# Perception and Acceptance of Epidural Analgesia during Labour among Pregnant women attending Antenatal Clinic in University of Port Harcourt Teaching Hospital

## <sup>1</sup>Udodiri Obia and <sup>2</sup>Josephine Gbobbo

Midwifery Division, African Centre of Excellence in Public Health and Toxicological Research, University of Port Harcourt, Nigeria.

## Abstract

**Background and aim:** Despite the numerous merits of epidural analgesia, its acceptance and practice has become a subject of contention. The present study is a qualitative research aimed at evaluating the perception and acceptance of epidural analgesia during labour amongst pregnant women attending antenatal clinic in university of Port Harcourt Teaching Hospital.

**Methods**: A total of 30 eligible pregnant women were recruited for the study and audio-taped interviews were recorded and saturation occurred at the 16<sup>th</sup> subject. Thematic analysis identified the following themes; assessment of labour pain, pain relief during labour, perception of epidural analgesia, as well as acceptance of epidural analgesia during labour.

**Results**: The respondents had experienced labour pain in their previous deliveries, half of whom are aware of epidural analgesia but not used. All the respondents would accept epidural analgesia only if they are assured of its safety to them and their babies.

**Conclusion**: Conclusively, non-pharmacological measures of pain relief are practiced in many obstetric units; the present study showed that pregnant women have strong interest to opt for epidural analgesia, although proper sensitization is still needed. This study recommends that more attention be directed to improve the practice of epidural analgesia in labour.

Key words: Perception, Acceptance, Epidural analgesia, Labour.

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## I. Introduction

Labour is a painful event that occurs towards the end of pregnancy resulting in the progressive dilatation of the uterine cervix and subsequent delivery of the fetus and placenta (1). Although the pain experienced during labour does not seem to enhance the process, its severity and expression varies extremely amongst women (2,3) whereas a few women would merely grimace, others would shout to express their pain.

Pain management in labour is as old as human existence and is an essential aspect of active management of labour (4). Several cultures and religions have in the time past proposed pain relief strategies that are peculiar to them (5). In some cultures, non-expression of labour pains increases the woman's societal acceptability (6). However, the role of health care practitioners in making labour safe especially in terms of pain management has become a herculean task with poor acceptance and practice of epidural analgesia in labour (7). It therefore behooves on the midwife to continually counsel her clients on the options available, merits and demerits of the various methods of labour analgesia since excellent pain control in labour has been linked to satisfactory birth experience for the parturient and her health care givers (5,8,9).

There is an increasing trend in the rate of acceptance of labour analgesia the developed world (10), but in Nigeria there is decreased acceptance probably because of the belief that pain in labour is an act of the Supreme Being and needs not be interfered with (11).

Amongst other forms of analgesia in labour, epidural analgesia is more commonly accepted by both the care givers and the clients due to its efficient mechanism of pain relief and it has also be proved not to interfere with the first stage of labour (6). It is regarded as probably the best form of labour analgesia since it also provides regional anesthesia for obstetric procedures such as episiotomy, assisted vaginal delivery and even caesarean section (12). Early epidural analgesia is apt in women who are at risk of obstetric interventions.

Despite the global rise in the acceptance and use of epidural analgesia in labour as a result of the 'No pain labour and delivery Initiative' launched in some countries (13), there is still no proper documentation of epidural analgesia use in some African countries including Nigeria and it is assumed to be even lower (6,14). It is worthy to note that even the few mothers who undergo epidural analgesia during labour in Africa did so as a

medical indication upon request from their obstetricians (15). Again, the option of epidural analysis in labour is not available to women in the rural communities where most of their deliveries are conducted by unskilled birth attendants (9).

Proponents of labour analgesia argue that women do not deserve to suffer while giving birth (13) but its low rate of use in the low-income countries stems from the fact that it is expensive and requires expertise. Therefore, in these low income countries, epidural analgesia is nearly only available to women in high socioeconomic level who could afford it thereby building a wall of inequality in accessing obstetric care within the same facility (16). Providing efficient and affordable labour pain relief to underprivileged women might bridge the gap of inequalities in intra-partum care.

In developed countries, with increased sensitization on the use of epidural analgesia, it is thought to be the mainstay of labour analgesia in over 50% of health facilities where obstetric care is rendered (6) contrary to barely 1.3% in developing countries (7).

The aim of this study was to assess the perception and acceptance of epidural analgesia during labour amongst pregnant women attending antenatal care in University of Port Harcourt Teaching Hospital, Nigeria.

The findings from this study will help improve the use of epidural analgesia among obstetricians in Port Harcourt, Nigeria and provide data on possible legislative policies on the use of epidural analgesia during labour in Nigeria and Africa at large.

#### II. Methods

This qualitative study was carried out at the antenatal clinic of the Department of Obstetrics and Gynecology, University of Port Harcourt Teaching Hospital (UPTH) between September, 2019 and May, 2020 after ethical approval was obtained from the Research Ethics Committee of the University of Port Harcourt and also from the Research Ethics Committee of the University of Port Harcourt Teaching Hospital, Nigeria.

The study population included pregnant women attending the antenatal clinic of the University of Port Harcourt Teaching Hospital. Inclusion criteria; pregnant women with good cognitive abilities, pregnant women who have attained at least secondary level of education as well as pregnant women who have had at least one vaginal delivery. Primigravidae, women with obvious obstetric complications and those billed for elective caesarean section were excluded from the study. All respondents gave written and informed consent after full disclosure of the purpose and benefits of the study. They were also assured of the confidentiality of the information that they provided or responded to.

A purposive sampling method based on the eligibility criteria was adopted in this study to recruit thirty pregnant women who can provide in-depth and detailed information about the topic being considered (17). Semi-structured interview guide was adopted which included sections for socio demographics of participants, awareness and types of labour analgesia known, use of labour analgesia in the previous delivery and desire to have labour analgesia in index pregnancy and desire to encourage other women to accept labour epidural analgesia.

## Data collection and analysis

The aim of the research and the interview format were explained to the clinic manager, and a convenient area to conduct the interviews was requested. Posters were placed on the walls of the clinic to inform about the ongoing studies. Prior to the interviews, written consent was obtained from each participant after the purpose of the study was explained to them.

Interviews were conducted by the researcher. Each interview lasted for a period of 30 to 45 minutes. Permission was obtained from the participants to audio tape the interview precedence, field notes were also obtained. Data saturation was achieved when adequate and quality data were collected and new data did not shed any further light on the issue under investigation. The notes summarized what the participants said, how the interview environment was, attitude and body language of the participants.

Data obtained from the audio-recorded interviews were analyzed using the thematic analysis approach (18). In this approach the recorded interviews were transcribed using an intelligent transcription system (i.e. the conversation is transcribed verbatim but without unnecessary verbiage or linguistic fillers). The analysis involved the following steps; compiling (data collection), disassembling (data were made familiar with and organized by assigning words or phrases that could capture the essence of the information read), reassembling (templates were produced to categorize the data), interpreting (the categorized data were interpreted to identify key themes, concepts and relationships) and finally, concluding (findings were presented in narratives using direct quotes as illustrations).

#### III. Results

The findings from this study were described using the following themes as structured in the interview guide: assessment of labour pain, pain relief during labour, perception of epidural analgesia during labour and acceptance of epidural analgesia during labour.

#### **Assessment of Labour Pain**

This theme describes the knowledge of labour pain in pregnant women during labour, their experience about labour and delivery and their pain experience during the first stage of labour. To achieve this theme, the respondents were asked to describe labour and give their experience of labour in previous delivery.

Labour pain is the pain people experience during delivery. I know it can be very painful and uncomfortable. I don't know about other people, I can talk for myself (Para 4).

That word they called labour, you should know that anything called labour is not sweet. Labour is labour. It is painful. I don't know for others, but I passed through pains, and based on the weight of the babies I normally delivers, it is double pains. My first baby weighed 4.2kg and my second baby was 5.1kg, so you should know that the pain actually increased in the second pregnancy. To add to the labour pain, I was given a cut. Labour is not easy at all (Para 2).

The first stage of labour is also painful. It comes sometimes 15 minutes, the pain will come and stop, then it will reduced to 10 minutes, then before you know it, it will be after 5 minutes, and it will be coming after 1 minutes it will come like that (Para 3).

#### **Pain Relief during Labour**

This theme explored how the respondents dealt with labour pain, their experience of pain relief methods and what influenced the method of pain relief used?

Most participants mentioned that they adopted breathing exercise, shouting and taking a walk as measures taken to ease off labour pains.

They said I should open my mouth and be breathing as if I am panting, and some nurses there where rubbing my waist (Para 3).

I usually start washing clothes and also start cleaning my house when the labour pains comes (32 year old para 3).

The pains were relieving me as I was walking around (Para 4).

When asked about the decision to adopt a particular type of pain relief method, most of the respondents believed that it is within the purview of the medical practitioners to decide the methods of pain relief offered during labour.

I don't think I am the right person to answer it. I think it is the nurse that asked me to do that that should know. But I think I actually requested for something for the pain, I was given something for the pains when it became very painful (Para 1).

## Perception of Epidural Analgesia during Labour

Half of the respondents mentioned that they have heard of epidural analgesia during labour, while the remaining half of the participants responded to have been aware of epidural analgesia, but have not used it before.

Yes, I have heard of epidural analgesia. I have also seen some women on it, but I have not tried it (Para 3). I don't know of any pain relief method. Do they give injection to relief pain during labour? (Para 1). I wouldn't know if am satisfied with epidural analgesia since it wasn't given to me (Para 1).

#### Acceptance of Epidural Analgesia during Labour

Most participated indicated that they will be willing to use epidural analgesia in their subsequent pregnancies, if it does not have any side effect to the mothers and babies and most of the respondents were willing to recommend epidural analgesia to others during labour.

Like I said, my first experience of labour was an introduction to motherhood. The second pregnancy there was pain, but not as much as in the first pregnancy. But if labour pain is something every person can go through without taking your life, then it is worth going through. Labour pain has been in existence. Our mothers have been going though it; so I believe what did not kill them will not kill us. So I feel I can hold on to labour pain for the third time (Para 2).

Yes, sharp, because the pain is unthinkable. I will like to use epidural analgesia. In fact, I am planning for caesarean section in this pregnancy (Para 4).

Yes I can recommend epidural analysis to others provided it does not have side effects to the mother and the baby. Because I usually hear some women say they cannot endure labour pain (Para 3).

## IV. Discussion

It is not debatable that the processes in which pain experienced during labour can be alleviated are a vital part of obstetric care. And this aspect of practice will make child birth pleasurable to labouring mothers. Labour pain contributes significantly to many illnesses and deaths of mothers and babies seen in the course of labour and childbirths. The recent advances and attainments in medicine have provided a number of measures aimed at improving labour and vaginal delivery by reducing or eliminating the pain experienced by women during the process.

Findings from the present study showed that most of the participants recalled that labour was a painful experience. Furthermore, a good number of respondents described labour pain as a horrible experience. The respondents also admitted that during the first stage of labour the pain increased progressively as contractions became stronger. This experience is physiologic, especially due to the interplay that occurs between the mechanisms of labour and nerve supply of the genital regions during labour. The experience of most of the participants in this present study is in agreement with the report of Butterworth *et al.*, 2013 (8), which reported that more than two-thirds of women who did not receive labour analgesia could only describe the severity of their labour pain with words like 'distressing,' 'horrible' or 'excruciating'.

From the present study, up to half of the respondents are aware of epidural analgesia during labour but not used. These responses are not unconnected with some of the assumptions that women in labour usually wants to go through the pain without using any labour analgesia, because of their belief that labour pain should be natural. These assumptions may equally result from the fact that obstetric caregivers at the study centre may not have been doing enough to inform, educate and encourage epidural analgesia by way of health education to pregnant women during their antenatal visitations, or possible because their lack of infrastructural provisions to institute epidural analgesia, owing to the poor resources setting in our environment. This agrees with the report of Geltore *et al.*, 2018 (19), which revealed that poor socio economic status is chief to poor acceptability of epidural analgesia especially in resource poor areas. Similarly, Chen *et al.*, in 2013 (20) revealed that poor utilization of epidural analgesia services could also result due to poor pre-natal information. This implies that those who desire to reduce their labour pain are more likely to gain the required information from health practitioners', because of their quest for information of the procedure.

In spite of the tremendous achievements and advancement in labour analgesia, the acceptance and application of epidural analgesia in labour has not yet received adequate attention in our environment. A majority of the respondents reported to have used breathing exercise as a form of pain relief method during labour. Some of them were said to be shouting and walking around to relief labour pain. This process was said to relief labour pains in some participants while others reported that the breathing exercise did not do enough to relief pains.

In the present study, some respondents described labour pain as the introduction to motherhood, and that it is natural having been in existence and is worth going through. They emphasized that their mothers passed through the pains of labour and did not die; hence labour pain is not capable of killing labouring mothers. Some of these respondents declined to the possible use of epidural analgesia during labour, favouring the natural process of labour. This assumption is similar to the responses of midwives who described labour pain as a natural occurrence and an experience given to mothers by the almighty God as reported in a study conducted by Aziato *et al.*, 2017 (21). This is also consistent with the report of Obuna and Umeora, 2014 (6) that cultural and other beliefs are play role in the low rate of epidural analgesia in Igbo land. Generally, the view of labour pain as a natural occurrence usually helps women cope and tolerate pain better. But it important to note that labour pain shouldn't be overlooked, because even in the natural processes of labour, women experience pain. Some evidence have shown that if labour pain exceeds a certain threshold, intensity and duration, it may interfere with the quality of life of woman in labour, which may predispose them to side effects, and also their baby, and even family members at large (21).

However, some participants also welcomed the use of epidural analgesia in labour. Reasons being that pregnant woman attending antenatal clinics are educated on the process and advantages of epidural analgesia in labour. In some literatures, most women have emphasized the need for individualized and continuous support to alleviate labour pain (22).

According to the respondents, they indicated they would love to recommend epidural analgesia to women during labour to relief pains, provided the procedure does not have any maternal or fetal side effect. Although all the participants responded not to have used epidural analgesia in their previous pregnancies, but they were of the opinion that anything to relief the labour pain will be acceptable based on their previous experience, and because most woman do not want to endure the pain of labour.

## V. Conclusion

Results obtained from this study make it necessary to intensify the efforts of healthcare professionals in making the clients more aware of labour analgesia particularly epidural analgesia. It could be observed that

although pregnant woman in labour may endure labour pains with conventional and non-pharmacological methods of pain relief, they showed strong interest to opt for epidural analgesia if adequate and proper sensitization and health education is done. This study recommends that more attention should be directed to improve the practice of epidural analgesia in labour. Obstetric care givers should be encouraged to undergo training and retraining on labour pain management. The government and other stakeholders need to subsidize epidural analgesia services and if possible incorporate it into the free maternal and child health programs nationwide.

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#### CONFLICT OF INTEREST

The authors declare no conflict of interest

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