience resulted in varied engagement of the student in routine clinical care but certainly afforded the students exposure to the complexities of professional practice.

1st year: And you get to see the birthing rather than just read it in a book and we don’t do much of that or we haven’t yet talked about what happens in labour and that sort of stuff. It’s very exciting and they’re all different.
There were clinicians who afforded them learning opportunities which involved clinical skills and practice beyond their level of competence. This resulted in ‘out of sync’ learning with the underlying curriculum but was a positive authentic learning opportunity for the student.

**Institutional axis**

The CoC experience is designed for midwifery students to be aligned with women, and as such they are not imbedded in the community of practice and everyday service provision. Furthermore, the CoC experience is intended to result in midwives who espouse continuity of care and a woman centred care philosophy as their ideal for future professional practice. Second and third year students challenged these concepts as being unrealistic of many current health service contexts.

2nd year: *But in the real world when we’re midwives, we’re not going to, unless we are working in continuity of care we’re not going to be able to establish that relationship with the woman anyway. So yeah I’ve kind of thought, well, what is it actually for?*

This negatively impacted on the authenticity of learning.

The creation of a win-win situation within health service requires students to be engaged longitudinally and become part of the community of practice. The CoC experience does not facilitate a sense of belonging to a community of practice as the students are always peripheral to routine care. Students expressed frustration about spending many hours sitting with women in waiting rooms for a routine consultation which they were often not engaged with.

3rd year: *I actually tried to go to appointments more often and I found they were an absolute waste of time. You spent a lot of time waiting to be seen and you actually didn’t learn anything.*

Students found negotiating the short term relationships, and the sheer number of CoC experiences required, time consuming and exhausting over the three years. As a result of this, the students became very strategic in their choice of women to recruit. They looked for women who had had previous births, a history of short labour and were near term in their pregnancy.

As students got to know the health care services and clinicians through the CoC and traditional block placements, along with their advancing knowledge and skills, their individual confidence and agency improved. As they progressed into third year and became more involved in clinical care for the women they were following, the clinicians recognised the student role and engaged them as a valuable team member, particularly in intrapartum care.

**Social Axis**

The CoC experience gives students an understanding of the health system and the service needs from the perspective of childbearing women. Being aligned with women and developing effective relationships with them, affords the students a unique view of midwifery practice which instills a strong philosophy of women centred care. This meets the communities’ desire for preparing a more holistic maternity service and aligns with the midwifery profession’ values. The concept of CoC is recognised by midwifery students as ideal but not reflective of current service provision.

1st year: *It reminds us what we’re supposed to be doing and provides a contrast with the shift work style of practice. It’s the only way that we can get an idea of what it might be like to work in midwifery group practice or independent practice.*

The CoC program therefore provides a unique learning opportunity for students to understand what CoC offers women. The CoC experience enables midwifery students to experience many and varied service providers and different models of care. This gives them the opportunity to see the full scope of how midwives can practice and allows them to reflect
on their own midwifery identity. Through the CoC experiences students also see the complexities of health services and how they interact and impact on outcomes.

1st year: You can sort of see how within the system a whole lot of—how one decision can lead to a whole lot of others.

This has the potential to develop a knowledgeable and critically reflective midwifery workforce that strives to improve maternity service.

DISCUSSION

Limitations of the study

This discussion paper has drawn on evidence from a study that explored the CoC experience from the perspectives of midwifery students and midwifery academic staff from one Australian university. It has not considered the perspective of midwifery clinicians or childbearing women (the latter has been presented by Rolls and McGuinnes 2007). Whilst all enrolled students at the time of the study were invited to participate in the study, the recruitment was low (14%) and therefore not representative of all students. Further, the way in which the CoC experience has been implemented at different universities in Australia varies and the findings of this study may not reflect the enactment and pedagogical issues of other universities.

Symbiosis and Continuity of Care program

This analysis has demonstrated that the CoC experience reviewed has components of symbiosis. This clinical learning model is appropriate to build professional values and develop agentic professionals. The strengths of the current program are the strong focus on relationships between midwifery students and women, and early clinical exposure to professional practice. Henderson et al (2006) argue that learning requires collaboration and partnership that occurs on a personal level in the context of a broader social and political environment in the clinical venue. The need for a sense of belongingness has also been highlighted (Levett-Jones and Lathlean 2008). In the CoC experience there is evidence of some development of a professional relationship between the midwifery students and the supervising clinicians which happens over time however it is evident that there is significant room for improvement. Furthermore, the participants in this study spoke of feelings of not belonging to the health care team; of feeling as if they were an outsider with no real role to play, as one said being an “appendage of the woman”. These findings concur with the published experiences of other Australian University (Seibold 2005; McKenna and Rolls 2007). The CoC may afford experiential learning opportunities, which, when appropriately supported, become significant authentic learning experiences. There is no doubt that the CoC experience is one that embeds midwifery student education in the real world experience of pregnancy and birth. However the development of real and meaningful relationships with the health care team is of vital importance for professional learning (Billett 2001).

Bournemouth University have a similar midwifery student clinical education model known as student caseloading (Fry et al. 2008; Lewis et al. 2008; Rawson et al. 2008). These authors highlight the importance of planning, communication and collaboration in their model. However there are some key differences between the caseload model in the United Kingdom and the CoC experience in Australia. First, caseloading does not start at the beginning of the pre-registration program, but waits 18 months until the student has developed a level of clinical competence to practice autonomously with indirect supervision. It is clear from our study that the early and continued exposure to midwifery practice offers great benefits to students in developing their own personal midwifery identity and philosophy. However, this UK caseload model makes students the primary care provider and in a key authentic learning opportunity in comparison to the Australian CoC model where the
student is often left as an observer. These differences warrant further research to assist development and improvements of the educational systems in both Australia and the UK. The time commitments, and personal and emotional costs of both models also appear significant and worthy of further research.

This study has highlighted some opportunities to improve the educational symbiosis within the CoC experience. Facilitation of more effective learning through building stronger relationships with clinicians will improve access to authentic supported learning and provision of formative feedback. This will enhance midwifery student learning. It will require the midwifery clinicians and academics working together to enact the midwifery curricula to ensure that students use their clinical reasoning and reflection skills to extend their knowledge and understanding. This improved relationship may then afford a greater mutual benefit in service provision and give the student a greater sense of belonging and value in the healthcare team.

CONCLUSION
The model of symbiotic clinical education is a model that can be used to guide clinical education development and evaluation, and focuses on the importance of relationship development for learning. This paper adds significantly to the midwifery literature on strengths and weaknesses of the mandated CoC experiences required in Australian midwifery education programs. Further, it commences dialogue about ways in which to improve this valuable pedagogical approach.

*The term Continuity of Care program replaced Follow Through Experience in 2009.*
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