ADDIS ABABA UNIVERSITY-COLLEGE OF HEALTH SCIENCE SCHOOL OF MEDICINE, TIKUR ANBESSA SPECIALIZED HOSPITAL

A RESEARCH PAPER SUBMITTED TO DEPARTMENT OF ANESTHESIOLOGY, COLLEGE OF HEALTH SCIENCE,ADDIS ABABAUNIVERSITY FOR PARTIAL FULFILLMENT OF RESIDENCY TRAINING ON ANESTHESIOLOGY

Study Area: Addis Ababa, Ethiopia

NOVEMBER , 2018
ADDIS ABEBA, ETHIOPIA

ASSESSMENT OF KNOWLEDGE, ATITUDE AND PRACTICE OF LABOR ANALGESIA AMONG OBSTATRIC HEALTH CARE PROVIDERS IN TIKUR ANBESSA SPECIALIZED HOSPITAL

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NOVEMBER 2018

ACRONYMS

ACOG-American College of Obstetricians and Gynecologists

LMIC- low and middle income countries

HCP-Health care providers

HIC- High income country

TCE- Transcutaneous electrical nerve stimulation

TASH-TikurAnbessa Specialized Hospital

IRB-Institutional Review Board

AA– Addis Ababa

PI - Principal Investigator

SPSS-Statistical Package for Social Sciences

FMOE -Federal Ministry of Education

ARSRH- Amhara Regional State Referral Hospitals

KAP- knowledge, attitude and practice

Abstract

Background

Despite the increased focus on pain management programs and the development of new standards for pain, assessment and treatment of labor pain is mostly abandoned specially in low and middle income countries. In Ethiopia there are few studies done in some regional states to assess attitude towards labor pain and utilization of labor analgesia, thus this thesis is conducted in one of the biggest and tertiary hospital found in the capital city of Ethiopia,A.A.

Objectives

To evaluate the knowledge and attitude of labor pain analgesia and to describe the practice of labor analgesia among obstetric health care providers at Tikur Anbessa Specialized Hospital.

Method: cross-sectional study was conducted from AUGUST 1 to OCTOBOR 1, 2018 at Tikur Anbessa Specialized Hospital. Data was collected using structured questionnaire distributed to obstetric residents , Ansthesiology residents and midwifes. The collected data was coded and entered into EPI info version 7and analyzed by using SPSS version 20. Descriptive analysis was used.

Result: This study found that majority (91%) of ansthesia and more than half(67%) of obstetric residents have good attitude towards labor analgesia, while majority(74%) of the midwifes found to have poor attitude.Althogh 80% of Ans residents have good knowledge towards labor pain management, only 49% of midwifes & 47% of obs residents found to have good knowledge about labor analgesia .majority of HCPs i.e 82% of midwifes, 69% of obs residents, 83% of ans residents was found to have good practice of labor analgesia.

Conclusion & recommendation: The majority of healthcare providers understand that women suffer significant pain during labor and majority believe that labor pain relief is necessary However, when we see the general knowledge of HCPs, except Ans residents half of obs residents & half of the midwifes have poor knowledge about labor analgesia thus emphasis should be given to train all obstetric health care providers regarding safe , efficient and affordable labor analgesia.

Acknowledgement

My gratitude goes to my advisor Dr. MANEKULH ESHETE for his expert advice, suggestions and assistance in all aspects of this research work. I would like to thank DR ZEHARAfor her advice. Moreover, I would to thank Addis Ababa University for giving me the chance to conduct this thesis .special thanks go to the study participants who spent their precious time in responding to the questionnaire.

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1 Introduction

1.1 Background

Pain can be defined as a sensitive and emotional experience, which can result from actual or potential tissue injury. Genetic makeup, individual behavior, cultural influences, and socio-demographic characteristics like age and sex contribute a lot for the individual variation in perceiving pain[1].

Coming to Labor pain, it is an intense, unpleasant experience with significant physiologic consequences on the mother and the fetus, in the past delivery was called “poena magna” in romans which means great pain or great punishment[2].

Labor pain can vary considerably in intensity among individuals, nulliparous women tend to have slightly exaggerated respose This may be related to each woman’s perception of pain before labor and the emotional component of pain is dependent upon the individual and the situation.

A thorough and focused assessment of laboring mothers before selecting and administering analgesic modality is essential to maximize efficacy and maternal satisfaction, without sacrificing maternal and fetal safety.

Understanding the neurophysiology of labor pain and the maternal and fetal effects of pain is essential for all practitioners dealing with laboring mothers

The concept of painless delivery was existed in the early 19th and mid-20th century by Edward and Hugson [11]. The American College of Obstetricians and Gynecologists (ACOG) states that ‘‘there are no other circumstances; considered as severe as labor pain. Maternal physiological responses to labour pain may affect maternal and fetal wellbeing and progress of labour[8]. ACOG and American College of Nurse-Midwives’ recommends pain relief and say “women should have access to variety of measures to assist them in labour and in the absence of medical contraindication, maternal request is enough for pain relief”. [[9]12]

In many high income countries (HIC), pain relief in labor is considered an essential part of intra-

partum care and all women have the choice of and access to all range of pain relief options for labor and delivery. [3]

Indeveloping countries including Ethiopia use of obstetric analgesia for labour pain relieve is not a common practice. This may be as a result of several factors including unavailability of equipment, problems at health care delivery systems & setting of hospital , poor knowledge & awareness of the HCPs about methods of labor analgesia , misconceptions regarding complications associated with labor analgesia including result of long-term backache, harm to baby, breast feeding problem, increased caesarean section, slow labour progress and permanent medical problems for the mother and newborn.(15)

Ethiopia is one of the low income countrys in East Africa with an estimated population of over 99 million and one of the highest maternal mortality ratios in the world with 353 per 100,000 live births[5].(The percentage of women who attend at least one antenatal visit is 34 and 90% of births are not assisted by skilled healthcare providers. The reasons for women not giving birth in healthcare facilities in Ethiopia are multifactorial and include confidence in traditional birth attendants, inability of family members to be present at time of labor and delivery, traditional and/or spiritual factors, economic factors accessibility to healthcare facilitie and misconceptions about services provided at health facilities (poor reception on arrival, lack of privacy, shortage of skilled staff and poor quality of care including lack of pain relief options) [6].

As the experience of pain in labor is subjective and differs from woman to woman, all woman should have a choice according to her preference and individual circumstances. In low and middle income countries (LMIC), the most common form of pain relief is the continuous support of a companion during labor. The provision of further pain relief in labor is often neglected, against a background of controversy over the need, advantages and disadvantages of pain relief, especially pharmacological options [3]

There are many methods to relieve labor pain, both non-pharmacological and pharmacological. The ideal pain relief method must be safe, effective, timely, efficient, equitable, women-centered and ideally should not interfere with labor or the mobility of the laboring women .Nonpharmacological options include the continuous support of a companion, directed breathing and relaxation techniques, massage, laboring in water and the use of transcutaneous electrical nerve stimulation (TENS) in early labor. Pharmacological options include oral tablets

(paracetamol, codeine or tramadol), inhalation analgesia (Entonox® - a 50:50 mixture of oxygen and nitrous oxide), intravenous and intramuscular opioids (pethidine or diamorphine) and various types of local (para-cervical or pudendal block) and regional analgesia (epidural or spinal anesthetic)[4].

Healthcare providers (HCPs) have an important role to play in supporting women's choice and to access those mentioned pain relief options during labor. A large systematic review concluded that a woman's desire for and choice of pain relief during labor is influenced by many factors: personal expectations, support from HCPs, the quality of the relationship between the woman and the HCP and the woman's involvement in decision making[7].

1.2 Rationale of the study

Historically and culturally women have been supported and attended by other women during labor and childbirth. But, since the middle of the 20th century, majority of mothers gave institutional delivery and continuous support during labor become missed practice[10, 11].

For many years Labour pain was regarded as punishment given by God from Eve's sin and asking for relief was considered as against God in reality there are no other circumstances; considered as severe as labour pain. One study done in United Kingdom and Finland indicated 93.5% and 80% of laboring women described the pain as very severe and intolerable [8].

Many researches concerning labor pain management were performed in different parts of the world. However, there is limited research done in Ethiopia to assess the knowledge attitude and practice of labor analgesia among obstetric HCPs. One Research done ARSRH also found the overall obstetric analgesia utilization very low

As TASH is a tertiary and huge hospital found in the country, this study is aiming to assess the attitude of labor pain among obstetric health care providers, to assess their knowledge and practice of labor analgesics.

1.3 Statement of the problem

According to Ethiopian demographic health survey finding in 2014, about 57.2% of pregnant Ethiopian women attended at least one antenatal care visit but only 14.5% of deliveries are in health care facilities. In this case effective labour pain management in addition with increasing human resource and better infrastructure development may be a critical intervention for increasing institutional deliveries.

Thus this research is conducted with the aim of exploring HCPs' awareness and practice about pain relief for women in labor in TASH, A.A. and finally to improve the practice looking at the drawbacks.

1.1 Literature review

Despite the fact that experience of pain in labor is subjective and differs from woman to woman, all woman should have a choice according to her preference and individual circumstance[3]

Different study show that labor analgesia is not well being practiced specially in middle & low income countries

A survey of healthcare providers knowledge and attitudes regarding pain relief in labor for women in Ethiopia at three public hospitals in different settings (rural, peri-urban and urban) in 2015 using A structured questionnaire (n = 200) distributed to healthcare providers working in the obstetric departments, including theatres, The response rate was 81.5% with 164 questionnaires completed. The majority, 79% of respondents, understood that women can feel moderate to severe pain in labor and 77% were of the opinion that labor pain should be relieved. However, common practices included only supportive measures such as breathing and relaxation exercises, back massage and support from family. The general attitude of healthcare providers was that labor is a natural process, women should be able to cope and that pain relief is not a priority forwomen in labor. More than half, 52% of healthcare providers had safety concerns with using pharmacological methods to relieve pain in labor, in this survey it is concluded that HCPs in Ethiopia understand and agree that labor is painful. However, in practiceHCPs do not provide women with options for the management of pain during labor other than support from family. There is a need to further educate HCPs to provide pain relief during labor, and for the HCPs to inform women regarding the various types of labor pain relief methods available in order to improve the quality of care given to women in labor[3].

A Hospital based Cross Sectional Study done on Utilization of Obstetric Analgesia in Labor Pain Management and associated Factors among Obstetric Care Givers in Amhara Regional State Referral Hospitals, Northwest Ethiopia in 2014

The study was conducted on all obstetric care givers in Amhara Regional State Referral Hospitals using structured questionnaires to collect the data and the overall utilization of obstetric analgesia in labour pain management was 40.1% which showed only non pharmacologic methods. All professionals used nonpharmacologic methods while the utilization of pharmacologic obstetric analgesia methods were found to be zero. Psychotherapy 75(88.2%) was the most used method followed by breathing technique 61(71.9%) and massage 54(63.51%). from the study the conclusion was Proportion of obstetric analgesia utilization was very low; The recommendation from the study was that Providers need to help laboring mother with analgesia; updates and make themselves familiar with obstetric analgesia..[9]

Survey of awareness, attitude, and practice of health care providers in Zaria, Nigeria was done using structured questionnaire, it was completed by 95 consenting maternal health care providers most respondents (94.8%) agreed that pain relief is needed during labor. Only 2.1% of respondents were undecided about the provision of pain relief during labor and 3.2% were of the opinion that pain relief was not necessary during labor, among the respondents who did not offer pain relief agents in labor, the majority (54.5%) had no reason for not offering it. Unavailability of methods, inability to afford the cost of pain relief, lack of knowledge and skills, as well as lack of essential equipment to provide the procedure were also given by respondents as reasons for not offering pain relief. In the sudsy it was concluded that Even though health care providers in this environment have a positive attitude to pain relief in labor, most women go through labor, without the benefit of analgesia. This study showed that there is a gap between provider attitudes to pain relief in labor and practice of the same, with many providers having no genuine reason(s) for not offering pain relief to their clients during labor[13].

A study conductedin Feinberg School of Medicine, Northwestern University, Chicago, it was concluded that Neuraxial analgesia in early labor did not increase the rate of cesarean delivery, and it provided better analgesia and resulted in a shorter duration of labor than systemic analgesia.[14]

A cohrane review which was done in 2009 which involve 13000 women from 11 different countries showed that women who had the continuous presence of a supportive companion like husband, relative or friends had slightly shorter labors, reduced requirement for analgesia and more likely they have spontaneous vaginal delivery. These women has also reported greater satisfaction with the entire childbirth experience and the feeling was true despite large cultural differences, obstetric practices and environmental factors[2].

2 Objectives

2.1 General objectives

- To assess knowledge, attitude and practice of analgesia for laboring mothers among obstetric health care providers in TASH, A.A.

2.2 Specific objectives

- To assess the knowledge & attitude of obstetric health care providers about labor analgesia
- To assess the knowledge & attitude of obstetric health care providers about labour pain
- To explain any drawbacks in labour pain management
- To formulate acceptable and workable recommendations to improve the pain management

3 Methodology

3.1 Study setting

The study was conducted at Addis Ababa University, College of Health Sciences, TikurAnbessa Specialized Hospital. It is the largest public specialized hospital in Ethiopia located at Addis Ababa under the Ethiopian FMOE.

3.2 Study design

Descriptive cross sectional study design was employed with self-administered structured questioner from august to octobor, 2018

3.3 Sample size

Complete census was employed because we wanted to survey all obstetric residents, anesthesiology residents and midwifes included in the inclusion criteria.

3.4 Study variables

3.4.1 Dependent variable

- Knowledge ,attitude & practice of labour analgesia

3.4.2 Independent variables

AGE

Sex

Religion

Profession

Year of experience

3.5 Sampling procedure

- The study was conducted at Addis Ababa University, College of Health Sciences, Tikur Anbessa Specialized Hospital. It is the largest public specialized hospital in Ethiopia located at Addis Ababa under the Ethiopian Federal Ministry of Education (FMO

3.5.1 Study population

- Includes all midwives, obstetric and ansthesia residents who work in labor ward of TASH for atleast for one year.

3.6 INCLUSION & EXCLUSION CRITERIAS

3.6.1 Inclusion criteria

- All obstetric residents, and midwifes who were working in labor ward of TAS hospital during the study period and Anesthesiology residents

3.6.2 Exclusion criteria

- First year obstetric residents
- First year anesthesiology residents who haven't attached their obstetric attachment.
- Midwifes working in labor ward for less than a year

3.7 Operational definition

Attitude (70%)

Good – respondents who answer >70 % of the attitude questions

Poor -respondents who answer < 70% of the attitude questions

Practice (70%)

Good-who answered who answer > 70% of the attitude questions

Poor-who answered who answer <70% of the total attitude questions

Knowledge (70%)

Good – who answer>70% total knowledge question

Poor- who answer <70% total knowledge question

3.8 Data collection procedure

- A structured questionnaire which has four essential components including providers socio demographic characteristics, knowledge, attitude and practice related questions
- The questioner was developed based on sources from previous researches and literature review with some modification to fit into our setup.
- The data was collected from AUGUST 1-OCTOBOR 1, 2018G.C. in the health facility during working days. Questionnaire was administered to study subjects by three data collectors (one anesthesia resident one obstetric resident and one midwife)

3.8.1 Data management

- To ensure data quality, data collectors was closely supervised all the collected data was be checked by the principal investigator.
- Data was double entered and cleaned before analysis.

3.8.2 Data Analysis

- First the data was checked for completeness and consistency. coded and entered in the computer using EPinfo7 software. Then, data was analyzed by using SPSS version 20. Descriptive statistics (frequencies, percentages, cross tabulations) was used to explain the study participants in relation to study variables.

3.9 Ethical consideration

Permission to carry out the study was obtained from the Institutional Review Board (IRB) of Addis Ababa University College of health science, school of medicine, department of anesthesiology. Oral informed consent was obtained from participants. Confidentiality of the collected information was maintained through coding and ensuring that they were only accessible to the research team.

3.10 DISSEMINATION OF RESULTS

The result of this study will be disseminated to policy makers, Black Lion Specialized Hospital, AAU school of Medicine and other concerned bodies through presentations and publications

4 RESULT

4.1 Socio demographic characteristics of respondents

A total of 123 participants were studied, the overall response rate was 100 %(n=123). Majority 75 %(n=92) were males and 81% (n=99) of the respondents were in age range of 20 – 29 years.40%(n=49) of the respondents are gyniobs residents, 39(32%) are midwifes and 28% (n=35) are ANS residents. 89 %(n=109) of the participants had a service year of <5 years and only one respondent had more than 10 years of clinical experience

Table: 1 - Distribution of participants by socio-demographic Characteristics

Variable	Frequency(n=123)	Percent(n=123)
Age		
20-29	99	81
30-39	23	19
Sex		
Male	92	75
Female	32	25
Religion		
Orthodox	75	62
Muslim	20	16
Protestant	21	17
Catholic	2	2
others	3	2
Professions		
Midwifery	39	32
Gyn.Residents	49	40
Ans.Residents	35	28
Qualification		
BSc	40	33
Resident	82	67
Service year		
≤5 years	109	89
5-10 years	12	10
>10 years	1	1
Year of residency		
1st	8	6
2nd	54	44
3rd	11	9
4th	11	9

4.2 Respondents attitude about labor pain management

83% of the respondents agreed that laboring women experience moderate to severe pain and almost all (94%, n=116) of the respondents agreed that labor pain relief is necessary. Only 6%(n=7) of the respondents disagree that labor pain relief is necessary off which 5 are midwifes and 2 are from gyni obs and from this respondents the reason they gave were that labor is a natural process and they should cope with it and none from anesthesia disagree about the necessity of labor pain management. More than half (66%) of the respondents sometimes feel that women complaining of labor pain is may be due to seeking stuff attention. About 90% of the respondents don't avoid opoids for fear of addiction.

This study found that majority of anesthesia residents (91%), more than half of obstetric residents (67%) have good attitude, while majority (74%)of the midwifes have poor attitude towards labor analgesia.

Figure 1 attitude distribution among physicians

Table: 2 Distribution of participants by Attitude

Variable	Frequency(n=123)	Percent (n=123)
Should Women expected to fell pa in		
No	43	35
Yes	80	65
Do you think Labor pain relief is ne cessary		
Strongly disagree	1	1
Disagree	6	5
Agree	53	43
Strongly agree	63	51
Why do you think is the reason to Relieve pain		
Yes	73	60
No	50	40
Relieve stress		
Yes	35	72
No	88	28
Feel confident		
Yes	10	8
No	113	92
Enjoy the experience		
Yes	18	15
No	105	85
Why do you think labor pain shoul dn't be relieved Natural process		
Yes	11	9
No	112	91
Labor longer		
Yes	3	2
No	120	98
Affect the baby		
Yes	1	1
No	122	99
Do you think placebo injection will determine if the pain is real		
Yes	37	30
No	86	70
Should Opiods be avoided for fear of addiction		
Yes	12	17
No	111	90
Have you ever thought women co		

mplaining labor pain may be due o t Seeking staff attention		
Sometimes	81	66
Never	42	34
What Level of pain do you expect		
Mild	21	17
Moderate	26	21
Severe	76	62

Figure 2 do you think labor pain relief is necassary

4.3 Respondents Practice about labor pain management

More than half (55%) of the respondents have given labor analgesia *more than ones in their practice while 35%(n=43) of the respondents have never gave labor analgesia in their practice off which 70%(n=30) give lack of knowledge and skill as a reason while the rest give lack of equipments and fear of complications (safety concern) as a reason for not giving labor analgesia . about half (51%) of the respondents grade pain before and after analgesia and almost all of the

respondents (97%) often use *psychological support in their practice. Overall majority(82%)of midwifes,69%of gyn-obs & 83% of ANS residents have good practice of labor analgesia.

Figure 3 **practice distribution among physcians**

***psychological support (verbal support and reassurance, deep and controlled breathing)**

*** more than once(twice and more than twice)**

Table: 3 Distribution of participants by Practice

Variable	Frequency(n=123)	Percent (n=123)
How many time you gave labor an algesia		
Ones	12	10
Twice	9	7
More than twice	59	48
Never	43	35
If never why Lack of equipment		
Yes	8	19
No	35	81
Safety concern		
Yes	8	19
No	35	81
No knowledge and skill		
Yes	30	70
No	13	30
Do you Grade pain before and afte r analgesia		
Yes	63	51
No	60	49
Do you often use psychological sup port		
Yes	119	97
No	4	3

Figure 4.how many times have you gave labor analgesia

Figure 5 **Do you Grade pain before and after analgesia**

4.4 Respondents knowledge about labor pain management

80% (n=99) of the respondents know about WHO pain ladder and 0nly 38% of the respondents know about pain assessment tools. 47% (n=65) of the respondents recommend IV analgesic as labor analgesia, while only 24%(n=29) of the participants recommend regional/local analgesia for labor pain. 67% of the participant believe that the main barrier for not receiving labor analgesia is lack of awareness of the physician's and the mothers .more than half 72%(n=88) of the respondents know that combining analgesia which act with different mechanism may result in better pain relief with fewer side effects. 80% (n=97) of the participants believe that opioids should be avoided in patients with respiratory compromise. Majority (80%) of the respondents belief that respectful and nonjudgmental communication will ease labor pain. 45 % (n=55) of the respondents believe that labor analgesia will affect baby's breathing, 36% (n=44) of the respondents believe that it will prolong labor and only 14% (n=17) of the respondents believe that labor analgesia will increase risk of instrumental delivery and 38% (n=47) of the respondents believe that regional analgesia will increase risk of caesarean delivery when compared to systemic analgesics.

This study found 80% of Ans residents have good knowledge towards labour

analgesia while 53% gyn-obs residents & half of(51%) of the midwifes are found to have poor knowledge towards labor analgesia.

Table: 4 Distribution of participants by Knowledge

Variable	Frequency(n=123)	Percent (n=123)
Do you know WHO pain ladder		
No	24	20
Yes	99	80
Have you ever used it to Treat pain		
No	21	17
Yes	101	82
0	1	1
Do you know pain Assessment tools		
No	63	51
Yes	47	38
0	13	11
Have you ever used it		
Yes	54	44
No	56	45
0	13	11
Which Tool do you use commonly		
Numerical	15	12
Visual	25	20
Verbal	20	16
0	63	51
What type of labor pain relief you routinely recommend IV		
Yes	65	53
No	58	47
Oral		
Yes	19	15
No	104	85
Social and psychological		
Yes	36	29
No	87	71
Regional		
Yes	29	24
No	94	76
Which systemic analgesic you recommend for labor analgesia NSAID		
Yes	17	14
No	106	86
Pethidine		
Yes	17	14
No	106	86
Tramadol		
Yes	50	41
No	73	59
others		

Yes	6	5
No	117	95
What are the barriers for patients to r eceive labor analgesia Lack of awareness of Patient		
Yes	34	28
No	89	72
Lack of awareness professionals		
Yes	48	39
No	75	61
culture		
Yes	4	3
No	119	97
Not priority		
Yes	21	17
No	102	83
Financial		
Yes	15	12
No	108	88
Fear of addiction		
Yes	28	23
No	95	77
others		
Yes	13	11
No	110	89
Do you think combining analgesics wo rking by different mechanism may res ult in better outcome with fewer side effects		
Yes	88	72
No	35	28
should Opoids be avoided in patients with respiratory compromise		
Yes	97	80
No	26	20
Should we Administrate oral analgesic s 1-2 hrs prior in order to be effective		
Yes	100	81
No	23	19
Do you think Respectful and nonjudgm ental communication will ease labor p ain		
Yes	97	79
No	26	21
What are some of your concerns in usi ng labor analgesia Affect babys breathing		
Yes	55	45
No	68	55
Prolong labour		
Yes	44	36

No	79	64
It will make Labor unnatural		
Yes	15	12
No	108	88
Will affect mothers Ability to push		
Yes	21	17
No	102	83
Increase instrumental		
Yes	17	14
No	106	86
Increase C/S		
Yes	15	12
No	108	88
I have no concern		
yes	17	14
no	104	86
Do you think that regional analgesia w ill increase risk of C/S compared to sys temic analgesics		
Yes	47	38
No	76	62

Figure 5 distribution of knowledge among physicians

Figure 6 Do you know WHO pain ladder

Figure7 Do you think that regional analgesia will increase risk of C/S compared to systemic analgesics

Table :5 KAP among professionals

	Midwife(n=39)	**Gyn.R(n=49)**	**Ans.R(n=35)**
Attitude			

Good	10(26%)	33(67%)	32(91%)
Poor	29(74%)	16(33%)	3(9)
Knowledge			
Good	19(49%)	23(47%)	28(80%)
Poor	20(51%)	26(53%)	7(20%)
Practice			
Good	32(82%)	34(69%)	29(83%)
Poor	7(18%)	15(31%)	6(17)

5 Discussion

This is the first survey which tries to assess the knowledge, attitude and practice of labor analgesia among obstetric health care providers practicing in TASH.

The generall finding of this study is that majority of ansthesia residents(91%) & more than half(67%) of obstetric residents have good attitude towards labor pain management while only 26% of the midwifes have good attitude. Again Majority (80%) of ANS residents found to have good knowledge while 53% of obs residents and (51%) of the midwifes have poor knowledge towards labor pain management when we see the practice of labor analgesia it was found that majority(82%) of midwifes ,69%of gyni-obs & 83% of Ans residents have good practice of labor analgesia.

83% of obstetric HCPs understood that women can feel moderate to severe pain in labor and 94% of HCPs agreed that labor pain should be relieved. This is comparable to findings from a study done in Ethiopia among 200 health care providers working in the obstetric departments, including theatres, of three public hospitals in different settings (rural, peri-urban

and urban) where they found that 79% of respondents, understood that women can feel moderate to severe pain in labor and 77% were of the opinion that labor pain should be relieved.

Of 123 respondents 98% of the them use Reassurance & verbal support to relief labor stress. When we see the analgesic technique preference 47% of the participants recommend IV analgesic as labor analgesia and only 24% prefer regional as labor analgesia when we compare this result to a survey done in ARSRH where pharmacological utilization was found to be zero this may show TASH has relatively better labor analgesia utilization.

In this study majority of the respondents (82%) have knowledge about WHO pain ladder and more than half (51%) of the respondents Grade pain before and after giving analgesia.

Among the respondents major concerns on using labor analgesia was a misconception about prolongation of labor and affecting baby's breathing and 38%of the respondents have a misconception that regional analgesia will increase risk of caesarean delivery when compared to systemic analgesics which may be the reason that majority prefer/recommend systemic analgesic than the regional one. In one study which was done in Ethiopia more than half of all HCPs were concerned about the effect of pain relief on the baby, on the mother and the labor process, where the researcher put that these concerns are also shared by laboring women as well.

6 Conclusion and recommendation

6.1 Conclusion

This survey found that majority of HCPs(80%) in TASH understand and agree that labor has moderate to severe pain and also majority (90%) of the respondents believe that labor pain relief is necessary. Although majority (74%) of midwifes found to have poor attitude ,91% of ansthesia residents & more than half of obstetric residents (67%) have good attitude towards labor pain management thus awareness creation among HCPs specially to midwifes may be helpful in improving utilization of labor analgesia.

Even though majority of ansthesia residents have good knowledge towards labor pain management, half of obstetric residents (53%) and half of the midwifes(51%) found to have poor knowledge the reason may be that ansthesia residents are more familiar with pain and options of pain management. Practice wise majority of HCPs are found to have good practice, commonly practiced one being psychological support & reassurace

6.2 Recommendation

To Black lion hospital

- raising awareness to the health care providers
- training should be given to all obstetric health care providers regarding safe ,efficient and affordable labor analgesia,
- Training should also be more practical in order to build skills of the HCPs a.
- emphasis should be given to awareness creation among women not only when they come for labor but also during their ANC follow up
- increasing its capacity to fulfill the need of laboring mothers by increasing equipment's and drugs necessary for labor pain management
- Making labor ward free of stress either by training the health care providers how to give appropriate psychological support or by allowing family members to accompany the mothers

Recommendation for researcher

Further investigation should be continued to explain exhaustively to assess knowledge, attitude and practice of analgesia for laboring mothers among obstetric health care providers

6.3 LIMITATION

- Attitude could have been explored more with qualitative data.
- Small sample size

7 Annex (questioner)

1)socio-demographic characteristic of health care providers working in labor ward of TAS hospital (**circle your answer)**

Age (in years)

20–29 30–39 >=40

Sex

Male

Female

Religion

Orthodox Muslim Protestant Catholic

Profession

Midwife Residents Nurse

Highest qualification

BSc Diploma Masters Resident

Years of experience

<=5 5-10 >=10

Year residency

1st yr 2ndyr 3rdyr 4thyr

2) Attitude questions (circle on your answer,more tha one answer is possible)

2) Do you think labor pain relief is necessary? A) Agree b) strongly agree c) disagree

d) Strongly disagree

3) If your answer is A or B for the above Why do you think that labor pain should be relieved?

A) To relieve pain B) To relieve stress C) To feel confident D) To enjoy the experience

4. If your answer is C or D for the above why do you think labor pain should not berelieved?

A) Labor is a natural process B) It will make labor longer C) It will affect the baby

D) Will cause complications

5. Giving patients sterile water by injection (placebo) is a useful test to determine if the pain is real A) yes B) no

6. Opoids should be avoided for fear of addiction A) yes B)no

7. Have you ever thought Patients who are complaining of labor pain may be due to seeking staff attention A) always B) sometimes C) often D) never

8. What level of pain would you expect them to experience? A) Mild b) moderate c) severe

Knowledge questions (circle on your answer)

9. Have you heard of WHO pain ladder? a) Yes b) no

10.If yes for the above question have you ever used it to treat pain ?

A) yes B) no

10.Do you know pain assessment tools? A) yes B)no

11. If yes have you ever used them to assess labour pain? A) Yes b) no

12. If yes for the above questions which assessment tools do you use frequently?

A) Numerical B) visual C) verbal

13. What types of methods of pain relief do you routinely recommend/practice?

A) IV B) oral analgesics B) Social & psychological support C) Regional/Local analgesics

14. If your answer for the above question is A or B which one of the drugs do you routinely use

A) NSAIDs B) Pethidine C) Tramadol D) other opioids

15.What are the main barriers for patients to receive analgesia in labor?

A) Lack of awareness of patients B) Lack of awareness of medical professional
C) Cultural norms D) Pain relief is not a priority for laboring mothers
E)Financial constraints Availability F) fear of complications G) others

16.Combining analgesics that work by different mechanisms may result in better pain control with fewer side effects than using single analgesic agent. A) yes B) no

17.Opoidsshould be avoided in patients with respiratory compromise A) yes B) no

18.To ensure that oral medications will be most effective at the time of the procedure, administer them 1- 2hrs before the procedure. A) yes B) no

19. Do you think respectful, non-judgmental communication will ease labor pain?

A) Yes B) no

20.What are some of your concerns in using labor analgesia?

A) It will affect the baby's breathing B) It will prolong labor

C) Make the labor unnatural D) affect the mother's ability to push

E) Increase risk of instrumental delivery

F) Increase Caesarean section

G) I have no concern

21.Do you think regional analgesia's increase risk of caesarian delivery compared to systemic analgesics? A)Yes b) No

Practice questions

22. How many times have you gave labor analgesia?

a. Once b. Twice c. More than twice d. Never

23. If your response for the above question is D why do you think is the reason?

A) Lack of equipment's/drugs B) Safety concern C) Do not have adequate knowledge & skill

24. Do you assess and grade pain before and after analgesia A) yes B) no

25. Do you encourage deep, controlled breathing, taking bath, listening music to reduce labor pain?

A) Yes B) no

26. Do you give verbal support and reassurance often ? A) Yes B) no

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