

WOLKITE UNIVERSITY  
COLLEGE OF MEDICINE AND HEALTH SCIENCE  
DEPARTMENT OF NURSING



LABOUR PAIN MANAGEMENT PRACTICE AMONG MOTHERS ATTENDING LABOUR  
IN WOLKITE UNIVERSITY SPECIALIZED HOSPITAL

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## LIST OF ABBREVIATION AND ACRONYMS

**OCGs.....OBSTETRIC CARE GIVER**

**ANC..... Antenatal care**

**GDM.....Gestetional diabetic mellitus**

**GHTN.....Gestetional hypertention**

**EFMOH.....Ethiopian federal ministry of health**

**Dr. ....Doctor**

**EC.....Ethiopian calender**

**ETB.....Ethiopian bir**

**WUSH.....wolkite university specialized hospital**

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## Abstract

**Introduction;** Labour pain is the most painful event experienced by most women in their lifetime. Labour pain management is essential to ensure the quality of obstetric care and meet the need of labouring woman to have pain free labour and delivery services.

**Objective:** The main aim of this study was conducted to assess labour pain management practice among mothers attending labour and obstetric care giver in Wolkite university specialized and teaching hospital. 2013 EC

**Method:** An institutional based cross sectional study was conducted on the practice of labour pain management among mother at postnatal ward after delivery and qualitative data was collected by interviewing obstetric care giver at labour ward in Wolkite university specialized and teaching hospital from June to July 2021 with a sample of two hundred fifteen (215) mother and fourteen (14) obstetric care giver was interviewed. The mother was selected using simple random sampling method and structured self-administered questioners then interviewed them at post natal ward was used to collect data. The obtained data was entered into SPSS version 25, and it was analyzed.

**Result:** The overall use of labour pain relief methods were 40.5%, almost all use non-pharmacologic labour pain relief, the practice of pharmacologic labour pain relief is zero. ten (10) obstetric care giver and 2 (1.9%) of the mother knew about labour pain relief. ten (10) of the obstetric care givers and 176 (81.5%) of mothers preferred to use labour pain relief.

**Conclusion and recommendation:** Despite of availability of labour pain relief methods, still most women go through painful Labour. The high-level knowledge and positive attitude towards the use of labour pain relief services provide a means to introduce pain relief services in a systematic way into the healthcare facilities. So, there is a need to build knowledge to the obstetric caregivers and give information to the mother to ask labour pain relief and further studies should be done from mothers' request point of view.

**Key words:** practice, labour pain, pharmacologic labour relief, epidural anesthesia, non pharmacologic labour relief, massage





# 1 introduction

## 1.1 back ground

Pain is distressing feeling caused by intense or damaging stimuli and unpleasant sensory and emotional effect associated with actual or potential tissue damage which conveys a human being considered as the beginning of his/her existence and is widely recognized as negative phenomena.[1] In fact, it is an indispensable component with in human's life. It accompanies the worsening effect on health ( in that case we call it as pathologic pain), however the progress of natural processes taking place in the body when start during child birth (during labour) we call it as (physiological pain).[1] Pain during labor and childbirth is a unique and the most severe painful event in women's life.[2]

The pain experienced during labour has multiple physiological and psychosocial dimensions and its intensity can vary greatly from one woman to another. It involves complex neuro behavioural responses to allogeneic stimuli and provides a personal and unique experience to individual women. The cause-effect relationship in labour pain does not always correspond to a clinical response; what matters is to understand the pain felt by the pregnant woman and to provide pain relief. Labour pain comprises complex neurobehavioral reactions and offers a personal and distinctive experience to individual women. [3] The pain during labour results in a complex and subjective interaction of multiple physiologic hormonal and neurologic factors on a woman's individual interpretation of labour stimuli.[4]

The physiological origin of labor pain is uterus contractions or cervical dilation and psychological factors like stress, anxiety, and fear were shown to associated with labor pain [5, 6]. The natural history of Pain stimulates the sympathetic nervous system, which causes the elevation in the heart rate, blood pressure, sweat production, endocrine hyper-function, and delays the patient's prognosis [7].

Child birth pain relief method actually classified in to pharmacologic and non-pharmacologic labour pain management, their difference is by the use of drug for pain relief

through pharmacologic pain management. Using analgesia like epidural analgesia are the commonest medical management of labour pain[20].

supporting women at delivery is an essential part of public health care. Labor support refers to continuous nonmedical usually non-pharmacologic care of a laboring woman. It includes physical comforting such as touching, massaging, bathing, grooming, applying warmth or cold; and emotional support such as continuous companion, reassurance, encouragement, anticipatory guidance, information provision, and non-medical advice. Labor support and care may also involve procedures and facilitation of communication between the woman and staff to assist her in making informed choices. Furthermore, it may comprise emotional support for the woman's partner [8,18]

A better understanding of the factors influencing women's use of a wide range of Labour pain management techniques may assist maternity care providers and policy makers to support women through informed decision making for their intrapartum care. In response, this study presents the first nationally representative data on determinants associated with women's use of labour pain management, including not only epidural analgesia but pethidine, nitrous oxide and non-pharmacological pain management techniques.[18]

## 1.2 statement of the problem

Childbirth into the arms of a conscious and pain-free mother is one of the most exiting pleasant moments for maternity caregiver. Developed countries regularly use obstetric analgesia 60% however, in developing countries, including Ethiopia most women still go through painful labour which is only 21% of them use labour pain relief, despite this availability of ways to relieve labour pain; it is not a common practice. [13,26]

A study in Southeast Nigeria among Igbo women reported 27% of parturient received paracetamol, epidural anesthesia from pharmacologic pain relief and massage, psychotherapy and destruction(music) from non-pharmacologic pain relief method. [12]

Another study done in Nigeria to assess the practice of labour pain management for vaginal delivery among obstetrician revealed that 49% of obstetrician provide labour pain relief method for a labouring woman [7].

A study done on practice of labour pain management on health care providers in Zaria, Nigeria reported systemic opioids like pethidine the most popular pharmacological labour pain relief

method whereas hypnosis and acupuncture were the least popular non-pharmacological labour pain relief methods [12].

In Ethiopia as a study conducted on laboring mother attending labour in Amhara Regional State Referral Hospitals showed the overall utilization of obstetric analgesia in labour pain management was 40.1% which showed only non-pharmacologic methods. The utilization of pharmacologic obstetric analgesia methods was zero [16].

Pain relief during labour is preferred by many women, and contributes enormously to their satisfaction with the experience of childbirth. This pain can be perceived to be the most severe form of pain experienced in a woman's life. Studies have shown that when women are offered analgesia during labour, they report greater satisfaction unless they are not satisfied with their overall birth experience [12]

Study done in Aga Khan teaching and referral hospital, Kenya, provision of labour pain management for labour is uncommon. This might be as a result of a number of factors, including the availability of drugs, health care delivery systems, knowledge, providers' attitude and choice of caregivers and clients. Of these, the attitude, knowledge, and skills of the provider to offer labour analgesia is vital, particularly in low-income countries, including Ethiopia. [12]

A survey conducted in the ANC clinic involving 100 women's regarding awareness, knowledge and attitude towards labour pain relief method, 70% of the women's are literate but the other's are not, and most of them were house wives among this, 63% were primi mothers. Most of them express that it is a natural process and they don't require any pharmacological relief during labor rather they opting for non-pharmacological pain relief such as breathing exercise and music therapy and most of them heard 78% about methods to relieve labour pain mainly through the media and through their doctors and consultants.[14]

In Ethiopia as a study conducted on laboring mother attending labour in Amhara Regional State Referral Hospitals reports, factors for poor awareness and quality of professionals and knowledge were found statistically associated with utilization of obstetric analgesia. [17]

Various pharmacologic and non-pharmacologic treatments have been produced to alleviate and to minimize the labour pains, and their use has become popular, more practiced in developed countries [11].

According to the health care standard practice in Ethiopia by Federal Ministry of Health (FMoH); provision of physical and psychological support and use of pharmacological and non-pharmacological comfort measures during labour and birth are listed as core competencies under standard practice. Even if it is the critical components in the EFMOH's efforts to improve the quality of maternal health services available to the Ethiopian public, its practice is not noticeably acknowledged [10].

Regardless of the finding labour pains accompany a large proportion of women, thereby making childbirth a less satisfactory experience, provision of analgesia for labour is uncommon. This may be as a result of a number of factors, including the availability of drugs, mother and OCGs, preference, knowledge of health providers' attitude and choice of caregivers and clients, particularly in low-income countries, including Ethiopia [18].

To the best of our knowledge, there is limited research in the study setting. Few local or international studies have been carried out on the current proposed study in Ethiopia. The study is thus aimed at assessing practice of labour pain relief methods and among mothers obstetric at wolkite university teaching and referral hospital, SNNPR region, Ethiopia.

### 1.3 The significance of the study

Managing of Labour pain during normal labour improve feto maternal outcome and satisfaction of laboring women. Up to this time there is not enough published study in Wolkite university specialized hospital on practice of labour pain relief methods among mother attending labour.

So this study will determine the current practice and use of labour pain methods among mothers attending labour of Wolkite university specialized hospital.

This study will be used as an input for gurage zone for developing and identifying the number of mother who use pharmacological and non-pharmacological labour pain management. The study also necessary for reporting the factor that affect low practice of labour pain relief among health care providers in this hospital.

Furthermore, this study will serve as an input for the future researcher. It will make a call to action to improve practice of pharmacological and non-pharmacological labour pain management .

## 2 literature review

### 2.1 practice of labour pain relief methods

Labour pain management is generally classified into pharmacologic and non-pharmacologic labour pain management, the difference is by the use of drug for pain relief through pharmacologic pain management. Utilization of labour pain management methods varies from place to place even it varies from one setup to another. In developed nation pharmacologic way of pain relief is the preferred one whereas in developing countries most of the time non-pharmacologic way of managing labor pain is utilized. [18]

According to a cross-sectional study was done in Kenya study done to assess the practice and use of labour pain relief methods in mother attending labor on an antenatal clinic in Nairobi, 18% percent of them had been offered some form of any of effective labour pain relief method at their last delivery. [12]

#### 2.1.1 pharmacologic practice of labour pain relief method

In developed countries, effective labour pain relief method practiced but in developing countries in areas where women exposed to high pregnancy rates and short inter-pregnancy intervals use of labour pain relief method is low. [15]

In developed countries the practice of pharmacologic labour pain relief during labour is around 60% of deliveries; covering France 75%; Sweden 71% and Colombia 31.5%. In other less developed countries such as South Africa, only 21% of women used pharmacologic pain relief. [26]

According to a study done in Nigeria to assess the practice of obstetric analgesia for vaginal delivery among obstetrician revealed that 49% of obstetrician provide labour pain relief method for a labouring woman [7].

A study in Dhaka and Bangladesh on perception and practice about labour pain management method during normal labour among health care providers conducting delivery reported that pethidine, diclofenac, and paracetamol are the best listed pharmacologic pain relief method. [22]

A study done in Greece on labour pain and pharmacological pain relief practice points reported that pethidine and Epidural analgesia were the most well-known and common form of pharmacological pain management methods .[20]

A study done in Ibadan, Nigeria among nurse/midwives on laboring mother in labour wards points revealed that the use of paracetamol (39.1%) for pharmacological support were the most well-known pain relief methods whereas epidural was least known by (3.4%) of the laboring mothers.[24]

Another study conducted on labour pain and pharmacological pain management practice points in Athens, Greece revealed that Pethidine was the only drug for pain relief method by midwives [20].

A cross-sectional study conducted in public hospitals of Addis Ababa to assess the practice of labour analgesia was 35.6% and 19.8% of them used opioid systemic analgesic and non-opioid systemic analgesics respectively [17].

Another study conducted in Amhara Regional State Referral Hospitals showed the overall utilization of obstetric analgesia in labour pain management was 40.1% ,The utilization of pharmacologic method was zero.[17]

A study conducted on all health care providers at labour wards in Tigray region general hospitals showed The practice of pharmacologic method was zero [9].

#### 2.1.2 Non pharmacologic Practice of pain relief

In developing countries most of the time non-pharmacologic way labour pain management is practiced.[12]

A study in Dhaka, Bangladesh on perception about pain relief during normal labour among health care providers conducting delivery reported that allow a patient to move freely, show the patient how to bear down, allow companion, massage the back were the most utilized non-pharmacologic pain relief methods [22].

A study conducted on systemic review on Brazilian nurse and midwives'view of non-invasive nursing technologies for pain relief during childbirth reported non- pharmacological pain relief methods such as back massage, encouraging freedom to move, to walk and the free choice for

vertical positioning were the most commonly practiced non- pharmacological labor pain relief methods.[19]

A study conducted in Ibadan, Nigeria among nurse/midwives on laboring mother in labour wards on the practice of non pharmacologic labour pain relief shows massage (34.5%) as non-pharmacological support.[27]

A study done on perception and practice of health care providers towards non pharmacological strategies of relieving labour pain and women's opinion towards their labour pain management experience in Abha Maternity Hospital, Saudi Arabia reported that allow movement and change in position (77.3 %), touch & massage (42%) and psychological support (53.4%) were commonly used non-pharmacologic labour pain relief methods [28].

Another study conducted in Ibadan, Nigeria to assess practice of labour pain management among nurse/midwives in labour wards reported psychotherapy, giving information to the woman and providing physical care were practiced as the labour pain management [23].

Study conducted on all obstetric caregivers in Amhara Regional State Referral Hospitals showed the overall utilization of non-pharmacological labour pain management methods shows Psychotherapy was the most used non-pharmacologic method (88.2%) followed by breathing technique (71.9%) and massage (63. 51%).[17]

study conducted on all skilled attendants working at labour wards in Tigray region general hospitals showed the overall utilization of obstetric analgesia was 43.3% which showed only non-pharmacologic methods,From the non-pharmacological labour pain management methods, how to bear down was the most widely used method by (98.3%) professionals followed by psychotherapy (76.8%) and allow companionship (57.9%). [9].

Different factors that affect the practice of pharmacologic and non pharmacologic labour pain relief method. A study done in U.S. communities reported an experience of nurses affect the use of labour pain relief method in a way which more experienced nurses' more likely to use labour pain relief methods [25]. This study shows on behaviors of nurses in the U.S. revealed that age and experience were the two only socio-demographic characteristics of the nurses were associated, in which older and more experienced more likely to use labour pain relief method

whereas, no difference was observed between age and profession of skilled birth attendants' and use labour relief methods in a study done in Tigray region general referral hospitals.[9,26]

A study done on perception and practice of health care providers towards non pharmacological strategies of reliving labour pain and women's opinion towards their labor pain management experience in Abha Maternity Hospital in Saudi Arabia reported lack of Knowledge was factor affect the use of labour pain relief methods as it is reported by 68.2% obstetric care providers [28].

A survey on healthcare providers' knowledge and attitudes regarding pain relief in labour for women in Ethiopia reported that the general attitude of healthcare providers is that labour is a natural process, women should be able to cope and pain relief is not a priority for women in labour [29].

A research conducted in Australia to examine the determinants associated with women's the use of labour pain management and a study done in Belgium and Netherland reported policies, clinical and structural setting of health institution were factors influence the use of labour pain relief methods in the obstetric care units. Labour management procedure like of intra-uterine fetal monitoring, induction of labour, workload of among obstetric care providers and unavailability of drugs affect use of labour relief methods [30].

A study done in Tigray region general hospitals and in Amhara region referral hospitals reported a small number of staff, lack of skilled professionals, high patient flow, unavailability of analgesic materials and misconceptions regarding labour pain and with unknown reasons were factors affect the use of labour pain relief methods[16,17] . The availability of drugs in the hospital and health centers are one of the common factor for low practice of labour pain relief methods. [17]



### 3 Objective

#### 3.1 general objective

- To assess practice of pharmacological and non-labour pain relief methods among mothers attending labour at wolkite university specialized hospital. 2013 EC

#### 3.2. specific objective

- To assess practice of pharmacological labour pain management methods.
- To assess practice of non-pharmacological labour pain management methods.
- To determine the reasons for the utilization and non-utilization of labour pain relief methods among mothers attending labour.

### 4 Methods

#### 4.1 Study area and period

The study was conducted in wolkite university specialized and teaching hospital in gurage zone gubra sub city of wolkite. Gurage is one of an administrative zone in SNNPR regional state of Ethiopia. gurage is bordered on the south east by hadiya and yem special woreda, on the

west,north and east by Oromia region and south east east by siltie. It found 170 km south –west of Addis ababa on the way to jimma.the zone has a total population of 5,000000.The hospital is aimed to teach the students in wolkite university health science.This study was conducted at April to Jun 2013 EC.

#### 4.2 Study design

Institutional based cross sectional study will conduct

#### 4.3 source population

All mother who give birth at Wolkite university specialized and teacheang hospital and qualitative data from Obstetric care giver in wolkite university specialized and teaching hospital.

#### 4.4 study population

All selected mothers at post natal ward before discharge in wolkite university specialized hospital.

#### 4.5 Sample size determination

Sample size was calculated by double proportion formula using spss info version 25.

The sample size will be estimated based on an assumption that 50% of the mother practiced labour pain relief with 5% margin of error and 95% confidence level of certainty. The actual sample size will be calculated using single population proportion formula.

$$n = \frac{z \left( \frac{\alpha}{2} \right)^2 * P(1 - p)}{d^2}$$

$n = (1.96)^2 * 0.5(1-0.5) / (d)^2 (0.05)^2$  Where: P= the prevalence of labour pain.

d =the margin error between the sample and the population.  $Z_{\alpha/2}$ = critical value at 95% confidence level of certainty (1.96).

The calculated sample size=384.16

The minimum sample size will determine using single population proportion formula

the total number of mother giving birth/minth in wolkite university specialized hospital (N=400) since the target population is less than 10 000 it is essential to use population reduction formula.

N=400

nf = final sample size after correction ni = initial sample size before correction.

$$nf = n / (1 + n/N) = 384 / [1 + 384/400] = 196$$

Adding a 10% non-response rate,  $196 + 10\% = 215$

For supportive data, fourteen(14) obstetric care giver was interviewed to study qualitative data.

#### 4.5 Sampling technique

Simple random sampling technique was used to select 215 mothers at post natal ward after delivery and 14 obstetric care provider was interviewed to collect supportive qualitative data.in wolkite university specialized and teaching hospital.

#### 4.6 Inclusion and exclusion

##### 4.6.1 Inclusion criteria

All mother who give birth at the study area and obstetric care giver at labour ward

##### 4.6.2 Exclusion criteria

Mother who give birth by emergency ceaserian section,unconscious and mother who are unable to speak and listen. Health care provider comes to labour ward for consultation during study was excluded from the study

#### 4.7 Data collection tools and method

Data was collected from mother at post natal ward before discharge and supportive qualitative data was collected from OCGs (midwives, nurse, MD, and other health care provider). After the birth of the baby, woman's found at post natal ward was interviewed about methods of labour pain relief and supportive qualitative data was collected from health care providers.used to select participants who satisfy the eligibility criterion.Data was collected about duration of labour,preference of labour pain relief and others was obtained from post natal ward in wolkite university specialized and teaching hospital.

#### 4.8 study variables

##### ➤ Practice of pharmacologic labour pain relief

- **Practice of non-pharmacologic labour pain relief**
- **Practice of pharmacologic and non pharmacologic labour pain relief**
- **Socio demographic:** age, marital status, residence
- **Individual factors:** Knowledge variation, Gravidity and parity, Caregiver preferences, Pain expectation of caregiver
- **Institutional factors:** Health institution, policy, n Number of skilled providers  
Availability of equipment & analgesics drugs

#### 4.9 Operational definition and measurement

**Practice of labour pain relief methods:** the prevalence and the use of pharmacologic or non pharmacologic labour pain relief in an institution to alleviate pain.

**Obstetric caregivers:** professionals like Midwifery, Nurses and Health Officers who give care for pregnant mother at labour ward.

**Pharmacologic labour pain relief :** method of labour pain management method through the use pain relief drugs like paracetamol, pethidine, epidural anesthesia and others medication.

**Non-pharmacologic labour pain relief :** Comfort measures that provide natural pain relief can be very effective during labor and childbirth. This method doesn't need any medication rather simple method like superficial heat and cold counter, pressure touch and massage, aromatherapy, hydrotherapy and distraction

#### 5.0 data management and quality assurance

Information about the data was provided for the data collectors and supervisors on objective, the benefit of the study, individual's right and informed consent for the common understanding of the study in general and the questionnaire in particular and they oriented to interview the mother appropriately. Regular supervision during data collection was made; the questionnaire was

reviewed and checked for completeness, accuracy and consistency by the principal investigator and supervisors.

### 5.1 data analysis

Data was analyzed by entering into computer epi data software and was exported in to statistical package for social sciences SPSS version 25 software for analysis. Tables and graphs was used to present the practice of pharmacologic and non pharmacologic labour relief methods among labour attending ,mothers and practice of labour pain relief among care giver was done qualitatively, after that the result was triangulate.

### 5.2 ethical consideration

The research paper was approved by the department of nursing in collaboration with the research coordinators of the college. After Title approved, the reaserch was evaluated by the advisors of the research. Then a formal latter was taken from CBE office administrative city and oral consent was taken from respondents before interview.

### 5.3 Dissemination of finding

After completing this study the result of the study will be disseminated towolkite university specialized teaching hospital in gurage zone, for Wolkite university collage of medicine and health sciences department of Nursing.

## 5 RESULTS

### 5.1 Socio demographic characteristics of respondents

A total of 215 mothers were enrolled in the study. Out of the total 72 (33.5%) were age group between 25-29, 45(20) were 30-34 years, 34(14.9%) are age group 35-39 and only 6.9 are age grater than or equal to 40 yrs. Most of the mother's were married 202(94%) and 6(2.8%) were unmarried. 122(56.2%) were primary education, 32(14.9%) were no formal education and the rest 20% and 8.4% are high school and higher education. Most of the child bearing mother's 96 (44%%) were housewives while 57 (26.5%) farmers, 35 (16.3%) were merchant, 38(15.4%)

One hundred seven (49.8%) of the respondant were muslim, eighty nine(41.4%) were orthodox christianity. 16(8.4%), were monthly family income of 800-1000, 67(31.2%) had family income of 1000-2000 and 50(17.7%) were monthly family income of 2000-4000.

Table 1 Distribution of socio-demographic characteristics of mother who attend labour in WUSH 2013 E.C

	Choices	Frequency	Percentage(%)
<b>Age of the mothers</b>	15-19	22	10
	20-24	27	12.6
	25-29	72	33.5
	30-34	45	20.9
	35-39	32	14.9
	40-44	14	6.5
	>=45	3	1.4
	Total	215	100
<b>Marital status</b>	Unmarried	6	2.8
	Married	202	94
	Widowed	4	1.9
	Divorced	3	1.4
<b>Occupation of the mother</b>	Farmer	57	26.5
	House wife	96	44.7
	Merchant	35	16.3
	Others...	27	12.6
<b>Level of education</b>	No formal education	32	14.9
	Primary education	122	56.7
	High school and prep.	43	20
	Higher education	18	8.4
<b>Religion</b>	Orthodox	89	41.4
	Muslim	107	49.8
	Protestant	13	6
	Other ...	6	2.8

**monthly income in family**

	Monthly income	Frequency	Percentage(%)
	<=800	3	1.4

<b>Monthly income in family</b>	800-1000	18	8.4
	1000-2000	67	31.2
	2000-4000	50	17.7
	4000-6000	38	9.8
	6000-8000	21	5.1
	8000-10000	11	1.9
	1000-2000	3	1.4
	>=1200	4	1.9

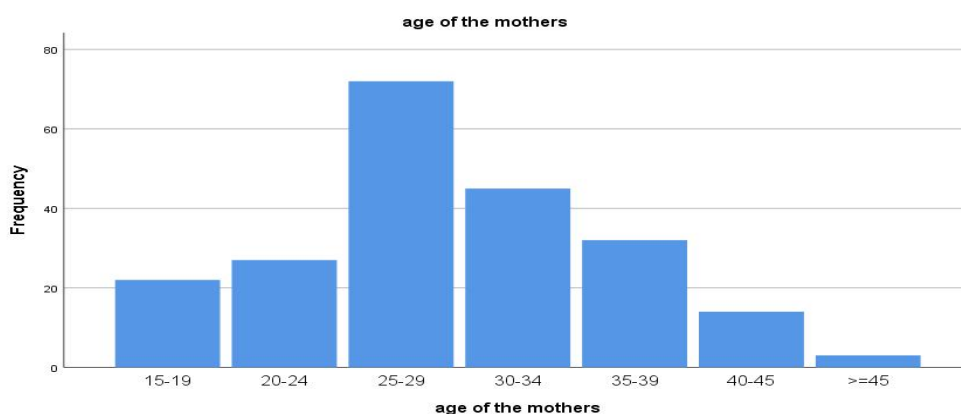


Figure 1 graphic distribution of age of the mothers

## 5.2 Knowledge of study participant

Most of the respondent two hundred eleven (98.1%) didn't know about labour pain relief, only four (1.9%) of the respondent knew about labour pain relief which is non-pharmacologic and none of them knew about pharmacologic labour pain relief.

## 5.3 personal preference and pain expectation

Most of the respondent one hundred seventeen (79.5%) expect labour as very severe, 38 (17.7%) severe and none of them expect labour as mild pain and from the total respondent 176 (81.9%) of the mother prefer labour pain relief from which 96 (44.7%) prefer pharmacologic labour pain relief and 42 (19.5%) were prefer non-pharmacologic labour pain relief preferred.

Table 2 distribution of mother on labour pain expectation.

	Choices	Frequency	Percentage(%)
<b>labour pain expectation?</b>	Very severe	171	79.5
	Severe	38	17.7
	Moderate	6	2.8
	Mild	0	0

Table 3 maternal preference of labour pain management in wolkite university teaching hospital

	Preference of labour pain relief	Frequency	Percentage(%)
<b>labour pain relief preference</b>	Yes	176	81.9
	No	38	17.7
<b>Methods of labour pain relief preference</b>	Pharmacologic	96	44.7
	Non-pharmacologic	42	19.5
	Both	38	17.7

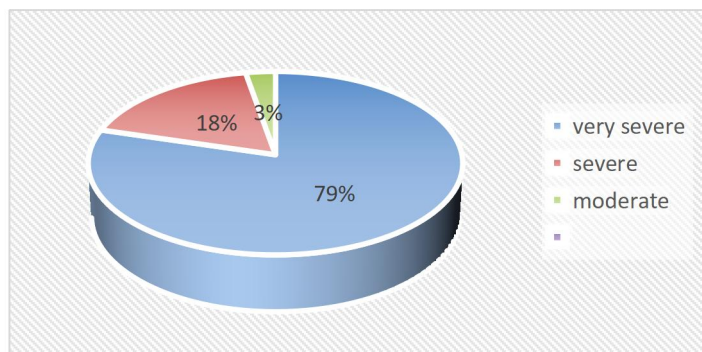
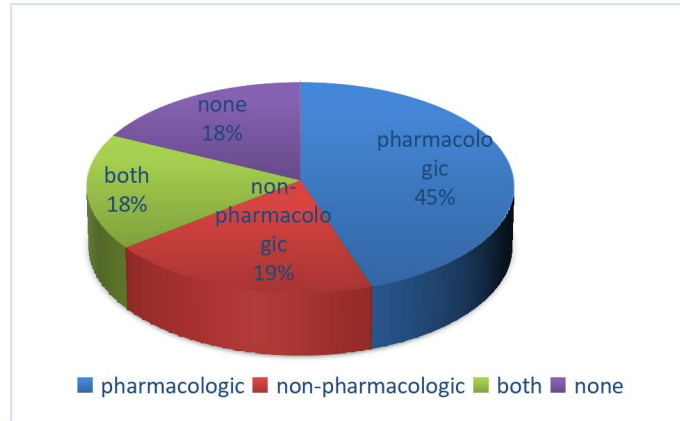


Figure 2Pie chart showing labour pain expectation of mothers who attend labour,2021





*Figure 3 Pie chart showing personal preference of labour pain relief methods among, mother 2021 G.C*

#### 5.4 obstetric characteristics of the respondent

From the total of 215 mothers thirty-six (16.7%) were parity number 1, ninety one (42.3%) of the mother are parity number 2 sixty-six (30.7%) were parity number 4 and above. from the respondent 209 (96.7%) have no any pregnancy complication and 4 (1.9%) were gestational hypertension.

One hundred twenty-one (56.3%) of the respondent were labour duration of 11-18, fourteen (22.5%) of the respondent forgot the duration of labour

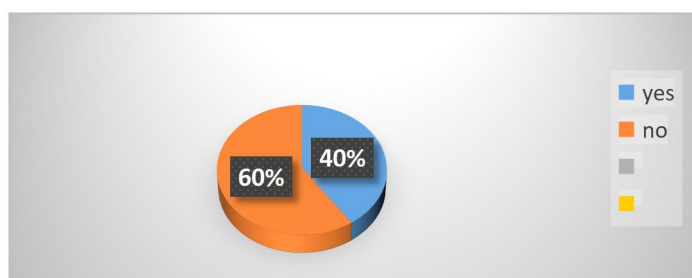
*Table 4 distribution of obstetric characteristics of child bearing mother*

	Choices	Frequency	Percentage(%)
<b>Number of parity</b>	One	36	16.7
	Two	91	42.3
	Three	22	10.2
	Four and above	66	30.7
<b>Any pregnancy complication</b>	Gestational hypertension	4	1.9
	Gestational diabetic mellitus	2	0.9
	Pre-eclampsia	1	0.5
	<b>Other...</b>	-----	-----

<b>Duration of labour</b>	3-6	1	0.5
	7-10	10	4.7
	11-18	121	56.3
	19-24	33	15.3
	25-27	5	2.3
	>=28	1	0.5
	Forget duration of labour	44	20.5

### 5.5 Use of labour pain relief methods

The result of this study showed that overall use of labour pain relief methods among mothers was 40.5%, from which almost all 40.5% was contributed to non-pharmacologic and the use of pharmacologic pain relief method was 0% with 95% confidence interval. From the non-pharmacologic labour pain management methods, psychotherapy(reassurance) was the most widely used method by 75(86.2%) of mothers followed by allow to ambulate free vertical position 28(32.2%),and comanion of her choice27(31%) ,while the use of pharmacologic labour pain relief methods was zero.



*Figure 4 pie chart showing use of labour pain relief among mother attending labour in wolkite university specialized teaching hospital*

*Table 5 use of non-pharmacologic labour pain relief among mother 2021 G.C (n=87)*

	<b>Choices</b>	<b>Frequency</b>	<b>Percentage(%)</b>
Reassurance	Yes	75	86.2

	No	12	13.8
Allow companion of her choice	Yes	27	31
	No	60	69
Massage	Yes	20	23
	No	67	77
Allow to ambulate free vertical position	Yes	28	32.2
	No	59	67.8
Music therapy	Yes	2	2.3
	No	85	97.7

5.6 result occurred from qualitative data.

**Table 1 socio demographic characteristics of obstetric care provider**

Health professionals	Age	Sex	Profession	Clinical experience
<b>Hp1</b>	26	F	Midwifery	2 yrs.
<b>Hp2</b>	25	F	Public health	2 yrs.
<b>Hp3</b>	30	M	Midwifery	5 yrs.
<b>Hp4</b>	30	F	Midwifery	2 yrs.
<b>Hp5</b>	32	M	Medical dr.	4 yrs.
<b>Hp6</b>	28	F	Midwifery	4 yrs.
<b>Hp7</b>	28	F	Midwifery	2 yrs.
<b>Hp8</b>	29	F	Midwifery	2 yrs.
<b>Hp9</b>	24	M	Nurse	1 yrs.
<b>Hp10</b>	25	M	Nurse	2 yrs.
<b>Hp11</b>	30	M	Medical dr.	3yrs.

<b>Hp12</b>	34	M	Midwifery	4yrs.
<b>Hp13</b>	29	F	Midwifery	3 yrs.
<b>Hp14</b>	25	F	Midwifery	2 yrs.

### **5.6.1 Results Occurred from supportive Qualitative data from obstetric care giver in wolkite university specialized and teaching hospital 2021 G.C**

#### **team:1 knowledge of the respondent**

From a total of 14 respondents 10 of them knew about labour pain relief. From them 7 of them knew both pharmacologic and non-pharmacologic labour pain relieve, but Three of them (Hp2&Hp14) didn't know pharmacologic labour relief.

#### **team: 2 preference of pain relief and labour pain expectation**

Most of the respondent ten (10) of them prefer to use labour pain relief two of them are medical doctor and eight of them are midwifery, hp2, hp5, hp9, hp10, didn't prefer to use labour pain relief

Almost all of the respondent think labour as very severe pain in the mother's life but only one health provider (hp4) says labour pain is moderate and natural.

#### **team:3 use of labour pain relief**

About seven (7) of obstetric care giver provide labour pain relief which is non-pharmacologic labour pain relief. None of the respondent provide pharmacologic labour pain relief.

From the non-pharmacologic labour pain relief Five health care provider (hp3, hp4, hp6, hp12, hp13) provide psychotherapy (reassurance) and four obstetric care givers provide allow free

vertical position, massage the back and companion of her choice. two obstetric care givers hp5 and hp14 provide psychotherapy, and music therapy.

#### **Team;4 reason for utilization and non-utilization of labour pain relief**

**Hp3, Hp4, Hp6:** “reports that the reason behind the utilization of non- pharmacologic labour pain relief is that the pain by itself is very severe so it should be relived”. And non-pharmacologic labour pain relief have no side effect and important to satisfy the mother”. the reason behind “non-utilization of pharmacologic labour pain relief is that it may prolong labour and have different side effect.in general there is no special training in the facility

**Hp5, Hp11:** “the utilization of non-pharmacologic labour pain relief is necessary to reassure the mother and used to satisfy the mother for the next birth and make the mother more comfortable. Also the utilization of pharmacologic labour pain is necessary but different factor affect to use pharmacologic labour pain relief.”

- ✓ Lack enough knowledge
- ✓ Unavailability of the drug
- ✓ Lack of special training
- ✓ Fear of side effect and believe that it may prolong labour

**Hp1, Hp2, Hp8, Hp9:** “we hadn’t provided any labour pain relief because of that there is no guide line in this hospital on the management of labour pain relief and there is no special training and there is low availability of drug, even if the drug is available no order from higher body and we believe the pain can’t be relieved by the drugs.

**Hp7, hp14:** “we believe giving any of labour pain relief is not necessary because it may distress the child and prolong labour in other ways giving any drug have its side effect, now drugs are not available at labour ward.

#### **5.7 triangulation of qualitative and quantitative result**

Some care givers two of fourteen care giver didn’t know labour pain relief and Almost all 98% of mother had no knowledge about labour pain relief. Most of the mother and care giver expect labour as very severe and most of the mother 81% and 10/14 of the obstetric care giver prefer to use labour pain relief. The Practice of labour pain relief among mother strongly affected by

practice of obstetric care givers, about seven (7) obstetric care givers provide labour pain relief and eighty-seven (40.5%) of mother got labour pain relief which is only non-pharmacologic.

The reason behind low practice of labour pain relief is inadequate knowledge, no special training, unavailability of the drug, personal pain expectation and pain relief preference.

## 6. DISCUSSION

Developing country like Ethiopia with a health policy of improving quality of maternal services, it is important to assess the practice of labour pain relief methods among obstetric mothers to manage labour pain which contributes to the quality of intrapartum care for a labouring woman. This facility based cross-sectional study was conducted to assess labour pain management practice among mothers attending labour in Wolkite University specialized teaching hospital, Gurage zone southern region. This study gives important findings regarding current activities carried out to manage labour pain and possible improvement measures that could be implemented in an effort to enhance the quality of maternal health services so as to meet the need of labouring woman.

### 6.1. Knowledge of mothers and obstetric caregivers towards labour pain management methods.

Out of 14 obstetric care givers 10 of them had adequate knowledge but 4 of them had inadequate knowledge about labour pain. This result is inconsistent with studies in Ibadan, Nigeria (66.7%) of respondents had inadequate knowledge [24], Tigray region general hospital, Ethiopia 60.1% [9] and (37.7%) [10], in Amhara region, Ethiopia had adequate knowledge. This difference may be as a result of a difference in study setting and sociodemographic characteristics of study participants.

### 6.2 Use of labour pain relief methods among mothers

The overall use of labour pain relief in this study among mother was 40.5%, which contributed almost all 40.5% are non-pharmacological and the use of pharmacological labour pain relief method was zero. The use of labour pain relief (40.5%) in this study is lower than studies done Tigray region general hospital, 43.3% [9], public hospitals of Addis Ababa, 47.5% [31] and

almost approximate to Amhara region referral hospitals 40.4% [9]. This may be as a result of difference in study setting, knowledge of the mother, and personal preference towards use of labour pain relief methods. The use of non-pharmacological methods in this study was inconsistent with studies done in Dhaka, Bangladesh and Ghana, which allow labouring women to move freely, psychotherapy, allow companion, massage the back were the most utilized non-pharmacologic pain relief methods [32,33]. This study found that the use of pharmacologic labour pain relief method among mothers was zero. The finding of this study in pharmacologic labour pain relief equal with studies done in Amhara region referral hospital [9], Tigray region general hospital's [10]. This may be due to time difference between studies and changing awareness of obstetric caregivers towards labour pain management through time. But this result is lower than (49 %) in Nigeria [7], (18%) in Kenya [34] and (54.2%), Addis Ababa Ethiopia of which systemic (35.6%), non-opioid systemic analgesics (19.8%) [31]. This may be as a result of a difference in sociodemographic characteristics of respondents and basic pain relief facilities.

## 7. CONCLUSION AND RECOMMENDATIONS

### 8.1. CONCLUSION

Even though most of the child bearing mothers and obstetric caregivers expect labour pain as very severe pain in this study and most of them prefer to use labour pain relief, most labouring women go through painful labour. Profession, knowledge, unavailability of the drug, the hospital protocol and Companion were major factors affecting the knowledge of obstetric caregivers towards labour pain relief methods and also attitude of obstetric caregivers towards labour pain relief methods affected by training, companion and knowledge of obstetric caregivers about labour pain relief method. Finally, maternal and obstetric preference of labour pain relief Knowledge, and standard guide line in the hospital had statistical significance with the practice of labour pain relief methods.

### 8.2. RECOMMENDATIONS

#### **Gurage zone health bureau and Wolaita university specialized hospital**

- ✓ Prepare special training, with task-oriented refreshment course, special emphasis on strengthening obstetric caregivers' knowledge as towards the practice of labour pain relief

methods through communicating with other concerned bodies. Regular supervision of activities of obstetric caregivers of their labour pain management mechanisms and supply of necessary logistics needed for labour pain management.

- ✓ Improve the accessibility of pharmacologic drug and try to decrease work over load on health professionals

**Non-governmental organization:** Participate in providing short-term training issues related to labour pain and labour pain relief methods and should correlate with governmental organization.

**Obstetric caregivers:** Empower woman to ask labour pain relief services and update their knowledge and attitude about labour pain relief methods.

**Researcher:** Researcher should examine and dedicate the practice of labour pain relief methods from maternal' request point of view.

**Mother:**should ask the obstetric care giver to get labour pain relief.



## 7 reference

- 1 Dominick CH, Blyth FM, Nicholas MK. Unpacking the burden: understanding the relationships between chronic pain and comorbidity in the general population. *Pain*.2012 Feb; 153(2):293-304
- 2 Dolatian M, Hasanpour A, Heshmat R, Alavimajd H. The effect of reflexology on labor pain intensity. *Journal of Zanzan University of Medical Sciences & Health Services* 2010; 18:52-61.
- 3 Pereira RDA R, Franco SC, Baldin N. Pain and the protagonism of women in parturition. *Rev Bras Anesthesiol*.2011. 61: 376-388. 4 Beigi NM, Broumandfar K, Bahadoran P, Abedi HA (2010) Women's experience of pain during childbirth. *Iran J Nurs Midwifery Res* 15: 77-82.
- 4 Lee Lai Yin I. The experience of pain in the context of childbirth for Hong Kong Chinese women: a longitudinal cohort interview study. University of Central Lancashire; 2017.
- 5 Abushaikh L, Oweis A. Labour pain experience and intensity: A Jordanian perspective. *Int J Nurs Pract*. 2005;11(1):33–8.
- 6 Lang AJ, Sorrell JT, Rodgers CS, Lebeck MM. Anxiety sensitivity as a predictor of labor pain. *Eur J Pain*. 2006;10(3):263.

- 7 Fortescue C, Wee MY. Analgesia in labor: non-regional techniques. *Contin Educ Anaesth Crit Care Pain*. 2005;5(1):9–13, Lawani, L.O., Eze, J.N., Anozie, O.B., Iyoke, C.A. and Ekem, N.N. Obstetric Analgesia for Vaginal Birth in Contemporary Obstetrics.
- 8 El-Wahab N, Robinson N. Analgesia and anaesthesia in labour. *Obstetrics, Gynaecology & Reproductive Medicine*. 2011;21(5):137-41.
- 9 Bonnet MP, Prunet C, Baillard C, Kpea L, Blondel B, et al. (2017) anesthetics and obstetrical factors associated with the effectiveness of epidural analgesia for labor pain relief: An observational and populational based study. *Reg Anesth Pain Med* 42: 109-116.
- 10 Federal Ministry of Health (FMOH). Standard of midwifery care practice in Ethiopia. Addis Ababa (Ethiopia): 2013 January. 64p (clinical standard; no. 1).
- 11 Ogboli-Nwasor E, Adaji S, Bature S, Shittu O. Pain relief in labor: a survey of awareness, attitude, and practice of health care providers in Zaria, Nigeria. *Journal of pain research*. 2011;4:227-232.
- 12 Karuga R, Nekyon D, Mung'ayi V. Knowledge, attitude and use of labour pain relief methods among women attending antenatal clinic in Nairobi. *East African medical journal*. 2008;85(9):438-41.
- 13 American Society of Anesthesiologists. Misconceptions about labor and delivery. <https://www.asahq.org/lifeline/anesthesia%20Topics/misconceptions%20about%20labor%20and%20delivery> 2014. (Last accessed on January1, 2018).
- 14 James JN, Prakash KS, Ponniah M. Awareness and attitudes towards labour pain and labour pain relief of urban women attending a private antenatal clinic in Chennai, India. *Indian Journal of anaesthesia*. 2012;56(2):195.
- 15 Karn S, Yu H, Karna S, Chen L, Qiao D. Women's Awareness and Attitudes towards Labor Analgesia Influencing Practice between Developed and Developing Countries. *Advances in Reproductive Sciences*. 2016;4(02):46
- 16 No. 4: 516. Bitew A, Workie A, Seyum T, Demeke T. Utilization of Obstetric Analgesia in Labor Pain Management and Associated Factors among Obstetric Care Givers in Amhara Regional State Referral Hospitals, Northwest Ethiopia: A Hospital based Cross Sectional Study. *Journal of Biomedical Sciences*. 2016.

- 17 Sahile E, Yemaneh Y, Alehegn A, Niguse W, Salahuddin M, et al. practice of Labour Pain Management Methods and Associated Factors among Skilled Attendants Working at General Hospitals in Tigray Region, North Ethiopia: Hospital-Based Cross-sectional Study Design. *Health Sci J*. 2017. Vol.
- 18 Mugambe JMNM, Hiemstra LA, Steinberg WJ (2007) Knowledge of and attitude towards pain relief during labour of women attending the antenatal clinic of Cecilia Makiwane Hospital, South Africa. *Medpharm* 49: 16-20.
- 19 Vargens OM, Silva AC, Progiante JM. Non-invasive nursing technologies for pain relief during childbirth—The Brazilian nurse midwives' view. *Midwifery*. 2013; 29(11): e99-e106
- Ilidou M. Labour pain and pharmacological pain relief practice points. *Health science journal*. 2009; Volume 3, (Issue 4).
- 20 Likis FE, Andrews JC, Collins MR, Lewis RM, Serology JJ, Starr SA, et al. Nitrous oxide for the management of labor pain: a systematic review. *Anesthesia and analgesia*. 2014; 118(1):153-67
- 21 Norris MC., Grieco WM., Borkowski M., Leighton BL., Arkoosh VA., Huffnagle HJ: Complications of labour analgesia: Epidural versus combined spinal epidural techniques. *AnesthAnalg*. 1994; 79:529-37
- 22 Nystedt A., Edvardsson D., Willman A. Epidural analgesia for pain relief in labour childbirth- a review with a systematic approach. *J ClinNurs*. 2004;13(4):455-66.
- 23 EZE Ojerinde O, Onibokun A, Matthew Akpa O. Knowledge and practice of pain management among nurses in labour wards in Ibadan, Nigeria. *African Journal of Midwifery and Women's Health*. 2016;10(3):132-7.
- 24 Hirsch L. Dealing with pain during childbirth. [kidshealth.org/ parent/pregnancy center/childbirth/childbirth\\_pain.htm](http://kidshealth.org/parent/pregnancy_center/childbirth/childbirth_pain.htm),2011. (accessed November 19, 201).
- 25 Lowe NK. The pain and discomfort of labour and birth. *J ObstetGynecol Neonatal Nurs*. 1996;25(1):82-92.
- 26 KrΘnj GD, Navarro-Vargas JR, Eslava-Schmalbach J (2013) Inequity in healthcare- the outlook for obstetric analgesia. *Colombian J Anesthesiology* 41: 5-7.
- 27 Labrague,L,J, Rosales,R,A, Rosales, G,L,&, Fiel,G,B,2013, Effects of soothing music on labor pain among Filipino mothers,Clinical Nursing studies, Philippines.

- 28 Mona Almushait1\* RAG. Perception toward Non-Pharmacological Strategies in Relieving Labor Pain: An Analytical Descriptive Study. Journal of Natural Sciences Research. Vol.4, No.2, 2014(ISSN 2225-0921 (Online)).
- 29 Lally JE, Murtagh MJ, Macphail S, Thomson R. More in hope than expectation: a systematic review of women's expectations and experience of pain relief in labour. BMC Med 2008;6:7
- 30 Escott D, Slade P, Spiby H. Preparation for pain management during childbirth: the psychological aspects of coping strategy development in antenatal education. Clin Psychol Rev 2009;29:617–22.
- 31 1. Mulugeta H. The practice of labor analgesia and its perceived barriers among health care providers working in public hospitals of Addis Ababa, Ethiopia. 2016
- 32 Tasnim. DS. Perception about Pain Relief During Normal Labour Among Health Care Providers Conducting Delivery. 2010;Volume 22
- 33 ato L, Kyei AA, Deku G. Experiences of midwives on pharmacological and nonpharmacological labour pain management in Ghana. Reproductive Health. 2017;14(1):128
- 34 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; 85:438–441.

## 8 ANNEX:

### Annexes I: English Version Information Sheet

Dear Respondent:

Greeting

Good morning/Afternoon! My name is \_\_\_\_\_. I am a data collector in the research conducting by Mubarik Meka, yikeber geta and selam on the practice of labour pain relief methods among mother attending labour in Wolkite university specialized teaching hospital in gurage zone for the partial fulfilment of their bachelors degree in Nursing track in Wolkite University. You are selected and included in the study as part of the sample population to complete the questionnaire designed by the researcher. Your honest response is vital to assess the practice and use of labour pain relief methods on mother attending labour those deliver in labour ward in Wolkite university specialized teaching hospital.

Annex II: English Version Consent Form

The selected participant should have read and understood the information sheet carefully. understand the purpose, the benefit of the study and personal information regarding me and all answers given by me should not be transferred to the third party without my permission. I also understood that I can decide whether or not to take part in the study or even withdraw from the study at any time so that I agree to participate in the study with my signature below.

The participant Sign\_\_\_\_\_

Supervisor Name \_\_\_\_\_

signature\_\_\_\_\_ Date\_\_\_\_/\_\_\_\_/\_\_\_\_ E.C. Time Started: Hour: \_\_\_\_\_ Minute: \_\_\_\_\_

Questionnaire No\_\_\_\_\_ Time ended: Hour: \_\_\_\_\_ Minute: \_\_\_\_\_

Name of Data collector \_\_\_\_\_ Date  
\_\_\_\_/\_\_\_\_/\_\_\_\_ E.C.

### Annex III: English Version Questionnaires

#### Question 1 for mother

##### **Part 1: socio demographic characteristics of respondent**

No	Question	Answer
1	Age	.....
2	Marital status	1 un married 2 Married 3 widowed 5 divorced

3	Occupation	1 farmer 2 house wife 3 merchant 4 other specify
4	Level of education	1 no formal education    3 high school 2 primary(1-8)                4 above high school
5	Religion	1 orthodox 2 Muslim 3 protestant 4 other specify.....

**Part 2: obstetric and past obstetric history related question**

	Number of parity	1 one    3three 2 two    4 four and above
	Mode of delivery	1 Per vaginal 2 caesarian section
	Any Pregnancy complication	Specify if any.....
	Duration of labour	-----

**Part 3 knowledge and personal preference related question**

1	do you know the different labour pain relief method?	1 yes 2 no
2	If 1 for Q1 Which method of labour pain relief do you know?	1 pharmacologic                3 both 2 non pharmacologic
3	If 2 for question number 2 which non-pharmacologic labour pain relief do you know? you can answer more than one	1.reassurance                3. Massage the back 2. Allow to ambulate        4 Allow free vertical position 5. Music therapy              6 allow companion of your 7 other specify....                choice

4	What do you think about labour pain ?	1 very severe pain      2 severe 3 moderate                4 mild
5	Do you preferred labour pain relief?	1 yes 2 no
6	What method of labour pain relief do you preferred ?	1 pharmacologic                      3 both 2 non pharmacologic
8	If 2 which non-pharmacologic method do you Preferred?	1.reassurance 2. Allow to ambulate 3. Massage the back 4. Allow free vertical positioning 5. Music therapy 6.companion of your choice 7 breathing technique 8 If other specify_____

### Part 3: use related question

1	Does the health professionals provide to you any labour pain relief method?	1 yes 2 no
2	Which method of labor pain relief they provide to you?	1 pharmacologic pain relief 2 non pharmacologic 3 both
3	If 2 for Q3 which non-pharmacologic method was provided to you? You can answer more than one	1. reassurance 2.to ambulate (activity during pain) 3. Massage the back 4.music therapy 5 hot compress 6 Allow companion of her choice 7 how to bear down 8 breathing technique 7 other....

### Annexes I: English Version Information Sheet

Dear Respondent:

Greeting

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## Annex II: English Version Consent Form

The selected participant should have read and understood the information sheet carefully. understand the purpose, the benefit of the study and personal information regarding me and all answers given by me should not be transferred to the third party without my permission. I also understood that I can decide whether or not to take part in the study or even withdraw from the study at any time so that I agree to participate in the study with my signature below.

The participant Sign \_\_\_\_\_

Supervisor Name \_\_\_\_\_

signature \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_ E.C. Time Started: Hour: \_\_\_\_ Minute: \_\_\_\_  
 Questionnaire No \_\_\_\_\_ Time ended: Hour: \_\_\_\_ Minute: \_\_\_\_  
 Name of Data collector \_\_\_\_\_ Date  
 \_\_\_\_/\_\_\_\_/\_\_\_\_ E.C.

## Question : for obstetric care provider

### Part 1 Socio-demographic characteristics of the respondent

1. age.....
2. Sex.....



3. Profession .....
4. Educational status.....
5. Clinical Experience in year.....

## **Part 2 interview question**

- 1 Have you ever provide any labour pain relief method?
- 2 which different pharmacologic and non-pharmacologic labour pain relief do you provide? when? and how?
- 3 did you know the different methods of labour pain relief? what are they?
- 4 do you prefer the different types pharmacologic and non-pharmacologic labour pain relief method?
- 5 if yes in Q3 what are they?
- 6 WHAT Reasons for utilization and non-utilization of the different pharmacologic and non-pharmacologic labour pain management methods?
- 7 what drugs are available and what are not available in your hospital?
- 8 what do you think about labour pain?
- 9 do you think the different method of labour pain relief is necessary for mother to alleviate