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 Short Term Scientific Mission (STSM)

‘A detailed exploration of the organisation of home birth services in The Netherlands, towards knowledge transition and development of home birth services in Ireland’.

Investigator: Dr Maria Healy
Queen’s University Belfast, School of Nursing and Midwifery, Belfast

Date of STSM: 5th September – 9th September 2016

HOST Site: VU Medical Centre Amsterdam, University of Amsterdam, Amsterdam (NL)

Host Person in Charge: Dr Corine Verhoeven
**Table of Contents**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background &amp; Propose of STSM</td>
<td>2</td>
</tr>
<tr>
<td>Aims &amp; Objectives</td>
<td>3</td>
</tr>
<tr>
<td>Description of the activities performed during STSM</td>
<td>4</td>
</tr>
<tr>
<td>Findings of the STSM</td>
<td>6</td>
</tr>
<tr>
<td>Conclusion &amp; Future collaboration</td>
<td>9</td>
</tr>
<tr>
<td>Confirmation from Host of successful execution of the STSM</td>
<td>10</td>
</tr>
<tr>
<td>References</td>
<td>11</td>
</tr>
<tr>
<td>Photo gallery</td>
<td>13</td>
</tr>
</tbody>
</table>
Background

The place of where a woman gives birth is a contributory factor in both maternal and infant outcomes. For both nulliparous and multiparous women, a planned home birth leads to fewer interventions than for those birthing in an obstetric hospital, these include: amniotomy, augmentation of labour, instrumental vaginal birth and opiate or regional analgesia (Hutton et al. 2016; Halfdensdottir et al. 2015; Blix et al. 2012, Brocklehurst et al. 2011; Wax et al. 2010; Hollowell et al. 2011). A planned home birth is a safe option for both low risk nulliparous and multiparous healthy women with clinical outcomes equal to, if not better than those who plan birth in other settings including: alongside Midwife- led unit (MLU), free standing MLU or an obstetric unit (deJonge et al., 2015; Brocklehurst et al., 2011 and Hollowell et al., 2011). Caution relating to outcomes following a planned home birth for babies from nulliparous women has been highlighted. The NICE Intrapartum care guideline (CG190, 2014) subsequent to Brocklehurst et al. (2011) research, recommends that low-risk nulliparous women should be advised if they plan birth at home that there is a 'small increase in the risk of an adverse outcome for the baby' (p.6). Findings from other cohort home birth studies however, have identified perinatal outcomes from home birth as low and not significantly different for babies of nulliparous women (Offerhaus et al. 2012, Van der Kooy et al. 2011). The Netherlands research outcomes suggest that this may be related to the continued, much higher rates of home births in The Netherlands than the UK. Thereby, the Dutch midwives’ experiences of caring for women giving birth at home may have an influence on the findings, as they may be more accustomed to dealing with complications as they arise.

NICE (2014) concludes that all women with straightforward pregnancies should have a choice to plan birth in any of the four birth settings, and that all women should receive up to date clinical outcome data from each setting to help inform their decision.

Midwife-led care in Northern Ireland has developed significantly in recent years with the development of eight MLUs; five, which are adjacent to obstetric-led units and three, which are freestanding. This development is strongly supported by the Department of Health, Social Services and Public Safety Maternity Care Strategy (DHSSPS, 2012) and the recently published ‘Guideline for the admission to midwife-led units in Northern Ireland & Northern Ireland Normal Labour and Birth Care Pathway’ GAIN (2016). As the Chair, Co-project led and Co-author of the GAIN (2016) guideline, I was aware of the expressed service user and service provider need, to develop a guideline for women and maternity care professionals on planning a home birth. The provision of home birth services in Northern Ireland is supported in policy
However, less than 1% of all births occur at home. In contrast, the rate of planned home births in The Netherlands is much higher, with the most recent statistics reported as 13.4% in 2014 (www.statline.nl). It was therefore important to undertake this STSM to gain knowledge and understanding of why home birth is the norm in The Netherlands for many women and to explore the organisation of home birth service provision.

Aim of STSM
To review in detail the organisation and provision of home birth services in The Netherlands towards the transition of experiential and evidenced-based knowledge for the development and sustainment of home birth services in Northern Ireland.

Objectives of STSM
- To examine in depth the relevant maternity/home birth care policy documents, evidenced-based care guidelines and home birth care documentation including audits and hand held maternity care records.
- To engage with key maternity care stakeholders including: home birth service users and women’s groups (if possible), midwives in particular who facilitate home births, Heads of Midwifery, midwife lecturers, obstetricians and general practitioners.
- To identify aspects of midwifery home birth care and service provision that work well and to note the challenges which require development.
- To explore the maternity interdisciplinary professional collaboration involved in the provision of the Dutch home birth midwifery service.
Description of activities performed during STSM

Day 1: 5th September 2016

Arrived at Amsterdam airport Schipol late afternoon and transferred to the hotel. I became familiar with the public transport systems and general locations later that evening.

Day 2: 6th September 2016

Began with a meeting with Dr Corine Verhoeven, Senior Lecturer (Department of Midwifery Science, VU Medical Centre (VUMC), University of Amsterdam) during which we confirmed the schedule for my STSM and discussed at length her role at the university as midwifery researcher and as a practicing midwife. I was introduced to her colleagues, in particular Assistant Professor Ank de Jonge, Head of the Department of Midwifery Science and active senior midwife researcher, who also works as a midwife facilitating home birth.

In the afternoon I travelled for 1.20 hours to Utrecht by train and bus to visit Ms Franka Cadée, Policy Advisor in International Affairs at the Royal Dutch Association of Midwives (KNOV). The location was Domus Medica, Mercatorlaan 1200, 3528 BL Utrecht. During our meeting Ms Cadée gave a detailed presentation of the role of KNOV, the organisation of midwifery practice, midwifery education and the registration and continuing education requirement for midwives in the Netherlands.

Day 3: 7th September 2016

The morning commenced by travelling to Vlaardingenlaan 1, approx. 11.5 miles from the centre of Amsterdam, where I visited Dr Trudy Kloomp (Lecturer) at the Academy of Midwifery Amsterdam and Groningen (AVAG). I was given a guided tour of the recently renovated, and interior designed student midwife education facility. The facility and resources are student friendly and extremely conducive to learning, with the positive colour scheme and different forms of art displayed (see picture gallery). This is one of three, facilities in the Netherlands were midwifery education programmes can be accessed, the others are: Midwifery Academy Rotterdam and Midwifery Academy Maastricht.

I met with a number of students and we discussed their experience as a student midwife. I also met two other midwifery lecturers and discussed the details of the education curriculum and the strategic developments for midwifery education in The Netherlands, including; the education input students receive relating to home birth and the future proposed transition of midwifery education into third level universities. Currently midwifery students undertake a four-year direct entry programme at a Bachelor of Applied Sciences level, which is not affiliated with the university.
In the afternoon I met, midwife Caroline Grootes who brought me to the midwifery group practice facility ‘Verloskundigenpraktijk Vondelpark’ where she is based (part-time) with her colleagues: Ms Constanze Erwich, Ms Aukje Gottenbos and Dr Ank de Jonge (part-time. The private practice was founded in 2003, is registered with the Royal Dutch Organisation of Midwives (KNOV) and all the midwives are registered in the KNOV quality register for midwives. The practice facilitates approx. 180 women annually who book and plan to give birth at home, within a birth centre or at a maternity hospital (where the midwives can also provide care). Women self-refer themselves to the practice, via word of mouth from other women or maternity health care professionals, through their website or social media. The surroundings of the Verloskundigenpraktijk practice are extremely comfortable and pleasant to visit with fresh flowers and colourful murals (see picture gallery)

I accompanied Caroline Grootes while she undertook her midwifery practice and visited (with consent from the woman and her partner) a primigravida in her home Day 1 post birth, I was driven to the OLVG Hospital in Amsterdam and had a guided tour of the alongside midwife-led unit and the maternity unit. We also went to see a private ultrasound centre ‘Echo Amsterdam’ where women can go for their 20 week antenatal scan and external cephalic version (ECV), if required later in pregnancy. Caroline has advanced practice skills to undertake ECV. In addition, I visited the renowned ‘Geboortecentrum Amsterdam’ a birth centre, which offers a range of services for pregnant women and new parents on one street, ‘De Genestet Straat’. The services include: midwifery and obstetric maternity care, antenatal clinic, antenatal classes, lactation consultancy, complementary therapies, a shop to purchase all mother and baby products and ‘The Birth Hotel’ (See picture gallery below). This free-standing birthing unit was originally an Amsterdam house which was renovated and officially opened as ‘The Birth Hotel’ in 2011. It facilitates women who choose to give birth there with a midwife from the Geboortecentrum practice or another midwifery group practice. It is the midwife who takes full medical responsibility for the women, not the owners of the Hotel. Women in the Birth Hotel can have a water birth; equipment is available to promote normal birth (e.g. birth stool, birthing ball) and Entonox as an additional options for pain relief. The birth partner can stay for the duration, as there is a king-size double bed and the couple can choose from a menu for their refreshments. Some women may use this facility as an alternative to a home birth if their home is not suitable, as many homes in Amsterdam are apartments with no emergency exits, if required.

Later in the evening I returned to the Verloskundigenpraktijk Vondelpark group practice with Caroline. I met all her colleagues and we discussed at length their midwifery practice, policies and procedures including the criteria consulted for planning a home birth and the ‘Obstetric Indication List’ for referring women to obstetrician-led care, for example hypertension, induction of labour and post term gestation.
Day 4: 8th September 2016

From early morning until late afternoon, I met Dr Corine Verhoeven, at the Department of Midwifery Science, VU University Medical Centre, University of Amsterdam where we discussed research findings from national cohort studies in the Netherlands on home birth and midwife-led care. In September 2016, for the first time a MSc in midwifery is being offered by the VU Medical Centre, University of Amsterdam and Dr Corine Verhoeven co-ordinates this programme.

In addition, we discussed in detail our future research collaboration relating to the aims of WG2, COST Action IS1405. During our meeting we developed an outline of a research proposal around the subject area of midwifery care during birth.

Day 5: 9th September 2016

I travelled home from Amsterdam to Ireland getting the 12.30pm flight.

Findings of the STSM

This STSM uncovered a number of interesting findings relating to the organisation of the Dutch maternity care system and the provision of home birth services.

According to the Royal Dutch organisation of midwives (KNOV) there are approximately 3000 Independent midwives, 360 hospital midwives and 900 obstetricians practicing in the Netherlands, with the birth rate of 165,000 in 2015 (www.statline.nl). The predominant model of maternity care is midwife-led, with 85% of women starting pregnancy with a midwife/group of midwives, as their lead maternity care professional(s). Some of these women may require input or transfer to obstetric-led care as their pregnancy progresses (Stichting Perinatale Registratie Nederland, 2013). Of all women who give birth in the Netherlands 51% commence labour with the midwife (Stichting Perinatale Registratie Nederland, 2013) and can choose to plan their birth at home, in a birthing centre or hospital. Despite many women growing up to believe that giving birth at home is the norm, the percentage of home births in the Netherlands over recent years has decreased from over 60% in 1970 to the most recent statistic, of 13.4% in 2014 (see figure No. 1)
A number of reasons have been cited for the decrease in home births including: obstetric opposition, media reports which have raised questions on the safety of home birth and media advertising showing a picture of a newborn baby being transferred to his/her mother following the birth, with the caption ‘Don’t try this at home!’ (Valk, 2011). Some women in the Netherlands choices’ of birth place and lead maternity carer has become influenced by these reports, with their sense of safety perhaps being affected. Some women prefer access to all forms of pain relieve available in the hospital or if a woman has attended the obstetrician for infertility, she may remain in his/her care. A series of research publications by de Jonge et al.’s (2015, 2013, 2009) on cohort data of childbirth statistics in the Netherlands has highlighted nevertheless, how a planned home birth has no increased risk of adverse perinatal or maternal outcomes compared to planned hospital births.

When planning a home birth, the midwife will assess the environment in addition to the assessment of the women and her fetus. In the unusual event of requiring an emergency transfer to hospital, because of the geographical environment an ambulance can transfer to the hospital within a relative short time period of 40 minutes. The fire brigade may also have to be called to assist with the transfer, if the woman lives in a second and third floor apartments with steep staircases and limited emergency exists.

As part of the antenatal screening assessment a new method was introduced three/four years ago across the Netherlands to identify the fetus rhesus factor, in mothers whose blood is rhesus negative. This test is taken via a blood sample at booking and the fetal rhesus factor is identified by a technical laboratory test.
Identification of the fetus rhesus factor prevents unnecessary administration of Anti-D to mothers whose infant is rhesus negative.

An excellent resource and asset to the Dutch home birth service is the ‘Kraamzorg’ or ‘Kraamhulp’. She/he is a maternity health carer who assists the midwife during the home birth, helps the mother initiate and establish breastfeeding, and crucially following the birth spends 24-80 hours providing practical help to the mother, baby and family providing hot meals and essential housework.

The Royal Dutch organisation of midwives, KNOV is well established in the Netherlands. It originated in 1975 from the merging of several Dutch midwifery organisations the oldest of which originated in 1898. KNOV is engaged in several activities including: developing policy, strengthening the position of midwives and midwifery, improving quality of midwifery care, developing midwifery care guidelines in collaboration with maternity care stakeholders, regulation of midwives, publishing a midwifery journal and hosting an independent complaints commission for clients of midwives. The independent complaints commission helps to address issues by: examining the validity of the complaint, dealing with the complaint independently, acting as a mediator, ensures confidentiality and makes recommendations to the midwives for appropriate action as required.

An independent midwife receive €1,200 approx. per individual woman for all her home birth care. Individuals in the Netherlands pay health insurance and the majority of payments made to midwives come directly from the health insurance. However the insurance agencies are particular in what they will pay out for, e.g., if a women decides to call an ambulance for an unnecessary event, the woman will receive an invoice or if a woman chooses to gave birth at the hospital or at the birthing centre the cost will be approx. €400.00.

Individual midwives pay a membership to KNOV of €600-€700 per annum. Indemnity insurance for midwives can also be accessed via KNOV and costs approx. €350 annually. In addition, to health insurance individuals pay a tax (AWBZ) towards a ‘General law special illness’ scheme, which provides needed monies to individuals with chronic illness such as cerebral palsy. Having this tax pays for appropriate care of the individual and prevents a competitive legal culture were lawyer fees of individual cases are unnecessarily high.

Individual midwives pay a membership to KNOV of €600-€700 per annum. Indemnity insurance for midwives can also be accessed via KNOV and costs approx. €350 annually. In addition, to health insurance individuals pay a tax (AWBZ) towards a ‘General law special illness’ scheme, which provides needed monies to individuals with chronic illness such as cerebral palsy. Having this tax pays for appropriate care of the individual and prevents a competitive legal culture were lawyer fees of individual cases are unnecessarily high.
KNOV is also a member of the ‘Meshwork for Mother Care’, an international twinning project between midwives across the world. Midwives in the Netherlands are twinned with midwives in Sierra Leone and in Morocco.

In relation to the challenge of decreasing home birth rates, several midwives practices’ across the Netherlands have recently collaborated in the form of an organisation known as Eerstelijns Verloskundigen Amsterdam & Amstelland (EVAA). The aim of this legal organisation is to continue the national provision of home birth services by collaborative development of midwifery practice, policy, research and continued education of midwives.

A national database known as ‘The Netherlands Perinatal Registry (PRN foundation) was set up by four professional organisations that provide maternity care:

- KNOV (Royal Organisation of Midwives in the Netherlands)
- LHV (National Organisation of General Practitioners)
- NVOG (Dutch Association of Obstetrics & Gynaecology) and
- NvK (Paediatric Association of the Netherlands)

All maternity care professionals are required to upload data relating to their professional practice onto the perinatal registry e.g. detailed data from individual births such as perineal trauma, method of infant feeding etc. The aim is to have a national data-base to improve the quality of health care by giving insight into the perinatal care process and outcomes.

**Conclusion,** this STSM to The Netherlands has been invaluable in relation to gaining knowledge of the Dutch maternity care system and provision of home birth care. This knowledge will enhance the development of the proposed regional evidenced-based guideline for planning birth at home in Northern Ireland. An application for funding has already been forwarded to the RIQA’s, GAIN (Guideline Audit and Implementation Network) in early October 2016.

**Future collaboration with host institute**

Future collaborative research is planned relating to midwifery care during birth, as mentioned in the details of the day 4 activity above. This initial proposal was brought to the COST Action IS1405 meeting in Sofia, Bulgaria 19-21st September 2016 and was positively received. A schedule of planned work has been drafted and we plan to explore the possibility of applying for funding early 2017.
It is also proposed that a member of the host institute applies for a STSM to visit Northern Ireland to examine maternity care provision there, in particular midwife-led services.

Future publication

A publication plan will be drafted further to initiation of the proposed research/collaboration above.

Confirmation by the host institute of the successful execution of the STSM

I hereby confirm that the activities and outputs described above took place. Maria was very dedicated and enthusiastic about our midwifery system and our work in our department while she was visiting our Department of Midwifery Science, AVAG/EMGO+ Institute, VU Medical Centre. She was interested in all the opportunities available to her and was fully engaged. It was a pleasure to have her with us for the week, and we look forward to working with her in the future.

Dr Corine Verhoeven
Senior researcher, midwife
Midwifery Science, AVAG/EMGO+ Institute, VU Medical Centre
Van der Boechorststraat 7
Room MF A-511
P.O. Box 7057
1007 MB Amsterdam
The Netherlands
Phone +31 204448406
Mobile +31 651853746
c.verhoeven@vumc.nl

Dr Corine Verhoeven
References


Royal College of Obstetricians and Gynaecologists/Royal College of Midwives
Joint statement No.2, April 2007 Homebirths


Photo Gallery

Dr Corine Verhoeven & myself (Dr Maria Healy) outside VU Medical Centre Amsterdam, University of Amsterdam

Picture above right: Caroline Grootes at the Verloskundigenpraktijk Vondelpark’ midwife practice facility

Picture middle left: Caroline Grootes, myself & Dr Ank de Jonge at the Verloskundigenpraktijk Vondelpark’ midwife practice facility

Picture above: Midwife lecturer, student midwives and myself.

Picture above right: student facilities at the Academy of Midwifery Amsterdam and Groningen (AVAG)
Pictures inside & outside the Birth Hotel, De Genestet Straat, Amsterdam