Safety, experiences and economic cost of planned home birth in Catalonia

| Submission date | Recruitment status | [X] Prospectively registered | | |
|-------------------|--------------------------------|------------------------------|--|--|
| 14/10/2018 | No longer recruiting | ☐ Protocol | | |
| Registration date | Overall study status Completed | Statistical analysis plan | | |
| 09/11/2018 | | [X] Results | | |
| Last Edited | Condition category | Individual participant data | | |
| 13/12/2023 | Pregnancy and Childbirth | | | |

Plain English summary of protocol

Background and study aims

Recent studies show that planned home birth is a safe option for low-risk women. These studies look at different aspects: safety in terms of health problems for the mother and baby resulting from the birth, women's experiences of the birth and its economic costs. These three dimensions of childbirth care are measured comparing the birthplace chosen by women and the type of professional attending childbirth. These studies conclude that home birth is as safe as or even safer than hospital birth for women with straightforward pregnancies (without any risk factor until labour starts), it is a satisfactory experience and it is cost effective.

In Spain, planned home birth is a private service provided by midwives. More than one third of all annual Spanish home births take place in Catalonia. The Catalonian home birth midwives' association, Associació de llevadores de part a Casa de Catalunya (ALPACC), collects data in a database of all births planned at home with the associated midwives. This database will be one of the sources used for the first and third phases of this study.

This study is planned in 3 phases and aims to investigate if home birth with midwives in Catalonia is safe (phase 1), if it is a satisfactory experience (phase 2) and if it is sustainable (phase 3).

Who can participate?

Pregnant women aged between 18 and 40 years with normal or low-risk pregnancies.

What does the study involve?

Phase 1 will involve analysis of the ALPACC database by the researchers. For Phase 2, participants will be sent a questionnaire relating to their experience of the birth 15 to 30 days after they have given birth. For Phase 3, midwives will be sent a questionnaire to record the hours of work, cost of materials used and time spent in hospital for each birth.

What are the possible benefits and risks of participating?

Participating in this study has no benefits or risks for the participating women, as the care being studied is that routinely provided.

Where is the study run from? Universitat Pompeu Fabra, Catalonia, Spain When is the study starting and how long is it expected to run for? January 2016 to June 2020

Who is funding the study? The researchers are funding the study.

Who is the main contact? Lucia Alcaraz-Vidal, lucialcaraz1@gmail.com

Contact information

Type(s)

Scientific

Contact name

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Contact details

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

IIBSP-PAR-2018-81

Study information

Scientific Title

Maternal and neonatal outcomes on planned homebirth assisted by midwives in Catalonia: Cross-sectional study

Acronym

HomebirthCat I

Study objectives

Planned home birth for low-risk women assisted by midwives is safe, is a positive experience and has lower economic costs than hospital birth.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approval has been requested from the ethics committee of Parc de Salut Mar (CEIC PSMAR) and the ethics committee of Hospital de la Sta. Creu i St.Pau. Study Code: IIBS-PAR-2018-81

Study design

Observational multicenter cross-sectional cohort study

Primary study design

Observational

Secondary study design

Cross sectional study

Study setting(s)

Home

Study type(s)

Quality of life

Participant information sheet

Health condition(s) or problem(s) studied

Delivery

Interventions

For phase 1, the active participation of women will not be necessary; data will be collected from the databases.

Participants in phase 2 will be recruited in the hospital and at home after delivery to be informed and obtain informed consent. After 15 days postpartum, the questionnaire will be sent by mail or will meet with their midwife who will provide the questionnaire in paper form.

For phase 3, the active participation of women is not required; the questionnaire on costs will be completed by the midwife attending the birth.

Intervention Type

Behavioural

Primary outcome measure

Phase 1:

- 1. Composite rate of neonatal death during labour and early neonatal death assessed using the ALPACC database with a 7 days follow-up time after the birth
- 2. Composite rate of maternal death during labour and early maternal death assessed using the ALPACC database with a 7 days follow-up time after the birth
- 3. Rate of postpartum haemorrhage measured after birth using the ALPACC database
- 4. Rate of perineal injury measured after birth using the ALPACC database
- 5. Rate of women admitted in intensive care unit after birth to 24 h postpartum using the ALPACC database.
- 6. Rate of neonates with neonatal encephalopathy measured 7 days after birth using the ALPACC database
- 7. Rate of neonates with Apgar score equal to 7 or lower, measured after birth using the ALPACC

database.

8. Rate on neonates admitted into neonatal intensive care unit (NICU) from birth to 24 h after birth using the ALPACC database

Phase 2:

- 1. Women's perception of their own capacity during birth, assessed using the Childbirth Experience Questionnaire (CEQ-E), filled in between 30 days and 3 months after the birth
- 2. Women's perception of the professional support during birth, assessed using the CEQ-E, filled in between 30 days and 3 months after the birth
- 3. Women's perception of their safety during birth, assessed using the CEQ-E, filled in between 30 days and 3 months after the birth
- 4. Women's perception of their participation during birth, assessed using the CEQ-E, filled in between 30 days and 3 months after the birth

Phase 3: primary outcomes

- 1. Cost of labour and birth care measured using a questionnaire filled by midwives in the obstetric unit before discharge.
- 2. Human resources cost measured using a questionnaire filled by midwives in the obstetric unit before discharge
- 3. Material resources cost, measured using a questionnaire filled by midwives in the obstetric unit before discharge
- 4. Pain management cost, measured using a questionnaire filled by midwives in the obstetric unit before discharge
- 5. Structural costs, measured using a questionnaire filled by midwives in the obstetric unit before discharge

Secondary outcome measures

N/A

Overall study start date

01/01/2016

Completion date

31/05/2021

Eligibility

Key inclusion criteria

- 1. Pregnant women aged 18-40 years with straightforward pregnancy
- 2. Labour starting spontaneously between 37 and 42 weeks
- 3. Single foetus in cephalic presentation
- 4. Labour assisted by midwives

Participant type(s)

Healthy volunteer

Age group

Adult

Lower age limit

18 Years

Upper age limit

40 Years

Sex

Female

Target number of participants

340

Key exclusion criteria

- 1. Women with diseases or medical conditions that could influence birth outcomes
- 2. Women with serious complications in previous pregnancies
- 3. Women without antenatal care
- 4. Women with a BMI higher than 35 kg/m2
- 5. Women planning hospital birth but delivering at home or while going to the hospital
- 6. Women planning childbirth in a freestanding birth centre
- 7. Women with premature rupture of membranes for more than 72 hours
- 8. Women with previous caesarean section
- 9. Women with prenatal congenital malformation diagnosis

Date of first enrolment

01/01/2019

Date of final enrolment

30/06/2020

Locations

Countries of recruitment

Spain

Study participating centre Sant Pau Hospital, Barcelona

Sant Antoni Maria Claret, 167 Barcelona Spain 08025

Study participating centre

Hospital Parc Salut Mar, Barcelona to Hospital Germans Trias i Pujol

Carretera del Canyes S/N Barcelona Spain 08916

Sponsor information

Organisation

University Pompeu Fabra

Sponsor details

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Sponsor type

University/education

Website

https://www.upf.edu/web/phd-biomedicine

ROR

https://ror.org/04n0g0b29

Funder(s)

Funder type

Other

Funder Name

Self funded

Results and Publications

Publication and dissemination plan

The first and second papers are going to to be published in 2019, with a third paper published in 2020.

Intention to publish date

01/03/2021

Individual participant data (IPD) sharing plan

The datasets generated and/or analysed during the current study during this study will be included in the subsequent results publication.

IPD sharing plan summaryNot expected to be made available

Study outputs

| Output type | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|-----------------|---------|--------------|------------|----------------|-----------------|
| Results article | | 01/07/2021 | 13/12/2023 | Yes | No |
| Results article | | 27/11/2023 | 13/12/2023 | Yes | No |