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ASSESMENT OF FACTORES AFFECTING SAFE DELIVERY CARE SERVICE UTILIZATION IN BRNA TSEMAY WOREDA, SOUTH OMO ZONE, SNNPR, ETHIOPIA

BY
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ACRONYMS AND ABREVATIONS

ANC…….Antenatal Care

DS…… Danger Signs

EDHS…….. Ethiopian Demographic and Health Survey

FGD…….Focus Group Discussion

HH……House Holds

HI……..Health Institution

HF…….Health Facility

ICD-10…….Tenth Revision on International Classification of Disease

MDG……Millennium Development Goal

MMR……Maternal Mortality Ratio

RA……Reproductive Age

SDC……..Safe Delivery Care

SPH……..School of Public Health

STD……. Sexually Transmitted Disease

TBAs……Traditional Birth Attendants

TTBA……...Trained Traditional Birth Attendants

TTI……Tetanus Toxoid Immunization

WHO……World Health Organization

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Abstract

Background: Every minute, at least one woman dies from pregnancy-related causes: 99% of these are in developing countries. The majority of these deaths occur in sub-Saharan Africa, and is avoidable by using standard interventions and health care which all pregnant women and their newborns need.

Objective: The main objective of this study is to assess factors affecting safe delivery care service utilization in Bena Tsemay Wereda.

Methods: A cross sectional community based study which was supplemented by qualitative method was conducted in Bena Tsemay Wereda from August, 2009 to June, 2010. A multistage sampling technique was used to select 426 women who had childbearing experience in the past five years prior to the study. To collect the quantitative data, well structured, pre-tested questionnaire was administered by data collectors. To supplement the quantitative information FGD and key informant interviews were conducted. Bivariate analysis of chi-square statistics and binary logistic regression is used to show the association of different variables with the dependent variable. Moreover, a multivariate analysis was implemented to identify factors that affect the utilization of safe delivery care utilization.

Result: From the total of 426 mothers, 386 (90.6%) delivered their last child at home and only 40 (9.4%) at health institution. Among the home delivery the distribution of birth attendants was 25.4% TBA, 36.5% relatives and 22.8% their neighbours. Most of the respondents' reasons for home delivery; 114 (29.2%), were reported that the HI was too far and there was no transportation and the other 93 (24.1%) due to their wish to deliver by nearby relatives. On the other hand, 52.5% of the respondents who deliver at HI were informed to deliver at HI. In multivariate analysis knowledge on DS, attitude towards institutional delivery, FP utilization, educational status of the mother, radio availability, walking distance of the HF, problem faced related to pregnancy or child birth and sex of health professional were found to be factors affecting safe delivery care utilization.

Conclusion and Recommendation: The utilization of safe delivery care service was very low in the woreda. Most of the important factors influencing the utilization of safe delivery care services were socio economic, health service related factors and factors related to the mothers

like attitude and knowledge on DS. So improving education for both groups especially girls, beyond the primary school, needs to be strongly encouraged. Health care providers should provide information on risks of pregnancy, benefits of giving birth at health facilities, danger signs during pregnancy and labor to mothers, family members and the community consistent to the focused ANC service provision.

1. INTRODUCTION

1.1. Background

Tenth Revision on International Classification of Disease (ICD-10) defines a maternal death as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes. (1)

From the estimated 536,000 maternal deaths world wide in 2005, developing countries accounted for 99%. Among the developing regions Sub-Saharan Africa had the highest MMR in 2005. At the global level, maternal mortality has decreased at an average of less than 1% annually between 1990 and 2005, far below the 5.5% annual decline, which is necessary to achieve the fifth MDG, concerning maternal mortality reduction. To achieve that goal, maternal mortalities will need to decrease at a much faster rate in the future, especially in sub-Saharan Africa, where the annual decline has so far been approximately 0.1%. Achieving this goal requires increased attention to improved health care for women, including high-quality emergency obstetric care (2)

WHO strongly advocates for “skilled care at every birth” to ward reducing the global burden of 536 000 maternal deaths, 3 million stillbirths, and 3.7 million newborn deaths each year (2, 3). Countries measure the proportion of deliveries assisted by skilled attendants frequently since it is one of the indicators of progress towards Millennium Development Goal five. (3)

Nearly 90% of all the births in the world occur in developing countries (115million births per year). These 115 million births are the outcome of about 180million pregnancies (4). In Africa and Asia, only 46.7% and 58.3%, respectively, of women gave birth with professional assistance. In less developed regions, the lowest levels of skilled attendant at birth were in Eastern Africa (34.5%), South-Central Asia (38.9%) and Western Africa (40.9%) with the highest levels in South America (86.8%) (5). This means that every year, whether by choice or necessity, 50 million women in developing countries give birth cared for only by a family member, a traditional birth attendant, or no one at all.

1.2. Statement of the Problem

Every minute, one maternal death occurs somewhere in the developing world. Every year over half a million women die during pregnancy and following childbirth. The majority of these deaths occur in Sub-Saharan Africa. Maternal mortality is the tip of the iceberg. For every maternal death, there is 20-30women who suffers severe morbidity (6).

Most causes of maternal deaths are avoidable through using standard interventions and health care which all pregnant women and their newborns need. The care that can reduce maternal deaths and improve women's health is also central to the survival and health of newborns (7). One explanation for poor health outcomes among women and children is related to the non-use of modern healthcare services by women (8). So access and use of high quality obstetric care is the key to reducing maternal and neonatal mortality.

Postpartum haemorrhage is one of the leading causes of maternal death worldwide; it occurs in about 10.5% of births and accounts for over 130 000 maternal deaths annually. Active management of the third stage of labour is highly effective at preventing postpartum haemorrhage among facility-based deliveries (9).

Every pregnant woman faces the risk of sudden, unpredictable complications that could end in death or injury to herself or to her infant which may not always be detected through the risk assessment approach during ANC, the best way to assure safe and successful delivery outcomes remains to be ensuring skilled personnel attendance of every child birth (10).

To reduce the risk of infections and to manage the complications that arise during labour and delivery, all mothers should deliver their babies in a hygienic setting in the presence of skilled birth attendants. But as different literatures indicates that in Sub Saran Africa especially in Ethiopia majority of the deliveries are attended at home without skilled birth attendants or only with the help of relatives or friends (11 and 12).

According to EDHS report, in SNNPR about 68.6% of mothers were assisted by their relatives but only about 4.2% of the mothers were assisted by health professionals (13). If we see industrialized countries they reduce their maternal mortality by providing professional midwifery

care at childbirth. The importance of skilled attendance at delivery is also reflected in the MDGs, where the proportion of births attended by skilled health personnel is considered a key indicator for the MDG 5 (14)

According to the UNICEF report around 50 million births in the developing world, or about 4 in 10 of all births worldwide, are not attended by skilled health personnel. The report indicated that ten countries including Ethiopia account for two third of births not attended by skilled personnel and in Ethiopia three million births were not attended by skilled birth attendants in 2006 (15).

Scientific evidence has clearly established the inverse relationship between skilled attendants at birth and the occurrence of maternal deaths. Thus, the considerable variation in the maternal mortality estimates between different locations within the same region can be attributed, to a large degree, to the differences in the availability of and access to modern maternal health services (16)

With the exception of sub-Saharan Africa, rates of births assisted by a medically trained attendant have shown impressive increases over the past 15–20 years and today data indicate that 59% of developing world births are assisted by a medically trained professionals. The large majority of these births occur in a health facility. To what extent do these births receive skilled care? None of the commonly used indicators of use or availability of maternal health care is able to address the issue of skills (17)

1.3. Significance of the study

Safe delivery is believed to reduce the health risk of both mother and the new born. This study focused on factors that affect the utilization of safe delivery care in the rural Southern Ethiopia called Bena Tsemay Woreda. Majority of the residents are illiterate. Even though childbirth is a joyful event, in many of rural Ethiopia the event end up by obstetric complication and new born death.

SNNP region is the least in utilization of safe delivery care utilization next to Amhara region and there was no research undertaken related to factors affecting safe delivery care service utilization in Bena Tsemay Woreda.

It is believed that, the outcome of the study will be helpful in understanding and describing the main factors that hinder the mothers to use the delivery care services in the study area. The result of this study may help the local government and NGOs in understanding the situation clearly and to plan a new strategy to come up with a solution and implementation of different maternal health care related services. The study may also be used for policy makers to promote the utilization of delivery care services and avoiding the factors that hinder the community to use the service in the study area.

2. LITERATURE REVIEW

2.1. Impact of Maternal Mortality and Morbidity

The death of a mother has an impact on her family, community and even country. A woman in the reproductive age is among the potential productive age group of a country and losing a mother affects the development process of country. Moreover, a mother might be the only head of the household, under this circumstance it is unquestionable how much the family members suffer due to her death.

According to WHO report for every woman dying due to pregnancy and child birth, at least 30 others will suffer from complications which often end up being long-term and devastating, they include infertility and damage to the reproductive organs (18).

A healthy newborn begins with a healthy mother, good nutrition and quality healthcare before, during, and after a mother gives birth can prevent many of the approximately four million newborn deaths and four million stillbirths each year. The lifetime risk of a mother losing a newborn is high in the same regions where the lifetime risk of maternal death is high (19). If a newborn's mother died of maternal causes, the baby had only one chance in four of living until its first birthday. Most of these infants died in the first month of life from acute malnutrition due to lack of breast milk (20). Surviving children also suffer: Mothers are usually the primary guardians of the health, education and nutrition of their children, and in many cases, also a contributing or main breadwinner. Every year up to two million children lose their mothers for lack of services that are readily available in wealthier nations. (21)

2.2. Prevalence on Safe Delivery Care Service Utilization

The fifth MDG places the improvement of maternal health in the mainstream development agenda, but the progress in recent decades especially in Africa has been limited. MDG 5 considers proportion of births attended by skilled health personnel and maternal mortality ratio as an indicator (22).

A study conducted in Bangladesh had revealed that, almost all births (92.1%) were taking place at home and only 7.9% of the births occur at health facility. Besides use of health facilities for delivery is much higher in urban (20.1%) area than rural (5.6%) (23).

A study conducted in Afghanistan revealed that having given birth within the previous 2 years, 1310 (13%) said that their most recent birth was assisted by a skilled birth attendant (24).

According to EDHS 2005 report in Ethiopia only 6% of births are delivered with the assistance of a trained health professional, and 28% are delivered by a TBA. The majority of births are attended by a relative or some other person (61%). Five percent of all births are delivered without any type of assistance at all. In SNNPR births that were attended by skilled birth attendants was only 4.2%. The majority (68.6%) of births were attended by relatives or others, 14.8 % was attended by TBA and 12.4% of the births was not attend by any one (13).

A study made on patterns of maternity care service utilization in Southern Ethiopia indicate that professionally assisted delivery is very low, only 3.3% of the women were attended by a medically trained person during delivery. There is a big gap in professionally assisted delivery between urban and rural areas. In rural area only 1.2% of the deliveries were attended by trained medical personnel while it was 42.8% for the urban area (12).

The study made in North Gonder revealed that a total of 13.5% of mothers gave birth to their last babies in health facilities. Untrained TBAs and relatives attended 76.4% of the deliveries. The reported reasons were: absence of health problems, short duration of labor, preferring the attention of relatives and trust in traditional birth attendants (10).

Based on the above stated facts it become evident that more learning is required particularly in respect to the determinants and factors of delivery care service utilization

2.3. Factors affecting Delivery Care Services Utilization

2.3.1. Socio-Economic and Demographic Factors

The links between poverty and poor maternal health is much conclusive. Poorer countries experience the highest rates of maternal mortality ratios, poor maternal health can also exacerbate poverty (7). Using discrete choice model a study conducted in Ghana revealed that women from the richest income quintile and those that have access to health information via television delivered at appropriate health institutions (25).

In Tanzania, Rose NM and her partners clearly showed that proportion of women attended by a skilled attendant was seen to decrease significantly with increasing age of women from 57.5% among women below 20 years of age to 48.8% among women aged 35 or more years (26). A study conducted in Jimma town showed that maternal age is significantly associated with place of delivery. Women between age group 35-39 are less likely to deliver in health facilities when compared to those between15-34 (OR= 0.06 and 95% CI=0.01 to 0.52) (27).

A study conducted in India showed that, Women having more than one birth were less likely to get professional assistance at the time of birth and the older mothers (age 35-49 years) were twice less likely to seek help of professionals at the time of birth than those less than 34 years of age (28).

A study conducted in Adigrat indicated that, marital status was a factor that was strongly associated with birth preparedness and complications readiness where married women were more likely to be prepared for birth/complication than non married (OR= 5.36, 95% CI= 1.64, 17.49) (29).

Another important and independent predictor of utilization of safe delivery care services in rural Ethiopia is parity. Based on EDHS 2000 Yared and Asnakech found out women with 2-4 and 5+ children are 60 percent and 50 percent less likely, respectively, to receive safe delivery care than parity one women (8). Yared in his study shows that the probability of a woman having received safe delivery care was higher for women with only one birth in the last six years (0.046). But For women with three births, the probability of not having safe delivery care was found to be very high in both urban and rural areas that are 0.605 and 0.938, respectively (12).

Melkamu clearly showed the role of female's economic status on the utilization of safe delivery care. His study had revealed that women whose monthly incomes had fallen above (> 500Birr per month) were three times more likely to deliver their babies in the health institution than those with lower than 100Birr per month (30).

Maternal education was a strong predictor in preparation for birth and complication. Literate mothers were about two times more likely to be prepared for birth and complication than illiterate women (OR= 2.25, 95% CI= 1.31, 3.88) (29). Years spent in school also showed a

significant association with seeking of skilled care during delivery with women who have more schooling years having a higher proportion of deliveries (50.4%) attended by skilled personnel compared to those with fewer schooling years or those who did not go to formal schooling ($p < 0.01$) (26).The odds of utilizing safe delivery care services are four and a half times and eight times higher for women with primary and secondary or higher levels of education, respectively, when compared with women with no education (8,27).

A study in rural Cambodia showed that there were three significant determinants: years of school attendance, frequency of antenatal care and prolonged labour. All three were positively and independently related to facility delivery. The strongest determinant was prolonged labour, with women who had experienced prolonged labour being 6.5–6.8 times more likely to eventually deliver babies at a health facility than those who had not. Education variable also had strong effect on facility delivery, with women who had at least 7 years of school attendance being six times more likely to deliver babies at a facility than those who did not attend school (31).

From those studies stated above, the demographic and socioeconomic factors are strongly affect delivery care utilization

2.3.2. Maternal Knowledge and Attitudes on Obstetrics Care

A study conducted in North Shoa Zone, Ephratanagidim district revealed that mothers who did not know danger sign during pregnancy were less likely to give birth at health facility than those mothers who knew at least one danger sign of pregnancy (OR 0.47, 95% CI=0.31-0.72) (32).

A study on utilization of maternal health care services in the department of Matagalpa, Nicaragua showed that Women's knowledge and acceptance of the importance of maternal health care and healthy pregnancy practices are shaped by previous experiences as well as formal and informal communication within the community and households. Many women who utilized maternal health services believed it was important as a means of reducing the risks of complications and ensuring the health of the unborn child. (33)

A study in Tanzania shows that mothers who were advised during ANC by health workers to deliver in a health facility had a higher proportion delivering with a skilled attendant compared

to those who were not. Proportion of women with skilled care at delivery increased with knowledge of danger signs from 39% among women who did not mention any to 68% among those who mentioned 4 or more danger signs (26).

A study conducted in Jimma revealed that, women's attitudes towards delivery services have shown statistically significant association with place of delivery. Mothers who have favorable attitudes to institutional delivery services was 6 times deliver at health facility (AOR = 5.55, 95% CI =1.6 to 19.24) when compared to women with unfavorable attitudes (27).

2.3.3. Cultural Practices and Women's Decision making Power

A study conducted in Jimma indicated that women who had attended ANC follow up (OR = 2.63 and 95%CI= 1.11 to 6.23), women to whom their husbands and relatives prefer skilled delivery attendants (OR= 4.78 and 95% CI=2.25 to 10.21) and those who can decide by themselves about getting institutional delivery services (OR = 2.75 and 95 % CI = 1.3 to 5.78) are more likely to deliver in health facilities (27).

According to the three levels of delay in decision making for emergency obstetric care, decisions at the first two levels are dependent on the woman's family and community resource. Poor community tends to delay decision making or making wrong choices when there are complications. A study conducted in Mekele town also showed, women whose husbands prefer delivery with health professional were five times (OR= 4.65 (95%CI=2.37-9.13) more likely to utilize skilled delivery attendant as compared with those, whose husbands prefer TBA, family and relatives (34).

A study in Afar regional state showed that husbands' attitude was a factor associated with utilization of skilled attendances at birth. Mothers whose husbands were positive towards ANC services were more likely to deliver at the health institution than women whose husbands negative towards ANC services (OR=3.96, 95% CI=2.29, 6.89). This study also identified that, women whose religion was Christian were more likely to prefer health institution delivery than women whose religion was Muslim (OR= 2.77, 95% CI=1.80, 4.27). (30).

A study conducted in Dhaka city showed that, the women and their house hold head do not want to take the mother and her child at hospital unless the complication are serious and out of control.

There is also some inherited belief and tradition, most of the women in the slum of Dhaka city expressed that they feel it is safe and secured to give child birth in the presence of their family members at home (35)

2.3.4. Health Services Related Factors

The aims of delivery care include achieving clean and safe delivery as well as recognition, early detection and management or referral of complications at health centre or hospitals (36).

A study conducted in Zambia showed that, place of last childbirth was independent predictors for utilization of a health facility for delivery. Compared to mothers who delivered their last pregnancy at a health facility, mothers who had their last childbirth at home were 85% (AOR=0.15, 95%CI [0.10, 0.22]) less likely to deliver their current pregnancy at a health facility (37).

A study conducted in Assaita and Dupti town had indicated that majority of deliveries took place at home, of which 93.7% were attended by TBAs. Among the reasons given for not using the delivery service include presence of relatives nearby, more trust on TBAs, lack of privacy, and male professionals assistance during labor at health facilities were the major one(30).

Based on EDHS 2000 and 2005, Habtamu has shown a significance association of the utilization of family planning and safe delivery care that is women who ever use FP service are more likely to use delivery care, a 9.6% significant increase in using DC was observed by women with the experience of FP use (11).

A study conducted in Tanzania shows that, women who attend ANC at government health center (OR 3.17, 95% CI: 1.60–6.30) or a mission facility (OR 2.87, 95% CI: 1.36–6.07), were significantly more likely to deliver their baby in health facility (38). Another study in India also shows that, a woman with higher level of ANC were much more likely to use safe delivery care. In addition, women who experienced problems during current pregnancies and delivery and those who had previously used a trained attendant or health facility for a delivery were more likely used trained assistance (39).

A study conducted in southern Tanzania revealed that, the proportion of women with skilled attendants at delivery was also seen to decrease with increasing distance to the health facility

which provide delivery care from 50.1% among women residing within 5 km of a health facility to only 20.2% among those residing more than 5 km from a health facility (OR 3.84 (95%CI 2.61–5.65) (26).

A study conducted in rural Mexico revealed that, women who received most prenatal care procedures were more likely to have a skilled institutional delivery (OR 2.29, 95% CI 1.18, 4.44) from those who received no prenatal care (40). In addition a study in Ghana shows, those women who had frequent antenatal visits are more likely to seek institutional delivery care (41).

A study conducted in Sulawesi Utara showed that, when the cost of health service was considered big problem, women were less likely to utilize a skilled attendant than women who perceived health service cost a small problem (OR 0.3; 95% CI 0.15-0.60) (42).

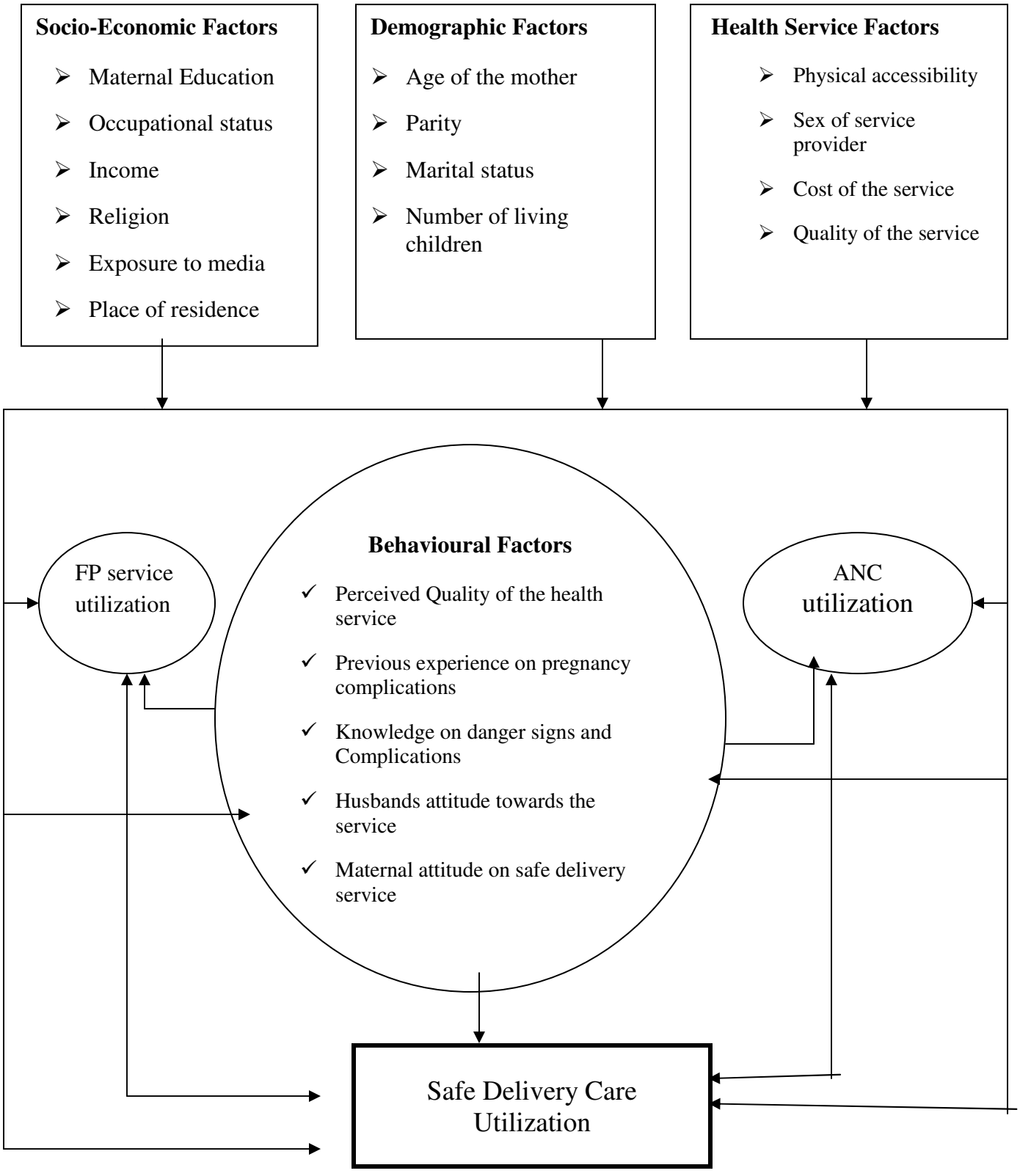
A study conducted in Mekele revealed that, most frequent reason for utilizing of institutional delivery by women are; better service in health facility 206(51.0%), better outcomes from institutional delivery 128(31.7%) and informed by health professionals to deliver in health facility 30 (7.4%) (34).

A study conducted in Addis Ababa clearly shows that, the most frequent reasons for preferring to deliver in a particular health institution was high quality of the service (50%) followed by nearness of health institution and approach of good health workers (9%). Of those respondents who prefer to deliver at home, 42.9% wished home delivery because relatives would be near by and 23.8% said expenses for delivery at health institutions were unaffordable (43).

2.5. Conceptual Framework

Based on the reviewed literatures, the conceptual framework was developed by the investigator. Accordingly, the conceptual framework had gotten formulated by taking the status of safe delivery service utilization as a dependent variable and the immediate factors like behavioural factors, ANC and Family planning service utilization as intermediate variables to affect the utilization of safe delivery care. The other preceding factors are considered as independent variables that affect both the intermediate and dependent variables. Here in this study, some factors from the independent and the intermediate variables will be considered and studied on how much they are playing a role in the utilization of safe delivery care service.

Schematic presentation of conceptual frame work



2.6. Research Questions

This study had tried to answer the following research questions;

1. What is the status of safe delivery service utilization in the study area?
2. What are the knowledge and attitude of mothers on safe delivery care?
3. What are the factors that affect the utilization of safe delivery care in the study area?
4. What kind of possible solutions are needed to overcome the identified problems in the study area?

3. Objectives of the Study

3.1. General Objective

To assess factors affecting the utilization of safe delivery care service utilization in Bena Tsemay Woreda, South Omo Zone, SNNPR, Ethiopia, 2010

3.2. Specific Objectives

The specific objectives of this study are to;

1. Measure safe delivery care service utilization in Bena Tsemay woreda, South Omo Zone, SNNPR, Ethiopia

2. Identify intermediate factors which affect utilization of safe delivery care service among mothers in Bena Tsemay woreda, South Omo Zone, SNNPR, Ethiopia

3. Describe demographic, health service and socio economic factors that influence safe delivery care utilization among mothers in Bena Tsemay woreda, South Omo Zone, SNNPR, Ethiopia

4. METHODOLOGY

4.1. Study Area

South Omo Zone is found in SNNPR at the southern parts of Ethiopia. In the zone there are eight woredas, and the zone town Jinka which is governed by 'kentiba' equivalent to mayor. It is 775 Km far from Addis Ababa, According to 2007 census, the total population of South Omo zone is about 577, 673. Among this male population are 288,638 and female population are 289,035. Bena Tsemay is one of the woredas found in the zone its total area is found to be 254907 hectare and the total population is 55,590, the population of male and female in the woreda is 28,087 and 27,503 respectively (44). Total population of women in the reproductive age group were estimated to be 14,415. The woreda's town Keyafer is found 42 km north ward from Jinka. Concerning the major infrastructures and social facilities the population has no access to piped water and electrical power supply. Telephone service including mobile phone is available.

4.2. Study Design

Community based cross-sectional study design employing both quantitative and qualitative data collection methods were conducted from August 2009 to June 2010.

4.3. Study population

4.3.1. Target Population

All women in childbearing age in Bena Tsemay woreda are considered as the target population.

4.3.2. Sampling Population

All women who had childbearing experience in the last five years in Bena Tsemay woreda are the sampling population.

4.4. Sample Size Determination

The number of women in the reproductive age and having the experience in childbearing in the last five years was determined based on a single population proportion formula.

$$n = \frac{Z_{\frac{\partial}{2}}^{2} p(1-p)}{d^2}$$

Where, n is the sample size

$Z_{\frac{\partial}{2}}$ is the standard normal value corresponding to the 95% level of confidence.

d is tolerable error or degree of precision.

p is the proportion of safe delivery care service users in the area.

Assumptions

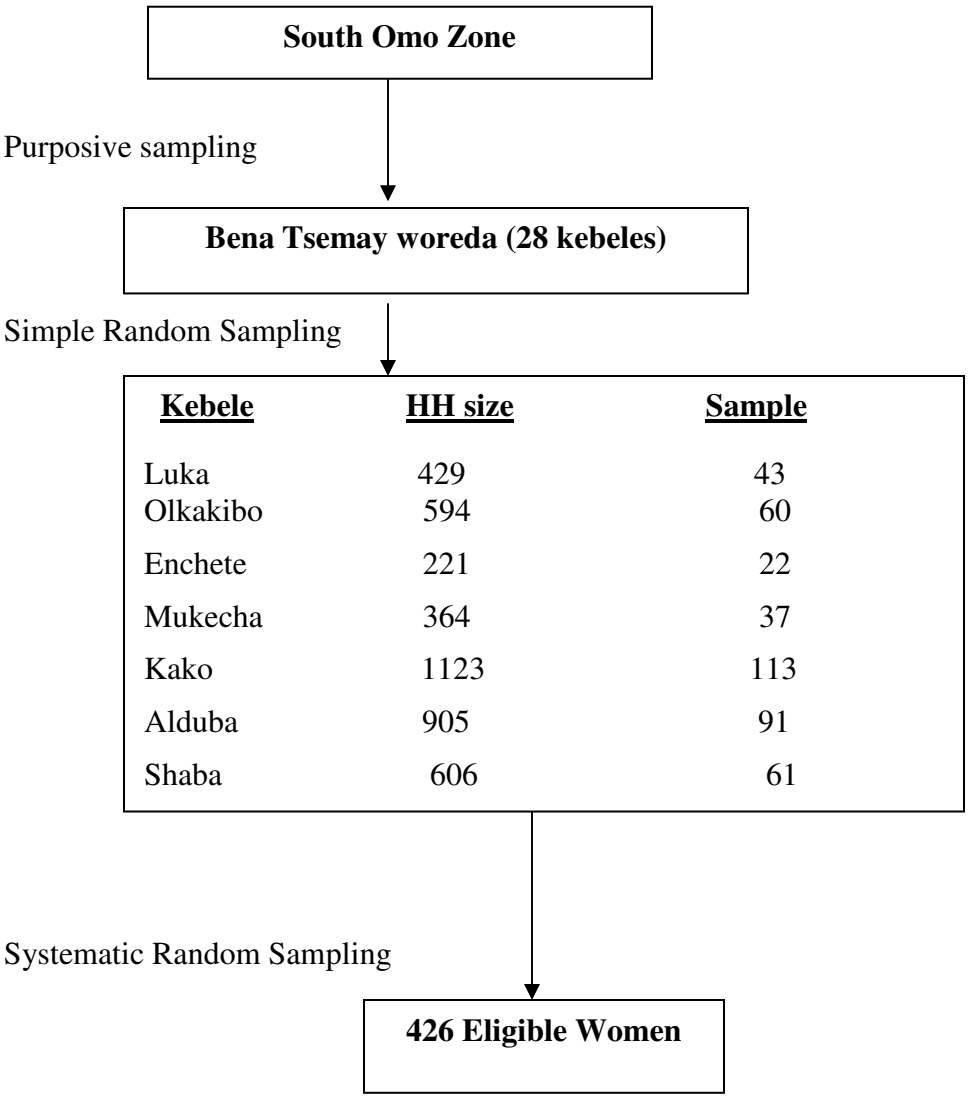
- ✓ To get the representative sample size the prevalence rate of safe delivery care service utilization was assumed to be 5% considering the prevalence in SNNPR.
- ✓ Taking 95% level of confidence $Z_{\frac{\partial}{2}}$ =1.96.
- ✓ d is assumed to be 3%.

Using this, n was obtained to be 203 and 5% contingency for non-response was added then the result was multiplied by 2 to consider design effect n =426.

4.5. Sampling procedure

South Omo Zone has eight woredas among these Bena Tsemay woreda was selected by purposive sampling. This is because observation was made in the study area and the information was that the delivery care utilization is minimal; moreover there had been resource constraints to include other woredas in South Omo zone. Bena Tsemay woreda has 28 kebeles, from this woreda seven kebeles were selected by using simple random sampling. The respondents were selected randomly proportional to each kebele's HH size. The first HH was selected randomly and each HH was selected using systematic sampling method. In case of non eligibility the next eligible HH was included, when there were two or more eligible women in one HH, interview was made by selecting a woman with recent birth or by lottery method. In case of absence the data collectors were revisit the house at least two times. Then, a total of 426 eligible women was selected and studied. For qualitative data collection mothers were purposively selected.

Schematic Presentation of the Sampling Procedure



4.6. Data Collection Instrument and Tools

The quantitative data was collected by using well designed and structured questionnaire which was administered by eight data collectors with face to face interview. The questionnaire was designed to address the stated objective after reviewing different related thesis works and EDHS. It was prepared in both languages Amharic and English to reduce the difficulty of understanding or answering the questions and again the Amharic version was translated to English to check consistency.

To collect the qualitative information FGD guide and key informant in-depth interview was used. The objective of the FGD and key informant in depth interview was to collect unaddressed information in the quantitative section.

4.7. Data Collection Technique and Process

Quantitative

Before going in to the detail data collection process, pre-test was made to check the problem on the questionnaire designed and adjustment was made. This pre-test was made on the 5 percent of the sample size (21 respondents) in one none selected kebele. The data were collected using house-to-house interview questions, which consist of variables categorized into four parts. A maximal effort has been made to insure privacy during interview.

Qualitative

The qualitative information was collected from two FGD groups and three key informant in-depth interview. The two FGDs were formed by using mothers' age group. Those mothers who were within 15 to 30 and 30 to 49 age groups were included in group one and group two, respectively. The principal investigator moderated the discussion, with respect to note taker. Group discussions with their respective discussants were conducted at woreda's health office. Each discussion was tape recorded not to miss all issues discussed.

4.7.1. Recruiting Data Collectors and Training

Based on the schedule, two days training was given to the supervisors, data collectors and FGD note taker about their particular duty. In this study eight data collectors, one note taker, two supervisors and two translators (Benigna and Tsemayigna) were participated. The eight data collectors were health extension workers who could speak the local language. The supervisors, translators and note taker were diploma holding nurses.

4.8. Operational Definitions

Safe Delivery Care: the service given for a pregnant woman during labor; management of normal delivery and detection of complications, management of risk cases in labor and complicated cases. In this study safe delivery care is considered as delivery attended at health institution by the help of skilled health personnel.

Skilled Attendance: the people with midwifery skills (doctors, midwifes, nurses) who have been trained in the skills necessary to manage normal delivery and diagnose, manage or refer obstetric complications.

***ANC service Utilizations*:** Refers to a woman attendance in antenatal care clinic and in this study at least one professionally assisted ANC was considered as an indicator to utilization.

FP service utilization: Using contraceptive at least once in their life time was considered as an indicator to utilization

Traditional Birth Attendants: A birth attendant who initially acquired the ability by delivering babies herself or through apprenticeship to other TBAs.

Trained Traditional Birth Attendants: Those TBAs who have undergone subsequent training and are integrated in the formal healthcare system.

Antenatal care (ANC): Care given for pregnant woman so that they have safe pregnancy and healthy baby. The care should provide health promotion, assessment, management and referral through history taking, physical examination and laboratory tests where necessary: TTI, iron and folate supplementation, malaria prophylaxis, hookworm treatment and STD management. WHO recommends that every woman should receive at least four visits each visits should last for twenty minutes (1^{st} as early in pregnancy as possible, 2^{nd} at 28-32 weeks, 3^{rd} after 36 weeks, 4^{th} before expected date of delivery or when women needs to consult)

4.9. Study Variables

Dependent variable

- Safe delivery care service utilization

Intermediate variables

- Family planning utilization
- ANC utilization
- Behavioural factors (knowledge and attitude)

Independent variables

Socio-Economic Factors

- Maternal Education
- Occupational status
- Income
- Religion
- Exposure to media

Demographic Factors

- Age of the mother
- Parity
- Marital status
- Number of living children

Health Service Factors

- Physical accessibility
- Sex of service provider
- Cost of the service

4.10. Method of Data Analysis

After the data was collected, it was checked for completeness and entered in to SPSS software for analysis. Descriptive statistics was used to describe the collected information by using percentage and frequencies. Bivariate analysis was performed by using chi-square statistics and binary logistic regression to show the association of different variables with the dependent variable. Moreover, a multivariate binary logistic regression was implemented to control possible confounding factors. Those variables which have significant association with dependent variables on bivaiate analysis were adjusted to each other and independent factors were identified. Results were presented in texts, tables, graphs and charts. This study used statistical packages like SPSS to analyze quantitative data. For qualitative information Benigna and Tsemayigna translators had involved during the discussions. The principal investigator transcribed the tape recorded after each section of FGD and key informant in-depth interview.

4.11. Data Quality Management

The quality of data was assured by using properly designed and pre-tested questionnaire and providing proper training to the interviewers and supervisors. The training was provided for three days about the objective and process of data collection. Closer supervision was undertaken during data collection. Code given to each questionnaire during data collection so that any identified error was traced back using the code. The filled questionnaire was checked for completeness by supervisors and principal investigator every day, when there were problems it was discussed

immediately with data collectors and supervisors. Then data was checked manually for completeness before entering in to statistical soft wares and cleared when there was any mistake.

4.12. Ethical Considerations

Ethical clearance was obtained from Public Health School's research ethics committee and faculty's institutional review board. Before starting the data collection, permission was obtained from the concerned bodies of South Omo zone and from Bena Tsemay Wereda administrative. During both qualitative and quantitative data collection the participants have got detailed information about the study and clarifications were given as required in their own language by the data collectors. Each study participants was requested for informed consent. Only participants who did agree to participate on the discussion were considered and their full consent was taken. Confidentiality was assured including by not mentioning their identification in any of the research process. As required or demand women was received referral. The findings of the research undertaking information was fed in to the respective programs at zonal and woreda level.

4.13. Dissemination of the result

After the data was interpreted the thesis had presented to examiners and audiences. The report of this thesis was submitted to SPH and to make it available for reference and further study one copy was given to the library. Bena Tsemay Woreda health office and South Omo health department was receive copies of the thesis. Briefing will be done at the zonal and woreda health offices.

6. RESULT

6.1. CHARACTERSTICS OF THE STUDY POPULATION

6.1.1. Socio demographic characteristics of the respondents

A total of 426 women who gave at least one birth in the last five years prior to this survey were interviewed. In this study among the respondents, about 30.8% were within the age group of 25-29 with median age of 26, the other age groups are fairly distributed. On the other hand childbearing begins at early age in the study area, the average age at first birth was 17.2 years.

Regarding ethnicity, majority of the respondents 55.6% are belonging to Bena ethnic group while Tsemay and Hamer accounts for 38.0% & 3.3%, respectively. Concerning religion, 64.3% do follow traditional religion and the rest 35.7% were Christians (protestant, catholic and orthodox).

Most of the respondents in the study area were housewives, about 53.8%, followed by farmer and pastoralists that are 23.2% and 17.8%, respectively. On the other hand 51.4% of their husbands are pastoralists and 29.6% were farmers. Regarding marital status, 89.9% were married. Concerning respondents educational status about 87.8% of the mothers and 87.3% of their husbands are illiterate.

This study tried to classify their monthly income into three groups: 57.5% of the respondents get less than 300bir per month, 35.2% of the respondents get between 300 to 1000bir per month and 7.3% of them more than 1000bir. Concerning media exposure, 18.3% of the respondents have radio among whom 65.4% and 29.5% of the respondents listen to the radio almost every day and at least once in a week, respectively. (Table 1)

Table 1: Socio-demographic characteristics of the respondents (n=426) in Bena Tsemay Woreda, South Omo, Zone SNNPR, Ethiopia, March 2010.

Variable	Frequency	Percent
Age of the mother		
15-19	**58**	**13.6**
20-24	**99**	**23.2**
25-29	**131**	**30.8**
30-34	**76**	**17.8**
35-39	**39**	**9.2**
40-44	**17**	**4.0**
45-49	**6**	**1.4**
Age at first birth		
<18	**244**	**57.3**
18-20	**145**	**34.0**
>20	**37**	**8.7**
Ethnicity		
Bena	**237**	**55.6**
Tsemay	**162**	**38.0**
Hamer	**14**	**3.3**
Others	**13**	**3.1**
Religion		
Christians (Orthodox, Catholic,	**144**	**34.1**
Protestant)	**277**	**65.9**
Traditional		
Occupation status	**229**	**53.8**
House wives	**99**	**23.2**
Farmer	**76**	**17.8**
Pastoralists	**22**	**5.2**
Others (priv. & Got employee)		
Educational status of the mother	**374**	**87.8**
Illiterate	**10**	**2.3**
Read and write	**37**	**8.7**
1-6	**5**	**1.2**
7-12		
Marital status	**385**	**90.4**
Married	**41**	**9.6**
Others (separated, single, widowed)		
Husband educational status(n=385)	**336**	**87.3**
Illiterate	**15**	**3.9**
Read and write	**30**	**7.8**
1-6	**4**	**1.0**
7-12		
Husband occupation	**114**	**29.6**
Farmer	**198**	**51.4**
Pastoralists	**73**	**19.0**
Others		
Income		
<300	**245**	**57.5**
300-1000	**150**	**35.2**
>1000	**31**	**7.3**
Radio availability		
Yes	**78**	**18.3**
No	**348**	**81.7**
Parity		
1-4	**310**	**72.8**
5+	**116**	**27.2**

6.1.2 Obstetric Characteristics of the Respondents

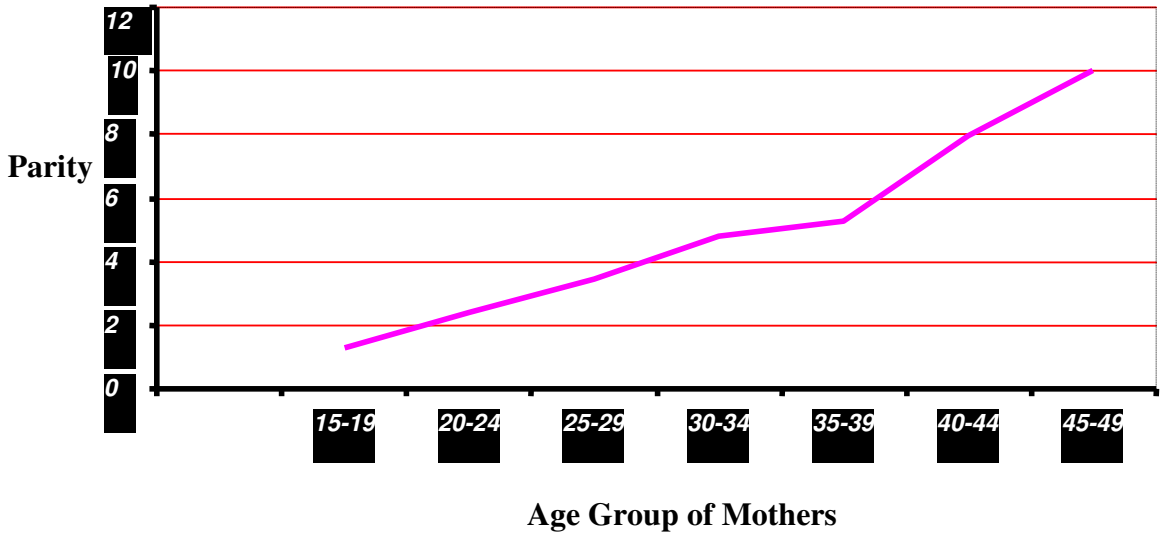


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Fig. 1. Average children ever born for women of reproductive age group in Bena Tsemay Woreda, South Omo Zone, SNNPR, Ethiopia, March 2010.

In Bena Tsemay average children ever born showed increasing pattern as the age group increases from 15-19 to 45-49 years. As one can see from Fig 1 there is a difference of single parity on average in each age group from 15-19 to 30-34 but the increase in the last age group is more than twice the first four age groups

Large proportion of women 386 (90.6%) had delivered their last child at home and only 40 (9.4%) women had delivered at health institution. Among the home delivery, the distribution of birth attendants was about 25.4% TBA, 36.5% relatives and 22.8% neighbours the rest were attended by TTBA and health extension workers.

Regarding other maternal health services, women who ever had ANC follow up was only 101 (23.7%) the rest 325 (76.3%) had never attended any ANC service in their life time, Among those who ever had ANC follow up about 82 (81.2%) had attended during their last pregnancy and 74.3% of them had at least two visits. Among mothers who had ANC 59.4% got information about safe delivery care service.

Concerning FP use, 79 (18.5%) of women had ever used FP service and 347 (81.5) were not using any FP service. Among those respondents who were using FP 82.7% were using before their last

pregnancy. Regarding the birth order, 162 (38%) of the last child were within 1-2 and 148 (34.7%) were within 3-4 birth order. Among mothers who had experience of modern FP service before last pregnancy 88.6% got information about safe delivery care service.

Table 2: Obstetric Characteristics of Women of Reproductive Age Group in Bena Tsemay Woreda, South Omo Zone, SNNPR, Ethiopia, March 2010.

Variable	Frequency	Percent
Place of delivery		
Home	386	90.6
Health institution	40	9.4
Ever had ANC follow up		
Yes	101	23.7
No	325	76.3
ANC follow up at last pregnancy		
Yes	82	81.2
No	19	18.8
Frequency of ANC visits at last pregnancy		
One		
Two	21	25.6
Three	32	39.0
Four and more	23	28.0
Get informed during ANC about SDC service (n=101)	6	7.3
Yes	60	59.4
No	30	29.7
I do not remember	11	10.9
Ever use of FP		
Yes	79	18.5
No	347	81.5
Modern FP use before last pregnancy		
Yes	62	82.7
No	13	17.3
Get informed during FP use about SDC service (n=79)		
Yes	70	88.6
No	5	6.3
I do not remember	4	5.1
Birth order of last child		
1-2	162	38.0
3-4	148	34.7
5 and above	116	27.2
Attendants at last birth for Home delivery.		
TBA	98	25.4
TTBA	41	10.6
HEW	18	4.7
Relatives	141	36.5
Neighbours	88	22.8

The distribution of reasons for home delivery (Fig 2) showed that, among women who deliver at home 114 (29.2%) had reported that the health institution was too far and there was no transportation, the other 93 (24.1%) were due to their wish to deliver near by relatives, about 15.5% due to family influence, about 15% the cost of the service was unaffordable, and the other 14.5% had more trust on TBA or relatives than health professionals as their main reason for home delivery.

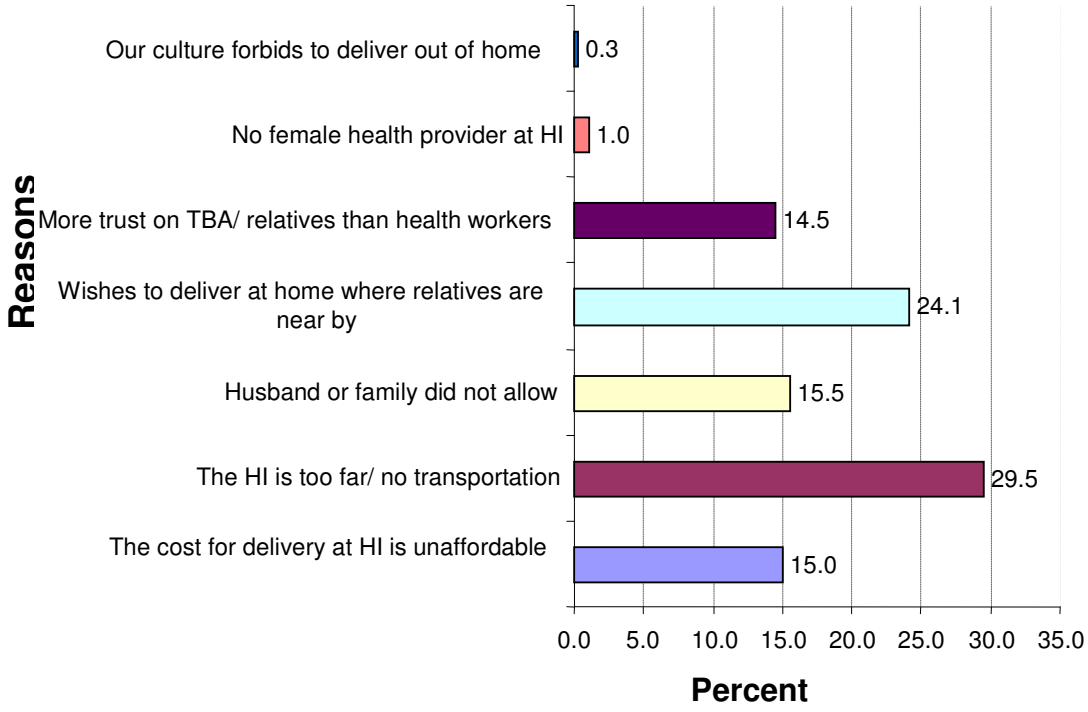

Fig. 2. Reasons for home delivery in Bena Tsemay Woreda, South Omo, Zone, SNNPR, Ethiopia, March 2010

On the other hand 52.5% of the respondents who deliver in health institution were informed to deliver at health institution in previous visits and 40% of the women have faced poor outcome from previous home delivery (fig. 3)

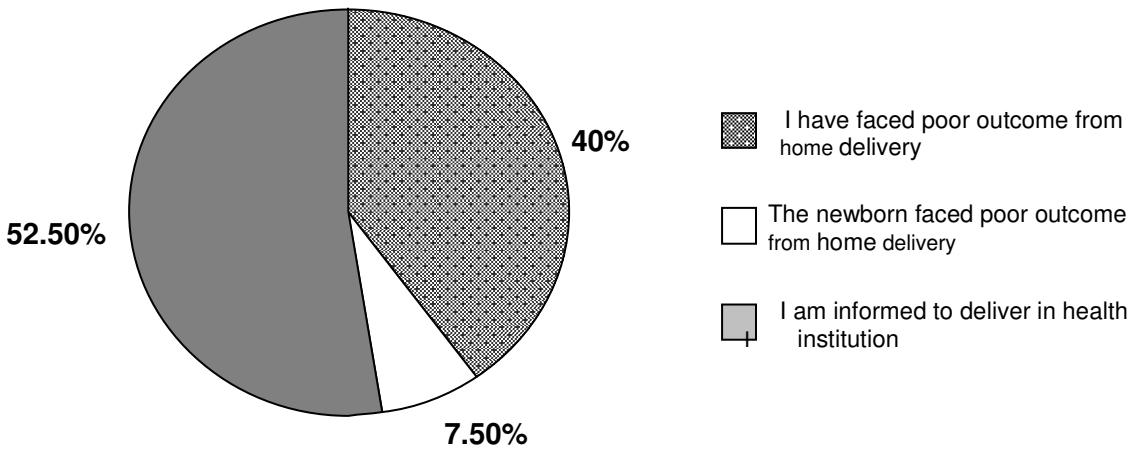

Fig. 3**.** Reasons for health facility delivery in Bena Tsemay Woreda, South, Omo Zone, SNNPR, Ethiopia, March 2010.

Based on their experience from home delivery, the women were asked about their future preference for place of delivery and 205 (53.2%) clamed to prefer institutional delivery. From those respondents who had encountered problem during delivery, 69.3% prefer to give birth at health institution but among those who did not face any problem previously about 46.5% had wished to give birth at health institution. Moreover, the proportion of home preference is 16.7% and 33.5% among those who faced any problem and who had not faced problem respectively.

The distribution of problem faced (table 3) reveals that, among those mothers who had face any problem during the last child birth about 23.0 % had excessive vaginal bleeding, 40.3% prolonged labour and 28.1% retained placenta. For those problems, the proportion of measures taken were 48.2% of the women consult TBA and 32.4% took traditional medicine and 10.8% of the mother did not take any measure but only 8.6% consult health professionals.

Regarding the outcome of the new born from home delivery, 339 (87.5%) of the new borns were live birth, 9.8% of new borns were live birth but died after some hours and the rest 1.3% were still births.

Table 3. Problem faced and Future preference of mothers in Bena Tsemay Woreda, South Omo, Zone, SNNPR, Ethiopia, March 2010.

Variable	Frequency	Percent
Future Preference for Place of Delivery(n=426)		
Home	109	28.3
Institution	205	53.2
Do not know	71	18.5
Problem faced in previous pregnancy or child birth (n=426)		
Yes	141	30.1
No	285	66.9
Previous Problem faced during pregnancy or delivery among the home delivery.(n=386)		
Yes	114	29.5
No	272	70.5
Future Preference among who faced problem in the past (n=114)		
Home	19	16.7
Institution	79	69.3
Do not know	16	14.0
Future preference among who had not faced any problem (n= 272)		
Home	90	33.2
Institution	126	46.5
Do not know	55	20.3
Problem faced during and after last child birth (n=139)		
Excessive vaginal bleeding	32	23.0
Prolonged labour (> 12 hr)	56	40.3
Retained placenta	39	28.1
Newborn death	12	8.6
Measures taken upon encountered problems		
Consult health worker	12	8.6
Took traditional medicine	45	32.4
Consult TBA	67	48.2
No measures taken	15	10.8
Condition of the last child who delivered at home(n=386)		
Live birth	339	87.8
Live birth but died after some hr	38	9.8
Still birth	5	1.3
Died before birth day	4	1.0

6.1.3. Accessibility of health service and decision making power

Regarding decision making power, 37.1% of the decisions about place of delivery were made by the women's husbands and 38.9% were made by the women independently. Fifty two percent of the respondents had said that there are health facilities near by which provide delivery care service.

From women who had given birth to their last child at health institution, 62.5% paid for the service among them 44% said the cost is unaffordable. Concerning the distance of the local most nearest health institution, 87.1% of the respondents walk >= 1 hour to reach to HF.

Among mothers who gave last birth at health institution, 72.5% of the respondents perceive the quality of the delivery care service was very good. Regarding the competency of the health professionals 50% of the mothers perceive they are very competent and 12.5% of the respondents said the health professionals are not competent. As to respect, 72.5% of the mothers said that, the delivery attendants respect the mothers and 27.5% of the women reported they didn't respect for the women who use the delivery service (table 4)

Table 4; Decision making and accessibility of the health facility in Bena Tsemay Woreda, South Omo Zone, SNNPR, Ethiopia, March 2010

Variables	Frequency	Percentage
Decision making on place of delivery		
By myself	166	38.9
My husband	158	37.1
Consensual	66	15.5
Relatives	34	8.0
Others	2	0.5
HF at proximate		
Yes	223	52.3
No	170	39.9
I do not know	33	7.7
Walking distance of the nearest local health facility		
<1 hr	55	12.9
1-2 hr	120	28.2
> 3 hr	251	58.9
Among HI delivery, Paid for delivery service		
Yes	25	62.5
No	15	37.5
Cost for delivery affordable		
Yes	14	56.0
No	11	44.0
Quality of the delivery service		
Very good	29	72.5
Good	9	22.5
Satisfactory	1	2.5
Not good	1	2.5
Delivery attendants give respect		
Yes	29	72.5
No	11	27.5
Perception of the women about competency of health professionals		
Very competent	20	50.0
Competent	12	30.0
Not competent	5	12.5
I do not know	3	7.5

6.1.4. Knowledge and Attitude of Mothers on Pregnancy and Delivery Care.

Knowledge of the respondents were assessed by using different related questions (table 5), about 224 (52.6%) and 198 (46.5%) of the mothers had agreed that a healthy looking women need ANC and delivery care service respectively. Among 189 respondents who had knowledge on danger signs of pregnancy (fig. 4), 60.32% mentioned two of the danger signs, and the rest frequently mentioned one danger sign either leg swelling or vaginal bleeding. Regarding the advantage of institutional delivery, 242 (56.8%) of the respondents knew the benefits of institutional delivery and 58.7% of them could mention at least two advantages of institutional delivery, the rest 19.8% and 16.1% could mention early detection of health problem and appropriate management of health problem during child birth. Regarding the risks of home delivery, 168 (39.4%) of the respondents knew the risks of home delivery and among these (fig.5) about 72.6% and 8.3% of them could mention two risks and the major risks respectively. The most frequently mentioned risks of home delivery include maternal death, maternal exhaustion and foetal distress.

Concerning attitude towards, 288 (67.6%) and 223 (58.2%) of the women and their husbands had good attitude towards institutional delivery, respectively, among 112(26.3%) women who had bad attitude towards institutional delivery, about 49.5% thought that home delivery had better outcome than health institution and 26.1% believe that the service at health institution had poor quality. Unwelcoming approach of health workers and expensive price were another mentioned reasons for bad attitude. Regarding the sex of delivery attendants, 325 (76.3%) of the respondents prefer female attendants during child birth. All respondents were asked whether they will be discouraged or not if they see male health professional attending delivery, and 176(41.3%) of the respondents reported that they will be discourage from delivering their child at that health institution. On the other hand 21.8% and 36.9% reported not to be discouraged and do not know their feeling, respectively.

Table 5. Knowledge and attitude of mothers on pregnancy and safe delivery service in Bena Tsemay Woreda, South Omo Zone, SNNPR, Ethiopia, March 2010. (n=426)

Variables	Frequency	Percent
Need ANC for healthy looking pregnant women		
Yes	224	52.6
No	120	28.2
I do not know	82	19.2
Need delivery care service for healthy looking pregnant women		
Yes	198	46.5
No	137	32.2
I do not know	91	21.4
Know danger sign in pregnancy and child birth		
Yes	189	44.4
No	237	55.6
Know HF delivery benefits		
Yes	242	56.8
No	184	43.2
Know risks of home delivery		
Yes	168	39.4
No	258	60.6
Women attitude about institutional delivery		
Good	288	67.6
Bad	112	26.3
Indifferent	26	6.1
Husband attitude about institutional delivery (n=385)		
Good	224	58.2
Bad	80	20.8
I do not know	81	21.0
Sex preference of delivery attendants		
Male	7	1.6
Female	325	76.3
I don't mind if any	94	22.1

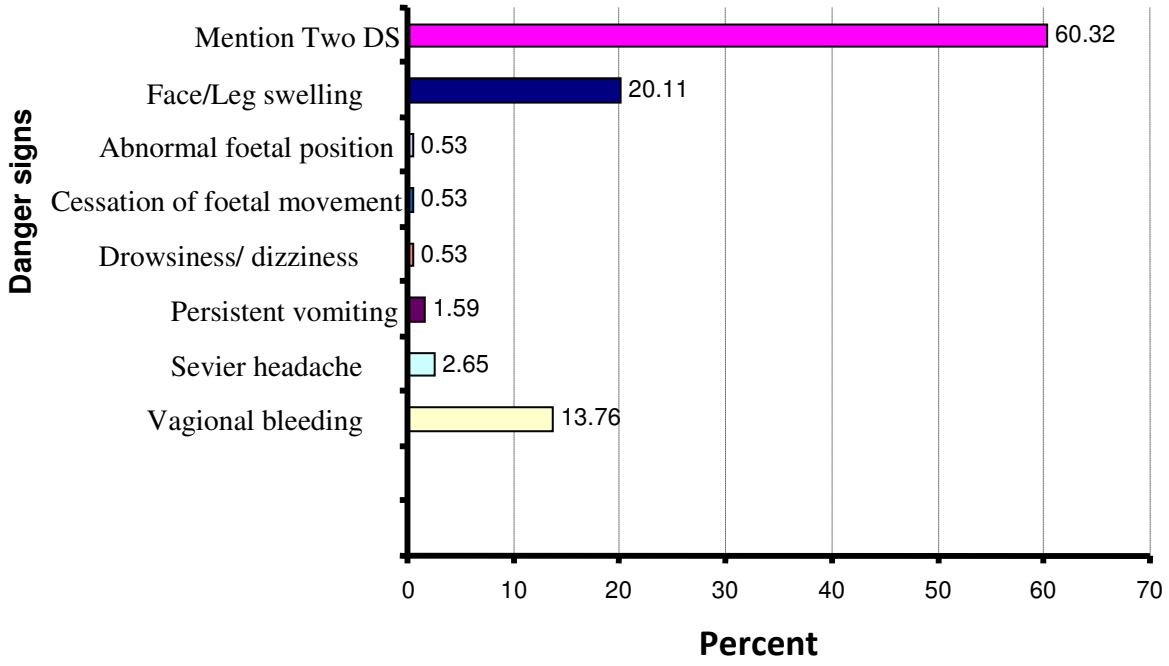

Fig.4. Danger signs of pregnancy mentioned by the respondents in Bena Tsemay Woreda, South Omo Zone, SNNPR, Ethiopia, March 2010.

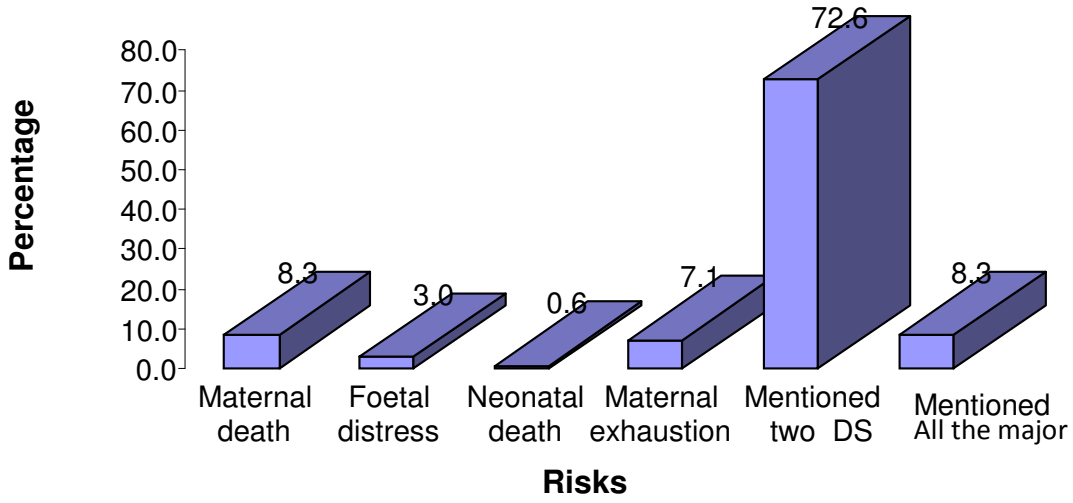

Fig. 5. Risks of home delivery mentioned by respondents in Bena Tsemay Woreda, South Omo Zone, SNNPR, Ethiopia, March 2010.

6.2. Bivariate and Multivariate Analysis

6.2.1. Bivariate analysis

Educational status of the women and husbands have statistically significant association with place of delivery (OR= 3.69, 95% CI: 1.65-8.22) and (OR= 4.63, 95% CI: 2.02-10.62), respectively. Those women who were literate were 3.7 times more likely to deliver at HI than mothers who were not. Besides, mothers whose husbands were literate were 4.6 times more likely to deliver at health institution than who had illiterate husbands.

Religion of the mothers also has significant association with safe delivery care utilization (OR=0.45, CI: 0.23-0.87). Those mothers who do follow traditional religion were less likely to deliver their child at HI compared to those who follow Christian religion. Regarding occupational status of the mother, only farmers category of respondents exhibited statistically significant association with safe delivery care utilization (OR=2.23, 95% CI: 1.04-4.66). Number of children alive, ethnicity and parity of the mothers were not found to have statistically significant association with safe delivery care utilization.

Media exposure through radio availability has also revealed statistically significant association with safe delivery care utilization (OR=4.45, 95% CI: 2.25-8.78). Mothers who had radio were 4.5 times more likely to deliver at health facility compared to mothers who had no access to radio.

Table 6. Association of socioeconomic and demographic factors with safe delivery care utilization in Bena Tsemay Woreda, South Omo Zone, SNNPR, Ethiopia, March 2010

Variables	Place of delivery				p -value	Crude OR (CI)
	HI		Home			
	No	%	No	%		
Women educational status						
Illiterate	30	7.8	354	92.2		1.000
Literate	10	23.8	32	76.2	0.003	3.69(1.65-8.22)**
Husband educational status						
Illiterate	29	8.3	322	91.7		1.000
Literate	10	29.4	24	70.6	0.000	4.63(2.02-10.62)***
Religion						
Christians [a]	22	14.1	128	85.9		1.000
Traditional	18	6.9	258	93.1	0.023	0.45(0.23-0.87)*
Ethnicity						
Bena	19	8.0	218	92.0		1.000
Tsemay	17	10.5	145	89.5		1.35(0.68-2.67)
Others	4	14.8	23	85.2	0.429	1.99(0.63-6.37)
Occupational status of the mother						
House wives	17	7.4	212	92.6		1.000
Farmers	15	15.2	84	84.8	0.034	2.23 (1.04-4.66)*
Pastoralists	5	6.4	71	93.4	0.312	0.88 (0.31-2.47)
Others [a]	3	13.6	19	86.4	0.805	1.97 (0.53-7.33)
Radio availability						
Yes	18	23.1	60	76.9	0.000	4.45(2.25-8.78)***
No	22	6.3	326	93.7		1.000
Parity						
1-4	31	10.0	279	90.0		1.000
5 & above	9	7.8	107	92.2	0.603	0.76(0.35-1.64)
Number of children alive						
0-2	18	9.6	169	90.4		1.000
3-4	17	10.9	139	89.1	0.332	1.19(0.57-2.5)
>=5	5	6.0	78	94.0	0.221	0.82 (0.35-1.95)
Birth order of the last child						
1-2	15	9.3	147	90.7		1.000
3-4	16	10.8	132	89.2	0.650	1.2 (0.57-2.5)
5 and more	9	7.8	107	92.2	0.661	0.82 (0.35-1.94)
Age at first birth						
<18	25	10.2	219	89.8		1.000
18-20	12	9.3	133	91.7	0.775	1.29(0.37-4.52)
>20	3	8.1	34	91.9	0.798	1.02(0.27-3.83)

Note - *p-value<0.05 **p<0.01 ***p<0.001 - [a] - Christian include Orthodox, Protestant and Catholic

- [a] - Others in occupation include merchants, private employee and Gov't employee

As table 7 shows that the mothers' attitude is significantly associated with safe delivery care utilization. Respondents who had bad attitude towards institutional delivery were 79 % less likely to deliver at HI (OR=0.21, CI: 0.08-0.18) and mothers whose attitude was indifferent also 92% less

likely to deliver at HI (OR=0.08, CI: 0.04-0.16) than those who had good attitude. In addition husband's attitude was also found to had statistically significant association with safe delivery care utilization. Those mothers whose husbands' attitude was bad were 93% less likely to deliver at HI than those husbands who had good attitude (OR=0.068, CI: 0.027-0.17).

Family planning has a significant association with place of delivery (OR= 6.25, CI: 3.17-12.34 $p<0.01$). Mothers who were using any FP service were 6 times more likely to utilize the service than mothers who had no experience of FP service. Similarly ANC also has a significant association with place of delivery (OR= 2.99, CI: 1.53-5.83, $p<0.01$). Those mothers who had any ANC follow up were 3 times more likely to utilize the safe delivery service than those who had no experience of ANC service.

Knowledge of the mother about the importance of institutional delivery has a significant association with place of delivery (OR= 0.3, CI: 0.13-0.66). Respondents who had no knowledge about the importance of institutional delivery were 70% less likely to deliver at health institution than those who had the knowledge. Besides, knowledge on danger signs of pregnancy was statistically associated with safe delivery care utilization (OR=0.09, CI: 0.06-0.15). Those who did not know danger signs of pregnancy were less likely to utilize the service. Respondents who did not know a healthy looking pregnant woman need HI for delivery were 57% less likely to deliver at HI than those who knew it is important (OR= 0.43, CI: 0.19-0.94). In addition, mothers who did not know home delivery has risk were less likely to deliver at HI (OR= 0.14, CI: 0.09-0.22) than who know the risks. Regarding child loss experience, it has no statistically significant association.

Distance of the HI has a significant association with place of delivery (OR=0.058, CI: 0.03- 0.12). Those mothers who walk more than one hour to the health institution were 94% less likely to use the safe delivery care service than who walk less than one hour. Regarding to mothers sex preference of the delivery attendant, it has a significant association with place of delivery. Respondents who prefer female delivery attendant were 93% less likely to deliver at HI (OR= 0.07 CI: 0.0.044-0.11) and respondents who has no any sex preference of the delivery attendant were also 78% less likely to deliver at HI (OR=0.22, CI: 0.13-0.37) than who prefer male delivery attendants.

Problem facing in previous pregnancy or child birth had statistically significant association with place of delivery (OR=0.20, CI: 0.01-0.41). Those mothers who ever had no experience of problems during pregnancy or child birth were 80% less likely to deliver at HI than those who faced problem.

Table 7: Association of safe delivery care utilization and some selected obstetric and gender factors in Bena Tsemay Woreda, South Omo Zone, SNNPR, Ethiopia, March 2010.

Variables	Place of delivery				p -value	Crude OR
	HI		Home			
	No	%	No	%		
Husband attitude						
Good	27	12.1	196	87.9		1.000
Bad	5	6.3	74	93.7	0.000	0.068(0.027-0.17)***
I do not know	7	8.6	74	91.4	0.000	0.095(0.044-0.21)***
Mother's attitude						
Good	31	10.8	257	89.2		1.000
Bad	8	7.1	104	92.9	0.000	0.21(0.08-0.18)***
Indifferent	1	3.8	25	96.2	0.002	0.77(0.04-0.16)**
Ever use of FP						
Yes	16	20.3	63	79.7	0.0000	6.25(3.17-2.34)***
No	24	6.9	323	93.1		1.000
Ever had ANC follow up						
Yes	18	17.8	83	82.2	0.002	2.99(1.53-5.83)**
No	22	6.8	303	93.2		1.000
Institutional delivery have importance						
Yes	32	13.2	210	86.8		1.000
No	8	4.3	176	95.7	0.002	0.3(0.13-0.66)**
Healthy looking pregnant women need HF for delivery						
Yes	28	4.1	170	85.9		1.000
No	9	7.6	128	93.4	0.011	0.43(0.19-0.94)*
I do not know	3	5.3	88	96.7	0.288	0.21(0.6-0.7)
Knowledge on danger signs of pregnancy						
Yes	20	10.6	169	89.4		1.000
No	20	8.4	217	91.6	0.000	0.09(0.06-0.15)***
Child birth at home has risk						
Yes	20	11.9	148	88.1		1.000
No	20	7.8	238	92.2	0.000	0.14(0.09-0.22)***
Walking distance to the HF						
< one hour	24	76.7	31	23.3		1.000
>=one hour	16	4.3	355	95.7	0.000	0.058(0.03-0.12)***
Sex preference of service provider at HF	2	28.6	5	71.4		1.000
Male	21	6.5	304	93.5	0.000	0.07(0.044-0.11)***
Female	17	18.1	77	81.9	0.000	0.22(0.13-0.37)***
I do not mind if any						
Problem faced in previous preg. or CB						
Yes	27	19.1	114	80.9		1.000
No	13	4.6	272	95.4	0.000	0.202(0.101-0.405)***
Child loss experience						
Yes	30	9.5	285	90.5	0.873	1.06(0.5-2.25)
No	10	10.0	101	90.0		1.000

Note. *p-value<0.05 **p<0.01 ***p<0.001

6.2.2. Multivariate Analysis

All variables which showed a significant association with safe delivery care utilization in the bivariate analysis were put in a binary logistic regression model to assess individual variable effects on safe delivery care use during delivery.

Among the intermediate variables FP, attitude and knowledge of mother on danger signs of pregnancy and child birth were found to be strong predictors of safe delivery service utilization. Women who were using FP service were 6 times more likely to give birth at health institution than those who were not using FP service at all (AOR= 5.62, 95% CI: 2.08, 10.40). On the other hand, mothers who did not know danger signs of pregnancy and child birth were found to be 73% less likely to give birth at health institution than mothers who had knowledge on DS (AOR=0.272, 95% CI: 0.15, 0.49).

There was statistically significant association between attitude of the mother towards institutional delivery and use of safe delivery services. Women who had bad attitude towards institutional delivery were less likely to use safe delivery service than those with good attitude. Women who does have bad attitude towards institutional delivery were 50% less likely to give birth at health institution than those with positive attitude (AOR=0.497, 95% CI: 0.26, 0.94).

Even though women who were using ANC service were 1.85 times more likely to give birth in health institution, it is not found to be statistically significant. In addition, knowing institutional delivery has importance and risk of home delivery had no statistically significant association with safe delivery care utilization.

Problem facing in previous pregnancy or child birth had statistically significant association with safe delivery care utilization (AOR=0.18, CI: 0.101-0.405). Those mothers who had not faced any pregnancy or child birth problem previously were 82% less likely to deliver at health institution than who had faced any problem.

Table 8: Association of intermediate variables and some obstetric factors with Safe Delivery Care utilization of mothers in Bena Tsemay Woreda, South Omo Zone, SNNPR, Ethiopia, March, 2010.

Variables	Crude OR (95% CI)	Adjusted OR (95% CI)	P-Value of AOR
Family Planning Utilization			
Yes	6.25(3.17-12.34)***	5.62(2.08-10.40)**	0.004
No	1.000	1.000	
ANC Utilization			
Yes	2.99(1.53-5.83)***	1.850(0.83-4.13)	0.136
No	1.00	1.000	
Maternal Knowledge of DS			
Yes	1.00	1.000	
No	0.09(0.06-0.15)***	0.272(0.15-0.49)**	0.002
Institutional delivery has importance			
Yes	1.00	1.00	
No	0.3(0.13-0.66)**	0.59(0.26-1.33)	0.137
Home delivery has risk			
Yes	1.00	1.00	
No	0.14(0.09-0.22)***	0.55(.26-1.19)	0.087
Maternal Attitude			
Good	1.00	1.000	
Bad	0.21(0.08-0.18)***	0.497(0.26-0.94)*	0.034
Indifferent	0.77(0.04-0.16)***	0.063(0.03-0.12)**	0.005
Problem faced during previous pregnancy or child birth			
Yes	1.000	1.000	
No	0.20(0.10-0.41)***	0.3(0.127-0.701)**	0.005

Note. - *p-value<0.05 **p<0.01 ***p<0.001

- Adjusted for socio economic & demographic variables those showed significant association during bivarate analysis

The multivariate binary logistic regression model reveals that, among the socio economic and demographic factors education, walking distance, media exposure and mothers' preference of sex of delivery attendant were found to be statistically significant association with safe delivery care utilization. Regarding education it significantly affects the utilization of safe delivery care. Educated women were two times more to utilize, safe delivery care service than illiterate women (AOR=1.88,

95% CI: 1.62-5.124). Regarding media exposure those mothers who had radio were four times more likely to deliver at HI than mothers who had no access to radio (AOR=3.76, , 95% CI:1.46-9.67). Even though there was a difference in safe delivery care service utilization by religion, it was not found to be statistically significant.

Regarding mothers' preference of the sex of delivery attendant, by taking male as a reference only female category has significant association with safe delivery care utilization. Those mothers who prefer female delivery attendant had 72% less likely to deliver at health institution (AOR= 0.284, CI: 0.132-0.613) than those who prefer male delivery attendant.

Concerning physical accessibility of the health facility it is strongly associated with safe delivery care utilization. (AOR=0.05, 95% CI: 0.022-0.12). Those mothers who walk one and more than one hour to the nearest HI were 95% less likely to deliver at HI than mothers who walk less than one hour.

Table 9: Socioeconomic and health service determinants of Safe Delivery Care utilization for mothers in Bena Tsemay Woreda, South Omo Zone, SNNPR, Ethiopia, March, 2010.

Independent Variables	Crude OR (95% CI)	Adjusted OR (95% CI)	P-Value of AOR
Educational status			
Illiterate(reference)	1.00	1.00	
Literate	4.63(2.02-10.62)***	3.6 (1.14-11.36)*	0.029
Religion			
Christian	1.00	1.00	
Traditional	0.45(0.23-0.87)*	0.7(0.251-1.78)	0.422
Radio availability			
Yes(reference)	4.45(2.25-8.78)***	3.76(1.46-9.67)**	0.006
No	1.00	1.000	
Mothers preference of sex of delivery attendant	1.00	1.000	
Male	0.07(0.044-0.11)***	0.284(0.13-0.613)**	0.001
Female	0.22(0.13-0.37)***	0.98(0.432-2.22)	0.961
Don't Mind if any			
Walking distance to HF from their home			
<1 hr	1.00	1.00	
>=1hr	0.058(0.03-0.12)***	0.05(0.22-0.12)***	0.000

Note - *p-value<0.05 **p<0.01 ***p<0.001

- Adjusted for knowledge and attitude variables those showed significant association during bivarate analysis

6.2.3. Qualitative findings

6.2.3.1. Findings of Focused Group Discussion

A total of 14 mothers were involved in two FGDs, each group has seven women and the grouping had made based on their age. They came from different kebles which were out of the seven kebeles studied in the quantitative data collection. Most of discussants had agreed that from religion point of view attending modern health care services is not prohibited. But some of the discussants had said that the cultural leaders will curse them if they go to health institution for delivery. When they came to the market, they use the ANC service once. If they were told that the pregnancy is fine, then they will not come back again. This visit is usually made without the knowledge of their husbands.

Most of the mothers in Bena Tsemay woreda deliver their baby at home and their main reasons were absence of illness during pregnancy, their husbands' opposition and more trust on TBAs. A 21 year old woman said *"when I deliver my last child, I was interested to deliver at health centre but my husband shouted and told me not to do so, and I had suffered a lot while giving birth at home"*. Another 30 years old woman added *"our husbands let us die in the jungle instead of bringing us to health institution"*.

Other discussants said *"all the time we deliver our children at home by the help of our relatives and TBA, if there is no problem, it is not necessary to come to health institution"*. In addition to this a discussant from the same group had added "*Most women deliver at home because labour is unpredictable and usually it arises suddenly without warning even if they attended ANC service, it is God's will to deliver with problem or without problem"*

The groups were also asked the best place of delivery. The majority of the discussants reflected that if there is no problem home is the best place. Few of the discussants agreed that the best place to deliver a child is at health institution. Discussants perceived that, home delivery has adequate privacy and to get assisted by TBAs whom they know and without fear and payment for transportation.

Whilst most of the discussants were agreeable that institutional delivery has more advantage than home delivery but couldn't mention important disadvantages of the home delivery. The discussants also were asked to reflect about harmful traditional practices related to pregnancy and child birth, and most of them had mentioned that massaging the abdomen during labour is common practice and

after child birth, most of the time the cord cutting blade is not boiled, and in addition to this they mentioned that when labour is prolonged the husband would hold the women and shake her to facilitate the birth of the child.

One participant mentioned *"At times the mothers or the foetus could die due to the suffocation resulting from the shaking"* and another participant from Tsemay said*" when there is excessive vaginal bleeding after child birth, we put the goat's or cow dung on the blood and we believe that it stops bleeding"*

They also mentioned that, even though there is health education, in some areas of Bena Tsemay woreda, taking plants root or leaves as a treatment for illness during pregnancy is still being practiced.

6.2.3.2. Key informant in-depth interview

A total of three key informants were interviewed, the head of the woreda health office and two nurses from MCH clinic of the health center. The contents of the interview had included patterns of maternal health service utilization, status of delivery care and factors affecting the provision of safe delivery care.

In the woreda there are one standard health center and two up-gradable health centers and in all 28 kebeles there are health posts. Even though it is not adequate, delivery care is given at the three health centers

The head of Bena Tsemay woreda health office had reported "*almost all of the mothers in Bena Tsemay woreda deliver their children at home and the service utilization is minimal. Their main reasons are cultural factors, low maternal knowledge, preference of TTBA or TBA, and bad attitude towards the institutional delivery*". The head had also mentioned "*among the various factors affecting the utilization of safe delivery at health institution, shortage of skilled professionals, shortage of equipments and supplies, including ambulance, absence of electricity and shortage of water supply are some of the factors*".

Furthermore, the health center is providing basic obstetric care but emergency obstetrics care like blood transfusion and surgery is not provided at the health center. The nurse from MCH clinic of the

health center said "*there is no emergency obstetrics care given in the health center if there is a case in need of the service, they usually referred to Jinka Hospital. However, most of the mothers return back to their home due to the absence of ambulance at the health center and even transportation is not available at any time they want. Hence the mothers could die at home*"

According to the report made by the head of the woreda health office, training was given for health professionals but it was not enough to promote safe delivery care. Regarding community awareness creation on safe delivery care, there was no any significant work made by the health centre or the woreda's health office, all the responsibility were left for health extension workers. They provided the information and educate the women in the kebeles to use different maternal services especially safe delivery care.

To promote and facilitate safe delivery care utilization in the woreda, recently they have only one midwife. Hence, they have a plan to increase the number of midwifes in the woreda to come up with a change. Moreover they planned to provide training to health extension workers on safe delivery care and furnishing the health centres including growing health centres with essential equipments. But concerns were expressed that things may not run as per the plan due to the budget constraint.

6. Discussion

The results of this study revealed that utilization of safe delivery care in Bena Tsemay can be affected by educational status of mothers, mothers' preference of sex of the health professional, the utilization of FP method, media exposure, walking distance to the health facility, previous experience of problem during pregnancy or child birth, maternal attitude towards institutional delivery and their knowledge on danger signs of pregnancy.

Regarding place of delivery, the prevalence of safe delivery care utilization in the study area was obtained to be only 9.4%. When we compare this result with other studies, it was found to be very low. A study in Sheka zone had showed that the prevalence of safe delivery care utilization was found to be 25.1% (45). Another study conducted in Amobo and its surrounding area revealed that, 25% of the respondents delivered their last child at health facility (46). The lower prevalence for safe delivery care in the study area has often been attributable to shortage of transportation particularly long distance during labour and delivery and as raised in FGD participants, preference of TBAs than health workers and absence of problem during previous pregnancy or child birth could contribute for the low prevalence. In addition, those studies in Ambo and Sheka zone were undertaken by including the urban and rural population but Bena Taemay Woreda is rural area.

The result of this study had showed that most of home deliveries were attended by TBA (25.4%), relatives (36.5%) and neighbours (22.8%). Results of EDHS also agree with this finding. In SNNPR among home deliveries 14.8% of the deliveries were attended by TBA and 68.6% were attended by relatives (13). Another study conducted in Afar also had revealed that, out of all home delivery in only 7(5.8%) of the births were assisted by health worker but 113 (94.2%) were assisted by TBA, close relatives/ friends, neighbours and TTBA (47). This is attributable to the value given for their relatives or TBA than health professionals and TBAs were familiar part of the birth process in the study area. In addition, they are easily accessible when labour begins.

Maternal knowledge on danger signs has significant association with safe delivery care utilization, a study in North Shoa Zone, Ephratagidim district is consistent with this result. It showed that, mothers who did not know the danger signs during pregnancy were less likely to give birth at HF than those mothers who knew at least one danger sign of pregnancy. On the other hand mothers who were knowledgeable on the risk of giving birth at home or benefits of giving birth at health facility

use safe place of delivery (32). This can be attributable to mothers who had knowledge on danger signs of pregnancy recognize the problem early, so that they would be encouraged to decide to deliver in HI. Moreover those mothers, who believe that institutional delivery is necessary for all pregnant women, make them ready to utilize the service.

In this study, positive or good attitude of the mothers' towards institutional delivery is found to be important predictor of safe delivery care utilization. Consistently a study conducted in Jimma had showed that women's attitude had statistically significant association with safe delivery practice. Those mothers who had favourable attitude were 2.34 times more to get delivered at HI than those whose attitude is unfavourable (27). On the other hand, a study conducted in Afar also revealed that husbands' attitude also has an association with safe delivery care practice (30). This is attributable to having good attitude does motivate the mothers to use the service. The result implies that focused advocacy and sustained work is needed to improve maternal and husband attitude towards safe delivery care service so as to increase the utilization of safe delivery care service.

The result of this study showed that there is strong association between mothers' preference of sex of delivery attendant and safe delivery care utilization. A study conducted in Afghanistan also showed that availability of a female doctor or midwife at the facility was associated with higher odds of skilled birth attendant use (OR=1.4; 95% CI=1.1, 1.8) (48). This is due to women feel secured when they were attended by female health professional during delivery.

In this study those who had experience of problems related to pregnancy or child birth previously were 70% more likely to deliver at health institution. A study conducted in Mekele town also revealed that women who had faced pregnancy and delivery complication are three times more likely to utilize skilled delivery attendant (adjusted OR=3.40 and 95%CI 1.76-6.57) (34). This may be due to having the experience of pregnancy related problem result fear of developing the problem again and if it happens they could recognize it early, so they come to the health institution to deliver their baby.

In Bena Tsemay, from the socioeconomic factors, maternal education is associated with safe delivery care utilization. A research conducted in Indonesia revealed that, women with low educational attainment had almost three times lower likelihood to access and utilize a skilled attendant than those with high educational attainment (49). It is clear that education plays a greater

role in making people more knowledgeable and independently judges the upsides and downsides of different health care choices. Even though primary school is available in the study area, about 87.8 percent of the mothers are illiterate. Usually child rearing is considered as the only responsibility of mothers which hindered them to attend formal education.

In many studies media exposure is important predictor of safe delivery care utilization, a research conducted in Bangladesh revealed that, mothers who listened to the radio and watched TV are more likely to use the HF during delivery. About 10.9% mothers who listened to the radio and 15.9% of mothers who watched to TV used HF during delivery, whereas it is only 6.1% and 3.6% for those mothers who did not listen to radio and did not watched TV who used HF during delivery, respectively (50). In this study it is also found to be important determinant of safe delivery care utilization. This is attributable to the information gap between those exposed to media and the non-exposed. Even though those respondents who had radio were so small in their proportion, it was found to bring a significant association in the utilization of the service. In addition, if the media of communication through radio in the study area is more of their local language, its effect will be stronger.

The utilization of family planning has a strong relationship with safe delivery care utilization. It was found to be consistent with a study conducted in Amhara Regional State of Ethiopia. The study was made by using a secondary data source EDHS 2000 and 2005 which indicated that those who use contraceptives showed a 9.6% higher proportion in using safe delivery care and it was found to be statistically significant (11). A study conducted in Sheka zone revealed that women who had received ANC were two and half times more likely to utilize the safe delivery care service (45). However, in this current study, ANC was not found to be significantly associated with safe delivery care utilization in the multivariate analysis. The smaller prevalence of ANC in the study area could have been the main reason why it failed to bring a statistically significant effect on safe delivery care. It is clear that mothers who use FP and ANC service are exposed to information about safe delivery. So they are more likely to deliver at health institution than those who didn't have the experience of any maternal health care service utilization. In addition, health professionals may encourage them to seek professional assistance at delivery or to give birth in a health facility.

In this study, walking distance of the health facility has negative association with safe delivery care utilization. A study conducted on women's preferences for obstetric care in rural Ethiopia had

revealed that travel time significantly associated with preference of place of delivery (51). Similarly a study in Tanzania also showed that the proportion of women with skilled attendants during delivery was seen to decrease with increasing distance to the health facility providing delivery care service (26). Walking distance played a greater role in promoting women to give birth in health institution. Usually women who live at a distant place in rural area have a shortage of transportation, so they prefer to deliver at home since they couldn't reach at health institution during labour.

This study had clearly revealed that the reason given for home delivery included more trust on TBA and relatives, wishes to deliver where relatives are near by, the health facility was too far and others. This result was also supported by the FGD participants. Moreover, the FGD participants mentioned the absence of illness during pregnancy as their main reason to deliver at home. A study conducted in Kenya also revealed that, the most frequent reason for not attending a health facility for delivery was lack of means of transport, in particular at night (49%), fast progression of labor (47%), and expense (28%). In addition this study also shows 14% of women did not think facility attendance was necessary (52).

When we compare the prevalence rates of ANC (23.7%) and FP (18.5%) in Bena Tsemay with other studies, it was found to be minimal. A study conducted in southern part of Ethiopia, the contraceptive prevalence in Awassa town was 68.8% and in the semi-urban areas were 48%. (53). Another study which was conducted on ANC in Maichew, Southern Tigray had revealed that 80% of the respondents had at least one ANC visits (54). In SNNPR the result from EDHS showed that ANC use among pregnant women was 30.3% (13). One can see how small the ANC coverage in the study area. Almost all of the population in Bena Tsemay was traditional societies and 87.8% of them are illiterate. They did not have the opportunity to get the information on maternal health services.

The result of this study showed that there is no any significant association between parity and safe delivery care utilization. But in other studies like a study conducted on maternal care utilization in Ethiopia clearly showed that, in rural Ethiopia parity is important and independent predictor of utilization of safe delivery care services. It revealed that women who have 2-4 and 5+ children are 60 percent and 50 percent less likely, respectively, to receive delivery care than para I women (7). Another study conducted in Zambia also showed that parity was significantly associated with choice of health facility for childbirth. Mothers who had one child were 92% (AOR=1.92, 95%CI [1.01,

3.67]) more likely to deliver at a health facility than those who had 3 or more children (37). This is attributable to traditionality, since, most of the mothers in Bena Tsemay were traditional society they give more value to their traditions so the young mothers follow the old mothers practice thus, they deliver at home instead of coming to health institution

7. Strength and Limitation of the study

1. Strength of the study

- Absence of non responses
- The study uses both qualitative and quantitative methods
- Data collectors are health extension workers which has advantage, since, they know all the localities of their respective kebeles, well known, live with them, speaks local languages and of the same sex with study subjects.
- Using pre-tested questionnaire
- The study was conducted in Bena Tsemay woreda where research findings are deficient for decision making

2. Limitation of the study

- Though the paper focused on factors that affect the safe delivery service utilization in the study area, it fails to get fair number of observation among the categories of the factors.
- For time and logistic reasons the study was conducted on one selected woreda so that it might not be generalizable to all women in the Zone
- Since, the data collection is based on the past five year experience of the mother so a recall bias and misreporting of events was likely to happen.
- Since the design is cross sectional temporal relations could not be assessed
- Income measurement might not be sufficiently representative for all parts of the population of Bena Tsemay Woreda, because of the population were pastoralists and farmers.

8. Conclusion

Using bivariate and multivariate analysis, this study clearly showed the effect of some selected factors on safe delivery care service utilization. Dealing with the above investigation the study arrives at the following conclusion.

- The prevalence of safe delivery care service utilization in the study area was found to be very low. Knowledge of danger signs, attitude, FP utilization, educational status of the mothers, radio availability, walking distance of health facility, experiences of problems related to pregnancy or child birth and mothers' sex preference of delivery attendants are influencing the utilization of safe delivery care service.
- In this study most of the factors that affect utilization of safe delivery care service are socio-economic, health service related and personal factors like knowledge on DS and attitude of the mother.
- Other maternal services have great role on the utilization of the safe delivery service. Especially the experience of modern family planning use promotes the mothers to use the safe delivery care service.
- There are shortage of equipments and skilled man power in the study area
- Most of the mothers who prefer to be attended by female health care provider during child birth are giving birth at home due to the shortage of female health professionals in the health institutions of the study area.
- The main reasons of women for home delivery in the study area are presence of relatives nearby, more trust on TBAs, lack of transportation because of long distance of the health facility and apparently healthy during pregnancy. Besides, previous experiences of problem on child birth or getting informed on where to deliver the child are important reasons which bring the mothers to health institution for delivery.
- However, factors like ANC use, income, occupational status, birth order of the last child, marital status, current age of the mother, age at first birth and parity are not the factors that affect the utilization of safe delivery care in the study area.

9. Recommendation

Based on the result of this new study in Bena Tsemay woreda, the following recommendations are forwarded.

- ✓ Almost all of the respondents and their husbands in the study area were illiterate, different studies including this thesis revealed that, education has a great role in utilization of modern maternal health services. So improving education for both groups especially girls, beyond the primary school needs to be strongly encouraged in Bena Tsemay woreda.
- ✓ Only 18% of the respondents had radio but it was strong predictor of safe delivery care service utilization. Media has a greater role in changing the peoples' perception and practice. Thus, Information, education, and communication (IEC/BCC) by using media channel and community channel in their local language are required. It motivates and educates women in order to increase their awareness about the importance of safe delivery care.
- ✓ Knowledge on DS was an important predictor of safe delivery care use so healthcare providers should provide information on the risks of pregnancy, benefits of giving birth at health facilities, danger signs during pregnancy and labour. In addition, an advocacy work is expected in changing the attitude of women towards safe delivery care in the study area.
- ✓ Other maternal health services favor the utilization of safe delivery care service, so integration of maternal health services should be strongly encouraged.
- ✓ The quality of health care services and health professionals should be considered. There is a shortage of equipments and skilled delivery attendant in the woreda. This may discourages the mothers to use the service. Therefore, the regional government needs to provide adequate training on EMOC and communication skills for health care providers and allocate additional resources including human resource to improve the quality of the service.
- ✓ Referral linkage between health posts, health centers and hospital should be strengthened
- ✓ Almost all of the deliveries had conducted at home with the help of none health professionals like TBAs, relatives and neighbours so, the GO and NGOs should work in increasing the number of skilled attendants especially midwives who provide the service at all health facilities in the woreda.
- ✓ Finally, further research is recommended which include other variables that are not included in this study.

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Appendix

Appendix A: information and consent form

Information sheet

Title: Assessment of Factors Affecting Safe Delivery Care Service Utilization in South Omo Zone, the Case of Bena Tsemay Wereda

In this study, the interview will be made to women in the reproductive age group and who had the experience of childbearing in the last five years.

Dear respondent,

My name is _____. Currently, I am working with the research team of Addis Ababa University, Medical Faculty, and School of Public Health. The survey is conducted to assess factors that affect the safe delivery care service utilization in Bena Tsemay Wereda. The research will be helpful to strengthen the newborn and maternal health care in Bena Tsemay wereda. The study will provide helpful information to the NGO's and local government to further deal with the problem and come up with a solution and it is also serving as an important input for intervention program so as to improve delivery care service utilization beyond Bena Tsemay Wereda.

There fore, your honest and genuine participation and response to the question will help us for a better understanding of the factors.

All the information you give me will be kept private and your name is not put any where on this questionnaire. Moreover, any one of your individual responses will not be disclosed to any one at any time but kept confidential. If you decided not to participate or complete the form, you may end filling the questionnaire any time you want. This interview will take some minutes to complete the questionnaire.

Are you interested to participate in this study? 1. Yes 2. No

If the response is no, say thank you and go to the next interviewee. If the response is yes, continue the interview and say thank you in advance and at the end of the interview.

Name of the Interviewer _____Signature._____ Date _____

Name of the Supervisor _____Signature._____ Date_____

For further information

Name of PI: Firehiwot Haile Institutional review bored (IRB) Tel: 0115538734

Phone number: 0911553011 Addis Ababa University, Medical Faculty, SPH

Consent form

I have been informed that the interview is to collect information about factors which affect safe delivery care utilization in Bena Tsemay Woreda and the result will help GO's and NGO's to overcome the problem. In addition, I am also informed about the confidentiality of the information and to stop any time if I don't want to continue.

Name _____

Signature _____

Date _____

I. IDENTIFICATION FORM

Questionnaire Code_____
Kebele _____
House Number _____
Time of start of interview_____
Time of end of interviewed_____

Part I: Socio-economic and Demographic Characteristics of the respondents.				
No	**Questions**	**Alternatives/ choice of responses**	**code**	**skip**
101	Current age in years	_____		
102.	Age at first birth	_____		
103	Religion.	1. Orthodox 2. Catholic 3. Protestant 4. Muslim 5. Others_____		
104.	Occupation.	1. House wife 2. farmer 3. Gov't employee 4. Private employee 5. Pastoralists 6. Others_____		
105.	Educational status?	1. illiterate 2. read and write only 3. 1-6 4. 7-12 5. 12+		
106	Number of children ever born?	_____		
107	Number of children alive?	_____		
108	When was the date in which you gave your last birth	_____		
19	Marital status during the last five year.	1. Married 2. Single 3. Divorce		if 2,3,4.&5 skip to Q. 113

		4. Separated 5. Widowed 6. Other_____		
110	Your husbands age	_____yr		
111	Educational status of your husband?	1. illiterate 2. read and write only 3. 1-6 4. 7-12 5. 12+		
112	Husband's occupation.	1. Not employed 2. Gov't employee 3. farmer 4. Private employee 5. pastoralists 6. Others mention_____		
113	What is the average family income per month?	_____		
114	Do you have a radio?	1. Yes 2. No		If 2 skip to Q 201
115	If 'yes' how often do you listen to the radio?	1. Almost every day, 2. At least once a week, 3. Less than once a week 4. Not at all		
Part II : Experience of mothers on ANC and family planning service				
201.	Have you ever had ANC follow up?	1.Yes 2. No		
202.	Have you got ANC service during your last pregnancy?	1.Yes 2. No		If '2' skip to 204
203	If yes, how many times you visited the service during your last pregnancy?	1. One 2. Two 3. Three 4. Four and more than four		
204	During your any of the ANC follow	1. Yes		if '2 &3'

	ups, did you receive any information regarding possible pregnancy & delivery complication?	2. No 3. Do not know		skip to 208
205	Did you get informed about where to deliver?	1. Yes 2. No 3. Do not remember		
206	Were you informed about who should attend you during delivery?	1. Yes 2. No		If 2 skip to 208
207	If yes, who is recommended to attend your delivery?	1. Skilled health personnel 2. TBA 3. TTBA 4. Relatives 5. Other family members 6. Other, specify ____		
208	Have you ever use any of the family planning methods?	1. Yes 2. No		
209	Did you ever use modern family planning methods?	1. Yes 2. No		If 2, skip to 301
210	Were you using modern family planning service before your last pregnancy?	1. Yes 2. No		
211	When you receive FP service, have you got any information about safe delivery care services?	1. Yes 2. No 3. I do not remember		
Part III : Maternal Knowledge and Attitudes on Pregnancy and delivery Care				
301	Should a healthy looking pregnant women need to use ANC service?	1. Yes 2. No 3. I do not know		
302	Should a healthy looking pregnant women need to use health service during delivery?	1. Yes 2. No 3. I do not know		
303	Do you know dangerous health problems related to pregnancy?	1. Yes 2. No		If no skip to 306

304	If 'yes' what danger signs do you know? Mention some of them (more than one answer is possible)	1. Vaginal bleeding 2. Sevier headache 3. Persistent vomiting 4. Drowsiness/ dizziness 5. Cessation of fetal movement 6. Face/leg swelling 7. Abnormal fetal position 8. Others (specify)_____		
305	Mention some of the danger sign and symptoms after child birth	1. Excessive vaginal bleeding 2. Retained placenta 3. Unable to control urine or faeces 4. High fever 5. Offensive vaginal discharge 6. Others (specify)_____		
306	Do you think child birth at home has risk?	1.Yes 2.No		If '2' skip to 308
307	If yes what risks do you know?	1. Maternal death 2. Fetal distress 3. Neonatal death 4. Maternal exhaustion 5. Disease transmission from attendants 6. Others specify_____		
308	Do you think that child birth at health institution has advantage	1. Yes 2. No		if 2 skip to 310
309	What are the Advantages of delivering at health institution	1.Early detection of health problems 2. Appropriate management of health problems during delivery 3. Better health care to the women 4. Better care to the newborn		

		5. others mention_____		
310	Are there any health facilities near by which provide delivery services?	1. Yes 2. No 3. Do not know		
311	How long does it take to walk from your home to the nearest health institution?	1. <1 hr 2. 1-2 hr 3. >3 hr		
312	What is your attitude to wards delivery services at health institution?	1. Good 2. Bad 3. Have no idea		If 2 & 3 skip to Q. 314
313	If 'bad ' why do you have bad attitude (more than one answer is possible)	1. Poor quality of services 2. Poor out comes of institutional delivery 3. Unwelcoming approach of health workers 4. Expensive price 5. I believe it is better to delivery at home 6. Other (specify)_____		
314	What was your husband's attitude towards delivery care at health institution? (only for married women)	1. Good 2. Bad 3. I don't know		
315	What sex of heath provider do you prefer to get attended by during pregnancy and delivery?	1. Male 2. Female 3. I don't mind if any		
316	If you find a male service provider at delivery room attending the delivery, will you be discouraged from delivering at health institution?	1. Yes 2. No 3. Indifferent		

Part IV: Delivery care utilization (for those who had childbearing experience in the last five years)				
401	The birth order of your last child	1. One 2. Two 3. Three 4. Four 5. Five and more		
402	Who made the decision about the place of delivery?	1. By myself 2. My husband 3. my husband and me 4. Relatives 5. Others (specify)_____		
403	Have you ever faced any pregnancy related health problems during any child birth?	1. Yes 2. No		
404	Have you faced any pregnancy related health problem during the last chid birth?	1. Yes 2. No		if 2 skip to 407
405	If yes what were the problem? (more than one answer is possible)	1. Excessive vaginal bleeding 2. Prolonged labour (>12 hrs) 3. Retained placenta 4. Inability to control urine/faeces/both 5. New born death 6. Early rupture of membrane 7. Others specify_____		
406	What measures were taken to alleviate the problem?	1. Consult health workers 2. Took traditional medicine		

		3. Consulted TBA 4. No action taken 5. Others specify_____		
407	Where did you deliver your last child?	1. Home 2. Health institution		if 2 skip to 412
408	What was your reason to deliver at home? (more than one answer is possible)	1. The cost for delivery at health institution is unaffordable 2. The health institution is too far / no transportation 3. husband/family did not allow 4. Wishes to deliver at home where relatives are nearby 5. More trust on TBAs/relatives than health workers at HI 6. No female health provider 7. Other (specify)_____		
409	Who assisted you during your last delivery?	1. TBA 2. TTBA 3. Neighbor 4. Health extension worker 5. Relatives / friends 6. No one 7. Others (specify)_____		
410	What was the condition of your last baby?	1. live birth 2. live birth but died after some hrs 3. still birth 4. died before birth day 5. others specify_____		
411	Based on your experience and delivery outcome from the last child birth at home what would be	1. Institutional delivery 2. Home delivery		

	your future preference for place of delivery?	3. do not know		
Only for those who deliver at health institution				
412	What is your main reason (more than one answer is possible)	1. I have faced poor outcome from home delivery 2. The new born has faced poor outcome from home delivery 3. I am informed that I should always deliver in health facilities 4. Other reasons, Specify _____		
413	Were the health workers respectful?	1. Yes 2. No		
414	What do you think about the quality of services?	1. Very Good 2. Good 2. Fair 3. Poor		
415	What do you say about the health worker's competence?	1. Very competent 2. Competent 3. Not competent 4. Difficult to judge		
416	Is there any payment for delivery at health institution?	1. yes 2. no		if 2 End
417	Is the cost of the delivery care service provided in health institution is affordable?	1.Yes 2. No		

Thank you!!

አዲስ አበባ ዩኒቨርስቲ

የህክምና ፋኩሊቲ

የህብረተሠብ ጤና ት/ቤት

ጤናይስጥልኝ ስሜ ----------እባላለሁ፡፡ በአሁኑ ጊዜ ከአዲስ አበባ ዩኒቨርስቲ የህብረተሠብ ጤና ትምህርት ቤት የጥናት ቡድን አባል ነኝ፡፡ ይህ ጥናት የሚካሄደው በበና ፀማይ ወረዳ ያሉ እናቶች የወሊድ አገልግሎትን በጤና ተቋም ውስጥ እንዲጠቀሙ ወይም እንዳይጠቀሙ የሚያደርጓቸውን የተለያዩ ምክንያቶችን ለማጥናትና የመፍትሄ መንገዶችን ለማመለከት ነው፡፡

ከዚህ ጥናት የሚገኘው ውጤት የወሊድ አገልግሎትን፣አቅርቦትንና ጥራትን ለማሻሻልና ለማጠናከር አስፈላጊ የሆኑ እርምጃዎችን ለመውሠድ ያገለግላል፡፡በተጨማሪም መንግስታዊና መንግስታዊ ያልሆኑ ድርጅቶች ችግሩን ከስሩ ለመስወገድና ዘላቂ መፍትኤ ለመፈለግ የሚያደርጉትን ጥረት ያግዛል ስለዚህ የርሶ ግልፅና ታማኝነት ያለው ተሳትፎ ወሳኝ ነው፡፡

በዚህ ጥናት ውስጥ የሚካተቱት ሴቶች እድሜያቸው በመውለድ ክልል ውስጥ የሚገኝና ባለፉት አምስት አመታት ውስጥ ልጅ የወለዱ ብቻ ናቸው፡፡ በመሆኑም ከነዚህ ሴቶች መካከልም እርሶ አንዷ ስለሆኑ በዚህ ጥናት ውስጥ ለመሳተፍ ፍቃደኛ እንዲሆኑ በትህትና እንጠይቃለን፡፡

ለጥያቄዎቹ የሚሰጧቸው መልሶች በሙሉ ሚስጢራዊነታቸው የተጠበቀ ነው ስለዚህ ስለማንነቶዎ እና ስለሠጧቸው መልሶች በT>ስጢር መጠበቅ ምንም አይነት ስጋት አይግባዎት፡፡ በጥናቱ L‌ይ የሚሳተፉት በፍላጎትዎ ሲሆን በጥናቱ ላይ ያለመሳተፍ መብትዎትም የተጠበቀ ነው፡፡ ቃለመጠይቁ የተወሰኑ ደቂቃዎችን ይወስዳል በማንኛውም ሠዓት ማስቆም ይችላሉ፡፡ ግልፅ ያልሆነልዎት ጉዳይ አለዎትን; ምናልባት በተጨማሪ እንዲብራራልዎት የሚፈልጉት ጉዳይ ካለ ቢያስታዉሱን፤ ግልፅ ከሆነ ደግሞ

በዚህጥናት ለመሳተፍ ፍቃደኛ ነዎት; 1) አዎ 2) አይደለሁም

መልሳቸው አዎ ከሆነ ወደ መጠይቁ መቀጠል ፈቃደኛ ካልሆኑ ደግሞ አመስግነው ወደ ቀጣዩ ቤት ይሂዱ

የጠያቂው ስም---------- ፊርማ ---------- ቀን----------

የተቆጣጣሪው ስም---------- ፊርማ ----------

<u>ለተጨማሪ መረጃ</u>

ፍሬህይወት ሀይሌ

ስልክ፡ 0911553011

አዲስ አበባ ዩኒቨርስቲ የህክምና ፋኩሊቲ የህብረተሠብ ጤና ት/ቤት

IRB (Institutional review board)

ስልክ : 0115538734

የስምምነት ውል

እኔ ከዚህ በታች የፈረምኩ ግለሰብ ይህ ጥናት የሚካሄደው በበና ፀማይ ወረዳ ያሉ እናቶች የወሊድ አገልግሎትን በጤና ተቋም ውስጥ እንዲጠቀሙ ወይም እንዳይጠቀሙ የሚያደርጓቸውን የተለያዩ ምክንያቶችን ለማወቅ እንደሆነና ውጤቱም መንግስታዊና መንግስታዊ ያልሆኑ ድርጅቶች ችግሩን ከስሩ ለመስወገድና ዘላቂ መፍትኤ ለመፈለግ የሚያደርጉትን ጥረት እንደሚያግዝ በተጨማሪም የምሰጠው መረጃ ሚስጢራዊነቱ የተጠበቀ መሆኑና በማንኛውም ሠዓት ቃለምልልሱን ማስቆም እንደምችል ተነግሮኝ ተስማምቻለው

የተጠያቂው ፊርማ----------

ቀን----------

የጠያቂው ስም----------

ፊርማ ----------

የመለያ መረጃዎች ቅፅ

የመለያ ኮድ ----------

ቀበሌ ----------

የቤት ቁጥር ----------

ቃለመጠይቁ የተጀመረበት ሠዓት ----------

ቃለመጠይቁ ያለቀበት ሠዓት ----------

ክፍል አንድ፣የተጠያቂዋ አጠቃላይ ማህበራዊና ኢኮኖሚያዊ እንዲሁም ስነህዝበዊ መረጃ

ተ.ቁ	ጥያቄዎች	አማራጭ መልሶች	ኮድ	እKõ
101	እድሜዎ በአሁኑ ሠዓት ስንት ነው;	----------		
102	የመጀመሪያ ልጅዎን ሲወልዱ እድሜዎት ስንት ነበር;	----------		
103	ሐይማኖት	1. ኦርቶዶክስ 2. ሙስሊም 3. ፕሮቴስታንት 4. ካቶሊክ 5. ሌላ ካለ ይጥቀሱ--------		
103	wH[cw	1. u“ 2. ìTA 3. GS` 4. ሌላ ካለ ይጥቀሱ---------		
105	የስራ ሁኔታ	1. የቤት እመቤት 2. የግል ተቀጣሪ 3. ገበሬ 4. የመንግስት ተቀጣሪ 5. ›`w„ ›Å` 6. ሌላ ካለ ይጥቀሱ---------		
106	የትምህርት ሁኔታ	1. ያልተማረ 2. ማንበብና መጻፍ w‰		

		3. 1-6 4. 7-12 5. 12+		
107	አጠቃላይ የተወለዱ ልጆች ብዘት ስንት ነው;	----------		
108	በህይወት ያሉ የልጆች ብዛት ስንት ነው;	----------		
109	የመጨረሻውን ልጅ የወለዱበት ቀን መቼ ነው;	----------		
110	የጋብቻ ሁኔታ;	1. ያገባች (አሁን በትዳር) 2. ያላገባች (ምንም ባል ያላገባች) 3. አግብታ የፈታች 4. ባልዋ የሞተባት 5. }KÁA}¬ T>•\ 6. ሌላ ካለ --------		2,3 ,4 እና 5 ወደ ጥያቄ 113
111	የባለቤቶት እድሜ;	_____		
112	የባለቤቶት የትምህርት ሁኔታ;	1. ያልተማረ 2. ማንበብና መጻፍ ብቻ 3. 1-6 4. 7-12 5. 12+		
113	የባለቤቶት ስራ ምንድነው ;	1. ስራ የለውም 2. የመንግስት ሠራተኛ 3. ገበሬ 4. የግል ተቀጣሪ 5. ›`w„ ›Å` 6. ሌላ ካለ ይጥቀሱ_____		

114	ገቢዎ በወር ሲሰላ በግምት ስንት ይሆናል ;	_____		
115	ሬዲዮ አለዎት ;	1. አለኝ 2. የለኝም		2 ከሆነ ወደ 201
116	ሬዲዮ ካለዎት ምን ያህል ጊዜ ያዳምጣሉ ;	1. ሁል ጊዜ 2. ቢያንስ በሳምንት አንድ ጊዜ 3. ከሳምንት አንድ ጊዜ ያነሰ 4. አላዳምጥም		

ክፍል ሁለት፡ የእናቶች የእርግዝና ክትትልና የቤተሰብ ምጣኔ የመጠቀም ልምድ

ተ.ቁ	ጥያቄዎች	አማራጭ መልሶች	ኮድ	
201	ከዚህ በፊት በማንኛውም ሠዓት የእርግዝና ክትትል አድርገው ያውቃሉ ;	1. አዎ 2. ›A ›LÅ[Ÿ<U		2 ከሆነ ወደ 208
202	ባለፈው የመጨረሻ እርግዝናዎ ወቅት የእርግዝና ክትትል አድርገው Áውnሉ ;	1. አዎ 2. ›A ›LÅ[Ÿ<U		2 ከሆነ ወደ 204
203	በመጨረሻ እርግዝናዎ ወቅት ምን ያህል ጊዜ የእርግዝና ክትትል አድርገዋል ;	1. አንድ ጊዜ 2. ሁለት ጊዜ 3. ሦስት ጊዜ 4. አራትና ከዚያ በላይ		
204	በማንኛውም የእርግዝና ክትትል ƒ ወቅት ስለ እርግዝናና የወሊድ ችግሮች ትምህርት ተሠጥቶƒ ያውቃል ;	1. አዎ 2. አልተሠጠኝም 3. አላስታውስም		2 እና 3 ከሆነ ወደ 208
205	የት መውለድ እንዳለብዎት ተነግሮታል;	1. አዎ 2. አልተነገረኝም 3. አላስታውስም		
206	ማን ሊያዋልድዎት እንደሚገባስ	1. አዎ		2 ከሆነ ወደ

	ተነግሮታል ;	2. አልተነገረኝም		208
207	ከተነገሮት ማን እንዲያዋልድዎት ነው የተነገሮት ;	1. የሰለጠነ የጤና ባለሙያ 2. ያልሰለጠነች የልምድ አዋላጅ 3. የሠለጠነች የልምድ አዋላጅ 4. ዘመድ / ጓደኛ 5. የቤተሰቡ አባል 6. ሌላ ካለ ይጥቀሱ_____		
208	ከዚህ በፊት ማንኛውንም የቤተሰብ ምጣኔ አገልግሎት ተጠቅመው ያውቃሉ ;	1. አዎ 2. አልተጠቀሙም		
209	ዘመናዊ የቤተሰብ ምጣኔ አገልግሎት ተጠቅመው ያውቃሉ ;	1. አዎ 2. አልተጠቀምኩም		መልሱ 2 ከሆነ ወደ 301
210	ከመጨረሻው እርግዝናዎ በፊት ዘመናዊ የቤተሰብ ምጣኔ አገልግሎት ተጠቅመዋል ;	1. አዎ 2. አልተጠቀምኩም		
211	የቤተሰብ ምጣኔ አገልግሎት በጤና ተቋም ውስጥ ሲጠቀሙ ስለወሊድ አገልግሎት ተነግሮዎት ’u` ;	1. አዎ 2. አልተነገረኝም 3. አላስታውስም		

ክፍል ሦስት፡ እርግዝናና ወሊድን በተመለከተ እናቶች ያላቸው እውቀትና አመለካከት

301	ጤነኛ የሆነች እርጉዝ ሴት የእርግዝና ክትትል ማድረግ አለባት ብለሽ ታስቢያለሽ ?	1. አዎ 2. የለባትም 3. አላውቅም		
302	ጤነኛ የሆነች እርጉዝ ሴት	1. አዎ		

	በጤና ተቋም ውስጥ መውለድ አለባት ብለሽ ታስቢያለሽ ?	2. የለባትም 3. አላውቅም		
303	ከእርግዝና ጋር የተያያዙ አደገኛ የሆኑ የጤና ችግሮችን ታውቂያለሽ	1. አዎ 2. አላውቅም		2 ŸJ’ ¨Å 305
304	የምታውቂ ከሆነ የተወሰኑትን ጥቀሺልኝ ? (ከአንድ በላይ መልስ ይቻላል)	1. ከማህፀን ደም መፍሰስ 2. Ÿõ}– ራስምታት 3. ተከታታይ ትውከት 4. የራስ ማዞር ወይም መሳት 5. ¾ò ƒ/የእግር እብጠት 6. የፅንስ እንቅስቃሴ ማቆም 7. ያልተለመደ የልጅ አቀማመጥ 8. ሌሎች ካሉ ይጥቀሱ _____		
305	ልጅ ከተወለደ በኋላ የሚኖሩ አደገኛ የጤና ችግሮች ምልክቶችን ይጥቀሱ	1. ከማህፀን ደም መፍሰስ 2. የእንግዴ ልጅ መዘግየት 3. ሰገራና ሽንትን መቆጣጠር አለመቻል 4. Ÿõ}– ƒŸ<dƒ 5. i} ÁK¬ ðdi ŸTlì” S¬×ƒ 6. ሌላ ካለ ይጥቀሱ----------		
306	ቤት ውስጥ መውለድ ችግር ያስከትላል ብለው ያስባሉ ?	1. አዎ 2. አላስብም		2 ŸJ’ ¨Å 308
307	ችግር ካለው ምን ምን ችግሮችን ያስከትላሉ? (ከአንድ በላይ መልስ ይቻላል)	1. የእናቶች ሞት 2. የፅንስ መታፈን 3. የጨቅላ ሕፃን ሞት 4. የእናቶች ድካም ያስከትላል 5. }LLò ui} Ÿ›ªLÐ‹ 6. ሌላ ካለ ይጥቀሱ----------		

308	በጤና ተቋም ውስጥ መውለድ ጥቅም አለው ብለው ያስባሉ?	1. አዎ 2. አላስብም		2 ŸJ' ¨Å 310
309	ጥቅም ካለው ምንድነው ጥቅሙ	1. ችግር ካለ በጊዜ ይለያሉ 2. ችግር ሲከሰት በጊዜው ይታከማሉ 3. ዕጻኑ የተለየ እንክብካቤ ያገኛል 4. የእናቶች ሕመም ይቀንሳል 5. ሌላ ካለ ይጥቀሱ----------		
310	በአካባቢዎ የወሊድ አገልግሎት የሚሠጡ የጤና ተቋማት አለ ?	1. አዎ 2. የለም 3. አላውቅም		
311	ቅርብ ወዳለው የጤና ተቋም ለመሄድ ምን ያህል ሰዓት ይወስዳል ?	1. <1 ሰ¯ƒ 2. 1-2 ሠዓት□እ 3. >3 ሠዓት		
312	የጤና ተቋም ውስጥ ስለመውለድ ያለዎት አመለካከት ምንድን ነው?	1. ጥሩ ነው 2. ጥሩ አይደለም 3. የተለየ አመለካከት ነው ያለኝ		1&3 ŸJ' ¨Å 314
313	ጥሩ ካልሆነ ለምንድን ነው ?	1. አገልግሎቱ ጥራት ስለሌለው 2. የጤና ባለሙያዎች ጥሩ አቀባበል ስለTያደርጉ 3. ቤት ውስጥ መውለድ የተሻለ ነው ብዬ ስለማስብ 4. አገልግሎቱ በጣም ውድ ስለሆነ 5. በጤና ተቋም ውስጥ መወለድ ውጤቱ ጥሩ ስላልሆነ 6. ሌላ ካለ ይጥቀሱ----------		
314	በወሊድ አገልግሎት ላይ	1. ጥሩ አመለካከት		

	የባለቤቶት አመለካከት ምንድነው ? **(አሁን በትዳር ላለ ብቻ የሚ ጠየቅ)**	2. ጥሩ ያልሆነ አመለካከት 3. አላውቅም		
315	የሚያዋልዶት የጤና ባለሙያ ጸታው ምን ቢሆን ይመርጣለ	1. ወንድ 2. ሴት 3. ምርጫ የለኝም		
316	ማዋለጃ ክፍል ውስጥ ወንድ የጤና ባለሙያ ሲያዋልድ ቢያዩ እዚያ የጤና ተቋም ውስጥ ከመውለድ ይቆጠባለ	1. አዎ 2. አይ 3. አላውቅም		

ክፍል አራት:

የወሊድ አገልግሎት አጠቃቀም (ባለፈው አምስት አመት ውስጥ ልጅ የወለዱ w‰)

401	የመጨረሻው ልጆት ስንተኛ ልጅ ነው ?	1. የመጀመሪያ 2. ሁለተኛ 3. ሦስተኛ 4. አራተኛ 5. አምስተኛና ከዚያ በላይ		
402	ስለወለዱበት ቦታ ውሳኔ የሠጠው ማነው ?	1. እኔ ራሴ 2. እኔ " ባለቤቴ 3. ባለቤቴ 4. ዘመዶቼ 5. ሌሎች ካለ ----------		
403	በማንኛውም እርግዝናዎና በወሊድ ወቅት የገጠምዎት ችግር ነበር ?	1. አለ 2. የለም		
404	የመጨረሻ ልጆን ሲወልዱ የገጠመዎት ችግር ነበር ?	1. አለ 2. የለም		2 ŸJ' ¨Å 407

405	የገጠመዎት ችግር ምን ምን ነበር ?	1. ከመጠን ያለፈ ደም መፍሰስ 2. የምጥ መራዘም (ከ12 ሠዓት በላይ) 3. የእንግዴ ልጅ መዘግየት 4. ሰገራና ሽንትን መቆጣጠር አለመቻል 5. የተወለደው ልጅ ሞት 6. የሽርት ውሃ ያለጊዜው መፍሰስ 7. ሌላ ካለ ----------		
406	ለተፈጠረው ችግር ምን መፍትሄ ወሰዱ ?	1. ወደ ጤና ባለሙያ ሄድኩ 2. የባህል መድሃኒት ተጠቀምኩ 3. የልምድ አዋላጅ አማከርኩ 4. ምንም እርምጃ አልወሰድኩም 5. ሌላ ካለ ----------		
407	የመጨረሻ ልጆት የት ነው የተወለደው ?	1. ቤት ውስጥ 2. የጤና ተቋም ውስጥ		2 Ÿሆነ ወደ 412
408	ቤት የወለዱበት ምክንያት ምን ነበር?	1. ወጪውን ስለማልችለው 2. የጤና ተቋሙ በጣም ስለሚርቅ 3. ባሌ ወይም ቤተሰቦቼ ስላልፈቀዱልኝ 4. ቤተሰቦቼ አጠገቤ ሆነው መውለድ ስለምፈልግ 5. በቤተሰቦቼና በልምድ አዋላጆች ላይ ሙሉ እምነት ስላለኝ 6. ሴት አዋላጅ የጤና ተቋም ውስጥ ስለሌለ 7. ሌሎች ካሉ ይጥቀሱ----------		
409	የመጨረሻ ልጆትን በሚወልዱበት ጊዜ እርዳታ ያደረገሎት ማን ነው	1. ያልሰለጠነች የልምድ አዋላጅ 2. የሠለጠነች የልምድ አዋላጅ		

	?	3. ¾Ö?“ ›?¡e}”ï” vKS<Á 4. **ዘመዶቼ ወይም ጓደኞቼ** 5. **ጎረቤቶቼ** 6. **ሌላ ካለ** ----------		
410	¾°é'< G<'@} እ”È*ƒ* 'u`;□	1. ulA¨*ƒ* '¬ ¾}¨KÅ¬ 2. ulA¨*ƒ* }¨MÊ ¨Ç=Á¬ V} 3. V„ }¨KÅ 4. ŸMÅ*ƒ* u›K< uò*ƒ* V} 5. **ሌላ ካለ** ----------		
411	ŸKð¬ **የቤት ውስጥ ወሊድ ልምደትና ከነበረው ውጤት አንፃር ለወደፊት የት መውለድ ይመርጣለ**	1. **ቤት ውስጥ** 2. **የጤና ተቋም ውስጥ** 3. ›L¨<pU		
የጤና ተቋም ውስጥ ለወለዱ እናቶች ብቻ የሚጠየቅ				
412	**የጤና ተቋም ውስጥ ለመውለድ ምክንያቶት ምን ነበር ?** **(የጤና ተቋም ውስጥ ለወለዱ ብቻ)**	1. **ቤት ውስጥ ስወልድ ችግር ስለገጠመኝ** 2. **ቤት ውስጥ የተወለደው ህፃን ችግር ስላጋጠመው** 3. **የጤና ተቋም ውስጥ መውለድ እንዳለብኝ ስለተነገረኝ** 4. **ሌሎች ካለ**----------		
413	**የጤና ባለሙያዎች ለወላዶች** ›**ክብa***ƒ* **ይሠጣለ** ?	1. **አዎ** 2. **አይሰጡም**		
414	**ስለ አገልግሎቱ ጥራት ያሎት አመለካከት ምንድነው** ?	1. **በጣም ጥሩ ነው** 2. **ጥሩ** '¬ 3. **በቂ ነው** 4. Ø\ ›AÅKU		
415	**የጤና ባለሙያዎቹ አገልግሎቱን ለመስጠት ብቁ ናቸው ብለሽ ታስቢያለሽ** ?	1. **በጣም ብቁ ናቸው** 2. wl “†¬ 3. **ብቁ አይደለም**		

		4. አስተያየት መስጠት ያስቸግራል		
416	የጤና ተቋም ውስጥ ለወሊድ አገልግሎት ¡õÁ AðîTK<;	1. ›ም 2. ›A ›MŸõMU		2 ŸJ’ SÚ[h
417	የጤና ተቋም ውስጥ ለወሊድ አገልግሎት የሚከፈለው ብር ተመጣጣኝ ነው ይላሉ?	1. አዎ 2. አይደለም		

በጣም እናመሰግናለን!

Appendix B: FGD Guidelines Questions on Pregnancy and Child Birth in Bena Tsemay Wereda

- ✓ What are the common beliefs and practices on pregnancy and child birth? Why?
- ✓ Where do you think the best place of delivery?
  - ➢ Why do you prefer that?
  - ➢ Have you come across any complication in the preferred place of delivery? If yes what was your next decision?
  - ➢ Who do you think the best person to assist during delivery? Why?
  - ➢ What are the advantages and disadvantages?
- ✓ What is your opinion about preferences to place of delivery from local cultural and religious point of view?
- ✓ What are the common practices related to pregnancy and child birth in your area?
- ✓ How many of you have the experience in home delivery?
  - ➢ Who was the attendant?
  - ➢ Who is volunteer to tell us her experience if any problem happened during home delivery?
  - ➢ Do you have any complain on health care providers in health institution?
- ✓ Were you getting an advice about safe delivery care service when you come to HI for other services?
- ✓ What is the advantage and disadvantage of home based pregnancy and delivery care?
- ✓ What is the advantage and disadvantage of facility based pregnancy and delivery care?
- ✓ Where do you recommend for delivery
  - ➢ Home delivery? Why?
  - ➢ Facility based delivery? Why?
- ✓ What changes and improvements do you like to see in pregnancy and delivery care?

Appendix C. Interview Guide questions for key informants

1. How many health facilities are found in the woreda? How many of them are providing safe delivery care?
2. How do you see the status of maternal health service in your area (woreda)?
3. Where do women in your area prefer to deliver?
    - Home, health facility, Why? Whom they prefer for attendance?
    - If they prefer at home give their reasons.

4. What are the factors that affect delivery service provision at health institutions?
    - Staffing (skill, behavior, commitment)
    - Equipment, supplies, infrastructure (drug, electricity, water…)
    - Quality of care, technical assistance, supervision?
    - Transport (ambulance)
    - Service fee, User unable to afford?
    - Attendant at community

5. Does the facility provide basic emergency obstetric care?

    Administration of antibiotics (IV, PO), IV infusion Parentral-Oxitoxic, Parentral anticonvalecent, Manual removal of placenta and retain products and Assisted vaginal delivery (vacuum, forceps)

6. What actions have you been taking to promote institutional delivery?
    - Human resource development
    - Health institution construction and equipping
    - Community awareness creation, collaboration with TBAs, TTBAs, HEWs

7. How do you promote safe delivery service utilization in your area?

    Community mobilization, use of HEWs, TBAs and Service expansion,

Declaration

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

Name: Firehiwot Haile

Signature_____

Date _____

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

Name: Dr. Mulugeta Betre (MD, MPH, Assistant Professor)

Signature _____

Date _____