Student midwives’ perception of peer learning during their clinical practice in an obstetric unit: A qualitative study

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ABSTRACT

Background: Evidence supports peer learning in clinical settings, but it has not been studied in obstetric units. In Sweden, obstetric units are a challenging learning area for student midwives because of the lack of attention to student needs and the stress of attaining the final number of 50 assisted births.

Objectives: To explore how student midwives experienced peer learning during clinical placement in an obstetric unit.
Design: Qualitative approach.
Settings: Three hospitals and obstetric units in Stockholm, Sweden.
Participants: Fifteen student midwives in a peer-learning model during clinical placement.

Results: The students shared skills, experience, and knowledge as equals and took responsibility for their peers’ learning while supporting women in labor and childbirth. Students shared ideas, thoughts, and knowledge and gained perspective while learning as peers on an equal level. Students used each other to work independently without much involvement from the preceptor. Feedback was welcomed as encouragement.

Conclusions: Peer learning had positive consequences as an educational model in the clinical context in obstetric units.

1. Introduction

Swedish midwifery education lasts eighteen months and is based on a three-year nursing program (bachelor’s degree). Student midwives spend half of their education in clinical settings and are required to assist at 50 births and to care for at least 100 women in labor. In Sweden, the midwifery profession includes student supervision, and the typical model of clinical training is based on traditional apprenticeship with interactions between one student and one midwife/preceptor (Barimani et al., 2020; Zwedberg et al., 2020). Swedish obstetric units are a challenging learning area for student midwives. These challenges have been identified as multiple preceptors, lack of attention to student needs, and the stress of attaining the final number of 50 assisted births (Zwedberg et al., 2020). Furthermore, the heavy workload of the midwives leaves little time to support and reflect with the students (Barimani et al., 2020). To address these challenges, new educational models for clinical practice need to be evaluated. Peer learning could be a step forward. The method has been found to positively influence the development of student clinical skills (Secomb, 2008). The focus of this study is peer learning in the context of student midwives in training in obstetric units.

2. Background

Peer learning is an educational model that emphasizes a student-activating approach; it puts student learning in focus and gives the preceptor a facilitating role. Central to this collaboration is that students practice giving each other feedback on the performance of tasks.
peer-learning model means specifically that two or more students prepare, solve, discuss, and reflect on structured tasks before seeking help from or discussing further with a preceptor (Boud et al., 1999; Boud, 2001). Boud defined peer learning as “students learning from and with each other in both formal and informal ways. The emphasis is on the learning process, including the emotional support that learners offer each other, as much as the learning task itself.” (Boud, 2001, p. 4) Boud’s definition described five peer-learning outcomes: working with others; critical enquiry and reflection; communication and articulation of knowledge, understanding and skills; managing learning and how to learn; and, assessing one’s self and peers (see Table 1, column 2, Interpretation of peer learning).

Most of the literature on peer learning in clinical placement regards nursing students and describes some of the crucial components that peer learning promotes: increased learning, increased security, and greater independence.

Peer learning can increase learning by building clinical skills and cognitive development (Secomb, 2008; Stone et al., 2013). It provides greater opportunity to develop skills by learning in interaction (Secomb, 2008; Stone et al., 2013), more problem-solving discussions (Stenberg and Carlson, 2015; Hellström-Hyson et al., 2012), and an improved learning process (Stenberg and Carlson, 2015). However, peer learning can also limit opportunities to practice hands-on skills (Stenberg and Carlson, 2015). Furthermore, peer learning can create a more secure learning environment by increasing feelings of self-confidence (Secomb, 2008; Stone et al., 2013), self-efficacy (Hellström-Hyson et al., 2012; Pålsson et al., 2017) and safety (Stenberg and Carlson, 2015), and reducing anxiety (Stenberg and Carlson, 2015; Stone et al., 2013). Finally, peer learning can lead to greater independence through better communication, and teamwork skills (Secomb, 2008; Stone et al., 2013).

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To our knowledge, there is no existing literature on the experiences of student midwives engaged in peer learning while in clinical placement at an obstetric unit. However, student midwives have expressed that reflection is essential to learning (Brumstad and Hjälmhult, 2014; Embo et al., 2015; Longworth, 2013). They have also expressed concerns about not getting support from their preceptor (Davies and Coldridge, 2013), about being ill-prepared for clinical practice, and about managing medical complications (Davies and Coldridge, 2015; Schytt and Waldenström, 2013).

To summarize, evidence supports peer learning in clinical settings, making it essential to study student midwives in peer learning. Therefore, the objective of this study was to explore how student midwives experienced peer learning during their clinical placement in an obstetric unit.

3. Methods

The design was qualitative, consisting of interviews followed by deductive content analysis.

3.1. Settings and participants

In this study, final-term student midwives from the same midwifery program participated in a peer-learning model during their clinical placement at three different hospitals and obstetric units in Stockholm, Sweden. In joint discussion between the university and those midwives managing the clinical placement we chose students who had completed 45 childbirths for this study of the peer-learning model. The clinical placement was managed in a way that paired those students. No method was used to decide who to pair with whom. The pairing was rather based on creating a practical schedule for the students. The pairing allowed both members of the pair to count the 5 childbirths they shared toward their totals. It required that they take turns being the student with more responsibility in managing the childbirth, and being the student that provided support to the parents. The two students shared the preceptor that is always recommended in clinical settings in higher education (Boud, 2001).

In Sweden, the registered midwife/preceptor has the ultimate responsibility for the care of birthing women when precepting. In this peer-learning model, the preceptor oversaw the process, and students reported back to the preceptor. Parents were informed of the study and gave their consent to have two students present during their labor and birth.

3.2. Data collection

All students were informed of the study and the peer learning model at school and were invited to participate. When students agreed to participate in peer learning, they were paired for clinical placement. They signed a consent form that included being interviewed afterwards. Students were required to experience peer learning during at least one childbirth.

The students were contacted first by text message and then by telephone. If they agreed to participate, an appointment was made for an interview by telephone or in person, depending on the student’s choice. Four students chose a personal interview to take place at their clinical placements, and four chose other locations. Seven chose to be interviewed by telephone.

In total, fifteen students were interviewed between December 19, 2018, and March 1, 2019. Student age varied from 27 to 47 years and all...
the students were female. The length of the interviews ranged between 13 and 71 min (with a mean of 41 min). The interviews were semi-structured and focused on the student’s experience of peer learning in relation to collaboration, reflection, role, responsibilities, communication, feedback, and the role of the preceptor. All the interviews were audiorecorded and transcribed verbatim, which yielded 119 pages of text.

3.3. Analysis

Preconceived concepts were used as a basis for categorization. Deductive content analysis was selected for its appropriateness when restesting existing concepts in other contexts (Elo and Kyngas, 2008). The preconceived concepts were adopted from Boud’s (2001) theoretical description of the five outcomes of peer learning: 1. Working with others; 2. Critical enquiry and reflection; 3. Communication and articulation of knowledge, understanding, and skills; 4. Managing learning and how to learn; and, 5. Self and peer assessment.

We authors independently read Boud’s (2001) five theoretical descriptions of peer learning before making our own descriptions of each concept. Then we reached a consensus on the interpretation of the five outcomes (see Table 1, column 2, for descriptions of each concept).

The analysis was carried out in several steps. First, each transcribed interview was read thoroughly. Second, meaning units were extracted to describe how the students experienced peer learning. Third, each meaning unit was assigned a code and transferred to the concepts of Boud (2001) (see Table 1, column 3, findings in relation to Boud, 2001). Finally, to ensure trustworthiness, we critiqued all steps of the process until consensus was reached.

3.4. Ethical considerations

Students received information about the study; confidentiality and voluntary participation were assured. Participants were informed that they could withdraw from the study without consequences. One of the authors was a lecturer at the university where the peer-learning model was introduced; however, this author was not involved in the data collection. The other authors had no relation to the students. The study was approved by the Stockholm regional ethical board (2017/1326-31/5).

4. Findings

The deductive analysis showed that the student midwives’ descriptions of peer learning were consistent with Boud’s (2001) theoretical descriptions of peer learning, and that they occurred in practice as shown in Table 1. Therefore, the findings are presented in the Boud (2001) model of peer learning.

4.1. Working with others

Working with others meant the development of collaborative skills; for example, the students split their duties and collaborated in planning the support of the women in childbirth. The division meant that one of the students supported the parents while the peer managed the childbirth. In situations where a quick decision was needed, the managing student made it.

When the cardiotocograph showed decelerations, I said, Let’s turn the mother around right away. It was not, Should we do this? but rather, Let’s do this! (12).

This managing student could distribute duties and delegate to the peer, and this was excellent practice in prioritizing. They made several assessments together and saw each other as equals who collaborated during the women’s labor and childbirth. They took responsibility for the other’s learning by giving the peer space to work as preferred. Sometimes that meant keeping oneself in the background, trying to facilitate at certain moments, or helping to clear up troublesome or difficult thoughts. It also meant letting the other take the primary role when the peer “needed to get more births.”

Because she needed to add births; we both had to count it but for her to feel a little more that, Yes, but it was my birth (7).

The students generally felt that they cooperated well. However, there was a risk that the managing student might “take over” or that one of the students felt superfluous. The students shared and harnessed each other’s experiences, knowledge, and skills by, for example, giving each other practical tips, learning from each other through observation, or performing steps in a way that was different from that learned from their preceptors.

You learned different things, you had different preceptors. I had tips that she didn’t, and she had tips for me (8).

4.2. Critical enquiry and reflection

Critical enquiry and reflection meant that the students got a new perspective on learning when working in pairs on an equal level. Seeing each other as equals, they felt they could discuss more freely and constructively than they could with their preceptors. Together, through critical enquiry and reflection, they determined what separated the different options and drew conclusions as to how to act.

The amniotic fluid had gone, and we had learned differently from our preceptors how long one should listen to the foetal heartbeat, so we kind of discussed what we had learned and what might be appropriate (8).

By having a common critical approach and the same theoretical education, the students were able to discuss how certain situations were managed in the obstetric units. They felt it was a strength that they shared the most up-to-date knowledge from their education.

Theoretically, you’ve got the most updated education; however, you do as the preceptor does. But when I’ve graduated, I will work more evidence-based (5).

They claimed that they understood their peer better than a preceptor could, because they were equal; for example, they expressed that it felt affirming to share experiences, that they were not alone in feeling insecure.

So somehow she was able to confirm my uncertainties and tell me how she felt about it as well. This was good to see, that you’re not alone (10).

Peer learning also allowed students to step back when they were not the most active peer and reflect on situations from an outside perspective. They then had the opportunity to reflect on what was happening in the birthing room, such as ways of communicating with the women.

4.3. Communication and articulation of knowledge, understanding, and skills

The students described communication and the articulation of knowledge, understanding, and skills as an ongoing process in which they continually checked the work of the other and put words to their thoughts and ideas. They continually evaluated their joint work and gave each other input and confirmation in their planning around the women, which took their work forward. They discussed specific situations in which they felt unsure.

...
Then it felt safe to ask her. If it had been something complicated, I would have asked the preceptor. But when it was about the opening grade, she gave me confirmation (11).

The students described an open and safe atmosphere between them. They did not have to feel stupid if they didn’t understand something or their knowledge was insufficient. The students thought it provided security to be able to consult a peer and that it could sometimes be more comfortable to ask their peer for confirmation than to consult their preceptor.

When you have a preceptor, it is maybe a bit more about being able to answer all the questions. With my peer, it became a more open dialogue, and then we came up with the right answer (7).

They also thought learning could be easier when a peer explained something than when a preceptor did, because as students, they were on the same level and “spoke the same language.”

Nice to hear the explanations from another student on the same level. Their explanations and pictures of it can sometimes give more than when preceptors explain it. The preceptor could be either on a too low or high level when explaining something. So, with your peer, you could understand more and get a clearer picture (4).

To put their knowledge into words and explain it to a peer confirmed what they had learned and helped them understand the theory they had learned in school.

Do you remember that lecture? For example, a picture of rectovaginal fascia, can we check it in the book? Yes, exactly. I have that picture. So, you could discuss the same way (14).

The students generally described being happy to get advice and help from their peer, whom they trusted and saw as competent. However, some students described difficulties, such as not feeling sure of the peer’s skills or feeling uncomfortable discussing in front of the women in the birthing room.

I was unsure of her skill regarding the foetal position, so instead of asking her, I asked the supervisor directly (2).

4.4. Managing learning and how to learn

Students were able to manage learning and how to learn together. They were especially able to identify gaps and the situations for which they did not have the authority to make decisions. If students used each other’s knowledge to fill the gaps, they felt they complemented and could help each other. For example, one student knew she had trouble feeling the foetus’s fontanel when she did vaginal examinations. Her peer had more experience and could guide her in that step. The students consulted each other when there was something they wondered about. This led to their working more independently without the involvement of the preceptor. They spent most of their time inside the birthing room with their peer and without the preceptor. They dared to take greater responsibility when they had the support of their peer.

Because it feels like you dare more … now it was our responsibility that this would be good … So, I thought it was great (12).

Managing learning included how to teach new things to their peer, which was a step in learning. It helped raise awareness of the skills they already had. They saw that they could trust themselves to make their own decisions.

You get to stand on your own in a completely different way. You still have the security of being two, but you are still independent. I think that was good (11).

It could facilitate the transition from student to midwife.

4.5. Self and peer assessment

The students described self and peer assessment as vital. They were in a vulnerable situation and needed all possible encouraging feedback. Most of the feedback they gave each other was incorporated as reminders, tips, and encouragement and felt natural.

That was good thinking, that was smart! God, I forgot, I was thinking about it. But we didn’t give any kind of formal assessment to each other (4).

If students gave feedback at the end of a shift, they could ask if they should have done anything differently and give each other encouragement. Students wanted constructive feedback above all. However, they also expressed that it could be challenging to provide constructive feedback as they were still students.

You don’t feel that you have the authority to really criticize another student, because we are still in the learning process (13).

When a situation was difficult or the outcome of a birth was not what a student wanted, the students gave each other encouragement and could talk about the situation afterwards. Students reflected on each other as equally competent, having learned the same things, and being on the same level. This was taken as confirmation in the final stages of their education. Reflecting on a peer also helped students see a peer’s progression in a particular area and thus see what they might need to develop further in themselves. This could be problematic, however, such as when students were not on the same level, and one felt the need to take the preceptor’s role and teach the other peer everything.

5. Discussion

We find Boud’s peer-learning concepts to be useful in the clinical context of the obstetric units. The five concepts from Boud’s (2001) theoretical description of peer learning provide the framework for the discussion.

5.1. Working with others

This study is the first study of peers in the birthing room. The findings show that students had a high level of equality and alternated between supporting the parents and managing the childbirth. Alternating allowed them to help each other reach the goal of 50 births. This is positive, because other studies showed that students are stressed to reach the 50-childbirth target (Lichurish and Seibold, 2013; Zwedberg et al., 2020). In this study, peer learning figured in the 5 final childbirths of a student’s education. In line with Boud (2001), it is vital to see peer learning as a complement to and not a substitute for other teaching. More studies are needed to establish how many births peers might manage and still reach the desired learning outcome. Like Pålsson et al. (2017), we found that students worked together and collaborated well. Our results also showed that the students worked together to plan the support of the women in childbirth. Working with others was seen as positive, but some students feared the peer might “take over” or that one of the students might feel superfluous. According to Stenberg and Carlson (2015), students should receive an introduction to peer learning to prevent problems between them.
5.2. Critical enquiry and reflection

Our findings show that critical enquiry and reflection give a new perspective to learning when working in pairs on an equal level. This may be because the pairs could discuss more freely and constructively than they could with their preceptors. Boud (2001) also observed that students can explore ideas more easily without the influence of authority figures. Our findings show that students could discuss how to manage certain situations in the obstetric units using what they learned theoretically. They felt it was a strength that they shared up-to-date knowledge from their education. These results are supported by the findings of Boud et al. (1999), that is, that peer learning helps students think more critically and prepares them better for lifelong learning than traditional tutoring does. Other studies have concluded that critical reflection can increase cognitive development and clinical skills (Secomb, 2008; Stone et al., 2013).

5.3. Communication and articulation of knowledge, understanding, and skills

Our findings show that communication and the articulation of knowledge, understanding, and skills took place in joint discussions. Students continually checked the work of each other, put words to their thoughts, and used each other to confirm planning. The learning process improved and took their work forward, a finding corroborated by others (Hellström-Hyson et al., 2012; Secomb, 2008; Stenberg and Carlson, 2015; Stone et al., 2013). Boud (2001) argued that the emphasis in peer learning should be on emotional support. Our findings show that the student felt more comfortable asking a peer than their preceptor for confirmation, and that an open and safe atmosphere had been established between students.

5.4. Managing learning and how to learn

Our findings show that peers identified gaps in knowledge, raised awareness of their skills, complemented each other, and were able to help each other as equals. Altogether this led to the greater independence found in other studies (Nygren and Carlson, 2017; Secomb, 2008; Stone et al., 2013). Students assumed greater responsibility in the birthing room. Our findings support Boud et al. (1999) that students learn from peers when they have to explain their ideas. Our findings also supported two studies’ findings that the peer-learning model saved time because the students were more independent and turned to each other rather than the preceptor to solve problems (Nygren and Carlson, 2017; Secomb, 2008). Future studies should determine if peer learning saves time in the context of obstetric units.

5.5. Self and peer assessment

Student midwives felt feedback and reflection were essential to learning, as found in other studies (Brunstad and Hjalmhult, 2014; Embo et al., 2015; Longworth, 2013). It is therefore not surprising that the students in our study wanted encouraging feedback above all from their peers. Students expressed difficulty giving each other criticism. Our findings show they felt they lacked the authority as students to give constructive feedback. Boud (2001) described the students using each other as mirrors; in our findings, students felt equal and competent and constructively reflected on mutual experience of having two students present.

All authors (SZ, MA, MB) have made substantial contributions to the conception and design. MA did the acquisition of data. SZ, MA, MB did the analysis and interpretation of data. MB and SZ have drafted the
article and reviewed the article critically for important intellectual content. Finally, all authors have approved the submitted version.

Declaration of competing interest

None declared

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