

**Building Intrapartum Research Through Health - an interdisciplinary whole system approach to understanding and contextualising physiological labour and birth (BIRTH)**

**COST Action: IS1405**

**Report of the STSM “Caesarean section in primiparous women: Swedish clinicians’ perspectives of factors influencing decision-making process”**

**DATE OF STSM:** 1<sup>st</sup> September 2015 - 9<sup>th</sup> September 2015

**HOST:** Professor Ingegerd Hildingsson, Mid Sweden University, Sweden

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**Co-Investigators:** Dr Deirdre Daly and Professor Cecily Begley

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A note of thanks to the Head of the Departments of Sundsvall and Ostersund Hospital, for granting permission to conduct this research.

Special thanks to the midwives and obstetricians in the two study sites in Sweden for their hospitality and for taking part in this research so willingly and enthusiastically.

My sincere thanks and heartfelt gratitude to my supervisors and co-investigators, Professor Cecily Begley and Dr Deirdre Daly, for their motivation, constant encouragement and timely guidance and support for the successful completion of the STSM.

## **Background**

The motivation to apply for this STSM emerged from the work-to-date on my PhD study. My literature search revealed global concern about the rising rate of caesarean section (CS) among primiparous women. In Europe, rates vary from 17% in Sweden to 38% in Italy. Ireland's caesarean section rate was 29% in 2013, a 17.5% increase since 2004 and a 42% increase since 1999. This rate also masks variation in national rates, 35% in some hospitals. Exploring the multifactorial and complex reasons behind the rising trend in CS, and the declining rates in normal birth, has become an important goal for health professionals. The literature on midwives' and obstetricians' perspectives has identified fear of litigation, maternal request, shortage of midwives, lack of skills, an increase in repeat CS and different medical reasons such as breech birth, twins, premature babies, long labour and HIV as the major reasons for the rising CS rates, indicating that the factors responsible for CS are both clinical and non-clinical. Asking midwives and obstetricians about their perceptions is one way of exploring the factors that influence the decision to perform a CS.

There is a wide variation in the CS rates among different European countries. Sweden's CS rate of 17% is one of the lowest in Europe and is 12% lower than Ireland's national rate of 29%. In order to gain an understanding of Swedish clinicians' perceptions of the factors influencing the decision to perform a CS in primiparous women, I proposed to conduct a Short Term Scientific Mission (STSM) to visit two hospitals in Sweden.

## **Purpose of the STSM**

The purpose of this STSM was to explore obstetricians' and midwives' perspectives of the factors influencing decision-making for caesarean section (CS) in primiparous women in Sweden.

## **Objectives of the STSM**

1. To visit two Swedish maternity hospitals and explore the reasons for performing caesarean section births.
2. To explore the factors influencing the decision to perform a CS in primiparous women through focus group interviews with midwives and obstetricians in two Swedish hospitals with low CS rates.

## The STSM

Prior to conducting the STSM in Mid Sweden University, Sweden, a detailed action and activity plan was agreed with my PhD supervisors and my STSM host, Professor Ingegerd Hildingsson, two months in advance of the start date. This forward planning ensured successful completion of, and maximum outputs from, the STSM.

### Preparatory work

The preparatory work included:

- i. Gaining agreement from Professor Ingegerd Hildingsson, my host, on the detailed plan for my STSM. This included obtaining consent from Dr Katrina Tunon, Head of Department of Obstetrics and Gynaecology, Ostersund Hospital and Dr Marju Dahmoun, Head of Department of Obstetrics and Gynaecology, Sundsvall Hospital. In addition, Professor Hildingsson arranged for me to organise the details and conduct of the research, focus group interviews, with two PhD students, one in each study site.
- ii. Developing the study information, including preparing an information leaflet, consent form and focus group interview guide.
- iii. Gaining Research Ethics Committee approval

Research Ethics Committee approval from the participating site hospitals in Sweden was not required. However, as a PhD student in Trinity College Dublin, and in order to publish findings from this research, REC approval was required.

An application for REC approval for the conduct of the study was submitted to the Research Ethics Committee of School of Nursing and Midwifery, Trinity College Dublin in May 2015. The process involved communicating with the Central ethical Review Board and Data Protection Authority in Sweden seeking confirmation of Sweden's legislative processes governing the conduct of research with clinicians. REC approval was obtained on 29<sup>th</sup> July 2015.

- iv. Conducting mock-interviews with my supervisors in order to test and refine my interview skills, style of questioning, interview guide and equipment.
- v. Preparation of presentation on *'Midwifery education and midwifery practice in Ireland'*. As part of the preparatory phase, Professor Hildingsson suggested I present a presentation on midwifery education and practice in Ireland to midwives, midwifery students and the research group at the university.

## The research

Table one presents the day-to-day actions and activities during the STSM. The presentation on day 1 was delivered to 15 students.

**Table 1 Summary of work carried out during STSM**

Date		Activity
Tuesday 1 <sup>st</sup> September	PM	Preparation of presentation for student midwives in Mid Sweden University on the topic ' <i>Midwifery education and midwifery practice in Ireland</i> '.
Wednesday 2 <sup>nd</sup> September	AM	Meeting with Midwifery Colleagues and researchers in Mid Sweden University with my host, Professor Hildingsson.
	PM	Presentation for Student midwives on the topic 'Becoming and being a midwife in Ireland'. Attended a presentation by Professor Hildingsson about 'Mid Sweden University: Midwifery education and practice in Sweden' and 'Fear of child birth from a Swedish perspective'.
Thursday 3 <sup>rd</sup> September	AM	Visit to Sundsvall Hospital with Professor Hildingsson and Ms Birgitta Larson, Midwife and Doctoral Student to observe practices in labour ward and maternity unit.
	PM	Scheduled focus group interviews with midwives in Sundsvall Hospital.
Friday 4 <sup>th</sup> September	AM	Scheduled focus group interviews with obstetricians in Sundsvall Hospital.
	PM	Transfer of audio recordings of focus group interviews onto laptop and commencement of transcription. Preparation of report of visit and activities carried out at Sundsvall Hospital.
Saturday 5 <sup>th</sup> September		Day tour of Sundsvall
Sunday 6 <sup>th</sup> Sunday	AM	Travelled to Ostersund. Transcribing the audio recording of the focus group interviews.
	PM	Tour of Ostersund
Monday 7 <sup>th</sup> September	AM	Meeting with Midwifery Colleagues and researchers in Ostersund Hospital with Ms Lena Back, Midwife and Doctoral Student. Attendance at the Research Seminar for Doctoral Students at Mid Sweden University, Ostersund.
	PM	Presentation for midwives in Ostersund Hospital on the topic 'Becoming and being a midwife in Ireland'.
Tuesday 8 <sup>th</sup> September	AM	Transcribing the audio recordings of focus group interviews.
	PM	Scheduled focus group interviews with midwives and obstetricians in Ostersund Hospital.
Wednesday 9 <sup>th</sup> September	AM	Transfer of audio recordings of focus group interviews onto laptop and commencement of transcription of audio recordings of focus group interviews with clinicians from Ostersund Hospital. Preparation of report of visit and activities carried out at Ostersund Hospital

## Methods

During the preparatory phase, Professor Hildingsson identified two gatekeepers in the two selected study sites in Sweden: Ms Lena Back (midwife and Doctoral student, Ostersund Hospital) and Ms Birgitta Larsson (midwife and Doctoral student, Sundsvall Hospital).

All the study information was sent to the gate-keepers in advance, and one to two weeks before the STSM, the gate-keepers sent the study information leaflets to the clinicians (midwives and obstetricians) in the two selected study sites.

### The focus group interviews

The aim of the focus group interviews was to explore the Swedish clinicians' perspectives of factors influencing decision making process for CS. Four focus group interviews were conducted, one with midwives and one with obstetricians in each site.

Written consent was obtained from each clinician prior to the interview and the interviews lasted between 30 to 35 minutes.

Table 2 Clinicians' participation in focus group in each site

Hospital	Midwives	Obstetricians
Sundsvall hospital	6	2
Ostersund hospital	5	3
Total	11	5

### Analysis

Data from the interviews will be analysed using NVivo software package. Analysis has been commenced by coding each transcript, identifying and grouping codes into categories and identifying themes from these categories.

Statistical advice and support, and advice on the analysis of qualitative component, is available through the School of Nursing and Midwifery's statistical support service and from researchers with methodological expertise in the School of Nursing and Midwifery, Trinity College Dublin.

Confidentiality and anonymity will be ensured by issuing an ID number to each midwife and obstetrician taking part in focus group interviews. The audio recordings will be transcribed verbatim and clinicians' names will be replaced with the participant's ID number.

### Preliminary findings

The audio recordings of the focus group interviews have been transcribed. Participants' names were removed from the transcription and a study identification number assigned. Data analysis has commenced.

Preliminary analysis revealed the emergence of two key over-arching themes:

- 1) The factors that influence the decision making for CS in Sweden.

Participants regarded caesarean section as a procedure that should be performed only when absolutely necessary, and stated that this was the prevailing perspective of midwives and obstetricians in Sweden generally. Although women's fear of childbirth, irrespective of parity, has some influence on the decision-making process, it was not considered to be one of the major influencing factors.

- 2) The factors that have played a significant role in maintaining a low rate of CS in Sweden compared to other European countries.

Interestingly, some of the common factors that emerged from all four focus groups were the focus on normality; promoting normal birth; multidisciplinary team collaboration and mutual respect of each profession's strengths; women-centred care and counselling groups for women who present with fear of childbirth and retrospective analysis of cases with unexpected outcomes to improve future practice.

### **The factors that influence the decision making for CS in Sweden**

The factors that influence the decision to perform CS were grouped into two categories:

➤ Clinical factors

These included fetal distress, failure to progress in labour, failed induction and antepartum haemorrhage

➤ Non-clinical factors

The main non-clinical factor identified was women's fear of childbirth.

### **The factors that have played a significant role in maintaining a low rate of CS in Sweden compared to other European countries**

The factors that have played a significant role in maintaining a low rate of CS in Sweden compared to other European countries were:

- Hospital policy to promote normal birth
- Midwifery-led care
- One-to-one support to women in labour
- Counselling services by midwives and obstetricians for women with fear of childbirth
- No fear of legal pressure i.e. litigation
- Regular team meetings and discussions to analyse cases with unexpected outcomes with an aim to improve future practice.



- A review of individual cases of women with breech presentations to promote vaginal breech birth.

### **Summary and conclusion:**

Sweden is one of the countries with a low rate of CS (17%) in Europe. My PhD project on caesarean section forms one strand of the MAMMI (Maternal health And Maternal Morbidity in Ireland) study (<http://www.mammi.ie/>), a multi-centre multi-strand longitudinal cohort study with 2600 primiparous women. My research aims to explore the decision-making process for CS and outcomes for primiparous women. The findings from these interviews will be synthesised with the findings from interviews conducted with clinicians in Ireland, a country with high CS rates, and help identify similarities and differences between the factors influencing the decision to perform a CS in primiparous women. In particular, findings from the interviews will help identify organizational, cultural, clinicians' and other characteristics that influence the decision to perform a CS.

The long term aim is to identify factors that may help clinicians modify practices that will help reduce the number of unnecessary CS among primiparous women. This would, ultimately, help reduce the number of repeat CSs in future births and optimise normal birth outcomes.

### **Key learning points**

*Knowledge of other countries' REC procedures*

### **Future collaborations**

Potential future collaborations are numerous. Firstly, this STSM has opened a channel for future research collaboration between to look into practices in decision-making for CS in primiparous as well as multiparous women in Sweden and Ireland. This will open an opportunity for future multi-national studies with the support of Professor Hildingsson and her widely extended and established research network.

This STSM has allowed me to learn from experts in the field and establish important cross-national links.

It is anticipated that TCD will host a reciprocal study visit for one or some of professor Hildingsson's students should they be successful in gaining funding.

### **Anticipated publications and presentations**

- The findings of this study will be submitted to a peer reviewed journal for publication. The paper will present midwives' and obstetricians' perspectives on the decision-making process for CS in primiparous women in Sweden.
- The findings of this study will be presented at the MAMMI (Maternal health And Maternal Morbidity in Ireland) study team meeting within three months of completion of the STSM.
- An abstract of this research will be submitted for presentation at forthcoming international conference.

## **Confirmation by the Host Institution of the successful execution of the STSM**

It has been a great pleasure hosting Ms Sunita Panda on her visit in Sweden. The predefined schedule was mainly followed. However, one of the obstetricians who was planned to be part of the interview went sick which limited the numbers of available doctors to interview. In such small hospitals in Sweden, we don't have that many obstetricians so there is a limited choice, but I know that the doctors, as well as the midwives, were happy to share their experiences and tried to reschedule their work in order to participate.

Sunita Panda also met with the midwifery students and presented on the topic "Midwifery education and midwifery practice in Ireland". It is of great importance to Mid Sweden University (and other universities as well) to hear about midwifery in other countries, and to share opinions about midwifery education. Currently there is some ongoing planning in Sweden for a direct entry midwifery program and it was interesting to learn from Sunita's presentation. We hope for further possibilities to discuss student and teacher exchange with Ireland.

I involved two of my doctoral students to take certain responsibilities for planning the interviews. They are both experienced midwives and work on the labour wards at the two hospitals. Engaging staff with local knowledge of whom to approach facilitated the interview sessions.

It was also valuable to discuss research questions with Sunita, and me and my colleagues would like to support her work and build research collaboration. It is important for my own doctoral students to engage in international collaboration and the STSM scholarship and the contact they made with Sunita could strengthen further networking.

The social activities, e.g. dinner in a restaurant, sight-seeing of Sundsvall city and surroundings (with Dr Annika Karlström) and tour of Östersund with Lean Back, Midwife and Doctoral student, was all appreciated by Sunita. All travel and accommodations seem to have suited Sunita.

From the Swedish perspective we are grateful to have had the opportunity to meet with Sunita and we are looking forward to visit her and her supervisors in Dublin in near future.



Ingegerd Hildingsson, Professor

Mid Sweden University

Sundsvall, Sweden

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