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Research Article

A CROSS-SECTIONAL RESEARCH TO ASSESS AWARENESS ABOUT MANAGEMENT OF PAIN VIA EPIDURAL LABOR ANALGESIA AMONG PREGNANT FEMALES

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Abstract:

Objective: The aim of our study was to observe the knowledge and tendency of pregnant women about the treatment of pain via epidural labour analgesia.

Material and Methods: We carried out this cross-sectional research at Mayo Hospital, Lahore from November 2017 to December 2018. We selected a total number of 200 females for our study who were willing to become a part of this study out of those several visiting our hospital and having antenatal care. A predesigned questionnaire was formatted which define the attitudes and knowledge of the participants about epidural labour analgesia. All the selected pregnant women were interviewed according to this predesigned questionnaire and recorded the results in the shape of a form for after use.

Results: All selected members were having age from 18 years to 36 years and found most of them as 175 (87.5%) in the age limit of 18 years to 25 years. Majority of women were belonging to rural areas with a percentage of 89.50% (179). Majority of the pregnant women with a total number of 196 (98%) were just unaware of epidural labour analgesia. Whereas, the women who want to know about the advantages and treatment method of it were significant in number with a percentage of 95%. It was observed that after having the full information about the epidural labour analgesia acceptance level was linked with eagerness to deliver without suffering from labour pains, fear of labour pains, fear of delivery complications, level of education and socioeconomic status with P value less than 0.05. Whereas, observed no linkage to intensity experience of labour pains during last delivery, the time required for last delivery, parity, geographical distribution and age with a P value of more than 0.05.

Conclusion: At the end of our study it was concluded that many women suffer from labour pain due to the lack of knowledge and awareness. Hence, it is suggested that the information level regarding epidural analgesia must be increased via educational programs and workshops throughout the country. And to achieve higher standards the obstetricians must take a keen interest in such programs.

Key Words: Pregnancy, Epidural Analgesia, Parturient, Awareness.

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INTRODUCTION:

The utmost efficient technique for normal uterine activity restoration and with the capability of satisfactorily relieving labour pain is the epidural analgesia. In healthy pregnant women, epidural analgesia sufficiently increases intervillous blood flow and reduces blood catecholamine levels for relieving from labour pain [1]. In spite of this, in developing countries, ELA (epidural labour analgesia) is normally not adapted as a treatment method of labour pain in many antenatal clinics [2]. Because of many reasons obstetricians normally don't use epidural labour analgesia and so as the patients don't ask for it [3 – 8]. One of the main reasons for this is financial limitations and lack of qualified anesthesiologists. In the developing countries patients load is usually more than the available resources and most clinics still haven't sufficient required equipment for example devices and infusion pumps for Patient Controlled Epidural Analgesia (PCEA) [9].

Good consultation and synchronization among patients, obstetricians and anesthesiologists were pointed out in a clinical study carried out to show the present attitudes and familiarity of obstetricians about labour epidural analgesia [10]. Although the facility of labour analgesia was available in the hospital we observed that very fewer quantity of patients asked for it. The purpose of our study was to find out the knowledge and tendency of pregnant women about the treatment of pain via epidural labour analgesia and to find out the reasons if poor tendency exists even with the availability of the facility.

MATERIAL AND METHODS:

We carried out this cross-sectional research at Mayo Hospital, Lahore from November 2017 to December 2018. We chose a total number of 200 pregnant women for our study who were willing to become a part of this cross-sectional study. Those patients were not selected who were unwilling to participate in our study. Designed a questionnaire which defines the attitudes and knowledge of the participants about epidural labour analgesia. All the selected pregnant women were interviewed according to this predesigned questionnaire and recorded the results in

the shape of a form for after use with the surety of confidential information of the patients.

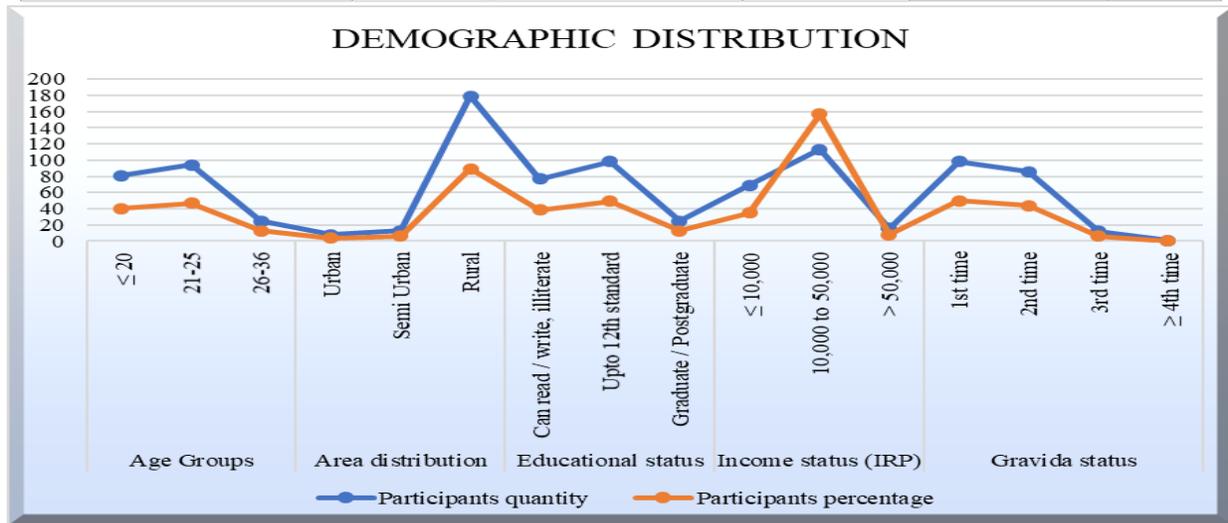
Knowledge about epidural labour analgesia was the primary result measurement and refusal reasons for ELA, demographics and willingness for ELA after providing whole knowledge to patients with or without expenditures was the secondary result measurement. Selected the hospital as the previous data indicates the most visitors in the department and facility of labour analgesia present in the Anesthesiology department. A sample size of 200 patients was decided on the basis of turnout of patients at the said department and expected knowledge of the patients about labour analgesia which is the primary objective of our study. It was also being supported by some previous studies of Oladokun A, et al (19.5%) and Olayemi O et al (10%) [7, 11]. Carried out the assessment of statistical significance via Chi-square test and calculation of statistical analysis of data carried out via SPSS 20. The significant value of P was considered to be less than 0.05.

RESULTS:

Total participants of our study were 200 in number and we provided them with a predesigned questionnaire. Some patients didn't answer all the questions but still, the return rate of the forms was 100% as all the patients returned the forms. Age of all patients was in between 17 years to 36 years. Majority of the patients were from the age of 19-25 years with a percentage of 87.5% were being up to 20 were 40.5%. Majority of the participants were from rural areas with a percentage of 89.50%, from urban and semi-urban areas there were 4.0% and 6.5% patients respectively. 38.50% of patients were educated only up to the level of writing/reading, 49% of participants were having education up to 12th standard and 12.50% patients were graduate or post graduate. As per the socioeconomic status majority of the participants were belonging to the middle-income group with the income from 10,000 to 50,000 scoring the percentage of 57.06%. primigravida, second gravida, third gravida and fourth and more than this were as 49.75%, 43.65%, 6% and one percent respectively. More details are given below in table number 01.

Table No 01: Participants Demographic Distribution

| Criteria | Range | Quantity | Percentage | Total |
|---------------------|------------------------------|----------|------------|-------|
| Age Groups | ≤ 20 | 81 | 40.5 | 200 |
| | 21-25 | 94 | 47 | |
| | 26-36 | 25 | 12.5 | |
| Area distribution | Urban | 08 | 4.0 | 200 |
| | Semi Urban | 13 | 6.5 | |
| | Rural | 179 | 89.5 | |
| Educational status | Can read / write, illiterate | 77 | 38.5 | 200 |
| | Upto 12th standard | 98 | 49 | |
| | Graduate / Postgraduate | 25 | 12.5 | |
| Income status (IRP) | ≤ 10,000 | 69 | 34.85 | 198 |
| | 10,000 to 50,000 | 113 | 157.06 | |
| | > 50,000 | 16 | 8.09 | |
| Gravida status | 1 st time | 98 | 49.75 | 197 |
| | 2 nd time | 86 | 43.65 | |
| | 3 rd time | 12 | 6.09 | |
| | ≥ 4 th time | 01 | 0.51 | |



Amongst the patients who were having previous experience of pregnancy, pain experience was as one patient didn't feel any pain whereas, moderate, mild, severe and unbearable pain experience was as 47%, 31%, 16% and 5% accordingly. Delivery statistics according to time intervals of ≤ 4Hrs, 4-12Hrs, 12-18Hrs, 18-24Hrs and prolonged labor for > 24Hrs were as 27%, 53%, 17%, 01% and 2% respectively. Fear of pain factor like mild to moderate level labour pain fear, highly fear of labour pains because of prior self-pain experience either due to others experience was as 93% and 5% accordingly whereas, no fear was seen in 2%. The same percentage observed for the delivery complications pain.

During our study, it was observed that amongst all selected 200 patients no one was having knowledge about prevention of labour pains. According to the opinion of three participants, it was impossible to be prevented and remaining had no idea of it that either it is possible or not possible. Same like results were observed about the knowledge of labour analgesia.

Only 4 members were having a little bit of information about labour analgesia which they received from their physician.

In the current study, we also observed the attitude of the patients towards labour analgesia, according to which found willingness in 138 (69%), those who showed no interest at all were 12 (6%) and 50 (25%) were not sure about it. Complete lack of interest for getting the information was observed in 5% participants whereas, remaining 95% showed their interest in having information of labour analgesia. There were 27% of participants who were unwilling to have the facility of labour analgesia even after having the full information about it. On the other hand, participants ready to some extent, ready, fully ready and those who do not want to deliver without labour analgesia were as 15%, 15%, 31% and 12% respectively. Found expenditure statistics as not ready 39%, ready to some extent 5%, ready 31%, fully ready 25%. Amongst all the participants no one was in knowledge of ELA case delivery.

Table No 02: Correlation of willingness for epidural analgesia and other variables

| Variable | Range | Quantity of patients | | | | | Total | P value |
|---|---|----------------------|----|----|----|----|-------|---------|
| | | A* | B* | C* | D* | E* | | |
| Time required for last delivery | ≤ 4Hrs | 5 | 5 | 3 | 13 | 1 | 27 | >0.05 |
| | >4 & <12Hrs | 17 | 5 | 10 | 16 | 5 | 53 | |
| | >12 & <18Hrs | 5 | 2 | 1 | 4 | 5 | 17 | |
| | >18 & <24Hrs | 0 | 0 | 0 | 1 | 0 | 1 | |
| | ≥ 24Hrs | 0 | 0 | 0 | 1 | 1 | 2 | |
| | Total | 27 | 12 | 14 | 35 | 12 | 100 | |
| Perception of intensity of labor pains during last delivery | No pains at all | 1 | 0 | 0 | 0 | 0 | 1 | >0.05 |
| | Mild pains | 11 | 5 | 5 | 9 | 1 | 31 | |
| | Moderate pains | 9 | 6 | 9 | 16 | 7 | 47 | |
| | Severe pains | 6 | 1 | 1 | 5 | 3 | 16 | |
| | Excruciating and unbearable | 1 | 0 | 1 | 1 | 2 | 5 | |
| | Total | 28 | 12 | 16 | 31 | 13 | 100 | |
| Fear of labor pains | No fear at all | 3 | 0 | 1 | 0 | 0 | 4 | <0.05 |
| | Mild fear | 40 | 24 | 23 | 37 | 11 | 135 | |
| | Moderate fear | 11 | 4 | 5 | 19 | 10 | 49 | |
| | Very much fear | 0 | 1 | 2 | 5 | 2 | 10 | |
| | Total | 54 | 29 | 31 | 61 | 23 | 198 | |
| Fear of delivery complications | No fear at all | 1 | 0 | 1 | 0 | 1 | 3 | <0.01 |
| | Mild fear | 42 | 20 | 11 | 30 | 7 | 110 | |
| | Moderate fear | 10 | 9 | 14 | 30 | 12 | 75 | |
| | Very much fear | 0 | 1 | 5 | 1 | 3 | 10 | |
| | Total | 53 | 30 | 31 | 61 | 23 | 198 | |
| Willingness to deliver without suffering from labor pains | Not willing at all | 10 | 0 | 0 | 2 | 1 | 13 | <0.01 |
| | May like | 27 | 16 | 3 | 3 | 0 | 49 | |
| | Like | 17 | 13 | 23 | 37 | 10 | 100 | |
| | Very much like | 0 | 1 | 4 | 17 | 11 | 33 | |
| | Wants to deliver without labor pains only | 0 | 0 | 0 | 2 | 1 | 3 | |
| | Total | 54 | 30 | 30 | 61 | 23 | 198 | |

*Response Rating: A=Not at all, B=Ready to some extent, C=Ready, D=Eager, E=Fully ready and willing to deliver with ELA

DISCUSSION:

Over 50% of women who got pregnant for the first time experienced unbearable labour pains [12]. The utmost intense pain is known is the pain during the birth of a child [13]. Mostly all gynaecologists wished to have ELA instead of exposure and low-level teaching. When safe and efficient methods for painless labour like epidural analgesia are available, it is very inhuman to let the parturients suffer from such severe labour pain. In a study in a metropolitan set up by Minhas et al, it was observed that most of the parturients delivering there were having information about epidural analgesia for management of labour pains. But because of misconceptions and fear factors, only a few were availing this facility.

In a previous study, Mugambe JM et al resulted that many females got information about pain relief from their friends, relatives and their previous experiences [14]. The major problems towards an

acknowledgement of labour analgesia amongst obstetricians were prevailing ignorance/confusion about ELA newly and maternal benefits, lack of training/teaching and a poor level of practical experience. As our majority of participants were from rural areas and study was hospital-based, different results are expected from metro cities. Therefore, multi-centre and large-scale studies are required to get more accurate and final conclusions.

CONCLUSION:

After all the observations of our study, it was concluded that many pregnant women suffer from labour pains due to the lack of knowledge and awareness. Consequently, it is proposed that the information level regarding epidural analgesia must be increased via educational programs and workshops throughout the country. And for the achievement of higher standards, the obstetricians must take a keen interest in such programs.

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