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BMJ Open Allophone immigrant women's knowledge and perceptions of epidural analgesia for labour pain: a qualitative study

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ABSTRACT

Objectives To explore allophone immigrant women's knowledge and perceptions of epidural analgesia for labour pain, in order to identify their information needs prior to the procedure.

Design We conducted focus groups interviews with allophone women from five different linguistic immigrant communities, with the aid of professional interpreters. Thematic analysis of focus group transcripts was carried out by all authors.

Setting Women were recruited at two non-profit associations offering French language and cultural integration training to non-French speaking immigrant women in Geneva.

Participants Forty women from 10 countries who spoke either Albanian, Arabic, Farsi/Dari, Tamil or Tigrigna took part in the five focus groups. Four participants were nulliparous, but all others had previous experience of labour and delivery, often in European countries. A single focus group was conducted for each of the five language groups.

Results We identified five main themes: (1) Women's partial knowledge of epidural analgesia procedures; (2) Strong fears of short-term and long-term negative consequences of epidural analgesia during childbirth; (3) Reliance on multiple sources of information regarding epidural analgesia for childbirth; (4) Presentation of salient narratives of labour pain to justify their attitudes toward epidural analgesia; and (5) Complex community positioning of pro-epidural women.

Conclusions Women in our study had partial knowledge of epidural analgesia for labour pain and held perceptions of a high risk-to-benefits ratio for this procedure. Diverse and sometimes conflicting information about epidural analgesia can interfere with women's decisions regarding this treatment option for labour pain. Our study suggests that women need comprehensive but also tailored information in their own language to support their decision-making regarding epidural labour analgesia.

INTRODUCTION

Epidural analgesia and anaesthesia has become the most widely used pain control method in obstetrics, allowing relief from labour pain during vaginal childbirth or caesarean section if required. In the UK and

Strengths and limitations of this study

- ► The inclusion of a diverse sample of hard-to-reach subjects allowed exploration of women's perspectives regarding epidural labour analgesia across different language groups.
- Focus group discussions supported by community interpreters created a comfortable atmosphere in which participants could freely express themselves.
- Involvment of a diverse research team in all aspects of the study provided multiple perspectives on the focus group transcripts' analysis and increased reflexivity throughout the study, thus minimizing bias associated with individual researchers' personal and professional beliefs and experiences with epidural analgesia for labour pain management.
- No data were collected on participants' education level, health literacy or migration history, and therefore their influence on participants' knowledge and perceptions could not be explored.
- This was a single-site study with a convenience sample of recent immigrants in Switzerland, and therefore results cannot be totally generalised to other contexts and settings.

USA, 60% of women will give birth under epidural analgesia, 69% in Canada and 83% in France. 1-3 While largely available in Western countries, epidural labour analgesia shows lower rates of use among immigrant women and parturients from ethnic minorities. In a study set in Ireland, women from Africa were three times less likely than their Western European counterparts to have epidural analgesia for labour and delivery. 45 In another study in Norway, 30% of women originating from Pakistan compared with 9% native Norwegian women received no analgesia for labour pain management. In a large US study conducted by the Center for Disease Control and Prevention, researchers found large disparities across ethnic groups in the use of epidural labour analgesia; non-Hispanic white women were found to be





the most likely to receive neuraxial analgesia and Afro-American women the least likely.⁷

There are several hypothesis to explain these disparities. One is the often lower socioeconomic level of women from non-dominant ethnic groups, which can negatively impact access to care, including epidural analgesia techniques.⁸ Another possible explanation is the lower level of knowledge of labour analgesia among immigrant and ethnic minority women. Several studies found that women from non-Western countries were less likely to ask for epidural analgesia because they had little awareness that labour pain can be relieved. 9-11 Researchers even found that Somali women in the USA had substantial resistance to any labour-related intervention because they believed it would increase the risk of caesarean section or death. 11 Other possible causes of disparities include difficulties accessing adequate information due to a language barrier, staff's limited time, fewer opportunities offered to members of ethnic minorities to express personal preferences and prior suboptimal experiences with Western world healthcare institutions. 12 An extensive literature review exploring women's experiences of pregnancy confirmed that immigrant women often encountered difficulties navigating the healthcare system, being understood and receiving treatments respectful of their cultural background. 13

While several barriers related to language, social and economic status, awareness of labour pain analgesia and prior negative healthcare experience have been identified, less is known about specific knowledge and perceptions of epidural labour analgesia of immigrant women from ethnic minorities. The nature and type of information needed by these women to allow an informed decision-making process regarding the use of epidural analgesia for labour pain management is unknown.

Our study aimed to explore allophone immigrant women's knowledge and perceptions of epidural analgesia, in order to identify their information needs and develop tailored information material to enhance their decision-making process. Our study was part of a larger project aimed at developing a multilingual short information video on epidural labour analgesia specifically designed for immigrant allophone women.

METHODS

Design, setting, rationale

We conducted an exploratory qualitative study using focus group interviews and thematic analysis exploring the knowledge and perceptions of allophone migrant women regarding epidural analgesia for labour pain. Focus groups have been identified as an efficient method with culturally and linguistically diverse populations to generate knowledge about patient preferences regarding healthcare provision and to inform future health interventions. ^{14 15} Details of the methodology used are reported according to the COnsolidated criteria for REporting Qualitative research checklist (online supplemental file

1). ¹⁶ The study was set in Geneva (Switzerland), a cosmopolitan city where 64% of the population holds a foreign passport and 54% of women who give birth at the main public hospital (Geneva University Hospitals or HUG) have a primary language other than French (the official language of Geneva). ¹⁷

Sampling and participant recruitment

Using the HUG maternity hospital interpreter services data, we identified the most frequently requested interpreter languages for women admitted for labour and delivery. We selected five language groups for our study: Tigrigna, Dari/Farsi, Albanian, Tamil and Arabic. Dari and Farsi speakers were considered a single group as there languages hold 90% lexical similarity. We contacted two well-known non-profit associations offering French language and cultural integration training to non-French speaking immigrant women in Geneva. 1819 Women were approached during their French language classes and invited to participate in the focus groups on a voluntary basis. All participants were informed about the research purpose and design and provided oral consent to participate in the study. Information about the study was provided in their own language by a professional community interpreter. Inclusion criteria included being a woman, over 18 years of age and belonging to one of the five linguistic communities selected. We included women with and without experience of labour and childbirth as we wanted to access a wide variety of perspectives on epidural labour analgesia. Participants were offered light refreshments and were given a voucher from a local grocery store after the focus group.

Data collection

The focus group discussion guide included 14 questions, focusing on: prior knowledge and representations of epidural analgesia for childbirth, information needs, expectations of epidural analgesia, knowledge of the epidural procedure and preferences regarding visual aspects of an informative film (online supplemental file 2). A short video showing how an epidural is performed was also shown at the end of the interview to trigger additional questions and discussion content from the participants. Focus groups lasted 2 hours including a short break.

Focus groups were held in empty classrooms at the language school. Each focus group included 7–9 women and was held with women from a single language group. Translation was provided by a professional female interpreter, chosen for her extensive experience with immigrant communities. Focus groups were led by two female experienced researchers (MDD, DG, IP). A short summary of relevant topics discussed during the sessions, as well as observations of group dynamics, were drafted by the two researchers immediately following focus group sessions. These notes served as additional data and facilitated subsequent thematic analysis. ²⁰ All focus groups discussions were audio recorded, and only the French



language portions of the recordings were transcribed (interviewers' questions and interpreters' translations of participants' comments).

Data analysis

During the data collection period, regular meetings between researchers took place to reflect on group animation processes, interview content and to identify emerging themes. Each transcript was first analysed separately by each researcher (MDD, IP, DG, GH) and then discussed together in order to develop a consensus coding list. Some codes emerged inductively from the data, while others emanated deductively from the interview questions; a thematic analysis framework was used in order to bridge inductive and deductive coding methods.²¹ ²² The final code list, resulting from a consensus meeting between all researchers, was then used to code all five focus group transcripts (online supplemental file 3).

All researchers then first coded each focus group transcript separately. Consensus meetings were held to compare coding and resolve discrepancies. Tables were created to compare excerpts for each code across focus groups; the main themes emerged through group discussions of this coded data across focus groups. ²³ Attention was given to how these themes compared across the five groups. Notes from each meeting were kept and referred to throughout the research process.

Reflexivity

To minimise the influence of researchers' opinions and beliefs regarding epidural labour analgesia, key steps of the thematic analysis were systematically completed during team meetings. Each researcher's personal perspective was challenged by other members of the group when there was discrepancies in theme identification, or when gender or prior personal and professional experiences of childbirth were felt by other members as possibly influencing data interpretation. Our research team included researchers with different personal and professional backgrounds. The diversity of the group allowed identification of individual norms and assumptions and discussion of these in order to minimise their impact on data collection and interpretation.

Patient and public involvement

To ensure participants' involvement and inform the study conduct, we included women (patients, interpreters and bilingual nurses) from the different linguistic groups selected. They supported study interpreters, experts in transcultural care and healthcare professionals involved in the study in designing the original protocol and developing the original discussion guide. More specifically they provided advice regarding common cultural issues surrounding epidural labour analgesia, gender preference for interviewers and settings for the conduct of the focus groups. They were not further involved in other participants' recruitment or data analysis.

RESULTS

Participant characteristics

Five focus groups involving 40 immigrant women from 10 different countries were conducted between May and September 2019. Participants were all native speakers of one of the five selected languages (Albanian, Arabic, Farsi/Dari, Tamil and Tigrigna). None of the participants spoke French. Table 1 provides an overview of participants' characteristics within each of the groups.

Women knew each other from their French classes and the dynamic within groups was very lively. They willingly shared personal childbirth experiences (sometimes distressing ones) from their original home country or in Europe. With the exception of Iran, women declared that epidural analgesia was not routinely offered for vaginal deliveries in their homeland. Some of them had knowledge that this type of procedure could also be used for caesarean section or other types of surgery, both in men and women. Women had many questions about epidural labour analgesia, including many relevant technical questions regarding contraindications, secondary effects, expected effect and so on. They were eager for more information about these topics, but also in general about sexual and reproductive health.

Five main themes emerged from the focus group discussions: (1) Women's partial knowledge of epidural analgesia procedures; (2) Strong fears of short-term and

Table 1 Participant characteristics for each language group				
Focus group language	Countries of origin	Number of participants	Age range	Childbirth history
Albanian	Kosovo, Albania	9	25–46 years old	Five women with 1–4 children, 1 pregnant again, Three women had none.
Arabic	Syria, Sudan, Iraq, Egypt, Palestine	7	30-60 years old	All with 2–4 children, 1 is pregnant again
Farsi/Dari	Iran, Afghanistan	7	32-57 years old	All with 2-5 children
Tamil	Sri Lanka	8	37-52 years old	Seven had 1-3 children, 1 had none
Tigrigna	Eritrea	9	23-41 years old	All had 1-4 children



long-term negative consequences of epidural analgesia during childbirth; (3) Reliance on multiple sources of information regarding epidural analgesia for childbirth; (4) Presentation of salient narratives of labour pain to justify their attitudes toward epidural analgesia; and (5) Complex community positioning of pro-epidural women.

Partial knowledge of epidural analgesia procedure

While in all groups many women were aware of the availability of epidural analgesia for childbirth, their understanding of the procedure varied widely and was often patchy. All groups mentioned that epidural analgesia is performed by an injection through a needle inserted in the back and is used to relieve labour pain.

If there is too much pain, it exists to ease the pain. It's called epidural, they can inject you, as you want. (Tigrigna)

I didn't know the name, but I knew that there was an injection in the back. (Albanian)

The Albanian, Arabic and Tigrigna groups commented that the procedure was also used for caesarean sections, but only the Arabic and Dari groups mentioned that an anaesthesiologist was required to perform the procedure.

All patients in all groups were aware that during needle insertion, they had to stay still. A key concern in all groups was the risk of harm from the needle if woman moved during the procedure.

It's very important not to move, because the injection has to be done in a precise place. Otherwise we can have paralysis. (Dari)

The anaesthesiologist explained that I shouldn't have a cold, that I shouldn't cough, that I absolutely should not move [during the procedure]. (Arabic)

Only rarely did women cite additional aspects of the procedure, such as the risk of total anaesthesia of lower extremities or that a catheter remained in the back following needle withdrawal.

I heard that, after receiving the epidural, is there some thread or something there? Because I heard, they leave a thread in there or something. (Tigrigna)

Perception of a high risk to benefits ratio of epidural analgesia

All groups agreed that epidural analgesia can reduce pain associated with childbirth. In addition, some women mentioned that it accelerated post-labour recovery (Arabic), allowed to open female genital mutilations type 3 (Arabic) and eased vaginal delivery, thus avoiding the risk of caesarean section (Dari).

The information we received is that it reduces very much, it reduces pain. (Tamil)

We heard that if we take the epidural, we feel less the pain, it's an easier delivery for the mom. (Albanian)

Despite these acknowledged benefits, the amount of discussions on the risks and adverse effects of epidural analgesia was striking in all groups. Eritrean women were particularly prone to express their concerns over health hazards associated with the procedure. The main concern was the mother's health, and women in all groups agreed that there was no risk for the baby, as nicely summarised by one Albanian participant: 'it's only for our body'. All groups feared immediate or delayed complications such as pain during the procedure, lower limb paralysis, persistent low back pain and headache.

It's a very difficult, very painful injection. (Arabic)

The needle can go to the wrong place, it can harm a nerve or something. (...) If it's the back that is injured it means that the legs will not walk any more. (Tigrigna)

We risk having pain in the lower back, having head-aches. (Dari)

Furthermore women in the Arabic, Dari and Tigrigna groups worried about the impact of epidural analysesia on the delivery process, mainly not being able to push or not knowing when to push.

So my husband told me that if you have an epidural you won't have enough strength to push, to give birth to the baby. (Dari)

In all groups, women frequently referred to generic 'adverse effects' of epidural analgesia, although they were often unable to specify the nature of these negative effects even when researchers tried to elicit more information.

But even if it helps us during the delivery, later it will cause problems. (Tamil)

We hear discussions around us, women say "it's not good for your health". That's all, but I don't know how. (Tigrigna)

Reliance on plural sources of information on epidural analgesia for childbirth

Participants relied on various sources of information on epidural analgesia for childbirth. Those who did not know much about the procedure often mentioned that the procedure was not available in their home country. Women who had previous personal experience of epidural analgesia referred to it as a valid source of information, and often contrasted their positive experience with the negative information they overheard.

The others say it will hurt your back (...). But I say no, I had it twice [the epidural], and I have never had [back] pain. (Dari)

Most information was acquired from relatives, friends and community members, especially other women from the same ethnic group. Here again, prior experience of other women was referred to.



Once I went home I was told by my relatives that I should not have accepted the epidural because there are secondary effects. (...) I asked my relatives 'where does that come from' and they said 'it happened to certain people. (Dari)

We hear discussions around us, women say "it's not good for your health". (Tigrigna)

Health professionals were also often mentioned as reliable and trustful source of information. Women never referred to internet or the social media as a source of information.

Narratives of labour pain to justify one's attitude toward epidural analgesia

Pain and suffering during labour was a strong recurrent theme discussed by participants. Participants used salient childbirth narratives of themselves or others to lend weight to their fears, perceptions and decisions regarding epidural labour analgesia. Some women justified the need for epidural analgesia by the intolerable intensity of labour pains.

So there, my daughter has heard so many things about epidural, she refused it. But as she was in labour, she suffered and, when it was proposed to her, she accepted. And she was pleased because she didn't feel anything. (Arabic)

Me, I had two children. My first child was born in Iran, I saw death with my eyes, and finally I had a caesarean section. However my second child was born here in Switzerland. So I was very frightened because of that experience I had in Iran. So I was told that with an epidural I might not have pain and at that moment, I accepted. (Iran)

More often, women described labour pain as a natural process associated with giving birth that women should accept and endure.

So normally, in my opinion, it's part of the birth itself. The mother must feel this pain, how the baby will come out, through this pain. (Egyptian)

Furthermore, some women regretted having initially asked for an epidural and not feeling pain. Others underlined that women should at least once in their life feel the pain of childbirth.

So at first, as I had too much pain, I accepted. With the second daughter, I said no. Because I already did it once. No, no, no, I didn't want it. (Eritrean)

Me for instance, if I had given birth, it's not that it's dangerous to have the epidural but I would have liked to feel these pains. (Albanian)

Finally, pain was seen as a distractor that prevented women from thinking straight, leading them to accept epidural analgesia without paying attention to adverse side effects. At the time of the birth, we don't have good reflexes. When we go through the stage of pain, someone proposes something, immediately we take it. Without thinking about it, all women, they want something to decrease the pain. (Tamil)

Complex community positioning of pro-epidural women

In each group of participants, a minority of strong advocates of epidural labour analgesia emerged. It was not easy for these women to position themselves against the majority of women who systematically discussed negative side effects and considered labour pain as a compulsory part of childbirth experience. A common strategy of these pro-epidural women was to oppose these arguments by referring to their positive personal experience to justify and support their use of epidural analgesia during labour.

So I was told that with an epidural I would not have pain. At that moment I accepted, because of my prior bad experience. I had pain but only a little. Once the baby was born, it went well. But once I went home, I was told, my close relatives [told me], that I should not have accepted the epidural because there are secondary effects. Six years later, I am very happy, I don't have any pain or any problem. (Dari)

These supporters of epidural labour analgesia also highlighted the fact that adequate information had been provided by health professionals and that this encouraged them to accept this technique and improved their freedom of choice.

What I appreciated is that 1 week before delivery, I was explained everything [through a prenatal consultation]. If I wanted to give birth vaginally, if I wanted a caesarean, I was explained everything, so I wasn't scarred. (Dari)

So for me, I think that what the others said is wrong. Because they give us an appointment before, they explain to us. If we take the epidural, if we do a caesarean section, they explain it to us. (...) So already we understand what is awaiting us. (Tigrigna)

Some epidural advocates showed uncommon assertiveness and tried to undermine other women's fears of adverse effects.

I don't agree with what the others say. It's all in the head because you are scared. (...) Others say that it hurts the back and the pain stays, but no, I had it twice and I never had pain. It all happens in the head, because of being scared to take the epidural, that's it! (Tigrigna)

Probably the woman she already has back pain (...) and then she says "oh, well, it's because of the injection!". (Arabic)

DISCUSSION

Our study shows that immigrant allophone women from the Middle East, Afghanistan, Iran, Eritrea, Sri-Lanka and Albania are well aware of the availability of epidural analgesia to control labour pain. However, their knowledge of the technique remains incomplete, and negative representations of epidural analgesia as a risky procedure predominates over positive perceptions of its benefits for pain management. Traditional perspectives of pain as a natural part of childbirth is also often advocated. Yet, some women seem to disagree with this traditional perspective, and use subtle narrative strategies such as positive individual experiences to justify the use of epidural analgesia for labour, in contradiction with traditional practice in their native home country. These pro-epidural women also underline the supportive role played by information provided by health professionals in their decision-making process. Finally, except for Eritrean women who appeared to be more worried than others about the side effects and complications associated with the technique, there were no other differences observed between ethnic groups.

Several studies performed in low-income countries, have identified significant barriers to the use of epidural analgesia for labour and delivery. These include costs, availability of specialised staff and material, awareness of existing labour pain management techniques and beliefs that labour pain is natural and good and should not be treated. 24-26 In our study of women having migrated from low-income countries, participants from all ethnic groups were aware of the different management techniques for labour pain, of their risks and benefits and had some level of knowledge of the epidural technique itself. This may be explained by improved access of immigrant women to multiple sources of information and expertise once they live in Western high-income countries. For instance, in our hospital setting, several information leaflets in different languages are available to explain labour, pain management and perinatal care; although, for some specific countries, the language barrier may still hinder access to information. 27-29 For many others this is not the case and this may explain why perspectives of immigrant women who have moved to a Western high-income country differ from the ones in their native home country.

In the different groups of immigrant women interviewed, we found that negative representations of epidural analgesia predominated over positive opinions. This is however not specific to immigrant women from low-income countries. Negative representations of epidural analgesia are common, including among natives of Western high-income countries. In many studies, authors found that women often blame epidural technique for slowing the natural process of labour, for increasing the risk of instrumental delivery, and for impeding breast feeding. ^{30 31} Although robust scientific data have invalidated these claims, ^{32 33} many women in high-income countries also consider that epidural analgesia increases their risk of caesarean section and can cause paraplegia. ^{34 35}

Another interesting finding of our study is the reliance of women on diverse sources of information and particularly on information provided by peers that have already experienced childbirth with analgesia techniques. This finding is similar in studies performed elsewhere. For instance, in a study in the USA, researchers found that friends and family members were often cited as the most important sources of information regarding epidural analgesia (70.5%), over internet (25%), books (23%) and childbirth classes (22.5%). This highlights the importance of providing peer to peer exchange opportunities, such as collective birthing classes, which are rarely available for allophone parturients due to language barriers. In our sample of allophone immigrant women, husbands, family and other community members were mentioned as influencing their choice to accept or refuse epidural analgesia. In high-income countries also, partners' preferences, recommendations of friends and family members appear to be an important factor influencing the decision to request or refuse epidural labour analgesia. 27 35 37 Healthcare professionals should thus provide information in a format that women can then share with others, in order to enhance women's autonomy in deciding whether or not to have labour epidural analgesia.

In our study, we also found that perspectives regarding labour pain varied widely. Many women supported a traditional perspective that labour pains are a necessary step toward childbirth and maternity. In a study in Iran, women who had given birth without epidural even expressed a sense of empowerment and belonging to an elite.³⁸ Furthermore, several qualitative studies in various cultural contexts found that labour pain, although challenging for women, is viewed as a positive, essential and beneficial part of life and as a source of trust in one's body. ³⁹ Health professionals should be aware of these different perceptions of labour pain, and tailor their pain management procedures to the women's personal and cultural preferences. This approach is particularly relevant with immigrant women as they have been found to encounter difficulties constructing their maternal identity across cultures, especially when practices differ between their home and host country.⁴¹ A more conservative approach to labour pain may be challenging to healthcare professionals in Westernised countries, who tend to value a calm and well organised labour room as a tangible indication of their professional competence.⁴²

Regardless of cultural perspectives and peer influences on the decision to have or not an epidural, labour pain is sometime overwhelming and can abruptly force women to request labour analgesia. In our study, some participants recall that labour pain was so strong that it hindered their ability to think and over-rode their initial decision not to ask for an epidural. Nulliparous parturient women have indeed been shown to increase their wish of epidural analgesia from 27.9% before labour to 48.2% as soon as painful contractions begin. A systematic review of women's expectations regarding labour pain showed that an important proportion of women underestimate the intensity of labour pain. In highincome countries studies, researchers found that 50% of women who had initially not requested an epidural finally



asked for it. 44 45 Healthcare professionals should keep this in mind, since women may feel disappointed or defeated when accepting epidural analgesia. Indeed in our study, several women expressed worries and regrets following acceptance of epidural analgesia.

This qualitative study has several strengths. One is a significant representative sample of 40 allophone immigrant women from cultural minorities from 10 different countries. Another is the use of a culturally congruent data collection method based on focus group interviews that allows, in a friendly atmosphere, in-depth understanding of participants beliefs and values. Finally our study has a high level of internal validity due to the involvement of researchers from different professional backgrounds, age and gender groups. They were all involved at each stage of the data collection, thematic analysis, coding and interpretation. In addition, to avoid bias associated with researchers' beliefs and personal experience with epidural analgesia, special attention was given to reflexivity throughout the study.

A number of limitations should also be mentioned. One is that our study design did not record participant information such as education level, health literacy or migration history, which could potentially impact on participants' perspective over epidural analgesia for labour. Another is the limited generalisability of our study findings. These might be limited to immigrants located in high-income Western countries such as Switzerland.

Further research should therefore also focus on immigrants in upper-middle, lower-middle or low-income countries to assess whether women's knowledge and perceptions of epidural analgesia for labour pain: management differ from the ones identified in our study. It could also assess whether providing information about epidural analgesia tailored to parturients' individual and cultural perspectives, improves their decision-making process regarding epidural analgesia use for labour. This becomes particularly relevant when the women's decision differs from the traditional perspective of their native community.

Our research findings have implications for clinicians and policymakers. Box 1 provides a checklist of key aspects that should be addressed by health professionals caring for allophone immigrant women to facilitate the decision-making process and improve women's autonomy.

CONCLUSION

This study shows that immigrant women's decision regarding epidural analgesia during childbirth is a complex interplay between knowledge, experience, attachment to tradition, social positioning and trust in the host country health system. By offering tailored medical information, health professionals can support women who wish to have a pain free labour with epidural analgesia despite the mainstream cultural views of their community. By questioning women's perspectives of labour pain, they can adapt their offer of pain management procedures.

Box 1 Key steps to enhance parturients' autonomy and informed decision-making for epidural analgesia during childbirth

Prior to giving information, the clinician should explore:

- Women's knowledge and experience of epidural analgesia.
- Individual, family and community perspectives regarding labour pain and analgesia.
- Presence of family or community members supporting or opposing the use of epidural analgesia.

Information about epidural analgesia should include:

- Overall simple description of the technique (ie, catheter placed in the back).
- What woman should do or not do during the procedure (ie, movement).
- ▶ What women will feel during the procedure.
- Risks and benefits of the procedure.
- ► Short-term and long-term side effects and possible complications.
- Consequences of not choosing epidural analgesia for pain management.
- Alternative pain management options.

Provide access to documents in women's own language (paper, online) that allow them to discuss the procedure with family members and peers from their own community.

Offer support to women that choose epidural analgesia against their family or community values or perspectives.

Although this is relevant for any woman, it is particularly important with immigrant women, as these women encounter more linguistic, social or cultural barriers in accessing healthcare preferences. This study also shows that research with often excluded minority communities is not only possible, but yields information that may also benefit the mainstream population.

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Patient consent for publication Not applicable.



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