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**Does Enquiry Based Learning (EBL) impact on clinical practice? A qualitative exploration of midwifery graduates' perceptions**

**Abstract**

**Objective:** To elicit perceptions of Midwifery graduates regarding the impact of Enquiry Based Learning (EBL) on their clinical practice.

**Design:** A qualitative approach utilising semi-structured interviews and content analysis.

**Setting:** A Midwifery education provider in the Republic of Ireland.

**Participants:** Purposive sampling was employed to recruit fourteen midwifery graduates, from a total of twenty eight, from two cohorts who had successfully completed a Higher Diploma in Midwifery programme.

**Findings:** Findings centred on the theme 'Effect of EBL on clinical practice', with positive perceptions of EBL reported in relation to its connexion to midwifery practice.

**Conclusions:** Findings affirm the view that EBL augments linkage of theory to clinical practice in addition to linking clinical practice to theory. Consequently, competent practitioners are cultivated and an array of transferable skills developed, thus demonstrating the significant contribution of EBL in enriching clinical practice.

**Keywords:** 'Enquiry Based Learning', 'Midwifery Education', 'Theory-practice connexion', 'Midwifery graduates', 'Transferable skills', 'Problem based learning'.

## **Introduction and Background**

Enquiry Based Learning (EBL) evolved from Problem Based Learning (PBL), an educational model first introduced in McMaster University, Canada in the mid-1960s by Professor Howard Barrows. EBL reflects an educational approach which facilitates learning that arises through a structured process of enquiry within a supportive environment, designed to promote collaborative and active engagement with problems and issues (Academic Practice and Organisational Development, 2010). Brunt (2003) suggests the terms EBL and PBL are used interchangeably as they share a number of philosophical premises and practices. As the term 'enquiry', is more congruent with the philosophy of 'normality' associated with midwifery, EBL is the term adopted for this study.

## **EBL in Midwifery Education**

A 'theory practice gap' is frequently cited in midwifery literature as an area of ongoing concern for both clinicians and academics and it has been suggested that midwifery education requires rigorous efforts to link theory to practice. For this reason Shalofsky (2010) recommends that teaching and learning strategies, which develop students' knowledge and learning beliefs to promote appreciation of the complexity of practice, be encouraged, and advocates EBL as one such approach.

Whilst understanding evidence based practice, and that the context of practice is central to midwifery education, the lateral thinking engendered by EBL can facilitate students to move beyond these concepts to new levels of thinking, which challenges existing prejudices and suppositions (MacVane Phipps, 2010). This is of particular relevance as midwifery practice continues to change and evolve and therefore challenges educators to develop reflective, knowledgeable and critically thinking midwives.

The study setting offers an eighteen month Higher Diploma in Midwifery programme for Registered General Nurses wishing to pursue a career in midwifery as well as a four year 'Direct Entry' midwifery programme. In an attempt to address the 'theory practice gap' described above, the author was instrumental in developing and incorporating EBL into discrete modules of both

midwifery programmes since 2009. In so doing, the study setting was the first midwifery education provider in the Republic of Ireland to introduce and formally evaluate EBL, using a research based evaluation.

### **Format of EBL sessions**

Within the study setting, students worked in small groups of 5 with the midwifery lecturer assuming the role of facilitator. The researcher was one of five EBL facilitators the students were exposed to over the duration of the programme. Students were presented with 'triggers' based on real life scenarios as espoused by Matheson and Haas (2010). A Trigger is a clear, but open, starting point to EBL (Kahn and O'Rourke, 2004). Triggers can be presented in a variety of formats, including for example a case study, video clip, poem, image, an object. Designated timetabled slots were assigned to each 'trigger' over a 2-3 week period, the last of these providing students with the opportunity to present their acquired knowledge and skills to the whole class, often engaging in role play. The following section provides an overview of the methods used to undertake this study.

### **Aim**

The overall aim of the research was to elicit midwifery students' perceptions of EBL. This entailed three objectives: to elicit the effect of EBL on the experience of learning; its perceived effect on the quality of learning; and its effect on clinical practice. This paper reports on the latter objective.

### **Methods**

A qualitative theory-driven approach was used as the philosophical framework to underpin the study. Two cohorts who had successfully completed a Higher Diploma in Midwifery programme in March 2012 and September 2013 (n= 28) were invited to participate. Purposive sampling was utilised to recruit fourteen graduates who had at least six months post midwifery registration clinical experience. All participants had one third of theoretical modules facilitated through EBL throughout the programme.

Semi-structured individual interviews were used to elicit participant's perceptions of the impact of EBL on clinical practice and related transferable skills. In keeping with the theory driven approach, the interview schedule was based mainly on EBL theory with questions derived from the literature. The use of open questions with additional probes promoted in-depth responses. Written informed consent was obtained prior to the interviews.

The interviews lasted on average 45 minutes and were audio-recorded and transcribed verbatim. Full transcripts were returned to participants, thus improving credibility of the study. The transcripts were analysed using a content analysis framework described by Hsieh and Shannon (2005). The emergent themes and categories were reviewed independently by the researchers' supervisors. Ethical approval was granted from "X" and noted by the Research Ethics Committee at "X".

### **Findings**

Participants in the study were exclusively female with six aged between 20-29 years, seven between 30-40 years and one over 40 years. The time spent working as a midwife prior to interview ranged from 5-22 months.

Saturation was deemed to be reached after the fourteenth interview as no new themes were emerging.

### **Effect of EBL on clinical practice**

This paper reports on the theme 'Effect of EBL on clinical practice' and the three categories which emerged from it: *Linking theory to clinical practice, Linking clinical practice to theory and Transferable skills.*

#### ***Linking theory to clinical practice***

There was general consensus that participants perceived EBL as enhancing the relationship between theory and clinical practice thus aiding their preparation for clinical practice. They described EBL as a realistic form of learning and although the scenarios (triggers) were classroom based, participants were aware that similar ones would be encountered in clinical practice:

- **P10.07 "It's not real life as such because it's still in the classroom but you know you're going to encounter it...it's not something that's going to be foreign to you".**

Role play was frequently referred to as it was found to aid realism thereby providing better insight into clinical practice:

- **P09.05 "... doing the role play it's very real...so it gives you a bit more insight I think going into practice".**

Participants referred to how they utilised EBL principles for knowledge transfer in clinical practice. Rather than having abandoned EBL to a classroom setting, they articulated how they reverted to its principles in various clinical scenarios:

- **P03.04-05 "...I was constantly chasing my tail...and I felt frustrated that I wasn't doing the job I should be doing so I...thought how would I do this in EBL?, EBL would be a better way of transferring this knowledge, so I used it there".**

These are novel findings in relation to extant EBL literature.

#### ***Linking Clinical Practice to Theory***

Some participants referred to how EBL was effective in linking clinical practice to theory, an area not heretofore widely explored. They explained how they were able to bring learning from the clinical area back to the classroom setting and utilise it in EBL:

- **P13.17 "You were bringing something from the clinical area back in here [to the classroom] so not just from here out to the clinical area but it was working both ways".**

They also referred to how they enjoyed exchanging information and ideas regarding EBL with clinical midwives:

- **P07.12 “[Named midwife] wanted to see how it [trigger related to teenage pregnancy] was and she was interested then to see our perception of it and what we had found out...this is a great boost for us”.**

### ***Transferable Skills***

All participants in this study were asked regarding their perception of the impact of EBL on critical thinking, problem solving and decision making, transferable skills frequently attributed to EBL. There were several references to how EBL positively changed the way they think:

- **P13.09 “You’re going to analyse what you’re doing a lot more...you have to be critically thinking all the time...”**
- **P08.05 “... I felt I questioned things more in the hospital...rather than just taking it at face value...”**

It was stated that as a result of EBL, they are more inclined to consider other ways of problem solving:

- **P01.13 “...now you are inclined to think what is the best way to do it...there are other ways around it, there is always another way around something”.**

It was considered that EBL enabled more autonomy, authority and confidence in decision making and that this impacted positively on clinical practice:

- **P03.09 “...I felt that it [EBL] gave you more autonomy and more authority and the confidence...”**

In summary, the findings in relation to the theme ‘Effect of EBL on clinical practice’ highlighted three categories: *Linking theory to clinical practice*, *Linking clinical practice to theory* and *Transferable skills*. In order that EBL continues to promote the link between theory and practice, it is important that facilitators construct triggers which replicate real life and promote the use of realistic forms of expression such as role play which was so positively evaluated in this study. Findings in relation to how participants’ utilised EBL principles for knowledge transfer in clinical practice are novel in relation to extant EBL literature therefore empirical research is recommended to formally determine what EBL principles, if any, are used in various clinical settings and to evaluate their effectiveness. Students should continue to be encouraged to exchange information and ideas regarding EBL with clinical personnel. Chunta and Katrancha (2010) identify that EBL can be used as a teaching and learning strategy in almost any setting, including staff development, therefore there is potential for this positive engagement between students and clinical staff to be further explored and capitalised on. Participants considered that EBL enhances the development of transferable skills. Further evidence based evaluation is warranted using, for example, recognised critical thinking scales. Any

educational strategy, such as EBL, which is perceived to enhance problem solving and decision making skills merits consideration in professional educational programmes.

## Conclusion

This study presents evidence to demonstrate the positive effect of EBL on clinical practice. Findings affirm the view that EBL augments linkage of theory to clinical practice in addition to linking clinical practice to theory. Consequently, competent practitioners are cultivated and an array of transferable skills developed, thus demonstrating the significant contribution of EBL in enriching clinical practice. This subsequently has the potential to positively influence maternity care provision for women and their families. Consideration should thus be given to the implementation of EBL into a professional educationalist programme such as midwifery. Whilst challenges relating to the introduction of EBL are acknowledged (Long *et al*, 1999), any educational model such as EBL that is perceived to bridge the theory-clinical practice gap, warrants serious consideration by all key stakeholders.

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