

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES

**PRACTICES AND BELIEFS DURING PREGNANCY
AND CHILD BIRTH IN ADAMITULU WOREDA,
OROMIYA REGIONAL STATE, ETHIOPIA**

YIGZAW KEBEDE, M.D.

DECEMBER, 1997

**PRACTICES AND BELIEFS DURING PREGNANCY AND
CHILD BIRTH IN ADAMITULU WOREDA, OROMIYA
REGIONAL STATE, ETHIOPIA**

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**ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES**

Practices and Beliefs during Pregnancy and Child birth

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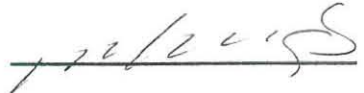
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DEDICATION

This thesis is dedicated to my wife W/O Etaferahu Alamaw, who had taken the whole responsibility of managing the family during the course. It is also dedicated to my son Henok Yigzaw and to my daughter Eyerusalem Yigzaw, who had suffered by keeping quiet while I was engaged in study.

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LIST OF ABBREVIATIONS

WHO – World Health Organization

MOH – Ministry of Health

TBA – Traditional Birth Attendant

TTBA – Trained Traditional Birth Attendant

NCTPE – National Committee on Traditional Practices in Ethiopia

PEM – Protein Energy Malnutrition

LBW – Low Birth Weight

PROM – Premature Rupture of the Membranes

pPROM – preterm Premature Rupture of the Membranes

ANC – Ante Natal Care

MCH – Maternal and Child Health

CHA – Community Health Agent

BP – Blood Pressure

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ABSTRACT

This community-based cross sectional study was carried out from May–August 1997 in Adamitulu Woreda, East Shewa Zone, Oromiya Regional State. The objective was to assess practices and beliefs during pregnancy and child birth, with special emphasis to traditional practices, and to identify factors related with them. Survey and focus group discussions were the techniques used to collect data. A total of 1023 women, 328 in Zeway town and 695 in the surrounding peasant associations, were interviewed. The major harmful traditional practices during pregnancy were restriction of certain food items, and taking "kosso" (*Hagenia abyssinica*) for the treatment of Tape Worm infestation and for other purposes. During child birth, the major harmful traditional practices identified were abdominal massage, and lubrication of birth canal with butter, using unboiled materials to cut the umbilical cord, leaving the umbilical stump untied, application of materials (mud, soil, cow dung, butter) on the umbilical stump, and giving butter to the new born. The major harmful traditional practices after delivery were delayed commencement of breast feeding, discarding colostrum, confining the child from sun light, and application of hot metal to the child when he/she has abdominal cramp. The effects of sex during pregnancy, "Metaten" during pregnancy, and drinking goat or sheep blood during delivery is not well studied that it is difficult to label them as useful, harmful or neutral.

In general, harmful traditional practices are highly prevalent in the 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 whose effect is not well known, and similar studies in other areas is therefore recommended.

1. INTRODUCTION

Women and children are vulnerable and sensitive to unfavourable influences in the environment including poor nutrition, toxic substances, infection, poor sanitation, crowding, inadequate health care, or lack of education (1,2).

Pregnancy brings high risk for women. Moreover, when pregnant women have complications, the infants these women bear have an increased risk for becoming low birth weight, suffer from illness, disability, and perinatal mortality (2).

It is estimated that 500,000 women die every year from complications of pregnancy. Ratios of 500-800 maternal deaths per 100,000 births are common in developing countries, compared to ratios of less than 30 in developed countries (3).

In most developed countries perinatal mortality rate has come down to 10 per 1000 births but in third world countries it remains high at the level of 25 to 60 per 1000 births. The most recent studies point to Socio-economic and cultural factors as leading causes of perinatal deaths (4).

One of the factors known to have significant influence on the health of women and children is traditional practice. "Traditional practice" is a

habitual or customary performance or operation of statements, beliefs, legends, customs etc., by the individual or community, which are handed down from generation (5). One aspect of the prevalent traditional practices, particularly in developing countries is traditional medicine. There are very few places in the world where traditional healers are not practising (6).

In Africa, prior to European settlement, traditional medicine, intertwined with magic and religion, exerted powerful political influence on the conduct of public as well as private affairs. In illness, the traditionally oriented individual learned to differentiate between those symptoms which responded rapidly to the impersonal, mechanical interventions of western medicine and those which seemed only to yield to the more personal, culturally rooted ministrations of the traditional healer. Because most Africans made these pluralist distinctions, traditional healing was able to survive what some might view as its "Dark age" (7).

Until the beginning of the 19th century, all medical practice was traditional. In many countries 80 % or more of the population living in the rural area are cared for by traditional practitioners and birth attendants (6). It is estimated that 45 % of the women of the world are delivered at home by an untrained birth attendant (3). In developing world between 60 % and 80 % of all births are

attended by TBAs (8).

Traditional practices can be beneficial, harmful or may have neutral effects to the mother or fetus/new born/neonate. In developing countries food intake is consciously restricted during pregnancy to facilitate easier labour and delivery (9). Women in the developing world, including those who are pregnant and lactating, are frequently engaged in moderate to high levels of physical activity that are not accompanied by increased energy intake, the combined effect of which is to cause low weight gain during pregnancy, impairment of fetal growth, and decreased ability to sustain milk production (9). Many drugs or herbs, taken by the mother during pregnancy, may have adverse effects on the fetus (10). Poor cord management during delivery results in neonatal tetanus (11,12). Pregnant women have different preference of place of delivery. To deliver at home, whatever reasons women give, can predispose them to complications (13,14,15,16).

Ethnomedical beliefs and practices continue to be widely practised through out urban and rural Ethiopia, reflecting considerable cultural continuity and the persistently poor accessibility and quality of most modern health services. The 1982-83 National Rural Health Survey revealed that more than half of all health seekers used traditional healers, lay treatment, or self

treatment. Moreover, 26 % of a representative population in Addis Ababa used traditional medicine. The wide spread recourse to traditional medicine should be attributed to a variety of factors, including cultural consonance, the nature of illness, attributed efficacy of treatment, geographical proximity, and economic affordability and social persuasion (17). The great majority of Ethiopian women deliver at home and follow traditional birth customs. A variety of practices are enacted post natally including cutting the umbilical cord with razor blade (new or used); giving butter for the new born etc. (17,18,19).

The World Health Assembly of May 1976 first discussed seriously the contribution that traditional medicine makes to the health care of the community. Since then traditional medicine was incorporated in many programmes thus narrowing the gap between traditional and modern systems (6).

In Ethiopia, traditional medicine was recognized by MOH as an important alternative health care, readily available to both urban and rural communities. An office for traditional medicine was established in the MOH in 1975, assigned with the task of coordinating nation wide activities related to traditional medicine. But unfortunately little has been accomplished since then (17). In 1993, National Committee on Traditional Practice

in Ethiopia (NCTPE) was established to deal with traditional practices (20).

This study gives emphasis to traditional practices during pregnancy and child birth. The reason for giving emphasis is that traditional practices are not easy to change. Hence systematic identification of these traditional practices and designing appropriate intervention is required.

The justifications for conducting study on Traditional Practices during pregnancy and child birth in Adamitulu Woreda (District) are:

1. Traditional practices during pregnancy, labour and delivery can affect mothers and fetus/new born/infant
2. The type and magnitude of traditional practices in Ethiopia, in general, is expected to be high though not well studied, and there was no similar study conducted in the study area
3. The study is timely in that the study result will be utilized by NCTPE and by others to bring change on harmful traditional practices or to promote the useful traditions.
4. The current health policy gives emphasis to the health of women and children, and to traditional practices (21).
5. After detecting harmful traditional practices, even though it will take time, it is possible to eradicate these practices by designing appropriate interventions.

3. LITERATURE REVIEW

3.1. DEFINITIONS

"Tradition" means the handing down of statements, beliefs, legends, customs etc., from generation to generation by word of mouth or by practice (5).

" Culture" is the learned, socially acquired traditions and life styles of the members of society, including their patterned repetitive ways of thinking, feeling, and acting (behaving) (22).

3.2. Food intake during pregnancy and influence of culture

An expectant mother needs a nutritionally balanced diet both before and during pregnancy. A poor diet may have adverse effects on herself and on her child in many ways (10). Fetal growth is affected by the quantity and quality of its nutrient supply. The effects on the fetus, its organs, and specific cell types in the tissues will vary depending on the type of insult, the severity and duration of the insult, and the timing of that insult (23).

The birth weight of infants of well-fed mothers in the upper Socio-economic classes are higher on average than those of poorer mothers. A low birth weight may be due to a baby being born prematurely or to retarded intrauterine growth. The latter is a common cause in poor mothers. There is good statistical evidence from Scotland and South India that birth weights are related to energy intakes of mothers during pregnancy (10). World Health Organization (WHO)

result from eating unrestricted amount of food. The meat from the head of lamb is also avoided in some areas since it is thought to cause large fetal head and difficult labour (26).

In Oman (1973) the main dietary change during pregnancy is to eat less, specifically less proteins. Food intake for the pregnant woman is restricted because it is believed that the fetus lies in the stomach so that enough space should be made for it. Fish intake is also decreased since it is associated with the belief that bones and scales of the fish would make the bones of the fetus too hard and would cause complicated delivery (26).

In Sokoto state of Nigeria, the untrained traditional midwives advise pregnant women to avoid sugar and honey as they cause prolonged painful labour. They also advise pregnant ladies not to take local soda which is supposed to make the fetus slim (26).

In a study, conducted on pregnant girls and women, from a poor urban community in Camden, New Jersey (1985–1990), a low zinc intake was associated with approximately a two fold increase in the risk of low birth weight. The risk of preterm delivery (< 37 complete weeks) was also increased, particularly when rupture of the membranes preceded the onset of labour. A low intake of dietary zinc earlier in pregnancy was associated with a greater than three fold increase in the risk of very preterm delivery (< 33 complete weeks) (27).

Supplementary feeding was offered to pregnant women in 4 rural Guatemalan villages. The mean birth weight of infants was seen to increase with

maternal caloric ingestion during pregnancy. This positive association between maternal caloric ingestion, from supplement and birth weight is observed whether the calories are ingested early or late in pregnancy(28).

Poor maternal nutrition increases the risk of still birth and of deaths of a baby within a week after birth. In this way between 60 and 70 out of every 1000 mothers in the UK lost their babies in the 1930s. By 1945 the losses were between 40 and 50. This rapid fall took place when wartime food policy provided extra food rations for pregnant women at subsidised rations and free supplements of vitamins (10).

The birth of a baby with a congenital defect in the formation of one or more of its organs is a hazard of pregnancy for which it is possible that factors in maternal diet may be responsible (10).

The relation between milk intake and preeclampsia was examined in a cohort of 9291 pregnant women selected from the child health and development study population assembled by the University of California, Berkeley, during 1959– 1966. Exposure was based on glasses of milk per day with and without calcium supplements. Data from both White and Black women displayed a U-shaped distribution of preeclampsia risk in relation to milk and milk plus supplement intake. Logistic regression analysis showed that women who drank 2 glasses of milk per day had the lowest risk. The Relative Risk for those drinking one glass of milk per day was similarly low, but risk for those drinking less than one glass of milk per day was substantially higher. The increased risk associated

with low milk intake is consistent with studies showing reduced BP with increased calcium intake(29).

A retrospective record analysis during the food emergency of 1984/85 in Northern Ethiopia, showed that birth weight and neonatal mortality were related to selected maternal characteristics. Mean birth weights were significantly lower than those previously reported in other Ethiopian populations. Birth weights were related to maternal weights recorded immediately after delivery (30).

In Gondar region, north west Ethiopia, the prevalence of low birth weight was found to be 17.8 %. The factors for high prevalence of low birth weight in the area could be the prevailing socioeconomic stress on the population due to the increased cost of living. The mean monthly family income of the study population was found to be less than 149 Birr. This corresponds to the highest proportion of low birth weight. The risk of LBW was found to be significantly high in those mothers whose age was below 20. The marital status of the mothers was also found to be related to the occurrence of LBW in this study, LBW being higher for single mothers (31).

Generally the observed nutritional practices during pregnancy have been found to have a number of consequences on the outcome of pregnancy. Restriction of food is considered as a harmful traditional practice because it is known to cause maternal under nutrition which in turn will result in retarded intrauterine growth, low birth weight, still birth, preeclampsia, death in the neonatal period.

3.3. Work and Pregnancy

A review of literature on the combined impact of diet and physical activity on pregnancy and lactation, by the Committee on International Nutrition Programs and of the National Academy on Science, concluded that women in the developing world, including those who are pregnant and lactating, are frequently engaged in moderate to high levels of physical activity that are not accompanied by increases in energy intake, the combined effect of which is to cause low weight gain during pregnancy, impairment of intrauterine growth, and decreased ability to sustain milk production. Holmboe- Ottesen et al. (1989) point to a number of studies that show lower pregnancy weight gain during the peak agricultural season, emphasizing that this is due to the combined effects of low energy intake and high energy expenditure (9).

The study conducted in four maternity units in France, in 1987 and 1988, revealed that occupation, but not working conditions, affected the incidence of preterm birth. This result is discordant with other studies which underlined the excess of preterm births among women with strenuous working conditions (32).

In a prospective study, which was conducted in Orebro country from oct. 1980 to June 1983, women who reported heavy lifting did not have in general more unfavourable outcomes than other women, although the risk estimates varied between different occupational categories. Lifting of weights ≥ 12 Kg more than 50 times per week increased the risk of preterm birth, but only among women who stopped working before the 32nd week of pregnancy (33).

In Ethiopia birth weights were low when mothers were undertaking heavy physical work (10).

3.4. Intake of herbal medicine/Western medicine during pregnancy, labour and delivery

Many drugs taken by a mother may have adverse effects on her baby and herself. Some drugs are potentially dangerous because they have been shown to be teratogenic (10). Two major causes of inappropriate drug use in developing countries are insufficient control of the distribution, prescription and use of pharmaceutical and high prevalence of self-medication. Studies in Ghana, Thailand, Brazil, and the Philippines found that the percentage of illness episodes treated by self-medication ranges from 50 – 90 %. In Asian countries herbs are most commonly used after a prior treatment with pharmaceutical has failed (34).

The study conducted among residents of western Kenya revealed that most residents begin treatment with herbal remedies or antipyretics for malaria. Antimalarials are used as the initial treatment in only about half of the cases. These practices are fairly common despite the fact that commercial chloroquine preparations are well known to residents of western Kenya and are generally recognized to be more effective against malaria than either antipyretics or herbal remedies. Various relatively inexpensive oral 4-amino-quinolines are available in local shops, and self-treatment with them is extremely common in western Kenya as well as on the coastal regions of the country. Injectable antimalarials are

not stocked in shops but can be purchased without prescription from pharmacies in the larger towns (35).

Traditional medicine continue to be widely used in Ethiopia inspite of the growing popularity of manufactured drugs. Little is known about the public health importance and potential pharmaceutical uses of plant medicines. The chemistry and economic importance of only two Ethiopian drug plants– *Phytolacca dodecandra* and *Hagenia abyssinica* have been studied in depth and little is known about the nearly 500 fold medicinal plants (36,37).

The studies conducted in 1973 and 1976, on uses and public health aspects of traditional medicines sold by 416 vendors in six markets in Addis Ababa, and 13 markets in towns and villages on the Central Plateau and Rift Valley of Ethiopia, revealed that a total of 41 types of plant material were found for sale for a great variety of illnesses and diseases. The most frequently sold medicines were "kosso" (*Hagenia abyssinica*), "enkoko" (*Embelia schimperi*), and "metere" (*Glibus lotoides*). These three taenicides and apparently some other medicines cause clinical side effects if taken in overdoses. Many roots and herbs were sold as general medicines (37). "Kosso", still used in Ethiopia as a tape worm remedy, appears to cause in certain individuals under condition still unknown, a simple or total optic atrophy, which is usually bilateral (38).

Preparation for child birth also entails empirical practices which aim at enhancing the health of both the expectant mother and the fetus. Among the Kembata and Hadiya kosso vermifuge (*Hagenia Abyssinica*) is taken at various

stages of the pregnancy for the purpose of:-

1. Cleaning the bowels, as it would be shameful for a woman to show intestinal parasites at birth
2. "Making space" for the fetus and
3. Keeping the fetus's weight down, as the delivery of a big baby would cause protracted and painful labour (17).

Some TBAs in Gondar region prescribe the roots of certain herbs for the relief of pain (19).

3.5. Sex during pregnancy

Sexual relations become very awkward toward the end of pregnancy. The pregnant belly is a real obstacle which becomes between the couples. Usually, in the course of a normal pregnancy, an obstetrician will impose few restrictions on sexual activity, unless there are medical indications such as bleeding or a history of prenatal complications (39).

Association between coitus and preterm birth and pPROM continue to debate (40). Orgasm associated with coitus, can initiate uterine contractions, some of which are strong. This may explain why pregnancies were shorter when women continued coitus during pregnancy, even in the absence of coitally related disorders such as chorioamnionitis (41).

Naeye examined data from 26886 women who participated in the Collaborative Perinatal Project conducted between 1959 and 1966. Among women

reporting coitus within one month of delivery, histological chorioamnionitis but not pPROM was significantly increased. Naeye suggested that motile sperms and proteolytic enzymes in semen might introduce bacteria into the amniotic fluid and promote placental inflammation. Subsequently, Naeye conducted an open prospective trial of condom use to reduce the risk of histological chorioamnionitis among South African women. Histological chorioamnionitis was most commonly found among non-condom users who reported intercourse within the past two days. In addition, women reporting recent coitus with orgasm had a higher rate of pPROM and evidence of placental inflammation. Conversely, among women who reported using condoms, the incidence of chorioamnionitis was reduced by approximately 66 %. In a subsequent analysis of a subset of the Collaborative Perinatal Project data set, Naeye found that women with pPROM were three times more likely to report intercourse within two weeks of delivery than women delivering at term. Naeye again suggested that coitus might introduce infection into the upper reproductive tract and lead to PROM . The frequency of preterm labours might be reduced if ways can be found to block the effects of coitus and prevent chorioamnionitis. The impact would be particularly great in twin gestations, where the effects of coitus and chorioamnionitis appear to be several fold greater than in singleton pregnancies (40,41).

Work by others documents that couples tend to reduce sexual intercourse as pregnancy progresses. Therefore the link between coitus and pPROM may actually be an artifact introduced by comparing the coital frequency for women

near term and those delivering preterm. A number of other investigators have examined coital frequency, female orgasm, and different coital positions as risk factors for pPROM or preterm birth with inconsistent results (40).

The practice of marrying more than one wife or polygamy affects women's health. It has both physical and psychological effects. In this age of HIV/AIDS epidemic, these customs of polygamy or sex with many women are extremely dangerous to the lives of people because in these circumstances transmission will be high (42).

3.6. Traditional practices during labour and delivery

The majority of tetanus cases is attributed to contamination of a wound, of a new born's umbilical stump, or of the puerperal uterus (following inexperienced attempts to remove a retained placenta) (11,12,43). In Northern Nigeria over 65 % of the neonatal mortality was accounted for neonatal tetanus. Poor cord management was shown to have strongest association with neonatal tetanus mortality. Over 60 % of the births have traditional surgeries performed with highly significant association with neonatal tetanus (44).

The benefits of colostrum, and the early initiation of breast feeding have received increased attention since the early 70s. Colostrum has a unique anti-infective properties specially adapted to the environment the new born shares with the mother. Also being put early to the breast positively affects the duration of breast feeding and the bonding of the mother and child. Many cultures around the

world consider colostrum to be of no value and even harmful to their new born and discard it. It is not only colostrum that is regarded unfavourably; the whole breast feeding period may be hampered by diverse ideas on milk quality as a consequence of the mother's mental or physical health, food intake, sexual relations or her other activities(45).

In Guinea-Bissau breast feeding is generally practised for two years or more. Colostrum taboos are known to exist, resulting in delayed commencement of breast feeding especially among mothers from the country's largest ethnic group (Balanta) (45).

The fact that colostrum is secreted in the last weeks of pregnancy may favour the belief that it is an old and stale milk, not suitable for the new born. Another factor may be that mothers in some way associate colostrum with meconium (45,46).

In Ethiopia, the onset of labour changes the mood in the house- hold. Women begin to pray, invoking St. Mary is done by many ethnic groups including some who are not followers of any known Christian denomination. Encouraging and comforting statements assure the woman in labour that all is going to be well. The Gumez and the Issaa are exceptions, to this. Among both peoples there is the superstition that a woman in labour is unclean, and she is, therefore, avoided, so as to keep clear of possible evil spirit, and generally looked down (18).

TBAs, in Ethiopia, facilitate deliveries through massaging and other forms of manipulation, often involving lubrication of the birth canal with butter (17).

In Ethiopia, cutting the umbilical cord with a razor blade; tying the umbilical cord with enset strings; giving butter for the new born baby; discarding the colostrum; delayed initiation of breast feeding are some of the traditional practices enacted postnatally (17,19).

3.7. Utilization of health institutions during pregnancy, labour and delivery

Statistics on utilization of health services can be used as indices of certain kinds of population behaviour. Utilization of health services reveals varying patterns of significance to a wide range of interests (16).

Utilization of health institutions depends on such factors as illness levels, age and sex composition of the population, presence or absence of health facilities, family income, residence, and the perception of providers and recipients of health services (16).

Distance, cost and quality– alone do not give a full understanding of decision making process. Their salience as obstacles is ultimately defined by illness–related factors such as severity. Differential use of health services is also shaped by such variables as gender and Socio– economic status (13).

The study conducted in Nicaragua's Atlantic Coast by Bruce Barrett (1993) revealed that utilization of the new biomedical health services is high, but is not clearly or simply related to any of the predictor variables. Traditional behaviours are related to all predictors, with higher retention of ethnomedical practice among the poor, the less educated and the villagers. Use of the hospital, is higher among

the urban (36 %) than among their rural counterparts (23 %). Indicators of traditional health behaviour are greater in the villages than in the city. Urban children are less likely to be born in the home (26 %) than are their rural counterparts (58 %). Village households are more likely to report herbal medicine use or visit traditional healers than are urban households. The vast majority of both urban and rural respondents report biomedical rather than traditional solutions to common health problems. It is shown that health behaviour is also related to living in individual villages. This can primarily be due to ethnicity and to availability of medical resources. Inter-ethnic differences in health behaviour are also shown. In general the poor are between 3 and 5 times more likely to report a traditional behaviour than are the wealthy. Half of the poor report home birth, while less than 20 % of the wealthier groups do the same. Children of respondents with no formal education are 4 times as likely to be born at home (58%) than are children of respondents with 7 or more years of education (14%). Similarly, members of poorly educated households are more likely to use medical herbs (67 %) and to visit spiritual healers (26 % of children, 15 % of respondents) than are their more educated counterparts. The poorer and least educated people tend to report more traditional practices while the more educated and wealthy tend to report more western or biomedical health practice (14).

In Ethiopia, traditional medicine was recognized by MOH as an important alternative health resource, readily available to both urban and rural communities (17). Normal delivery care is provided in communities by TBAs and others, and

in facilities by health workers. The Safe Motherhood Need Assessment in Ethiopia(1996) revealed a delivery coverage rate of 4.5 % in health facilities, indicating that large numbers of women are delivering in the community (47). The majority of Ethiopian women deliver at home, with the help of one or more women birth attendants. The Gumez women give birth alone, often under a tree near a river, cleans up alone and remains outside the compound until the end of the two month period. The Issaa women also give birth alone, usually while looking after the cows (17,18). The survey conducted in Haykoch and Butajira Awraja, in 1986, showed low utilization of TTBA. Fifteen percent were attended by TTBA during delivery (48). In urban areas of Jimma zone, South Western Ethiopia, the proportion of health unit and home deliveries was found to be equal (47 % Vs 53 %) (49).

The study carried out in Gulele district, Addis Ababa, revealed that three fourths of the respondents preferred to deliver in health institutions and one fourth preferred to deliver at home. The most frequent reason for preference of health institution delivery (40.8 %) was high quality of service. The risk of preference to deliver at home was higher for those who were illiterate; for those whose husband's or partner's attitude towards ANC attendance is negative or unknown, and did not attend ANC clinics. It was also lower for the nulliparae (50).

In Addis Ababa(1983) Antenatal Care coverage was 70 %; 40 % of births took place in hospital; 16 % in MCH clinics; 44 % at home of which 19 % were attended by TBAs. Services were under utilized by women of low socioeconomic

status: One in five women gave birth at home had no ANC and 50 % of these delivered unattended. Maternal Mortality was three fold among women who delivered at home with out a TBA (410.7 per 100000 live births) compared to those attended by TBAs. The still birth / neonatal death ratio of home deliveries conducted by TBAs was 0.5:1 (51). Ethiopian immigrant women, after immigration to Israel chose to deliver their babies in the Hospital rather than import traditional home delivery practices from their home land (52)

2. OBJECTIVES

2.1. GENERAL

To assess practices and beliefs during pregnancy and child birth, with special emphasis to traditional practices, and identify factors related with them in Adamitulu Woreda.

2.2. SPECIFIC

1. To identify traditional practices and beliefs during pregnancy and child birth
2. To measure the magnitude of traditional practices during pregnancy.
3. To measure the magnitude of traditional practices during child birth.
4. To determine factors related to these traditional practices.
5. To describe the practices as useful, neutral or harmful to health based on the existing medical knowledge.

4. METHODS

4.1. STUDY DESIGN

This is a community based cross sectional study conducted from May–August 1997. The study utilized both qualitative and quantitative approaches.

4.2. OPERATIONAL DEFINITION

We have made effort in Addis Ababa University, Ministry of Sport and Culture, Ministry of Health, and National Committee on Traditional Practices in Ethiopia (NCTPE), to get the cut-off point to say a practice "traditional". The cut-off point used in this study is five years to label the practice or belief as traditional. The reason why five year is taken as cut-off point is that, if an individual lives for five years in the area, he/she will used to practice what already is practised in the area.

For the purpose of this study Traditional practice is defined as a habitual or customary practice during pregnancy and child birth

4.2. POPULATION

4.2.1. STUDY AREA

The study area is Adamitulu Woreda, in East Shewa Zone of Oromiya Regional State. The total population of Adamitulu Woreda is estimated to be 122,305 of which 85,614 (70 %) live in the rural area and 36,691 (30 %) live in the urban area. The total population of Zeway town, capital of the Woreda, is

estimated to be 21,916 (53). Of the total rural community 97 % are Moslems, 2.2 % are Orthodox Christians and 0.7 % are Catholics. Whereas in Zeway town 87 % of the inhabitants are Orthodox Christians, 8 % are Moslems. In the rural community 98.3 % are Oromos, 0.6 % are Guragies and 1.1 % belong to other ethnic groups (54).

The Crude Birth Rate (CBR) for East Shewa Zone, in 1994 was 31.2 per 1000 mid year population. The Infant Mortality and Under Five Mortality Rates for the zone, during the same period, were reported to be 128 and 190 per 1000 live births respectively. The Total Fertility Rate (TFR) was 4.5 children per women, and the expectation of life at birth was 48.6 years (55).

The origin of Oromos is believed to be in Ethiopia (where they lived for many centuries), or North East Africa (56). Different cultures are known to exist within the Oromo ethnic group. During marriage, two traditions are experienced by the Moslem Oromos. The first type is called "Wolgera" which means that the female child (usually less than 5 years old) is given to the father of future husband and grow there until she is matured to make sexual intercourse. The second type of marriage is called "Gegewo". In this type of marriage, the parents of the future husband give a lot of cattle and crops to the parents of the future wife as a gift. During wedding, in both types of marriage, the invited guests usually eat "Genfo" (porridge) by sharing the same spoon (Personal communication).

Zeway Health Center, Bulbula Health Station, and Malaria and other Vector Born Diseases Control Center are the health institutions in the Woreda

owned by MOH. There are also four small clinics in the Woreda which are not accountable to Ministry of Health (54).

The economy of the rural population in Adamitulu Woreda is entirely based on farming and cattle rearing. In Zeway town only 11.8 % are government employee and 13.1 % are house wives. There are 3 main industries in the Woreda namely The Soda-Ash Plant, The Caustic Soda Plant, and the Pesticide Factory Project (54).

4.2.2. SOURCE POPULATION

The source population was women of age 15–49 years in Adamitulu Woreda who gave birth in the last five years.

4.2.3. STUDY POPULATION

The study population was women 15–49 years in Zeway town and the surrounding peasant associations which are found within 10 Km radius from Zeway town.

4.2.4. SAMPLE SIZE AND SELECTION OF STUDY UNITS

Using the formula for calculation of sample size in cross sectional studies, under the assumptions of 3 % margin of error and assuming the prevalence of traditional practices in the area to be 50 % (to get maximum sample size) with a confidence level of 95 %, a total of 1174 women (after adding 10.0 %

estimated to be 21,916 (53). Of the total rural community 97 % are Moslems, 2.2 % are Orthodox Christians and 0.7 % are Catholics. Whereas in Zeway town 87 % of the inhabitants are Orthodox Christians, 8 % are Moslems. In the rural community 98.3 % are Oromos, 0.6 % are Guragies and 1.1 % belong to other ethnic groups (54).

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contingency) were required for the survey. Out of the total 79 peasant associations, those peasant associations which are found within 10 Km radius from Zeway town were included in the sampling. The reasons why only peasant associations within 10 Km radius from Zeway town were included in the sample were shortage of fund and inaccessibility of most peasant associations. Ten peasant associations were selected randomly out of 18 peasant associations which are found within 10 Km radius from Zeway town. Both two Kebeles of Zeway town were included in the survey. After selection of the peasant associations, the households were selected systematically. During systematic sampling the sampling unit was house hold. Because the proportion of urban population was 30 %, 352 out of the total 4669 house holds in Zeway town and 822 out of the total 3864 house holds in the peasant associations, which were found within 10 km radius from Zeway town, were selected by systematic sampling. In Zeway town every thirteenth house was selected from the list of house numbers which was obtained from the kebele offices. Since houses were not numbered in the peasant associations, every fourth house was selected by counting from the center of the peasant associations to the North, South, East and West directions.

After the households were selected, women who were 15–49 years old; have resided in the area for at least five years and have given birth in the past five years were interviewed (one randomly selected from each household). If in the selected household there was no woman which fulfilled the selection criteria then one woman was randomly selected from the adjacent household.

4.2.5. INCLUSION CRITERIA FOR THE SURVEY

1. Woman 15–49 years old
2. Woman who has given birth at least once in the last five years
3. Woman who has resided in the area for at least five years

4.2.6. EXCLUSION CRITERIA FOR THE SURVEY

1. Woman <15 or >49 years old
2. Woman who has not given birth in the last five years
3. Woman who has resided in the area for less than five years
4. Woman who is foreigner
5. Woman who has mental illness

4.3. VARIABLES

The dependent variables are:– 1. different practices and beliefs during pregnancy regarding food, work, sex, clothing, treatment and preference of place of treatment, taking of "kosso", and "Metaten". 2. Different practices and beliefs during child birth regarding place of delivery, person who assisted the delivery, ceremonies during delivery, massage, application of butter to the birth canal, drinking goat/sheep blood, management of umbilical cord, giving butter to the new born, expectations from relatives 3. Practices after delivery regarding confining from sun light, application of hot metal to the child when he/she had abdominal cramp, refraining sex after delivery, and feeding of the new born. The independent

variables were the Socio-demographic variables such as address, income, age, religion, ethnicity, education status, occupation, marital status and number of pregnancies.

4.4. DATA COLLECTION: TECHNIQUES, TOOLS AND PROCEDURES

Data collection techniques were questionnaire interview and focus group discussion. Questionnaires, interview guide and focus group discussion guide were the tools used to collect data. The principal investigator first contacted the two supervisors and one coordinator, who have already been contract employees of Addis Ababa University, Medical Faculty. The supervisors were female who had completed twelve grade, and are able to speak Amharic, Oromifa and English. The coordinator was a male sanitarian who can speak only Amharic and English. In the first week of May 1997 three Focus Group Discussions were conducted with 1. Health professionals from Zeway Health Center 2. Men 40 years and above in the peasant associations and 3. Women (including traditional birth attendants) who have given to three or more births. The Focus Group Discussion with the health professionals was chaired by the principal investigator but the discussions in the rural area were chaired by the supervisors in the presence of principal investigator since the principal investigator can't speak Oromifa. These Focus Group Discussions helped to identify the major traditional practices in the area during pregnancy, labour and delivery. After the focus group discussions, a questionnaire was developed in Amharic. Six interviewers were recruited in May 1997 on the

basis of the following criteria: 1. Those who completed grade twelve 2. Can speak Amharic and Oromifa 3. Being female. After recruitment, the supervisors, coordinator and interviewers were trained for seven days, and the questionnaire was pretested as soon as the training was finished. Then survey was conducted using the structured and pre tested questionnaire between June – July 1997.

The second set of focus group discussions was conducted in August 1997 on six selected topics, the selection of which was based on the findings of the survey. The number of participants in each group was 5–7. The selection of participants was done with the help of key informants who were officials of the peasant associations/urban associations(kebele). The topics of discussion, number of groups and type of participants are presented below.

1. Foods that are not restricted and restricted during pregnancy.

Three FGDs were conducted with: 1. mothers who have given three or more births in Zeway town 2. Mothers who have given three or more births in the rural area 3. Traditional birth attendants in the rural area.

2. Taking "Kosso" during pregnancy without the presence of symptoms and signs of tape worm infestation.

Three FGDs were conducted with: 1. mothers who have given three or more births in Zeway town 2. Mothers who have given three or more births in the rural area 3. Traditional birth attendants in the rural area.

3. Place of delivery

Two FGDs were conducted with: 1. urban women who gave three or more births. 2. rural women who gave three or more births.

4. Malaria

Since malaria is prevalent in the area, it is important to know how the pregnant women are behaving when they are infected with malaria.

Two FGDs were conducted with: 1. urban women who gave three or more births. 2. rural women who gave three or more births.

5. Work during pregnancy

Two FGDs were conducted with: 1. urban women who gave three or more births. 2. rural women who gave three or more births.

6. Feeding of the new born

Two FGDs were conducted with: 1. urban women who gave three or more births. 2. rural women who gave three or more births.

To ensure quality, interviewers and supervisors were intensively trained for seven days by the principal investigator. Supervisors checked the completed questionnaires every day. The principal investigator checked the completed questionnaires every week and conducted meetings with the supervisors and interviewers. All the points for focus group discussion were checked before the

discussion is over and all the data were checked before the period of data collection is over.

4.5. DATA PROCESSING AND ANALYSIS

For focus group discussions, the topics were put separately, participants were described and findings were summarized. For the quantitative part data were entered into computer using the statistical package EPI INFO version 5. Frequencies and proportions are calculated according to the various Socio-demographic variables. Chi-square test is used to determine the association between the dependent and independent variables. Logistic regression is applied to control for confounding effect. EPI INFO version 5 and SPSS statistical computer programs were used to analyze the data. In the discussion and conclusion sections, the findings of the survey and focus group discussions were lumped together to complement each other.

4.6. ETHICAL CONSIDERATIONS

Ethical clearance from the Department of Community Health and Faculty of Medicine was obtained. Permission and informed consent was also obtained from community leaders and study subject, respectively. Names are not written on the questionnaire and during interview privacy was maintained. After completion of the study, the findings will be disseminated to the responsible bodies in the area, so that appropriate intervention measures will be taken.

5. RESULTS

A total of 1174 houses were identified for the survey. Eighty women were not willing to participate in the survey (14 in Zeway town and 66 in the peasant associations) and 71 (10 in Zeway town and 61 in the peasant associations) could not be available for interview on repeated visits. The questionnaire were therefore administered on 1023 women (328 in Zeway town & 695 in Peasant associations) making the response rate 87.1 %.

5.1. GENERAL CHARACTERISTICS OF THE RESPONDENTS

The general characteristics of respondents is summarized in table 1. Three hundred twenty eight (32.1 %) of the respondents were residents of Zeway town and 695 (67.9 %) were from the surrounding peasant associations. Most respondents were in the age group 20–29 (54.0 %). Overall, 61.3 % of the respondents were Moslems followed by Orthodox Christians (30.4 %). Eighty percent of the respondents were Oromos and 19.8 % were Guragies. Majority of the respondents were house wives (91.7 %) and illiterate (73.1 %). Ninety two percent were married. The majority (33.7 %) were married at age 15. The earliest documented age of marriage was 7 years. Sixteen percent of the respondents had history of abortion and 11.4 % had history of still birth ranging from one to nine. The maximum number of live births was 15. Ninety one percent of the respondents had monthly income between 30–499 Birr.

Table 1: Sociodemographic characteristics of respondents in Adamtitulu Woreda: May–August 1997.

Sociodemographic characteristics	Urban(n=328) No.(%)	Rural(n=695) No.(%)	Total(n=1023) No.(%)
AGE			
15–19	17(5.2)	49(7.1)	66(6.5)
20–24	81(24.7)	161(23.2)	242(23.7)
25–29	108(32.9)	202(29.1)	310(30.3)
30–34	53(16.2)	113(16.3)	166(16.2)
35–39	57(17.4)	94(13.5)	151(14.8)
40–49	12(3.7)	76(10.9)	88(8.6)
RELIGION			
Orthodox	198(60.4)	113(16.3)	311(30.4)
Moslems	64(19.5)	563(81.0)	627(61.3)
Catholic	1(0.3)	3(0.4)	4(0.4)
Protestant	64(19.5)	16(2.3)	80(7.8)
Other	1(0.3)	0(0.0)	1(0.1)
ETHNICITY			
Oromo	100(30.5)	558(80.3)	658(64.3)
Amhara	117(35.7)	25(3.6)	142(13.8)
Guragie	61(18.6)	65(9.4)	126(12.3)
Other	50(15.2)	47(6.8)	97(9.5)
Education status			
Illiterate	128(39.0)	620(89.2)	748(73.1)
Read&write	30(9.1)	43(6.2)	73(7.1)
Elementary	60(18.3)	17(2.4)	77(7.5)
Secondary	80(24.4)	11(1.6)	91(8.9)
12+	30(9.1)	4(0.6)	34(3.3)
OCCUPATION			
House wife	274(83.5)	664(95.5)	938(91.7)
Merchant	15(4.6)	5(0.7)	20(2.0)
Civil serv.	17(5.2)	1(0.1)	18(1.8)
Farmer	3(0.9)	13(1.9)	16(1.6)
Other	19(5.8)	12(1.7)	31 (3.0)

Table 1 cont'd

Sociodemographic characteristics	Urban(n=328) No.(%)	Rural(n=695) No.(%)	Total(n=1023) No.(%)
MARITAL STATUS			
Married	296(90.2)	640(92.1)	936(91.5)
Single	7(2.1)	25(3.6)	32(3.1)
Divo/sep.	14(4.3)	6(0.9)	20(2.0)
Widowed	11(3.4)	24(3.5)	35(3.4)
TOTAL NUMBER OF PREGNANCY			
1	44(13.4)	65(9.4)	109(10.7)
2-4	162(49.4)	261(37.6)	423(41.3)
5+	122(37.2)	369(53.1)	491(48.0)
FAMILY INCOME(BIRR/MONTH)			
30-149	75(22.9)	389(56.0)	464(45.4)
150-499	190(57.9)	276(39.7)	466(45.6)
500+	40(12.2)	16(2.3)	56(5.5)
No response	23(7.0)	14(2.0)	37(3.6)

Divo/sep. – Divorced and Separated

5.2. PRACTICES AND BELIEFS DURING PREGNANCY

Tables 2 and 3 show the most prevalent traditional practices during the last pregnancy which must have taken place in the past five years. Almost all (98.4 %) of the respondents believe that eating balanced diet during pregnancy is important for themselves and their fetus. Most respondents reported restriction to milk, yogurt, meat, egg, haricot bean, kale and fish.

Almost all of the urban and rural respondents continue to cook food (96.6 and 97.8 %, respectively) during pregnancy. Seventy three percent of the urban respondents and 93.2 % of the rural respondents fetched water during pregnancy. Only 34.6 % of the total respondents reported the work of fetching water to have been less hard compared to the non-pregnancy period. For 58.4 % it 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.

Fifty eight percent of the rural and only 2.1 % of the urban respondents applied smoke of leaves or wood while covered with cloth ("Metaten") for the purposes of making the husband happy (21.5 %), making their skin smooth (70.4 %), and avoiding bad smell (22.7 %). Thirty eight percent applied smoke during the first trimester, 66.3 % during the second trimester and 91.2 % during the third trimester.

Table 2: Prevalence of traditional practices regarding food, work and "Metaten", during last pregnancy in Adamitulu Woreda: May–August 1997

Traditional practice	Urban (n=328) No.(%)	Rural (n=695) No.(%)	Total (n=1023) No.(%)
1. FOOD ITEM RESTRICTION			
–In the first trimester			
No restriction	324(98.8)	653(94.0)	977(95.5)
1–2	4(1.2)	37(5.3)	41(4.0)
3–4	0(0.0)	5(0.7)	5(0.5)
–In the second trimester			
No restriction	325(99.1)	647(93.1)	972(95.0)
1–2	3(0.9)	37(5.3)	40(3.9)
3–4	0(0.0)	11(1.6)	11(1.1)
>4	0(0.0)	1(0.1)	1(0.1)
–In the third trimester			
No restriction	279(85.1)	301(43.3)	580(56.7)
1–2	27(8.2)	162(23.3)	189(18.5)
3–4	13(4.0)	162(23.3)	175(17.1)
>4	9(2.7)	70(10.1)	79(7.7)
2. FASTING DURING PREGNANCY			
Yes	115(35.1)	293(42.2)	408(39.9)
No	213(64.9)	402(57.8)	615(60.1)
–Period of fasting			
First trimester	61(53.0)	51(17.4)	112(27.5)
Second trimester	72(62.6)	127(43.3)	199(48.8)
Third trimester	97(84.3)	182(62.1)	279(68.4)

Table 2 Cont'd

Traditional practice	Urban (n=328) No.(%)	Rural (n=695) No.(%)	Total (n=1023) No.(%)
3. WORK DURING PREGNANCY			
-Fetching water			
Yes	239(72.9)	648(93.2)	887(86.7)
No	89(27.1)	47(6.8)	136(13.3)
-Collect fire wood			
Yes	118(36.0)	614(88.3)	732(71.6)
No	210(64.0)	81(11.7)	291(28.4)
-Cooking food			
Yes	317(96.6)	680(97.8)	997(97.5)
No	11(3.4)	15(2.2)	26(2.5)
4. "METATEN" DURING PREGNANCY			
Yes	7(2.1)	402(57.8)	409(40.0)
No	321(97.9)	293(42.2)	614(60.0)

Thirty two (53.3 %) of the urban respondents, who experienced tape worm infestation were treated in the health institutions but few (21.6 %) of the rural respondents were treated in the health institutions and health posts. The majority (63.7 %) of the respondents, who were infested with tape worm, took the herbal medicine "kosso" (*Hagenia abyssinica*) after preparing it by themselves. Eighty nine percent of the respondents, who didn't go to the health institutions/ health posts, know the herbal medicine for tape worm infestation and believe that the "kosso" best cures tape worm infestation than modern medicine. During pregnancy, kosso is also taken for other purposes in addition to cure for tape worm infestation. Ninety nine (30.2 %) of the urban and 569 (81.9 %) of the rural respondents had taken "kosso" during pregnancy for the purposes of washing (cleaning) the abdomen during labour, hence, facilitating labour (59.3 %); removing food (eaten by the mother) from the body of the fetus (72.0 %); to feel at ease (36.2 %) and increasing appetite (24.1 %). Of 668 who took kosso, 29 % , 35.5 % and 98.8 % took in the first, second and third trimesters, respectively. During the first trimester the majority (75.8 %) were taking kosso every month. As the stage of pregnancy increases the frequency of taking kosso also increased. In the second trimester 110 (45.6 %) were taking every month. In the third trimester 80.7 % were taking kosso every 1–7 days. Two hundred thirty five (23.0 %) mothers experienced diseases, other than tape worm infestation, during pregnancy. Diseases and symptoms/signs reported by the respondents were malaria (51.9), Gastrointestinal problems (3.0 %), headache (2.1 %), throat diseases (2.6

%), diseases of reproductive organ (0.4 %), and other diseases (40.0 %). Of the mothers who experienced disease, the majority (91.9 %) were treated in the health institutions and health posts. Fifty five percent of the urban and 63.3 % of the rural respondents reported that it is the husband who decides where to go to seek help when the pregnant wife is sick.

Forty one percent were making sex while they are pregnant. The reasons given for making sex during pregnancy were: 1. the ejaculated fluid is considered as food for the fetus (16.5 %) 2. To get heat for her self (41.3 %) 3. Other reasons including clearing the eye of the fetus (55.4 %). The following reasons were given for abstaining sex during pregnancy: 1. It is a sin to make sexual intercourse during pregnancy (4.0 %) 2. It is believed that it will result in loss of conceptus tissue/child (28.8 %) 3. It is believed that it will make the mother sick (13.2 %) 4. The mother feel tired to make sex during pregnancy (42.7 %). Out of 604 women who abstained sex during pregnancy 143(23.7 %) allowed their husband to make sex with other women.

Table 3: Prevalence of traditional practices regarding treatment, sex and clothing during last pregnancy in Adamitulu Woreda: May–August 1997

Traditional practice	Urban (n=328) No.(%)	Rural (n=695) No.(%)	Total (n=1023) No.(%)
1. Intake of Kosso with out tape worm infestation			
Yes	99(30.2)	569(81.9)	668(65.3)
No	229(69.8)	126(18.1)	355(34.7)
–Stage of pregnancy when kosso is taken			
First trimester	21(21.2)	173(30.4)	194(29.0)
Second trimester	39(39.4)	198(34.8)	237(35.5)
Third trimester	93(93.9)	567(99.6)	660(98.8)
2. Experience of tape worm infestation during pregnancy			
Yes	60(18.3)	111(16.0)	171(16.7)
No	268(81.7)	584(84.0)	852(83.3)
3. Disease experience other than tape worm infestation			
Yes	71(21.6)	164(23.6)	235(23.0)
No	257(78.4)	531(76.4)	788(77.0)

Table 3 Cont'd

Traditional practice	Urban (n=328) No.(%)	Rural (n=695) No.(%)	Total (n=1023) No.(%)
-Place of treatment			
H/ institution	67(94.4)	149(90.9)	216(91.9)
Other place	4(5.6)	15(9.1)	19(8.1)
 4. Sex experience			
during pregnancy			
Yes	126(38.4)	293(42.2)	419(41.0)
No	202(61.6)	402(57.8)	604(59.0)
-Husband allowed to make sex with others (If there is abstinence)			
Yes	22(10.9)	121(30.1)	143(23.7)
No	180(89.1)	281(69.9)	461(76.3)
 5.Wearing special type of cloth during pregnancy			
Yes	287(87.5)	316(45.5)	603(58.9)
No	41(12.5)	379(54.5)	420(41.0)

H/institution – Health institution

5.3. PRACTICES AND BELIEFS DURING LAST LABOUR AND DELIVERY

The most prevalent traditional practices during labour and delivery are presented in tables 4 and 5. One hundred eleven (33.8 %) of the urban and only 59(8.5 %) of the rural respondents have delivered at health institution. Of 849 women who delivered at home, the delivery of 186(21.9 %) was assisted by TTBAAs and the delivery of 663 (79.1 %) was assisted by untrained birth attendants. Five hundred twenty five (61.8 %) of the home deliveries delivered on floor covered with hide. Twenty two (6.7%) of the urban and 185 (26.6 %) of the rural respondents drunk goat or sheep blood during delivery to replace lost blood (90.8 %) and for strength (9.2 %). Sixty nine percent of the respondents reported that the husband decides where to seek help during labour and delivery. The pregnancy outcome was alive baby for 326 (99.4 %) of the urban and 676 (97.3 %) of the rural respondents. For 2.5 % of the respondents, who delivered outside health institutions, the umbilical cord was not tied after cutting it. The reasons given for not tying the umbilical cord were: 1. The umbilical stump dries by itself (19.0 %), 2. It was left untied unknowingly (38.1 %), 3. Other reasons (42.9 %). Twenty two (6.7 %) of the urban and 197 (29.1 %) of the rural respondents gave butter for the new born for the purposes of washing or clearing the intestine of the new born (64.8 %), making the intestine of the new born smooth (62.1 %) and other reasons (16.9 %).

There were special ceremonies during labour in 751 (88.5 %) of the

respondents like singing (95.5 %), applying butter on the head of all people in the house (65.1 %) and smoking leaves (of good smell) in the house (25.3 %).

Table 4 Cont'd

Traditional practices	Urban (n=328) No.(%)	Rural (n=695) No.(%)	Total (n=1023) No.(%)
4. Birth canal lubrication with butter during delivery*			
Yes	12(5.5)	63(10.0)	75(8.8)
No	205(94.5)	569(90.0)	774(91.2)
5.Drinking goat/sheep blood during last delivery			
Yes	22(6.7)	185(26.6)	207(20.2)
No	306(93.3)	510(73.4)	816(79.8)
6. Practices after delivery			
-Time mother go out of home first			
Within 2-7 days	3(0.9)	22(3.2)	25(2.4)
Within 8-14 days	7(2.1)	11(1.6)	18(1.8)
Within 15-30 days	48(14.6)	82(11.8)	130(12.7)
Within 31-44 days	88(26.8)	129(18.6)	217(21.2)
After 44 days	182(55.5)	451(64.9)	633(61.9)
- Refrain sex after delivery			
<1 month	5(1.5)	11(1.6)	16(1.6)
1-2 month	178(54.3)	443(63.7)	621(60.7)
3-4 months	104(31.7)	206(29.6)	310(30.3)
>4 months	41(12.5)	35(5.0)	76(7.4)

*For deliveries out side health institutions

Table 5: Prevalence of traditional practices, done on the umbilical cord and the child, during last labour and delivery, in Adamitulu Woreda: May–August 1997

Traditional practices	Urban (n=328) No.(%)	Rural (n=695) No.(%)	Total (n=1023) No.(%)
1. Material used to cut umbilical cord*			
New/boiled razor blade	120(55.8)	85(13.7)	205(24.5)
New/not boiled-razor blade	80(37.2)	530(85.2)	610(72.9)
Used/boiled razor blade	1(0.5)	3(0.5)	4(0.5)
Boiled scissor	12(5.6)	1(0.2)	13(1.6)
Used/not boiled-blade/scissor	0(0.0)	2(0.3)	2(0.2)
Other materials	2(0.9)	1(0.2)	3(0.4)
2. Umbilical cord tied after cutting*			
Yes	215(100.0)	601(96.6)	16(97.5)
No	0(0.0)	21(3.4)	21(2.5)
3. Is any thing applied to the umbilical stump?*			
Yes	44(20.5)	145(23.3)	189(22.6)
No	154(71.6)	423(68.0)	577(68.9)
Don't know	17(7.9)	54(8.7)	71(8.5)

Table 5: Prevalence of traditional practices, done on the umbilical cord and the child, during last labour and delivery, in Adamitulu Woreda: May–August 1997

Traditional practices	Urban (n=328) No.(%)	Rural (n=695) No.(%)	Total (n=1023) No.(%)
1. Material used to cut umbilical cord*			
New/boiled razor blade	120(55.8)	85(13.7)	205(24.5)
New/not boiled-razor blade	80(37.2)	530(85.2)	610(72.9)
Used/boiled razor blade	1(0.5)	3(0.5)	4(0.5)
Boiled scissor	12(5.6)	1(0.2)	13(1.6)
Used/not boiled-blade/scissor	0(0.0)	2(0.3)	2(0.2)
Other materials	2(0.9)	1(0.2)	3(0.4)
2. Umbilical cord tied after cutting*			
Yes	215(100.0)	601(96.6)	16(97.5)
No	0(0.0)	21(3.4)	21(2.5)
3. Is any thing applied to the umbilical stump?*			
Yes	44(20.5)	145(23.3)	189(22.6)
No	154(71.6)	423(68.0)	577(68.9)
Don't know	17(7.9)	54(8.7)	71(8.5)

Table 5 Cont'd

Traditional practices	Urban (n=328) No.(%)	Rural (n=695) No.(%)	Total (n=1023) No.(%)
4. Material applied to the stump*			
Mud	2(4.5)	21(14.5)	23(12.2)
Soil	6(13.6)	32(22.1)	38(20.1)
Cow dung	0(0.0)	10(6.9)	10(5.30)
Butter	34(77.3)	80(55.2)	114(60.3)
Other material	2(4.5)	2(1.4)	4(2.1)
5. Butter given to the new born			
Yes	22(6.7)	197(29.1)	219(21.9)
No	304(93.3)	479(70.9)	783(78.1)
6. Practices after delivery			
-Hot metal applied to the child when he/she has abdominal cramp			
Yes	5(1.5)	39(5.8)	44(4.4)
No	321(98.5)	637(94.2)	958(95.6)
-Commencement of breast feeding			
Within 2 hours-			
of delivery	156(47.9)	493(72.9)	649(64.8)
After 2 hours-			
of delivery	170(52.1)	183(27.1)	353(35.2)

*For deliveries out side health institutions

5.4. RESULTS OF FOCUS GROUP DISCUSSIONS (FGD)

A total of 14 FGDs were conducted on six selected topics. The topics and the results of the discussion are presented below.

5.4.1. Foods that are not restricted and restricted during pregnancy

Three FGDs were conducted on food with 1. mothers who have given three or more births in Zeway town 2. Mothers who have given three or more births in the rural area 3. Traditional birth attendants in the rural area. Most ideas were similar in all the three groups. Usually, both in the urban and rural areas, the pregnant women prepare the food for themselves and the family. If the pregnant women have daughters, the daughters assist their mothers in preparing the food. Yogurt, cheese, milk, meat(fatty), kale, fish, and towards the end porridge (Genfo) are restricted during pregnancy. The other food items are not restricted. The reasons given for restriction were: 1. These foods are believed to attach on the fetus if eaten during pregnancy. 2. These foods, if they are eaten during pregnancy, will result in bad odour of the blood and other fluids during labour and delivery. Two traditional birth attendants mentioned that **"if it is known that the pregnant woman eats these restricted food items, the birth attendants are not willing to assist her delivery because of the fear of bad odour of the fluid during her delivery"**. 3. If meat is eaten during pregnancy, it is believed that the child will be born with the meat in his hands. 4. These food items are believed to make the pregnant women fat so that during delivery the birth canal is obstructed resulting in obstructed labour. Additionally, these foods are believed to increase the size (weight) of the fetus hence causing difficulty during labour. The number of women, who restrict food during pregnancy, in the past ten years is decreasing. The participants of FGD from Zeway town believe that food restriction during pregnancy should not continue because the above problems didn't occur in the past years. Even if the problems occur, they can be overcome by health professionals.

The rural participants however have a different view. The women, who gave three or more births, believe on the importance of continuation of food restriction during pregnancy. The Traditional Birth Attendants are in between. On the one hand they believe that if the pregnant women didn't eat these foods they will be tired during labour so that it is good to eat these foods for the future during pregnancy. On the other hand they believe on the side effects of these foods (mentioned above) that food restriction should continue for the future during pregnancy.

5.4.2. Taking "Kosso" during pregnancy without the presence of symptoms and signs of tape worm infestation

The same individuals who participated on food intake during pregnancy participated in these FGDs. 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 seventh month of pregnancy. After seven months the pregnant take kosso every 4–7 days. Some women take seed of pumpkin instead of kosso. Kosso, when taken during pregnancy, makes the mother exhausted. The urban participants said that only few pregnant women in the town are taking kosso. The rural participants (including Birth Attendants) said that the majority of the pregnant women are still taking kosso during pregnancy. The urban participants and the rural Traditional Birth Attendants believe that taking kosso during pregnancy should stop but the rural women participants, who gave three or more births, believe on the importance of continuation of taking kosso during pregnancy.

5.4.3. Place of delivery

Two FGDs were conducted on place of delivery. The first FGD was conducted with urban women who gave three or more births. According to them

the majority of the women deliver in health institutions. If labour starts during the night, some of them deliver at home by assistance of Trained Traditional Birth Attendant or by Traditional Birth Attendants. The FGD conducted with the rural counterparts revealed that the majority of the women deliver at home. After initial trial of labour, the Traditional Birth Attendant, the husband and herself decide to seek help from health institutions. They believe that if they deliver at home, God facilitates the delivery.

5.4.4. Malaria

Two FGDs were conducted on malaria. The first group was formed by urban women who gave three or more births. The discussion revealed that the people in the urban area know the signs and symptoms of malaria and when sick they immediately go to health institutions. Antimalarial drugs are not available in open market or shops. The second group was formed by the rural counterparts. According to the discussion with them, the people in the rural area know the signs and symptoms of malaria but they decide lately to seek help in the health institutions. The reason given for delay was to give time if the symptoms and signs subsided without medication. There are no traditional medicines in the area for treatment of malaria.

5.4.5. Work during pregnancy

Two FGDs were conducted on work during pregnancy. The first group was formed by urban women who gave three or more births. The discussion with them revealed that women in the urban area are engaged in activities like cooking food, cleaning house, fetching water, preparing local drinks, trade, etc. The work load of pregnant is the same as the non-pregnancy period. They believe that pregnant should work towards the end of pregnancy in order to facilitate labour. Some problems, like abortion and injury, were seen in the area (esp. Gerbi State Farm employees) due to work over load. The second group was formed by the rural counterparts. According to the discussion with them, the women in the rural areas

are engaged in farm activities, food cooking, fetching water, collecting fire wood etc. The work load of pregnant is the same as the non-pregnancy period. The participants believe that due to work overload problems like abortion, lying of the fetus on the lateral side of the abdomen and entry of the fetus to the lower birth canal, could be resulted. When problems like these occur, she will be first seen by the local traditional healer Before she is seen by health professionals. 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.

5.4.6. Feeding of the new born

Two FGDs were conducted on feeding of the new born. The first group was formed by urban women who gave three or more births. The discussion with them revealed that women in the urban area give, to their new born, boiled and cooled water with some sugar added to it. Women in the urban area usually do not start breast feeding until 10 hours to 5 days after delivery when their milk starts to flow out of the nipple. During this period the new born is given water. Most of the mothers express and discard colostrum because of the following reasons: 1. It is believed that it causes abdominal cramp for the new born. 2. Since it has stayed in the breast for long time it is considered as dirty. 3. It is not liked by most of the mothers because of its colour and sticky character. Most of the mothers in Zeway town do not give butter to their new born. The second group constituted their rural counterparts. According to the discussion with them, the women in the rural area start breast feeding their new born when it starts to cry, i.e. they do not start breast feeding immediately after delivery. The mothers in the rural area do not discard colostrum even though they don't known the importance of colostrum. They give butter for the new born to wash the dirty materials in the intestine of the new born and to prevent abdominal cramp. They do not give water to the new born but they apply unboiled water, cow milk, butter, on the mouth of the new born. The reason to applying is to ask God to make the child rich in his future life.

5.5. FACTORS ASSOCIATED WITH PRACTICES DURING PREGNANCY, LABOUR AND DELIVERY

Residence, income, age, religion, ethnicity, education status, occupation, marital status, and number of pregnancy were included in the logistic regression model. Many variables which showed significant association in the bivariate analysis turned to be non significant in the multivariate analysis. Taking age group 15–19 as referent category, age group 20–29 (OR=0.28), age group 30–34 (OR=0.94), age group 35–39 (OR=4.47), and age group 40–49 (OR=2.25) were found to be significantly associated with yogurt restriction in the third trimester of pregnancy. Intake of kosso during pregnancy (with out the presence of signs and symptoms of tape worm infestation) was found to be significantly associated with rural residency (OR=10.5) (urban residency taken as referent category), Oromo ethnicity (OR=2.0), Guragie ethnicity (OR=0.37) (Amhara ethnicity taken as referent category), and being able to read and write (OR=0.54) (Illiterates taken as referent category). Place of delivery was found to be significantly associated with Protestant religion (OR=1.56) (Orthodox and Catholic religion taken as referent category), Guragie ethnicity (OR=1.51) (Amhara ethnicity taken as referent category), 2–4 pregnancy number (OR=0.47) (first pregnancy taken as referent category), and monthly income 150–499 Birr (OR=1.88) (monthly income 30–149 taken as referent category). The results of bivariate and multivariate analysis are displayed in tables 6, 7 and 8.

Table 6: Association of factors with restriction of yogurt in the third trimester of last pregnancy, Adamitulu Woreda, May–August 1997

Sociodemographic characteristics	yogurt restriction		Crude OR 95% CI	Adjusted OR 95%CI
	No No(%)	Yes No(%)		
RESIDENCE				
Urban*	377(56.1)	318(90.6)	1.0	
Rural	295(43.9)	33(9.4)	7.54(15.03–11.36)	NS
AGE				
15–19*	56(8.3)	10(2.8)	1.0	
20–24	155(23.1)	87(24.8)	0.32(0.14–0.68)	0.28(0.13–0.61)
25–29	203(30.2)	107(30.5)	0.34(0.16–0.72)	0.58(0.17–2.07)
30–34	105(15.6)	61(17.4)	0.31(0.14–0.68)	0.94(0.64–1.39)
35–39	101(15.0)	50(14.2)	0.36(0.16–0.81)	4.47(2.75–7.29)
40–49	52(7.7)	36(10.3)	0.26(0.11–0.61)	2.25(1.35–3.74)
RELIGION				
Orthodox or Catholic*	266(39.6)	50(14.2)	1.0	
Moslem	339(50.4)	288(82.1)	0.22(0.16–0.32)	NS
Protestant	67(10.0)	13(3.7)	0.97(0.48–2.0)	NS
ETHNICITY				
Amhara*	131(19.5)	11(3.1)	1.0	
Oromo	372(55.4)	286(81.5)	0.11(0.05–0.21)	NS
Guragie	98(14.6)	28(8.0)	0.29(0.13–0.65)	NS
Other	71(10.6)	26(7.4)	0.23(0.10–0.52)	NS
EDUCATION STATUS				
Illiterate*	427(63.5)	321(91.5)	1.0	
Can read&write	60(8.9)	13(3.7)	3.47(1.81–6.76)	NS
Elementary	66(9.8)	11(3.1)	4.51(2.27–9.19)	NS
Secondary+	119(17.7)	16(4.6)	5.59(3.17–10.0)	NS

Table 6 Cont'd

Sociodemographic characteristics	yogurt restriction		Crude OR 95% CI	Adjusted OR 95%CI
	No No(%)	Yes No(%)		
OCCUPATION				
Not housewife*	66(9.8)	19(5.4)	1.0	
House wife	606(90.2)	332(94.6)	0.53(0.30–0.91)	NS
MARITAL STATUS				
Single*	25(3.7)	7(2.0)	1.0	
Married	614(91.4)	322(91.7)	0.34(0.08–1.23)	NS
Divorced/Sep.	17(2.5)	3(0.9)	1.59(0.3–9.14)	NS
Widowed	16(2.4)	19(5.4)	0.24(0.07–0.77)	NS
PREGNANCY NUMBER				
1*	86(12.8)	23(6.6)	1.0	
2–4	289(43.0)	134(38.2)	0.58(0.34–0.98)	NS
5+	297(44.2)	194(55.3)	0.41(0.24–0.69)	NS
*referent category	NS – Non-Significant			

Table 7: Association of factors with intake of "kosso" during last pregnancy with out the presence of signs and symptoms of tape worm infestation, Adamitulu Woreda, May-August 1997

Sociodemographic characteristics	Kosso intake		Crude OR 95% CI	Adjusted OR 95%CI
	Yes	No		
	No(%)	No(%)		
RESIDENCE				
Urban*	99(14.8)	229(64.5)	1.0	
Rural	569(85.2)	126(35.5)	10.5(7.6–14.3)	1.8(1.5–2.3)
RELIGION				
Orth/Cath*	139(20.8)	177(49.9)	1.0	
Moslem	504(75.4)	123(34.6)	5.22(3.84–7.10)	NS
Protestant	25(3.7)	55(15.5)	0.58(0.33–1.01)	NS
ETHNICITY				
Amhara*	28(4.2)	114(32.1)	1.0	
Oromo	531(79.5)	127(35.8)	17.0(.6–27.6)	2.0(1.3–3.1)
Guragie	63(9.4)	63(17.7)	4.1(2.3–7.3)	0.4(0.35–0.39)
Other	46(6.9)	51(14.4)	3.7(2.0–6.8)	1.15(0.8–1.65)

Table 7 cont'd

Sociodemographic characteristics	Kosso intake		Crude OR 95% CI	Adjusted OR 95%CI
	Yes No(%)	No No(%)		
EDUCATION STATUS				
Illiterate*	574(85.9)	174(49.0)	1.0	
Read & write	46(6.9)	27(7.6)	0.52(0.30–0.88)	0.5(0.39–0.75)
Elementary	26(3.9)	51(14.4)	0.15(0.09–0.26)	0.66(0.4–1.09)
Secondary+	22(3.3)	103(29.0)	0.06(0.04–0.11)	1.15(0.7–1.82)
OCCUPATION				
Not housewife*	41(6.1)	44(12.4)	1.0	
House wife	627(93.9)	311(87.6)	0.46(.29–.74)	NS
PREGNANCY NUMBER				
1*	57(8.5)	52(14.6)	1.0	
2–4	257(38.5)	166(46.8)	1.41(0.90–2.20)	NS
5+	354(53.0)	137(38.6)	2.36(1.51–3.68)	NS
INCOME (BIRR/MONTH)				
30–149*	344(30.1)	120(33.8)	1.0	
150–499	281(42.1)	185(52.1)	0.53(0.4–0.71)	NS
500+	21(3.1)	35(9.9)	0.21(0.11–0.39)	NS

*referent category

NS - Non-Significant

Orth/Cath - Orthodox or Catholic

Table 8: Association of factors with preference of place of last delivery in Adamitulu Woreda: May-August 1997

Sociodemographic characteristics	H/inst.Deliv.#		Crude OR 95% CI	Adjusted OR 95% CI
	Yes	No		
	No(%)	No(%)		
RESIDENCE				
Urban*	111(65.3)	217(25.4)	1.0	
Rural	159(34.7)	636(74.6)	0.18(0.13–0.26)	NS
RELIGION				
Orth/Cathol*	94(55.3)	222(26.0)	1.0	
Moslem	49(28.8)	578(67.8)	0.2(0.13–0.30)	0.74(0.41–1.35)
Protestant	27(15.9)	53(6.2)	1.2(0.69–2.09)	1.56(1.09–1.72)
ETHNICITY				
Amhara*	56(32.9)	86(10.1)	1.0	
Oromo	63(37.1)	595(69.8)	0.16(0.10–0.25)	0.83(0.57–1.21)
Guragie	25(14.7)	101(11.8)	0.38(0.21–0.68)	1.51(1.07–2.14)
Other	71(41.5)	26(3.0)	4.19(2.31–7.66)	1.17(0.76–1.77)
EDUCATION STATUS				
Illiterate*	79(46.5)	669(78.4)	1.0	
Read &write	10(5.9)	63(7.4)	1.34(0.62–2.84)	NS
Elementary	26(15.3)	51(6.0)	4.32(2.46–7.54)	NS
Secondary+	55(32.3)	70(8.2)	6.65(4.26–10.39)	NS

Table 8 Cont'd

Sociodemographic characteristics	H/inst.Deliv.#		Crude	Adjusted
			OR 95% CI	OR 95% CI
	Yes No(%)	No No(%)		
OCCUPATION				
Not house-				
wife*	24(14.1)	61(7.2)	1.0	
House wife	146(85.9)	792(92.8)	0.47(0.28-0.80)	NS
PREGNANCY NUMBER				
1*	32(18.8)	77(9.0)	1.0	
2-4	81(47.6)	342(40.1)	0.57(0.34-0.95)	0.47(0.31-0.72)
5+	57(33.5)	434(50.9)	0.32(0.19-0.53)	1.06(0.80-1.40)
INCOME (BIRR/MON)				
30-149*	44(27.3)	420(50.96)	1.0	
150-499	90(55.9)	376(45.6)	2.28(1.53-3.43)	1.88(1.35-2.61)
500+	27(16.8)	29(3.5)	8.89(4.63-17.1)	1.20(0.90-1.58)

*referent category

NS - Non-Significant

H/inst.Deliv.#- Health institution delivery including
health post delivery

Orth/Cathol - Orthodox and Catholic

6. DISCUSSION

This study identified the major traditional practices in the study area and measured the magnitude of these practices. In addition the factors for selected traditional practices are analyzed, which makes this study different from the previous studies conducted in Ethiopia. For this reason comparison of the study result, especially the association of factors with the traditional practices, was difficult.

In this study milk, yogurt, cheese, meat, egg, haricot bean, kale, fish and towards the end of pregnancy porridge are restricted during pregnancy. Yogurt is restricted by many pregnant women in the third trimester of pregnancy. Age was found to be significantly associated with yogurt restriction in the third trimester of last pregnancy. One of the reasons given for restriction, as the study finding in Sudan (26), is the belief that eating unrestricted amount of food will result in big fetus which will cause obstructed labour. The other reasons given for restriction, which were not mentioned in other studies were: 1. these foods are believed to attach on the fetus 2. these foods are believed to cause bad odour of the blood and other fluid during labour and delivery. 3. if meat is eaten during pregnancy, it is believed that the fetus will be born with the meat in his hands. 4. these food items make the pregnant women fat so that their birth canal is narrowed during labour. These given reasons are not scientifically acceptable because there is no association between the foods eaten and direct attachment or contact of the food

to the fetus, odour of the blood and other fluids during labour/delivery, and narrowing of the birth canal. Food restriction, of course, will result in small fetus whose delivery will be easier (9). But the complications of food restriction are dangerous compared to the complications of normal or big size fetus. The number of food items restricted and the number of pregnant women who restricted food is found to increase, in this study, with the increase in the period of pregnancy. Since fetal nutrition needs are small in early pregnancy compared to later, this increased practice of food restriction in the late period of pregnancy is harmful (57). In addition to deliberate food restrictions, 42.2 % of the respondents fast during pregnancy which further threaten the nutrient supply of the mother and the fetus (9,10,23,39,58).

Only 34.6 % and 35.2 % of respondents who were fetching water and collecting fire wood, respectively, reported their work to have been less hard compared to the non-pregnancy period. This indicates that the majority are engaged in hard work, which is not usually compensated by high energy intake, the combined effect of which will be preterm delivery, low birth weight, and preeclampsia (32,33,10,59).

Fifty eight percent of the rural and only 2.1 % of the urban respondents applied smoke of leaves or wood ("Metaten") to them selves. The prevalence of "Metaten" and its effects were not studied previously. One hundred seventy one (16.7 %) of the respondents experienced tape worm infestation of which 63.7 % took "kosso" (*Hagenia abyssinica*) after preparing it by themselves. In addition to

the use of kosso for treatment of tape worm infestation it was also used by 668 (65.3 %) of the respondents for the purposes of washing (cleaning) the abdomen during labour hence facilitating labour (59.3 %), removing food (eaten by the mother) from the fetus (72.0 %), to feel at ease (36.2 %), and increasing appetite (24.1 %). The other reasons given were for avoiding bad smell of the blood and other fluids during labour and delivery, and for strength. Intake of kosso during pregnancy (with out the presence of signs and symptoms of tape worm infestation) is significantly associated with residence, ethnicity, and education status. The reasons given above are different from the belief of Hadiya and Kembata people who take kosso for the purposes of cleaning the bowels (as it would be shameful for a woman to show intestinal parasites at birth), making space for the fetus, and keeping the fetus's weight down(17). This difference in belief is possible because the study area are different. All the reasons given for taking of kosso during pregnancy (in the absence of signs and symptoms of tape worm infestation) have no scientific evidence. Though the teratogenic effect of kosso is not studied other side effects of kosso like blindness, and changes in the cardiovascular, respiratory and central nervous systems have repeatedly been found in people who took overdoses of kosso (20).

Compared to other studies in Ethiopia (17) which stated that more than half of all health seekers used traditional healers, lay treatment, or self treatment, the utilization of health services and health posts is high in this study (91.9 %). This may be related to the nature of illness the pregnant women had experienced or

that the study included rural communities who are closer to an urban setting (10 km radius), for whom health institutions are accessible.

Fifty nine percent of the respondents abstained from making sex during pregnancy. The two reasons given for continuing sex "for clearing the eye of the fetus" and "the ejaculated fluid is considered as food for the fetus" have no scientific evidence of importance in this regard. Out of 604 women who abstained sex during pregnancy, 143 (23.7 %) allowed their husbands to make sex with other women. Though the association between coitus and premature birth or pPROM are still debatable, the tradition of sex with many women and polygamy, in the era of HIV/AIDS epidemic, are extremely dangerous (39,40,41,42).

One hundred eleven (33.8 %) of the urban but only 59 (8.5 %) of the rural respondents have delivered in health institutions. This finding is in agreement with the findings of The Safe Motherhood Need Assessment in Ethiopia (1996) which reported that large numbers of women are delivering in the community (47). Of the women who delivered at home, only the delivery of 186 (21.9 %) was assisted by Trained Traditional Birth Attendants. Religion, ethnicity, number of pregnancy, and income are found to be significantly associated with place of delivery. Overall 93.5 % used new blade (with and with out boiling) which is similar with the findings in Gondar (92 % used new blade with out boiling) (19). One hundred eighty nine (22.6 %) of the respondents applied mud, soil, cow dung, butter, and other materials on the umbilical stump. Contamination of a wound of a new born's umbilical stump, or of puerperal uterus (following inexpert attempts to remove a

retained placenta) increases the risk of developing tetanus (11,12,43). For 21 (3.4 %) of home deliveries in the rural area the umbilical cord was not tied which is lower than the report of a finding in Gondar region (24.0 %) in 1978 (19). This is not a good practice because the new born may die of bleeding unless the umbilical cord is tied after cutting it (60).

For 320 (37.7 %) home deliveries abdominal massage was applied to expel the fetus and placenta, which is lower than the figure reported (57.7 %) for the whole country (47). Abdominal massage is not medically recommended because it is assumed to cause unnecessary contractions, and will lead to retention of the placenta by creating contraction in the lower uterine segment (Personal communication).

The birth canal of 75 (8.8 %) home deliveries was lubricated with butter. The prevalence of birth canal lubrication is not studied previously except mentioning that TBAs, in Ethiopia, facilitate deliveries through massaging and other forms of manipulation, often involving lubrication of the birth canal with butter (17). Lubrication of birth canal with butter introduces infection to the birth canal and to the fetus or new born.

Two hundred seven women drunk goat or sheep blood during delivery for the purpose of replacing lost blood and to become strong. It is difficult to describe this as harmful, useful or neutral. For this reason the effects of this practice should be studied further.

For the majority of women it was the husband who decides where to seek help

during pregnancy, labour and delivery as it is generally true in Ethiopia and other developing countries where the husband is the head of the household.

The results of Focus Group Discussion revealed that in the urban area colostrum is expressed and discarded. One of the reason given for discarding it was that since it has stayed for long time at the tip of the breast it is considered as dirty. Similar reasons were given in Addis Ababa and Guinea-Bissau (45,46). As the findings in Addis Ababa (46), the other reasons given were 1. It causes abdominal cramp for the new born and 2. it is not liked by most of the mothers because of its colour and sticky character. The interesting finding is that women in the rural area are not discarding colostrum. Colostrum has a unique anti-infective properties specially adapted to the environment the new born shares with the mother (45). For this reason discarding colostrum is a harmful traditional practice. Three hundred fifty three (35.2 %) of the respondents, whose delivery outcome was alive baby, started to breast feed their children two hours after delivery. The mothers in the urban area start to breast feed their children when the milk starts to flow out of the nipple, usually ten hours to five days. Till then boiled and cooled water, with some sugar in it, is given to the child. The study in Addis Ababa also revealed that the time of initiation of breast feeding entirely depends on the time the milk started to flow (46). Early initiation of breast feeding consistently appears as a key factor in the establishment and duration of breast feeding. Early mother-to-skin, skin-to-skin contact and demand feeding are important factors in enhancing breast feeding (61). Two hundred nineteen (21.9

%) of the total respondents has given butter to the new born for the purposes of washing the kosso in the intestine of the new born which was taken by the mother while pregnant (64.8 %), and to make the intestine of the new born smooth (62.1 %). There is a finding also in parts of Northern Ethiopia that the newly born baby is generally given some butter to eat after birth which is thought to clear the baby's intestines from black tar & other fluids accumulated during pregnancy (17). Giving butter to a new born, instead of breast milk, is a harmful traditional practice because breast milk contains the complete range of nutrients necessary to the infant and is easier to digest than any other kind of milk or milk products (62,63).

Forty four mothers (4.4 %) have applied hot metal to their children when they were having abdominal cramp which is lower than the report of The Safe Mother Hood Need Assessment in Ethiopia (47). This practice is harmful because it is painful for the child, it causes wound and wound infection, and its effect in relieving abdominal pain is not a proven fact(64). Six hundred thirty three (61.9 %) of the respondents first go out of home forty four days after delivery. That means until they go out the babies are not exposed to the sun. The report of Safe Mother Hood Needs Assessment in Ethiopia states that 33.0 % of the mothers confine babies from sun (47). Lack of access of skin to UV irradiation predispose the infant to vitamin D deficiency so that delayed exposure to sun light is a harmful traditional practices (63).

Six hundred twenty one (60.7 %) of the respondents refrain from sex for 1-2

months after delivery. Resuming sex early after delivery could not be labelled as harmful or useful. But unless the mother is frequently breast feeding, or taking contraceptives, it will lead her to become pregnant again, which is not good for the mother and the child.

In general the harmful, useful or neutral effects of the identified traditional practices are presented as follows:

A. Harmful practices

- Restriction of food during pregnancy (9,10,27,29,30,31)
- Hard work during pregnancy (9,10,32,33)
- Taking kosso for the treatment of tape worm infestation because the individual could face complications due to overdose (37,38)
- Taking kosso for purposes other than tape worm infestation (37,38)
- Husband allowed to make sex with other women, when the wife is pregnant (42) .
- Delivery in unsafe circumstances (11,12,43,44)
- Abdominal massage during labour and delivery (personal communication)
- Birth canal lubrication with butter (personal communication)
- Using unboiled materials to cut the umbilical cord (11,12,43,44)
- Applying butter, mud, soil, and cow dung on the umbilical stump (11,12,43,44)
- Leaving the umbilical cord without tying (60)
- Giving butter for the new born (62,63)

- Delayed exposure to sun light (65)
- Discarding colostrum (45)
- Delayed commencement of breast feeding (61)
- Applying hot metal to children when they have abdominal pain (64)

B. Useful practices

- Majority of the pregnant women were treated in the health institutions when they are sick during pregnancy.
- Wearing special clothes during pregnancy makes the pregnant women to feel at ease

C. Practices whose effect is not well known or studied

- Sex during pregnancy (40)
- "Metaten" during pregnancy
- Drinking goat or sheep blood during delivery

LIMITATIONS OF THE STUDY

The study has looked into several factors (residence, age, income, religion, ethnicity, education, occupation, marital status and number of pregnancy) that can be associated with the identified traditional practices. The list however is not complete and factors not considered here may have significant associations. Income in the rural areas is determined by converting the total amount of grains

produced, in one year, into money, the calculation of which was based on the local price. But they could have other sources of income which is not considered in the calculation of income.

Validity and generalizability

This study is reliable because extensive training was given, fairly large number of sample was taken, two techniques (triangulation) were used, and regular supervision and meeting was conducted.

Since probability sampling method was employed selection bias was minimal. The supervisors and interviewers were not health workers and were not aware about the desired result. This indicates that information bias was minimal.

Confounding was controlled by setting inclusion and exclusion criteria, stratification, and logistic regression.

This study can be generalized for similar areas in Oromiya Regional state.

7. CONCLUSION AND RECOMMENDATION

Restriction of food during pregnancy, taking kosso for the treatment of tape worm infestation (over dose), taking kosso for purposes other than tape worm infestation, husband allowed to make sex with other women while the wife is pregnant, abdominal massage, birth canal lubrication with butter, using unboiled materials to cut the umbilical cord, applying materials (butter, mud, soil, and cow dung) on the umbilical stump, leaving the umbilical cord with out tying, giving butter for the new born, delayed exposure to sun light, discarding colostrum, delayed commencement of breast feeding, applying hot metal to children when they have abdominal pain, are the prevalent harmful traditional practices identified by this study. "Metaten" during pregnancy, and drinking goat or sheep blood during delivery, are also among the traditional practices identified but their effect is not studied to label them as harmful, useful or neutral.

Age was found to be significantly associated with yogurt restriction in the third trimester of pregnancy. Intake of kosso during pregnancy (with out the presence of signs and symptoms of tape worm infestation) was significantly associated with residence, ethnicity, and education status. Religion, ethnicity, number of pregnancy and income were found to be significantly associated with place of delivery.

In general harmful traditional practices are highly prevalent and the effects of some of the traditional practices are not well known.

produced, in one year, into money, the calculation of which was based on the local price. But they could have other sources of income which is not considered in the calculation of income.

Validity and generalizability

This study is reliable because extensive training was given, fairly large number of sample was taken, two techniques (triangulation) were used, and regular supervision and meeting was conducted.

Since probability sampling method was employed selection bias was minimal. The supervisors and interviewers were not health workers and were not aware about the desired result. This indicates that information bias was minimal.

Confounding was controlled by setting inclusion and exclusion criteria, stratification, and logistic regression.

This study can be generalized for similar areas in Oromiya Regional state.

It is therefore recommended from this study that

1. The health professionals in the Woreda, in cooperation with other governmental and non governmental bodies, should work hard towards the eradication of the identified harmful traditional practices by giving health education for the local people.
2. The effects of kosso on organogenesis, the effects of drinking goat or sheep blood during delivery, the effects of "Metaten" during pregnancy should be studied
3. The effects of sex during pregnancy should be further studied.
4. Similar studies in other areas

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Appendix I- Questionnaire (English Version)

Objectives of the study and confidentiality

The objective of the study is to know the traditional practices in the area. After completion, this study will serve as a base for solving the health problems of the people. We assure that whatever information you give will be kept as secrete.

CONSENT IDENTIFICATION AREA

House number of the respondent

--	--	--	--	--

Relation to head of house hold _____

Please make a (x) mark to show your commitment to participate in the study.

1. a. I have read and understood all instructions and confidentiality procedures and I on my own will consent to participate _____ []

b. The purpose of the study and confidentiality procedures are explained to me and I on my own will consent to participate

2. a. I have read the instructions but I am not willing to participate _____ []

b. The purpose of the study and confidentiality procedures are explained to me but I am not willing to participate __ []

Name of interviewer _____

Date _____

Sig. _____

FORM 1. HOUSEHOLD QUESTIONNAIRE

1. Address:

-Town_____ -Kebele/peasant association_____

2. Monthly income of the family in Birr _____

3. Animal possession

1. number of cattle_____ 2. number of sheep____

3. Other animals (specify with their number)_____

4. Type of crops produced yearly and the amount in quintals

1. Maize_____quintal 2. haricot bean____quintal

3. Teff_____quintal 4. Wheat_____quintal

5. Others (specify type and amount in quintals)____

5. Tenure status of the house:

1. Your own 2. Rent from kebele

3. Others (specify) _____

6. Material used to construct the roof:

1. Corrugated iron sheet 2. Thatch 3. Cement

4. Other (specify) _____

7. Material used to construct the Ceiling:

1. No ceiling 2. Hard board 3. Cloth

4. Other (specify)_____

8. Material used to construct the wall:

1. Wood and mud 2. Wood and thatch 3. Stone

4. Concrete block 5. Brick 6. Other (specify)____

9. Material used to construct the floor:

1. Cement 2. Mud 3. Wood

4. Other (specify) _____

10. Number of rooms of the house_____

FORM 2. INDIVIDUAL QUESTIONNAIRE

1. Age _____ 2. Sex _____

3. Religion:

1. Orthodox Christian 2. Moslem

3. Catholic 4. Protestant

5. Other (specify): _____

4. Ethnic group:

1. Amhara 2. Oromo 3. Guragie 4. Tigrie

5. Other (specify) _____

5. Language:

1. Amarigna 2. Oromifa 3. Guragigna

4. Tigirigna 5. Other (specify) _____

6. Education status:

1. Illiterate 2. Can read and write

3. Elementary 4. Secondary 5. 12 grade

complete 6. 12+1

7. 12+2 8. 12+4 and above

7. Occupation:

1. Farmer 2. House wife 3. Civil servant

4. Merchant 5. Student 6. Unemployed

7. Other (specify) _____

8. Duration of stay in the kebele/peasant association:

1. Less than six months 2. Six to 11 months

3. 1-4 years 4. 5-10 years

5. 11-14 years 6. 15+ years

9. Marital status:

1. Single 2. Married 3. Divorced 4. Widowed

5. Separated

10. Occupation of the spouse (if married)_____
11. Educational status of the spouse (if married):
1. Illiterate 2. Can read and write
3. Elementary 4. Secondary 5. 12 complete
6. 12+1 7. 12+2 8. 12+4 and above
12. Age at first marriage (if she is ever married)____
13. Are you pregnant now? 1. Yes 2. No
14. Number of abortions_____
15. Number of live births____
16. Number of still births____
17. Number of total pregnancies_____
18. Number of deaths within 28 days of delivery____
19. Number of children you have now____

FORM 3. TRADITIONAL PRACTICES DURING PREGNANCY LABOUR
AND DELIVERY

A. Experience of traditional practices during the last pregnancy (if she is pregnant now, ask about the second from this pregnancy):

1. Do you believe that taking balanced diet during pregnancy, is important for you and your fetus?

1. yes 2. No 3. I don't know

2. During your last pregnancy, what foods were allowed to eat in your first three months of pregnancy (from conception to 3 months of pregnancy)?

a. Teff enjera 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

b. Maize enjera 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

c. Wheat bread 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

d. Maize bread 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

e. Enset bread 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

~~f. Milk 1. Yes 2. No 3. Don't know~~

~~-If it is not allowed, why is it not allowed?___~~

g. Yogurt 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

h. egg 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

i. Meat 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

j. kale 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

k. Fish 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

l. Boiled haricot bean

1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

m. Vegetables (salad, tomato, Swiss chard)

1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

n. Fruits (orange, banana, papaya)

1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

3. During your last pregnancy, what foods were allowed
to eat in your second three months (4-6 months)
of pregnancy?

a. Teff enjera 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

b. Maize enjera 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

c. Wheat bread 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

d. Maize bread 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

e. Enset bread 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

f. Milk 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?__

g. Yogurt 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?__

h. egg 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?__

i. Meat 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?__

j. kale 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?__

k. Fish 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?__

l. Boiled haricot bean

1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?__

m. Vegetables (salad, tomato, Swiss chard)

1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?__

n. Fruits (orange, banana, papaya)

1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?__

4 . During your last pregnancy, what foods were

allowed to at in your last three months (7-9

months) of pregnancy?

a. Teff enjera 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?__

b. Maize enjera 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?__

c. Wheat bread 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

d. Maize bread 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

e. Enset bread 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

f. Milk 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

g. Yogurt 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

h. egg 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

i. Meat 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

j. kale 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

k. Fish 1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

l. Boiled haricot bean

1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

m. Vegetables (salad, tomato, Swiss chard)

1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

n. Fruits (orange, banana, papaya)

1. Yes 2. No 3. Don't know

-If it is not allowed, why is it not allowed?___

5. During your last pregnancy, were you fasting for religious reasons? 1. Yes 2. No
6. If the answer to question number 5 is "yes", in which period of your pregnancy were you fasting?
 1. First 3 months (From conception to 3 months of pregnancy)
 2. Second three months (4-6 months)
 3. Last three months (7-9 months)
7. If the answer to question number 5 is "yes", what type of fasting was it?
 1. Not taking of some food items
 1. Yes 2.No 3. don't know
 2. Decreasing the quantity of food
 1. Yes 2.No 3. Don't know
 3. Minimizing feeding frequency?
 1. Yes 2.No 3. don't know
8. If you were not allowed to eat some food items, what food items were not allowed to eat (because of fasting)?
 - a. Meat
 1. Yes, it was not allowed
 2. No (it is allowed)
 3. I don't know
 - b. Milk
 1. Yes, it was not allowed
 2. No (it is allowed)
 3. I don't know
 - c. Egg
 1. Yes, it was not allowed
 2. No (it is allowed)
 3. I don't know

- d. Fish 1. Yes, it was not allowed
 2. No (it is allowed)
 3. I don't know
- e. Others (specify)_____
9. If you were fasting by decreasing the quantity of food, how little was the amount eaten during fasting compared to non-fasting periods?
1. Half 2. Two third 3. One fourth
 4. One third 5. I don't know
10. If you were fasting by minimizing feeding frequency, for how many minimum continuous hours were you fasting?
1. less than 4 hours 2. 4-6 hours
 3. 7-9 hours 4. 10-12 hours
 5. >12 6. I don't know
11. If you were fasting by minimizing feeding frequency, how often did you eat in a day?
1. Once 2. Twice 3. Three times
 4. More than three times
12. During your last pregnancy, did you experience tape worm infestation? 1. Yes 2. No
(If the answer is No skip to que. number 15)
13. If the answer to question number 12 is "yes", where did you go for treatment?
1. Hospital/ Health center/ Health station
 2. health post 3. Local herbal healer
 4. I took the medicine by my self after preparing it
 5. Other place (specify_____

14. If the answer to question number 13 is "3" , "4" or "5" why do you chose to go there or to treat your self?
1. Hospitals/ Health centers/ Health stations or Health posts are far
 2. Because of economic reasons, I was not able to go to the Hospitals/ Health Centers/ Health stations or Health posts
 3. The health professionals and the CHA's has no good manner
 4. Because I know the medicine
 5. Because more than the health professional the others can handle the problem or traditional medicines can best cure the disease
 6. Other reasons (specify)_____
15. During your last pregnancy, with out the presence of signs and symptoms of tape worm infestation, were you taking kosso or other herbal medicines for tape worm infestation ?
1. Yes 2. No
- (If the answer is No skip to que. number 20)
16. If the answer to question number 15 is "yes", during your first 3 months of pregnancy, how often were you taking it?_____
- 17.If the answer to question number 15 is "yes", during your second 3 months of pregnancy, how often were you taking it?_____

18. If the answer to question number 15 is "yes",
during your last 3 months of pregnancy, how often
were you taking it? _____

19. If the answer to question number 15 is "yes", what
were the reasons for taking kosso or other herbal
medicines, without the presence of signs and
symptoms of tape worm infestation?

1. to wash the abdomen during labour hence
facilitating delivery

2. to remove the food (eaten by the mother) which
is attached to the fetus so that the fetus will
be clean

3. to feel at ease

4. to increase appetite

5. simply because it is common in our culture

6. other reasons (specify) _____

20. During your last pregnancy, have you experienced
diseases other than tape worm infestation?

1 ~~Y~~ 2 ~~N~~

(If the answer is No skip to que. number 25)

21. If the answer to question number 20 is "yes", what
was that disease? (specify) _____

22. If the answer to question number 20 is "yes",
Where did you go for treatment?

1. Hospital/ Health Center/ Health Station

2. Health Post

3. Local Herbal Healer

4. I took the medicine my self after preparing it

5. Other places (specify) _____

23. If the answer given to que. number 22 is "3" , "4"
or "5", why did you chose to go there or treat
your self?

1. Hospitals/ Health centers/ Health stations or
Health posts are far
2. Because of economic reasons, I was not able to
go to the Hospitals/ Health Centers/ Health
stations or Health posts
3. The health professionals and the CHA's has no
good manner
4. Because I know the medicine
5. Because more than the health professional the
others can handle the problem or traditional
medicines can best cure the disease
6. Other reasons (specify)_____

24. If the answer to que. number 22 is "3" , "4" or
"5" , what was the medicine that you took?

1. I don't know
2. I know the medicine but I am not willing to
tell
3. If you know the medicine , and if you are
willing to tell, what was that medicine?
(specify)_____

25. During your last pregnancy, were you making sex
with your husband? 1. Yes 2. No

26. If the answer to question number 25 is "yes", what
were the reasons for continuing sexual intercourse
during pregnancy?

1. Because the husband's ejaculated fluid is considered as food for the fetus
 2. To get heat for my self
 3. Other reasons (specify)_____
27. If the answer to question number 26 is "No", what were the reasons for abstaining?
1. Because it is a sin to make sexual intercourse during pregnancy
 2. Because it is believed that it will result in loss of the conceptus tissue/child
 3. Because it is believed that it will make the mother sick
 4. Because I feel tired to make sex during pregnancy
 5. Other reasons (specify)_____
28. If the answer to question number 25 is "No", in which period of your pregnancy did you abstain from sexual intercourse?
1. During the first 3 months
 2. During the second 3 months
 3. During the last 3 months
29. If the answer to question number 25 is "No", was your husband allowed to have sex with other women?
1. Yes
 2. No
30. Were you wearing special type of clothes during your last pregnancy? 1.Yes 2.No
- (If the answer is No skip to que. number 33)

31. If the answer to que. number 30 is "Yes", what type of cloth were you wearing?
1. Wide and thin
 2. Wide and thick
 3. Other type (specify)_____
32. If the answer to que. number 30 is Yes , in which period of your pregnancy , were you wearing special type of cloth?
1. First 3 months
 2. Second 3 months
 3. Last 3 months
33. Were you fetching water during your last pregnancy?
1. Yes
 2. No
34. If the answer to que. number 33 is "yes", how hard was the work?
1. Same as the non-pregnancy period
 2. Harder than the non-pregnancy period
 3. Less hard compared to the non-pregnancy period
35. Were you collecting fire wood during your last pregnancy?
1. Yes
 2. No
36. If the answer to que. number 35 is "yes", how hard was the work?
1. Same as the non-pregnancy period
 2. Harder than the non-pregnancy period
 3. Less hard compared to the non-pregnancy period
37. Were you cooking food during your last pregnancy?
1. Yes
 2. No

38. If the answer to que. number 37 is "yes", how hard was the work?
1. Same as the non-pregnancy period
 2. Harder than the non-pregnancy period
 3. Less hard compared to the non-pregnancy period
39. During your last pregnancy, were you doing works different from those mentioned in questions 33, 35, and 37? 1. Yes 2. No
40. If the answer to que. number 39 is "yes", how hard was the work?
1. Same as the non-pregnancy period
 2. Harder than the non-pregnancy period
 3. Less hard compared to the non-pregnancy period
41. Did you experience vaginal bleeding during your last pregnancy? 1. Yes 2. No
42. If the answer to question number 41 is "yes", what treatment have you taken?
1. Treatment was given in health institution
 2. Drink goat or sheep blood
 3. Bleeding subsided with out taking treatment
 4. Treatment was given by the local herbal healer
 5. Other treatment (specify) _____
43. Who decides to seek help from other persons/ health institutions when you are sick during pregnancy?
1. My self 2. The husband 3. My husband and me
 4. Other people (specify) _____

38. If the answer to que. number 37 is "yes", how hard was the work?
1. Same as the non-pregnancy period
 2. Harder than the non-pregnancy period
 3. Less hard compared to the non-pregnancy period
39. During your last pregnancy, were you doing works different from those mentioned in questions 33, 35, and 37? 1. Yes 2. No
40. If the answer to que. number 39 is "yes", how hard was the work?
1. Same as the non-pregnancy period
 2. Harder than the non-pregnancy period
 3. Less hard compared to the non-pregnancy period
41. Did you experience vaginal bleeding during your last pregnancy? 1. Yes 2. No
42. If the answer to question number 41 is "yes", what treatment have you taken?
1. Treatment was given in health institution
 2. Drink goat or sheep blood
 3. Bleeding subsided with out taking treatment
 4. Treatment was given by the local herbal healer
 5. Other treatment (specify)_____
43. Who decides to seek help from other persons/ health institutions when you are sick during pregnancy?
1. My self 2. The husband 3. My husband and me
 4. Other people (specify)_____

44. During your last pregnancy, were you sitting on the pit (covered with garment) within which is a smoke of wood or leaf? 1. Yes 2. No
45. If the answer to question number 44 is "yes", what was the reason?
1. To make the husband happy
 2. To make the skin smooth
 3. To avoid bad smell
 4. Other reasons (specify)_____
46. If the answer to question number 44 is "yes", in which period of your pregnancy have you done that?
1. First three months
 2. Second three months
 3. Last three months
47. 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

48. Where did you give birth during your last delivery?
1. Hospital/ Health center/ Health station
 2. Health Post 3. Home
 4. other place(specify):_____
- (If the answer is 1 or 2, skip to que. number 54)

49. In your last delivery, if you have given birth at home, who has assisted your delivery?
1. TTBA 2. Mother-in-law 3. Neighbour
 4. My husband's another wife
 5. Other (specify) _____
50. In your last delivery, if you have given birth at home, how many people were allowed to be surrounding you while you are in labour? _____
51. In your last delivery, if you have given birth at home, on what materials did you deliver?
1. On bed
 2. On the floor covered with mattress
 3. On the floor covered with hide
 4. Simply on the floor (with out cover)
 5. Other materials (specify) _____
52. In your last delivery, if you have given birth at home, were there special ceremonies during labour?
1. Yes 2. No
53. If the answer to que. number 52 is "yes", what were the ceremonies?
1. Singing
 2. Applying butter, on the head, to all people in the house
 3. Smoking leaves with good smell in the house
 4. Other ceremonies (specify) _____
54. Have you faced massaging during your last delivery?
1. Yes 2. No

55. If the answer to que. number 54 is "yes", what do you think are the reasons for doing it?
1. To correct the position of the fetus
 2. To facilitate labour
 3. Other reasons (specify) _____
56. Was your birth canal lubricated with butter during your last delivery? 1. Yes 2. No
57. Have you taken sheep or goat blood during your last delivery? 1. Yes 2. No
- (If No, skip to que. number 59)
58. If the answer to question number 57 is "yes", what were the reasons for drinking sheep or goat blood?
1. To replace the lost blood
 2. For strength
 3. Other reasons (specify) _____
59. Who decides to seek help from other persons/ health institutions during labour?
1. My self 2. The husband
 3. My self and the husband
 4. Other people (specify) _____
60. What other traditional practices have you faced during your last delivery? (specify) _____

II. TRADITIONAL PRACTICES DONE ON THE NEW BORN AND PLACENTA DURING THE LAST DELIVERY

61. During your last delivery, was the out come alive baby? 1. Yes 2. No
62. During your last delivery, if the delivery was out side health institutions, what was used to cut the umbilical cord?
1. new and boiled razor blade
 2. new but not boiled razor blade
 3. used razor blade but boiled
 4. Boiled scissor
 5. Scissor which was not boiled
 6. other materials (specify)_____
63. During your last delivery, was the umbilical cord tied after cutting it? 1. Yes 2. No
64. If the answer is "Yes" to question number 63, what was used to tie the umbilical cord?
1. thread 2. enset 3. Bark of a tree
 4. other materials (specify)_____
65. If the answer is "No" to question number 63, what was the reason to leave it with out tying?
1. The cut end of the cord will dry by it self
 2. It was left unknowingly
 3. Other reasons (specify) _____
66. During your last delivery, wass any thing applied to the umbilical stump after cutting it?
1. Yes 2. No 3. I don't know

67. If the answer to question number 66 is "yes",
what was applied to the umbilical stump?
1. mud 2. soil 3. cow dung 4. butter
5. other (specify) _____
68. Was butter given to the new born during your last
delivery? 1. Yes 2. No
69. If the answer to que. number 68 is "yes", what
were the reasons to give butter?
1. To wash the kosso in the intestine of the new
born, which was taken by the mother while
pregnant
2. To make the intestine of the new born smooth
3. Other reasons (specify) _____
70. What other traditional practices were done on the
new born and the placenta during your last
delivery? (specify) _____

III. EXPECTATIONS FROM THE RELATIVES DURING DELIVERY

71. During your last delivery, what was expected of
your husband?
1. Leave the house
2. Sing
3. Support the baby from behind the mother
4. Sitting and following the labour until
delivery
5. Other (specify) _____

72. During your last delivery, what was expected of your mother? _____
73. During your last delivery, what was expected of your father? _____
74. During your last delivery, what was expected of your grand mother? _____
75. During your last delivery, what was expected of your sister? _____
76. During your last delivery, what was expected of your daughters? _____
77. During your last delivery, what was expected of your sons? _____

IV. TRADITIONAL PRACTICES AFTER DELIVERY

78. After your last delivery, when did you go out first?
- 1. immediately after delivery
 - 2. Within 2-7 days 3. Within 8-14 days
 - 4. Within 15-30 days 5. Within 31-44 days
 - 6. After 44 days of delivery
79. For how long did you refrain from sex after your last delivery?
- 1. Less than one month 2. 1-2 months
 - 3. 3-4 months 4. More than 4 months
80. Have you applied hot metal to your child when she/he has abdominal cramp? 1. Yes 2. No

81. After your last delivery, when did you start to breast feed your child?

1. Immediately after delivery
2. Within one hour of delivery
3. Within two hours of delivery
4. Within three hours of delivery
5. After three hours of delivery

2. Questionnaire (Amharic version)

የመጠይቅ ቁጥር /...../...../...../...../

የጥናቶች ዓላማና የሚሰጥር አጠባበቅ

የጥናቶች ዓላማ 1) በአካባቢው በፅርግዝናና በመውለድ ወቅት የሚደረጉትን ተግባሮች

2) ጤና፤ ሥነምግብ፤ ኢኮኖሚያዊና ማህበራዊ ህይወት

ለማወቅ ሲሆን ይህ ጥናትም ከተጠናቀቀ በኋላ የህብረተሰቡን የጤና ችግር ለማቃለል የሩ መነሻ ይሆናል ተብሎ ስለሚታመንበት በጥናቱ ለመሳተፍ ፈቃደኛ እንዲሆኑ ስንጠይቅ የሚሰጡት መረጃ የሚሰጥም እንደሚጠበቅ እናረጋግጣለን።

በጥናቱ ለመሳተፍ ፈቃደኝነትን የሚያረጋግጡበት ቦታ

የተጠያቂው የቤት ቁጥር

ክፍተት ሥራ ጋር ያለው ግንኙነት _____

በጥናቱ ለመሳተፍ ፈቃደኛ መሆንዎትን የ (x) ምልክት በማስቀመጥ ያረጋግጡ

1. ሀ. የጥናቱን ዓላማና የሚሰጥር አጠባበቁን በሚገባ አንብቤ በአራሴ ፈቃድ በጥናቱ ለመሳተፍ ተስማምቻለሁ ()

ለ. የጥናቱን አላማና የሚሰጥር አጠባበቁን በሚገባ አስረድተው በአራሴ ፈቃድ በጥናቱ ለመሳተፍ ተስማምቻለሁ ()

2. ሀ. የጥናቱን አላማና የሚሰጥር አጠባበቁን አንብቤዋለሁ። ሆኖም ግን በጥናቱ ለመሳተፍ ፈቃደኛ አይደለሁም ()

ለ. የጥናቱን አላማና የሚሰጥር አጠባበቁን አስረድተውኛል። ሆኖም ግን በጥናቱ ለመሳተፍ ፈቃደኛ አይደለሁም ()

የቃለመጠይቅ አቅራቢው ሥም _____
ቀን _____ ፊርማ _____

ቅፅ 1. የቤተሰብ መጠይቅ

1. አድራሻ
 . ከተማ _____
 . ቀበሌ/ገበሬ ማህበር _____
2. የቤተሰቡ የወር ገቢ በብር (ለከተማ ነዋሪዎች ብቻ) _____
3. ያላቸው የቤት እንስሳት ብዛት
 ሀ. የከብት ብዛት _____ ለ. የበጎች ብዛት _____
 መ. የሌሎች የቤት እንስሳት ዓይነትና ብዛት (ይጠቀስ) _____
4. በዓመት የሚመረቱ እህሎች ዓይነትና ብዛት በኩንታል
 ሀ. በቆሎ _____ ኩንታል ሐ. ጤፍ _____ ኩንታል
 ለ. በለቄ _____ ኩንታል መ. ስንዴ _____ ኩንታል
 ሠ. ሌላ (ዓይነትና ብዛት በኩንታል ይጠቀስ) _____
5. የመኖሪያ ቤት ይዞታ ሀ. ባለቤት (የራስ)
 ለ. ቀበሌ የተከራዩት
 ሐ. ሌላ ይጠቀስ
6. የመኖሪያ ቤት ጣሪያ የተሠራው
 ሀ. በቆርቆሮ ሐ. በስሚንቶ
 ለ. በሣር መ. ሌላ ካለ ይጠቀስ
7. የመኖሪያ ቤት ኮርኒስ የተሰራው
 ሀ. ኮርኒስ የለውም ሐ. ጨርቅ
 ለ. ፋይዚት መ. ሌላ ይጠቀስ
8. የመኖሪያ ቤት ድግድግዳ የተሠራው
 ሀ. በእንጨትና ጭቃ መ. በብሎኬት
 ለ. በእንጨትና ሣር ሠ. በሽክል
 ሐ. በድንጋይ ረ. በሌላ ነገር ይጠቀስ _____
9. የመኖሪያ ቤት ወለል የተሠራው
 ሀ. በስሚንቶ ሐ. በጣውላ
 ለ. በጭቃ መ. ሌላ ይጠቀስ
10. የመኖሪያ ቤት ክፍል ብዛት _____

ቅፅ 2 .

I. የግለሰብ መጠይቅ (ለሁለቱም ጥናቶች የጋራ የሆነ)

1. ዕድሜ _____

2. ፆታ _____

3. ሐይማኖት

ሀ. ኦርቶዶክስ ክርስቲያን
መ. ፕሮቴስታንት

ለ. እስላም

ሐ. ካቶሊክ

ሠ. ሌላ (ይጠቀስ) _____

4. ብሔር

ሀ. አማራ

ለ. አሮሞ

ሐ. ጉራጌ

መ. ትግሬ

ሠ. ሌላ (ይጠቀስ) _____

5. ቋንቋ

ሀ. አማርኛ

ለ. አሮምኛ

ሐ. ጉራግኛ

መ. ትግርኛ

ሠ. ሌላ (ይጠቀስ) _____

6. የትምህርት ደረጃ

ሀ. ማንበብና መፃፍ የማትችል/የማይችል

ሠ. 12ኛ ክፍል የጨረሰ

ለ. ማንበብና መፃፍ የምትችል/የሚችል

ረ. 12+1

ሐ. አንደኛ ደረጃ

ሰ. 12+2

መ. 2ኛ ደረጃ

ሸ. 12+4 እና በላይ

7. ሥራ

ሀ. ገበሬ

ለ. የቤት እመቤት

ሐ. የመንግሥት ሠራተኛ

መ. ነጋዴ

ሠ. ተማሪ

ረ. ሥራ የሌለው

ሰ. ሌላ (ይጠቀስ) _____

8. በቀበሌ/ገበሬ ማህበሩ ውስጥ የቆዩበት ጊዜ

ሀ. ከ 6 ወር በታች

ለ. ከ 6 - 11 ወር

ሐ. ከ 1 - 4 ዓመት

መ. ከ 5 - 10 ዓመት

ሠ. ከ 11 - 14 ዓመት

ረ. ከ 15+ ዓመት

9. የጋብቻ ሁኔታ

ሀ. ያላገባች/ያላገባ

ለ. ያገባች/ያገባ

ሐ. የፈታች/የፈታ

መ. ባሏ የሞተባት/ሚስቱ የሞተችበት

ሠ. ከባለቤቷ/ከባለቤቱ የተለየች/የተለየ

10. የትዳር ጓደኛዋ/ጓደኛው ሥራ (ላገቡት ብቻ) _____

የመጠይቅ ቁጥር / / / / /

11. የባለቤቷ/ባለቤቱ የትምህርት ደረጃ (ላገቡት ብቻ)
ሀ. ማንበብና መፃፍ የምትችል/የማይችል
ለ. ማንበብና መፃፍ የምትችል/የሚችል
ሐ. 1ኛ ደረጃ
መ. 2ኛ ደረጃ

ሠ. 12ኛ ክፍል የጨረሰች/የጨረሰ
ረ. 12+1
ሰ. 12+2
ሸ. 12+4 እና በላይ

II. የግለሰብ መጠይቅ (በዕርግዝናና በመውለድ ወቅት በዘልማድ የሚደረጉ ተግባራትን ለማጥናት ብቻ የሚያገለግል)

12. መጀመሪያ ስታገባ የነበራት ዕድሜ (አግብታ የምታውቅ ከሆነ) _____
13. በአሁኑ ወቅት ነፍሰጡር ነዎት? 1. አዎ 2. አይደለሁም
14. የውርጃ ብዛት _____
15. በህይወት የተወለዱ ልጆች ብዛት _____
16. ሞተው የተወለዱ ልጆች ብዛት _____
17. አጠቃላይ የዕርግዝና ብዛት _____
18. ከተወለዱ በ28 ቀናት ውስጥ የሞቱ ልጆች ብዛት _____
19. አሁን ያሏት ልጆች ብዛት _____

ቅፅ 3 - በዕርግዝናና በመውለድ ወቅት በዘልማድ የሚደረጉ ተግባራት

ሀ - በመጨረሻው እርግዝና ወቅት በዘልማድ የሚደረጉ ተግባራት (ሴትናዋ አሁን ነፍሰጡር ከሆኑ ከአሁኑ እርግዝና በፊት ስላለው ይጠይቁ)

1. ነፍሰጡር ሆነው እያሉ የተመጣጠነ ምግብ መውሰድ ለእርስዎም ሆነ ለፅንሱ ጤንነት የሚረዳ መስሎ ይታዩታል? 1. አዎ 2. አይረዳም 3. አላውቅም

2. በመጨረሻ እርግዝናዎት በመጀመሪያዎቹ ሦስት ወራት (ካረገዙ እስከ 3 ወር) ለመብላት የሚፈቀዱልዎት ምግቦች ምን ነበሩ?

ሀ. ጤፍ እንጀራ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
- የማይፈቀድ ከሆነ ለምን?

ለ. የበቆሎ እንጀራ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
- የማይፈቀድ ከሆነ ለምን?

ሐ. ስንዴ ዳቦ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
- የማይፈቀድ ከሆነ ለምን?

መ. የበቆሎ ዳቦ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
- የማይፈቀድ ከሆነ ለምን?

ሠ. የእንሰት ዳቦ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
- የማይፈቀድ ከሆነ ለምን?

ረ. ወተት 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
- የማይፈቀድ ከሆነ ለምን?

ሰ. እርጎ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
- የማይፈቀድ ከሆነ ለምን?

ሸ. ዕንቁላል 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
- የማይፈቀድ ከሆነ ለምን?

ቀ. ሥጋ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
- የማይፈቀድ ከሆነ ለምን?

በ. የጎበሻ ጎመን 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
- የማይፈቀድ ከሆነ ለምን?

ተ. ዓሳ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
- የማይፈቀድ ከሆነ ለምን?

ቸ. የቦለቄ ንፍሮ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
- የማይፈቀድ ከሆነ ለምን?

ኔ. አትክልት (ሰላጣ፤ ቲማቲም፤ ቆስጣ)
1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
- የማይፈቀድ ከሆነ ለምን?

ኘ. ፍራፍሬዎች (ብርቱካን፤ ሙዝ፤ ፓፓያ)
1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
- የማይፈቀድ ከሆነ ለምን?

3. በመጨረሻ ዕግዝናዎት በሁለተኛው ሦስት ወራት (ከ 4 - 6 ወር) ለመብላት የሚፈቀዱልዎት ምግቦች ምን ነበሩ?

ሀ. ጤፍ እንጀራ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
- የማይፈቀድ ከሆነ ለምን?

ለ. የበቆሎ እንጀራ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
- የማይፈቀድ ከሆነ ለምን?

ሐ. ስንዴ ዳቦ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
- የማይፈቀድ ከሆነ ለምን?

መ. የበቆሎ ዳቦ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም.
የማይፈቀድ ከሆነ ለምን?

ሠ. የእንሰት ዳቦ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
የማይፈቀድ ከሆነ ለምን?

ረ. ወተት 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
የማይፈቀድ ከሆነ ለምን?

ሰ. እርጎ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
የማይፈቀድ ከሆነ ለምን?

ሸ. ዕንቁላል 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
የማይፈቀድ ከሆነ ለምን?

ቀ. ሥጋ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
የማይፈቀድ ከሆነ ለምን?

በ. የሃበሻ ጎመን 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
የማይፈቀድ ከሆነ ለምን?

ተ. ዓሳ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
የማይፈቀድ ከሆነ ለምን?

ቸ. የበለቄ ንፍሮ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
የማይፈቀድ ከሆነ ለምን?

ኘ. አትክልት (በላጣ፤ ቲማቲም፤ ቆስጣ)
1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
የማይፈቀድ ከሆነ ለምን?

ሃ. ፍራፍሬዎች (ብርቱካን፤ ሙዝ፤ ፓፓያ)
1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
የማይፈቀድ ከሆነ ለምን?

4. በመጨረሻ ዕርግዝናዎት ወቅት በመጨረሻዎቹ ሦስት ወራት (ከ 7 - 9 ወር) ለመብላት የሚፈቀዱልዎት ምግቦች ምን ነበሩ?

ሀ. ጤፍ እንጀራ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
የማይፈቀድ ከሆነ ለምን?

ለ. የበቆሎ እንጀራ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
የማይፈቀድ ከሆነ ለምን?

ሐ. ስንዴ ዳቦ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
የማይፈቀድ ከሆነ ለምን?

መ. የበቆሎ ዳቦ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
የማይፈቀድ ከሆነ ለምን?

ሠ. የእንሰት ዳቦ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
የማይፈቀድ ከሆነ ለምን?

ረ. ወተት 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
የማይፈቀድ ከሆነ ለምን?

ሰ. እርጎ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
የማይፈቀድ ከሆነ ለምን?

ሸ. ዕንቁላል 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
የማይፈቀድ ከሆነ ለምን?

ቀ. ሥጋ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
የማይፈቀድ ከሆነ ለምን?

- በ. የሃበሻ ጎመን 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
 . የማይፈቀድ ከሆነ ለምን? _____
- ተ. ዓሳ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
 . የማይፈቀድ ከሆነ ለምን? _____
- ቸ. የበለቄ ንፍሮ 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
 . የማይፈቀድ ከሆነ ለምን? _____
- ኘ. አትክልት (በላጣ፤ ቲማቲም፤ ቆስጣ) 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
 . የማይፈቀድ ከሆነ ለምን? _____
- ሃ. ፍራፍሬዎች (ብርቱካን፤ ሙዝ፤ ፓፓያ) 1. አዎ ይፈቀዳል 2. አይፈቀድም 3. አላውቅም
 . የማይፈቀድ ከሆነ ለምን? _____
5. በመጨረሻ እርግዝናዎት ወቅት በሐይማኖት ምክንያት ይታሰባል ነበር?
 1. አዎ እንደም ነበር 2. አልታሰብም
6. የ5ኛው ጥያቄ መልስ አዎ ከሆነ በየትኛው የዕርግዝና ወቅት ነበር የታሰበ?
 ሀ. በመጀመሪያዎቹ ሦስት ወራት (ካረገዙ እስከ 3 ወር)
 ለ. በሁለተኛው ሦስት ወራት (ከ 4 - 6 ወር)
 ሐ. በመጨረሻው ሦስት ወራት (ከ 7 - 9 ወር)
7. የ5ኛው ጥያቄ መልሱ አዎ ከሆነ ምን ዓይነት ሥራ ነበር የሚታሰብ?
 ሀ. የተወሰኑ የምግብ ዓይነቶችን አለመውሰድ 1. አዎ 2. አይደለም 3. አላውቅም
 ለ. የሚበላውን የምግብ መጠን መቀነስ 1. አዎ 2. አይደለም 3. አላውቅም
 ሐ. የሚመገቡበትን ጊዜ መቀነስ 1. አዎ 2. አይደለም 3. አላውቅም
8. (በታሰቡ ምክንያት) የተወሰኑ የምግብ ዓይነቶችን እንዲወስዱ የማይፈቀድልዎት ከነበር ምን ምን የምግብ ዓይነቶች ነበሩ ለመውሰድ የማይፈቀዱ?
 ሀ. ሥጋ 1. አዎ አይፈቀድም 2. አይደለም (ይፈቀዳል) 3. አላውቅም
 ለ. ወተት 1. አዎ አይፈቀድም 2. አይደለም (ይፈቀዳል) 3. አላውቅም
 ሐ. እንቁላል 1. አዎ አይፈቀድም 2. አይደለም (ይፈቀዳል) 3. አላውቅም
 መ. አሣ 1. አዎ አይፈቀድም 2. አይደለም (ይፈቀዳል) 3. አላውቅም
 ሠ. ሌሎች የማይፈቀዱ (ይጠቀስ) _____
9. የሚበሉትን የምግብ መጠን በመቀነስ ይታሰባል ከነበር ከምን ውጭ ከሚበሉት የምግብ መጠን ጋር ሲወዳደር በግምት ምን ያህል ይሆናል?
 ሀ. ግማሽ ለ. ሁለት ሦስተኛ ሐ. አንድ አራተኛ መ. አንድ ሦስተኛ ሠ. አላውቅም
10. የሚመገቡበትን ጊዜ በመቀነስ ይታሰባል ከነበር ዝቅተኛው ያለማቋረጥ የሚታሰቡት ለስንት ሰዓታት ነበር?
 ሀ. ከ 4 ሰዓት በታች ለ. ከ 4 - 6 ሰዓት ሐ. ከ 7 - 9 ሰዓት
 መ. ከ 10 - 12 ሰዓት ሠ. ከ 12 ሰዓት በላይ ረ. አላውቅም
11. የሚመገቡበትን ጊዜ በመቀነስ ይታሰባል ከነበር በቀን ስንት ጊዜ ይበሉ ነበር?
 ሀ. አንድ ጊዜ ለ. ሁለት ጊዜ ሐ. ሦስት ጊዜ መ. ከሦስት ጊዜ በላይ
12. በመጨረሻው ዕርግዝናዎት ወቅት የኮሶ በሽታ ይዞታት ነበር ወይ?
 1. አዎ ይዞኛል 2. አልዞኝም
 (የተሰጠው መልስ አልዞኝም ከሆነ ወደ 15ኛው ጥያቄ እለፍ)
13. ለ12ኛው ጥያቄ መልስ አዎ ከሆነ ለህክምና የት ሄዱ?
 ሀ. ሆስፒታል / ጤና ጣቢያ / ክሊኒክ መ. እኔ ራሴ መድሃኒት አዘጋጅቼ ወሰድኩ
 ለ. ጤና ኬላ ሠ. ሌላ ቦታ (ይጠቀስ) _____
 ሐ. የመንደር መድሐኔት አዋቂ

14. ለ13ኛው ጥያቄ የተሰጠው መልስ ሐ መ ወይም ሠ ከሆነ ለምን ወደዚያ ለመሄድ ወይም ራስዎትን ለማከም መረጡ?

ሀ. ሆስፒታል፤ ጤና ጣቢያ፤ ክሊኒክ ወይም ጤና ኬላ ሩቅ ስለሆኑ

ለ. ሆስፒታል፤ ጤና ጣቢያ፤ ክሊኒክ ወይም ጤና ኬላ ሂጄ ለመታከም የገንዘብ ችግር ስላለብኝ

ሐ. የጤና ባለሙያዎች ወይም የቀበሌ ጤና ተጠሪዎች በጥሩ ስነምግባር ስለማያስተናግዱ

መ. መድሃኒቱን ራሴ ስለማውቀው

ሠ. ከጤና ባለሙያዎች በበለጠ ሌሎች በሽታውን ለማከም ስለሚችሉ ወይም ያበሻ መድሃኒት

በይበልጥ ስለሚፈውስ

ረ. ሌላ ምክንያት (ይጠቀስ) _____

15. በመጨረሻ እርግዝናዎት ወቅት የኮሶ ስሜት ሳይሰማዎትና ምልክት ሳያዩ ኮሶ ወይም ሌላ የኮሶ መድሐኒት ወስደው ነበር ወይ?

1. አዎ

2. አይደለም

(የተሰጠው መልስ አይደለም ከሆነ ወደ 20ኛው ጥያቄ እለፍ)

16. (የ15ኛው ጥያቄ መልስ አዎ ከሆነ) በመጀመሪያዎቹ ሦስት የዕርግዝና ወራት (ካረገዙ እስከ ሦስት ወር) በየምን ያህል ጊዜ ነበር መድሃኒቱን የሚወስዱት? _____

17. (የ15ኛው ጥያቄ መልስ አዎ ከሆነ) በሁለተኛው ሦስት የዕርግዝና ወራት (ከ 4 - 6 ወር)

በየምን ያህል ጊዜ ነበር መድሃኒቱን የሚወስዱት? _____

18. (የ15ኛው ጥያቄ መልስ አዎ ከሆነ) በመጨረሻው ሦስት የዕርግዝና ወራት (ከ 7 - 9 ወር)

በየምን ያህል ጊዜ ነበር መድሃኒቱን የሚወስዱት? _____

19. (የ15ኛው ጥያቄ መልስ አዎ ከሆነ) የኮሶ ስሜት ሳይሰማዎትና ምልክት ሳያዩ ኮሶ ወይም ሌላ የኮሶ መድሃኒት የወሰዱበት ምክንያት ምን ነበር?

ሀ. በምጥ ጊዜ ሆድዎን እንዲያጥብሉትና ምጡ እንዲፋጠን

ለ. የሚበላው ምግብ ክልጁ ሰውነት ስለሚጣበቅ ልጁን ለማጽዳት (ለማንጸት)

ሐ. ሰውነትዎን ስለሚቀልዎት

መ. ምግብ በደንብ ለመብላት እንዲያስችሉት

ሠ. እንዲሁ በባህላችን የተለመደ ስለሆነ ብቻ

ረ. ሌላ ምክንያት (ይጠቀስ) _____

20. በመጨረሻው ዕርግዝናዎት ወቅት ከኮሶ በሽታ ውጭ ሌላ በሽታ አሞዎት ነበር?

1. አዎ

2. አይደለም

(የተሰጠው መልስ አይደለም ከሆነ ወደ 25ኛው ጥያቄ እለፍ)

21. የ20ኛው ጥያቄ መልስ አዎ ከሆነ ምን ዓይነት በሽታ ነበር ያመሞት? (ይጠቀስ) _____

22. የ20ኛው ጥያቄ መልስ አዎ ከሆነ ለህክምና የት ሄዱ?

ሀ. ሆስፒታል፤ ጤና ጣቢያ ክሊኒክ

ለ. ጤና ኬላ

ሐ. የመንደር መድሃኒት አዋቂ

መ. እኔ ራሴ መድሃኒት አዘጋጅቼ ወሰድኩ

ሠ. ሌላ ቦታ (ይጠቀስ) _____

23. ለ 22ኛው ጥያቄ የተሰጠው መልስ ሐ መ ወይም ሠ ከሆነ ለምን ወደዚያ ለመሄድ ወይም ራስዎን ለማክም መረጡ?
 ሀ. ሆስፒታል፤ ጤና ጣቢያ፤ ክሊኒክ ወይም ጤና ኬላ ሩቅ ስለሆኑ
 ለ. ሆስፒታል፤ ጤና ጣቢያ፤ ክሊኒክ ወይም ጤና ኬላ ሂጂ ለመታከም የገንዘብ ችግር ስላለብኝ ሐ. የጤና ባለሙያዎች/የቀበሌ ጤና ተጠሪዎች በጥሩ ሥነምግባር ስለማያስተናግዱ መ. መድሐኒቱን ራሴ ስለማውቀው
 ሠ. ከጤና ባለሙያዎች በበለጠ ሌሎች በሽታውን ለማክም ስለሚችሉ ወይም የሃበሻ መድሐኒት በይበልጥ ስለሚፈውስ
 ረ. ሌላ ምክንያት (ይጠቀስ) _____
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24. ለ 22ኛው ጥያቄ የተሰጠው መልስ ሐ መ ወይም ሠ ከሆነ ምን ዓይነት መድሐኒት ነበር የወሰዱት?
 ሀ. የወሰድኩትን መድሐኒት አላውቀውም
 ለ. የወሰድኩትን መድሐኒት አውቀዋለሁ ሆኖም ግን ለመናገር አልፈልግም
 ሐ. የወሰድኩትን መድሐኒት ካወቁትና ለመናገር ፈቃደኛ ከሆኑ ምን መድሐኒት ነበር የወሰዱት (ይጠቀስ) _____
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25. በመጨረሻው ዕርግዝናዎት ወቅት ከባለቤትዎ ጋር ግብረ ሥጋ ግንኙነት ያደርጉ ነበር?
 1. አዎ 2. አይደለም
26. የ25ኛው ጥያቄ መልስ አዎ ከሆነ በዕርግዝና ወቅት ግብረ ሥጋ ግንኙነት ማድረግ የቀጠሉበት ምክንያት ምን ነበር?
 ሀ. በግብረ ሥጋ ግንኙነት ጊዜ ከወንዱ የሚወጣው ፈሳሽ ለልጁ ምግብ ይሆናል ተብሎ ስለሚታመን
 ለ. ለእኔ ለራሴ ሙቀት ለማግኘት
 ሐ. ሌላ ምክንያት (ይጠቀስ) _____
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27. የ25ኛው ጥያቄ መልስ አይደለም ከሆነ ግብረ ሥጋ ግንኙነት ከማድረግ ያቋረጡበት ምክንያት ምን ነበር?
 ሀ. በዕርግዝና ወቅት ቅብረ ሥጋ ግንኙነት ማድረግ ኃጢአት ስለሆነ
 ለ. በዕርግዝና ወቅት ግብረ ሥጋ ግንኙነት ማድረግ ልጁን ያሳጣል ተብሎ ስለሚታመን
 ሐ. በዕርግዝና ወቅት ግብረ ሥጋ ግንኙነት ማድረግ እናትየዋን ያሳምማል ተብሎ ስለሚታመን መ. ስለሚደክመኝ
 ሠ. ሌላ ምክንያት (ይጠቀስ) _____
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28. የ25ኛው ጥያቄ መልስ አይደለም ከሆነ በየትኛው የዕርግዝና ወቅት ነበር ግብረ ሥጋ ግንኙነት ማድረግ ያቋረጡት?
 ሀ. በመጀመሪያዎቹ ሦስት ወራት (ካረገዙ እስከ 3 ወር)
 ለ. በሁለተኛው ሦስት ወራት (ከ 4 - 6 ወር)
 ሐ. በመጨረሻዎቹ ሦስት ወራት (ከ 7 - 9 ወር)
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29. የ25ኛው ጥያቄ መልስ አይደለም ከሆነ ባለቤትዎ ከሌላ ሴት ጋር ግብረ ሥጋ ግንኙነት እንዲያደርግ ይፈቀድላቸው ነበር ወይ? 1. አዎ 2. አይደለም
30. በመጨረሻ ዕርግዝናዎት ጊዜ የተለየ ልብስ ይለብሱ ነበር? 1. አዎ 2. አይደለም (የተሰጠው መልስ አይደለም ከሆነ ወደ 33ኛው ጥያቄ አለፍ)
31. የ30ኛው ጥያቄ መልስ አዎ ከሆነ ምን ዓይነት ልብስ ነበር የሚለብሱት?
 ሀ. ሰፊና ስስ ለ. ሰፊና ወፍራም
 ሐ. ሌላ ዓይነት (ይጠቀስ) _____
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32. የ30ኛው ጥያቄ መልስ አዎ ከሆነ በየትኛው የዕርግዝና ወቅት ነበር የተለየ ልብስ የለበሱት?
 ሀ. በመጀመሪያዎቹ ሦስት ወራት (ካረገዙ እስከ 3 ወር)
 ለ. በሁለተኛው ሦስት ወራት (ከ 4 - 6 ወር)
 ሐ. በመጨረሻዎቹ ሦስት ወራት (ከ 7 - 9 ወር)

33. በመጨረሻ ዕርግዝናዎት ወቅት ውኃ ያመላልሱ ነበርላ 1. አዎ 2. አይደለም
34. የ33ኛው ጥያቄ መልስ አዎ ከሆነ የሥራው ክብደት ምን ያህል ነበር?
 ሀ. ነፍሰጡር ባልሆንኩበት ጊዜ እንደምሠራው ነበር
 ለ. ነፍሰጡር ባልሆንኩበት ጊዜ ከምሠራው ይክብዳል
 ሐ. ነፍሰጡር ባልሆንኩበት ጊዜ ከምሠራው ይቀላል
35. በመጨረሻ ዕርግዝናዎት ወቅት እንጨት ይለቅሙ ነበር? 1. አዎ 2. አይደለም
36. የ35ኛው ጥያቄ መልስ አዎ ከሆነ የሥራው ክብደት ምን ያህል ነበር?
 ሀ. ነፍሰጡር ባልሆንኩበት ጊዜ እንደምሠራው ነበር
 ለ. ነፍሰጡር ባልሆንኩበት ጊዜ ከምሠራው ይክብዳል
 ሐ. ነፍሰጡር ባልሆንኩበት ጊዜ ከምሠራው ይቀላል
37. በመጨረሻ ዕርግዝናዎት ወቅት ምግብ ያበስሉ ነበር? 1. አዎ 2. አይደለም
38. የ37ኛው ጥያቄ መልስ አዎ ከሆነ የሥራው ክብደት ምን ያህል ነበር?
 ሀ. ነፍሰጡር ባልሆንኩበት ጊዜ እንደምሠራው ክብደት ምን ያህል ነበር
 ለ. ነፍሰጡር ባልሆንኩበት ጊዜ ከምሠራው ይክብዳል
 ሐ. ነፍሰጡር ባልሆንኩበት ጊዜ ከምሠራው ይቀላል
39. በመጨረሻ ዕርግዝናዎት ወቅት በ33ኛው፤ በ35ኛው እና በ37ኛው ጥያቄ ከተጠቀሱት ሥራዎች ውጭ ይሰሩ ነበር? 1. አዎ 2. አይደለም
40. የ39ኛው ጥያቄ መልስ አዎ ከሆነ በአጠቃላይ ነፍሰጡር ባልሆኑበት ጊዜ ከሚሠሩት ጋር ሲወዳደር ምን ያህል ከባድ ነበሩ?
 ሀ. ነፍሰጡር ባልሆንኩበት ጊዜ እንደምሠራው ነበር
 ለ. ነፍሰጡር ባልሆንኩበት ጊዜ ከምሠራው ይክብዳል
 ሐ. ነፍሰጡር ባልሆንኩበት ጊዜ ከምሠራው ይቀላል
41. በመጨረሻ ዕርግዝናዎት ወቅት በማህፀንዎት ደም ፈሶ ነበር? 1. አዎ 2. አይደለም
42. የ41ኛው ጥያቄ መልስ አዎ ከሆነ ምን መድሐኒት ወስደው ነበር?
 ሀ. ህክምናው የተሰጠው በጤና ድርጅት ነበር መ. ከመንደር መድሐኒት አዋቂ ታክምኩ
 ለ. የፍየል ወይም የበግ ደም ጠጥኛ ነበር መ. ሌላ ህክምና (ይጠቀስ) _____
 ሐ. ምንም ህክምና ሳይሰጠኝ መፍሰሱን አቆመ
43. በዕርግዝና ወቅት ሲታመሙ ከሌሎች ሰዎች ወይም ከጤና ድርጅቶች ዕርዳታ እንዲያገኙ የሚወስነው ማንነው?
 ሀ. እኔ ለ. ባለቤቴ ሐ. ባለቤቴና እኔ መ. ሌላ ሰው ይጠቀስ _____
44. በመጨረሻ ዕርግዝናዎት ወቅት ከጉድጓድ ውስጥ እንጨት ወይም ቅጠል ጨምረው በማጨስ ይታጠኑ ነበር? 1. አዎ 2. አይደለም
 (የተሰጠው መልስ አይደለም ከሆነ ወደ 47ኛው ጥያቄ እለፍ)
45. የ44ኛው ጥያቄ መልስ አዎ ከሆነ ምክንያቱ ምን ነበር?
 ሀ. ባለቤትዎን ለማስደሰት
 ለ. ቆዳዎን ለማለስለስ
 ሐ. መጥፎ ጠረኖችን ስለሚያጠፋ
 መ. ሌሎች ምክንያቶች (ይገለፁ) _____
46. የ44ኛው ጥያቄ መልስ አዎ ከሆነ ይህን ያደረጉበት በየትኛው የዕርግዝና ወራት ነበር?
 ሀ. በመጀመሪያዎቹ ሦስት ወራት (ካረገዙ እስከ 3 ወር)
 ለ. በሁለተኛው ሦስት ወራት (ከአራት እስከ 6 ወር)
 ሐ. በመጨረሻው ሦስት ወራት (ከ 7 - 9 ወር)
47. ሌሎች በመጨረሻ ዕርግዝናዎት ወቅት ያጋጠሙዎት በዘልማድ የሚሰሩ ነገሮች ምን ነበሩ?

ለ. በመጨረሻው ውልደት ጊዜ በዘልማድ የተደረጉ ተግባራት

I. በዘልማድ በእናትየዋ ላይ የተደረጉ ተግባራት

48. ለመጨረሻ ጊዜ ሲወልዱ የት ነበር የወለዱት?
ሀ. ሆስፒታል/ጤና ጣቢያ/ክሊኒክ ለ. ጤና ኬላ ሐ. ቤት
መ. ሌላ ቦታ (ይጠቀስ) _____
(የተሰጠው መልስ ሀ ወይም ለ ከሆነ ወደ 54ኛው ጥያቄ እለፍ)
49. ለመጨረሻ ጊዜ ሲወልዱ ቤት ውስጥ ከወለዱ ማን ነበር ያዋለደዎት?
ሀ. የሰለጠነች የልምድ አዋላጅ ለ. የባለቤትዎ እናት ሐ. ንባቤት
መ. የባለቤቱ ሌላዋ ሚስት
ሠ. ሌላ (ይጠቀስ) _____
50. ለመጨረሻ ጊዜ ሲወልዱ ቤት ውስጥ ከወለዱ በምጡ ጊዜ ቤት ውስጥ እርስዎን በመክበብ የነበሩት ስንት ሰዎች ነበሩ? _____
51. ለመጨረሻ ጊዜ ሲወልዱ ቤት ውስጥ ከወለዱ ምን ላይ ሆነው ወለዱ?
ሀ. አልጋ ላይ ለ. ወለል ላይ ፍራሽ ተነጥፎ ሐ. ወለል ላይ ቁርበት ተነጥፎ
መ. ወለል ላይ ምንም ሳይነጠፍ ሠ. ሌላ ቦታ (ይጠቀስ) _____
52. ለመጨረሻ ጊዜ ሲወልዱ ቤት ውስጥ ከወለዱ በምጥ ጊዜ የተለየ አከባበር (ሥነ ሥርዓት) ነበር?
1. አዎ 2. አይደለም
53. የ52ኛው ጥያቄ መልስ አዎ ከሆነ ምን ዓይነት አከባበር (ሥነ ሥርዓት) ነበር?
ሀ. እልልታ ለ. ቤት ውስጥ ያለው ሰው በሙሉ ቅቤ መቀባት
ሐ. ቤት ውስጥ ሽታ ያላቸው ቅጠሎችን ማጨስ
መ. ሌላ አከባበር ወይም ሥነ ሥርዓት (ይጠቀስ) _____
54. ለመጨረሻ ጊዜ ሲወልዱ አዋላጆች ሆድዎትን በጣም ይጫኑዎት ወይም ያሻሹዎት ነበር?
1. አዎ 2. አይደለም
55. የ54ኛው ጥያቄ መልስ አዎ ከሆነ ለምን የተጫኑዎት ወይም ያሻሹዎት ይመስሎዎታል?
ሀ. ፅንሰትን ለማስተካከል ለ. ልጁ ቶሎ እንዲወጣ
ሐ. ሌላ ምክንያት (ይጠቀስ) _____
56. ለመጨረሻ ጊዜ ሲወልዱ ማህፀንዎትን ለማለሰለስ ሲባል በማህፀንዎት ቅቤ ተደርጎ ነበር?
1. አዎ 2. አይደለም
57. ለመጨረሻ ጊዜ ሲወልዱ የበግ ወይም የፍየል ደም ጠጥተው ነበር? 1. አዎ 2. አይደለም
(የተሰጠው መልስ አይደለም ከሆነ ወደ 59ኛው ጥያቄ እለፍ)
58. የ57ኛው ጥያቄ መልስ አዎ ከሆነ በምን ምክንያት ነበር የጠጡት?
ሀ. የፈሰሰውን ደም ለመተካት
ለ. ለጥንካሬ
ሐ. ሌሎች ምክንያቶች (ይጠቀሱ) _____
59. በምጥ ጊዜ ከሌላ ሰው ወይም ከጤና ድርጅት እርዳታ እንዲያገኙ የሚወስነው ማነው?
ሀ. እኔ ለ. ባለቤቴ ሐ. እኔና ባለቤቴ መ. ሌላ ሰው (ይጠቀስ) _____
60. ለመጨረሻ ጊዜ ሲወልዱ ያጋጠመዎት ሌሎች በዘልማድ የሚሰሩ ነገሮች ምን ነበሩ? (ይጠቀስ) _____

II - በመጨረሻው ውልደት ወቅት በዘልማድ አዲስ በተወለደው ህፃንና በእንግዲህ ልጁ ላይ የተደረጉ ተግባራት

61. ለመጨረሻ ጊዜ ሲወልዱ ልጁ በህይወት ነበር የተወለደው?
1. አዎ 2. አይደለም
62. ለመጨረሻ ጊዜ ሲወለድ ከጤና ድርጅት ውጭ ከወለዱ እትብቱ በምን ነበር የተቆረጠው?
ሀ. አዲስና የተቀቀለ ምላጭ
ለ. አዲስ ሆኖም ያልተቀቀለ ምላጭ
ሐ. የተጠቀሙበት ሆኖም ግን የተቀቀለ ምላጭ
መ. የተቀቀለ መቀስ
ሠ. ያልቀቀለ መቀስ
ረ. ሌላ ነገር (ይጠቀስ) _____
63. ለመጨረሻ ጊዜ ሲወልዱ እትብቱ ከተቆረጠ በኋላ ታስሮ ነበር?
1. አዎ 2. አይደለም
64. የ63ኛው ጥያቄ መልስ አዎ ከሆነ በምን ነበር የታሰረው?
ሀ. በክር ለ. እንስት ሐ. የዛፍ ልጥ መ. ሌላ ነገር (ይጠቀስ) _____
65. የ63ኛው ጥያቄ መልስ አይደለም ከሆነ ሳይታሰር የተተወበት ምክንያት ምን ነበር?
ሀ. የተቆረጠው እትብቱ ራሱ ስለሚደርቅ ለ. ባለማወቅ ነበር የተተወወ.
ሐ. ሌላ ምክንያት (ይጠቀስ) _____
66. ለመጨረሻ ጊዜ ሲወልዱ በተቆረጠው እትብቱ ጫፍ ላይ የተደረገ ነገር ነበር?
1. አዎ 2. አይደለም 3. አላውቅም
67. የ66ኛው ጥያቄ መልስ አዎ ከሆነ የተደረገው ነገር ምን ነበር?
ሀ. ጭቃ ለ. አፈር ሐ. የከብት እበት መ. ቅቤ ሠ. ሌላ ነገር (ይጠቀስ) _____
68. ለመጨረሻ ጊዜ ሲወልዱ ቅቤ አዲስ ለተወለደው ህፃን አውጠውት ነበር? 1. አዎ 2. አይደለም
69. የ 68ኛው ጥያቄ መልስ አዎ ከሆነ ለምን ነበር ያዋጡት?
ሀ. አናትየዋ በእርግዝና ወቅት የጠጣቸውን ኮሶ ከህፃኑ ሆድ አጥቦ እንዲያወጣው
ለ. የህፃኑ አንጀት እንዲለበሰልስ
ሐ. ሌላ ምክንያት (ይጠቀስ) _____
70. ለመጨረሻ ጊዜ ሲወልዱ ሌሎች በዘልማድ አዲስ በተወለደው ህፃንና በእንግዲህ ልጁ ላይ የተሰሩ ነገሮች ምን ነበሩ? (ይጠቀሱ) _____

III - በውልደት ጊዜ ከቤተዘመድ የሚጠበቁ ነገሮች

71. ለመጨረሻ ጊዜ ሲወልዱ ከባለቤትዎ ምን ይጠበቅ ነበር?
ሀ. ከቤት መውጣት መ. ተቀምጦ መወለዱን መከታተል
ለ. መዝሙር መዘመር ሠ. ሌላ (ይጠቀስ) _____
ሐ. ህፃኑን ከኋላ መደገፍ
72. ለመጨረሻ ጊዜ ሲወልዱ ከእናትዎ ምን ይጠበቅ ነበር? _____
73. ለመጨረሻ ጊዜ ሲወልዱ ከአባትዎ ምን ይጠበቅ ነበር? _____
74. ለመጨረሻ ጊዜ ሲወልዱ ከሴት ኤያትዎ ምን ይጠበቅ ነበር? _____
75. ለመጨረሻ ጊዜ ሲወልዱ ከእህትዎ ምን ይጠበቅ ነበር? _____
76. ለመጨረሻ ጊዜ ሲወልዱ ከሴት ልጆችዎ ምን ይጠበቅ ነበር? _____
77. ለመጨረሻ ጊዜ ሲወልዱ ከወንድ ልጆችዎ ምን ይጠበቅ ነበር? _____

IV - ከወለዱ በኋላ በዘልማድ የሚደረጉ ተግባራት

78. ለመጨረሻ ጊዜ ከወለዱ በኋላ በስንተኛው ቀን ከቤት ወጡ?
 ሀ. ወዲያውኑ እንደወለዱ መ. ከ 15 - 30 ቀን ባለው ጊዜ
 ለ. ከ 2 - 7 ቀን ባለው ጊዜ ሠ. ከ 31 - 44 ቀን ባለው ጊዜ
 ሐ. ከ 8 - 14 ቀን ባለው ጊዜ ረ. ከ 44 ቀን በኋላ
79. ለመጨረሻ ጊዜ ከወለዱ በኋላ ለምን ያህል ጊዜ ግብረ ሥጋ ግንኙነት ሳያደርጉ ቆዩ?
 ሀ. ከአንድ ወር በታች ለ. ከ 1 - 2 ወር ሐ. ከ3 - 4 ወር መ. ከ4 ወር በላይ
80. ልጆዎች (የመጨረሻው) የሆድ ቁርጠት ሲሰማው/ሲሰማት ከተወለዱ/ች እስከ 28ኛው ቀን ባለው ጊዜ ውስጥ በጋለ ብረት ተኩሰውት/ተኩሰዋት ነበር? 1. አዎ 2. አይደለም
81. ለመጨረሻ ጊዜ ከወለዱ በኋላ ከምን ያህል ጊዜ በኋላ ህፃኑን ማጥባት ጀመሩ?
 ሀ. ወዲያውኑ እንደተወለደ መ. ከተወለደ በሦስት ሰዓት ውስጥ
 ለ. ከተወለደ በአንድ ሰዓት ውስጥ ሠ. ከተወለደ ከሦስት ሰዓት በኋላ
 ሐ. ከተወለደ በሁለት ሰዓት ውስጥ

DECLARATION

I, the undersigned, declare that this thesis is my original work and has not been presented for a degree in this or any other university and that all sources of materials used for this thesis have been duly acknowledged

Name Yigzaw Kebede, M.D.

Signature 

Place Addis Ababa

Date of submission 25/3/98

This thesis has been submitted for examination with my approval as the university advisor

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