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Original Research Article

## Attitude of obstetricians regarding labour analgesia and limitations in practising it

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### ABSTRACT

**Background:** Parturient experience labour pain of varying degrees which intensifies as labour progresses. Providing adequate pain relief during labour is important for positive experience of child birth.

**Methods:** This cross-sectional survey was conducted among obstetricians working in five teaching hospitals in Tamil Nadu in 2015. Obstetricians working in these medical colleges were given structured questionnaire to be filled by them. It had questions regarding the obstetricians knowledge, experience and attitude towards labour analgesia and limitations in its practise.

**Results:** Majority of them considered epidural labour analgesia as most effective (91%). Only 55% of them have had practical experience of conducting deliveries under epidural. Parenteral injection of opioid (tramadol hydrochloride) or NSAIDs remain the most commonly practised method. 82% of the participants don't discuss about labour analgesia services while providing antenatal care.

**Conclusions:** Obstetricians should sensitize the antenatal women regarding labour pain and its management. Supportive role should be provided by midwives. Where resources are limited non-pharmacological means of pain relief should also be encouraged.

**Keywords:** Labour analgesia, Pain relief, Survey

### INTRODUCTION

Parturient experience labour pain of varying degrees which intensifies as labour progresses. Many methods of pain relief are available with varieties of non-pharmacological and pharmacological methods. Providing adequate pain relief during labour is important for positive experience of child birth.

Studies have shown that even in hospitals with established labour analgesia services, not many pregnant women booked in such hospitals were aware of availability of labour pain relief.<sup>1,2</sup> Among those who had prior knowledge about labour analgesia, the information was gained by informal means rather than formal means.

Obstetricians and midwives are the health faculties the pregnant women come in close contact with frequently. Hence it is necessary to know the attitude of obstetricians towards labour analgesia and limitations they face in practising it.

### METHODS

This cross-sectional survey was conducted among obstetricians working in five teaching hospitals in Tamil Nadu in 2015. Obstetricians working in these medical colleges were given structured questionnaire to be filled by them. The method of distribution was by personal contact. The questionnaire was designed based on the questionnaire used in the previous study of clinical audit

on obstetricians by Taneja et al.<sup>3</sup> It was modified and pretested. It had questions regarding the obstetricians knowledge, experience and attitude towards labour analgesia and limitations in its practise. The responses were collected and analysed using freely available software Epi Info version 3.5.4. Frequencies and percentages were calculated and Chi-square was applied to find out the statistical significance. P value < 0.05 was considered significant.

## RESULTS

The response rate for the survey was 91%. Of the 110 questionnaires given 100 participants responded and half of them had <5 years' experience (Table 1). While

majority of them considered epidural labour analgesia as most effective (91%), only 55% of them have had practical experience of conducting deliveries under epidural and the remaining have quoted non-availability of epidural labour analgesia as the reason for lack of practical experience. Effective pain relief, maternal satisfaction and improved patient cooperation were the main reasons given for favouring epidural analgesia by both the group. While more than half of the respondents (54%) were of the opinion that epidural analgesia has no adverse obstetric or neonatal outcome, others considered prolonged labour, increased operative interference and neonatal respiratory depression as the major adverse effects on labour.

**Table 1: Comparison of years of practice with knowledge about labour analgesia and epidural experience.**

Yrs. of practice	N=100	Knowledge about labour analgesia			Epidural as most effective	Experience with epidural labour analgesia	
		Books	Clinical exposure	Both			
<5	51	29	16	6	48 (94%)		24 (47.1%)
6-15	32	12	7	13	25 (78%)	P value = 0.0015	21 (65.6%)
>15	17	3	4	10	16 (94%)		10 (58.8%)

Of the different types of labour analgesia available, parenteral injection of opioid (tramadol hydrochloride) or NSAIDs remain the most commonly practised method (Table 2). The reasons stated for these were non-dependence on anaesthetists (44%), requirement of less monitoring services (67%), less cost (30%) and more effective pain relief (2%). Non-pharmacological means remain the least practised method.

**Table 2: Obstetricians opinion and actual practice of type of labour analgesia.**

Type of labour analgesia	Most effective (no. of responses)	Commonly used (no. of responses)
Epidural	91	20
Parenteral Injections	04	84
Gas inhalation	05	11
Non pharmacological	0	01
No effective method	0	06

While 23% of participants offered labour analgesia for all patients, 75% of them practise it on patients who request pain relief. 82% of the participants do not discuss about labour analgesia services while providing antenatal care and 75% do not discuss it at the time of admission to labour ward. The reasons stated were lack of time due to patient overload and labour analgesia being not a part of routine antenatal care. Respondents have chosen more

than one reason as limitations in practising epidural analgesia (Table 3).

**Table 3: Limitations in practice of epidural labour analgesia.**

Reasons	Number of responses
Patients non acceptance	09
Difficulty in monitoring	16
Lack of anaesthetists	43
Dependence on anaesthetists	39
Cost	30

Participants stated that labour analgesia services can be improved by creating awareness among pregnant women (38%), increasing the availability of anaesthetists (29%) and improving labour ward facilities (20%) while 13% considered that their labour analgesia services are adequate.

## DISCUSSION

Labour pain is one of the most severe pain experienced by women and it is amenable to treatment.<sup>4</sup> Relieving or reducing labour pain not only puts the women out of her misery, it also ameliorates various systemic adverse effects of pain and improves labour outcome.<sup>5</sup> In our study majority of the participants used parenteral NSAIDs or opioid (tramadol hydrochloride) for pain relief in labour. While tramadol does not induce

respiratory distress in the new born unlike other opioids, it usually causes nausea when used.<sup>6</sup> Cochrane review has stated that opioids are superior to non-opioids like NSAIDs and antispasmodics which appear superior to placebo and as such there is not much evidence to support use of non-opioids for labour pain relief.<sup>4</sup> Epidural labour analgesia is considered as superior to opioids.<sup>7</sup> It does not increase the incidence of caesarean deliveries and has no ill effect on the neonate.<sup>8</sup> There may be some prolongation of labour duration which can be reduced if low dose regimens are used.<sup>9</sup>

Most participants in this study have shown positive attitude towards epidural labour analgesia which is similar to study by Klein MC et al in which obstetricians less than 40 years of age were more supportive of epidural labour analgesia.<sup>10</sup> Major reasons stated by our participants as limitations in offering epidural labour analgesia are lack of anaesthetists and dependence on anaesthetists which is similar to other studies that have shown unmet need for epidural labor analgesia.<sup>3,11,12</sup> Turkish study has stated that there should be good interpersonal relationship between obstetricians and anaesthetists and there should be mutual respect, understanding and support from professional point of view as their combined management is required for effective labour outcome.<sup>13,14</sup>

Our study has shown that non-pharmacological means are the least practised method of labour analgesia. Studies have shown that continuous support, immersion in water, relaxation, acupuncture and massage relieved labour pain and improved patient satisfaction.<sup>4,15</sup> In a country like India with limited resources and patient over load, there is unavoidable compromise in providing epidural labour analgesia and in such situations we should consider non-pharmacological intervention for pain relief.

Antenatal education of women regarding labour analgesia by health providers is poor in our study which is similar to the inference obtained in other studies done in pregnant women.<sup>16-19</sup> Another study stated that their participants knowledge about labour analgesia was obtained from friends, relatives, media and literature rather than from obstetricians.<sup>18</sup> Antenatal education of the women is important to sensitize them about pain relief in labour as women in developing country like India are generally subdued and their ability to seek and gain information is limited. Studies have also shown the benefit of integrating the services of anaesthetists, obstetricians and midwives both in educating the antenatal women and in providing labour analgesia.<sup>20-22</sup>

## CONCLUSION

Obstetricians should sensitize the antenatal women regarding labour pain and its management in order to make it possible for the women to access pain relief when needed and to make child birth a memorable experience. Supportive role should be provided by midwives who

should be trained to deliver knowledge about labour analgesia to all women attending antenatal clinic which will definitely help in reducing the anxiety of the women. Where resources are limited non-pharmacological means of pain relief should also be encouraged.

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