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Assessment of Knowledge and Attitude towards Labour Analgesia among Pregnant Women Attending Antenatal Clinic

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Abstract
Introduction: *The pain of childbirth has been documented to be extreme. A lot of controversy has existed since the inception of pain relief in labour to date. According to the American Society of Anesthesiologists (ASA) and American College of Obstetricians and Gynecologists (ACOG), maternal request represents sufficient justification for pain relief .*
Materials and Methods: *This cross-sectional study was done in the department of obstetrics and gynecology outpatient department, D.Y Patil Medical College and Hospital, Navi Mumbai from Jan 2014 to March 2014. Sample size is calculated according to formula 4pq/d2 where p=proportion of people with awareness; q=100-p; d=absolute precision (available error) which is 5%. In a previous study proportion of people with awareness is 20%. By calculating the values the sample size is 256.*
Results: *Out of 256 women 89.8% had no idea about usage of pain relief in labour. Only 10.2% had some idea about pain relief in labour. In previous delivery, out of 149 women, 89.9% of women were given some form of analgesia during labour. Only 10.1% stated that they were not given any method of analgesia. But, 38.9% experienced severe pain, 58.4% experience moderate pain and only 2.7% experienced mild pain during previous delivery. In spite of labour analgesia being given in majority of women, more number of women experienced moderate and severe pain (97.3%) during labour.*
Conclusion: *In spite of the presence of various pain relief techniques, women deliver with moderate to severe pain in labour. This is due to lack of adequate knowledge among pregnant women about pain relief and hectic work in labour room in Indian setting. Awareness is especially lacking among women in semi urban setting. Nonpharmacological methods should be popularized among pregnant women, which may provide pain relief and satisfaction during labour. Creating awareness may help them improve usage of adequate analgesia, which may in turn improve quality of care during labour and better outcome of mother and baby.*
Key Words: *labour analgesia, American Society of Anesthesiologists, analgesia*

I. Introduction

The pain of childbirth has been documented to be extreme. A lot of controversy has existed since the inception of pain relief in labour to date. According to the American Society of Anesthesiologists (ASA) and American College of Obstetricians and Gynecologists (ACOG), maternal request represents sufficient justification for pain relief. The American College of Obstetricians and Gynecologists also states that 'labour results in severe pain for many women. There is no other circumstance where it is considered acceptable for a person to experience untreated severe pain, amenable to safe intervention, while under a physician's care'.[1]

In a bid to attain Millenium Development Goals 4 and 5, attention is being focused on the very important area of childbirth. Analgesia for labour is widely utilized in high-income countries but this is not the case in Africa. Issues in high-income countries are focused on the choice of methods and complications, while in developing countries the issue revolves around awareness, acceptability and availability of analgesia for labour .[2]

Various studies have been conducted on the subject not only in low income countries, but also in high income countries and they have shown various factors affect women's attitudes to pain relief in labour. These include knowledge of labour analgesia (found to be low in several studies, upbringing and culture, education level, age, among others.[3]

Currently, the method of analgesia available in the labour ward is continuous support, which is inconsistently offered, mainly by the understaffed midwives. There being little data and no protocols for pain relief in labour in our setting, the study sought to assess the participants' knowledge of pain relief during labour and their beliefs, values and attitudes toward labour analgesia.[4,5]

II. Materials And Methods

This cross-sectional study was done in the department of obstetrics and gynecology outpatient department, D.Y Patil Medical College and Hospital, Navi Mumbai from Jan 2014 to March 2014. Sample size is calculated according to formula 4pq/d2 where p=proportion of people with awareness; q=100-p; d=absolute precision (available error) which is 5%. In a previous study proportion of people with awareness is 20%. By calculating the values the sample size is 256.

Pregnant women attending antenatal outpatient department were included in the study. Women who were planned for elective caesarean were excluded from the study. After getting consent from the pregnant women, they were personally interviewed using structured questionnaire. Proforma consisted of socio demographic characteristics, opinion about intensity of labour pain, knowledge about methods of pain relief and source of information about pain relief. In case of multi gravida, time duration for last delivery, the amount of pain experienced in previous delivery, usage of any pain relief during labour were collected. Other factors such as their preferred method of labour analgesia and reason for not opting for labour analgesia were also collected.[6]

Results are reported in percentages. Socio demographic factors such as age, religion, educational status, order of pregnancy, income, occupation of the women were analyzed for their influence on awareness of labour analgesia. Delivery factors such as amount of pain expected in present delivery, amount of pain experienced in previous delivery, time duration of previous delivery were also analyzed for influence on acquiring knowledge on labour analgesia. Chi square test was used to assess various factors influencing knowledge on labour analgesia. P value <0.05 was considered statistically significant.

III. Results

Out of 256 women 89.8% had no idea about usage of pain relief in labour. Only 10.2% had some idea about pain relief in labour. In previous delivery, out of 149 women, 89.9% of women were given some form of analgesia during labour. Only 10.1% stated that they were not given any method of analgesia. But, 38.9% experienced severe pain, 58.4% experience moderate pain and only 2.7% experienced mild pain during previous delivery. In spite of labour analgesia being given in majority of women, more number of women experienced moderate and severe pain (97.3%) during labour.

On analysing various socio demographic factors, age, religion, educational status of women did not have influence on knowledge about labour analgesia significantly. On analysing order of pregnancy, multigravida had a better knowledge than primigravida (x2 value 4.17; p value 0.041*). Similarly women with income of > Rs.10000/month had a better knowledge than those with < Rs.10000/month (x2 value 7.32; p value 0.026*). Similarly employed women had a better knowledge than housewife (x2 value 4.12; p value 0.042*) (Table 2).

Demographic characteristics	N=256	%
Age		
<20 years	**12**	**4.7%**
20-30 years	**214**	**83.6%**
>30 years	**30**	**11.6%**
Educational Status		
Uneducated	**16**	**6.3%**
Schooling	**157**	**61.3%**
College	**83**	**32.4%**
Gravid		
Primi	**107**	**41.8%**
Multi	**149**	**58.2%**
Income		
<10,000	**227**	**88.7%**
10,000-50,000	**26**	**10.2%**
>50,000	**3**	**1.1%**
Occupation		
House Wife	**240**	**93.8%**
Employed	**16**	**6.2%**

Table 1: Demographic characteristic of study population

Knowledge on labour analgesia	Yes (N=26)	No (N=230)
Age		
<20 years	**0**	**12**
20-30 years	**23**	**191**
>30 years	**3**	**27**
Religion		
Hindu	**17**	**180**
Muslim	**8**	**47**
Christian	**1**	**3**
Educational status		
Uneducated	**1**	**15**
Schooling	**16**	**141**
College	**9**	**74**
Gravid		
Primi	**6**	**101**
Multi	**20**	**129**
Income (INR/month)		
<10,000	**19**	**208**
10000-50000	**6**	**20**
>50000	**1**	**2**
Occupation		
Housewife	**22**	**218**
Employed	**4**	**12**

Table 2: Socio demographic factors influencing knowledge on labour analgesia

Knowledge on labour analgesia	**Yes**	**No**
Severity of pain expected in present delivery	**N=26**	**N=230**
Mild	**15**	**174**
Moderate	**8**	**50**
severe	**1**	**1**
No idea	**2**	**5**
Duration of labour in last delivery	**N=23**	**N=126**
<4 hours	**6**	**26**
4-12 hours	**4**	**23**
12-24 hours	**6**	**22**
>24 hours	**7**	**55**
Severity of pain during previous delivery	**N=23**	**N=126**
Mild	**1**	**3**
Moderate	**16**	**71**
Severe	**3**	**52**

Table 3: Delivery factors influencing knowledge on labour analgesia

IV. Discussion

The modern era of labour analgesia began in 1847 when Dr J. Y. Simpson administered ether to a woman during childbirth. Since then usage of labour analgesia made the women to deliver with less pain. This labour pain not only causes distress to the mother, it also has influence on the labour progress and fetal outcome. Acute stress during labour activates the sympathetic nervous system, resulting in an increase in plasma catecholamine levels. This increased catecholamine levels during labour, are associated with decrease in uterine blood flow.[7] This results in fetal hypoxia. Severe pain, anxiety and increased catecholamine levels are associated with prolonged or dysfunctional labour.

In previous delivery, out of 149 women nearly 97% experienced moderate to severe pain. 89.9% of women were given intramuscular injections during labour. Only 10.1% stated that they were not given any method of analgesia. This shows intramuscular injections given during labour does not produce pain relief in labour. Cochrane analysis shows that up to two-thirds of women who received opioids reported moderate or severe pain following administration of analgesia.[8]

In this study, on analyzing various socio demographic factors and delivery related factors, factors such as order of pregnancy, family income, occupational status of women and severity of pain expected in present pregnancy had statistically significant influence on knowledge about labour analgesia than others.[9]

Only 26 pregnant women in our study had prior knowledge about labour analgesia. Out of it, 24 got information from friends and relatives. This shows that health care workers do not provide adequate counseling about labour pain and about the options of labour analgesia during routine antenatal checkups. Because of overwhelming crowd in antenatal out-patient department, it may not be possible to provide counseling about labour analgesia in Indian settings.[10]

In this study, 7.8% of women were against labour analgesia. Reason being harmful to the baby, no belief that they cause complete pain relief and some wanted to experience natural child birth. Even educated people believe that delivery cannot occur without pain. Because of this deep rooted belief that delivery is painful, either patients are unaware of labour analgesia or failed to
utilize these pain relieving methods.[11]

V. Conclusion

In spite of the presence of various pain relief techniques, women deliver with moderate to severe pain in labour. This is due to lack of adequate knowledge among pregnant women about pain relief and hectic work in labour room in Indian setting. Awareness is especially lacking among women in semi urban setting. Nonpharmacological methods should be popularized among pregnant women, which may provide pain relief and satisfaction during labour. Creating awareness may help them improve usage of adequate analgesia, which may in turn improve quality of care during labour and better outcome of mother and baby.

References

[1]. Kuti O, Faponle AF, Adeyemi AB, Owolabi AT. Pain Relief in labour: A randomized controlled trial comparing pentazocine with Tramadol. NJOG. 2008;3:14–8.
[2]. O, Aimakhu CO, Udoh ES. Attitudes of patients to obstetric analgesia at the University College Hospital, Ibadan, Nigeria. J Obstet Gynecol. 2003;23:38–40.
[3]. Audu B, Yahaya U, Bukari M, El-Nafaty A, Abdullahi H, Kyari O. Desire for pain relief in labour in Northeastern Nigeria. J Publ Health Epidemiol. 2009;1:053–7.
[4]. Barakzai A, Haider G, Yousuf F, Haider A, Muhammad N. Awareness of women regarding analgesia during labour. J Ayub Med Coll Abbottabad. 2010;22.
[5]. Mugambe JM, Nel M, Hiemstra LA, Steinberg WJ. Knowledge of and attitude towards pain relief during labour of women attending the antenatal clinic of Cecilia Makiwane Hospital South Africa. SA Fam Pract. 2007;49:16.
[6]. Mung'ayi V, Nekyon D, Karuga R. Knowledge, attitude and use of labour pain relief methods among women attending antenatal clinic in Nairobi. East Afr Med J. 2008;85:9.
[7]. Naithani U, Bharwal P, Chauhan SS, Kumar D, Gupta S, Kirti Knowledge, attitude and acceptance of antenatal women toward labor analgesia and caesarean section in a medical college hospital in India. J Obstetric Anaesth Crit Care. 2011;1:13–20.
[8]. Okeke CI, Merah NA, Cole SU, Osibogun A. Knowledge and perception of obstetric analgesia among prospective parturients at the Lagos University Teaching Hospital. Niger Postgrad Med J. 2005;12:258–61.
[9]. Olayemi O, Adeniji RA, Udoh ES, Akinyemi OA, Aimakhu CO, Shoretire KA. Determinants of pain perception in labour among parturients at the University College Hospital Ibadan. J Obstet Gynaecol. 2005;25:128–30.
[10]. Shidhaye RV, Galande M, Bangal VB, Smita J, Shidhaye UR. Awareness and attitude towards labour analgesia of Indian pregnant women. Anaesth Pain & Intensive Care. 2012;16:131–6.
[11]. Toledo P, Sun J, Peralta F, Grobman WA, Wong CA, Hasnain-Wynia R. A qualitative analysis of parturients' perspectives on neuraxial labor analgesia. Int J Obstet Anesth. 2013;22:119–23.