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Title Page

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Highlights

- Classrooms offer students a supportive setting in which to experiment with different SSMP approaches
- The experiential learning model offers a low resource approach to teaching
- The model has potential application in other countries and has been positively evaluated
Abstract

Background and Objective

The limited availability of high quality evidence related to second stage management of the perineum (SSMP) combined with a perceived shift in UK practice towards a 'hands off' the perineum/fetal head approach are likely to have impacted significantly on student midwives' understanding of SSMP. This paper presents a classroom based educational session using low fidelity simulation, which was designed in response to student feedback and aimed to improve confidence in this skill.

Design

Reflective Teaching practice, based on evaluation of SSMP teaching

Setting

An undergraduate midwifery programme based at an inner city university in London UK

Participants

Student Midwives

Findings

The education session based on Kolb's experiential approach to learning appeared to address gaps in the previous teaching which was identified by students. The Classroom setting offered students a supportive setting in which to experiment with different SSMP approaches with a view to personalising care and without compromising safety.

Conclusions and implications for practice

Although further longitudinal research is needed, the experiential model appears to offer a low resource approach to teaching SSMP and has potential application in other countries.
An experiential model of education introduced to improve the confidence of student midwives in undertaking second stage management of the perineum (SSMP)

Background

There is little high quality evidence to guide practice on second stage management of the perineum (SSMP). This, combined with a perceived shift in practice towards a ‘hands off’ approach during the second stage of labour, has impacted on student midwives’ understanding of SSMP, and presents an educational challenge.

The change in SSMP practice in the United Kingdom (UK) has been associated with the ‘Hands on or Hands Poised’ (‘HOOP’) randomised controlled trial (McCandlish et al 1998). The HOOP trial compared a ‘hands on’ approach (then usual practice) with a ‘hands poised’ approach, and found the ‘hands on’ approach was associated with a reduction in mild perineal pain at ten days. Perineal trauma was reported as a secondary outcome, and there was no overall difference in rates of trauma between the ‘hands on’ and ‘hands poised’ groups, although a lower episiotomy rate was noted in the ‘hands poised’ group (McCandlish et al 1998). UK midwives use both ‘hands on’ and hands poised’ approaches (Trochez et al 2011) The intervening years have seen a rise of obstetric anal sphincter injuries (OASI), giving rise to widespread concern about perineal trauma during birth (Trochez et al
2011), and a drive to understand better how and whether SSMP practices might reduce this.

Current UK guidance reflects the uncertainties within the available evidence, recommending that either a ‘hands on’ or a ‘hands poised’ approach may be used during normal birth (NICE 2014, pg 60). To date, there is little published evidence on how student midwives develop confidence in SSMP. Whilst evaluating this aspect of teaching, student midwives at a London university (n= 285) were asked whether they felt confident in SSMP and, if not, what would improve their confidence. Whilst 43% answered positively, 57% of students identified a need for additional teaching input. This paper describes a learning opportunity introduced to improve students’ understanding and confidence in undertaking SSMP, based on an experiential model that shaped the educational content and content delivery.

**Basis for experiential learning model**

Student evaluations highlighted the absence of SSMP approaches in taught clinical skills sessions and students reported that in clinical practice, mentors did not articulate their rationales for SSMP, resulting in confusion, stress and fear of getting it wrong, hindering learning (Finnerty & Pope 2005).
The students proposed learning strategies to enhance their learning which aligned naturally with Kolb’s experiential model of learning (Kolb 1984). Kolb’s model assumes that the student is not a blank slate and that their experiences can be used to build on, thus individualising learning (Hill 2017). Skilled clinical knowledge depends on the process of making adjustments to preconceived ideas and expectations by being exposed to a variety of situations (Cioffi & Markham 1996); the use of reflection to ‘make sense’ of the experience then results in ongoing, continuing learning and develops students’ capacity to cope with uncertainty.

**How the experiential model for SSMP was implemented**

Experiential learning has been described as ‘A sense making process involving significant experiences that, to varying degrees, act as the source of learning. These experiences actively immerse and reflectively engage the inner world of the learner, as a whole person’ (Beard and Wilson 2013, p.17).

Kolb proposes four stages of learning learning (highlighted in bold in Table 1) that are mutually supportive and result in ‘deep’ learning if all stages are experienced. Students identified that they experienced educational ‘gaps’ at each stage of Kolb’s model.
A session was created in response to these gaps and a variety of SSMP approaches are now demonstrated in the classroom, each accompanied by a discussion on the quality of underpinning evidence (Table 1. Concrete experience). Evidence exists for warm compresses on the perineum to reduce perineal trauma (Dahlen et al 2007) and this technique is demonstrated despite being seen infrequently by the students in practice.

The students recognised that greater partnership working with women had the potential to improve their confidence in preserving perineal integrity; however, they reported that in practice, SSMP was rarely adapted to the woman and her clinical situation as mentors often had a preferred approach that was used on every woman. Time was allocated in the session for generating ideas about how students can utilise the contact time with women (Table 1. Observe and Reflect). A detailed description and demonstration of antenatal perineal massage was presented to the students and they are invited to think about some of the challenges for women in undertaking perineal massage from 35 weeks (Beckman and Stock 2013). This gives the students the opportunity to think about the woman’s experience, to offer practical solutions and to consider the importance of providing clear instruction and rationales. According to the students, antenatal perineal massage is discussed
rarely and superficially, therefore this level of detail is appreciated. As Smith et al (2017) report, working in partnership with women during pregnancy and birth is integral to midwives’ expertise in preserving perineal integrity.

The session, presented to small teaching groups of twenty (normal cohort size is 95), encourages open discussions on clinical practice. The questions asked by the students during the sessions facilitate further reflection and generalisation (Table 1. Abstract Conceptualisation) and application of amended knowledge is then simulated using the models (Table 1. Active Experimentation). This also aids practical learning such as where to position oneself and place equipment which has been demonstrated to be a useful skill in other studies (Lendahls & Oscarsson 2016). The learning stages and strategies are shown in Table 1 however individual stages may take place in the clinical area.
### Table 1. Content delivery aligned with Kolb’s stages of learning.

<table>
<thead>
<tr>
<th>Kolb Stage</th>
<th>Session learning content</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Concrete Experience: Experience</strong></td>
<td></td>
</tr>
<tr>
<td>Classroom session</td>
<td>Demonstration of SSMP approaches (simulation, photos and video)</td>
</tr>
<tr>
<td></td>
<td>Strength of evidence and absence of evidence highlighted</td>
</tr>
<tr>
<td><strong>Observe and Reflect: Reflect</strong></td>
<td></td>
</tr>
<tr>
<td>Classroom session</td>
<td>Reflection and sharing of students’ experiences and observations of SSMP in clinical practice.</td>
</tr>
<tr>
<td><img src="image-url" alt="Image" /></td>
<td></td>
</tr>
<tr>
<td><strong>Abstract Conceptualisation: Generalise</strong></td>
<td></td>
</tr>
<tr>
<td>Classroom session</td>
<td>Students are supported in making sense of what has happened by consolidating theory and practice and reflection leading to a new theory.</td>
</tr>
<tr>
<td><img src="image-url" alt="Image" /></td>
<td>Students are asked to write learning</td>
</tr>
</tbody>
</table>
points from session and how they will use in clinical area.

**Active experimentation: Apply**

**Classroom session**

Support in application of the modified approach

Simulation with low fidelity models in different positions in small groups. This enables students to attempt SSMP approaches demonstrated in the classroom and shared by fellow students.

In the clinical area

Individual students have reported that they have had some success at introducing warm compresses on the perineum into own practice.
**How well does the model work?**

The students have reported that the experience of simulation and skills training reinforces the theory with practical knowledge (Lendahls and Oscarsson 2016) and this is consistent in the positive feedback received.

The safe, supportive and non-judgemental space away from the clinical placement area was considered valuable for learning. The exchange of experiences enables learners to identify resources in themselves to facilitate problem solving (White 2010). Practising SSMP in the classroom does not compromise women’s safety, and provided freedom to attempt a variety of approaches.

**Does the teaching model meet maternal health needs?**

Personalised care is central to current maternity policy in the United Kingdom (Maternity Review 2016) and closely connected to safety. Midwife-led continuity of care models have been shown to decrease the rates of episiotomy compared to other models of care (Sandall et al 2016) however continuity models are currently not widespread in the UK, and in the majority of cases, women have not previously met the midwife or midwives who care for them in labour (Redshaw and Heikkila 2010). There is a dearth of evidence in relation to women’s views on SSMP however the students’ identification of preparatory discussions with
women may provide the impetus for a more personalised approach to this aspect of care.

**Does this model develop midwives with appropriate skills and competencies?**

The application of Kolb’s model to SSMP education ensures that consideration and time is provided for students to develop their ‘theories’ relating to SSMP, enhancing understanding of rationales, the limitations of the evidence base, the wide range of SSMP approaches and the common principles of SSMP such as good communication with the woman and good visualisation of the perineum, and these help to consolidate theory and practice. Further research needs to be undertaken to consider how this session has impacted on the students’ practice, post-qualification.

**What is of benefit and what is missing?**

Simulation is helpful in ‘bringing alive’ the principles of SSMP and students do appear to be fully absorbed in the low fidelity experience as they talk to the model and make sounds to replicate a birthing situation. Resources that show SSMP approaches clearly are limited and students who respond well to visual learning have commented on the desire for more films.
**What are the threats and challenges**

The session is currently delivered in the second year of a three year programme, however student feedback suggests that they would like it in each year of the programme in recognition that additional learning opportunities may arise as experience in SSMP increases. This poses a significant challenge as there are competing priorities in an already crowded curriculum.

The learning environment is considered crucial to developing confidence. The safe, non-judgemental approach of the sessions has been contrasted with the experience of clinical placement, where the stressful working environment and the ‘blame’ culture, described by the students, is likely to impact on learning (Khajehei et al 2011). This limits the opportunity to apply adapted or modified knowledge consistent with the fourth stage of Kolb’s cycle.

**Conclusion**

The quality of decision making affects care quality (Jefford 2012), and should be based on the best available evidence (NMC 2015). This provides a challenge for student midwives and their educators as the best available evidence for SSMP is limited. The classroom setting can provide safety to simulate SSMP approaches away from the gaze of clinical assessors and offer opportunities to attempt different SSMP with
a view to individualising care to suit the woman and the clinical situation. The experiential model offers a low resource approach to teaching SSMP and has potential application in other countries; it is consistent with the constructivist learning models recommended within the *Global Standards for Midwifery Education* (International Confederation of Midwives 2013). Longitudinal research is needed to examine whether the experiential model described in this paper has the potential to improve students’ confidence in undertaking SSMP after qualification.

**Conflict of Interest:** None

**Acknowledgments:** None

**References**


