

Research Institut of Midwifery and Reproductive Health

Development and validation of a tool for advising primiparous women during early labour (GebStart-Study)

Women giving birth to their first child often have difficulties to cope with contractions and other symptoms of early labour. If hospital admission occurs before the birth progresses, this is associated with increased rates of intervention and caesarean section. However, staying at home in labour can cause anxiety. Care during early labour is often unsatisfactory for women in labour and challenging for health professionals. The study aims therefore to develop and validate a tool to inform the decision “admitted versus non admitted to hospital” for primiparous women during early labour.

Background

Pregnant women experience early labour as the first phase of labour with different physical and emotional symptoms. Early admission to hospital has been found to be associated with increased intervention and caesarean section rates. However, primiparous women often contact the hospital before labour progresses because they might have difficulties coping with labour pain at home. Previous studies investigating early labour care have not resulted in increased spontaneous birth rates and have not provided evidence regarding the appropriate care during early labour. An evidence-based instrument assessing the physical and emotional state within the early labour process and the wellbeing of woman and thereby, their need for support, is required to inform the decision “Admitted versus not admitted to hospital”.

Aims

This study aims to develop and validate a tool for advising primiparous women during early labour.

Design

A multi-stage scale development procedure with a mixed-methods study design will be conducted.

Project leader

Prof. Dr. Susanne Grylka, Head of Research Institut of Midwifery and Reproductive Health

Project team

Antonia Müller, MSc Midwifery, research associate

Project partner

University hospitals of Zurich and Basel, Cantonal Hospitals of Baden, Winterthur and Lucerne, City Hospital Triemli

Project time

01.05.2021 – 30.04.2021

Funding partner

Swiss National Science Foundation

Project status

ongoing

Methods

The study lasts three years and includes the following phases:

- 1) **Preparatory phase:**
 - Approval Ethic Committees, study preparation
- 2) **Development phase:**
 - Generate an initial item pool with 99 items based on a literature review (symptoms of onset of labour, anxiety and self-efficacy) and focus group discussions with women who have given birth (experiences) as well as determining the format of measurement. The interviews will be transcribed verbatim and analysed using qualitative content analysis.
 - Assessment of content and face validity in an expert panel and item reduction to 30-40 items.
- 3) **Data collection phase:**

Multicentre data collection in six sites in the Zurich region as well as Central and Northwest Switzerland with a sample size of approximately $n = 400$ women:

 - Preliminary tool with 32 items
 - German versions of the Childbirth-Self-Efficacy Inventory and the Cambridge-Worry Scale
 - Perinatal outcomes (mode of birth, intrapartum interventions, labour duration, postnatal quality of life)
 - Satisfaction of women and health professionals with the tool
- 4) **Analysis and finalisation phase**
 - Exploratory factor analyses for item reduction to 15-20 items
 - Validity and reliability of the instrument
 - Proportional odds model for determination of the cut-off points for the decision "Admitted versus not admitted to hospital"
 - Designing the final instrument with 15-20 items
 - Dissemination and implementation

Relevance of the study

The tool will provide an instrument to advise primiparous women during early labour. It can be applied by midwives and doctors for the initial telephone or face to face contact. The use of the instrument is of great interest because it has the potential to shorten hospital stays, increase spontaneous birth rates and decrease intervention rates and thereby, lower costs. Additionally, this study will make an important contribution to the scientific discussion for optimising early labour care and provide a basis for further research.



Prof. Dr. Susanne Grylka is a midwife with several years of clinical experience. She is head of the Research Institut of Midwifery and Reproductive Health at ZHAW. After three years as a research associate in the German of a European multicentre study, she has been working at ZHAW since 2016. Her main areas of research and interest are the onset of labour and birth processes, high caesarean section and intervention rates, vaginal births after caesarean section, postpartum care, postpartum quality of life and breast-feeding.



Antonia Müller, MSc Midwifery, has been accompanying families through the stages of childbirth in hospital setting since her BSc degree in midwifery in 2014. In 2019, she completed the European Master of Science in Midwifery. In the labour ward, she trained the next generation of midwives over the last few years and implemented various practice-relevant projects. Since the start of this study in 2021, she is supporting the ZHAW as a research associate.

Contact

ZHAW School of Health Professions
Prof. Dr. Susanne Grylka
Research Institut of Midwifery and Reproductive Health
Katharina-Sulzer-Platz 9, CH-8401 Winterthur

+41 58 934 43 77 / susanne.grylka@zhaw.ch
www.zhaw.ch/gesundheit