Delivery Practices and Perineal Tears: Midwives' Experiences

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ABSTRACT

Objective: The aim of this study is to explore the experiences and views of midwives regarding third- and fourth-degree perineal tears. Method: Focus group interviews with midwives from a university hospital. Qualitative analysis using principles from 'grounded theory'. Findings: The participants mentioned several factors that they considered important for the prevention of tears that may cause injury to the anal sphincter. A crucial aspect was the way in which the midwife deals with the physiological birth process. Amongst the challenges highlighted was the need to pay attention to both the baby's condition and the mother's perineum simultaneously, as well as the control of speed during the crowning of the head. One opinion was that tears most often occurred during the delivery of the shoulders, and were not linked merely to crowning. The importance of patience during this phase of the delivery was emphasised. Other essential factors were mentioned, such as teamwork, an environment that stimulated and encouraged midwives to reflect on their actions, professional development, and particularly the importance of practical knowledge. This presupposes firm leadership for the promotion of research and development. Conclusion: In order to prevent perineal tears, we must recognise the complexity of the challenges we face. Research and development in this field must therefore focus, not only on technical aspects, but also on teamwork, social setting, interpersonal relations and midwives' reflections on their own practice.

KEY WORDS: Perineal tear, practical knowledge, midwifery, focus group, childbirth.

Introduction

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The prevention of third- and fourth-degree perineal tears is a constant challenge facing maternity care today. There has been a registered increase in the incidence of damaging perineal tears in Scandinavia, although there is still some uncertainty regarding the exact figures (1-6). This increase has been linked to midwives' delivery techniques. However, no evidence of the cause-effect relationship has yet been found, either in relation to support techniques, or birthing positions or other conditions related to delivery. One hypothesis is that midwives' practices influence the outcome of the delivery. There is less agreement about precisely what part of a midwife's skill set actually increases or decreases the risk of tears, but there is a general consensus that a gentle delivery is important (7-9). In the guidelines for delivery, which were drawn up on the basis of knowledge gained from the experiences of midwives, this was described as: 'a gentle unrushed, carefully attended birth, with optimum foetal head flexion and minimum expulsive force' (7). A textbook for midwives describes the delivery of the head as follows: 'most midwives place their fingers lightly on the advancing head to monitor descent and to prevent very rapid crowning and extension, which is believed to result in perineal laceration' (10). Midwifery skills consist of, amongst other things, knowledge based on both research and experience. It can be difficult to distinguish between evidence-based practices and practices which are based on norms or rituals.

Perineal Tears

The most serious consequences for the women are when the anal sphincter, is affected. The rate of occurrence varies from between 0.3% and 6% (2-6), but an occurrence rate of 24% has been reported. Reported figures have proved difficult to interpret, as the definition and classification of tears has varied (11). An increasing rate of occurrence has been documented in Sweden (4-6). In Norway there is a general consensus that sphincter tears occur all too frequently, but there are no accurate figures which can provide a basis for the definition and perception of what we should count as an acceptable occurrence (1). Damage caused by this type of tear may cause varying degrees of discomfort, pain, urinary, flatus and faecal incontinence, and may have negative consequences for an individual's social life, physical activity, sexual activity and self-image (3, 5, 11, 12). On the other hand, one must perhaps accept that tears may well occur in the delicate balance between prioritising the safety of the foetus and ensuring a fast delivery, which is associated with the risk of tearing.

Risk factors for anal sphincter tears are: instrumental delivery (particularly with forceps), a birth weight of over 4000 grams, first-time mothers and median episiotomy (2, 3, 13, 14). In some studies, it has been shown that standing births and birthing stools tend to cause third- and fourth-degree tears, yet other studies find no differences based on different birthing positions (15-18). Other factors are also thought to contribute to the risk of tears, but the results are not explicit (5, 13, 17, 19). There are, however, few if any prospective, randomised studies which show that different types of hand grip, or other interventions used in maternity care, actually reduce the incidence of tears. It is therefore difficult to draw conclusions from risk factor research in order to be able to give concrete advice about these interventions.

One study draws the conclusion that it is important for midwives to identify the risk factors in advance (17).

Delivery Techniques

In professional circles there is still a focus on delivery techniques. The significance of supporting the perineum and giving guidance to women is discussed. Pirhonen (6) performed a retrospective study on the topic, the purpose of which was to investigate the occurrence of anal sphincter tears at two university hospitals in Scandinavia.

In Malmö, midwives were patient in awaiting further developments with regard to their decision to support the perineum, and the occurrence rate of sphincter tears was 2.69%. Meanwhile in Turku, where the practice was to actively support the perineum from the outset as the baby's head crowned, the rate of occurrence was only 0.36%. In the study's conclusion it was discussed whether or not this variation in the occurrence of tears could be attributed to variation in midwives' practices regarding this perineal support. Whilst it used to be common practice to actively support the perineum at the same time as the head gave counter pressure during the final part of the foetal expulsion stage (hands on), it is now also considered necessary in practice to support to a greater extent (hands poised) (20). The most recent research on the topic (4, 6, 20, 21) provides little detail about delivery methods. Further studies are needed to shed light on which practices cause minimal damage (13, 22). In his review of studies on perineal damage, Floud (8, 9) shows that there are vast differences in the results relating to tears and episiotomy.

The purpose of our study is therefore to investigate midwives' own experience of what factors cause perineal tears. The basis for clinical skills is seldom described in the literature, despite the fact that clinical judgement and experience are both elements which are almost always taken into consideration when assessing the quality of healthcare. This study focuses on midwives' personal reflections on delivery methods, in order to gain a deeper understanding of how delivery is handled in maternity care. The aim of this study is to shed light on the viewpoints and experiences of midwives working with childbirth, and what they believe causes obstetric lacerations.

Method

Focus group interviews were used in order to answer the research question and to reveal the breadth of midwives' knowledge and experience (23, 24). The method was chosen in order to gather more midwives together to record their experiences and test the divergence of opinion and areas of tension that have a synergistic effect in group situations (25).

The study was conducted at a university hospital with an overall birth rate of 4800 per annum. Around 70 midwives work with childbirth at this hospital. Information about the study, and the invitation to participate, was spread by word of mouth at personal meetings, and in writing via letter to the individual midwives. Strategic selection was used in order to obtain the greatest possible variation in the group (26). A criterion for inclusion was that the midwives were actively working on delivery wards at the time

that the study was conducted. Midwives with different backgrounds were chosen for the purpose of diversity. The participants came from the hospital's large, technologically advanced maternity ward, and from a midwife-run delivery unit. One midwife also practised in home births. The majority of the participants had been practising midwives for over ten years. Two midwives had less than five years of experience.

The focus group interviews were conducted at the hospital. The sample group consisted of seventeen midwives who were then divided into four focus groups. The interviews were recorded on a minidisk and each one lasted around ninety minutes.

A guide for the interviews was adhered to, including the following themes:

- Characteristics of the situations in which tears did or did not arise.
- The importance of context in relation to obstetric tears.
- How interpersonal factors can affect midwives' work during this phase.
- Delivery techniques.

One problem that could have arisen from the focus group interview was that 'group mentality' could potentially interfere with individual opinion (27). Group members were made aware of this before the interviews began, and this was then subsequently monitored by a moderator. All of the midwives had their say and were engaged, active, interested and dynamic. In our study, the midwives expressed that being involved in the focus groups provided professional development in itself. This is also emphasised in focus group research (28).

Opinion saturation was reached after four focus group interviews. The recording was then transcribed and the contents analysed and categorised by the authors of this study. Principles of 'grounded theory' were used in the analysis (29). We had uncovered a gap in knowledge and therefore wished to remain open-minded about the collected data. The first stage in the analysis was 'open coding', where the data was systematically analysed and thematised. This was carried out by all three authors independently of one another in order to avoid bias. Each interview was examined for both similarities and differences. The interviews were then compared with each other. To ensure accurate interpretation, some of the participants read through the findings. The second stage was 'axial coding', where the content of the opinions was merged into themes. These were the above-mentioned themes that were identified in all of the focus group interviews.

Findings and Discussion

The themes that most clearly stood out formed the basis for our discussions on the different aspects of midwives' handling of the delivery process. These were:

- •Management of the baby's position and the woman's perineum.
- •Control of speed when the head crowns.
- •Challenges in connection with the delivery of the shoulders.
- •Cooperation between woman and midwife.
- •Midwives in 'confined spaces'.

Management of the Baby's Position and the Woman's Perineum

In all of the focus groups the midwives discussed uncertainty about the baby's condition in the foetal expulsion phase. They described situations where they faced a dilemma between getting the baby out quickly and waiting until the woman's body was ready to give birth. The action they chose to take was that which they considered safest for the baby. One midwife said:

"...if you don't hear foetal heart sounds, it depends on how far into the foetal expulsion phase you are. If there are still one or two contractions, and you've heard foetal heart sounds clearly the whole way along, you can allow yourself to take it easy. But if the sounds have been weak, and you've been observant and kept a close watch on this, you may then decide to give an episiotomy and ask for fundal pressure if you so wish. But fundal pressure is likely to cause more tears. Because then the baby is born more quickly."

Such a practice may mean that the muscle will not be able to gradually stretch, something which may be of significance for the prevention of damage (10, 20). As the midwife above states, a tear is almost to be expected in such situations. However, the midwives could also give examples of births where the baby was born quickly, naturally and uncontrolled, and without causing a tear. How the midwife chose to handle a difficult instrumental delivery could be directly connected to her level of experience and how she interpreted the clinical situation. This was described as follows:

'No matter whether there are doubts about anything relating to the baby, or whether the baby is doing well, tears are still possible. This is something that comes with experience. As you gain experience, so perhaps you can attend to both.'

A midwife's confidence and level of expertise can be crucial for her judgement and for how she discerns which babies are at real risk. Experience and theoretical knowledge are required in order to be able to observe and interpret complicated situations. The complex nature of the development of midwifery practice has been observed by Barnes et al. (27) in a study about midwives' delivery practices. According to Bjørk and Bjerknes' (30) study of practical skills, this may involve: interaction with the woman, integration of action in a wider perspective and care. It is difficult to identify which babies are genuinely at risk. Midwives may choose to intervene 'to be on the safe side'. Perhaps the occurrence of tears is legitimised to an excessive degree, and in this context as protection against what could happen in a worst-case scenario, i.e. where the mother gives birth to a 'compromised baby'. This can be seen to illustrate worst-case thinking (31).

Among other elements that emerged during the discussion was the individual variation in tissue, such as the elasticity, colour, length and thickness of the perineum. This was kept in mind as the midwife guided the baby out. The participants also posed the question of whether or not there was an imbalance between muscle and fat tissue in the perineum of obese women. Similarly, it was discussed whether or not immobility could affect elasticity, due to impaired circulation and adverse strain on the tissue.

Control of Speed when the Head Crowns

There seemed to be a general consensus about the concept of 'supporting'; i.e., manually supporting the head or perineum during crowning. During the discussions, however, it became clear that the midwives did not in fact have a common understanding of the concept. Support of the perineum during childbirth is an example of a skill, as an integrated action, in a wider context (30). The interviews highlighted details and nuances:

'I use the fingertips of my left hand, thumb on one side and the other fingers together on the other side, which gently supports, gradually leading the labia minor behind the head before I gradually release the head out over the perineum. With my right hand, I give substantial support with my thumb and middle finger, but all four fingers are grouped together, and the baby's head and perineum is in the palm of my hand.'

The midwives described and demonstrated different grips. The left hand was used to control the speed and encourage flexion of the baby's head. In addition, some used the same hand to push the labia to the side with the little finger and thumb, in order to try to prevent labial tears. The right hand was used in different ways. One method was to use the thumb and index finger on the side of the perineum, around the baby's head, while at the same time trying to guard the tissue in the midline, the three other fingers being bent toward the perineum. Another variation was to support with a cupped hand, with the thumb on one side and the other four fingers on the opposite side of the perineum. Some held the tissue together in order to guard it in the midline, whilst others attempted to control the pace. Meanwhile, there were also some who tried to avoid touching the perineum, in order not to hinder the blood flow; they thought that the pace could be controlled just as effectively by holding the baby's head. For some of the midwives, it was important to describe how the 'hand grips' were performed; with a demonstration the 'hand grips' were self-explanatory. For all concerned, the most important thing was that the baby should be born as gently as possible. This could be achieved with control of the speed of the baby's head, allowing the muscle and tissue to stretch gradually, and with the strain on the tissue evenly distributed around the birth opening. The midwives employed a wide variety of techniques to prevent the baby's head from crowning too quickly and in an uncontrolled manner. Some had a wider repertoire than others, including their various grips and techniques:

'How much support I provide, and how I provide it, varies a lot from woman to woman. I feel I've got to use my own insights to know what's needed. I believe in supporting and support techniques, just as much as I believe in birthing positions and how we can utilise natural elasticity.'

Certain birthing positions can help with this gradual stretching and evening out of the strain on the tissue. There were different preferences when it came to the choice of birthing position. Lithotomy, birthing stools and standing birthing positions were perceived to cause a sudden load on tissue which is already vulnerable to tears. It could also be said that the experience and expertise of the individual midwife, developed by having previously dealt with various birthing positions, is of critical importance for the prevention of tears:

'I've stopped having women on a birthing stool during childbirth. Some midwives may like to have women who can push better on a stool, but I feel it's too harsh altogether. I much prefer to have them squat at the bedside.'

A more common practice was to use a variety of positions in order to slow down the progress. Midwives tried to get the woman to move, and recommended positions which complemented the body's physiology. Some studies have shown that women who chose their birthing position for themselves more frequently retained an intact perineum than those women who were directed to give birth in a particular position (32).

Challenges in Connection with the Emergence of the Shoulders

A key factor that had significance for the occurrence of tears was the delivery of the baby's shoulders in normal births. The avoidance of sudden movements, such as bending, stretching and manipulation by spontaneous movement, was emphasised. One experience was that coaxing of the shoulders could and should be done more gently. The shoulders could cause tears, especially in cases where the midwife was impatient and actively intervened in the delivery:

'Many of us are too quick to deliver the shoulders, we intervene and deliver the baby we should try to remain a little more patient, and if the conditions are right allow the baby to come when it comes.'

The ideal situation presented was that the midwife should plan ahead and guide the woman through the final stage of labour in such a way that the head and shoulders were delivered with the same contraction. If this was not possible it was considered important for the midwife to wait for a new contraction. When the shoulders have emerged the midwife takes the baby and lifts it out in the direction of the birth canal. In the case of normal births, the majority agreed that it was important that the shoulders should be allowed to rotate spontaneously, without midwife intervention:

'We make the largest tears with the shoulders, when the shoulders are not allowed to rotate spontaneously after the head has emerged. Then we can see that the posterior shoulder actually comes first. If I had been actively intervening I would have delivered the front shoulder first. When the head is out I hold my hands ready in suspension, because I want to control the speed. I've thought to myself many times, why on earth we do the opposite when in actual fact it's natural for the posterior shoulder to come first.'

Several of the midwives had become aware of the methods they used to deliver the shoulders. They had experience behind them which had led to a change in their own practice. Others had reflected on their own practices, but had not changed them, even though they were doubtful whether or not they were correct. The delivery of the shoulders in normal births has not been problematised to a sufficient degree. In practice, attention is focused on the delivery of the head. Having a patient attitude was considered important, but several expressed the dilemma between 'taking the time needed' and being patient, or intervening and delivering the baby more quickly.

Cooperation between Woman and Midwife

The midwives stressed that having good communication with the woman in labour was important, but often difficult. Especially in cases where they had not previously met the women and came into the delivery room towards the end of the early stages of labour. This could potentially result in unsatisfactory guidance and could also be a contributing factor to the occurrence of large tears; the woman could push too forcefully or at the wrong time. Teamwork between the woman and the midwife in this phase of the birth is challenging. It is important to be able to read body language, especially the eyes, the face, sounds and breathing. The impression given in the interviews was that in order to observe and interpret the body language of the woman it required experience, willingness and the opportunity to be present. These are seen as important areas of competence. Both the midwife and the woman must be willing and capable of entering into such a partnership. One significant effect of guidance from the midwife that came up in the discussions was that the woman learned to listen to her body's signals and therefore behave more instinctively. This could be significant for how the woman handled this phase of the birth:

'I guide if I must. I say: Listen to your body, do as you feel, and I'll stop you if something isn't right. And often the women do have good control, if they begin to listen to themselves. I think they push much better when they're given freedom.'

How the midwives handled cooperation with the birth mothers depended on several factors: their own confidence, interpresental skills, interpretation of the situation and vigilance:

'There's one birth which I remember very well. The baby arrived very suddenly. I was completely caught by surprise... Oops, he's coming now, and so just ... And she just stood there and carried on pushing. I wasn't ready that time.'

In this case neither the midwife nor the mother had control. The empirical data reveal the nuances: some midwives thought it best for the woman to have control, whereas others wanted to have it themselves. A point of contention arose in cases when the midwife pushed the woman too much, resulting in her being less able to draw on her own resources. Women were perceived to be very different in this area, ranging from those who handed over control to the midwife and took on a passive role, to those who wished to have a more active role. Some midwives pointed out that it seemed to be the case that some women were simply not motivated to listen to their own body:

'I think that a large number of those who give birth come in, lay down on the bed and behave as if they're ill, and you've got to motivate them every step of the way. At all times you've got to motivate the woman.'

The midwives discussed the great challenge posed by more 'passive' women who come into the delivery room and put their body in their midwife's hands. Is it possible that some women simply have a fundamental lack of trust in their own ability to give birth? How the woman becomes motivated and is encouraged about the birth during her pregnancy can influence the way she copes with the birth:

'A number of the women impress me: they just arrive, work instinctively with their body, 'I've got to cope with this'. Sometimes I've thought to myself, now we're certainly starting to stretch her limits, it takes time, and then they give birth. Cases like these do exist, but they're often overshadowed by the other kind.'

When the midwives were present and showed that they were available, the result was that that the woman was more forthcoming with her thoughts and questions. A good dialogue and teamwork between the woman and the midwife was essential in order for both parties to feel confident. This 'good dialogue' and eye contact were considered a requirement for effective guidance. Midwives who were present, and showed it, felt that they had a better chance of assessing the situation. These were in fact important contributory factors in situations where no tears actually occurred. The midwives thought that continuity of care resulted in an optimal relationship in this important phase of life:

'I think that as long as we have such a system for pregnancy and birth, it's difficult to achieve this optimal relationship of total confidence, where they give themselves up to it completely. Had we had them in our care during the pregnancy we could have gradually started to talk about the birth - to have been involved all the way through and got to know them - that would have been the ideal.'

By knowing a woman beforehand, the midwife would know more about her limits, resources and expectations, and would easily be able to stimulate and motivate her to cope. Research has shown that continuity in obstetric care is associated with favourable birth outcomes, and sometimes with more instinctive births (33). One interesting research topic would be whether or not this continuity actually contributes to a reduction in the occurrence of tears.

Midwives in 'Confined Spaces'

Midwives often work alone in the delivery room, alongside one other and the mother. In many cases they do not take difficult experiences with them from this room, out to their colleagues – events are played out in a 'confined space'. It can take time and requires confidence for midwives to be able to process their experiences and thoughts from this 'confined space'. Teamwork and guidance can be difficult:

'When I was a junior midwife I used to try to coax the shoulders free. We learnt during midwifery training to first take forward the one (shoulder) and then the other, but I think large tears were caused because of that, so I used to try to actively coax the shoulders free. There was a very experienced colleague who had been practising for a long time, who I had a lot of respect for and liked very much, who was with me during a birth. Perhaps it was a little difficult to get the baby out, so I ended up actively coaxing the shoulders free, and afterwards I was told how bad my shoulder delivery had been. It has stayed in my thoughts ever since – I stopped doing that.'

An inexperienced and vulnerable midwife at the beginning of her career will undoubtedly experience 'correction'. This has an impact on her delivery practices. Instead of reflecting over her own experiences and engaging in a dialogue with an experienced midwife, she will develop unfortunate habits, and have an unpleasant experience without learning from it. Midwives highlighted the importance of good teamwork within the department. Good collaboration can stimulate both reflection and professional development. Development of clinical skills is more than just theoretical knowledge, and is best learnt through experience: learning by doing. The midwives thought it was important to dare to show their uncertainty and to discuss situations when things did not go as planned. They then got feedback and tips from colleagues about alternative ways of handling the situation. Reflection helps to raise individuals' awareness of their actions (34), and this came up early on in the focus groups. The midwives expressed that they were unaccustomed to having to describe what they actually did. It seems as if some actions were automatic and were performed without any conscious professional anchoring. Descriptions of actions are essential if that knowledge is later to be passed on to others. The participants in the focus groups said they found it both exciting and educational to participate in the group discussions, and showed evident interest and curiosity in one another. This resulted in reflection over their own practice in addition to gaining knowledge about how other midwives handled similar situations:

'When I tried to think back, I couldn't remember where I'd had my hands. That was something I didn't anticipate. The memory of what the baby experienced on the way out – that I remembered, so I can describe it in great detail. But where I had my hands was a memory I had to deliberately try and think back to, and it took quite a long time before it came back to me.'

Great experience alone is not enough to develop professionally. Professional guidance, collegial support, self-confidence and how individuals allow themselves to be affected by others can determine how midwives learn and develop.

Conclusion

Data from the study show that midwives' experiences of perineal tears are complex. The way in which the midwives themselves thought they handled the physiological delivery process was found to be an important factor which affected their action patterns. In some situations, the midwives experienced a real dilemma when both the baby's safety and the woman's perineum needed to be taken care of simultaneously. Other factors which were emphasised were: pushing methods, birthing positions, 'hand grips', and how the head and shoulders were delivered. A significant finding was that many of the midwives thought that tears primarily occurred during the delivery of the shoulders. Many emphasised the importance of allowing the shoulders to rotate and be delivered of their own accord, as well as the need for patience during this phase of the delivery. The significance of contact with and guidance of the woman, as well as interaction with colleagues, was highlighted as fundamental. According to the midwives, how well prepared a woman was had an impact on how she coped with the birth. This preparation is a process which begins during pregnancy, and this study clearly demonstrates the significance of preparation for birth during antenatal care. It seems as if some women are determined not to tear and can better withstand the burning pain, or 'ring of fire' sensation, which occurs when the head crowns. These women have a greater degree of control over their own bodies in the self-expulsion phase. Midwives' own experiences and competence can be crucial for the outcome. Accordingly, they have much to gain by researching practical knowledge, and being able to satisfactorily articulate and convey it. In most cases it is the individual midwife who, in a given situation, is responsible for the delivery of the baby, where tears can and may occur.

The problems related to these large tears are also complex, and it is important to highlight the different factors involved. An environment which stimulates reflection and professional development is probably of substantial significance to this problem. Record-keeping of situations where tears occur can and should be improved, and must be taken into account when considering the birth environment, midwife intervention and interpersonal skills. It is also important to pay attention to individual observations and reflections on what can go wrong. This can only take place if the 'confined space' is opened up and experiences are discussed as part of the quality assurance of practice. It is important to create a culture in individual maternity wards where both good and bad experiences can be shared. Implementation of quality revision or audit is therefore an important tool for the development of professional midwifery practice.

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