CLINICAL AUDIT OF KNOWLEDGE AND PRACTICE OF EPIDURAL LABOUR ANALGESIA AMONGST OBSTETRICIANS IN SOUTH-WEST NIGERIA

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Abstract

Epidural analgesia (EA) is the most ideal method for pain relief during labour. We sought to highlight the current knowledge and practice of the obstetricians regarding epidural labour analgesia (ELA). An audit was conducted amongst obstetricians in two teaching hospitals in the south west of Nigeria. Most of our respondents received lectures about ELA but about half of them rated the lectures as inadequate. Though 37.8 % and 53.3% of respondents are of the opinion that there is interference with labour and increased incidence of instrumentation following epidural analgesia in labour respectively, however 84.4% agreed that the technique is not associated with adverse neonatal or maternal outcome and 97.8% will prefer their patients having epidural labour analgesia.
We are of the opinion that education regarding ELA, both during and after obstetric speciality training, be improved, and well-established interpersonal relationship between obstetricians and anaesthetists will be needed to achieve this.

Keywords: Labour analgesia; Obstetricians; Knowledge

Introduction

Epidural analgesia (EA) is the most effective method for pain relief during labour and is considered a component of routine obstetric care during labour in most developed countries today. In fact, one of the major factors quoted by women in their choice of a hospital birth over home birth in countries in North America and Europe is the access to pain relief during labour, especially epidural analgesia.[1, 2]

In an average Nigerian hospital, implementation of obstetric analgesia is not yet a routine practice. This might not be unrelated to the limited number of trained personnel especially anaesthetists, support staffs, equipment and most importantly inadequate collaboration between the anaesthetists and obstetricians. In view of these challenges, labouring women are often left to suffer the consequences. We sought to highlight the current knowledge and practice of the obstetricians regarding epidural labour analgesia (ELA) in the south west of Nigeria.

Methods

Seventy–five survey forms were circulated to obstetricians in two teaching hospitals in the southwest of Nigeria (University College Hospital, Ibadan, Oyo State and Obafemi Awolowo University Teaching Hospital, Ile-Ife, Osun State) and a consultant obstetrician in each institution co-ordinated the administration. The forms were intended for all registrars with not less than two years in specialist training, senior registrars and consultants in the two teaching hospitals.

To encourage participation in the audit, we limited the questions to twelve. This covered the following areas; teachings/training received on ELA, existing knowledge about effects on labour outcome, and practical application of labour analgesia. This study was patterned after a similar one [1] conducted in New Delhi, India. Only descriptive data were obtained and presented.

Results

Forty-five (60%) forms were properly filled and used for analysis, 5 (6.7%) were not properly filled and 25 (33.3%) were returned unfilled. Designations of respondents are shown in Figure 1. Thirty-nine (86.7%) of respondents opined that labour analgesia was part of their post-graduate training (Figure 2) but only 2 (4.4 %) agreed they had 'abundant' teaching time on labour analgesia, while 21 (46.7%) and 13 (28.9%) had 'little' and 'no' time respectively. (Figure 3). Asking about their various views about effects of epidural analgesia, 17 (37.8 %) and 24 (53.3%) of respondents are of the opinion that there is interference with labour and increased incidence of instrumentation following epidural analgesia in labour respectively, however 38 (84.4%) agreed that the technique is not associated with adverse neonatal or maternal outcome and 44 (97.8%) will prefer their patients having epidural labour analgesia (table 1). For various reasons like cost, availability, safety and some others (figure 4), 29 (64.4%) of our respondents will like to have other alternatives to ELA. When asked about LA services in their centre, most of our respondents 38 (84.4%) presently use intramuscular opioid (Pethidine), while others make use of Tramadol 6 (13%) and paracetamol 2 (4.4%).

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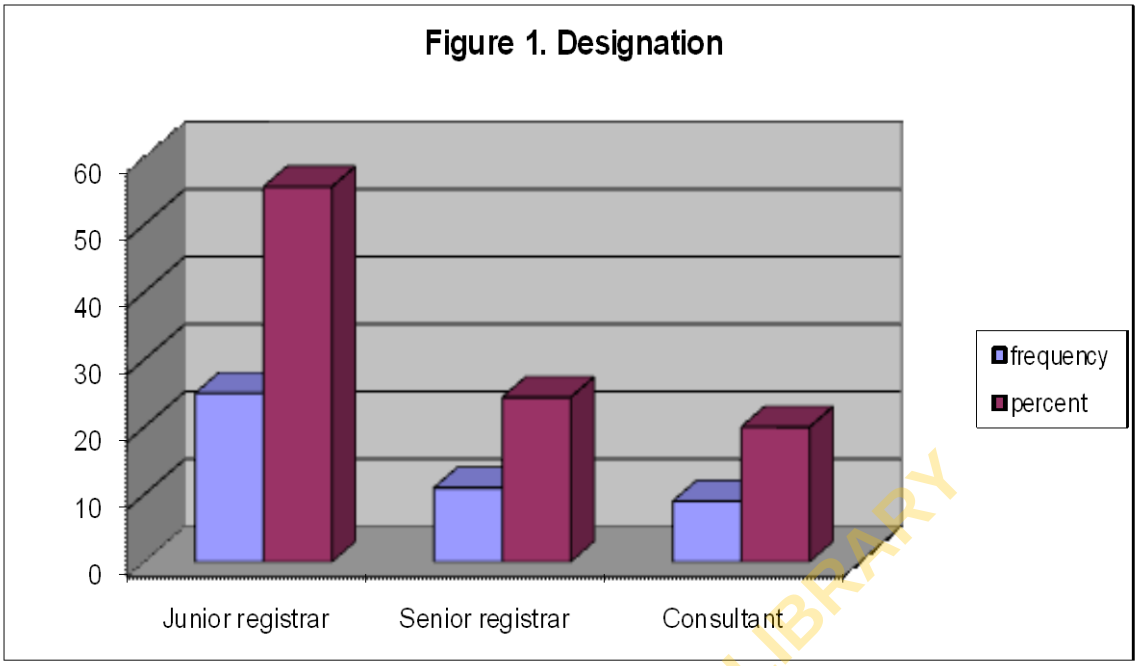

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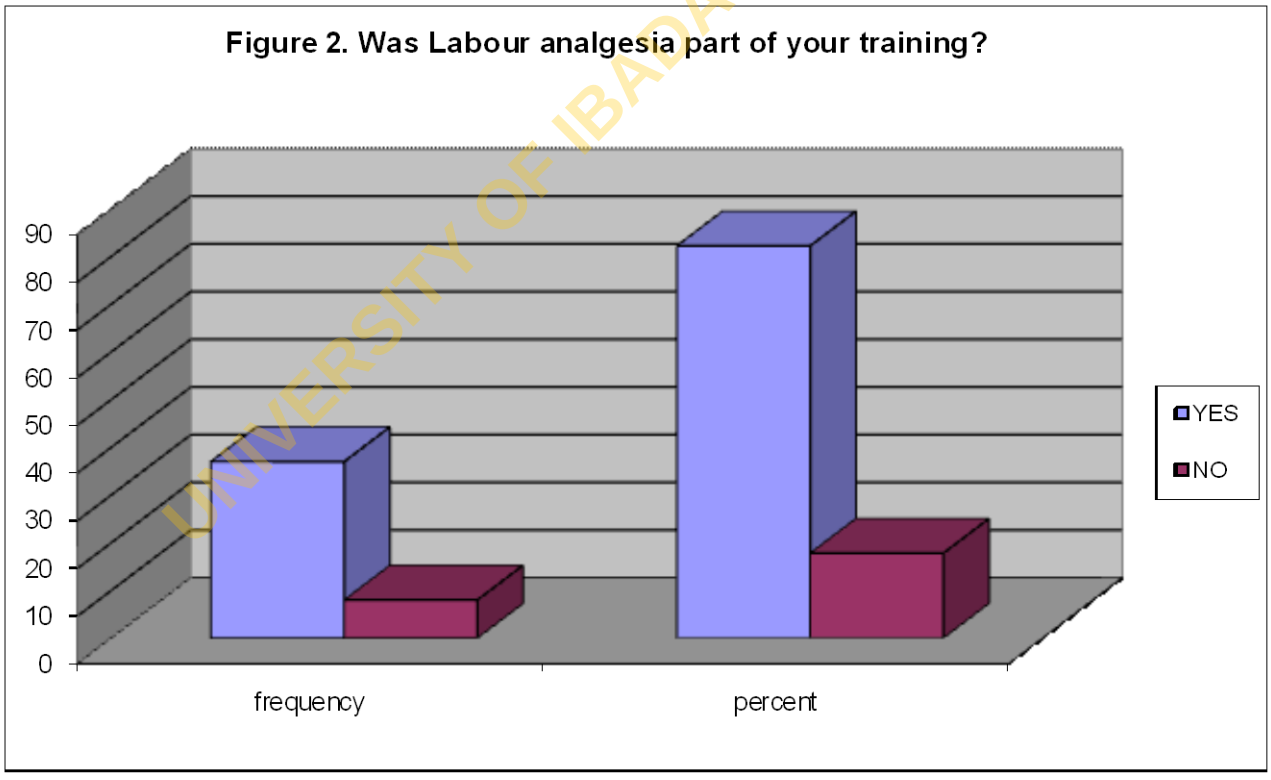

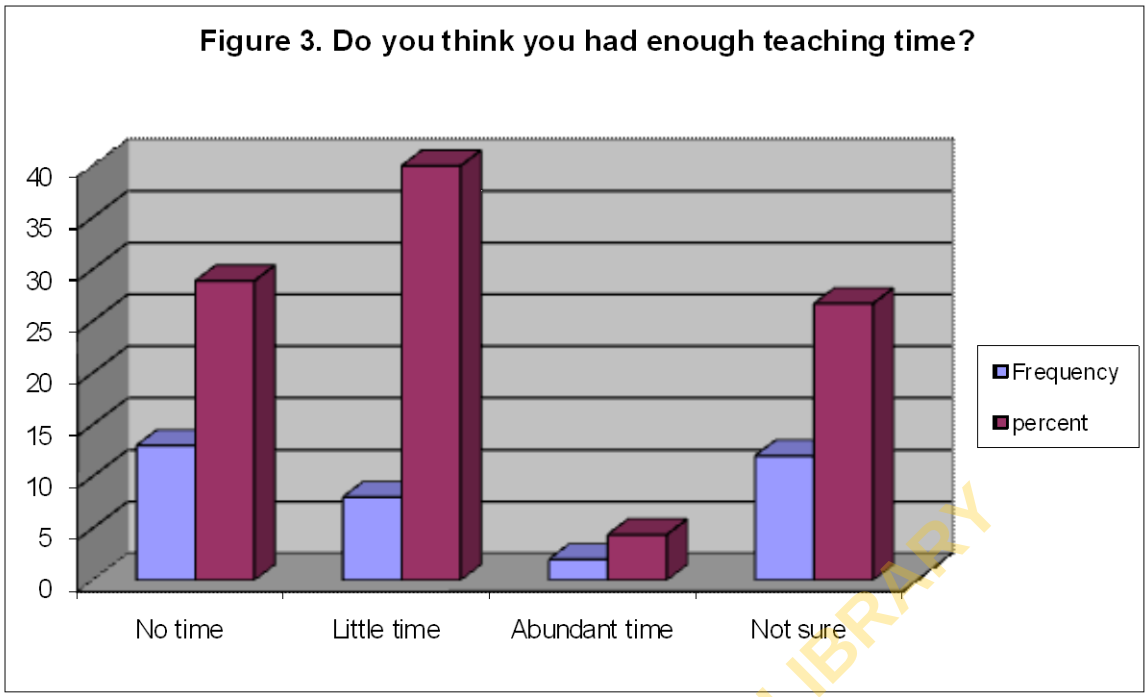

Table 1 Views about epidural labour analgesia

View	Yes n (%)	No n(%)	Not sure n(%)
Interferes with labour	17(37.8)	28(62.2)	-
Increased incidence of instrumentation	24(53.3)	18(40.0)	3(6.7)
Leads to adverse maternal outcome	4(8.9)	38(84.4)	3(6.7)
Leads to adverse neonatal outcome	4(8.9)	38(84.4)	3(6.7)
Increases incidence of maternal backache	14(31.1)	28(62.2)	3(6.7)
Would you like epidural for your patients?	44(97.8)	1(2.2)	-
Would you like other forms of analgesia?	29(64.4)	11(24.4)	5(11.1)
Do you give any form of analgesia presently?	40(88.9)	3(6.7)	2(4.4)

Data are number of patients (percent of total).

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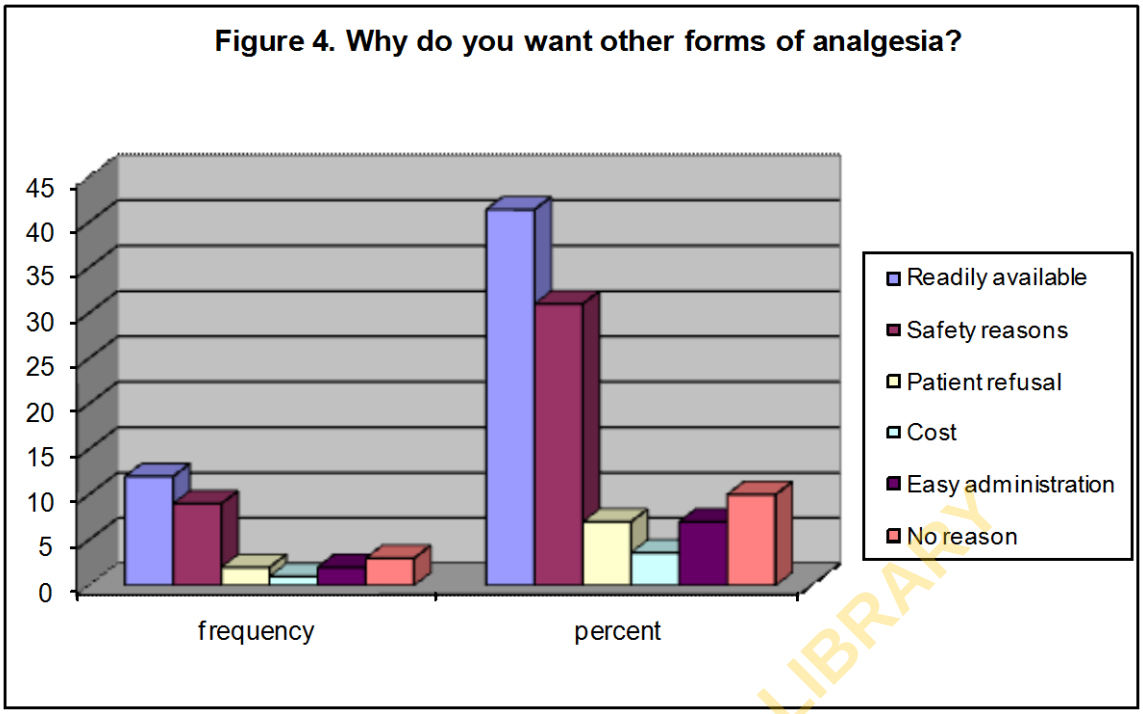
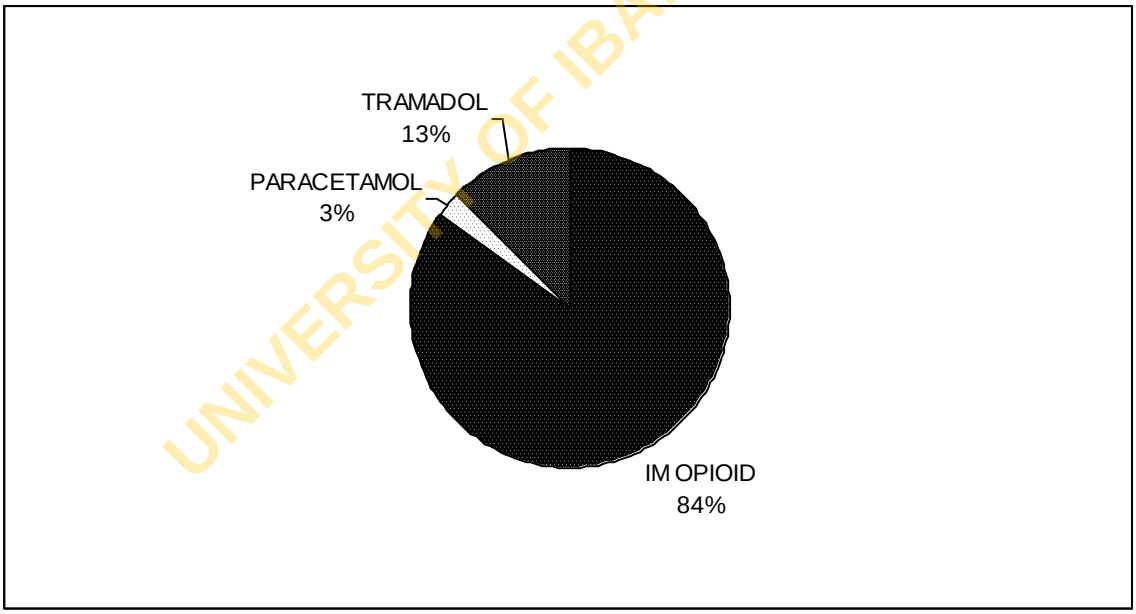


Figure 5. Present treatment given for labour analgesia



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Discussion

More than two thirds of women described their pain intensity with terms such as "distressing," "horrible" or "excruciating" at some point during the first stage of labor.[3] Although the second stage of labor is briefer than the first, the pain is usually more intense. Perineal pain due to stretching of the vagina, vulva and perineum is superimposed on the pain of uterine contractions. The advantage offered by epidural analgesia and the favorable experiences of women who have had painless labor with epidural block have reshaped the expectations of pregnant women entering labor. Oladokun et al in a survey conducted amongst Nigerian women, [4] reported that

knowledge of epidural analgesia and previous use of epidural analgesia were the significant predictors of a desire to receive epidural analgesia in a future labor. Though they reported a low awareness about among women in their study, only 3.7% of women who had a prior knowledge of epidural

analgesia will not ask for an epidural during labour. As more parturient experience pain-free labor, it is likely to have a positive influence on other women, thereby increasing the demand for epidural labour analgesia. Therefore physicians managing women in labor should have a clear understanding of various advantages and limitations of epidural analgesia, as this will most likely determine the outcome of each epidural and the desire to request for it when indicated.

Most of our respondents had training/teaching sessions on labour analgesia (LA) at one time or the other during their postgraduate training and when asked to assess the teaching they had, only about 4% of them accepted to have had adequate teaching time. This is related to the number of teaching and practical sessions they've had on labour analgesia compared to other important obstetric procedures. It is difficult to say whether the later observation accounted for the views expressed by 37.8% and 53.3% of the respondents about EA interfering with labour and increased incidence of instrumentation respectively or that these views are represent the familiar contentions about EA, [5, 6, 7, 8] especially the association between EA and caesarean delivery for dystocia. [9, 10] Chestnut *et al* [11, 12] opined that EA does not increase the incidence of instrumental delivery. Sharma *et al* [13] further demonstrated that, labor with epidural analgesia in women at term that had uncomplicated pregnancies and spontaneous active labour does not increase caesarean deliveries. Another prospective randomised trial of 334 nulliparous women found no difference in the caesarean delivery rate for early (10 %) compared with late (8 %) epidural placement [12]. As reported in recent studies, using lower doses of drugs and patient-controlled EA has led to a high spontaneous rate of vaginal delivery (78 to 95 %) and has decreased the incidences of instrumental delivery (14 %) and caesarean delivery (2 %). [14, 15, 11] 97.8% of our respondents are willing to recommend epidural analgesia to their patients and in agreement with other studies [16,17,18,19] 84.4% of them opined that EA does not lead to adverse maternal or neonatal outcome.

With majority of the respondents rating the teaching they had on LA as inadequate, we are of the opinion that education regarding LA, both during and after obstetric speciality training, be improved, and well-established interpersonal relationship between obstetricians and anaesthetists will be needed to achieve this. Anaesthetists should recognise the special needs and concerns of obstetricians, and obstetricians should recognise the anaesthetists as expert in the management of pain and life supportive measures. It has been shown that obstetric and anesthetic management have effects upon labor progress and outcome.[8] Both should recognize the need for collaboration to provide high-quality care for all patients.

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