#### 8 Open Access Full Text Article

#### ORIGINAL RESEARCH

## Perceptions of obstetric analgesia: a qualitative study among midwives attending normal vaginal deliveries in Durame Hospital, Southern Ethiopia

This article was published in the following Dove Press journal: *Journal of Pain Research* 

### Teketel Ermias Geltore<sup>1</sup> Abraham Getachew Kelbore<sup>2</sup> Abiy Tadesse Angelo<sup>3</sup>

<sup>1</sup>Midwifery Department, School of Nursing and Midwifery, College of Health Sciences and Medicine, Wachemo University – Durame Campus, Durame, Ethiopia; <sup>2</sup>Dermatology Department, College of Health Sciences and Medicine, School of Medicine, Wolaita Sodo University, Wolaita Sodo, Ethiopia; <sup>3</sup>Nursing Department, School of Nursing and Midwifery, College of Health Sciences and Medicine, Mizan Tepi University, Mizan Aman, Ethiopia

Correspondence: Teketel Ermias Geltore Department of Midwifery, College of Health Sciences and Medicine, Wachemo University – Durame Campus, Durame, PO Box 667, Wachemo, Ethiopia Tel +251 91 013 2178 Email teketelermias@gmail.com



**Background:** Labor pain is distressing and produces undue side effects to both woman and fetus. In low-income countries like Ethiopia, addressing pain relief is often neglected. Professionals attending labor may not have awareness of obstetric analgesia. Besides this, there is a lack of published research on perceptions of obstetric analgesia among health professionals in Ethiopia. The aim of this study was to explore perceptions of obstetric analgesia among midwives attending normal vaginal deliveries in Durame Hospital.

**Methods:** The study adopted an exploratory descriptive qualitative approach in Durame General Hospital, Kembata Tembaro Zone, Southern Ethiopia from March 1 to April 2, 2017. Fifteen midwives were purposely selected and participated in in-depth interviews. Data from interviews were transcribed, translated to English, coded, and categorized into themes. Data analysis was initiated alongside data collection using a thematic approach. Written informed consent was obtained from all study participants.

**Results:** Scarcity of knowledge, negative attitudes, lack of trained personnel, and absence of protocols were impediments to using labor analgesia for midwives to relieve labor pain.

**Conclusion:** This study suggests that perceptions and practices of midwives with regard to labor analgesia needs special attention to address labor pain by scaling up forms and practice of labor analgesia in such a way that internationally accepted standards are met. **Keywords:** pain, analgesia, midwives, qualitative research, hospital-based, Ethiopia

### **Background**

Giving birth is said to be an exciting and universally celebrated event, but the majority of mothers are passing through the severest forms of pain in completing it. In humans, childbirth through labor is associated with a painful experience, irrespective of social, cultural, and ethnic background.<sup>1–3</sup> Pain relief in labor is surrounded by myths and ambiguity, and providing effective and safe analgesia during labor has remained an ongoing challenge, though its use analgesia became widespread and popular in the Victorian era.<sup>4,5</sup>

The American College of Obstetricians and Gynaecologists and the American Society of Anaesthesiologists recognized a double standard, noting that there was another occasion in which the experience of severe pain was assumed acceptable under a physician's care. Since then, when contraindications are ruled out, a mother's request for analgesia has been sufficient indication for pain relief during labor.<sup>5,6</sup> Also, in the UK it has been emphasized that when giving health education to expectant women, the choices and availability of appropriate analgesia services during labor should be highlighted.<sup>7</sup>

Journal of Pain Research 2019:12 2187-2192

2187

© 2019 Geltore et al. This work is published and licensed by Dove Medical Press Limited. The full terms of this license are available at https://www.dovepress.com/terms. work you hereby accept the Terms. Non-commercial uses of the work are permitted without any further permission form Dove Medical Press Limited, provided the work is properly attributed. For permission for commercial use of this work, please see paragraphs A2 and 5 of our Terms (https://www.dovepress.com/twws.shore). Labor pain is as old as human beings. It is a complex phenomenon with sensory, emotional, and perceptual components. Some misconceptions assume that labor pain is normal and that interfering with this is not good for health. However, if labor pain exceeds a certain intensity and duration, it may affect the expectant mother and her attitudes toward her baby.<sup>8,9</sup> Severe pain during labor seems not life-threatening for a healthy person, but it may result in overstimulation of the sympathetic nervous system, leading to increased blood pressure, decreased blood flow from the uterus to placenta, which may leads to fetal distress, postpartum depression, and posttraumatic stress disorder. However, many of these sequelae of pain are mitigated by effective pain-relief methods.<sup>10,11</sup>

In developed countries, both pharmacological and nonpharmacological treatments have been established to relieve labor pain. Opioids, epidural analgesia, inhalation agents, pudendal block, massage, acupuncture, continuous support, positioning, ambulation, and breathing techniques are used to manage labor pain.<sup>12,13</sup> In highincome countries, freedom from labor pain is a basic right of clients, with a focus on preference for methods and addressing complications. However, the focus of lowincome countries are: awareness creation to acceptability and availability of methods.<sup>14</sup>

On one hand, factors that influence the practice of analgesia in developing countries by service providers are unavailability of medications, facility-management systems, religious background, attitudes, knowledge, and skills. Besides this, misunderstanding with regard to fetal distress, increased caesarean deliveries, prolonged backache, and medical problems to both mother and newborn are issues that influence practice of the service.<sup>15–17</sup> In the developing world, the practice of obstetric labor analgesia is not known. The unavailability of the service results in mother anxiety and no access to fundamental medical care.<sup>18</sup>

Providing appropriate labor-pain management is comfortable and celebrating event in childbirth. A 2014 Ethiopian Demographic and Health Surveillance finding showed that despite more than 50% of pregnant women attending antenatal care, only 14.5% of deliveries were conducted by skilled care providers. This points to the need for labor-pain alleviation.<sup>19</sup> As such, this study explored perceptions of obstetric analgesia among midwives attending normal vaginal deliveries in Durame General Hospital, Kembata Tembaro Zone, Southern Ethiopia in 2017.

### Methods

We adopted an exploratory descriptive qualitative approach. This approach was appropriate because it permits not only study subjects to describe their experiences and perceptions fully but also allows researchers to probe emerging themes.<sup>20</sup> The study was conducted from March 1 to April 2, 2017. Fifteen midwives participated in in-depth interviews. Interviews were transcribed and translated to English, then coded and categorized into similar themes. Data analysis was initiated alongside data collection using a thematic approach. Written informed consent was obtained from all study participants. The hospital is located 274 km from Addis Ababa, the capital, and has 196 staffs: 118 clinical and 78 nonclinical. Currently, there are two general surgeons, one gynecologist, one internist, one pediatrician, nine health officers, 17 general practitioners, 29 BSc nurses, 34 clinical nurses, 21 midwives, and 3 integrated emergency-surgery officers. According to hospital records, there were 2,000 deliveries there in 2018.

# Sampling and data-collection procedures

Fifteen participants were purposively sampled and involved in individual interviews. Interviews were conducted in Amharic, the local language, and the first author conducted all the interviews. A semistructured interview guide was used to conduct interviews. Open-ended questions were used to generate responses with probing to achieve full understanding. Each interview lasted 25–30 minutes. Place and time were convenient for the participants. All interviews were audio recorded and later transcribed verbatim.

### Data analysis

Data obtained from study subjects were transcribed verbatim into English by the principal investigator. Transcripts were read several times to gain a full sense of the participants' worlds. They were coded by reading line by line and assigning a word or phrase that accurately captured the essence of the information read, and categorized and analyzed using a thematic approach. The findings are presented in narratives using direct quotes as illustrations.

## Trustworthiness of the study

Concurrent analysis ensured that emerging themes were probed in subsequent interviews to reach full understanding of themes. The same interview guide was used for all midwives. In-depth interviews conducted in Amharic were discussed with experts to ascertain accuracy.

### **Ethical considerations**

Ethical clearance was obtained from the ethical review board of the Institute of Health Sciences, Jimma University to conduct the study. Permission to conduct the study was secured from Durame General Hospital. Written informed consent was obtained from all respondents, and they were given the chance to withdraw from the study at any time during the data-collection period. Findings presented contain no identifying information about study participants.

## Results

### Participant backgrounds

Participants were 15 midwives aged 20–35 years. Eight were female and seven male. Eight were orthodox in religion and had work experience of 6–10 years. Eleven had BSc. Findings were described on such themes as: experiences of midwives in supporting women during labor pain, knowledge of participants regarding obstetric analgesia, attitudes of participants toward obstetric analgesia, presence of trained personnel, and availability of protocols and drugs.

## Experiences of midwives in supporting women during labor pain

This theme described midwives' assistance to mothers with labor pain. During painful uterine contractions, a few midwives encouraged laboring women by massaging their waist, allowed a squatting position, and permitted them to walk around.

While the women were in strong labor pain, I just encouraged them to walk around, which helps to bring the pain down. [male midwife with 6 years' work experience]

I have previous experience that when women are in labor pain, I assist them to lie on their side, and when I do that they are relieved of the pain. [female midwife with 4 years' work experience]

In the case of second stage of labor with strong uterine contractions, I advise laboring mothers to be in a squatting position. This helps them in decreasing the pain. [female midwife with 9 years' work experience]

Other participants had had experience in encouraging deepbreathing exercises for laboring mothers through their mouth during painful contractions, helping to reduce the pain.

I have previous experience that when women are in pain, I advise them to breathe through their mouth, and when the contractions start, they do it and that helped them to reduce the pain. [female midwife with 7 years' work experience]

On the other hand, some midwives in this study perceived labor pain as normal. As such, they prevented laboring women from walking around and advised them to sleep only on their left lateral side.

I provided advice for laboring mothers not to ambulate around, because I have been faced with one laboring mother walking around, and when the labor was advanced she gave birth without the assistant of care providers and thus developed a fistula. So I don't advise them to walk around during labor for reducing labor pain. [female midwife with 3 years' work experience]

I advise laboring mothers to be lying on their left lateral side only, because if they are in another position rather than the left lateral side, this might result in fetal distress. [male midwife with 5 years' work experience]

Some midwives had the perception that women who cried during labor were weak. They did not allow them to cry.

Women who cry during labor are labelled as weak women. They have to bear the pain. I do not allow them to cry until the baby comes out. I also order them to go through labor without crying. [female midwife with 2 year's work experience]

# Knowledge of participants related to labor pain-relief measures

Most participants mentioned that labor pain was a natural phenomenon and that they did not have enough knowledge to manage it with painkillers.

When I was a student 3 years back, I was taught about labor analgesia during my university training program, but now I have forgotten it. Therefore, I cannot practice labor analgesia, especially the pharmacologic one. [female midwife with 6 years' work experience]

Indeed, I and our labor-ward case-team members have not enough knowledge on prescribing labor-analgesia drugs to manage labor pain rather than help and support mothers during labor. [male midwife with 1 year's work experience]

# Attitudes of participants related to labor pain–relief measures

Most midwives indicated labor pain is a major part of giving birth and mentioned that use of labor analgesia (pharmacological) can affect both the mother and fetus. Therefore, they had decided not to use labor analgesia (pharmacological) for labor-pain management.

Labor pain is a major part of giving birth, and it is not common practice to relieve pain during labor and delivery by using labor analgesia in our facility. But I can encourage and allow laboring mothers to walk around during labor. [male midwife with 11 years' work experience]

The practice of labor analgesia [pharmacological] is not common in our facility, because if we use the service it may harm both mother and baby. So it is not offered in our facility [male midwife with 7 years' work experience]

## Trained personnel, protocols, and availability of drugs related to labor pain–relief measures

Almost all midwives mentioned that they were not trained how to manage labor pains by using obstetric analgesia, due to lack of protocols and guidelines. The situation was explained by a 30-year-old female midwife.

There is no known practice of obstetric labor analgesia in our facility, because there are no experienced/trained health-care personnel and also there are no guidelines or protocols that stimulate us to practice it. [female midwife with 11 years' workexperience

Labor analgesia is not well practiced in our facility, because of unavailability of drugs and absence of trained health-care personnel to utilize the methods. In order to solve the problem, the facility management is responsible for facilitating training for labor-analgesia providers and also should avail necessary drugs, protocols, and guidelines to provide analgesia to laboring mothers. [male midwife with 9 years' work experience]

I experienced that it was very difficult to cope with the labor pain and I sympathize with the mother in labor who shouts and suffers because of pain. I always ask myself and others what if labor analgesia was prescribed for mothers in labor to relieve the pain. [female midwife with 7 years' work experience]

Indeed, labor pain is the severest kind of pain in a woman's life, but still I don't see interventions taken

during labor-pain management. Therefore, some concerned body should train health-care providers in the management of labor pain and avail safe and effective analgesia drugs in the hospital. [male midwife with 4 years' work experience]

### Discussion

There is no controversy that labor-pain management adds value to obstetric services. Managing this is not fashion rather forecasted obstetrics care.<sup>15</sup> This study found that midwives' perceptions of analgesia to lighten pain for normal labor were limited. Surprisingly, it was an entirely new concept for the majority of them. Labor-pain relief is an essential aspect of women's health that has historically been neglected. It has been shown that midwives sometimes underestimate the level of pain experienced by women in labor and overestimate the efficacy of pharmacological practice.<sup>21</sup>

Perceptions of health-care providers were restrictive toward using analgesics for normal labor. They thought it would interfere with the normal progress of labor. However, they expressed a positive attitude to help mothers to cope with labor pain through assurances and carrying out activities to comfort the women.<sup>22</sup> Both experience and perception of pain were regarded as subjective. Therefore, it was difficult to measure objectively. Indeed, other study findings have shown that pain is often under- or overestimated by care providers, which results in inability to administer adequate analgesia.<sup>21</sup>

In the present study, the midwives considered labor pain a natural phenomenon and an experience given by God. This assumption is similar to midwives in Ghana.<sup>22</sup> In general, the assumption of childbirth as a normal process helps women to cope better with the pain,<sup>23</sup> but this does not mean that labor pain should be neglected, because even in the normal physiology of labor, women experience pain.<sup>24</sup> As evidence shows, if labor pain exceeds a certain intensity and duration, it may have a negative impact on the lives of the expectant mother, her baby, and even family members.<sup>8</sup> In low- and middle-income countries, the majority of obstetric caregivers are not taught about labor analgesia during their training program, and their practical exposure to it is very limited.<sup>25</sup>

In the current study, most midwives indicated that pharmacological analgesia (systemic opiods) could harm both woman and newborn and for that reason they refrained from providing it. Concern by midwives about the potentially harmful effects of pharmacological analgesia upon the mother's birth experience, coupled with the potential danger to the fetus, is not reflected by the common use of pethidine.<sup>9</sup> Opioids, however, have limited effects on pain relief.<sup>26</sup> Other forms of analgesia, such as paracetamol, were used by only a few participants. Furthermore, a good number of participants offered psychological support, a form of nonpharmacological analgesia, even when there is no known evidence that this technique affects labor pain.

According to participants that did not offer pain relief to their laboring mothers, they refrained because of fear of fetal distress and the fact that mothers presented very late in labor, among other reasons.<sup>26,27</sup> In the present study, most midwives indicated that absence of protocols and guidelines and unavailability of drugs were factors affecting use of the methods. Hospital setting, lack of skilled personnel, and unavailability of medications and equipment to apply these are obstacles that influence obstetric pain management.<sup>15,19,25,28</sup> Even when drugs are available in facility, there is no appropriate use of drugs. This is probably due to the fact that the midwives often do not get any training in labor-pain management.<sup>18</sup>

### Conclusion

Having inadequate knowledge of obstetric analgesia, negative attitudes toward obstetrics analgesia, and lack of trained personnel, protocols, and analgesic drugs were the areas identified as obstacles to obstetric pain management. Midwives should be equipped with the required attitudes, knowledge, and skills, and further efforts must be made in supplying health facilities with the necessary materials and personnel. Proper policies on the use of obstetric analgesia are also important.

### **Acknowledgments**

The authors are very grateful to study participants for sharing their personal experiences, and Professor Ben Naafs for editing the English.

#### Disclosure

The authors report no conflicts of interest in this work.

### References

- Ebirim LN, Buowari OY, Ghosh S. Physical and psychological aspects of pain in obstetrics. In: Ghosh S, editor. *Pain in Perspective*. London, UK: InTech; 2012. doi:10.5772/53923.
- Tasnim S. Perception about pain relief during normal labour among health care providers conducting delivery. *Med Today*. 2010;22 (1):20–23. doi:10.3329/medtoday.v22i1.5600

- Baker A, Ferguson SA, Roach GD, Dawson D. Perceptions of labour pain by mothers and their attending midwives. *J Adv Nurs*. 2001;35 (2):171–179. doi:10.1046/j.1365-2648.2001.01834.x
- 4. Agrawal D, Makhija B, Fotedar S. Impact of epidural analgesia on labour: a review. *Ann Woman Child Health*. 2015;1(1):1–9.
- 5. Kothari D, Bindal J. Impact of obstetric analgesia (regional vs parenteral) on progress and outcome of labour: a review. *Jurnalul Român de Anestezie Terapie Intensivã*. 2011;18:34–40.
- [No authors listed]. ACOG Committee Opinion #295: pain relief during labor. Obstet Gynecol. 2004;104(1):213. doi:10.1097/ 00006250-200407000-00061
- Karn S, Yu H, Karna S, Chen L, Qiao D. Women's awareness and attitudes towards labor analgesia influencing practice between developed and developing countries. *Adv Reprod Sci.* 2016;4(2):46–52. doi:10.4236/arsci.2016.42007
- Vixiner L. Accuprcture for Labor Pain. Department of Women's and Children's HealthKarolinska Institutet, Stockholm, Sweden. 2015; ISBN 978-91-7549-823-2.
- Iliadou M. Labour pain and pharmacological pain relief practice points. 2009;3(4):197–201.
- Ding T, Wang D, Qu Y, Chen Q, Zhu S. Epidural labor analgesia is associated with a Decreased Risk of Postpartum Depression. *Society* for Obstetric Anaesthesia and Perinatology. 2014;119(2):383–392.
- Cochrane AR. Perceptions of Labor and Delivery Clinicians on Nonpharmacological Methods for Pain Relief during Labor; 2015. Available from: https://digitalcommons.brockport.edu/cgi/viewcontent.cgi?arti cle=1093&context=honors. Accessed February, 2017.
- Zionts S. Ouch, that hurts: childbirth-related pain management and the inappropriate replacement of traditional obstetrical knowledge in Kumaon, Uttarakhand, India. Independent Study Project (ISP) Collection. Paper 2015; 2081.
- BarragánLoayza IM, SolàI JC. Biofeedback for pain management duringlabour. *Cochrane Database Syst Rev.* 2011;(6):Art. No.: CD006168. doi:10.1002/14651858.CD006168.pub2
- Nabukenya MT, Kintu A, Wabule A, Muyingo MT, Kwizera A. Knowledge, attitudes and use of labour analgesia among women at a low-income country antenatal clinic. *BMC Anesthesiol*. 2015;15:98. doi:10.1186/s12871-015-0044-6
- Ogboli-Nwasor E, Adaji S, Bature S, Shittu O. Pain relief in labor: a survey of awareness, attitude, and practice of health care providers in Zaria, Nigeria. J Pain Res. 2011;4:227–232. doi:10.2147/JPR.S21085
- McCauley M, Stewart C, Kebede B. A survey of health care providers' knowledge and attitudes regarding pain relief in labor for women in Ethiopia. *BMC Pregnancy Childbirth*. 2017;17(1):56. doi:10.1186/s12884-017-1237-4
- Reena BKH, Afzal M, Mishra AK, Paul A. Labor epidural analgesia: past, present and future. *Indian J Pain*. 2014;28(2):71–81. doi:10.4103/0970-5333.132843
- Size M, Soyannwo OA, Justins DM. Pain management in developing countries. *Anaesthesia*. 2007;62(1):38–43. doi:10.1111/j.1365-2044.2007.05296.x
- Bitew A, Workie A, Seyum T, Demeke T. Utilization of obstetric analgesia in labor pain management and associated factors among obstetric care givers in Amhara Regional State Referral Hospitals, Northwest Ethiopia: a hospital-based cross-sectional study. *J Biomed Sci.* 2016;5:2. doi:10.4172/2254-609X.100029
- Devos AS, Strydom H, Fouché CB, Delport CSL. Research at Grass Roots: For the Social Sciences and Human Service Professions. 4th ed. Pretoria: Van Schaik Publishers; 2011.
- Niven C. Coping with labour pain: the midwife's role. In: Robinson S, Thomson AM, editors. *Midwives, Research and Childbirth*. London: Chapman and Hall; 1994;3.
- 22. Aziato L, Ohemeng HA, Omenyo CN. Experiences and perceptions of Ghanaian midwives on labour pain and religious beliefs and practices influencing their care of women in labour. *Reprod Health*. 2016;13(1):136. doi:10.1186/s12978-016-0130-3

- Van der Gucht N, Lewis K. Women s experiences of coping with pain during childbirth: a critical review of qualitative research. *Midwifery*. 2015;31(3):349–358.
- 24. Escott D, Slade P, Spiby H. Preparation for pain management during childbirth: the psychological aspects of coping strategy development in antenatal education. *Clin Psychol Rev.* 2009;29(7):617–622. doi:10.1016/j.cpr.2009.07.002
- 25. Geltore TE, Taye A, and Kelbore AG. Utilization of obstetric analgesia in labour pain management and associated factors among obstetric care givers in public health facilities of Kembata Tembaro Zone, Southern, Ethiopia. J Pain Res. 2018;11:3089–3097. doi:10.2147/JPR.S165417
- Imarengiaye CO. Trends in pain relief in labour: implications for obstetric analgesia service in Nigeria. *Niger Postgrad Med J.* 2005;12 (3):193–202.
- 27. Lawani LO, Eze JN, Anozie OB, Iyoke CA, Ekem NN. Obstetric analgesia for vaginal birth in contemporary obstetrics: a survey of the practice of obstetricians in Nigeria. *BMC Pregnancy Childbirth*. 2014;14:140. doi:10.1186/1471-2393-14-140
- 28. Mulugeta H. Practice of labor analgesia and its perceived barriers among health providers working in public hospitals of Addis Ababa, Ethiopia; [master's thesis]. 2016; Addis Ababa.

#### Journal of Pain Research

Publish your work in this journal

The Journal of Pain Research is an international, peer reviewed, open access, online journal that welcomes laboratory and clinical findings in the fields of pain research and the prevention and management of pain. Original research, reviews, symposium reports, hypothesis formation and commentaries are all considered for publication. The manuscript

Submit your manuscript here: https://www.dovepress.com/journal-of-pain-research-journal

**Dove**press

management system is completely online and includes a very quick and fair peer-review system, which is all easy to use. Visit http:// www.dovepress.com/testimonials.php to read real quotes from published authors.