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ORIGINAL RESEARCH – QUALITATIVE

Assessment and documentation of women's labour pain: A cross-sectional study in Swedish delivery wards

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ABSTRACT

Background: A woman's pain during labour plays a dominant role in childbirth. The midwife's role is to assess the degree of pain experienced during labour. When professionals respond to labour pain with acknowledgement and understanding, the woman's sense of control and empowerment is increased, which could contribute to a positive experience of childbirth. The aim of this study is to describe how labour pain in Swedish delivery wards is assessed and documented.
Methods: This quantitative descriptive study was designed as a national survey performed through telephone interviews with the representatives of 34 delivery wards in Sweden.
Results and conclusion: The majority of the participating delivery wards assessed and documented women's labour pain, but in an unstructured manner. The wards differed in how the assessments and documentation were performed. In addition, almost all the delivery wards that participated in the survey lacked guidelines for the assessment and documentation of the degree of pain during labour. The findings also showed that the issue of labour pain was sometimes discussed in the delivery wards, but not in a structured or consistent way.

1. Introduction

For many women, the pain associated with childbirth is the most intense pain they will ever experience.[1–3] Unlike other kinds of acute and chronic pain, labour pain, under normal conditions, is not associated with a pathological process. On the contrary, labour pain is part of the most basic human process—giving birth.[4] It has been reported that it is of utmost importance for women during labour "To trust the body and to face the pain".[5] In order to feel confident in their first childbirth, women want to be confirmed as unique individuals. If professionals respond to the individual woman's need of support, she is more likely to have a positive birth experience, even if the birth is protracted or there are medical complications.[5] To support women's experiences of pain during labour is an important task for the midwife, in order to get the women involved and able to make informed choices.[6] Unless her labour pain is taken into account, the woman is at psychological risk of anxiety and fear from both a short- and long-term perspective.[7]

The feeling of being protected and secure has a positive impact on women's experiences of labour pain, achieved through good pain management.[8,9] A positive birth experience can have immediate and long-term effects on a woman's health and her relationship with her newborn baby, which also contributes to a sense of accomplishment and a future increase in self-esteem.[10,11] Women that experience an unsatisfactory birth often recall the event with memories of pain, anger, fear or even no memory at all, which may indicate traumatic amnesia.[8] A traumatic birth experience and inadequate personal control increase the risk of postpartum depression and post-traumatic stress disorder.[10] Moreover, pain is a cause of fear in future births.[11–13]

In the Western world, most women give birth to their children in delivery wards.[14] In Swedish maternity care, under normal circumstances, a midwife is responsible for and provides care to a

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childbearing woman throughout her pregnancy, labour and birth.[15] The midwife has an important role in assessing the woman's pain during childbirth. In performing this role, the midwife understands the woman's experience and provides adequate pain relief only if this is what the woman wants or requests. Furthermore the midwife assesses the effect of the measures taken. However, few studies have described how midwives assess labour pain in birthing women. It has been shown that although both birthing women and midwives underestimate the equivalent of mild to moderate pain, the midwife often underestimates a mother's experience of severe pain.[16] Recently it was reported that mothers' and midwives' pain scores were similar with regards to mild-moderate pain, but midwives with longer professional experience underestimated severe pain. Further, the more births the midwives themselves have undergone the higher they estimates the women's labour pain.[17] If midwives misjudge the degree of pain, they more often fail to provide adequate pain relief for women during childbirth.[16] However, this has to be done in a dialogue with the woman.

A proper assessment of pain requires both verbal and non-verbal information. However, midwives often use non-verbal communication, such as body language, facial expressions and sounds, which may result in an underestimation of the woman's experience of pain.[16] In both research and clinical praxis, the visual analogue scale (VAS) is widely used as a pain-rating scale to estimate pain and to measure the experienced effect of any given pain relief.[18–21] The VAS usually consists of a 100 mm straight, ungraded line; the endpoints are labelled "No pain" and "Worst imaginable pain".[22] Several studies have shown that the VAS can also be used to evaluate treatment of labour pain.[23–25] The VAS estimations of pain are also the major data source for the documentation of pain and the effect of pain relief.

According to Swedish law,[26] there is a demand for documentation within all health-care settings. The documentation is primarily a guarantee that the patient receives good and safe care. Accordingly, midwives are obliged to keep records of the labour progress, including assessment of pain, as well as the use and effects of pharmacological and non-pharmacological pain relief. Moreover, all actions and interventions must be justified and evaluated. A Swedish study found that in 42 per cent of the medical records reviewed, the woman's pain level had been neither assessed nor addressed.[27] Therefore, the aim of this study is to describe how labour pain in Swedish delivery wards is assessed and documented.

2. Materials and methods

2.1. Settings

In Sweden there are approximately 6700 midwives, most of whom work in the health care system.[28] In 2012, 113,177 babies were born in Sweden. Almost all were born in one of the 48 delivery wards at hospitals throughout the country.[29] Documentation of the care is done in computer program such as Obstetrix, Partus or Cosmic.

2.2. Participants and data collection

This quantitative descriptive study was designed as a national survey. Forty-eight delivery wards were contacted by telephone and asked to participate in the study. In response to this first invitation 12 delivery wards agreed to participate, a further 19 accepted after the first reminder, and 3 accepted after the second reminder. In total, 34 of 48 delivery wards took part in the study. The response rate was 71 per cent.

The head of each participating delivery ward was asked permission to conduct an interview. She/he was given the opportunity to participate in the telephone interview her/himself or to refer a suitable midwife to represent the delivery ward. The respondents were given written information about the study via an information letter and additional oral information during the telephone interview. During the data collection period, two reminders were sent out. Each telephone interview lasted approximately 15 min.

The telephone interview was based on a structured survey. Due to the lack of an existing instrument (no similar previous surveys had been done), the survey was constructed in relation to the research question. The survey consists of 19 questions, of which 11 had a predetermined alternative response and 8 included the opportunity to add comments. The survey focused on the following areas: questions about measurements of women's pain; use of pain measurement tools; evaluation of given pain relief; documentation of pain; existing guidelines and discussions about pain, among colleagues.

Prior to the data collection, the 19 questions of the survey were used to interview one midwife. Some of the authors (IB, LBM and AE) have previous experience of constructing surveys and interview guides. This pilot interview was performed to test the intelligibility of the questions and determine whether they could be answered in a manner that provided the required information. The feedback indicated that no changes were necessary.

2.3. Data analysis

Descriptive statistics were calculated and presented as frequencies. Data was analysed using IBM SPSS Statistics for Windows, Version 21.0 (SPSS IBM, New York, USA). Comments made during the telephone interview by the representative midwife are presented in connection with the relevant quantitative results to which the comment was connected.

2.4. Ethical considerations

The study was performed according to the ethical guidelines presented in the Helsinki Declaration.[30] As this type of study did not fall under the Ethical Review of Research Involving Humans Act,[31] no ethical approval was sought. However, the heads of every participating delivery ward were orally informed about the purpose of the study. They were told that participation was voluntary and that they could withdraw without prejudice at any time. They were also informed that the data would be treated in a confidential manner. The heads of the participating delivery wards gave their informed consent to participate orally by telephone.

3. Results

3.1. Assessment of women's labour pain

Women's labour pain was assessed and reported by midwives in 32 of the 34 participating delivery wards. When and how the labour pain was assessed and reported differed among the delivery wards (Fig. 1). In 22 delivery wards, the women's labour pain was assessed continuously, including providing pain relief during labour. In eight delivery wards, the women's labour pain was assessed in connection to the kind of pain relief provided. In two delivery wards, the woman's pain was assessed only upon her arrival at the delivery ward. The pain was most commonly assessed through verbal communication ($n = 16$), followed by VAS ($n = 9$) (Fig. 1).

Representatives of two of the participating delivery wards commented on the question of assessing labour pain at the unit: "*We assess labour pain, but not in a structured way*" and "*We don't use any*

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