



Knowledge and expectations of labour among primigravid women in the public health sector

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Objectives. We analysed knowledge and expectations of the process and pain of labour in primigravidas attending a local midwifery obstetric unit (MOU). It was anticipated that the results of this study could inform the development of interventions aimed at improving the analgesic care of women delivering at primary health care obstetric units.

Design. Qualitative analysis of data obtained from in-depth semi-structured interviews.

Setting. A Cape Town MOU.

Subjects. 30 black African, Xhosa-speaking primigravidas.

Outcome measures. An open-ended interview guide was developed. The themes explored included previous painful experiences, knowledge of labour, expectations of and attitudes

towards labour pain, and knowledge of biomedical analgesia.

Results. Patients were poorly informed about the process and pain of labour. Most women appeared highly motivated concerning their ability to cope with labour. Most expected pain, but had no concept of the severity or duration of the pain, and knew very little concerning methods available for pain relief in labour.

Conclusion. Women at this MOU were poorly prepared for the experience of delivery. Antenatal programmes should incorporate sensitive education concerning the process and pain of labour and the methods available to alleviate pain.

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In the Cape Town metropole, low-risk pregnancies are managed at the level of the midwifery obstetric unit (MOU). Very little is known about the perceptions of labour among women undergoing antenatal care and delivery at these MOUs. The aim of this qualitative study was to determine the knowledge and expectations of these primigravid women regarding the process, and in particular the pain, of labour. The results of this study could be utilised to improve the analgesic care of women delivering at primary health care obstetric units.

Methods

The study was conducted at an MOU in Cape Town. The study population consisted of 30 healthy Xhosa-speaking women who presented for antenatal care. Only primigravid patients were recruited, in order to have a homogeneous cohort with no previous personal experience of labour. Women were recruited consecutively from the clinic in the presence of one of the investigators (FI), and interviewed during the third trimester of pregnancy. Eligibility criteria included willingness to participate and the ability to converse in English or Xhosa. Written informed consent was obtained from all participants after study approval had been obtained from the Ethics Committee of the University of Cape Town.

In-depth, semi-structured interviews were conducted by FI, a senior registrar in anaesthesia, assisted by a professional interpreter. Informants were interviewed alone in a quiet room at the MOU. An open-ended interview guide explored the following themes: previous experience of pain, knowledge of labour, expectations of and attitudes towards labour pain, and knowledge of biomedical analgesia. A 10-point Likert-type scale was used to score the severity of previous pain experience and the expected severity of labour pain (0 = no pain, 10 = worst imaginable pain). Knowledge and utilisation of traditional medicine was also explored. Interviews were audiotaped, transcribed and where required, translated into English.

Data analysis followed the principles of descriptive analysis.¹ Numerical and operationally defined verbal counting was employed,² implying that verbal counting (i.e. 'few', 'some' and 'many') is defined. In this study, 'few' referred to more than 1 but less than 6 informants. The words 'some' and 'several' were used for groups of 6 - 14 participants, with 'some' referring to the lower numbers and 'several' to the upper numbers in this range. The term 'many' was applied for between 15 and 21 parturients, while 'most' and 'the majority' were utilised synonymously to indicate that 22 or more of the informants were involved in a particular theme or finding.

Results

Socio-demographic information

The mean age of participants was 24 years (range 16 - 29 years). Twenty-four women were born in rural areas, and 15 received their school education in such settings. The remainder were born and schooled in Cape Town. Nine had completed

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their schooling, and 6 were completing a tertiary diploma. Seventeen had completed 1 - 4 years of high school, and 3 had primary school education. The average household income was R1 200 per month. Twenty-one participants were unemployed.

The majority of women were in a stable relationship with their male partner and were happy to be pregnant. A few had initial misgivings, but were now looking forward to childbirth. Only 1 woman expressed predominantly negative feelings about being pregnant, and another 4 experienced negative attitudes from their partners.

Knowledge of labour

In response to the open-ended question 'What do you know about labour?', several women initially professed complete ignorance regarding labour, and some said that knowledge of labour could only be obtained in the process of delivery. However on further probing 20 women indicated that they knew that labour would be painful. The other 10 women did not mention pain, but described warning signs of the onset of labour (bleeding and 'breaking of waters'), the mode of delivery and the possible need for caesarean section.

Sources of information varied. Several women said they had received information from the clinic nurse. This antenatal education focused on pregnancy complications (antepartum haemorrhage and pre-eclampsia) and onset of labour (rupture of membranes, 'show', contractions), but did not include information on labour pain and/or pain management. Many others had learnt from their mother, sisters or friends. A few patients said that other women attending the antenatal clinic had told them about labour. Only 1 participant had read about labour in the popular press.

Previous pain experiences and personal expectations of labour pain

Twenty-eight women said they had previously experienced pain. The mean score on the 10-point Likert-type scale for the worst pain experienced in the past was 6.3 (range 0 - 10). Eleven informants felt they had suffered the worst imaginable pain in the past (pain score 10). For 2 women this pain was associated with a broken ankle and a burn injury. The other 9 women spoke about events such as accidental cuts, dysmenorrhoea, breast tenderness, backache and sore feet.

Women were then asked to score the expected severity of their own labour pain. The mean score was 8.4 (range 0 - 10). Two women did not expect labour to be painful, while 19 participants thought labour would cause the worst imaginable pain. Altogether 25 patients predicted scores of 8 - 10, and 5 women expected a score below 6. Another 5 participants expected labour pain to be less than their worst previous pain experience. The other 25 women expected labour pain to be the same as or worse than their worst previous experience of pain. One woman, however, emphasised that it was difficult

to know what to anticipate, as 'labour was not always the way you expect it to be'. Several women indicated that they were afraid of labour pain and a few of them said they were 'very scared'. One of these women also indicated that this fear could create barriers in obtaining information, saying, 'I don't want to ask the people, because they will make me scared. I'd rather stay not knowing anything and I will see on the day [day of delivery]'. Five women said they did not know how long labour would last or for how long they would experience pain. The others expected a wide range of duration (a few minutes to several days). The majority, however, expected pain for several hours.

Attitudes towards labour pain

Fifteen participants said that labour pain was a 'good thing'. The majority of these women felt that pain was important for bonding with the baby. 'If you don't go through the labour pain you wouldn't love the child,' one participant said. Another emphasised, 'You will feel more protective over something that you have given so much for and you brought into the world in a painful way.' One woman felt that labour pain was positive because it signalled the arrival of the baby.

The majority said that the pain should be relieved, if possible. This included many of the women who thought that labour pain was 'a good thing'. Some of these women wanted to experience pain, but emphasised that the pain should not be allowed to get too severe or last for too long. In contrast, some women were of the opinion that pain was a 'bad thing', which could jeopardise the process of bonding; one said, 'You can even hate your child, because you are going through the labour pain.' A few women were unsure whether labour pain was good or bad. Only 3 women expressed the opinion that labour pain should not be relieved. Two of these women based this opinion on the importance that pain played in the bonding process between mother and child and the other woman felt that pain in labour was 'how it was intended to be'.

Half of the informants thought they would be able to cope with the pain of labour. 'The body is made to accommodate the pain. I need to be strong and go with it [the pain],' one informant said. Another 2 women thought that they would cope, but only if given support and if they were not left alone. Some women were less sure about their coping skills, yet appeared very motivated, as expressed in these comments: 'I will try and be still' and 'I will try and behave'. One woman gave a possible reason for this motivation when she said, 'I wanted to have a baby, so I will go through the pain. Why should I be scared? I have faith. It must happen.' Only 4 women said they did not think they would tolerate the pain of labour. One was clearly distressed when she said, 'I am picturing myself ... like a mentally retarded person ... I'm thinking the pain will be there and it will be the first time and I'll go mad.'



Knowledge of analgesia

All women were poorly informed about biomedical methods of obstetric analgesia. One informant said that pain was a natural part of childbirth, and that no method existed to alleviate this pain. The majority referred to 'tablets' and 'injections' and a few of these participants mentioned the word 'morphine'. A few informants forwarded limited information about 'spinal injection' or the possibility of an 'injection in the back'. One woman said there was 'a gas to breathe'. Many women appeared to rely on the nursing staff to provide both pain relief and emotional support. This reliance is reflected in the following comment: 'I hope the nurses will be there that day ... and they mustn't be harsh to me because it is my first child ... they know that and they are also parents, and I will do what they ask me to do.' Only some women expected doctors to assist them with their pain. Asked whether they wanted a relative or friend to offer emotional support during labour, many women said that they wanted the father of the child or a female relative to be present. A few women, however, indicated that they only wanted medical staff in attendance.

Attitudes towards traditional health care

All women were asked about accessing traditional health care for any pregnancy-related health issue. Many women said that they would not consult a traditional healer, and a few of these added that they were not familiar with traditional healing. Prominent reasons for avoiding traditional health care included adherence to religious beliefs that appeared to be in conflict with traditional beliefs, and lack of belief in the efficacy of traditional health care. However, a few women added that it was beneficial to those who did believe in it, and a few others thought that traditional medicine was good for medical conditions other than pregnancy. Other reasons for avoidance included concerns that traditional medicine might be dangerous and/or 'unhealthy'. Two women expressed their worry that traditional medicine might cause a miscarriage or fetal abnormality.

In contrast, 6 participants were currently taking traditional medicine. All of these women were ingesting a fluid called 'baboon's urine' or 'dassie's piss', so named because of its bad taste. Perceived benefits were assistance in a normal delivery, turning the baby into the cephalic position, maintaining healthy fetal movements, and protection from evil generated by people who might be jealous of the pregnancy.

Discussion

This study assessed the knowledge and expectations of the process and pain of labour among black Xhosa-speaking primigravidas attending a level one antenatal care facility in the public health system in Cape Town. These women were found to have limited knowledge, and to have received little antenatal education in this regard. Similarly, women were

poorly informed about methods of obstetric analgesia. Most participants expected labour pain, but expectations regarding the severity, duration and role of labour pain differed among informants. Many women underestimated the severity of labour pain. The majority were highly motivated to deal with childbirth, although some were anxious, and a few women expressed fear.

The literature suggests that the experience of pain in labour is influenced by factors other than pharmacological regimens, including antenatal education, cultural and social paradigms, attitudes to the unborn child, and the presence of persons (medical and non-medical) who support the parturient.³⁻⁸ Studies in many First-World population groups on the influence of antenatal education show that both knowledge and expectations of the pain of labour influence the subsequent experience of childbirth.^{3,5,7} The fact that the experience of labour may impact on the quality of subsequent mothering is of additional concern.⁹

Expectations include the mother's belief in her ability to cope with pain. Antenatal education reduces anxiety, enhances coping and feelings of control, and correlates positively with a good experience of childbirth. In contrast, anxiety about the pain of labour has been shown to be a strong predictor of negative experiences in labour.¹⁰

In a developing country like South Africa, antenatal education may be of even greater importance, since women may be less well educated than women from the industrialised world, and therefore have poorer knowledge about human reproduction. Furthermore, their ability to seek and access information is limited, so that women are dependent on education provided by health workers. In addition, the limited resources in the public health sector often compromise the ability of nurses and doctors to provide optimal analgesia, and non-pharmacological interventions that can reduce pain are therefore particularly valuable. In this study, the lack of knowledge regarding labour also applied where methods of obstetric analgesia were concerned. This ignorance is likely to influence women's experience of labour, and makes the parturient particularly dependent on the health care workers and their assessment of analgesic needs in labour. In addition, when confronted with options for analgesia, women may also experience anxiety and consequently refuse intervention. Because of complications in the peripartum period, patients are often referred to nearby hospitals where epidural analgesia is available in labour. Currently, many patients are in advanced labour when first encountered by the anaesthetist. Obtaining informed consent from women who are in pain and who have no pre-existing information of the risks and benefits of epidural analgesia is problematic and controversial.^{11,12} A recent study⁷ from the industrialised world documented a need for improved educational and resource materials and current factual information on epidural anaesthesia.



Many women in this study expected the worst possible pain in labour. When asked about previous painful experiences, many reported that they had suffered the worst imaginable pain in their life, but in several instances this pain was associated with apparently minor incidents. A few women did not appear to anticipate any significant degree of pain. Many women in this study therefore underestimated the actual degree of labour pain. This is in keeping with a multicentre European study, which documented that primigravidas suffered more pain during labour than they had expected. Moreover, it has been reported that the expectation of a low degree of pain is associated with worse labour experiences.³

The fact that some informants in this study considered pain a positive feature of labour and that a few opposed the idea of relieving labour pain, may reflect traditional values, according to which labour pain is welcome, the expression of pain is frowned upon, and successful bonding is seen to depend on the experience of pain in labour. Women raised in the context of these values are often socialised from birth to accept and endure the pains of childbirth.^{4,13} The observation that women were highly motivated to cope with labour may also reflect this socialisation. Alternatively, women's expectations of coping may be related to their misconception regarding the severity of labour pain.

Most informants relied on Western medicine to provide health care, and only a few women had concurrently accessed the traditional health system. The concern that the transition from the traditional to the biomedical health system is associated with a loss of adequate preparation among women for the experience of childbirth, has been previously expressed.^{4,13} Traditionally, young women were educated about pregnancy and labour by female elders. Although this information may have included some misconceptions, the experience of childbirth was usually congruent with this form of antenatal education.

Our own findings indicate that primigravidas were inadequately prepared for the experience of childbirth. It

therefore appears that our public health system does not provide sufficient cognitive and emotional preparation for our obstetric patients. In view of the high workload and shortage of nurses, consideration should be given to a new category of health workers, who could be trained as childbirth educators, and fulfil an important support role in the same way that *doulas* (birth attendants) have become invaluable to women in labour.⁶ Patient-centred antenatal education and care are needed, as differences exist between groups with regard to expectations of comfort and involvement in labour.^{3,8,14} This form of antenatal education should improve women's experience of childbirth, as well as enhance patient autonomy and ability to access analgesia in labour.¹¹

References

1. Sandelowski M. Whatever happened to qualitative description? *Res Nurs Health* 2000; 23: 334-340.
2. Sandelowski M. Real qualitative researchers do not count: the use of numbers in qualitative research. *Res Nurs Health* 2001; 24: 230-240.
3. Capogna G, Alahuhtat S, Celleno D, et al. Maternal expectations and experiences of labour pain and analgesia: a multicentre study of nulliparous women. *Int J Obstet Anesth* 1996; 5: 229-235.
4. Chalmers B. *African Birth - Childbirth in Cultural Transition*. 1st ed. Johannesburg: Berev Publications, 1990.
5. Hallgren A, Kihlgren M, Norberg A, Forslin L. Women's perceptions of childbirth and childbirth education before and after education and birth. *Midwifery* 1995; 11: 130-137.
6. Hofmeyr GJ, Nikodem VC, Wolman WL, Chalmers BE, Kramer T. Companionship to modify the clinical birth environment: effects on progress and perceptions of labour, and breastfeeding. *Br J Obstet Gynaecol* 1991; 98: 756-764.
7. Paech MJ, Gurrin LC. A survey of parturients using epidural analgesia during labour. Considerations relevant to antenatal educators. *Aust N Z J Obstet Gynaecol* 1999; 39: 21-25.
8. Raines DA, Morgan Z. Culturally sensitive care during childbirth. *Appl Nurs Res* 2000; 13: 167-172.
9. Lundgren I, Dahlberg K. Women's experience of pain during childbirth. *Midwifery* 1998; 14: 105-110.
10. Green JM. Expectations and experiences of pain in labor: findings from a large prospective study. *Birth* 1993; 20: 65-72.
11. de Roubaix JAM. Seeking patient's consent in anaesthesiology: consent in clinical practice. *South African Journal of Anaesthesia and Analgesia* 2006; 11: 125-129.
12. Jenkins K, Baker AB. Consent and anaesthetic risk. *Anaesthesia* 2003; 58: 962-984.
13. Chalmers B. Western and African conceptualisations of health. *Psychology and Health* 1996; 12: 1-10.
14. Weber SE. Cultural aspects of pain in childbearing women. *J Obstet Gynecol Neonatal Nurs* 1996; 25: 67-72.

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