

Questionnaire to Assess the Knowledge, Attitude and Acceptance of Epidural Labor Analgesia among Paramedical Staff

Kalla Nagaraj S¹, Papireddy Sujatha M², Madhusudhana Ravi³

¹Post graduate Resident, ²Associate Professor, ³Professor, Department of Anesthesiology, SDUMC, SDUAHER, Kolar, Karnataka, 563101, India.

How to cite this article:

Kalla Nagaraj S, Papireddy Sujatha M, Madhusudhana Ravi. Questionnaire to Assess the Knowledge, Attitude and Acceptance of Epidural Labor Analgesia among Paramedical Staff. Indian J Anesth Analg. 2020;7(4):944-947.

Abstract

Context: Labor pain is characterized by regular, painful uterine contractions that increase in frequency and intensity in three stages of labor. Women's experience of pain during labor greatly varies from feeling of little pain to extremely distressing pain. Therefore, we have conducted a questionnaire based study in the primary caregivers like paramedical staff to assess their knowledge about labor pain and the methods to counteract like labor analgesia.

Aims: To check awareness about labour analgesia and anesthesia among paramedical staff and To provide the knowledge regarding labour analgesia.

Settings and Design: Questionnaire based study

Methods and Material: After obtaining institutional ethical committee approval, this study is conducted between January - February 2020 among the paramedical staff. The members included were belonging to age group 20-45 years.

Statistical analysis used: Data entered to Microsoft Excel and presented in %.

Results: Out of the total population, only 7.5% had the awareness about labour analgesia and 92.5% didn't have awareness about labour analgesia. Out of 15 members have who had knowledge about labour analgesia, 12 members gained this through doctors and 03 members through their friends or relatives.

Conclusions: Our study revealed that most of the paramedical staff still have that fear of labour pains and still suffer from the agony of labor pains due to lack of awareness, or knowledge about availability of labor analgesia service.

Keywords: Analgesia; Epidural; labour; Questionnaire.

Introduction

The pain of child birth is the most severe pain, that the women will have in their lifetime. Labor pain is characterized by regular, painful uterine contractions that increase in frequency and intensity in three stages of labor. Pain originates from different sites in each stage of the labor, which is a physiological phenomenon and its evolution

is associated with ischemia of the uterus during contraction, effacement, dilation of cervix, stretching of the vagina, perineum, and compression of pelvic structures.¹

Women's experience of pain during labor greatly varies from feeling of little pain to extremely distressing pain. Since pain relief in labor has always been surrounded with myths and controversies,

Corresponding Author: Madhusudhana Ravi, Professor, Anesthesiology, SDUMC, SDUAHER, Kolar, Karnataka 563101, India.

E-mail: ravijaggu@gmail.com

providing effective and safe analgesia during labor have remained an ongoing challenge.

Many pharmacological and non-pharmacological treatments have been developed to alleviate labor pain. The effectiveness of the methods varies, but epidural analgesia remains the safest. It is the widely used analgesia that provides almost complete labor pain relief (90%) with a favorable birth experience.²

In developed countries, analgesia is widely utilized for pain relief and they also focused on choice of methods and complication, but in developing countries the issue concentrates on awareness, acceptability, and availability.

Therefore, we have conducted a questionnaire based study in the primary caregivers like paramedical staff to assess their knowledge about labor pain and the methods to counteract like labor analgesia. If at all they do not have the idea about labor analgesia, we will try to give a basic knowledge and will see their response whether they are ready to spread this knowledge among the patients who still suffer labor pain and also if necessary whether they are ready adopt for themselves.

Aims and Objectives

1. To check awareness about labour analgesia and anesthesia among paramedical staff.
2. To provide the knowledge regarding labour analgesia.

Materials and Methods

After obtaining institutional ethical committee approval, this study is conducted between January - February 2020 among the paramedical staff. The members included were belonging to age group 20-45 years.

Data was collected using a structured, pretested, and self-administered questionnaire prepared by adapting from different studies.

The questionnaire had four essential components related to obstetric analgesia utilization in labor pain management. The care providers were requested to complete the questionnaire following informed consent.

Results

Table 1: Age distribution among paramedical staff

| Age (in years) | Number of Patients | Percentage (%) |
|----------------|--------------------|----------------|
| 20-25 | 92 | 46 |
| 26-30 | 46 | 23 |
| 30-35 | 40 | 20 |
| 35-45 | 22 | 11 |

Out of 200 staff, 46% were between 20-25 years, 23% of 26-30 years, 20% of 30-35 years, 11% of 35-45 years of age.

Table 2: Previous deliveries among the paramedical staff

| Previous Deliveries | Number of Patients | Percentage (%) |
|---------------------|--------------------|----------------|
| Vaginal | 73 | 36.5 |
| Assisted | 5 | 2.5 |
| Operative | 47 | 23.5 |
| Nil | 75 | 37.5 |

Out of 200 paramedical staff, 125 staff members had undergone previous deliveries and 75 staff members were unmarried. Out of 125 members, 36.5% had undergone vaginal deliveries, 23.5% had undergone cesarean section.

Table 3: Knowledge about the nature of labour pain and attitude of the labour pain

| Knowledge About the Labour Pain | Number of Patients | Percentage (%) |
|---------------------------------|--------------------|----------------|
| Experienced Labour Pain Before? | 125 | 62.5 |
| Pain Free | No | — |
| Painful | | |
| Mild | — | — |
| Moderate | 20 | 10 |
| Severe | 140 | 70 |
| Intolerable | 40 | 20 |
| Should Labour Pain Be Relieved | | |
| Yes | 185 | 92.5 |
| No | — | — |
| No Opinion | 15 | 7.5 |

62.5% of the population had experienced labour pain before. 70% of the total population had knowledge about labour pain and explains as severe pain, were as 20% of the total say it as intolerable. 92.5% of the population were in favorer the opinion that labour pain has to be relieved. Most the members does not know who provides the labour analgesia.

Table 4: Awareness regarding labour analgesia

| Awareness | Number of Patients | Percentage (%) |
|------------------------|--------------------|----------------|
| Yes | 15 | 7.5 |
| No | 185 | 92.5 |
| Source of Information? | | |
| Doctors | 12 | 80 |
| Friends and Relatives | 3 | 20 |

Out of the total population, only 7.5% had the awareness about labour analgesia and 92.5% didn't have awareness about labour analgesia. Out of

15 members have who had knowledge about labour analgesia, 12 members gained this through doctors and 03 members through their friends or relatives.

Discussion

The modern era of childbirth analgesia began in 1847 when Dr J Y Simpson administered ether to a woman in childbirth, and Queen Victoria was given chloroform by John Snow (1853) for the birth of her eight child Prince Leopold and this did much to popularize the use of pain relief in labour.

Many pharmacological and non-pharmacological treatments have been developed to alleviate labor pain. Among the methods, systemic opioids, non-opioids, epidural analgesia, combined spinal-epidural analgesia, inhalation agents, pudendal block, transcutaneous electrical nerve stimulation, massage, acupuncture, water immersion, yoga, music therapy, biofeedback, continuous support, positioning, ambulation, hypnosis, and breathing technique are used to manage labor pain.³

Neuraxial analgesia into obstetric practice was introduced at the end of the 19th century, an year after August Bier, a German surgeon, described six lower extremity operations rendered painless by means of "cocainisation of the spinal cord". Cleland in the year 1949 introduced the technique of epidural analgesia using a Tuohy needle with epidural catheter.⁴

The effectiveness of these methods varies, but epidural analgesia remains the safest. It is the widely used analgesia that provides almost complete labor pain relief (90%) with a favorable birth experience.

The aim of pain relief in labor is to make an emotionally satisfying experience where a woman is delivering a healthy baby with as little distress, pain, and exhaustion as possible and with minimal risk to both mother and fetus. "Delivery of the infant into the arms of a conscious and pain-free mother is one of the most exciting and rewarding moments in medicine".⁵

In developed countries, analgesia is widely utilized for pain relief and they also focused on choice of methods and complication, but in developing countries the issue concentrates on awareness, acceptability, and availability.

On the other hand, the major factors that affect the utilization of obstetric analgesia in developing countries by caregivers are unavailability of drugs, health care delivery systems, knowledge, and religion. Of these, knowledge, attitudes, and skills

of the health care provider to offer labor analgesia are main factors. Moreover, misconceptions of long-term backache, harm to baby, breastfeeding problem, increased cesarean section, slow labor progress, and permanent medical problems for the mother and newborn are some of the factors that affect utilization of labor analgesia.⁶

Therefore, we have conducted a questionnaire based study in the primary caregivers like paramedical staff to assess their knowledge about labor pain and the methods to counteract like labor analgesia. If at all they do not have the idea about labor analgesia, we will try to give a basic knowledge and will see their response whether they are ready to spread this knowledge among the patients who still suffer labor pain and also if necessary whether they are ready adopt for themselves.

Conclusion

Our study revealed that most of the paramedical staff still have that fear of labour pains and still suffer from the agony of labor pains due to lack of awareness, or knowledge about availability of labor analgesia service. Not only the antenatal women, paramedical staff needs to be educated regarding physiology of labor, labor pain and pain relief and available options for labor pain relief.

Therefore in collaboration with anesthesia and obstetrics department, the awareness programs about labour pain and labour analgesia have to be conducted.

Key Messages

The pain experienced during labour is very distressing and knowledge about pain relief that can be obtained is lacking among parturients, lay people and Health care providers. Proper education and avilabilty of knowledge of labour analgesia can bring about lot of changed and acceptability of labour analgesia.

Prior publication: Nil

Support: Nil

Conflicts of interest: Nil

Permissions: Nil

References

1. Geltore TE, Taye A, Kelbore AG. Utilization of obstetric analgesia in labor pain management and associated factors among obstetric caregivers in public health facilities of Kembata Tembaro Zone, southern ethiopia. *Journal of Pain Research* 2018;11:3089-97.

2. Kuti O, Faponle AF. Perception of labour pain among the Yoruba ethnic group in Nigeria. *J Obstet Gynaecol.* 2006;26:332-34.
3. Karn S, Yu H, Karna S, Chen L, Qiao D. Women's awareness and attitudes towards labor analgesia in uencing practice between developed and developing countries. *Adv Reprod Sci* 2016;4:46-52.
4. Reena, Bandyopadhyay KH, Afzal M, et al. Labor epidural analgesia: Past, present and future. *Indian J Pain* 2014;28:71-81.
5. Hodnett ED, Gates S, Hofmeyr GJ, et al. Continuous support for women during childbirth. *Cochrane Database Syst Rev.* 2013;7:CD003766.pub5.
6. McCauley M, Stewart C, Kebede B. A survey of healthcare provider's knowledge and attitudes regarding pain relief in labor for women in Ethiopia. *BMC Pregnancy Childbirth.* 2017;17:56-58.

