

**ADDISABABA UNIVERSITY
COLLEGE OF HEALTH SCIENCES
SCHOOL OF ALLIED HEALTH SCIENCES
DEPARTMENT OF NURSING AND MIDWIFERY**

**ASSESSMENT OF TRADITIONAL PRACTICES DURING PREGNANCY,
LABOUR, DELIVERY AND ASSOCIATED FACTORS AMONG THE
REPRODUCTIVE AGE WOMEN AT KERSA MALIMA DISTRICT,
SOUTH WEST SHOA ZONE, OROMIA REGIONAL STATE, ETHIOPIA.**

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This thesis by Hulemenaye Tiruneh is accepted in its present form by the board of examiners as satisfying thesis requirement for the degree of master in Maternity and Reproductive Health.

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List of Abbreviations

ANC	Ante Natal Care
AOR	Adjusted Odds Ratio
CI	Confidence Interval
COR	Crude Odds Ratio
EDHS	Ethiopian Demographic and Health Survey
FGD	Focus Group Discussion
HEW's	Health Extension Workers
HTPs	Harmful Traditional practices
IUGR	Intrauterine Growth Restriction
MMR	Maternal Mortality Rate
OR	Odds Ratio
PDR	People Democratic Republic
SNNP	Southern Nations Nationalities and People
TBAs	Traditional Birth Attendants
TPs	Traditional Practices
USA	United States of America
χ^2	Chi-Square

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Abstract

Introduction: Traditional Practices reflect values and beliefs held by members of a community for periods often spanning generations. Every social grouping in the world has specific Traditional Practices and beliefs, some of which are beneficial to all members, while others are harmful to a specific group. Traditional Practices transmitted through tales, rituals, healing method and customary laws from generation to generation. Traditional Practices are more likely employ in developing countries where health facilities and health education are still behind the rich of the majority of the people. Although Maternal Mortality Ratio in developing countries is still 15 times higher than developed countries. This is because Traditional Practices are the main contributing factors for maternal morbidity and mortality.

Objective: Assessment of Traditional Practices during pregnancy, labour and delivery among reproductive age group women and to identify factors related with them.

Methods and Materials: The community-based cross-sectional study for the quantitative study and indepth interview for the qualitative study was carried out from November 2013-June 2014 in Kersa Malimma District, South West Shoa Zone, Oromia Regional state.

Result: The major Harmful Traditional Practices during pregnancy were intake of kosso with or without tape worm infestation, doing hard work. During labour and delivery the major Harmful Traditional Practices identified were home delivery, shaking the women until placenta deliver, cutting the umbilical cord with unsterilized razor blade, left the umbilical cord without tying, putting butter, vaseline and hair oil on umbilical stump (a short piece of umbilicus after the rest of umbilical cord was cut), giving bath for the newborn immediately after delivery, women taking bath on day 4 or 5 after delivery and drinking local alcohol while breast feeding. Massaging the abdomen while the women were in labour and drinking “telba” after delivery are Traditional Practices identified but their effect is not well known and labelled as neutral practices. Those Traditional Practices that are indicated above have similarity with Traditional Practices described in indepth interview. Family monthly income is associated with kosso intake, abortion and

educational status of the women is associated with work during pregnancy and abortion is associated with home delivery practice.

Conclusion:In general, Harmful Traditional Practices during pregnancy, labour and delivery are highly prevalent in this study area and the effects of some of the traditional practices are not well known. Extensive health education towards the eradication of the identified Harmful Traditional Practices, further studies on the effects of Traditional Practices for those that are not well known and similar studies in other areas is therefore recommended.

1. Introduction

1.1. Background

Traditional Practices (TPs) reflect values and beliefs held by members of a community for periods often spanning generations. Every social group in the world has specific TPs and beliefs, some of which are beneficial to all members, while others are harmful to a specific group (1). TPs transmitted through tales, rituals, healing methods and customary laws from generation to generation. TPs are more likely employed in developing countries where health facilities and health education are still behind the rest of the majority of the people. In many parts of Africa it is estimated that about 90% of the population rely on traditional healers and Traditional Birth Attendants (TBAs) as the first contact for health (2). However, unlike in developing countries like Ethiopia where TPs are performed in more than 80% of the population, some countries in the Middle East as well as immigrants to Europe and United States of America (USA) have abandoned these practices. This was the result of the work contributed by religious leaders, government bodies and the victim people themselves. Women and children are specific groups who are highly vulnerable to TPs (3). TPs focused on a specific group is against basic principles of Charter of United Nations which implies that, the achievement of international cooperation in promoting and encouraging respect for human rights and fundamental freedoms for all without distinction as to race, sex, language or religion (4).

An estimated 287,000 maternal deaths occurred in 2010 worldwide, a decline of 47 per cent from 1990. Of the total maternal deaths, Sub-Saharan Africa (with 56 per cent of these deaths) and Southern Asia (29 per cent) together accounted for 85% of the global burden in 2010, with 245,000 maternal deaths between them. The number of maternal deaths per 100,000 live births the Maternal Mortality ratio (MMR) was also down, from 440 in 1990 to 240 in 2010, for the developing regions as a whole. But MMR in developing regions was still 15 times higher than developed regions (5).

1.2. Statement of the Problem

In developing countries like Ethiopia TPs are performed in more than 80% of the population. The TPs in Ethiopia is not only that these traditions continue to be practiced, but the people who participate in all the practices do not know about the harmful effects of the acts. Because of this most Harmful Traditional Practices (HTPs) are very resistant to change(3).

With regard to home delivery practices, postpartum morbidity was significantly associated with having two or more vaginal examinations during labour and reports of practices to expel the placenta or stop bleeding (forced gagging, applying hard manual pressure to the abdomen or pulling on the umbilical cord). TBAs with formal training were significantly more likely to force gagging to remove the placenta (6).

Child birth is part of TPs. This perception might to large extent shrouded and myth reflecting lack of knowledge on physiology of birth process. During women's pregnancy and birth period, if the pregnant women doesn't experience problem, she is respected in the community and pregnancy with related with risk and also birth with episiotomy or caesarian section considered as the women is lazy and may not even be worth living. This traditional thought discourages them not to utilize health institution during labour and delivery and exposed them to potentially bad obstetric outcome(7).

TPs during pregnancy, labour and delivery is not studied yet at Kersa Malima District previously [information gained from the District health bureau].

1.3. Significant of the Study

The aim of study is to assess and measure the magnitude of the existing TPs during pregnancy, labour and delivery and to recommend appropriate feed-back and implementation by community members to prevent those HTPs occurrence.

Addressing of this type of study, assessment of TPs during pregnancy labour, and delivery and coming up with necessary information may be helpful to improve maternal health and reduce maternal mortality and to which is a major public health problem concern in our country Ethiopia. It is necessary for midwives to learn specific skills from TBAs and elderly women,

rather than viewing modern medicine as superior to indigenous knowledge. Lack of understanding of cultural beliefs and practices results in a lack of support from the health system, thus contributing to delayed health institution utilization (8).

2. Literature Review

2.1. Work during Pregnancy

Over the past two decades there has been a significant increase of the physical or psychological stress that results in preterm birth. A pregnancy can be affected by one or more risk factors (12).

In North East Brazil study found that, the incidence of low birth weight among agricultural workers and house wives was 10.4% and 7.1% respectively (X^2 , $p=0.03$). The median duration of gestation was 38 wks for agricultural workers who continued working throughout pregnancy. Of women in agricultural work 4.6% of infant were delivered before 37wk. Mean birth weight were 2953gm compare with 3143gm for infant of household. Working throughout pregnancy significantly reduces birth weight in the low income population. This study also found that mean birth weight of infant to women who worked in agricultural during 9 month of pregnancy was 190gm lower than that of non exposed group ($p=0.02$)(9).

Engaging in hard work during pregnancy the effect will be preterm delivery, low birth weight. A meta-analysis has shown physically demanding work to be significantly associated with pre-term birth. Other occupational exposures significantly associated included prolonged standing, shift and night work and a high cumulative work fatigue score. In general working hard work during pregnancy is not advisable and it is HTP (10).

2.2. Intake of Kosso during Pregnancy

There is dual health seeking both from biomedical and traditional health care. In terms of pregnancy and child birth practices, both traditional and modern practices existed. These included uses of herbal medicines as well as modern drugs during Ante Natal Care (ANC) and delivery (11).

Study which is done at Eastern Côte d'Ivoire for the reasons of use of plants, 4 main indications were given by women, 1: to ensure the good development of the fetus and to have thus a beautiful baby, 2: to facilitate labour, 3: to prevent or cure malaria, a very frequent affliction during the first trimester of pregnancy and 4: to prevent the spontaneous abortions and

miscarriages. This study also noticed that some seemingly odd indications like “having a baby with dark complexion” or “having a cheerful baby” or “making the fetus move”. But for men, the use of plants by pregnant women should be encouraged as it ensures a good health for pregnant women. Mother or a close relative are main specialist recognized in the village. Generally, the use of plants depends upon the pregnancy stage. For example: from the first signs of pregnancy until the end of the first trimester. The purpose of the use of these plants is to develop the fetus or to prevent miscarriages. During the second trimester, the plants prescribed were intended especially for the fetus development (12).

2.3. Traditional Practices on Umbilical Cord

According to the traditional beliefs, most of TBAs cut the umbilical cord by using bamboo or razor blade. Study participants mentioned that they used to wash razor with alcohol and they used black or white rope to tie the umbilical cord. After birth, the baby was taking a bath and then it was placed on the bamboo plate and putted nearby mother(13).

The cord has to be tied/clamped tightly in order to keep the umbilical vessels occluded and prevent bleeding. The instrument used cut through living tissue and vessels that are still connected to the infant's blood stream needs to be sterile to avoid infection. Umbilical cord care (keeping the cord clean without application of anything and leaving it exposed to air or loosely covered by a clean cloth, in case it becomes soiled it is only cleaned with water). Drying and separation of the stump is facilitated by exposure to air. The devitalized tissue of the cord stump can be an excellent medium for bacterial growth, especially if the stump is kept moist and unclean substances are applied to it. Also omphalitis (infection of umbilical stump) may delay cord healing; causing the umbilicus to stay moist for longer periods (tracking of bacteria along the umbilical vessels) may lead to septicaemia that can result in neonatal morbidity and mortality, especially in developing countries (14).

2.4. Traditional Practices during Pregnancy, Labour and Delivery in Ethiopia

2.4.1. Work during Pregnancy

In Adamitulu district 93.2% percentof the woman fetches water during pregnancy. However the hardship of the work is differ from the non-pregnancy period. In 34.6% of the respondents thatis less hardthan the non-pregnancy period. While 58.4% was as hard as the non-pregnancy period. Seventy two percent were collecting fire-wood out of which only 35.2% reported the collection

of fire-wood to have been less hard compared to the non-pregnancy period. On the other hand focus group discussion (FGD) with rural woman revealed that, the women in the rural areas are engaged in farm activities, fetching water and collecting fire wood. The work load of pregnant is the same as the non-pregnancy period. The reason given for continuing to work during pregnancy was that it is an obligation for them to work since no body assists them the work they are supposed to do (15).

2.4.2. Intake of Kosso during Pregnancy

In Ethiopia, pregnant woman is advised repeatedly throughout pregnancy to take local medicine called kosso (scientific name-*Hagenisa abyssinixa*), which is a traditional medicine used as treatment of intestinal worms, especially tape worms in Ethiopia. This is believed to clean the baby's body before birth (2,15).

Kosso is taken during pregnancy for treatment of tape worm infestation, for clearing the fetus by removing the foods attached to it, for strength of the fetus, for feeling at ease, for avoiding bad smell of the blood and other fluids during labour and delivery, for clearing the intestine of the pregnant women so that she will be clean during delivery. Usually kosso is taken during pregnancy every month up to the seven month of pregnancy. After seven months the pregnant take kosso every 4-7 days. The urban participants said that only few pregnant women in the town are taking kosso. The rural participants (including TBAs) said that the majority of the pregnant women are still taking kosso during pregnancy. The urban participants and the rural TBAs believe that taking kosso during pregnancy should stop but the rural women participants, who gave three or more births, believe in the importance of continuation of taking kosso during pregnancy (15).

Kosso, still used in Ethiopia as atape worm remedy, appears to cause in certain individuals under condition still unknown. Simple or total optic atropy, which is usually bilateral occur, if it is in higher dose. Therefore taking Kosso for the treatment of tape worm infestation is Harmful Traditional Practice because the individual could face complication in high dose (17).

2.4.3. Traditional Practice on Umbilical Cord Cutting

In Ethiopia (1997), for 2.5 % of the respondents, who delivered outside the health institutions, the umbilical cord was not tied after cutting it. The reasons for not tying the umbilical cord were

1: umbilical stump dries by itself accounts 19.0%, 2: it was left unknowingly, 38.1% and 3: other reasons account 42.9% (15). Scientific evidences revealed that the newborn may die of bleeding unless the umbilical cord is tied after cutting it (18).

2.4.4. Home Delivery and Traditional Practices during Labour and Delivery

Largely, there was preference for modern health care services, though TBAs were more accessible. This was because TBAs live in the community and offer flexible terms of payment for the services offered (12).

Care by a skilled provider before, during and after delivery is important for the reduction of maternal and neonatal mortality. In most developing countries babies delivered at home are usually more likely to be delivered without the assistance of skilled health professionals, relative to babies delivered at a health facility. However, home deliveries without a skilled attendant are chosen (15).

Poor utilization of health facilities during delivery by pregnant mothers is still a major cause of maternal and childhood morbidity and mortality in developing countries (19). In Nepal four out of five births 81% take place at home. Delivery in a health facility is more common among younger mothers, mothers of first order birth and mothers who have attended the recommended four ANC in a facility (20). The majority, 87.9% delivered at home claiming that home was best place for giving birth. Out of those mothers who delivered at home, 80.0% were assisted by family members. Many different reasons were forwarded for home delivery (21).

In-depth analysis of the Ethiopian Demographic and Health Survey (EDHS) 2005 revealed that birth at home are substantially higher among women who live in Tigray, Afar, Amhara, Oromia, Benishangul Gumuz and SNNP (Southern Nations Nationalities and People) regions (22). In Ethiopia at Sekela District, of the total respondents, only 12.1% of them gave birth at health facilities and majority of them 87.9% delivered at home claiming that home was best place for giving birth. Out of those mothers who delivered at home, 80.0% were assisted by family members (23). Whereas 95.7% of rural women delivered their last child at home at Arsi Zone. Out of the total home deliveries 88.6% were attended by unskilled birth attendants including neighbors and relatives (24).

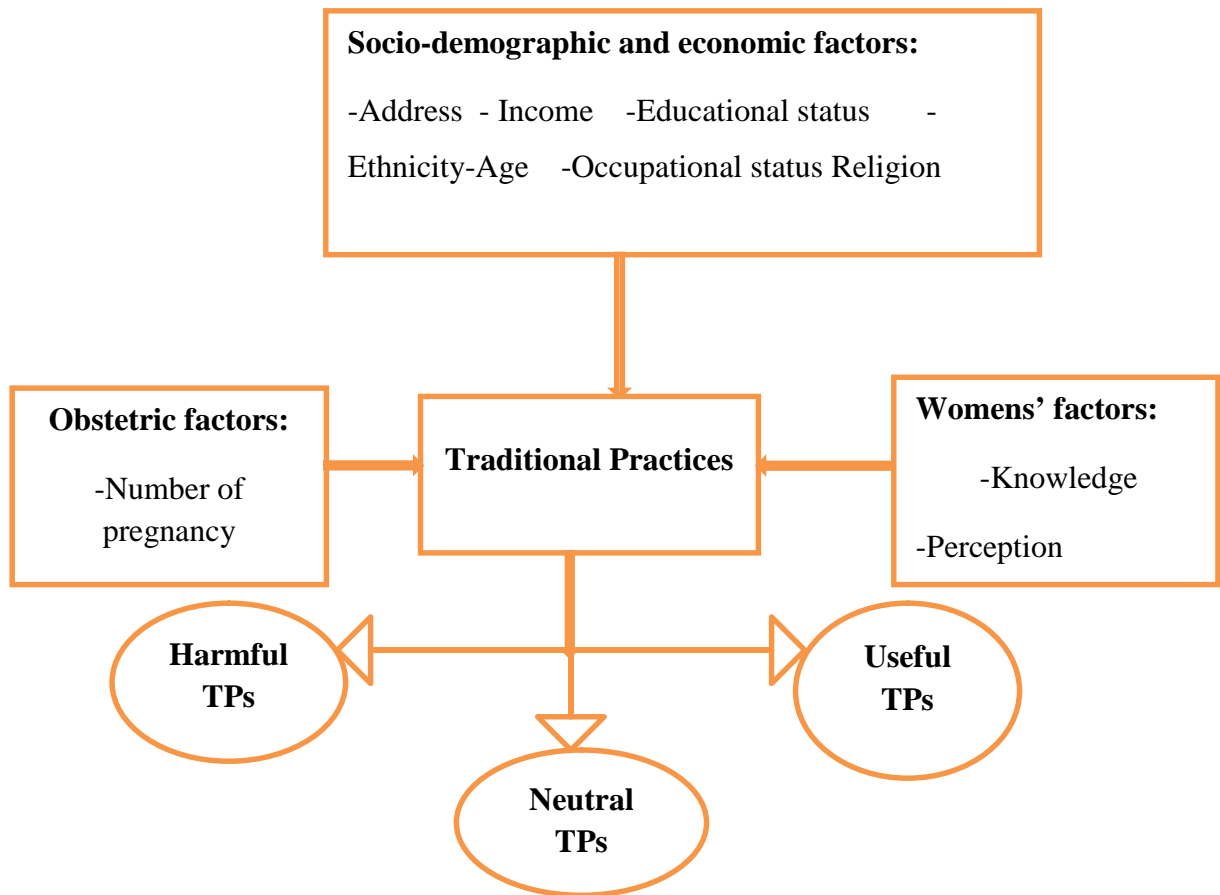
Non institutional delivery makes childbearing very risky and dangerous since place of delivery and the personnel assisting can greatly determine the risk of complications and infections that a mother is exposed to. The risk of complications such as maternal death, retained placenta, perineal tear, puerperal pyrexia, post partum hemorrhage, still birth, neonatal death etc has been found to increase when a significant proportion of mothers fail to utilize available health facilities for delivery care and post partum care(19, 25).

At third stage of labour in the oxytocin prophylaxis regimen, provision of controlled cord traction reduced post-partum hemorrhage risk by 66% when oxytocin was administered intramuscularly (how effective) active management of the third stage of labour reduces the risk of post partum hemorrhage and should be offered and recommended to all women (18, 26).

Alcohol passes freely into breast milk reaching approximately maternal levels. Effects on the infant from alcohol in the breast milk are not well studied but there have been reports of reduction of let down, reduced infant feeding and changes in infant sleep patterns when the mother drinks heavily. Excess levels of alcohol in milk result drowsiness, deep sleep, weakness and decrease growth in the infant. Impaired motor development following exposure to alcohol in the breast milk was seen in one study but not another (27, 28).

The baby's body is wet and evaporation of the fluid on the skin causes a marked fall in body temperature. Hence the baby should be dried by a means of a warm cloth immediately at birth. Neonatal mortality in hypothermic infants tends to be twice that in normothermic ones. After drying carefully the baby should be given to the mother in skin-to-skin contact and delay bathing for after 6 hours (18, 29). Women should be advised of importance of perineal hygiene, including frequent changing of sanitary pads, washing hands before and after doing this, and daily bathing or showering to keep their perineum clean(18, 30).

Figure 1: Conceptual Framework



This conceptual frame work was developed by the investigator based on literature review.

3. Objective

3.1. General Objective

- Assessment of Traditional Practices during pregnancy, labour and delivery and associated factors among reproductive age group women at Kersa Malima District, South West Shoa Zone, Oromia Regional State.

3.2. Specific Objectives

- To measure the magnitude of Traditional Practices regarding work, intake of Kosso during pregnancy, Traditional Practices during labour and delivery.
- To determine factors related to those Traditional Practices.
- To describe usefulness of the practices: as useful, neutral or Harmful Traditional Practices related to the existing scientific medical knowledge.

4. Methods and Materials

4.1. Study Setting

The study area was Kersa Malimma District, South West Shoa Zone, Oromia Regional State. It is about 60 Km far from Addis Ababa capital city of Ethiopia. The District has a total of 32 kebeles, 3 urbans and 29 rural kebeles. The total population is estimated to be 98,297. Out of this 50,207 are males and the remaining 48,090 are females. The reproductive age women account at about 21,714. There are 5 governmental and 10 private health centers, 21 health posts and 1 private pharmacy. There are 2 Health Extension Workers (HEWs) for urban and 54 HEWs for rural areas in the District [verbal information obtained from the head of woreda health Bureau].

4.2. Study Design

Community-based cross-sectional study using quantitative and qualitative method was conducted from November 2013-June 2014 at Kersa Malimma District, South West Shoa Zone, Oromia Regional State.

4.3. Source of Population

The source of population was woman among the reproductive age at Leman town surrounding peasant associations which are found within 10 km radius of Leman town.

4.4. Study Population

Study Population was woman among the reproductive age at Leman town surrounding peasant associations which are found within 10 km radius of Leman town Kersa Malimma District who gave birth in the last five years.

4.5. Study Period

This study was take place from November 2013-June 2014 at Kersa Malima District, South West Shoa Zone, Oromia Regional State, Ethiopia.

4.6. Sample Size Determination and Selection of Study Units

The sample size (n) required for the study was calculated using the formula to estimate a single population proportion by considering the following assumptions.

$Z / 2$ = critical value for normal distribution at 95% confidence level which equals to 1.96 (Z value at alpha=0.05).

P= (0.5) assume prevalence of Traditional Practice during pregnancy and child birth at the area 50% (to take maximum sample size).

d= margin of error of 0.05 with 95% confidence level.

$$n = \frac{(Z /2)^2 p (1-p)}{d^2}$$

$$n = \frac{(1.96)^2(0.5) (1-0.5)}{(0.05)^2} = 384$$

10% nonresponse rate

Total sample size = 423

4.7. Sampling Procedures

4.7.1. Quantitative Part

Kersa Malimma District has a total of 32 kebeles, 3 Urban and 29 rural kebeles. In this study urban kebeles are excluded because TPs are mostly practiced in rural kebeles because they are far from health facilities. Out of 29 rural kebeles 12 rural kebeles are around 10 Km radiuses of Lemana town. The reason why a distance only of 10 Km around Lemana town was selected that was due to resource limitation. From twelve peasant associations 3 peasant associations was taken by simple random sampling method. Based on proportion to size, 100 samples from Baye Giche kebele, 146 samples from Mutte Dayo kebele and 177 samples from Mazoria Golba kebele was taken. The households was selected every 13 households (N=5,516 and n=423) as referred in figure 1. The eligible women were interviewed by a structured pre-tested Afan Oromo version questionnaire adapted from previous similar study. If the houses were closed or the mothers not presented at the time of data collection, frequent visits were done until the women were able to communicate throughout the data collection. For the household with more than one, one woman will be selected by using lottery method.

4.7.2. Qualitative Part

Purposive sampling technique was employed for the qualitative study. Two women who have gave three or more births and TBAs were selected by head villagers as well as snowball sampling technique. One woman from Baye Giche rural kebele and the other woman from Arifetta rural Kebele for the in-depth interview. This is due to literatures revealed that mothers who have gave

three or more births and TBAs considered as a good key informants. Those key informants were taken from other study units other than sampling units.

Proportion to size allocation

Based on proportion to size allocation thus 423 sample sizes are distributed into 3 kebeles.

$$n_i = (n/N) N_i$$

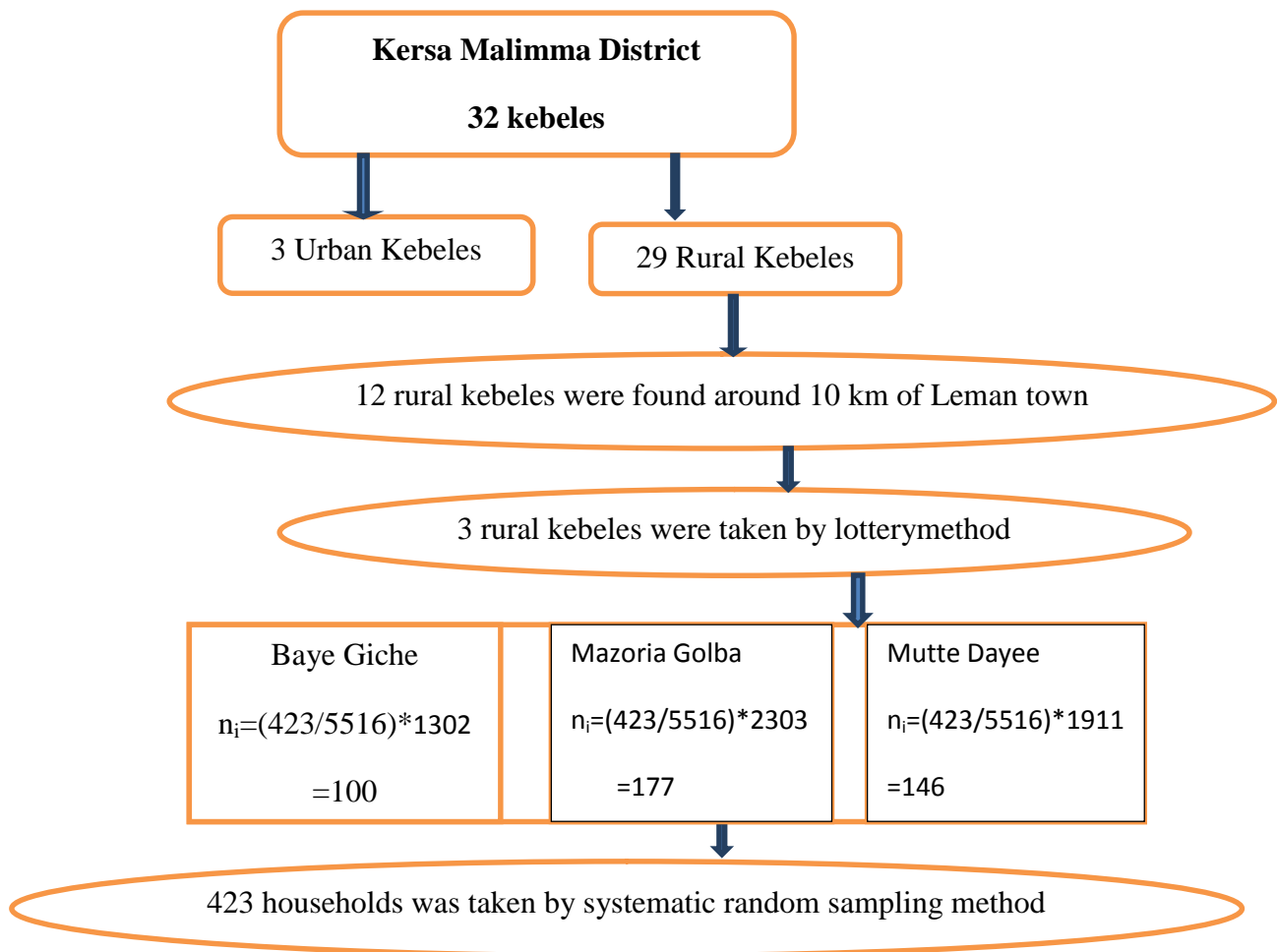
Where n_i = sample size of the i^{th} the kebele

N_i = is population size of the selected kebele

$n = n_1 + n_2 + n_3$ the total sample size

$N = N_1 + N_2 + N_3$ the total population size of the three kebeles

Figure 2: Schematic Presentation of Sampling Procedure.



4.8. Inclusion Criteria for the Survey

1. Women 15-49 years old
2. Women who had given birth at least once in the last five years
3. Women who were residents in the area for at least five years (if she lives for five years in the area, she will use to practice what already is practiced in that area).

4.9. Exclusion Criteria for the Survey

1. Women who had not given birth in the last five years
2. Women who had resided in the area for less than five years
3. Women who was foreigner
4. Women who had mental illness

4.10. Data Collection Procedure

4.10.1. Quantitative Part

Structured and pre-tested questionnaire was adopted from from similar studies (15) in English and then translated into Afan Oromo which is the local language and pretest was done on 20 women at Chancho Robbe rural kebele from April 12-13, 2014. Based on pretest result the necessary corrections were taken and the survey was continued. Three college graduate students were conducted the face to face interview from April 14-28, 2014. Two Diploma nurses had supervised the data collection process. Training was given to the data collectors and supervisors before the actual data collection regarding the aim of the study, data collection tool and procedures going through the questionnaires question by question. In addition, the training also focused on the art of interviewing and clarifying questions that were unclear to the respondents. Data collectors were peer interviewed.

4.10.2. Qualitative Part

Qualitative data were collected through in-depth interview in following a semi structured questions which are selected from the questionnaire from April 26-28, 2014. The indepth interviews were conducted by one individual, who is local resident and fluent in speaking Afan Oromo and Amharic language with under supervision of the investigator. The in-depth interview comprised two sections; the section included TPs during pregnancy regarding work and intake of kosso and the second part was about TPs during labour and delivery. The interview was lasted between 45 and 60 minutes.

4.11. Data Processing and Analysis

4.11.1. Quantitative Part

Collected questionnaires were checked visually for completeness, coded and entered into Epi Info 3.5.1 and exported to SPSS version 20 software package and analysed. Results were described by text, tables and figures. Multivariable logistic regression model was constructed to find independent risk factors associated with TPs. Odds ratios (ORs) and their 95% (CIs) were computed. A value of $p < 0.05$ was considered as statistically significant.

4.11.1. Qualitative Part

All the interviews were recorded and transcribed on the same day. The transcripts were analyzed thematically. Transcripts were reviewed to develop a code list for the topics related to the research questions. Codes were applied manually by the interviewers.

4.12. Dissemination of Result

The result will be disseminated to Addis Ababa University, Federal Minister of Health, Kersa Malimma District health bureau, Non Governmental Organizations

4.13. Variables

1. **Dependent Variables:** Traditional Practices during pregnancy regarding work, intake of Kosso and place of delivery.
2. **Independent Variables:** are socio-demographic variables such as family income, age, religion, ethnicity, educational status and occupational status of both the women and the husband and number of pregnancy, women's factors such as knowledge and perception.

4.14. Operational Definitions

Harmful Traditional Practices: customary performance by the individual or community and that can compromise the health of pregnant women and that hinder the development of the fetus, the newborn or both. Such as home delivery, cutting the cord with unsterilized material etc.

Knowledge: refers for information or awareness about at least one or more TPs.

Kosso: which is a traditional medicine used as treatment of intestinal worms, especially tape worms in Ethiopia during pregnancy.

Neutral Traditional Practices: are customary practices by the community and whose effect is not well known or studied. Such as abdominal massage etc.

Perception: a woman who has knowledge and has a positive attitude towards those TPs.

Place of delivery: home to get care or to give birth during labour and delivery.

Traditional Birth Attendants: a Traditional Birth Attendant who initially acquired her skills by delivering babies herself or through apprenticeship to other TBAs and who is experienced in pregnancy and giving birth.

Work: activities that are potentially to cause physical or psychological stress. Such as carrying heavy container, sack etc during pregnancy period.

4.15. Ethical Considerations

Ethical approval was obtained from Research Ethics Committee of School of Allied Health Sciences, Department of Nursing and Midwifery and the Kersa Malimma District health bureau. Informed consent was obtained from participants before data collection started. The study participation was purely voluntary and the right of not to answer any part or all of questions was respected.

5. Result

A total of four hundred twenty three houses were identified for the survey. Thirty four (8%) women were not willing to participate in the survey. The questionnaire was therefore administered on 389 women making the response 92%.

5.1. Socio-demographic Characteristics of the Respondents

The general characteristics of the respondents is summarized in table 1. Two hundred ninety one (74.8%) of the respondents were in the age group 25-39 followed by age group less or equal to 24 years that is 68(17.5%). Over all 367(94.3%) were Orthodox religion follower followed by others (Catholic and Prothestant) 20(5.1%). Three hundred fifty six(91.5%) were Oromo followed by others 33(8.5%). Two hundred thirty eight(58.6%) had no formal education followed by 112(28.8%) primary education (1-8 grade). The majority of the respondent 203(52.2%) were house wife followed by 140 (36%) merchant. The majority 346(88.9%) were married and the earliest documented age of marriage was 8 years. Ninety eight (25.2%) of the respondents had abortions ranging from one to three. From the total respondents only 5 (1.3%) women had experienced still birth ranging from one to two. Maximum number of live birth was 13. One hundred ninety seven (50.6%) women had family monthly income less or equal to 795 Eth birr.

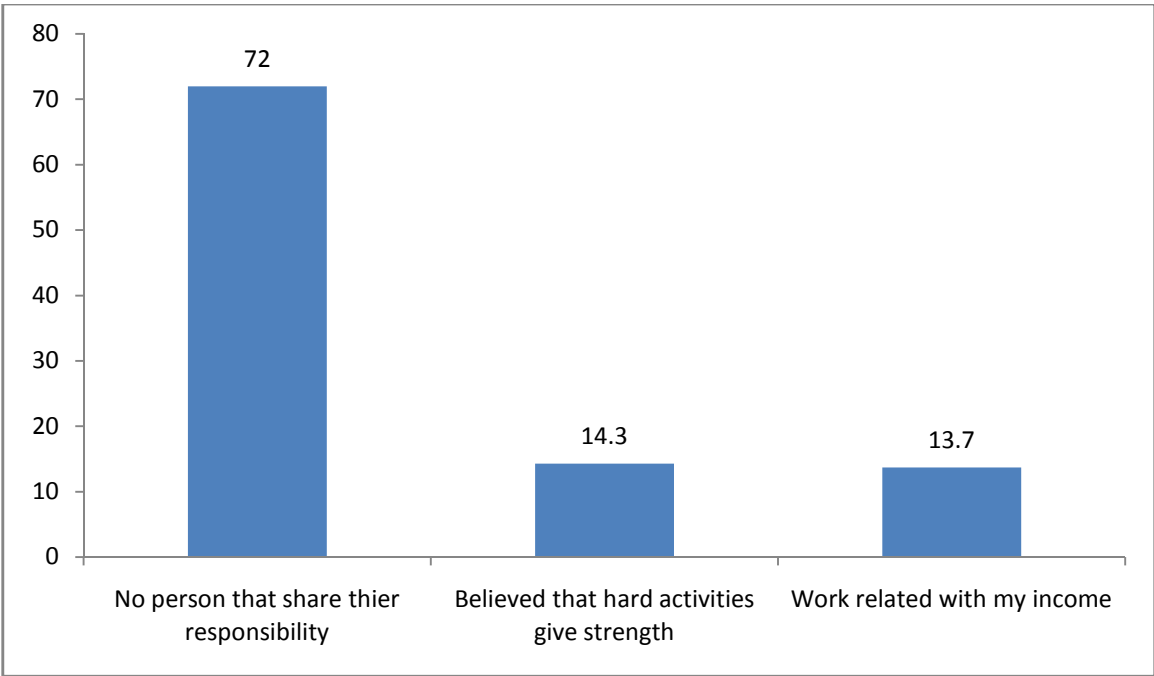
Table 1: Socio-demographic Characteristics of Respondents at Kersa Malima District: November 2013- June 2014.

Socio-demographic characteristics	Number(389)	Percent (%)
Age:		
<=24	68	17.5
25-39	291	74.8
>=40	30	7.7
Religion:		
Orthodox Christian	367	94.3
Others(Catholic, Prothestant)	22	5.7
Ethnicity		
Oromo	356	91.8
Others(Amhara, Gurage)	33	8.5
Education status		
No formal education	238	58.6
Primary	112	28.8
Secondary and above	49	12.6
Occupation status of women		
House wife	203	52.2
Merchant	140	36.0
Farmer	34	8.7
Others(daily laborer, government employer, jobless)	12	3.1
Duration of stay in that kebele		
=<10	95	24.4
11-25	230	59.1
=>26	64	16.5
Marital status		
Married	346	88.9
Divorced	28	7.2
Others(single, widowed)	15	3.8
Number of abortions		
Yes	98	25.2

No	291	74.8
Number of still births		
Yes	5	1.3
No	384	98.7
Number of live births		
3	126	32.4
4-6	216	44.5
=>7	47	23.1
Number neonatal deaths		
Yes	117	30.1
No	272	69.9
Number of children you have now		
=<3	157	40.4
4-7	213	48.3
=>8	19	11.3
Family income birr per month:		
=<795	197	50.6
>795	192	49.4

5.2. Traditional Practices during Last Pregnancy

Table 2 shows the most prevalent TPs during the last pregnancy which must have taken place in the past five years. Three hundred fourthy four (88.4%) woman did rigorous work, which can result physical and psychological stress. Out of the 344, 343(99.7%) of the women carried heavy watercontainer(20L) and heavy sack containing crops (80Kg), 288(74%)of the women collected fire wood during their pregnancy period. The reason stated for doing those activities are 1)two hundred fourthy six (72%) women reported that theyhad no person that can share their responsibility during pregnancy period, 2)49(14.3%) responded that it is believed that strenuous activities are good since it give us strength and also the labour will be easy, 3)the remaining 47(13.7%) stated that those activities are highly related with theirsorce of income, which is making local alcohol and “tella”(local beer with low alcohol content).



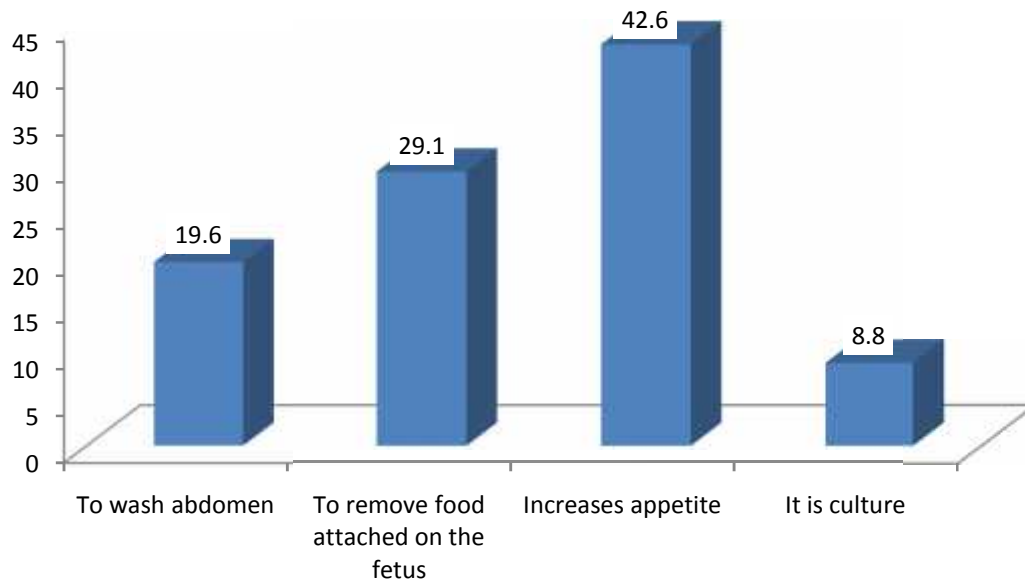


Figure 4: Percent Distribution of Respondents by Reason for Intake of Kosso without Tape Worm Infestation during Pregnancy, Kersa Malimma District, November 2013-June 2014.

One hundred forty one (36.2%) respondents were experienced disease during their last pregnancy period. Thirty six (25.5%) of women reported dyspepsia, 44(31.2%) of women reported feeling generalized body weaknes especially at third trimester. Out of 141women 82(58.2%) didn't go anywhere and the remaining 59 (41.8%) treated at hospital, health center. The reason given for not to go anywhere was, 1) the hospital, the health center is far 60(73.2%), 2) because the health professionals didn't give care properly 22(26.8%).

Table 2: Prevalence of Traditional Practice Regarding Work and Intake of Kosso, Kersa Malimma District, November 2013-June 2014.

Traditional practices:	Total (389)	Percent (%)
Hard work		
Yes	344	88.4
No	45	11.6
Intake of kosso without tape worm infestation:		
Yes	148	38.0
No	241	62.0
Experience of tape worm infestation during pregnancy:		
Yes	158	40.6
No	231	59.4
Stage of pregnancy when kosso is taken:	Number(148)	Percent (%)
1st three months of pregnancy		
Yes	84	56.8
No	64	43.2
2nd three months of pregnancy		
Yes	83	56.1
No	65	43.9
Last three months of pregnancy		
Yes	139	93.9
No	9	6.1

5.3. Traditional Practices during Last Labour and Delivery

Two hundred seventy nine (82.1%) of the respondents reported that the husband and the women together decides where to seek help during labour and delivery. Of 440(87.4%) were delivered at home, 63(18.5%) had abdominal massage during labour. The reasons stated for abdominal massage is 1) to relieve labour pain 25(39.7%), 2) to correct the fetal position 22(34.9%).

The most prevalent TPs during labour and delivery are presented in table 3 and 4. Only 49(12.6%) of the respondents have delivered at health institution. Four hundred fourthy

(87.4%) women were delivered at home, 130(33.4%) of the delivery were attended by neighbor, 98(25.2%) assisted by TBA.

The pregnancy outcome was alive for 331(97.4%) of the respondents. Two hundred twenty three (65.6%) were used new and unboiled razor blade, and 114(33.5%) were used new and boiled razor blade in order to cut the umbilical cord. Of the total home deliveries 45(13.2%) the umbilical cord were not tied after cutting it. The reasons given for not tying the umbilical cord were: 1) I don't know, it is culture 29(59.2%), 2) it is believed that if blood remains inside the newborn, the newborn will be sick thus the cord was not tied after cutting it 20(40.8%). Of the total home deliveries 219(64.4%) were put material on the umbilical stump to prevent drying of the umbilical stump. Following newborn bath until the umbilical cord detaches, 160(73.1%) were used to put butter and 37(16.9%) vaseline.

Three hundred twenty nine (96.8%) respondents of home delivered, the newborn were taken bath immediately after delivery to clean the newborn body from different body wastes. Three hundred twenty seven (96.2%) of home delivered at home, the women were taken bath on 4th or 5th day if she delivered male or female respectively. Out of the total home delivered women 150(44.1%) respondents reported that an object, which has a concave shape and made of a special grass which we call "yeagelgel kidan" in Amharic put on the umbilicus and firmly held with another person at standing position then shaken until the placenta delivered.

One hundred sixteen (34.1%) respondents were drunk local alcohol in order to relieve abdominal cramp after childbirth. One hundred seventeen (34.4%) drunk boiled "telba" which is one of oil seed, with empty stomach to clear the remained placental products and to wash the abdomen from different wastes.

There were special ceremony during labour like singing 340(87.4%), drinking local alcohol and "tella" 335(98.5%), giving local alcohol for women who gave birth 83(24.4%) and shooting gun 23(6.8%).

Table 3: Prevalence of Traditional Practices done on the Pregnant Mother during Last Labour and Delivery at Kersa Malima District: November 2013-June 2014.

Traditional Practices	Number(389)	Percent (%)
Homedelivery		
Yes	340	87.4
No	49	12.6
Variables	Number (340)	(87.4%)
For home deliveries, person assisted the delivery		
Neighbor	130	33.4
TBA	98	25.2
Delivering womans' mother	75	19.3
Others(mother-inlaw, health professionals)	37	9.5
Abdominal massage during delivery:		
Yes	63	18.5
No	277	81.5
Reason given for abdominal massage		
To correct the fetal position	22	34.9
To facilitate labour	16	25.4
To relieve labour pain	16	25.4
I don't know the reason	3	4.8
Who decide to seek care during labour and delivery		
The husband and the wife together	279	82.1
The wife	18	5.3
Labouring womans' family	20	5.1
Others (the wife and neighbor together and the husband)	23	5.9
An object "yeagelgi kidan" on the umbilical cord		
Yes	150	44.1
No	190	55.9
Drinking local alcohol to relief labour pain		

Yes		116	34.1
No		224	65.9
Drinking“telba”remove	remained	placenta/product,wash	
abdomen			
Yes		117	34.4
No		223	65.6

Table 4: The Outcome of the Newborn and Traditional Practices done on the Newborn, Kersa Malimma District, November 2013-June 2014.

Traditional Practices	Number (340)	Percent (%)
If you delivered home was the outcome alive baby?		
Yes	331	97.4
No	9	2.6
Material used to cut the umbilical cord		
New and unboiled razor blade	223	65.6
New and boiled razor blade	114	33.5
Sterile scissor	3	0.9
Was umbilical cord tied?		
Yes	295	86.8
No	45	13.2
If the umbilical cord not tied what was the reason		
If the blood remains inside the newborn, newborn will be sick	20	40.8
I don't know	19	38.8
It is culture	10	20.4
Was anything applied on the umbilical cord?		
Yes	219	64.4
No	121	35.6
Material put on umbilical cord		
Butter	160	73.1
Vaseline	37	16.9
Hair oil	11	5
Vaseline and butter	11	5

Newborn took bath immediately after delivery		
Yes	329	96.8
No	11	3.2
Newborn and the mother together took bath on 4th or 5th day		
Yes	327	96.2
No	13	3.8

5.4. Indepth Interview Result

Work during Pregnancy

Both TBAs explained that hard work is part of daily activity for women in thier community, since most of themare farmers’ house wife. Those activities also were continued during the whole pregnancy period. Only “siffet” which is a name given for traditional tray, bread storing object etc which is made from special type of grass, is prohibited since it is believed that cord will be coiled on the neck of the fetus.

“During pregnancy, I advised the pregnant women continue to do their work. Additionally carrying water with pot on her back is good, since it gives strength for the women, being passive for the pregnant women is not good. It leads to prolonged labour”(28 years TBA).

Intake of kosso during Pregnancy

Both TBAs states that kosso intake during last trimester is usual in the community

“If pregnant women complete her 9 months, taking kosso is very usual Traditional Practice. The first reason is that in order to wash the pregnant women stomach to make ease feeling and the other reason is that to wash the body of the fetus from food attached to it” (TBA with 28 years).

Traditional Practices during Labour

Regarding abdominal massage different experience is take place during labour among the two TBAs.

“I do massage in order to facilitate the entry of extremities in to the pelvis and I encourage to eat food which is available at home and to drink coffee. If she failed to give birth until around 10 hour duration, I advise to go to health institution” (TBA with 28 years).

Traditional Practice during Delivery

The same TP is done among the respondents during delivery

“After child birth placenta fail to deliver, an object ‘yeagelgil kidan’ in Amharic, put on the umbilicus while the women were in standing position and someone who has strong enough hold by supporting the object by standing in front of the delivering woman and shake until the placenta deliver” (TBA with 28 years).

“I used to cut umbilical cord by using new and unboiled razor blade because I always used razor blade which is provided by womens’ family. I think it was clean and safe, and it was easy and available in our community “(TBA, 48 years old).

5.5. Factors Associated with Practices during Pregnancy, Labour and Delivery

Factors associated with utilization of kosso without tape worm infestation on bivariate analysis are monthly income, age, duration of stay in that kebele, number of live birth, number of neonatal death and total number of children at home. In the multivariable logistic regression analysis family monthly income greater or equal to 795 birr are 1.63 times more likely have kosso intake practice than family income of less than 795 birr (AOR=1.633, 95% CI= [1.06-2.517]) are found to be significantly associated, refer table 5.

Factors associated with work practices during pregnancy on bivariate analysis are monthly income, age, educational status of the women, duration of stay in that kebele, occupation of the husband, history of abortion, number of live birth, number of neonatal death and number of children at home. In multivariable logistic regression primary education is 5.602 times more likely do worm than secondary and above education (AOR=5.602, 95% CI= [1.595-19.676]) and women who had abortion history have 11 times more likely have work practice than those who had not abortion (AOR=11.444, 95% CI= [1.425-91.882]) refer table 6.

Factors associated with home delivery on bivariate are age, educational status of the women occupation status of the women, duration of stay in that kebele and husband educational status, history of abortion, number of live birth, number of neonatal death and total number of children at home. In multi variable logistic regression women who had abortion 11.835 times more likely had home delivery practice than who had no abortion (AOR=11.835, 95% CI= [1.471-95.201]), refer table 7.

Table 5: Factors Associated with Traditional Practices Regarding Kosso Utilization without Tape Worm Infestation during Pregnancy at Kersa Malimma District, November 2013-June 2014.

Variables	Yes	No	COR(95% CI)	p-value	AOR(95% CI)	p-value
Family income						
>795	86	106	1.77(1.17-2.67)*	0.007	1.633(1.060-2.517)*	0.026
795	62	135	1	-	1	
Age						
24 years	16	52	1	-	1	
25-39	113	178	2.06(1.12-3.79)*	0.020	1.065(0.518-2.190)	0.865
40	19	11	5.62(2.21-14.23)*	0.000	2.640(0.884-7.885)	0.082
Duration of stay in that kebele						
10	26	69	1	-	1	
11-25	95	135	1.87(1.12-3.15)*	0.019	1.310(0.738-2.327)	0.356
26	27	37	1.94(0.99-3.79)	0.053	1.151(0.550-2.408)	0.709
Live birth						
<=3	29	97	0.31(0.17, 0.50)*	0.000	1	
4-6	75	98	0.80(0.48, 1.33)	0.392	1.168(0.458-2.981)	0.746
>=7	44	46	1	-	1.108(0.329-03.730)	0.869
Neonatal death						
Yes	54	63	1.62(1.04-2.52)*	0.031	1.148(0.658-2.002)	0.627
No	94	178	1	-	1	
Number of children at home						
<=3	38	119	1	-	1	
4-6	89	99	2.82(1.77-4.49)*	0.000	2.093(0.901-4.862)	0.086
>=7	21	23	2.86(1.43-5.73)*	0.003	1.720(0.541-5.472)	0.358

*=significance with p-value < 0.05, NS=non significant, 1=constant category, da lab=daily laborer, govemp=government employer, jb

less=jobless, far and mer=both farmer and merchant, wid=widowed, sing=single.

Table 6: Association of Factors with hard Work during Pregnancy, Kersa Malimma District, November 2013-June 2014.

Variables	Yes	No	COR(95% CI)	p-value	AOR (95% CI)	p-value
Family income						
>795	178	14	1	-	1	
795	166	31	2.37(1.22-4.62)*	0.011	1.723(0.789-3.763)	0.172
Age						
24 years	52	16	1	-	1	
25-39	266	25	3.27(1.64-6.55)*	0.001	1.775(0.682-4.618)	0.240
40	26	4	2.00(0.61-6.59)	0.255	0.675(0.093-4.907)	0.698
Educational status						
No education	203	25	2.93(1.37-6.26)*	0.005	2.215(0.890-5.512)	0.087
Primary education	105	7	5.417(2.01-14.63)*	0.001	5.602(1.595-19.676)*	0.007
Secondary and above	36	13	1	-	1	
Duration of stay in that kebele						
10	75	20	1	-	1	
11-25	214	16	3.57(1.77-7.24)*	0.000	1.792(0.748-4.294)	0.191
26	55	9	1.63(0.69-3.85)	0.266	0.682(0.206-2.255)	0.531
Occupation of the husband						
Farmer	253	25	2.79(1.15-6.76)*	0.023	1.746(0.574-5.309)	0.326
Daily laborer	32	7	1.26(0.41-3.91)	0.688	1.303(0.330-5.146)	0.706
Others(da lab, govemp, far and mer)	29	8	1	-	1	
Abortion						
Yes	96	2	8.32(1.98-35.1)*	0.004	11.444(1.425-91.882)*	0.022
No	248	43	1	-	1	
Number of live birth						
3	98	28	1	-	1	
4-6	159	14	3.25(1.63-6.46)*	0.001	1.628(0.273-9.698)	0.592
7	87	3	8.29(2.43-28.2)*	0.001	5.520(0.381-80.021)	0.210
Neonatal death						
Yes	111	6	3.1(1.27-7.53)*	0.013	1.542(0.428-5.559)	0.508
No	233	39	1	-	1	
Number of children at home						
3	128	29	1	-	1	
4-6	175	13	3.05(1.53-6.09)*	0.002	1.080(0.175-6.647)	0.934
7	41	3	3.10(0.896-10.7)	0.074	0.288(0.021-3.978)	0.352

*=significance with p value 0.05, NS=non significant, 1=constant category, da lab=daily laborer, govemp=government employer, jb less=jobless, far and mer=both farmer and merchant, wid=widowed, sing=single.

Table 7: Association of Factors with Preference of Home Delivery, Kersa Malimma

Variables	Home delivery		COR(95%CI)	p-value	AOR(95%CI)	p-value
	Yes	No				
Age of a women						
24	51	17	1	-	1	
25-39	260	31	2.80(1.44-5.43)*	0.002	1.540(0.599-3.960)	0.370
40	29	1	9.67(1.22-76.43)*	0.032	0.714(0.101-5.060)	0.736
Others(Amh, Gur)	26	7	1	-	1	
Educational status						
No education	208	20	4.16(1.92-8.99)*	0.000	1.603(0.112-22.991)	0.728
Primary education	97	15	2.59(1.13-5.90)*	0.024	3.335(0.517-21.528)	0.205
Secondary and above	35	14	1	-	1	
Occupational status of women						
Farmer	30	4	5.36(1.14-25.26)*	0.034	0.560(0.055-5.676)	0.624
House wife	184	19	6.92(2.00-23.93)*	0.002	0.427(0.062-2.917)	0.385
Merchant	119	21	4.05(1.17-13.96)*	0.027	0.475(0.067-3.373)	0.475
Others(da lab, govemp, jb less)	7	5	1	-	1	
Duration of stay in that kebele						
10	74	21	1	-	1	
11-25	204	26	2.23(1.18-4.20)*	0.013	1.891(0.787-4.547)	0.155
26	62	2	8.80(1.98-39.00)*	0.004	0.739(0.228-2.390)	0.613
Educational status of the husband						
No education	178	13	12.55(4.65-33.89)*	0.00	2.826(0.158-50.529)	0.480
Primary	122	15	7.46(2.80-19.83)*	0.00	3.713(0.580-23.754)	0.166
Secondary and above	12	11	1	-	1	
Abortion						
Yes	97	1	19.16(2.61-14.01)*	0.004	11.835(1.471-95.201)*	0.020
No	243	48	1	-	1	
Number of live birth						
3	95	31	0.143(0.048-0.42)*	0.00	1.826(0.309-10.778)	0.506
4-6	159	14	0.528(0.169-1.66)	0.273	6.560(0.446-96.485)	0.170
7	86	4	1	-	1	
Neonatal death						
Yes	112	5	4.32(1.67-11.2)*	0.003	1.553(0.424-5.689)	0.506
No	228	44	1	-	1	
Number of children at home						
3	123	34	1	-	1	
4-6	175	13	3.72(1.89-7.34)*	0.000	1.036(0.167-6.450)	0.969
7	42	2	3.81(1.34-25.21)*	0.019	0.238(0.016-3.514)	0.296

District, November 2013-June 2014.

6. Discussion

This study identified the major TPs during pregnancy regarding intake of kosso, work during pregnancy and home delivery and related TPs during labour and delivery in the study area and measured the magnitude of those practices. In addition the associated factors for selected TPs were analyzed and based on scientific evidences (researches) or accepted standardized practices categorized into HTP, UTP or neutral TPs.

During pregnancy kosso is also taken without tape worm infestation for other purposes. In this study kosso is taken in two different events pregnancy. One is that the presence of tape worm infestation and the second is without tape worm infestation. Without tape worm infestation was preferred for the discussion because they did not rely on the presence or absence of tape worm. In this study kosso in take without tape worm infestation practice is highly prevalent. One hundred forty eight (38%) were took kosso without tape worm infestation. Sixty three (42.6%) took to increase appetite, 43(29.1%) respondents took to remove the food that is eaten by the mother which is attached to the fetus so that fetus will be clean, 29(19.6%) to wash the abdomen during pregnancy and the remaining 13(8.8%) took because of taking kosso during pregnancy is culture. Of 148(38%) who took kosso without tape worm infestation 84(56.8%), 83(56.1%) and 139(93.9%) took at first, second and third trimester of pregnancy respectively. During the first trimester the majority 35(43.8%) were took every two month, in the second trimester 42.7% were took every two month. In the third trimester 58(41.7%) were took only once. This difference is due to time gap (8 years) between the two studies, since health care system is improving from year to year and the source population was only rural in this study (15). Kosso is still used in Ethiopia as a tape worm remedy, appears to cause in certain individuals under condition (lower dose) still unknown, a simple or total optic atrophy, which is usually bilateral if it was taken in higher dose. Therefore taking Kosso for the treatment of tape worm infestation is Harmful Traditional Practice because the individual could face complication high dose (17).

Regarding doing strenuous work during pregnancy period 344(88.4%) woman did rigorous activities that can result physical and psychological stress. Out of the 344, 343(99.7%) of the women carried heavy water (20 L) container and 288(74%) of the women collected fire wood during their pregnancy period. This result is much higher than that of Adamitulu District. This is due to difference in study area, occupation of the study woman since womens' participated in this

study respondents live in rural kebeles they travel a distance of kilometers in order to get other services which is not available at rural kebeles. In this study hard work is associated with abortion refer table 6. Engaging in hard work during pregnancy the effect will be abortion, preterm delivery and low birth weight. A meta-analysis has shown physically demanding work to be significantly associated with pre-term birth. In general working hard work during pregnancy is risk for obstetric complications stated above, thus it is HTP (10).

Regarding place of delivery the majority of women 340(87.4%) practiced home delivery. This result is agree with the study done in Nigeria (21) and Ethiopia, Sekela district 87.9%(23), and lower than EDHS, the home delivery practice in Ethiopia that is 90% and percentage of births delivered in health facility is less than 10 percent in Oromia region (31). This difference is due to health care system is improving through time in rural areas with HEWs, thus health institution utilization was improved. Also there was time difference since the EDHS was studied 3 years ago. Non institutional delivery makes childbearing very risky and dangerous since place of delivery and the personnel assisting can greatly determine the risk of complications and infections that a mother is exposed to. The risk of complications such as maternal death, retained placenta, perineal tear, puerperal pyrexia, post partum hemorrhage, still birth, neonatal death etc has been found to increase when a significant proportion of mothers fail to utilize available health facilities for delivery care and post partum care (19, 25).

Of home delivered women 150(44.1%) respondents reported that an object, which has a concave shape and made of a special grass which we called “yeagegel kidan” in Amharic put on the umbilicus and firmly held with another person at standing position then shaken until the placenta delivered. But scientifically at third stage of labour in the women should be administered oxytocin intramuscularly, provision of controlled cord traction these allow to reduce post-partum hemorrhage risk by 66% and should be offered and recommended to all women (18, 26). Thus the above practice could be considered as HTP.

The pregnancy outcome was alive for 331(97.4%) of the respondents. Two hundred twenty three (65.6%) used new and unboiled razor blade, 114(33.5%) used new and boiled razor blade in order to cut the umbilical cord. Forty five (13.2%) of the respondents, who delivered out side health institutions the umbilical cord was not tied after cutting it. The reasons given for not tying the umbilical cord were: 1: I don't know, it is culture 29(59.2%), 2: it is believed that if blood remains

inside the newborn, the newborn will be sick thus the cord was not tied after cutting it 20(40.8%). Of the total home deliveries 219(64.4%) were put material on the umbilical stump to prevent drying of the umbilical stump. One hundred sixty (73.1%) put butter, 37(16.9%) put vaseline on the umbilical following newborn bath until the umbilical cord detaches. The cord has to be tied/clamped tightly in order to keep the umbilical vessels occluded and prevent bleeding. The instrument used to cut through living tissue and vessels that are still connected to the infant's blood stream needs to be sterile to avoid infection. Umbilical cord care is done by keeping the cord clean without application of anything and leaving it exposed to air or loosely covered by a clean cloth. Drying and separation of the stump is facilitated by exposure to air. The devitalized tissue of the cord stump can be an excellent medium for bacterial growth, especially if the stump is kept moist and unclean substances are applied to it. Also omphalitis (infection of umbilical stump) may delay cord healing causing the umbilicus to stay moist for longer periods (tracking of bacteria along the umbilical vessels) may lead to septicaemia that can result in neonatal morbidity and mortality, especially in developing countries (14, 18).

One hundred sixteen (34.1%) respondents were drunken local alcohol in order to relieve abdominal cramp after childbirth. Alcohol passes freely into breast milk reaching the newborn approximately maternal levels. Effects on the infant from alcohol in the breast milk are not well studied but there have been reports of reduction of let down, reduced infant feeding and changes in infant sleep patterns when the mother drinks heavily. Excess levels (amount in which Central Nervous System effect is begin to exhibit in the women) of alcohol in milk result drowsiness, deep sleep, weakness and decrease growth in the infant. Impaired motor development following exposure to alcohol in the breast milk was seen in one study (27, 28). Drinking alcohol while breast feeding is not recommended.

Three hundred twenty nine (96.8%) respondents, who delivered at home, their newborn, were taken bath immediately after delivery. The baby's body is wet during delivery and evaporation of the fluid on the skin causes a marked fall in body temperature. Hence the baby should be dried by a means of a warm cloth immediately at birth. Neonatal mortality in hypothermic newborns tends to be twice than in normothermic newborns. After drying carefully the baby should be given to the mother in skin-to-skin contact and delay bathing for after 6 hours (18, 29). Therefore, giving

bath immediately after birth inclines hypothermia and leads to neonatal morbidity and mortality thus it is HTP.

Three hundred twenty seven (96.2%) of home delivered women were taken bath on day 4th and on day 5th if she delivered male or female respectively. Women should be advised of importance of perineal hygiene, including frequent changing of sanitary pads, washing hands before and after doing this, and daily bathing or showering to keep their perineum clean (18, 30). Delaying to take bath after delivery is risk for infection neither for the mother nor for the newborn.

Harmful Traditional Practices

Intake of kosso during pregnancy

Doing hard work during pregnancy

Home delivery

Putting “yeagegil kidan” on the umbilicus of the women

Cut umbilical cord with unboiled razor blade

Not tying umbilical cord

Putting butter, vaseline, hair oil on the umbilical stump

Drinking local alcohol while breast feeding

Giving bath for the newborn immediately after birth

The women take bath on 4th or 5th day

Neutral Traditional Practices

Abdominal massage during labour

Drinking boiled “telba”

Strength and Limitation of the Study

Strength of the Study

- Triangulation (both quantitative and qualitative) methods were used,
- Fairly large sample size was taken.
- Since probability sampling method was employed selection bias was minimal.

Limitation of the Study

- Unavailability of national prevalence about TPs during pregnancy, labour and delivery
- Income in the rural areas is determined by converting the total amount of crops produced in one year into money, the calculation was based on the local price. But they could have other sources of income which is not considered in the calculation of income.
- Since the interview was about previous five years experience respondents may forget some TPs (recall bias).

7. Conclusion and Recommendation

7.1. Conclusion

Taking kosso for the treatment of tape worm infestation, taking kosso for the purposes other than tape worm infestation (over dose), doing hard work during pregnancy, home delivery, putting a concave shaped object (“yeagelgil” kidan in Amharic) on the umbilicus and holding firmly by supporting the object at standing position and shaking the women until placenta deliver after child birth, cutting the umbilical cord with not boiled razor blade, left the umbilical cord with out tying, putting butter, vaselin, hair oil to prevent umbilical cord drying, giving bath for the newborn immediately after delivery, women taking bath on day 4 or 5 and drinking local alcohol while breast feeding are the most prevalent HTPs during pregnancy, labour and delivery in this study area. Also have similar with result found by indepth interview.

Massaging the abdomen while the women were in labour, taking bath with different boiled leaves watern and TPs to express happines are among the TPs identified but their effect is not studied to label them as harmful, useful or neutral practices.

No useful TPs were identified in this study.

Age and religion were found to be significantly associated with kosso intake with out tape worm infestation during pregnancy. Age, religion, duration of stay in that kebele, abortion and number of children at home were significantly associated with work during pregnancy. Duration of stay in that kebele and abortion is significantly associated with home delivery practice.

Family monthly income is associated with kosso intake, abortion and educational status of the women is associated with work during pregnancy and abortion is associated with home delivery practice.

In general HTPs during pregnancy, labour and delivery are highly prevalent and the effects of some TPs are not well kown.

7.2. Recommendation

HTPs that are commonly practiced during pregnancy and childbirth should be mimimized by involving different concerned bodies.

The District health bureau should take as a major factor for maternal and new born morbidity and mortality and should strengthen the implementation of maternal and new born health care strategies.

First HEWs in that community should get aware in such HTPs and take it an important agenda and discuss with the community leaders, community health agents and religious leaders. Finally based on the consensus reached, sustainable health education should be given to community and to the mother.

Adequate in-service training for HEWs is mandatory to increase their midwifery skills so that they will be able to conduct normal deliveries and will get community acceptance in this regard.

Health facilities especially health posts should be well staffed and equipped with necessary trained human power and materials since ensuring accessibilities of health facilities alone does not bring health service utilization.

Non governmental organizations and other stake holders should also be involved to promote maternal health care and avert related with HTPs in this study.

Finally some of the HTP outcomes were not studied and I recommend further research to be done on this area.

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Annexes

Annex I. English Version Information Sheet

English version information sheet: For study on Traditional Practices during pregnancy, labour and delivery.

Information sheet: For study on Assessment of Traditional Practices during Pregnancy, Labour and Delivery at Kersa Malima District, South West Shoa Zone, Oromia regional State.

Greeting- Hello!

My name is _____, this study is conducting by Hulemenaye Tiruneh, She came from Addis Ababa University Nursing Department, post graduate school and she has permission from regional health bureau. The reason why she came here is to conduct a research on assessment of Traditional Practices during Pregnancy, Labour and Delivery among the reproductive age women at Kersa Malima District, South West Shoa Zone, Oromia regional State. The purpose of this study is to assess Traditional Practices during Pregnancy Labour and Delivery and forward some recommendations to concerned bodies that will help to improve the existing efforts in the area of maternal and newborn health. If you have pregnancy in the last five years, your participation is very important to the outcome of the study. If so, I would like to ask you some very personal questions which may take about 45 minutes. All the information that you are going to provide me will remain confidential and you don't need to mention your name. For this reason, I kindly request you to give me your sincere and truthful answer. All this is completely on voluntary bases and you have the right to refuse from participation. Participation or non-participation and refusal to answer questions will have no effect on your life. If you have further questions or would like to know the results of this study, please feel free to contact the principal investigator; with the following address.

- Hulemenaye Tiruneh
- Cell phone: +251911854875
- E-mail: tsaunu@gmail.com

Annex II. Informed Consent form English Version
Questionnaire for community-based survey on Assessment of Traditional Practices during
Pregnancy, Labour and Delivery at Kersa Malima District, South West Shoa Zone, Oromia
regional State.

Verbal consent

Greetings

Hello! My name is _____. I am working in research team of Addis Ababa University, Department Nursing and Midwifery.

I am conducting a study of research on assessment of Traditional Practices during Pregnancy, Labour and Delivery among the reproductive age women at Kersa Malima District, South West Shoa Zone, Oromia regional State. You are kindly requested to be included in the study, which will have importance in improving maternal and child health services. The interview will take about 45 minutes. No information concerning you, as individual will be passed to another individual or institution without your agreement. Your participation is voluntary and you have the right to not participate fully or partially. If you agree to be included in the study I will start my questions by asking general identification points. Only honest answers would contribute to improvement of health planning.

The study has approval from Addis Ababa University. “May I continue?”

If yes, continue interviewing

If No, thank and stop interviewing

Name of the interviewer, _____ Sign, _____ Date of interview _____

Name of the supervisor, _____ Sign, _____ Date _____

Annex III. English Version Questionnaire

Form1. Household questionnaire

1. Address; kebele/peasant association _____
2. Monthly income of the family in birr _____
3. Animal possession
 - a. Number of cattle
 - b. Number of sheep
 - c. Other animals (Specify with their number)
4. Type of crops produced yearly and the amount in quintals
 - a. Maize _____ quintals
 - b. Bean _____ quintals
 - c. Teff _____ quintals
 - d. Wheat _____ quintals
 - e. "shumbura"

Individual Questionnaire

1. Age 1. 15-19 2. 20-24 3. 25-29 4. 30-34 5. 35-39 6. 40-44 7. 45-49
2. Religion a. Orthodox Christian b. Protestant c. Others
3. Ethnicity a. Amhara b. Oromo c. Guragie d. Others
4. Education status a. Can't read and write b. Can read and write c. 1-8 grade
d. 9-12 grade e. >12 grade
5. Occupation a. Farmer b. Housewife c. Merchant d. Day labour
6. Duration stay in the kebele/peasant association
 - a. 5-10 years
 - b. 11-16 years
 - c. 17-22 years
 - d. >22 years

7. Marital status

- a. Single b. Married c. Divorced d. Widowed

8. Occupation of the spouse (if married) a. Farmer b. Merchant c. daily
labour. government employ e. other

9. Educational status of the spouse (if married)

- a. Cann't read and write b. Can read and write c. 1-8grade d. 9-12grade. >12

10. Age at first marriage (if she is ever married) _____

11. Are you pregnant now? a. Yes b.No

12. Number of abortions _____

13. Number of still births _____

14. Number of live birth _____

15. Number of deaths within 28 days of delivery _____

16. Number of children you have now _____

Form3. Traditional Practices during pregnancy labour and delivery

A. Experience of Traditional Practices during the last pregnancy (if she is pregnant now, ask about the previous from this pregnancy)

1. During your last pregnancy, did you experience tape worm infestation?

- a. Yes b. No (If the answer is no skip to question number 15)

2. If the answer to question number "1" is "yes" where did you go for treatment?

- a. Hospital /health center/ health post b. Local herbal healer

c. I took the medicine by myself after Ipreparing itd. Other place (specify)

3. If the answer to question number 1 is "c", "d" or "e" why do you choose to go there or

to treat yourself?

a. Hospitals / health centers / health stations or health posts are far

b. Because of economic reasons, I was not able to go to the hospitals /health centers/health station or health posts

c. The health professionals has no good manner

d. Because I know the medicine.

e. Because more than the health professional the others can handle the problem or traditional medicines can best cure the disease

f. Others reasons (specify)

4. During your pregnancy, without the presence of signs and symptoms of tape worm infestation, were you taking Kosso or other herbal medicines for tape worm infestation?

a. Yes

b. No

5. If the answer is to question number 4 is "yes", during your first 3 months of pregnancy,

How often were you taking it?_____

6. If the answer is to question number 4 is "yes", during your second 3 months of pregnancy,

How often were you taking it?_____

7. If the answer is to question number 4 is "yes", during your last 3 months of pregnancy,

How often were you taking it?_____

8. If the answer is to question number 5 is "yes", what were the reasons for taking kosso or other herbal medicines, without the presence of signs and symptoms of tape worm infestation?

a. To feel at ease and to increase appetite

b. Simply because it is common in our culture

- c. To wash the abdomen during labour hence facilitating delivery
 - d. To remove the food which is attached to the fetus so that fetus will be clean
 - g. Other reasons (specify)_____
9. During your last pregnancy, have you experienced diseases other than tape worm infestation?
- a. Yes b. No
10. If the answer question number 9 is “yes”, what was that disease? (Specify)_____
11. If the answer question number 9 is “yes”, where did you go for the treatment?
- a. Hospital/health center/ health post b. Local herbal healer
 - c. I took the medicine myself after preparing it d. Other place (specify)_____
12. If the answer given to question number 11 is ‘c’, ‘d’ or ‘e’ why did you chose to go there or treat yourself?
- a. Hospital/health center/ health station or health posts are far
 - b. Because of economic reasons, I was not able to go to the hospital/health center/ health station or health posts
 - c. The health professionals have no good manner
 - d. Because I know the medicine
 - e. Because more than the health professional the others can handle the problem or traditional medicines can best cure the disease
 - f. Other reasons (specify)_____
13. If the answer to question number 12 is “c” “d” or “e”, what was the medicine that you took?
- a. I don’t know

- b. I know the medicine but I am not willing to tell
- c. If you know the medicine, and if you are willing to tell what was that medicine? (Specify)

14. During your last pregnancy, were you doing work during your pregnancy period?

- a. Yes
- b. No

15. If the answer to question number 14 is “yes”, what type of work is it?

16. If the answer to question number 14 is “yes”, what was the reason to do that work?

17. If the answer to question number 14 is “no”, what was the reason not to do other work?

18. Did you experience vaginal bleeding during your last pregnancy?

- a. Yes
- b. No

19. If the answer to question number 18 is “yes”, what treatment have you taken?

- a. Treatment was given in health institution
- b. Bleeding subsided without taking treatment
- c. Treatment was given by the local herbal healer
- d. Other treatment (Specify) _____

20. Who decides to seek help from other persons/health institutions when you are sick during pregnancy? a. Myself b. The husband c. My husband and me

21. What other Traditional Practices have you faced during your last pregnancy? (Specify) _____

B. TRADITIONAL PRACTICES DURING LAST LABOUR AND DELIVERY

I. TRADITIONAL PRACTICES DONE ON THE MOTHER

22. Where did you give birth during your last delivery?

- a. Hospital/health center/ health station/Health post b. Home c. Other place (Specify)

23. In your last delivery, if you have given birth at home, who has assisted your delivery?

- a. TBA b. Mother-in-law c. Neighbor d. respondents family

24. In your last delivery, if you have given birth at home, were there special ceremonies during labour? a. Yes b. No

25. If the answer to question number 24 is “yes”, what were the ceremonies?

- a. Singing
- b. Applying butter, on the head to all people in the house
- c. Smoking leaves with good smell in the house
- d. Other ceremonies (Specify)_____

26. Have you faced massaging during your last delivery? a. Yes b. No

27. If the answer to question number 26 is “yes”, what do you think are the reasons for doing it?

- a. To correct the position of the fetus b. To facilitate labour c. To relieve labour pain

28. Who decides to seek help from other persons/health institutions during labour?

- a. Myself b. Husband c. Myself and my husband

29. What other Traditional Practices have you faced during your last delivery? (Specify)_____

II. TRADITIONAL PRACTICE DONE ON THE PLACENTA DURING THE LAST DELIVERY

30. During your last delivery, was the outcome alive baby?

- a. Yes b. No

31. During your last delivery, the delivery was outside the institution, what was used to cut the umbilical cord? a. New and boiled razor blade b. New not boiled razor blade
c. Boiled scissors d. not boiled scissors
32. During your last delivery, was the umbilical cord tied after cutting it?
a. Yes b. No
33. If the answer is “yes” to question number 32, what was used to tie the umbilical cord?
a. Thread b. Enset c. Bark of tree d. Other materials (Specify)
34. If the answer is “no” to question number 32, what was the reason not to tie the umbilical cord?
a. The cut end of the cord will dry by itself
b. It was left unknowingly
c. Other reasons (Specify) _____
35. During your last delivery, was anything applied to the umbilical stump after cutting it?
a. Yes b. No c. I don't know
36. If the answer to question number 35 is “yes” what was applied to the umbilical stump?
a. Butter b. Vaseline c. hair oil
37. What other Traditional Practices were done and the placenta during your last delivery?
(Specify)_____

Annex IV. Information Sheet Afan Oromifa Version

Univarsityii Addis Ababa fi garee deesistoota sagantaa Mastersaa

Umriin isaanii 15–49 dubartoota ta'aniif yaada tokko tokko fidhiidhaan akka nuu kennan kan qarqaaru.

Akkam bultan/oltan?

Maqaan kiyya_____ jedhama. Ani univarsityii finfinneet barataa mastersaa yoo ta'u, qorannaa deegarsaa kutaa barnoota Narsiifii Midwayifarii kan geggeefamu irratti Anaaf Isiin jiddutti daqiiqaa 45maaf marii qabna. Kanaafu akka hirmaattan kabajaan isin gaafadha.

Gara marii seenun duratti haalafii kayyoo qo'annoo waan isinii dubbisuuf akka nahordoftan isin gafadha. Dhuma irratti qo'annoo kana irratti hirmaachuf waliigaluufi waligaluu dhabu keessan natti himtan.

Kaayyoon qo'annoo kanaa dubartoota Hospitaal Robetti hordoffii ulfaatif kan dhufan waa'ee fayyadama hospitaalatti dahuu ilaala. Yaani keessan fayyaa haadholee foyyessuuf tattaaffii godhamaa jiru nideeggara.

Turtii qabnu keessatti iccitiin ni eeggama, maqaan kessan hinbarreefamu, deebii kessan nama biraatif dabarsinee hinkennamu. Gabaasa qorannoo irratti waa'een kessan hin ibsamu.

Unki hayyama kessan irratti kan hundaa'e yoo ta'u hirmaachu dhabuu kessatti, ammas ta'ee ufduratti tajaajila isin argattan irratti dhiibbaa hinqabu.

Qorannoo irratti hirmaachuf fedhii niqabdu?

1. Eeyyeen
2. Hinqabu

Yaadannoo

1. Fedhii yoo qabaattan gara unkaa guttamutti darbaa.
2. Namoonni tajaajila isinii kennu qorannoo kesatti akka hirmaattan dirqisisuun hindanda'amu.

Qorrannoo kanairratti hundaa'ee yoo gaafii kan qabattan ta'e .

- Hulemenaye Tiruneh
- Lakk. Bil: +251911854875E-mail: tsaunu@gmail.com

Annex V. Informed Consent form of Oromifa Version

Questionnaire for community-based survey on Assessment of Traditional Practices during Pregnancy, Labour and Delivery at Kersa Malima District, South West Shoa Zone, Oromia Regional State.

Walii galitee

Nagaa gaafachu

Ani Addee _____ , miseensa garee qorannoo irra.

Qorannoo kun kan inni irratti xiyeefatee, waa'ee barmaatilee yeroo ulfaa ti yeroo da'umsaa rawwataman qorachuu. Kanaaf qorannoo kana irrattii wanta isiin irraa eegamu akka nuufgotan kabajaan isiin gaafanna. Kun ammoo fayyaa hadhooleefii da'immaniif fayidaa guddaaf jijjiirama qabu akka fidu nigargaara.

Waliigalitee kessaniin ala iccitii kessan nama tokkoofu yokan ammoo waajira tokkoofuu akka dabarsinee hinkenineef waadaa isinii galla. Yoo qorannoo kana irratti hirmachuu waliigallee gaafii waliigalaa irraa isinii jalqabaa. Deebii kessan kan dhugaa irratti hundahee fayidaa jijjiirama fayyaatif nugargaara.

Qorannoon kun karaa Univarsitii Addis Ababa irraa fudhatama argatee jira. Kanafuu qorannoo kanarratti hirmaachuuf fedhii qabduu?

1. Ni qaba Deebiin ni qaba yoo jette gaafii itti anutti fufi.
2. Hinqabu deebiin hin qabu yoo jette, galatoomaa jedhiiti gaafii addaan kuti.

Fedhii qorannoo adeemsisuuf yaada namarraa kan fuudhu.

Maqaa_____

Guyyaa gaafii itti gaafate/...../..... mallattoo.....

Hordofa isaatin mirkana'u kanmuli'isu

Maqaa.....guyyaa...../...../.....mallattoo.....

Annex VI: Oromifa Version Questionnaire

Kutta I: Gaffannoo maatii

1. Tessoo: Ganda qonnaan bulaa_____
2. Galii ji'aa maatii sanaa_____
3. Bayina horii (bineensota) manaa maatiin sun qabu
 - a. Baayina horii
 - b. Baayina holotaa
 - c. Baayina bineensota manaa kan biro (ya'ibsamu)
4. Baayina gosa midhannii oomishaman kuntaalaan
 - a. Boqqolloo kuntaala
 - b. Boloqqee kuntaala
 - c. Xaafii kuntaala
 - d. Qamadii kuntaala
 - e. Can biro yoo jiraate yan ibsamu

Kutaa: 2

I. Gaafannoo nama dhunfaa (qorannoo lamaaniif kan tajaajilu)

1. Umrii a. 15-19 b. 20-24 c. 25-29 d. 30-34 e. 35-39 f. 40-44 g. 45-49
2. Amantaa a. Orthodoxii b. Islaama c. Protestaantii d. Kaatolikii
 - e. Kanbiroo yoo jiraate yaa ibsamu
3. Saba a. Amaara b. Oromoo c. Guraagee d. Tigiree

e. Kan biroo you jiraate yaa ibsamu _____

5. Sadarka barumsaa

a. Dubbisuu fi barreessuu kan hin dandeenye

b. Dubbisuu fi barreessuu kan dandeessuu/danda'u

c. Sad $1^{ffaa} - 8^{ffaa}$ kan xumure/te

d. Sad $9^{ffaa} - 12^{ffaa}$ kan xumure/te

e. >12

6. Hojii. Qonnan bulaa

b. Haadha warraa

c. Hijjetaa/ttu mootummaa

d. Barataa

e. Hojii dhabeessa (hojii barbaadaa)

f. Kan biroo you jiraate yaa ibsamu

7. Baayiina yeroo ganda qonnaan bulaa sana keessa turan

a. 5-10 Woogaab. 11-16 Woogaa

c. 17-22 Wooga

d. >22 Wooga

8. Hala fuudhaati harumaa

a. Kan hin heerumne /hin fuune b. Kan Herumte/ fuudhec. Kan Hiikite /hiike

d. Haati warraa ykn abbaan warraa kan jalaa duute/du'e

9. Gahee hojii abbaa/ hadha warraa (kan fudhe ykn heerume) _____

10. Sadarkaa barumsaa haadha warraa ykn abbaa waraa

a. Dubbisuu fi barressuu kan hindandeenyeb. Dubbisuu fi barressuu kan dandeessu/danda'u

c. Sad $1-8^{ffaa}$ kan xumure/te. Sad $9-12^{ffaa}$ kan xumure/te

e. Sad >12 kan xumure/te

II. Gaffanoo nama dhuunfaa (barmaatilee yeroo ulfaa ti yeroo da'umsaa rawwataman qorachuu qofaaf can oolu)

11. Yeroo jalqaba heerumte umriin kee meeqa ture (kan harumteef qofa) _____

12. Yeroo ammaa garaatti baattee (ulfaa)? a. Eeyyee b. Lakkii
13. Baayina ulfa hin barabaachifne ofirraa baasuu _____
14. Ijoollee lubbuu malee (du'anii) dhallatan jiruu? Meeqa _____
15. Ijoollee lubbuudhaan (fayaa) dhallatan meeqa qabda? _____
16. Erga dhalatanii booda guyoota 28 giddutti baayine ijoollee du'an _____
17. Yeroo amma ijoollee meeqa qabda _____

Kutaa 3: Barmaatilee yeroo ulfaa fi yeroo da'umsaa raawataman

A. Yeroo (wayita) ulfaa gara dhumaa irratti gochaawan barmaatilee raawataman (dubartiin sun yeroo ammaa ulfa yoo taatee waa'ee ulfa isa yeroo darbee ykn kan duraanii yaa gaafatamtuu)

1. Wayita ulfaa keessan isa dhumaa irratti dhibee (dhukkuba) koosoo isiin qabee turee?
 - a. Eyyee
 - b. Lakki nan qabne

(Deebiin kenname "lakkii" yoo ta'e gara gaaffii 15ffaatti darbi)
2. Gaaffii 1^{ffaa} irratti deebii keessan "Eyyee" yoo ta'e yaalamudhaaf eessa deemtan?
 - a. Hospitaala/Buufata fayyaa/Kilinika
 - b. Kellaa fayyaa
 - c. Beektota qorichaa ganda keessaa
 - d. Ani ofii kiyyaan qoricha qopheesseen fudhadhee
 - e. Kan biro yoo jiraate yaa ibsamu _____
3. Gaaffiin 2^{ffaa} tiif deebii keessan c, d ykn e yoo ta'ee maaliif gara sana deemu ykn ofiin of yaaluu filattan?
 - a. Hospitaalli, Bufatni fayyaa, Kilinikni ykn Kellaan fayyaa fagoo waan ta'eef
 - b. Hospitaalli, Bufatni fayyaa, Kilinikni ykn Kellaan fayyaa deemee yaalamudhaaf hanqina qarshii waan na mudateef
 - c. Hogeeyyiin fayyaa ykn qindeessitootni fayyaa sadarkaa gandaa naamusa gaariittin waan nama hin simmaneef

- d. Qoricha isaa waan ofii kiyaan waanan beekkuuf
- e. Hogeeyii fayyaa caalaa namootni biro dhibee kana yaalu waan dandaa'aniif ykn qorichi habashaa caalaatti waan nama fayyisuuf
- f. Sababiin biro yoo jiraate yaa ibsamu _____
4. Wayita ulfaa isa dhumaa rakkoon dhibee koosoo osoo hin dhaga'amiin fi mallattoo tokkollee osoo hin argiin qoricha koosoo fudhatanii jirtuu?
1. Eyyee 2. Lakki
5. Gaaffii 4^{ffaa} irratti deebiin keessan “eyyee” yoo ta'e ji'oota ulfaa kan jalqabaa sadan (ulfa irraa amma ji'a sadiitti) yeroo ammamii keessatti ture qoricha kan fudhattan?_____
6. Gaaffii 4^{ffaa} irratti deebiin keessan “eyyee” yoo ta'e ji'oota sadan ulfaa isa lammaffaa (ji'a 4-6) keessatti yeroo ammamii gidduutti ture qoricha kan fudhattan?_____
7. Gaaffii 4^{ffaa} irratti deebiin keessan “eyyee” yoo ta'e ji'oota sadan ulfaa isa dhumaa (ji'a 7-9) keessatti yeroo ammamii gidduutti ture qoricha kan fudhattan?_____
8. Gaaffii 4^{ffaa} irratti deebiin keessan “eyyee” yoo ta'e dhibee koosoo osoo isiniitti hin dhaga'amiinii fi mallattoo osoo hin argiin koosoo ykn qoricha koosoo kan biro maaliif fudhattan?
- a. Yeroo ciniinsuu garaa keessan akka dhiquu fi ciniinsuu akka ariifachisuu
- b. Nyaatni ani nyaduu dhaqna da'ima waan qabatuuf akka irraa qulqulleessuuf jecha
- c. Qaamni keessan waan isiinitti salphatuuf
- d. Nyaata shaggaatti akka isiin nyaachisuuf
- e. Aadaa keenyaan waan bartameef qofa
- f. Sababni biro yoo jiraate yaa ibsamu _____
9. Yeroo ulfaa keessan isa dhumaa koosootiin ala dhibeen biroo isiin dhukkubee beekaa?
1. Eyyee 2. Lakki
10. Gaaffii 9^{ffaa} deebiin “eyyee” yoo ta'e dhibee(dhukkuba) akkamii kan isiin dhukkube? Yaa ibsamuu _____
11. Gaaffii 9^{ffaa} deebiin “eyyee” yoo ta'e yaalamudhaaf eessa deemtan?
- a. Hospitaala/Buufata fayyaa/Kilinika
- b. Kellaa fayyaa

- c. Beektota qorichaa ganda keessaa
 - d. Ani ofii kiyaan qoricha qopheeseen fudhadhee
 - e. Kan biro yoo jiraate yaa ibsamu _____
12. Gaaffiin 11^{ffaa} tiif deebin kessan c, d ykn e yoo ta'ee maaliif gara sana deemu ykn ofiin of yaaluu filattan?
- a. Hospitaalli, Bufatni fayyaa, Kilinikni ykn Kellaan fayyaa fagoo waan ta'eef
 - b. Hospitaalli, Bufatni fayyaa, Kilinikni ykn Kellaan fayyaa deemee yaalamudhaaf hanqina qarshii waan na mudateef
 - c. Hogeeyyiin fayyaa ykn qindeessitootni fayyaa sadarkaa gandaa naamusa gaariittin waan nama hin simmaneef
 - d. Qoricha isaa waan ofii kiyaan waanan beekkuuf
 - e. Hogeeyii fayyaa caalaa namootni biro dhibee kana yaalu waan dandaa'aniif ykn qorichi habashaa caalaatti waan nama fayyisuuf
 - f. Sababiin biro yoo jiraate yaa ibsamu _____
13. Gaaffii 12^{ffaa} tiif deebiin kennamee c, d ykn e yoo ta'e qoricha akkamii ture kan fudhattan?
- a. Qoricha fudhadhe hin bekkuu
 - b. Qoricha fudhadhe nan bekka garuu himuu hin berbaduu
 - c. Qoricha fudhatan kan bekkatan ta'e himu kan barbaaddan qorichi fudhatan maali?
14. Yeroo ulfaa darbetti waanti adda ta'ee kan hojeete jira; kan yeroo ulfaa hinta'iin hinhojeene? 1. Eyyee 2. Lakki
15. Gaaffii 14^{ffaa} deebiin "eyyee" yoo ta'e hojin hojatee maali?

16. Gaaffii 14^{ffaa} deebiin "eyyee" yoo ta'e sabbaabni isaa maali?

17. Gaaffii 14^{ffaa} deebiin "lakki" yoo ta'e sabbaabni isaa maali?

18. Wayita ulfa isa dhumaa gadameessa keessan irraa dhiignii dhangala'ee (ya'ee) ture?
1. Eyyee 2. Lakkii
19. Gaaffii 18^{ffaa} deebiin "eyyee" yoo ta'e qoricha fudhatan maal ture?
- a. Yaaliin naaf taasifame dhaabilee fayyaa irratti
 - b. Dhiiga Re'ee ykn Hoolaa dhugeen ture

- c. Osoo yaala tokkolee hin argatiin dhiguu dhisee
 - d. Nammoota ganda keessa qoricha beekkan birratti yaalame
 - e. Yaala biraa yoo jiraate yaa ibsamu _____
20. Yeroo ulfaa dhukkubsattan namoota biraa ykn dhaabbilee fayyaa irraa gargaarsa akka argatan eenyutu murteessa?
- a. Ana
 - b. Abbaa warraa
 - c. Abbaa warraa koo fi Ana
 - d. Nama biraa yoo jiraate yaa ibsamuu _____
21. Yeroo ulfaa keessan isa dhumaa barmaatileen raawwataman keessaa wantootni isiin mudatan maal fa'ii turan? _____

Barmaatilee yeroo da'umsa isa dhumaa raawwataman.

I. Barmaatilee haadha (Deessuu) irratti raawwataman

22. Yeroo dhumaaf yoo deessan eessatti ture?
- a. Hospitaala/Buufata fayyaa/Kilinika
 - b. Kellaa fayyaa
 - c. Mana
 - d. Bakka biro yoo ta'e yaa ibsamu _____
- (Deebiin kenname a ykn b yoo ta'e gara gaaffii 34^{ffaa}tti darbii)
23. Yeroo dhumaa yommuu deessan mana keessatti yoo ta'e kan isiin deessise eehyu ture?
- a. Dubrtii leenjii fi muuxannoo deessisuu qabduu
 - b. Haadha abbaa warraa keessanii
 - c. Olla keessan
 - d. Haadha warraa abbaa warraa kiyyaa ishee tokko
 - e. Kan biro yoo jiraate yaa ibsamuu _____
24. Yeroo dhumaa mana keessatti yommuu deessan yeroo ciniinsuu kabaja (Ayyaana) adda ta'etu ture?
- 1. Eyyee
 - 2. Lakkii
25. Gaaffii 24^{ffaa} deebiin keessan "eyyee" yoo ta'e kabajni (ayyaani) sun maal ture?
- a. Ililchuu
 - b. Namootni mana keessa turan hundi dhadhaa dibachuu

- a. Kirriidhaan
 - b. Baala warqeedhaan
 - c. Quncee mukaatiin
 - d. Kan biroo yoo jiraate yaa ibsamuu _____
34. Gaaffii 32^{ffaa} deebiin “lakkii” yoo ta’e osoo hin hidhamiin sababiin isaa maali?
- a. Haandhuurrii cite sun ofuumaan maan goguuf
 - b. Hanqina beekumsaa (hubannoo)
 - c. Sababni biro yoo jiraate yaa ibsamuu _____
35. Yeroo dhumaa yommuu deessan handhuura isa cite fiixee isaa irratti wanti godhame jiraa?
- a. Eyyee
 - b. Lakkii
36. Gaaffii 35^{ffaa} deebiin “eyyee” yoo ta’e wanti goodhamee sun maali?
- a. Dhoqqee
 - b. Biyyoo
 - c. Dhoqqee sa’a
 - d. Dhadhaa
 - e. kan biro yoo jiraate _____
37. Yeroo dhumaa yommuu deessan barmaatileen mucaa haaraa dhalatee fi obbaatti irratti wanti raawwataman jiru? Yaa ibsamuu _____

Declaration

The thesis my original work, has not been presented for only other university and that all sources of material used for the thesis have been duly acknowledged.

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Sign _____

Date _____