

## Labour analgesia: A survey of the practice of health care workers in North Central Nigeria

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### Abstract

**Background:** Labor is among the most painful experiences a woman will endure. Labor analgesia in low income countries as against developed countries is not in widespread use. This is as a result of issues related to awareness, culture, acceptability and availability of analgesia. This study aims to assess the knowledge, attitude and practices for labor analgesia amongst healthcare workers.

**Methods:** This was a descriptive cross-sectional questionnaire-based study on the knowledge and practice of labor analgesia among practitioners at the Departments of Obstetrics and Gynecology and Family Medicine of the Federal Medical Centre, Keffi.

**Results:** This study found that despite 92.3% having had education about labor analgesia and 95.2% of respondents

believing labor pain should be relieved, 19.2% still believed labor analgesia should not be routinely prescribed. In addition, about 35% of the surveyed health workers had never counseled pregnant women on any form of intra-partum analgesia before, while about 24% had never prescribed labor analgesia.

**Conclusion:** We found that despite adequate awareness of labor analgesia, a lot of health care workers in the obstetrics unit unfortunately fail to counsel patients on and prescribe labor analgesia.

**Keywords:** Labor analgesia, healthcare workers, Practice

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### Introduction

The pain of labor has been described as excruciating.<sup>1</sup> A lot of controversy has existed since the inception of pain relief in labor to date. The American Society of Anesthesiologists (ASA) and American College of Obstetricians and Gynecologists (ACOG) have said that maternal request represents sufficient justification for pain relief.<sup>2,3</sup>

Pain can be defined as an 'unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage.<sup>4</sup> Pain is however, whatever the individual experiencing it says it is, existing wherever he or she says it does.<sup>5</sup>

Labor pain is not different from other kinds of pain, which is basically a result of interactions between physiological and psychological factors.<sup>5</sup> The physiological factors include uterine contractions and dilation and effacement of the cervix which are essential parts of labor and contribute significantly to labor pains.<sup>5</sup> Psychological factors include stress, anxiety, fear, a sense of loss of control and a sense of abandonment.<sup>5</sup>

Experience of pain associated with labor differs among individuals and tribes.<sup>6</sup> It is also greatly dependent on cultural and religious beliefs. However, irrespective of tribe, individual or religious beliefs, labor pain experienced by women could be severe and has been

documented to be emotionally and psychologically disturbing to the health of women.<sup>5</sup>

Labor analgesia is an essential part of modern obstetric practice, and different options are available.<sup>7</sup> Non-pharmacological methods of labor analgesia include continuous support, warm water baths, maternal positioning, relaxation, breathing exercises, and acupuncture, while nitrous oxide inhalation, parenteral opioids and regional analgesia are the pharmacological interventions.<sup>7</sup> Although all of these methods have varying degrees of effectiveness, use of epidural analgesia appears to be the gold standard.<sup>7</sup>

The American College of Obstetricians and Gynecologist (ACOG) recommends that pain management should be administered if it's medically indicated.<sup>8</sup> The National Institute of Clinical Excellence (NICE) recommends that all women should be educated on the options and availability of effective labor analgesia so as to make sure that women receive optimal analgesia during child birth.<sup>9</sup> However, the Society of Gynecology and Obstetrics of Nigeria (SOGON) currently has no clearly stated guidelines for pain management in labor.<sup>10</sup>

Studies have described several barriers contributing to optimal treatment of labor pain and the use of labor analgesia.<sup>11</sup> These factors include healthcare worker related barriers, hospital related barriers and patient-related barriers. The health care workers related barriers are said to be the main barriers.<sup>11,12</sup> A lack of knowledge, poor attitudes, and unavailability of labor analgesia options were considered to be the main barriers that influences utilization of labor analgesia in low resource settings.<sup>13</sup>

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Many reports showed that many health care workers lack adequate knowledge and attitude for effectively managing labor pain, leaving many women and their baby to endure a reduced functional and psychological quality of life.<sup>12,13</sup>

This study assessed the knowledge and practice of pain management during labor among healthcare workers in the Federal Medical, Centre, Keffi.

## Materials and Methods

### *The study site and design*

This is a cross-sectional descriptive study conducted in the Obstetrics and Gynecology department of the Federal medical center (FMC), Keffi. The FMC, Keffi is located in a sub-urban town in Nasarawa State in the north-central zone of Nigeria and has an average population of about 92,664 and around 45,023 being females. FMC, Keffi is a tertiary health institution in Nasarawa State with a bed space of 277.

### *The study population and data collection*

A written informed consent was obtained from all participants. The study population consisted of consultants, residents and mid-wives of the department of obstetrics and gynecology and family medicine of the FMC, Keffi. Participants were requested to complete the structured, self-administered questionnaire. The questionnaire contained 15 close ended questions with two sections. The first part of the questions covered socio-demographic characteristics of respondents. The second section focused on, and assessed knowledge, attitudes and concerns regarding labor analgesia. These include: labor pain related issues, options of labor analgesia and general effect of labor pain, perception of barriers to labor pain and analgesia, and attitude toward future education.

### *Data analysis*

The raw data from the field was screened for inconsistencies. Analysis of data was done using statistical package for social sciences (SPSS) version 23. Stepwise Multivariate analysis was used in analysis of the data. Chi square test was used to determine the relationship between some categorical variables. Significant level was set at  $p < 0.05$ .

### *Ethical considerations*

Ethical approval was obtained from the Federal Medical Centre, Keffi Ethical review Committee. Written informed consent was obtained from respondents who were also assured of confidentiality.

## Results

There were 104 participants surveyed, the information from 3 respondents were incomplete and therefore not

analyzed. The respondents comprised four consultants, twelve senior registrars, fifteen junior registrars, forty-one house officers, twenty-six midwives and three nurse anesthetists. The mean age of respondents was 33.79 years and the age ranged from twenty-three to fifty-five years.

Table 1: Demographics of the respondents

Characteristics	Number (%)
Sex	
Male	42 (41.6)
Female	59 (58.4)
Cadre	
Consultant	4 (3.9)
Senior registrar	12 (11.9)
Registrar	15 (14.9)
House-officer	41 (40.6)
Midwife	26 (25.7)
Anesthetist nurse	3 (3.0)
Personal or spousal experience of labor	
Yes	51 (50.5)
No	50 (49.5)

Table 2: Knowledge of labor analgesia

Method	Number (%)
Emotional support	68 (67.3)
Breathing exercises	70 (69.3)
Massage	64 (63.4)
Transcutaneous electrical nerve stimulation	32 (31.7)
Acupuncture	39 (38.6)
Paracetamol	60 (59.4)
Pentazocine	57 (56.4)
Pethidine	44 (43.6)
Entonox	42 (41.6)
Epidural	87 (86.1)

## Discussion

The findings in this study demonstrated a high level of knowledge of various methods of intra-partum analgesia among health workers, and most of them believed that providing intra-partum analgesia is important. This study found that despite 92.3% having had education about labor analgesia and 95.2% of respondents believed labor pain should be relieved, 19.2% still believed labor analgesia should not be routinely prescribed. In addition, about 35% of the surveyed health workers had never counseled pregnant women on any form of intra-partum analgesia, while about 24% had never prescribed labor

Table 3: Attitude of health care workers towards labor analgesia

Item	Number (%)
Should women expect to feel pain?	
Yes	75 (74.3)
No	25 (24.7)
Not stated	1(1)
Previous education about labor analgesia	
Yes	96 (95.0)
No	5 (5.0)
Do you think labor pain should be relieved?	
Yes	99 (98)
No	2 (2.0)
Should analgesia be routinely prescribed?	
Yes	81 (80.2)
No	20 (19.8)
Does analgesia improve overall experience?	
Yes	78 (77.2)
No	10 (9.9)
Maybe	13 (12.9)

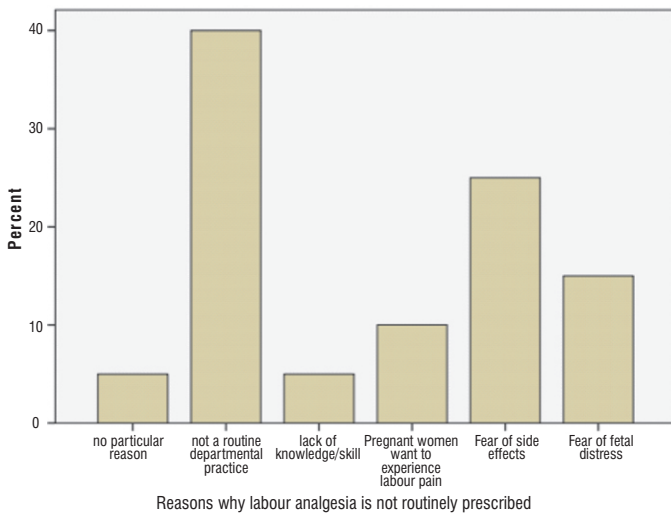


Figure 1: Reasons why labour analgesia is not routinely prescribed

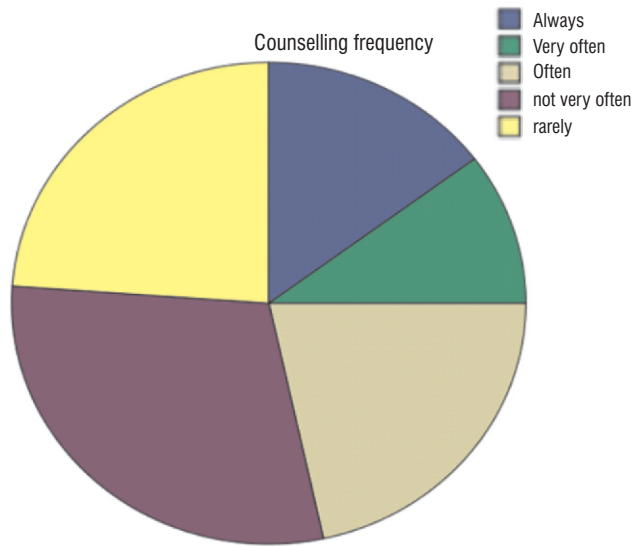


Figure 2: Frequency of counseling among health care workers

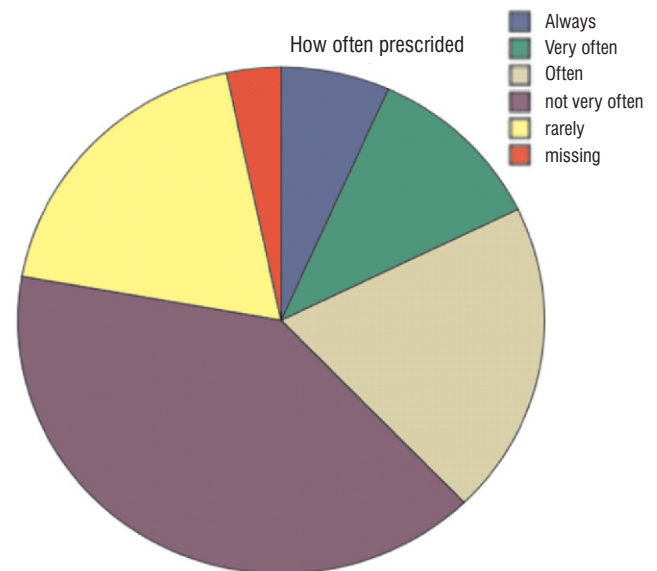


Figure 3: Frequency of prescription of labor analgesia

Table 4: Cadre and its effect on counseling and prescription of labor analgesia

Cadre	Percentage that had counseled patients on labor analgesia	$\chi^2$	p-value	Percentage that had prescribed labor analgesia	$\chi^2$	p-value
Consultant	100%			75%		
Senior registrar	100%	13.890	0.031	100%	9.743	0.136
Registrar	57.1%			73.3%		
House-officer	58.5%			68.3%		
Midwife	57.7%			80.8%		
Nurse anesthetist	100%			100%		

analgesia. This was similar to findings by Olaide et al, in Ilorin who found that physician attitude towards provision of labor analgesia was poor as many of the respondents felt that the service should not be routinely provided.<sup>7</sup> This was at variance to their high level of belief in the importance of intra-partum analgesia. In addition, about 60% of the surveyed physicians had never counseled pregnant women on any form of intra-partum analgesia before.<sup>7</sup> These findings show that having knowledge of labor analgesia doesn't translate to utilization of the knowledge.

This study found that among health care workers that did not routinely prescribe labor analgesia, the most common reason was because it was not a routine departmental protocol. This was followed by fear of the side effects of the medications. This was similar to findings in a study in south-west Nigeria where majority of the participants said they had no departmental protocols for labor analgesia and a study by Lawani et al who found the most common reason to be fear of side effects.<sup>10</sup>

In this study, all consultants, senior registrars and nurse anesthetists surveyed had all previously counseled patients on labor analgesia. This may be due to adequate knowledge about labor analgesia among these groups. However, counseling on labor analgesia was much lower among the other cadres, with 57.1%, 58.5% and 57.7% of registrars, house-officers and midwives respectively. The house-officers may have had a higher percentage for counseling than the registrars and midwives as they are often close to the patients and may have developed empathy for the patients. This study found that there was a significant relationship between the cadre of health care workers surveyed and counseling of patients on labor analgesia. This study also found that of the participants who had counseled patients on labor analgesia, majority counseled not very often or rarely.

This study found that there was no significant relationship between cadre and having prescribed labor analgesia. This could be as a result of this study being carried out in a tertiary center where patient care is carried out in teams of health care workers across cadres. This study however showed that asides from senior registrars and nurse anesthetists, a good proportion of health care workers across cadres had never prescribed labor analgesia and among those who prescribed majority prescribed not very often. This was similar to findings by Lawani et al.<sup>10</sup>

### Conclusion

We found that despite adequate awareness of labor analgesia, a lot of health care workers in the obstetrics unit unfortunately fail to counsel patients on and prescribe labor analgesia.

We recommend departmental protocols be set up on

provision of labor analgesia, and training and retraining of health care workers in the obstetrics unit on different forms of labor analgesia, benefits and side effects. This would help address the major reasons for non-prescription of labor analgesia.

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