

ADDIS ABABA UNIVERSITY
COLLEGE OF HEALTH SCIENCE
SCHOOL OF ALLIED HEALTH SCIENCES
DEPARTMENT OF NURSING AND MIDWIFERY

**FACTORS DETERMINING CHOICE OF DELIVERY PLACE AMONG
WOMEN'S OF CHILD BEARING AGE IN DEGA DAMOT WOREDA,
WEST GOJJAM ZONE, AMHARA REGIONAL STATE, ETHIOPIA, 2014**

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Abstract

Background: A significant number of women in developing countries, predominantly in the Sub-Saharan countries, do not have the opportunity to be attended by skilled personnel during childbirth. This is a major factor in maternal and infant mortality including Ethiopia.

However, a little has been explored about factors determining choice of delivery place among women's of child bearing age, in Ethiopia there has been slow progress regarding MDG-5 with a maternal mortality ratio of 673 per 100,000 live births and 19,000 maternal deaths annually.

Objective: The objective of the study is to assess the factors affecting the choice of delivery place among women of child bearing age group in Dega Damot, West Gojjam Zone, Amhara, Ethiopia, 2014.

Method: A descriptive community based cross-sectional study design that employed both quantitative and qualitative data collection methods was conducted from April, 2014 to May, 2014. Multistage sampling technique was used to select 361 participants.

A pre tested and structured questionnaire was used to collect data. The data was entered using EPI INFO version 3.5.4 and was exported to SPSS version 20.0 for data cleaning and for bivariate and multivariate data analysis.

Result: The mean age of the respondents was 30.93 ± 6.006 SD. Majority of mothers 107(29.6%) were in the age range of 25–29 years. Of the total respondents 361, 296(82%) were rural residents. A number of independent variables like; age of the respondents, respondent educational status, monthly household income, gravidity and means of transportation were found to be significantly associated with women choice of delivery place. Qualitatively inaccessibility of health facilities (distance, transportation problem), lack of women's decision making power to use modern health service, inaccessibility of media and ANC follow up were identified to influence maternal choice of delivery place.

Conclusion and recommendations: In conclusion, the study revealed a number of independent variables like; age of the respondents, respondent educational status, monthly household income, gravidity and means of transportation were found to be significantly associated with women choice of delivery place. Increasing maternal health service coverage and promotion of maternal health information, education and communication in the community are recommended.

Key words: Institutional delivery, Home Delivery, Dega Damot District, Ethiopia

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Acronyms

AAU	Addis Ababa University	MDG	Millennium Development Goals
AIDS	Acquired Immunodeficiency Syndrome	MMR	Maternal Mortality Ratio
ANC	Antenatal Care	SBA	Skilled Birth Attendant
CSA	Central Statistical Agency	SLC	School Leaving Certificate
ETB	Ethiopian Birr	SPSS	Statistical Package for Social Science
FGD	Focused Group Discussion	SSA	Sub Saharan Africa
HC	Health Center	TBA	Traditional Birth Attendant
HEW	Health Extension Workers	TFR	Total Fertility Rate
HEP	Health Extension Program	TTBA	Trained Traditional Birth Attendant
HF	Health Facility	UNICEF	United Nations Children's Fund
HIV	Human Immunodeficiency Virus	USD	United States Dollar
HW	Health Workers	WHO	World Health Organization
MCH	Maternal and Child Health		

1. Introduction

1.1. Background

Globally, there were an estimated 287 000 maternal deaths in 2010⁽¹⁻²⁾ yielding a Maternal Mortality Ratio (MMR) of 210 maternal deaths per 100 000 live births among the 180 countries that were covered in this study⁽²⁾.

Further, the global adult lifetime risk of maternal mortality (i.e. the probability that a 15-year-old woman will die eventually from a maternal cause) is 1 in 180⁽²⁻³⁾. Developing countries, specially Sub-Saharan Africa(SSA) had the highest MMR at 500 maternal deaths per 100 000 live births. The MMR of the remaining Millennium Development Goal (MDG) developing regions in descending order are Southern Asia (220), Oceania (200), South-eastern Asia (150), Latin America and the Caribbean (80), Northern Africa (78), Western Asia (71), and Caucasus and Central Asia (46)⁽²⁾.

Improving maternal health is one of the eight MDG adopted at the 2000 Millennium Summit. Hence, between 1990 and 2010, Africa has reduced maternal deaths by 41 per cent. Over the same period, it has also reduced under-five mortality by 33 per cent. Despite progress, 57 percent of all maternal deaths occur on the continent, giving Africa the highest maternal mortality ratio in the world. Maternal mortality rates vary from country to country^(1,3).

Almost all maternal deaths occur in developing countries, where the majority of women deliver at home without skilled birth attendance⁽⁴⁾. In general, maternal health-care use is reported to vary within developing countries, with most findings showing differences between affluent and poor women, and between women living in urban and rural areas. Two decades after the Safe Motherhood campaign's 1987 launch in India, half a million women continue to die from pregnancy-related causes every year. Key health-care interventions can largely prevent these deaths, but their use is limited in developing countries, and is reported to vary between population groups⁽⁵⁾.

In much of Sub-Saharan Africa, fewer than half of women deliver their infants in health facilities⁽⁶⁾. Increasing the percentage of births delivered in health facilities is important for reducing deaths arising from complications of pregnancy. The expectation is that if complications arise during delivery in a health facility, a skilled attendant can manage the complication or refer the mother early to the next level of care. Hence, Nepal is promoting safe motherhood through

initiatives such as providing financial assistance through maternity incentives schemes to women seeking skilled delivery care in a health facility. Subsidies are also provided to health institutions on the basis of deliveries conducted. Obstetric care from a health professional during delivery is recognized as critical for the reduction of maternal and neonatal mortality. Children delivered at home are usually more likely to be delivered without assistance from a trained provider, whereas children delivered at a health facility are more likely to be delivered by a trained health professional ⁽⁷⁾.

Low use of maternal health services for delivery has long been on the research agenda. Being a long distance from health services, high costs, multiple demands for women's time, low coverage and poor quality of care have been identified as key factors ⁽⁸⁾. Additionally, factors related to place of residence and socioeconomic status may account for variations in use of maternal health care. These factors include women's age, ethnicity, education, religion, culture, decision-making power and clinical need for care ⁽⁹⁾.

The lack of decision-making power of women within the family and inequities in the provision of essential maternal health care interventions remain a challenge in many Sub-Saharan African countries ⁽¹⁰⁾.

Ethiopia is a major contributor to the worldwide death toll of mothers with a maternal mortality ratio of 673 per 100,000 live births and 19,000 maternal deaths annually. Although improvements have been reported in regard to reducing infant and child mortality in the country, there has been slow progress regarding MDG-5, the cornerstone of maternal health ⁽¹¹⁾. Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that can cause the death or serious illness of the mother and/or the newborn baby. An important component of efforts to reduce health risks to mothers and children is increasing the proportion of babies that are delivered in health facilities ⁽¹²⁾.

1.2. Statement of the Problem

Globally, of the total maternal deaths, developing countries account for 99% (284 000), the majority of which are in Sub-Saharan Africa (162 000) and Southern Asia (83 000). These two regions accounted for 85% of global burden, with Sub-Saharan Africa alone accounting for 56%. The MMR in developing regions (240) was 15 times higher than in developed regions (16) ⁽²⁾.

Worldwide, 80% of all maternal deaths are caused by hemorrhage, hypertensive disorders, infections, unsafe abortion, sepsis, and obstructed labor account with important variations by region. Of the remaining maternal deaths, a substantial number are related to HIV/AIDS, malaria, and anemia during pregnancy ⁽¹³⁾.

Attending to all of the 136 million births every year is one of the major challenges that now face the world's health systems. This challenge will increase in the near future as large cohorts of young people move into their reproductive years, mainly in those parts of the world where giving birth is most dangerous. Women risk death to give life, but with skilled and responsive care, at and after birth, nearly all fatal outcomes and disabling sequelae can be averted – the tragedy of obstetric fistulas, for example – and much of the suffering can be eased ⁽¹⁴⁾.

Many women in developing countries are at greater disadvantage. These mothers are at increased risk from unpredictable obstetric complications, often ending in death either at home or after transfer to a health facility ⁽¹⁵⁾.

Many of these deaths could be avoided by the provision of skilled care during delivery, preferably at a health care facility and also for optimum safety, every woman, without exception, needs professional skilled care when giving birth, in an appropriate environment that is close to where women lives and respects their birthing culture. Such care can best be provided by a registered midwife or a health worker with midwifery skills, in decentralized, first-level facilities. This can avert, contain or solve many of the life-threatening problems that may arise during childbirth, and reduce maternal mortality to surprisingly low levels. Skilled midwifery professionals do need the back-up only a hospital can provide, however, for women with problems that go beyond the competency or equipment available at the first level of care ^(14, 16).

Maternal and newborn deaths slow economic growth and lead to global productivity losses of some \$15 billion each year. Conversely, investing in improved health for women and babies has far-reaching benefits for nations ⁽¹⁷⁾.

Complications in pregnancy and childbirth are the leading causes of death among adolescent girls ages 15-19 in low- and middle-income countries, resulting in thousands of deaths each year (18-19).

Maternal death is high, particularly, in settings where deliveries occur mostly at home, and/or where civil registration systems with correct attribution of causes of death are inadequate (3, 20). These maternal deaths in the less developed world, particularly, in SSA countries cannot be substantially reduced because of availability, awareness about best choice of delivery place and utilization of health care services are low. One possible explanation for poor health outcomes among women and children in Ethiopia is the non use of modern health care services by sizable proportion of women (20). The Ethiopian and demographic health survey 2011, indicated that low utilization of modern health care utilization which is 19% of women with a live birth made four or more Anti Natal Care (ANC) visits during the length of their pregnancy. Regarding to the delivery place, 10% of births in Ethiopia are delivered at a health facility—9% in a public facility and 1% in a private facility whereas 90% of births takes place at home (12). According to in depth analysis of Ethiopian Demographic Health Survey (EDHS) 2000- 2011, report showed that, in Ethiopia, since institutional delivery strikingly low, assistance by health worker during delivery accounts only small percentage which is 13.2%, by Traditional Birth Attendant 7.8% and by family/relatives/friends 79%. The United Nation Children's Fund (UNICEF) in 2012 has reported that the proportion of women who will be assisted by skilled workers will be 20.9% by 2015 (21). Concerning to total fertility rate (TFR) of children per woman in Ethiopia, the central intelligent agency report in 2013 showed that total fertility rate of 5.31 children born/woman (22). Institutional Delivery Service Utilization in Amhara Region is low as many other parts in the country, 10.2 % of the deliveries in the region were within the health facility while 89.3 % taken place at home (12). Assessment about the factors determining delivery place in the district was not carried out. That is why the study to be crucial to identify those factors affecting the choice of delivery place among women of child bearing age group in the study area.

1.3. Significance of the Study

Information with respect to factors that influence the choice of delivery site among women of child bearing age group are of relevance for designing, initiating or modifying intervention programs. To the best of my knowledge, there are no research reports on this topic in Dega Damot District, West Gojjam, Amhara, Ethiopia. I believe that the scarcity of available data on factors that influence the choice of delivery site among women of child bearing age group in the study area has limited the development of intervention strategies, which aims to improve maternal health.

Given the importance of integrating and coordinating interventions to monitor progress towards achievement of the 5th Millennium Development Goal (MDG) which aims to improve maternal health, it is vital to arrive at a set of priority actions to guide program development and the implementation process. The process for priority setting should start with the assessment and analysis of the situation that women face in their environment.

This study, therefore, is aimed at assessing factors affecting the choice of delivery place among women of child bearing age group in Dega Damot, West Gojjam Zone, Amhara, Ethiopia.

Information gathered from this survey will provide baseline data and will elicit support and promote cooperation among the different stakeholders towards preventing maternal morbidity and mortality by increasing the proportion of births attended by skilled health personnel.

2. Literature Review

2.1. Global Picture of Maternal Morbidity and Mortality

International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, 1992 (ICD-10), World Health Organization (WHO) defines 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 ^(3,23).

Globally, about 16 million girls aged 15 to 19 years give birth every year, accounts for about 11 percent of all births worldwide and have suffered with different obstetrical problems ⁽²⁴⁾.

According to the trends in Maternal Mortality: 1990 to 2010, globally about 287,000 maternal deaths occurs every year due to complications of child birth. The adult lifetime risk of maternal mortality in women from Sub-Saharan Africa was the highest at 1 in 39, in contrast to 1 in 130 in Oceania, 1 in 160 in Southern Asia, 1 in 290 in South-eastern Asia and 1 in 3800 among women in developed countries ⁽²⁾.

The UNICEF, Goal: Improve maternal health report in September 2001, showed that 147 heads of states collectively endorsed the Millennium Development Goals. Goals 4 and 5 were intended to reduce child mortality rate by 2/3 and maternal mortality ratio by 3/4 between 1990 and 2015 respectively. The direct causes of maternal deaths secondary to lack of quality of care during delivery are haemorrhage, infection, obstructed labour, hypertensive disorders in pregnancy, and complications of unsafe abortion. There are birth-related disabilities that affect many more women and go untreated like injuries to pelvic muscles, organs or the spinal cord. At least 20% of the burden of disease in children below the age of 5 is related to poor maternal health as well as quality of care at delivery ⁽²⁵⁾.

Several reasons, for improvement in health systems like female education, could account for the decline in maternal mortality. In developing regions, not only has the MMR declined but also other MDG 5 indicators have improved during the same period. However, maternal mortality in developing countries estimates were affected by under registration of deaths – especially in rural

areas and small towns, where mortality ratios tended to be highest – and by under-reporting of maternal causes in registered deaths ^(3,26).

2.2. Women's Choice of Delivery Place

The five years preceding survey related to place of delivery in Nepal in 2011 showed that 35% of births take place in a health facility: 26 % are delivered in a public-sector health facility, 2% in a nongovernment facility, and 7% in a private facility. Still 63% of births take place at home. Most common cause for not utilizing the health facility for delivery were found to be the successful experiences of home deliveries of self or immediate relatives or neighbors. Skilled Birth Attendant (SBA) (Doctor, Nurse & others) assisted 70% of deliveries while 30% deliveries were conducted by trained health professionals (Health Assistant, Auxiliary Health Worker and Maternal and Child Health Worker) or untrained friends/relatives. Among the home delivery, only 6% deliveries were assisted by SBA, 14% by trained health professional and the rest were assisted by Traditional Birth Attendant (TBA) ^(7, 27). As the study conducted in other developing countries, in 2013 both in Nigeria and Kenya, about (60.7%) and (42.6%) chose to deliver in the hospital while (39.3%) and (57%) opted for home delivery respectively ⁽²⁸⁻²⁹⁾.

Traditionally, children in Ghana are delivered at home with the assistance of birth attendants or elderly women of the community. The level of assistance a woman receives during the birth of her child has important health consequences for both mother and child. Births delivered at home are more likely to be delivered without professional assistance, whereas births delivered at a health facility are delivered by trained medical personnel ⁽³⁰⁾.

The findings in Uganda in 2010, showed that women had a choice to choose a service provider or site at the time of delivery, (93%) would have opted for an institutional site. However, (7%) would opt for home delivery and would have chosen to be delivered by a TBA ⁽³¹⁾.

The study conducted in Tanzania in 2013, showed that younger women aged 15 to 22 delivered more often with the assistance of a TBA than women 23 years and older ⁽³²⁾.

The studies conducted in Ethiopia at North Gondar Zone in 2005 and Sekela district in 2012, showed almost the same finding that about (13%), (12.1%) of them gave birth at health facilities and majority of them (87%), (87.9%) delivered at home claiming that home was best place for giving birth respectively. Many different reasons were forwarded for home delivery was about

(14.0%) of the respondents at Sekela district said that it is because of the influence from family members and others ⁽³³⁻³⁴⁾.

In Ethiopia, a study conducted in Woldia in 2013, (48.3%) gave their last birth in health institutions, (51.7%) gave birth at home. Out of the total home deliveries, 22.5%, 10.4% and 7.4%, of the deliveries were assisted by family members and relatives, untrained traditional birth attendants and trained traditional birth attendants, respectively ⁽³⁵⁾.

The study in 2011 showed that institutional delivery service utilization in Tigray region, Ethiopia was very low. Of all the survey participants, only (4.1%) of women gave birth at a health facility and 95.9% of women were assisted at home: by their mothers (or other elderly women who were relatives or neighbors) for more than half (53.2%); by TBAs (40%), and by Health Extension Workers (HEWs) (6.8%) ⁽³⁶⁾.

As the study revealed in South West Ethiopia, Kafa Zone in 2013, there are so many practices that respondents used to facilitate child birth at home delivery during prolonged labor. (15%) of the women reported that they would identify the nearest Health Center (HC) and arrange for referral; (41.6%), used abdominal massage; (6.2%), utilized abdominal piercing; and (5.8%), ate butter with “*telba*” to hasten the birth process. The rest, (31.4%), took no action at all ⁽³⁷⁾.

In summary, institutional delivery in developing countries like Ethiopia and other African countries are very low. In contrary to the low utilization of institutional delivery, developing countries highly experiencing home delivery which in turn brings those mothers to different obstetrical problems which can be easily managed at health institutions.

2.3. Maternal Determinants for the Selection of Delivery Place

2.3.1. Socio Demographic Variables

Although several studies have been carried out to identify why maternal health care services are underutilized in developing countries, there is no universal explanation that applies to all places about maternal health care services utilization are not the same across socio-demographic and cultural contexts. As the study conducted in Tanzania in 2007, numbers of socio demographic and economic factors were found to have a significant influence on the choice of delivery place. They include women’s age, education level, religion, marital status and income ⁽³⁸⁾.

As different studies conducted in Nepal in 2011, revealed that the majority of women who did not deliver in a health facility believed that it was not necessary (62%). Some of them reported cost as a barrier to having a delivery in a health facility. There is a strong relationship between mother's education ⁽³⁹⁾ and delivery by an SBA. Births to highly educated women (School Leaving Certificate (SLC) or higher) are nearly four times (76%) as likely as births to women with no education (19%) to receive assistance from an SBA. Similarly, assistance during delivery by an SBA varies by women's economic status ⁽⁴⁰⁾ births to women in the highest wealth quintile are much more likely to be assisted by an SBA (82%) than births to women in the lowest wealth quintile (11%). As part of the government strategy to promote institutional delivery, women who deliver in any health facility are provided cash incentives to defray the cost of transportation to the facility. In addition, delivery in a health facility is provided free of cost to mothers. The findings show that 71% of mothers received payment to defray the cost of transportation to a health facility. 73% of rural women received transportation incentives, compared to 60 percent of urban women. As indicated by the study conducted in rural Bangladesh in 2012 and Nepal in 2011, the costs associated with the utilization of institutional delivery care are often equated to the cost of selling one's land or forfeiting one's livelihood ^(7, 40).

As revealed by the other study conducted in Nepal in 2012, residency on the other hand affects the maternal choice of delivery place. About 48.4% of the respondents represented from urban area, more than 38% from rural and 13% from remote area. Almost half (50.4%) of the women were illiterate and majority (83.5%) mentioned themselves as housewives. Hence, those mothers from urban area ⁽⁴¹⁾, literate and government employee were more prone to use institutional delivery ⁽⁴²⁾.

In the Latin American and Caribbean region, and in Europe, North Africa, and the Middle East, over 50% of all women in richest quintile reported that choosing delivery at public facilities. But in SSA more delivery takes place at home; reasons why women gave birth at home within SSA, responds that it is because of "cost", "facility closed," "did not know where", and "husband and family didn't allow" ⁽⁴³⁾.

As the study conducted in African countries in 2006 revealed that, the age of the respondent showed a significant association with the choice of institutional delivery in Malawi and

Tanzania, women of all age groups were more likely to choose delivering their last child in a health facility. In Kenya, women aged 30 to 39 and women aged 40 to 49 were more likely than women aged 20 to 29 to have done so. Mother's education and their decision to deliver their last child in a health facility have a significance association. In Malawi, Kenya, Burkina Faso, and Ghana, women with a secondary education or higher were more likely than women with no education have chosen to deliver in a health facility. In Ghana, concerning religion, Muslim women or women reporting another religion were less likely than Catholic women to report delivering their latest child in a health facility, whereas in Kenya and Tanzania, Protestant women were more likely than Catholic women to report having done so ⁽⁴¹⁾.

In Uganda, the studies conducted at different time revealed that, the higher the education level, the more economy for different transportation and medical expenses and the good job other than peasant farming or subsistence farming to earn more money brings the more likely the child's birth had been attended by an SBA ^(31, 44).

The Demographic Health Survey of Kenya and studies done in Nigeria and Vietnam indicated that mothers aged 35 or over, those married or widowed, with a co-wife and those living in larger households were less likely to deliver in a health facility. But women lived in urban settings; closest to a health facility and mothers with higher education were more likely to give birth in a health facility than those without any education. Other factors were occupation, where housewives, farmers and hawkers were the majority opting for home delivery ^(28-29, 45). Other studies done in Kenya showed that, place of delivery also differed between ethnic groups and religious groups with Muslim women and those without religion and elderly mothers were being less likely to deliver in a health facility than Protestant ^(28, 46). The majority of the respondents in Tanzania interviewed with a questionnaire and younger mothers were more likely to deliver at a health facility than other age groups ⁽⁴⁷⁾. Their reasons for delivering at a health facility were, 'good service' (48%) and 'security' (34%) were most frequently mentioned ⁽³²⁾.

Mothers' socio demographic characteristics in Ethiopia, Sekela District and rural India, Punjab at the time of delivery is believed to be an important determinant of health seeking behavior. Young mothers (under age 35), women with secondary education and above ^(34, 48), women from the highest wealth index and husband's education and occupation usually tend to visit health institutions for delivery care and postnatal care ^(35, 49).

The other study conducted in North West of Ethiopia, Sekella district in 2012, economically, (26.1%) of the households had monthly income of between 60–408 Ethiopian Birr (ETB) and (25.1%) had 94–987 ETB monthly income based on quartile classification. Those mothers who earned more money were prone to chose to deliver in health institution ⁽³⁴⁾.

Marked regional or residential disparity was also observed in the utilization of delivery and health care services in Ethiopia. The net odds of receiving delivery care services again appear to be higher for Addis Ababa (7.7), Gambella (5.3), Harari (3.6) and Dire Dawa (2.4) and this is found to be statistically significant than other rural parts of Ethiopia. With regard to the influence of religion on utilization of delivery and postnatal care services, a protestant woman was about 1.21 times more likely to deliver her child at health institution than an Orthodox woman. Female schooling in addition to religion and place of residency, it appears also to be strongly linked to antenatal care, utilization of delivery and postnatal care services ⁽⁴⁹⁾.

2.3.2. Cultural Practice and Women Decision Making

Decision making power in the household is better able to get and use services before, during, and after pregnancy and childbirth. Women's involvement in household decision making is also positively associated with use of maternal health services, one study in Nepal in 2012, women with significant decision-making power were more than twice more likely to deliver at health facility than women with more limited decision-making power and other study conducted in Nepal showed that almost 9% women had not been to institutional delivery because of shyness and fear of institutional delivery and about 13% women admitted that their mothers-in-law did not allow them for institutional delivery ^(42, 50).

The qualitative study conducted in Tanzania in 2013, and central Laotians in 2012, revealed that most of respondents reported the place of delivery was done by women personal choice or decision. In Uganda, also self decision making towards the choice of delivery place was done by the majority of women. Additionally, the place of delivery was decided by the woman's husband, mother, grandmother or a TBA, together with the woman herself ^(31-32, 51).

Different studies conducted in Ethiopia indicated that household decision autonomy has also an effect on utilization of delivery services. The more women household self decision making autonomy, the more to deliver at health institution or utilize health services ^(49, 52).

The other study in Ethiopia, Tigray region in 2011, revealed that decision to visit a health facility for delivery was made by the mothers themselves in most cases (74%), followed by the extended family (the woman's mother and father, mother-in-law, elderly relatives and neighbors) (12%), and the husbands and TBAs (4% respectively). The remaining 6% was involved a joint decision made by husbands and wives. The proportion of women who perceived the health facility as a better place to give birth than at home was 63%. Furthermore, around 40% of women said they wanted to give birth at a health facility next time ⁽³⁶⁾.

Related to culture the qualitative study conducted in Ethiopia in 2013, revealed that many families opt for traditional birth attendants as their first line of care for delivery unless they believe that labor is not normal. The fact that they are familiar and have trust in the traditional birth attendants' ability to handle 'normal' deliveries was an important consideration in deciding place of delivery. The reasons for preferring traditional birth attendants is the fact that mothers get the much needed support from their spouses and families' presence in home deliveries. Besides, some traditional birth attendants attend to some of the longstanding traditional practices which are rooted in the beliefs and cultures of the society (such as massaging the abdomen with butter and burying the placenta around home). Discussions with both mothers and fathers suggest that traditional birth attendants' approach fulfils the expectations of laboring mothers and their immediate families in a way the modern health system does not ⁽⁵³⁾.

2.3.3. Availability and Quality of Health Services

2.3.3.1. Availability of Health Services

Accessibility of health services have been shown to be an important determinant of utilization of health services in developing countries. The majority of women in Nepal who did not deliver in a health facility believed that it was not necessary. In addition, women mentioned that the health facility was too far or they had transportation problems so that the child was delivered before reaching a health facility, and the remaining said that it was not customary^(7, 42).

Qualitative study conducted in Tanzania at different period of time, revealed that the primary factor influencing women's place of choice for delivery was 'convenience'. The location of and distance to a single health facility supporting a catchment area of up to 7 villages as well as the poor transport system were push factors towards TBAs and home deliveries. The majority of all

interviewed women paid between 6 and 10 United States Dollar(USD) for transport which makes transportation very expensive ^(32, 54).

A similar study conducted in Uganda in 2010, showed that most of the women (42%) just walked to sites where they delivered from. This group included those that delivered within their home premises. Those that used a bicycle were (12%) and a motorcycle was used by (33%). Transport by vehicle was used by (13%). Although 58% had reached their delivery destination within less than one hour, it was evident that the means available for transport were inappropriate for a pregnant woman. The reasons that were identified as significant by the study and had had an influence on the women's choice of a institutional delivery were the; site being near home (33%), site offering friendly services (22%) and site having affordable services (8%) ⁽³¹⁾.

There are so many reasons revealed by the study conducted in different developing countries; distance which was at least five kilometers away from the nearest health facility was less equipped to perform deliveries. The condition of roads and availability and cost of local transportation were mentioned as barriers to hospital-based deliveries ^(28, 40, 55).

Concerning the availability of health services, studies conducted in Ethiopia in 2012 showed that, (72.2%) of the respondents in Sekela District said that the time they travelled on foot to reach the nearby health center was less than one hour, (19.4%) said between one to two hours and (8.4%) said more than two hours. Hence, most of mothers obliged to deliver at home because of long foot travel ⁽³⁴⁾.

Although most of the respondents in Woldia reported that the availability of health facility in the nearby to their home, some of respondents did not know whether that health facility provide delivery service or not ⁽³⁵⁾.

Generally the most frequently mentioned reasons in different parts of Ethiopia, for delivering at home were “easy labour” (64%), “transport problem” (4%), “health facility too far” (4.7%) stated in Arsi Zone ⁽⁵²⁾ and “afraid of user fees” stated in Tigray Region ⁽³⁶⁾.

2.3.3.2. Quality of Health Services

Quality of care is an important consideration in the decision to seek care. The study conducted in Laotians in 2012, indicated that the presence of male birth attendants: different aspect of hospital services that women did not like that the birth attendant could be a man. Their husbands, interestingly, could accept this, but most of the women felt shy and embarrassed by having a

male attendant. Lack of privacy and confidentiality: Informants also reported that they disliked the lack of privacy and confidentiality at the hospital. The presence of many health staff during delivery coupled with women's shyness at being naked during delivery made hospital deliveries less appealing than home deliveries ⁽⁵¹⁾.

In Kenya the study conducted at different time, the odds of health facility delivery also differed significantly depending on the healthcare service provided during ANC and the health facility attended by the mother. Those women lacked good service provision during ANC follow up, remained unsatisfied with health service provision which brings them to deliver at home ^(28, 46).

A cross-sectional study conducted in Tigray region, Ethiopia, in 2011, the most frequently mentioned reasons for delivering at a health facility were "saves mother's life" (31.2%), "health facility is clean" (30.6%), "bleeding will not occur" (21%), "problem of retained placenta is not encountered if delivered at health facility" (12.5%) and "health facility supports labor" (10%) ⁽³⁶⁾. In contrast to this finding the study conducted in Arsi Zone, South-East Ethiopia in 2011, and Nkasi District, Tanzania in 2013 revealed about the most frequently mentioned reasons for never delivering in a health facility were; perceived delays in being attended, fear of episiotomy, and in general fear of manipulation in the health facility. Out of the total women who delivered their last child at health institution, some of them were not satisfied with the service they received ^(52, 54).

2.3.4. Factors Related to Health Professional

The qualitative data in South Africa in 2012, highlight the range of availability, affordability and acceptability constraints faced by pregnant women not to deliver at health institutions, additionally, reasons for not giving birth in a facility, due to poor interactions with the health service during ANC or early in labor ⁽⁵⁶⁾.

The study conducted in different developing countries like Tanzania, Nigeria and Ghana revealed different factors that were reasons given by the women who chose home delivery were unfriendly attitude of health care workers or bad behavior of healthcare provider, presence of traditional birth attendants, and no one to escort women to health facility ^(29, 54, 57).

The study conducted in Ethiopia in Arsi Zone in 2011, revealed that about (29.0%) said they waited for long time before receiving the service and (13.0%) said the health worker were not respectful ⁽⁵²⁾. And another qualitative study conducted on the same country Ethiopia in 2013,

indicated that women who preferred to deliver at home indicated that some health professionals are not sensitive to their privacy and care little to give them psychological support when they need it most ⁽⁵³⁾.

2.3.5. Maternal Past Obstetrical History

Maternal past obstetrical history has a great contribution to the maternal delivery service utilization. The only individual variables that were significantly associated with delivery in a health facility were receipt of prenatal care during the last pregnancy and previous delivery in a health facility. Relative to women who had received 1 to 3 prenatal care visits during their last pregnancy, women who had received 4 or more visits showed an increased likelihood of choosing institutional delivery also reporting that their last child was born in a health facility ^(32, 34, 41, 58).

The study conducted in six African country in 2006, revealed that women at all higher gravida and parities were less likely to have chosen to deliver their last child in a health facility than women who were being gravida one or two and had given birth once or twice, respectively in Malawi, Tanzania, Ghana and Kenya except Burkina Faso and Ivory Coast ⁽⁴¹⁾.

Those attending more antenatal care visits, and those with low parity especially with first birth order were more likely to deliver in a health facility ^(28, 31, 49, 59).

Moreover, mothers in rural Nepal and Ethiopia who have had past history of intrapartum and postpartum complication like retained placenta, prolonged labor, excessive vaginal discharge and loss of consciousness and prenatal visit were more likely to seek safe delivery care than those with no such history but women who did not have any registered antenatal visit or who never visited ANC were less likely to give birth at health facilities ^(33, 35, 42, 60).

2.3.6. Other Reasons for the Choice Of Delivery Place

As clearly depicted on the multivariate logistic regression, in addition to different socio demographic characteristics; having TV/radio and ever use of family planning were significantly and independently associated with skilled birth attendance ^(33, 41, 61).

Regarding reasons for preferring home delivery, almost half of the respondents reported that labor was short/urgent, labor at night, smooth and preferred to give birth in the presence of close relatives. The rest of the mothers reported preference to give birth in the presence of relatives,

trust in TBAs, cultural reason and lack of money as reasons for non-use of health facilities (33-35, 49, 52).

Conceptual Frame Work

This study helped to explore different factors that may influence women's choice of delivery place. The selection of the explanatory variables (see Conceptual framework adopted from McCarthy J and Maine) was based on their empirical importance, as reported in the literature for the choice of delivery place. The demographic background characteristics such as the variables age of mother at delivery and birth order, and the socioeconomic variables such as maternal marital status and maternal education reflect the individual's own influence on choice of delivery place. The other factors that are come between these explanatory variables and the dependent variable include factors that impede delivery service utilization, such as hurdles in accessing health care or facilitate delivery care, such as ANC visits. However, in this study no attempt was made to measure the quality and content of ANC service

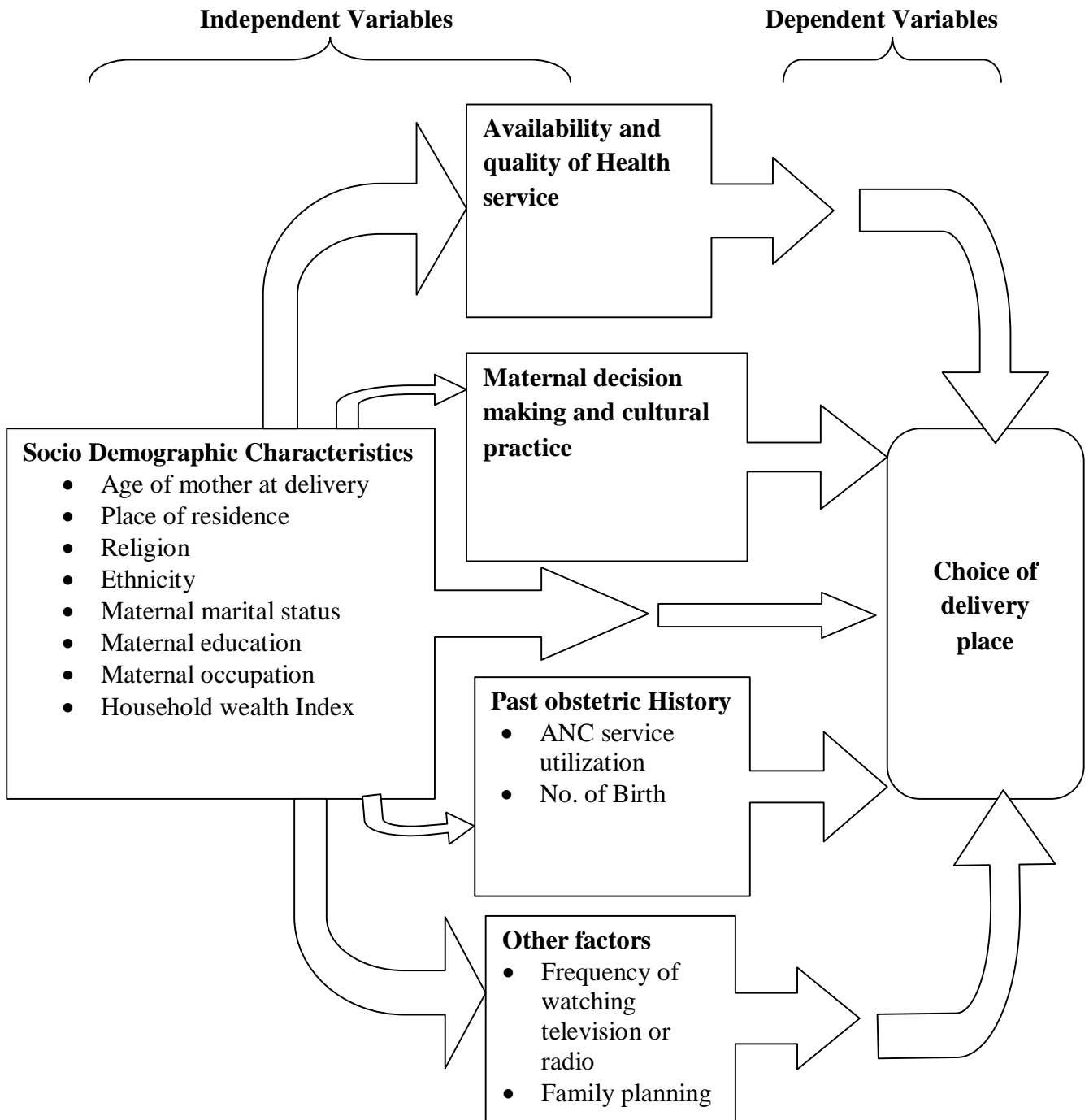


Figure 1: Conceptual framework for analyzing the determinants of maternal choice of delivery place [Modified from McCarthy J and Maine 1992]

3. Objectives

3.1. General Objectives

To assess the factors determining the choice of delivery place among women of child bearing age group in Dega Damot, West Gojjam Zone, Amhara, Ethiopia, 2014.

3.2. Specific Objectives

- To identify maternal choice of delivery place in Dega Damot district.
- To describe factors that determine the choice of delivery place of study subjects in Dega Damot district.

4. Methodology

4.1. Study Area

"The Amhara Region is located in the northwestern part of Ethiopia between 9°20' and 14°20' North latitude and 36° 20' and 40° 20' East longitude." Its land area is estimated at about 170000 square kilometers. Amhara borders Tigray Region in the North, Afar in the East, Oromiya in the South, Benishangul-Gumiz in the Southwest and the country of Sudan in the west.

The CSA's total population estimate for the Amhara region for mid-2008 is 20,136,000. Of these 2,408,000 (only 12%) are urban residents and the rest are rural residents.

West Gojjam is one of the Zone in Amhara region and its capital is Finote Selam and formerly its capital was Bahir Dar. Based on the 2007 Census conducted by the Central Statistical Agency of Ethiopia (CSA), this Zone has a total population of 2,106,596, of whom 1,058,272 are men and 1,048,324 women; with an area of 13,311.94 square kilometers, Mirab Gojjam has a population density of 158.25, while 184,703 or 8.77% are urban inhabitants.

The study was carried out in Dega Damot located 399 km far from capital Addis Ababa. It is one of the woredas in the West Gojjam, Amhara Region of Ethiopia. Part of the Mirab Gojjam Zone, Dega Damot is bordered on the south by Dembecha, on the southwest by Jabi Tehnan, on the west by Kuarit, and on the north and east by the Misraq Gojjam Zone. The major town of Dega Damot is Feres Bet which is located at about 3400 m just above sea level and has total population of 8989, of whom 4687 are men and 4302 are women.

Based on the 2007 national census conducted by the Central Statistical Agency of Ethiopia (CSA), this woreda has an area of 65726.68 km² with an estimated a total population of 152,343, an increase of 16.35% over the 1994 census, of whom 75,005 are men and 77,338 women; 6,699 or 4.40% are urban inhabitants. With an area of 831.23 square kilometers, Dega Damot has a population density of 183.27, which is greater than the Zone average of 158.25 persons per square kilometer. A total of 33,336 households were counted in this Woreda, resulting in an average of 4.57 persons to a household, and 32,497 housing units. The majority of the inhabitants practiced Ethiopian Orthodox Christianity, with 99.92% reporting that as their religion. The woreda is also characterized by good climate for most of the year with annual rain fall between 900 ml and 1200ml. Dega Damot woreda has 6 health centers and 31 health posts with a total of 87 health professionals but there is no hospital ⁽⁶²⁾.

4.2. Study Design

A descriptive community based cross-sectional study design that employed both quantitative and qualitative data collection methods was carried out to assess the determinants of the choice of delivery place among women in child bearing age group in Dega Damot, West Gojjam Zone, Amhara, Ethiopia.

4.3. Study Period

April 2014 to May 2014

4.4. Population

4.4.1. Source Population

All women of child bearing age group (15-49 year) in Dega Damot Woreda.

4.4.2. Study Population

Women of child bearing age groups who had experience at least one child birth.

4.5. Inclusion and Exclusion Criteria for the Study Population

4.5.1. Inclusion Criteria

- Women of age 15-49 years who gave at least one birth within the two years preceding the survey from April 2012 to April 2014.
- Women who were mentally and physically capable of being interviewed
- Permanent resident of the study area

4.5.2. Exclusion Criteria

- Women who never gave at least one child birth
- Those who lived less than six months in the study area at the time of the interview

4.6. The Sample Size Determination

The sample size was determined using single population proportion formula.

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

Where; n =sample size

Z=Reliability Coefficient with 95% confidence interval

P=Population variance available from previous data (q=1-p)

d= Degree of precision or margin of error

The Degree of precision or margin of error chosen to be 0.05 with the reliability coefficient of 1.96% certainly (z=1.96) and design effect chosen to be 2.

The sample size was calculated using the proportion of deliveries conducted in West Gojjam Zone, Sekela district where (12.1%) of them gave birth at health facilities and majority of them (87.9%) delivered at home. Therefore, the proportion of delivery attended by skilled birth attendants is 12.1% (p=0.121 and q=0.879) ⁽³⁴⁾.

$$n = \frac{1.96^2 \times 0.121 (0.879)}{0.05^2} = 164$$

n = 164 x 2 (design effect) = 328 and,

With 10% the non response rate,

n = (328+33) = 361

4.7. Sampling Procedures

Quantitative Part

Multistage sampling was used in this study. The primary sampling units, the 9 Kebeles were selected by simple random sampling from the total of 31 kebeles. The sample size was distributed to Kebeles by population proportion to size (PPS) formula. The secondary sampling units, the households in the selected Kebeles were selected by using systematic random sampling with a random starting point selecting from within the first 28 house hold by using the household record which the health extension worker used and the next eligible individual in the household was interviewed every 28th houses which were fairly proportional to household size in the kebeles. Assuming every household is to host at least one woman who had given at least one birth in the last two years, households were taken as a final sampling unit. For households' with more than one eligible women in one household, only one person was selected using lottery method although in the event of a household with no eligible woman the immediate next house hold(HH) was interviewed. Revisit of three times was made in case where eligible respondents were not available at the time of the survey.

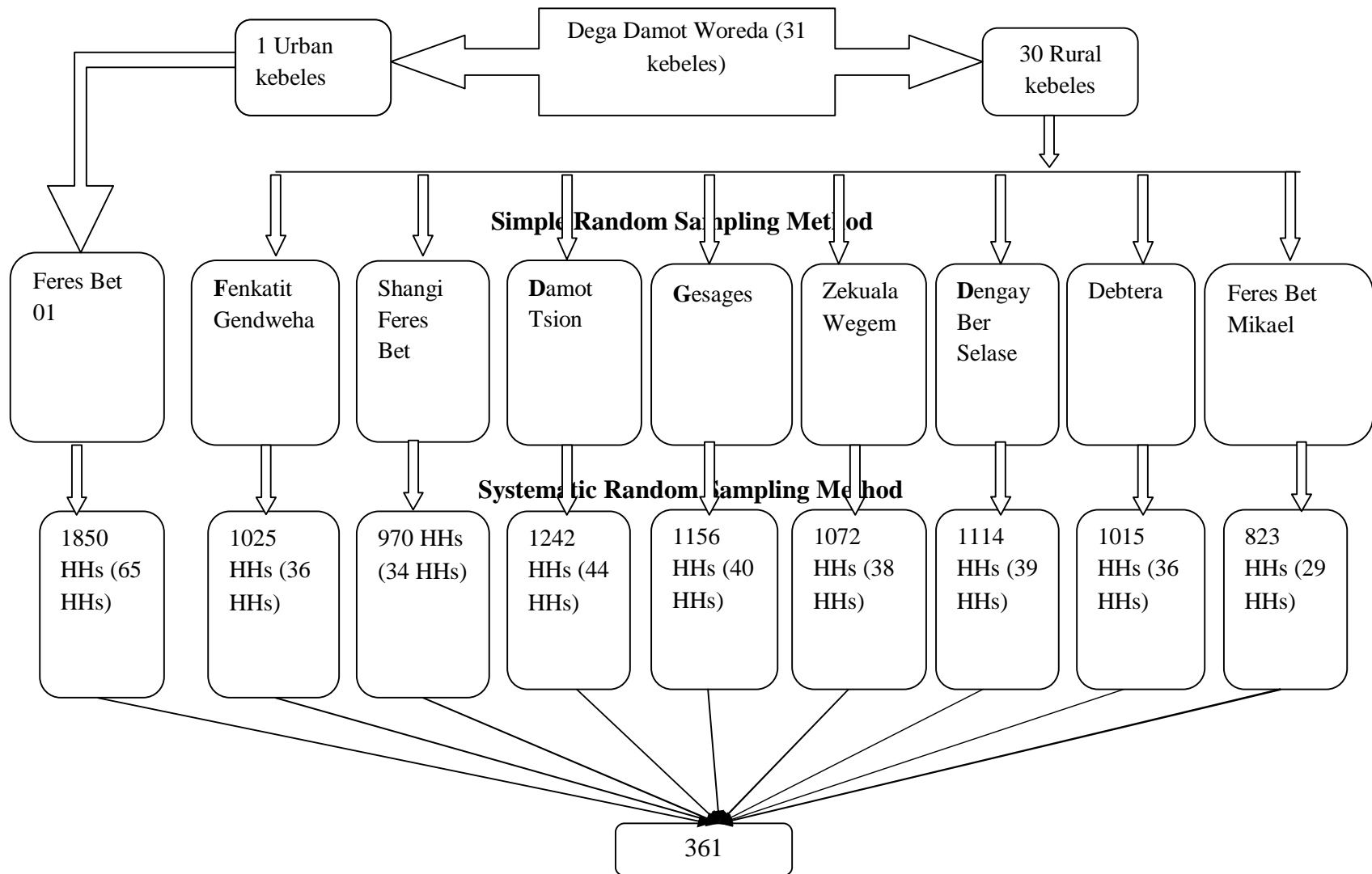


Figure 2: Schematic presentation of sampling procedure for Quantitative method

Qualitative Part

For the qualitative design purposive sampling technique was used to obtain homogenous groups. A total of 22 discussants were recruited for qualitative data collection from health professionals, community leaders and religious leaders.

4.8. Data Collection Procedure and Tools

4.8.1. Quantitative Survey

Structured questionnaire was used which was adopted and modified from different reviewed literatures ^(27-29, 31). The questionnaire was translated into the Amharic (national language) by linguistic professionals. Matching was made on the exact fitness of the two versions. A pretest using the questionnaire was conducted among five percent of the total sample size which were not included in the study. The pretest as well as the study was done by trained data collectors (elementary and high school teachers) and supervisors (HEWs) and any ambiguous and unsuitable questions were modified after the pretest was conducted. After checking of questioner completeness with pretest, the actual data collection with a face- to- face interview was conducted by using structure questionnaire.

The criteria for selecting the data collectors and supervisors were included; Being female and had previous experience was a priority, those who were health professionals and knew the local language, those who were known to be diligent and willing to face difficulties that may arise during the process of interviewing and those who knew the study area and successful performance during the training were selected and hired for data collection.

Both the interviewers and supervisors were given three days training before the actual work about the aim of study, study procedures, and data collection techniques go through the questionnaires question by question, art of interviewing, ways of collecting the data, clarification was given on each doubt and was discussed about potential problems that can arise and how to solve them. At the time of data collection, explanation was provided for the respondents on the purpose of the study and the importance of their involvement then respondents who volunteered were interviewed face- to- face using structured and pretested questionnaires.

4.8.2. Qualitative Survey

Qualitative data consists of focus group discussions that were held with Health Workers, Community leaders and Religious leaders. Participants were recruited on the basis of homogeneity, convenience, and willingness to participate in the study. Three groups of FGD consisting of 8 from Health Workers, 6 from Community leaders and 8 from Religious leaders were held both at the community level and health facility staffs with the total of 22 discussants. Health workers (nurses, midwives, Health officers etc.) in the facilities were recruited those who were affiliated with any of the following units: antenatal care, labor and delivery. The focus group discussion (FGD) with health workers were held in the morning and the other key informants (Community and Religious leaders) in the evening and weekend in order to accommodate participants' availability respectively.

Focus group discussions with their respective discussants were conducted in a quiet hall at church, Kebele hall and health institutions meeting hall. It was aimed to explore and to share the experiences, thoughts, feelings, attitudes and ideas of participants on determinants to choice delivery place. All discussions and interviews were conducted in Amharic, the local language, by a team of three, including a moderator, note taker, and tape recorder. Before the FGDs, the moderator was introduced all participants and was explained the general purpose of the study and topic of the discussions. The participants were informed about the tape-recorder and permission to be recorded were requested. Note was taken through writing and each discussion was tape recorded in order to backup the written note. The session Lasted about 30-45 Minutes.

4.9. Variables of the Study

4.9.1. Dependent Variable: Women's choice of delivery place

4.9.2. Independent Variables

- Socio-demographic like age, maternal education, husband education, mother's occupation and husband's occupation, ethnicity and religions, income
- Socio-cultural factors like traditional beliefs, women's autonomy
- Geographical accessibility of care like distance to facility
- Information availability

- Health service factors like access, availability of the service, cost and provider attitude towards laboring mother.
- Past obstetrical profile of the mother like gravidity, parity, ANC follow up.

4.10. Operational Definitions

Skilled attendance: People with midwifery skills (doctors, midwives, nurses and TTBAAs) who have been trained in the skills necessary to manage normal delivery, diagnose and refer obstetric complications.

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.

Permanent residence: Lived in the study area more than six months at the time of the survey.

Delivery place:-The place where women's give birth either home or health institution.

Age:-Refers to the respondent's age in completed year at the time of survey.

Household: A group of related people or family living together.

Kebele: The smallest administrative unit in urban and rural area.

Educational status: - Refers to the highest level of education attended by the respondent during the time of survey.

Distance: - Is measured in kilometers from home to the nearest health facility. According to National standard distance > 5km from home to health facilities are said to be far.

Parity:-Total number of delivery that occur after 28 wks of gestational age.

Gravidity:-Total numbers of pregnancies a woman have regardless of pregnancy out come.

Income:-For rural study participant calculated in kind the crop, cattle changed in to monetary forms.

Women's autonomy:-Decision-making power of women on one's own choice of delivery place.

4.11. Data Quality Assurance

The quality of data was assured by properly designed and pre-tested of the questionnaire, proper training of the interviewers and supervisors about the data collection procedures, proper categorization and coding of the questionnaire. Every day, at least 10% of the computed questionnaires were reviewed and checked for completeness and relevance by the supervisors and principal investigator and the necessary feedback was offered to data collectors in the next morning before the actual procedure. For the qualitative the kebele administrator, the head of health institutions and the supervisors with principal investigator were used to identify eligible discussants.

4.12. Data Processing and Analysis

Quantitative

After data collection, each questionnaire was checked visually for completeness and end coding at the right margin of the questionnaire. The corresponding code number was written carefully at each margin. The data was entered using EPI INFO version 3.5.4 and was exported to SPSS version 20.0 statistical software packages for data cleaning and analysis. Computer frequencies and summary statistics (mean, standard deviation, percentage, and rang) were used to describe the study population in relation to relevant variables and outlines. Any errors identified at this time were corrected after revision of the original data using the code numbers and statistical commands.

Frequencies and measures of variation were used to describe the study population in relation to socio-demographic and other relevant variables. The degree of association between independent and dependent variables was assessed using crude and adjusted odds ratio with 95% confidence interval. For bivariate relationship between each independent/ predictor variables and outcome was investigated using binary logistic regression model. Those independent variables that were statistically significant with $p\text{-value} < 0.05$ at bivariate level were included in multivariate logistic regression model for dependant variable to control for potential confounder variables. The analysis was yield standardized partial regression coefficients that estimate the direct effect of predictor variables on the dependent variable controlling for the effect of all other independent variables in the equation. The result was presented in the form of tables, figures, and summary statistics.

Qualitative Part

The qualitative data that was obtained from participants', conversations were audio taped, transcribed verbatim, translated and coded with open code version 3.6. Then inductive content analysis was used after the data was systematically coded segment by segment based on the research questions. Categories were formed and then based on the emerged relationships between the categories; themes were developed and used to answer the research questions in conjunction with the data from the quantitative survey.

4.13. Ethical Clearance

The survey was conducted after approval by the IRB (Institutional Review board) of Addis Ababa University, college of Allied health science, department of nursing and midwifery. Informed verbal consent was obtained from respondents after explaining the objective of the study. The collected information was recorded anonymously and the confidentiality was maintained. In addition, all the responses were kept confidential and anonymous.

4.14. Dissemination Plan

Though the primary objective of this thesis is a requirement for master in Maternity and reproductive health and will be defended at the School of Nursing and Midwifery, Addis Ababa University and a short report will be communicated to the Woreda Health Office, Woreda Administration, Zonal health bureau, and regional health bureau. Presentations at professional, local, national and international meetings and publication in peer reviewed national or international journals will be attempted.

5. Result

Quantitative Findings

A total of 361 eligible women were interviewed from one urban and eight rural kebeles of Daga Damot Woreda with 100% response rate.

5.1. Socio-Demographic Characteristics of the Respondents

The mean age of the respondents was 30.93 [SD \pm 6.006]. Majority of mothers 107(29.6%) were in the age range of 25–29 years. Of the total respondents 361, 296(82%) were rural residents. Regarding their marital status, majority 287 (79.5%) and 39 (10.8%) of them were married and separated, respectively. Among the total study participants about 360(99.7%) were orthodox and regarding to ethnicity all of them were Amhara.

Regarding the occupational status of the respondents, majority 215(59.6%) of them were farmers, 44(12.2%) were house wives, and only 38(10.5%) were governmental worker. Inwards most 182(50.4%) of them were illiterate, 70(19.4%) were able to read and write whereas 38(10.5%) of them were diploma and above. Concerning to the occupational status of the respondents husband, majority 197(60.4%) of them were farmers whereas about 55(16.9%) were governmental workers and regarding their educational status, most of them 119(36.5%) were able to read and write, 68(20.9%) were illiterate and only 57(17.5%) of them were diploma and above. Economically, 77(21.3%) of the households had monthly income of <399 ETB and 102(28.3%) had 400-699 ETB monthly income based on quartile classification [Table 1].

Table 1: Socio-demographic characteristics of the respondents (n=361) in Dega Damot district, West Gojjam Zone, Amhara Regional state, Ethiopia, May 2014.

Variables	Frequency	Percent
Place of residence		
Rural	296	82.0
Urban	65	18.0
Age of respondents		
20-24	55	15.2
25-29	107	29.6
30-34	89	24.7
35-39	71	19.7
+40	39	10.8
Mean + SD	30.93 \pm 6.006	

Marital status		
Married	287	79.5
Single	7	1.9
Divorced	11	3.0
Separated	39	10.8
Widowed	17	4.7
Religion		
Orthodox	360	99.7
Protestant	1	.3
Ethnicity		
Amhara	361	100.0
Respondent occupation		
House wife	44	12.2
Governmental Worker	38	10.5
Merchant	32	8.9
Farmer	215	59.6
Daily labors	16	4.4
Student	16	4.4
Husband occupation, n= 326		
Farmer	197	60.4
Daily laborer	21	6.4
Merchant	53	16.3
Governmental Worker	55	16.9
Respondent's educational status		
Illiterate	182	50.4
Read and write	70	19.4
Primary education (1-8)	35	9.7
Secondary education	19	5.3
Certificate	17	4.7
Diploma and above	38	10.5
Husband educational status, n= 326		
Illiterate	68	20.9
Read and writes	119	36.5
Primary education (1-8)	50	15.3
Secondary education	16	4.9
Certificate	16	4.9
Diploma and above	57	17.5
Monthly house hold income		
<=399	77	21.3
400-699	102	28.3
700-999	78	21.6
>=1000	104	28.8
Mean \pm SD	833.04 \pm 619.515	

5.2. Women's Choice on Place of Delivery and Its Determinants

Of the total number of respondents, 223(61.8%) chose home delivery whereas the rest number of respondents 138(38.2%) chose health institution delivery [Fig 3].

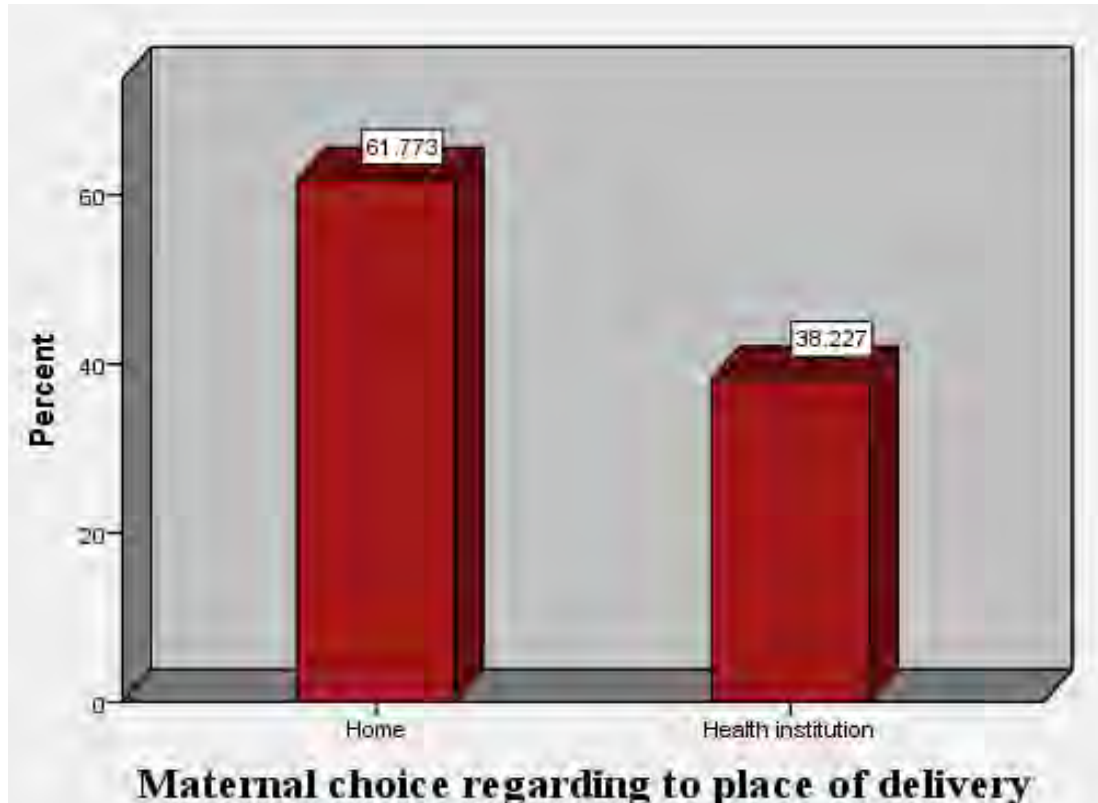
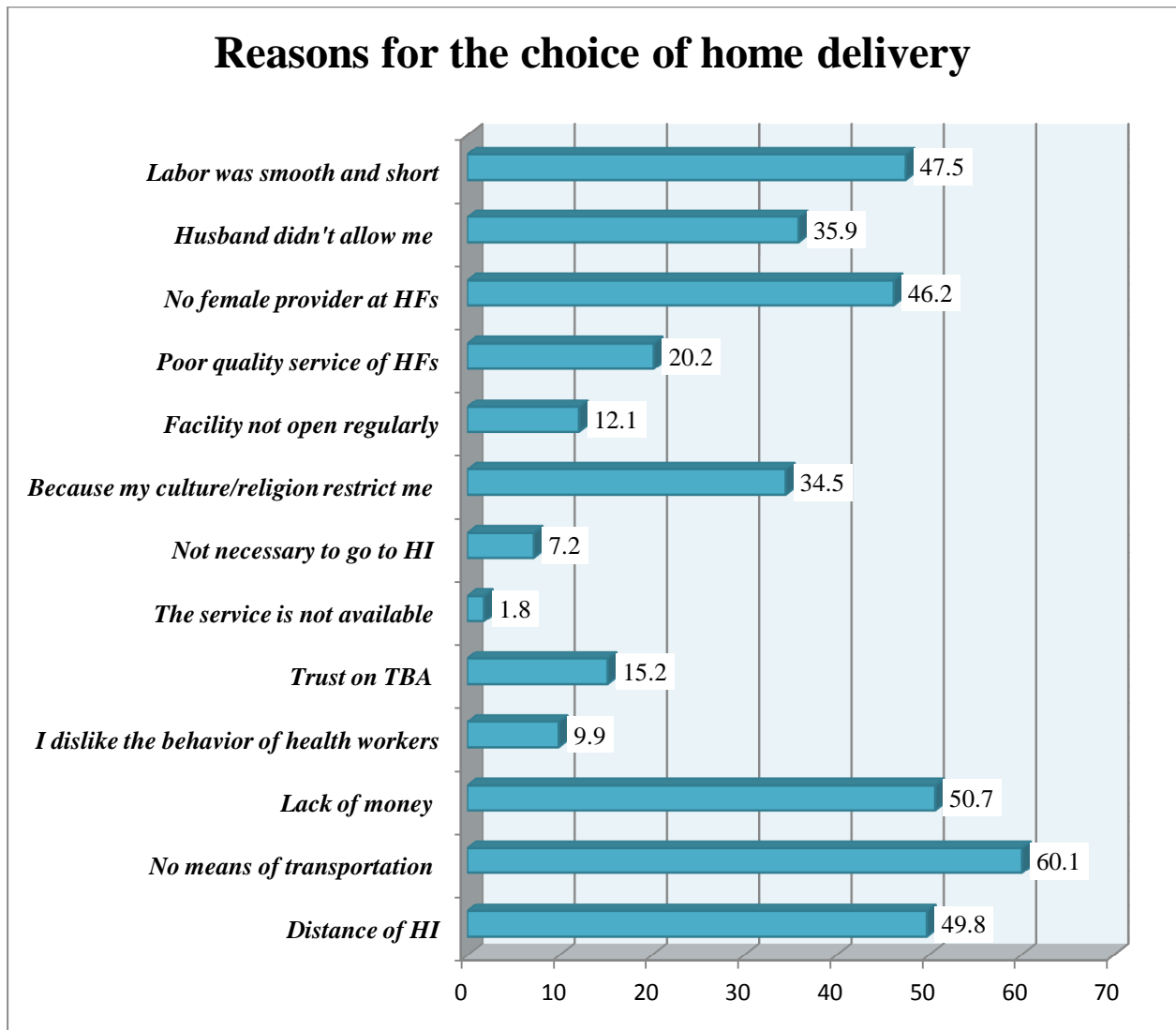


Figure 3: Maternal choice regarding place of delivery (n=361) in Daga Damot District, West Gojjam Zone, Amhara Regional State, Ethiopia, May 2014

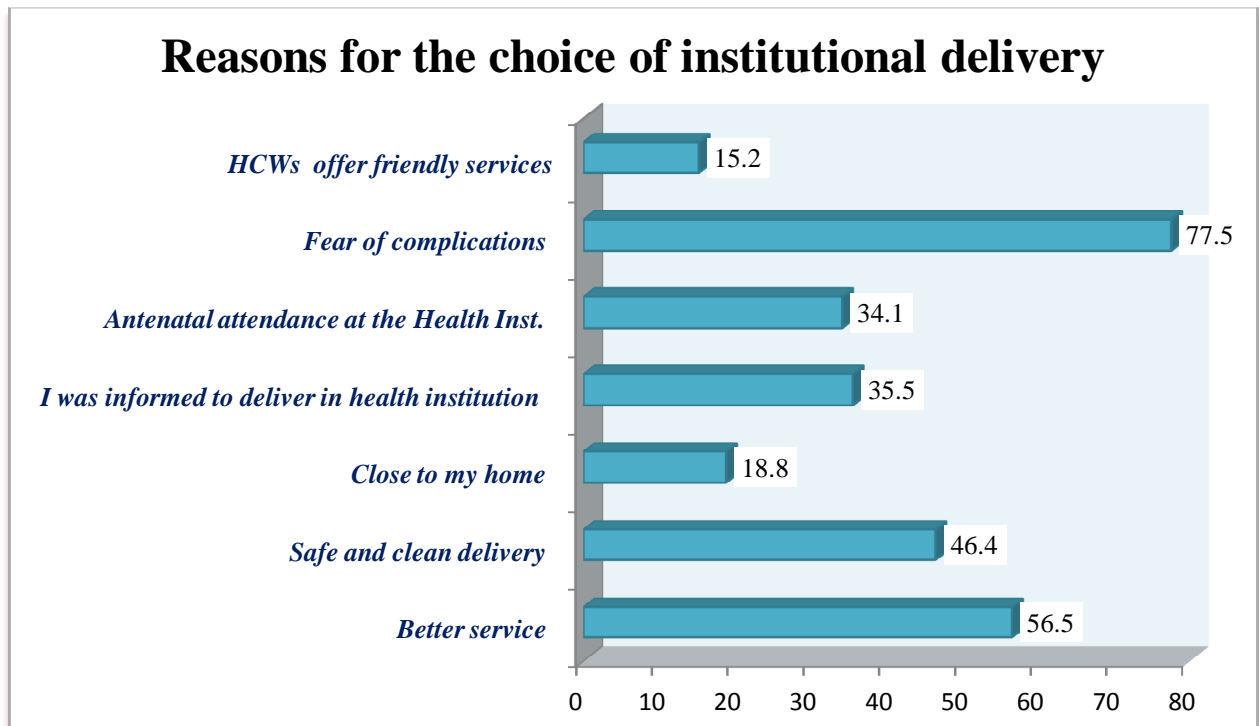
Concerning to the reasons for maternal choice of home delivery, majority of respondents 111(49.8%) of them replied due to distance of health institution is far from my home, 113(50.7%) of them respond due to no money to pay for transport and health service, 134(60.1%) of them respond due to no means of transportation, 106(47.5%) of them were replied due to labor was smooth and short, 103(46.2%) of them were due to no female provider at HFs and 77(34.5%) of them were due to culture/religion [Fig 4].



*More than one possible answer was used

Figure 4: Reported reasons for the choice of home delivery(n=223) in Daga Damot District, West Gojjam Zone, Amhara Regional State, Ethiopia, May 2014

Regarding the determinant factors of maternal choice of institutional delivery, majority of respondents 107(77.5%) of them respond due to fear of complications, 78(56.5%) of them replied due to better service and 47(34.1%) of them were due to Antenatal attendance at the Health Institution [Fig 5].



*More than one possible answer was used

Figure 5: Reported reasons for the choice of institutional delivery (n=138) in Daga Damot District, West Gojjam Zone, Amhara Regional State, Ethiopia, May 2014

5.3. Delivery Place of Women Last Child Birth and Decision Making Power of the Respondents

Of the total respondents who gave at least one child birth within the last two years, 110(30.5%) of the participant experience health institution delivery whereas majority 251(69.5%) of them were practice home delivery during last child birth. Among those respondents who experienced home delivery during last child birth, 76(30.3%) of them were assisted by women from neighbor, 69(27.5%) of them were assisted by mother, 50(19.9%) of them were assisted by mother-in-law and only 16(6.4%) of them were assisted by health extension workers. Of the total respondents who deliver their last child at home, 128(51%) of them were use traditional medication and 62(48.4%) of them put the reason to hasten child birth. Regarding to the assistant at health institution, majority of the respondents deliver their last child at health institution were assisted by nurses 44(40.0%) and followed by midwifery and health extension workers, 33(30%) and 11(10%) respectively.

Regarding the decision on the place of delivery, most 100(27.7%) of them replied that the decision was made by their husband, 94(26.0%) of them were replied that it was made by both husband and wife, and 80(22.2%) of the respondents replied that the decision was made by themselves. From the total study participant, 133(36.8 %) of the study participants were below 2 km far from health institution whereas 90(24.9%) of the respondents were >10 km far from health institution. In regarding the means of transportation, majority 182(50.4%) of the respondents were go on foot to reach at health institution followed by traditional transportation by mule/horse/kareza and vehicle, 159(44.0%) and 20(5.5%) respectively. Inwards 142(39.3%) of the respondents respond that < 1 Hr to reach at health institution and 103(29.6%) of the respondents respond that 3-4 Hrs to reach at health institution [Table 2].

Table 2: Women last delivery place and decision making power of the respondents (n=361) in Dega Damot district, West Gojjam Zone, Amhara Regional state, Ethiopia, May 2014.

Variables	Frequency	Percent
Last delivery take place		
Health institution	110	30.5
Home	251	69.5
Assistant at home delivery		
Mother	69	27.5
Mother –in-low	50	19.9
TTBA	20	8.0
Women from my Neighbor	76	30.3
Health extension workers	16	6.4
TBA	20	8.0
Traditional medication given during home delivery		
Yes	128	51.0
No	123	49.0
Reason for providing the medication		
To hasten child birth	62	48.4
To relief pain	51	39.8
To prevent complication of child birth	15	11.7
Assistant at HI delivery		
Health extension workers	11	10.0
Nurse	44	40.0
Midwife	33	30.0
Health officer	9	8.2
Doctor	9	8.2
Don't remember	4	3.6

Decision maker on place of your delivery		
Just me	80	22.2
My husband	100	27.7
Both My husband and me	94	26.0
TBA	50	13.9
My Mother and Mother in law	37	10.2
Husband's choice of place of delivery, n= 326		
Health institution	137	42.0
Home	189	58.0
Next delivery		
Health institution	218	60.4
Home	142	39.3
Estimated distance to the nearby HI		
below 2km	133	36.8
2-5km	68	18.8
5-10 km	70	19.4
>10 km	90	24.9
Means of transport to reach the health facility		
On foot	182	50.4
Traditional transportation/ by mule/ horse/ and traditional ambulance or kareza	159	44.0
Vehicle	20	5.5
Time expend to reach HI		
Less than 1 hour	142	39.3
1 – 2 hours	65	18.0
3 – 4 hours	107	29.6
Over 5 hours	47	13.0

5.4. Past Obstetric Characteristics of the Respondents

Concerning to the respondents age at first marriage and at first pregnancy, 207(57.3%) of them were get married below the age of eighteen years but 270(74.8%) of the respondents had their pregnancy above the age of eighteen. Two hundred two (56%) of the mothers were gravida two to five and 99 (27.4%) of them were gravida one, almost half of the respondents 186(51.5%) were between para two and five while 155(42.9%) were parity one. From the total study participants 269(74.5%) of them had information about the benefit of giving birth at health institution from them 126(46.8%) of respondents said that the primary source of information were health workers, 78(29.0%) replied primary source of information were friends or neighbors and 65(24.2%) of them said media like TV/Radio.

Regarding the antenatal service utilization of the respondents, 135(37.4%) had attended ANC service of which 59(43.7%) had attended 2-4 visits, 41(30.4%) had attended one visit and 35(25.9%) had more than four visit. One hundred ninety (52.6%) of the respondents had faced different obstetrical difficulties during last child birth. Of those who faced obstetrical difficulties, 84(44.2%) of them were used (massaging, herbs, drinking soft drinks) at home whereas 51(26.8%) of them were visit health institution to overcome different obstetrical problems [Table 3].

Table 3: Women’s past obstetrical history (n=361) in Dega Damot district, West Gojjam Zone, Amhara Regional state, Ethiopia, May 2014.

Variables	Frequency	Percent
Age at first marriage		
<18 yrs	207	57.3
>18 yrs	154	42.7
Age at first pregnancy		
<18 yrs	91	25.2
>18 yrs	270	74.8
Gravidity		
1	99	27.4
2-5	202	56.0
>5	60	16.6
Parity		
1	155	42.9
2-5	186	51.5
>5	20	5.5
Information about the benefit of delivery in health institution		
Yes	269	74.5
No	92	25.5
Primary source of information n=269		
Health workers	126	46.8
Friends, neighbors who get similar service	78	29.0
Media like TV/Radio	65	24.2
Antenatal care Attendance		
Yes	135	37.4
No	226	62.6

No. of visits of antenatal care		
1	41	30.4
2-4	59	43.7
>4	35	25.9
Obstetric difficulties		
Yes	190	52.6
No	171	47.4
Specific measures taken for Obstetric difficulties		
Nothing	55	28.9
Visited health institution	51	26.8
Massage, herbs, drinking soft drink	84	44.2

5.5. Determinant Factors Related to Socio Demographic Variables Associated with the Choice of Delivery Place

On bivariate analysis of socio demographic characteristics like; place of resident, age of the respondents, occupational status of the mother, educational status of the mother, occupational status of husband, educational status of husband, and monthly house hold income were the factors found to be significantly associated with the choice of delivery place.

Numerous associations were found to be significant in the bivariate analysis of socio demographic characteristics of the respondents. Therefore, a multivariate approach was applied to determine which factors best explained and predict choice of delivery place after adjusting for possible confounder. Consequently a number of independent variables like; age of the respondents, respondent educational status, husbands educational status, and monthly household income were found to be significant on multivariate analysis.

Mothers with age group of 20–24 years were 5 times more likely to choose institutional delivery than mothers with age group 40 and above (AOR = **4.88**, 95% CI = [**1.256**, **18.986**]) and mothers with the age group of 25-29 years and 30-34 years were four times more likely to choose institutional delivery than mothers with age group of 40 and above (AOR = **3.57**, 95% CI = [**1.027**, **12.41**] and AOR = **4.08**, 95% CI = [**1.129**, **14.78**]) respectively.

Respondents who can be able to read and write were three times more likely to choose institutional delivery than mothers who were illiterate (AOR = **3.452**, 95% CI = [**1.661**, **7.176**]).

Those respondents whose husband with educational status of read and write were three times more likely to choose institutional delivery than those husbands who were illiterate (AOR = **3.212**, 95% CI = [**1.213, 8.506**]). Mothers whose husbands educational level of diploma and above were about 28 times more likely to choose institutional delivery than those who were illiterate (AOR = **28.28**, 95% CI = [**1.56, 511.29**]). Those women whose household income was between four hundred and six hundred ninety nine Ethiopian birr were less likely to choose delivery at health facility compared to women of house hold income greater than one thousand Ethiopia birr (AOR = **.331**, 95% CI = [**.131, .838**]) [Table 4].

Table 4: Association of socio-demographic variables with women choice of delivery place in Daga Damot district, West Gojjam Zone, Amhara Regional State, Ethiopia, May 2014.

Variables	n (%)	Choice of delivery place		COR at 95%CI	AOR at 95% CI
		Home n%	HI n%		
Place of residence					
Rural	296(82.0)	200(89.7)	96(69.6)	.263(.150-.462)	.922(.347-2.452)
Urban	65(18.0)	23(10.3)	42(30.4)	1.00 ⁺	
Age of respondents					
20-24	55(15.2)	29(13.0)	26(18.8)	7.845(2.45-25.076)*	4.88(1.256-18.986)*
25-29	107(29.6)	61(27.4)	46(33.3)	6.598(2.19-19.882)*	3.57 (1.027-12.41)*
30-34	89(24.7)	46(20.6)	43(31.2)	8.179(2.68-24.941)*	4.08 (1.129-14.78)*
35-39	71(19.7)	52(23.3)	19(13.8)	3.197(1.00-10.201)*	2.105 (.546-8.119)
+40	39(10.8)	35(15.7)	4(2.9)	1.00	
Respondent occupation					
House wife	44(12.2)	20(9.0)	24(17.4)	1.200(.382-3.773)	1.063(.212-5.343)
Govern.l Worker	38(10.5)	6(2.7)	32(23.2)	5.333(1.437-19.80)*	3.995(.582-27.450)
Merchant	32(8.9)	21(9.4)	11(8.0)	.524(.154-1.777)	.459(.091-2.322)
Farmer	215(59.6)	160(71.7)	55(39.9)	.344(.123-.960)	.660(.140-3.118)
Daily labors	16(4.4)	8(3.6)	8(5.8)	1.000(.250-3.998)	1.524(.229-10.118)
Student	16(4.4)	8(3.6)	8(5.8)	1.00	

Husband occupation n=					
Farmer	197(60.4)	143(73.7)	54(40.9)	1.00	
Daily laborer	21(6.4)	9(4.6)	12(9.1)	3.531(1.408-8.853)*	1.418(.373-5.398)
Merchant	53(16.3)	28(14.4)	25(18.9)	2.364(1.267-4.411)*	1.142(.440-2.962)
Govern.l Worker	55(16.9)	14(7.2)	41(31.1)	7.755(3.92-15.349)*	.145(.010-2.116)
Respondent's edu. status					
Illiterate	182(50.4)	146(65.5)	36(26.1)	1.00	
Read and write	70(19.4)	34(15.2)	36(26.1)	4.294(2.371-7.777)*	3.452(1.661-7.176)*
Primary edu. (1-8)	35(9.7)	19(8.5)	16(11.6)	3.415(1.600-7.292)*	2.307(.764-6.961)
Secondary education	19(5.3)	8(3.6)	11(8.0)	5.576(2.09-14.873)*	1.908(.470-7.739)
Certificate	17(4.7)	8(3.6)	9(6.5)	4.562(1.646-12.65)*	.600(.084-4.274)
Diploma and above	38(10.5)	8(3.6)	30(21.7)	15.21(6.429-35.97)*	.835(.090-7.705)
Husband edu. status n=					
Illiterate	68(20.9)	61(31.4)	7(5.3)	1.00	
Read and writes	119(36.5)	74(38.1)	45(34.1)	5.299(2.23-12.592)*	3.212(1.213-8.506)*
Primary edu. (1-8)	50(15.3)	31(16.0)	19(14.4)	5.341(2.03-14.067)*	2.488(.752-8.227)
Secondary education	16(4.9)	8(4.1)	8(6.1)	8.714(2.487-30.53)*	3.639(.720-18.400)
Certificate	16(4.9)	8(4.1)	8(6.1)	8.714(2.487-30.53)*	5.111(.798-32.713)
Diploma and above	57(17.5)	12(6.2)	45(34.1)	32.68(11.9-89.595)*	28.28(1.56-511.29)*
Monthly house hold income					
<=399	77(21.3)	54(24.2)	23(16.7)	.216(.114-.408)*	.693(.259-1.853)
400-699	102(28.3)	78(35.0)	24(17.4)	.156(.085-.288)*	.331(.131-.838)*
700-999	78(21.6)	56(25.1)	22(15.9)	.199(.105-.378)*	.360(.146-.885)*
>=1000	104(28.8)	35(15.7)	69(50.0)	1.00	

*Adjusted for all significant variables $p < 0.05$

⁺ = Reference Category

5.6. Determinant Factors Related to Geographical Accessibility of Health Institutions Associated with Choice of Delivery Place

Geographical accessibility of health institution was also another factor determine women choice of delivery place. On bivariate analysis factors related to distance to the nearby HI, means of transportation and time expend to reach health institution were significantly associated with women choice of delivery place but after adjusting the possible confounding factors with multivariate analysis only means of transportation and time expend to reach health institution were found to be significantly associated with women choice of delivery place. Participants who had access to vehicles to reach at health institutions were eleven times more likely to choose delivery at health institution than women who were go on foot to reach at health institutions (AOR = **11.33**, 95% CI = [**2.997**, **42.8**]) but those women who were used traditional transportation like horse, mule and kareza to reach at health institution were less likely to choose health facilities as delivery place than women who were go on foot to reach at health institutions (AOR = **.424**, 95% CI = [**.231**, **.777**]). Time expend over 5 hours for respondents to reach at health institution were less likely to choose delivery at health institution as compared with time took less than one hour for mothers to reach at health institutions (AOR = **.091**, 95% CI = [**.012**, **.715**]) [Table 5].

Table 5: Association of geographical accessibility of health care with women choice of delivery place in Daga Damot district, West Gojjam Zone, Amhara Regional State, Ethiopia, May 2014.

Variables	n(%)	Choice of delivery place		COR at 95%CI	AOR at 95% CI
		Home n%	HI n%		
Estimated distance to the nearby HI					
below 2km	133(36.8)	50(22.4)	83(60.1)	1.00 ⁺	
2-5km	68(18.8)	36(16.1)	32(23.2)	.535(.296-.967)*	.997(.443-2.243)
5-10 km	70(19.4)	63(28.3)	7(5.1)	.067(.028-.158)*	.284(.062-1.300)
>10 km	90(24.9)	74(33.2)	16(11.6)	.130(.068-.248)*	.515(.082-3.219)

Means of transport to reach the HI						
On foot	182(50.4)	89(39.9)	93(67.4)	1.00		
Traditional trans/ by mule/ kareza	159(44.0)	129(57.8)	30(21.7)	.223(.136-.364)*	.424(.231-.777)*	
Vehicle	20(5.5)	5(2.2)	15(10.9)	2.87(1.00-8.23)*	11.3(2.997-42.8)*	
Time expend to reach HI						
Less than 1 hour	142(39.3)	48(21.5)	94(68.1)	1.00		
1 – 2 hours	65(18.0)	42(18.8)	23(16.7)	.280(.151-.518)*	.455(.189-1.097)	
3 – 4 hours	107(29.6)	91(40.8)	169(11.6)	.090(.048-.169)*	.206(.041-1.041)	
Over 5 hours	47(13.0)	42(18.8)	5(3.6)	.061(.023-.164)*	.091(.012-.715)*	

*Adjusted for all significant variables $p < 0.05$,

⁺ = Reference Category

5.7. Determinant Factors Related to Women Past Obstetrical Characteristics Associated with Choice of Delivery Place

Respondents past obstetrical history was also another factor determine women choice of delivery place. On bivariate analysis factors related to age at first marriage, age at first pregnancy, gravidity, parity and number of visits of antenatal care were significantly associated with women choice of delivery place but after adjusting the possible confounding factors with multivariate analysis only gravidity and number of visits of antenatal care were found to be highly significant. Women with gravida one were more likely to choose institutional delivery than women with gravida greater than five (AOR = **21.24**, 95% CI = [**2.493**, **180.94**]). Those participants with greater than four visit of ANC were six times more likely to choose health institution delivery than those women with one visit of ANC (AOR = **5.721**, 95% CI = [**1.727**, **18.958**]) [Table 6].

Table 6: Association of women past obstetrical characteristics with choice of delivery place in Daga Damot district, West Gojjam Zone, Amhara Regional State, Ethiopia, May 2014.

Variables	n(%)	Choice of delivery place		COR at 95% CI	AOR at 95% CI
		Home (n%)	HI (n%)		
Age at first marriage					
<18 yrs	207(57.3)	144(64.6)	63(45.7)	1.00 ⁺	
>18 yrs	154(42.7)	79(35.4)	75(54.3)	2.17(1.41-3.346)*	.594(.205-1.717)
Age at first pregnancy					
<18 yrs	91(25.2)	73(32.7)	18(13.0)	1.00	
>18 yrs	270(74.8)	150(67.3)	120(87)	3.24(1.837-5.73)*	1.047(.277-3.954)
Gravidity					
1	99(27.4)	47(21.1)	52(37.7)	6.27(2.79-14.11)*	21.24(2.493-180.94)*
2-5	202(56.0)	125(56.1)	77(55.8)	3.49(1.63-7.489)*	2.483(.379-16.274)
>5	60(16.6)	51(22.9)	9(6.5)	1.00	
Parity					
1	155(42.9)	91(40.8)	64(46.4)	3.99(1.12-14.17)*	
2-5	186(51.5)	115(51.6)	71(51.4)	3.499(.99-12.37)	
>5	20(5.5)	17(7.6)	3(2.2%)	1.00	
No. of visits of ANC					
1	41(30.4)	21(51.2)	20(21.3)	1.00	
2-4	59(43.7)	14(34.1)	45(47.9)	3.38(1.43-7.953)*	4.318(1.617-11.529)*
>4	35(25.9)	6(14.6)	29(30.9)	5.08(1.74-14.82)*	5.721(1.727-18.958)*

*Adjusted for all significant variables $p < 0.05$

⁺ = Reference Category

5.8. Qualitative Findings

A total of three focus group discussions were conducted consisting of a total of 22 participants: 8 from religious leaders, 8 from health institutions and 6 from community leaders were involved. The contents of the FGD included experience or knowledge about ANC and delivery services, the best place for delivering a child, reasons for pregnant women to attend institutional delivery, reasons for pregnant women to attend home delivery and preferences to place of delivery from local cultural and religion point of view. From the discussion themes were identified and content were analyzed.

After clear description of the importance of focus group discussion for the group discussants, the group discussion started with general questions whether they had the knowledge on antenatal and delivery care services or not. Almost all of the groups defined ANC as a care provided during pregnancy to prevent any problems related to pregnancy and childbirth. ANC was also important for the well being of both the women and the foetus. Regarding delivery care services, most of the discussants agreed that delivery care is the care provided for women by trained health professional in the health institution. Concerning to maternal health problem, majority of the group discussants able to name pregnancy and delivery related health problems such as blurring of vision, severe headache, vaginal bleeding, etc. Moreover, the group discussants able to state the possible causes like excessive work, lifting to heavy load, under nutrition, consequences like eclampsea, premature rupture of membrane, fetal and maternal death, and attending ANC as a prevention method for pregnancy and delivery related health problems.

Best Place for Child Birth

The group were also interviewed the choice of delivery site. The majority of the discussants reflected mixing of opinions with no clear choice of place of delivery.

One of the discussants from religious leader said, *"If once the mother has assured the wellbeing of the fetus, delivering at health institution is not mandatory. Because it is possible to attend by the nearby attendants like mother, mother in law and traditional birth attendants. But if the wellbeing of the mother and fetus didn't assure it is better to attend the delivery at the health institutions because the mother might have face a pregnancy induced hypertension."* (A 52 years of old priest at Feresbet 01 kebele)

Some of the discussants agreed that the best place to deliver a child is a health institution. Despite the fact that they choose and know the significance of institutional delivery, practically they were experiencing home delivery due to different circumstances.

One of the discussants from community leader said that, *"even though our wives do know the importance of institutional delivery we husbands prioritize our work like plowing, cattle keeping and other related works than our wives even the distance by itself is also the one which let us to deliver at home."* (A 35 years of old male discussant at Arefa Gense kebele)

The majority of the discussants preferred home delivery. According to participants, home delivery has a benefit regarding to cost and time.

One of the discussants from community leader said that, *"delivering at home doesn't require a lot things like expending money for transportation and health service, walking too long distances to reach at health institutions and others."* (A 43 years of old male discussant at Arefa Gense kebele)

Reason for Choice of Institutional Delivery

Most of the discussants narrated that the reason for those women to attend institutional delivery includes; being educated, attending ANC follow up and too short distance to reach at health institution. And the other discussants also stated that those women will attend when they face a problem like excessive bleeding and prolonged labour, when there is educated family and when the village is near the main road to take those women in labour with traditional ambulance /kareza then after that they can access to transportation to health institution.

One of the discussants from health professional said that, *"those mothers who do have a good knowledge status and ANC follow up attend institutional delivery. In addition to this there are mothers who attend health institution when they face a problem like excessive bleeding and prolonged labour."* (A 35 years of old female nurse participant from Feres bet health center)

Similarly another discussants from community leader said that, *"the reason for those women to attend health institutions is that being educated, too short distance to reach at the health institutions, availability of traditional ambulance /kareza and because of the quality of health*

service at the HI but the service provided at home is not that much clean and safe." (A 31 years of old community leader in Arefa Gense kebele)

Additionally occupation, educational status of family member and residence were important predictors of institutional delivery. This statement was clearly stated by one of the discussants from the religious leader as follows;

One of the discussants from religious leader said that, *"those women do have so many reasons. The first reason is that being governmental worker or their children, brother and other family members may be governmental workers who have good knowledge status. The second reason is that those mothers who are lived in urban residence have got a great opportunity in accessing different health services and health educations and Medias like TV and radio. Because of this reasons they are more prone to choose delivery at health institution. Those children and their mother become healthier if the delivery conducted in health institutions where as if it is conducted at home, they become at risk of different health problems. Therefore, to prevent such a kind of problem they prefer to deliver at health institutions. This is my understanding!!!!!!!!!!!!!!"* (A 46 years of old priest, the secretary of Daga Damot Woreda religious institute)

Reasons for Choice of Home Delivery

Some of the discussants agreed that most of the women experienced home delivery due to too far to reach at HI, lack of transportation, lack of money, difficult geographic feature and different rivers. Some of the other discussants also stated that lack of knowledge is also the other problem because those mothers are preferred to die rather than expending their money for health services. One of the discussants from community leader said that, *"there are so many problems for them to experience home delivery. Among these the first is too far to reach at HI, lack of transportation, difficult geographic feature and different rivers during summer season are the factors that obliged the mothers to experience home delivery. The other what makes me surprise is that we husbands are the main problem for our wives regarding to the choice of place of delivery because to the beginning we enforce them to deliver at home even they were at risk and with a lot of pain but when we lose them or something bad thing happened to them we get in to meaningless regret."* (A 40 years of old community leader from Arefa Gense)

Similarly, other discussant from health professional replied that, "there are places or kebeles with Extreme Mountain. Despite the fact that they want to deliver at HI, they obliged to deliver at home because of river at summer season and mountain." (A 38 years of old male clinical nurse from Feres bet Health center)

Lack of knowledge is also another factor for those women to experience home delivery.

One of the discussants from religious leader said that, "the concerned bodies even do not provide health education about the negative impact of home delivery to the people lived in remote area. Because of this reason those mothers in rural residence experience home delivery due to lack of knowledge. When I say lack of knowledge there are women prefer to die rather than expending money for health service even they have had sufficient monthly income. Additionally, the presence of health extension workers and neighborhood assistant in our kebele leads our wives to deliver at home. But unfortunately when delivery complication happen to those women, both the health extension worker and neighborhood assistant has nothing to do with this because this is beyond their capacity." (A 46 years of old priest in Feres bet 01 kebele)

Most of the discussants stated that mothers fear of possible referral to different hospitals in case of complication during delivery, because there are women who were suffered with unskilled health professionals at the health center during previous exposure. This is clearly stated by one of discussant from the religious leader as follows;

One of the discussants from community leader said that, "Of course most of the factors are stated but what I would like to add is that distance and geographic feature are the main problems especially here in these kebeles which are remote from the center of the woreda. There are mothers who were suffered with different difficult health problems which cannot be easily managed at the health center setting. During this time the health professionals at the health center are also obliged to refer those mothers to the referral hospitals. Those mothers lived around dega part of the woreda are referred to Fenote selam referral hospital which is about 80 - 85 km far from the center of the worera (feres bet) and took about one hour by ambulance and also mothers are referred to Debre Markos referral hospital which is about 100 km far from Feres bet and took about 1:20 to 1:40 hours by ambulance. On the other hand at the woina dega or lower part of the woreda, mothers are most of the time referred to Bahirdar Felege hiwot

referral hospital and Motta district hospital which are located away from the woreda. Therefore, in order to reach at these hospitals those mothers should have to pass through different rivers and mountains on foot even if they reached at the main road, they should have to wait for ambulance or other transport services. Because of this reason they prefer to deliver at home because they perceived that there is nothing new services provided at the health center and health post." (A 45 years of old community leader)

Culture is also one of the determinants for home delivery as it was clearly stated by one of the religious leader.

One of the discussants from religious leader said that, *"there are some usual problems which are still unresolved by different health education and health service provision. There are mothers who said that my mother and father spirit/kolle/ does not allow me to deliver at health institutions. The spirit/kolle/ that I already gained from my family will do something bad to me if I attend the health institutions and lose my blood outside my home. They also perceived that if a mother attend health institutions and assist by health professionals, the child will not grow or develop as expected as compared with attending delivery at home. Because of this reason they prefer to deliver at home by TBA or family member. These are the problems that are experienced in rural/remote part of the woreda. Specially, those elderly mothers in rural kebeles perceived that all health professionals are pagan, or non religious because of this reason they said that we do not want the health professionals to see and touch our reproductive organ but we prefer to die rather than assisting by those unknown, young unskilled and unethical health professionals. Because of these reasons they do not prefer to deliver at health institutions."* (A 46 years of old priest, the secretary of Daga Damot Woreda religious institute)

Best Assistant During Delivery

Most of the discussants replied that it is better for those mothers to be assisted by health professional specially a person who have a close relationship with the mother and had high educational status.

One of the discussants from religious leader said that, *"I prefer to choose the person who has high educational status like doctor because those persons are knowledgeable enough to manage different problems and assist the mother during delivery. Even during ancient time there were*

health professionals in different streams like in science and religious leaders (Hawariyat)." (A 50 years of old priest in Feres bet 01 kebele)

But some of the discussants replied that it is better for those mothers to be assisted by other than health professionals because they claim that health professionals will do something bad because of lack of skill.

One of the discussants from religious leader said that, " it is better for those mother to be attended by trained traditional birth attendants because those midwifery which are graduated from the governmental health institutions are not knowledgeable enough to assist the mother during delivery because there are some health professionals which harts the mother in labour and delivery due to lack of skill. " (A 52 years of old priest in Feres Bet 01 kebele)

Cultural and Religious Aspect Related to ANC and Delivery Service

From local cultural and religion point of view, all the discussants agreed that from religion point of view attending modern health care services is not prohibited. The holy bible or Feteha Negest Segawe does not say anything about ANC and delivery care services.

One of the discussants from religious leader said that, "*concerning to the religious point of view, there is no contradicting idea about ANC, delivery service and PNC unlike family planning. There is no religious article which stated as do not attend health institution for delivery, do not keep and check your health status. Our religion prohibiting family planning depending on the article which stated at Feteha Negest, Feteh Segawe, article 24. This idea also supported by the Genesis, article 28. GOD told for Adam and Hewan that, "bezu tebazu mederenem muluat." Till now there are no printed religious books and other scripts which contradict the ideology of the religion. There is no article which contradicts, refuses and even rejects the article which stated at Fetha Negest Segawe article 24. Concerning to culture and tradition, those illiterate mothers are hard to let the health professionals to see, touch and assist during labour."* (A 46 years of old priest, the secretary of Daga Damot Woreda religious institute)

6. Discussion

This community –based study has tried to identify maternal choice of delivery place and factors determining the choice of delivery place in Daga Damot District. Accordingly, maternal choice of delivery place and factors influencing the choice of delivery place among child bearing age women in the district were identified. The factors were related to women in the reproductive age and health facility.

This study regarding to maternal choice of delivery place revealed that, of the total number of respondents, (61.8%) chose home delivery whereas the rest number of respondents (38.2%) chose institutional delivery. This finding is appeared to be inconsistent with the study conducted in Uganda in 2010, showed that (93%) would have opted for an institutional site. However, (7%) would opt for home delivery and would have chosen to be delivered by a TBA ⁽³¹⁾. This discrepancy may be due to different socio demographic and socio cultural characteristics of the study participant. The possible explanation for this finding is that most of participants' residence in the current study were rural and most of them were farmers which were more prone to prefer home delivery.

The study has also identified several socio-demographic factors that have important influence on women choice of delivery place. In line with other studies socio demographic characteristics such as age of the respondents, respondent educational status, husband's educational status, and monthly household income were the common determinants for women choice of delivery place in Daga Damot District.

Mothers with age group of 20–24 years were 5 times more likely to choose institutional delivery than mothers with age group 40 and above and mothers with the age group of 25-29 years and 30-34 years were four times more likely to choose institutional delivery than mothers with age group of 40 and above. This finding is appeared to be inconsistent with the study conducted in African countries in 2006 revealed that, the age of the respondent showed a significant association with the choice of institutional delivery in Malawi and Tanzania, women of all age groups were more likely to choose delivering their last child in a health facility ⁽⁴¹⁾. This discrepancy may be due to different socio demographic and socio cultural characteristics of the study participant. This finding may plausibly be explained that young women tend to benefit

from increased knowledge and has better understanding about the advantages of HF deliveries compared to the old women counterparts.

Education is one of the major socio demographic factors that influence maternal choice of delivery place. Respondents who can be able to read and write were three times more likely to choose institutional delivery than mothers who were illiterate. This finding is consistent with different studies conducted in Uganda, rural Bangladesh and other different countries ^(31, 34, 40-41, 44, 48). The possible explanation for this finding why education is a key determinant could be that as a woman go up through the ladder of education, the more knowledgeable she will be about the choice of institutional delivery also education is likely to enhance female autonomy so that women develop greater confidence and capability to make decision about their own health because they have better access to information through reading and following media about maternal health care.

Husband education is also a predictor for choice of facility based delivery service. This finding has revealed that those mothers whose husbands had able to read and write and completed diploma and above were more likely to choose institutional delivery compared to their counterparts. Other studies conducted in Ethiopia have shown comparable results with this finding. Women from the highest husband's education usually tend to visit health institutions for delivery care and postnatal care ^(35, 49). The possible explanation for this finding is since education leads to better health awareness, this may sensitize the family to choose and utilize delivery care provision at various facilities. Therefore, husbands with better education could be able to decide timely and easily pay for service and related fees required than their counterparts.

Consistent with different studies monthly income was also found to be a strong predictor for choice of institutional delivery, mother with low monthly income were less likely to choose delivery at health facility compared to women of house hold income greater than one thousand Ethiopia birr. This study is consistent with the study conducted in the Latin American and Caribbean region, and in Europe, North Africa, and the Middle East, over 50% of all women in richest quintile reported that choosing delivery at public facilities ⁽⁴³⁾. From this result we can conclude that mothers with highest wealth quintile were choose institutional delivery and seek professional help than lowest wealth quintile regardless of high cost of transportation and health services.

In this study regarding decision making on place of delivery, the most frequent reasons given by the discussants through FGD is that "*we husbands are the main problem for our wives regarding to the choice of place of delivery because to the beginning we enforce them to deliver at home even they were at risk and with a lot of pain but when we lose them or something bad thing happened to them we get in to meaningless regret.*" This study is inconsistent with the qualitative study conducted in Tanzania and Uganda, revealed that most of respondents reported the place of delivery was done by women personal choice or decision ^(31-32, 51). This discrepancy may be due to different socio demographic and socio cultural characteristics of the study participant. This finding may plausibly be explained that most of husbands in Ethiopia specially in Gojjam were the head of the household and monthly income that they got from farming was owned by the husband because of this reason women are always dependent on their husband.

Coming to factors related to the geographical accessibility of health institution includes; access to transportation like vehicle and time spending to reach at health institution were found to be both highly significantly associated with the choice of institutional delivery. This study has revealed that those participants who had access to vehicles to reach at health institutions were eleven times more likely to choose delivery at health institution than women who were go on foot to reach at health institutions. This study is in line with other study conducted in Nepal, Tanzania and other different developing countries including Ethiopia which revealed that the location of and distance to a single health facility as well as the poor transport system were push those mothers towards TBAs and home deliveries ^(7, 31-32, 34, 42, 54). This finding is reasonably explained by which those mothers who were travelled on foot to reach the nearby health center has suffered with long distance and difficult geographical feature but if they have had a chance for modern transportation, they would easily access the nearby health institutions.

The proportion of women choosing institutional delivery had decreased with increasing time spending to reach at the health facility. Time expend over 5 hours for women to reach at health institution were less likely to choose delivery at health institution as compared with time took less than one hour for mothers to reach at health institutions. This study is consistent with a study conducted in Ethiopia Sekela District ⁽³⁴⁾. The possible explanation for those women went over five hours to reach at health institution were less likely to choose delivery at health institution as

compared with time took less than one hour is that women unable to go on foot because of long distance to reach at health institutions.

Belief and culture was also found to be strong predictor for mothers to choose home delivery as clearly stated by one of the discussants from religious leader said that, *"there are some usual problems which are still unresolved by different health education and health service provision. There are mothers who said that my mother and father spirit/kolle/ does not allow me to deliver at health institutions. The spirit/kolle/ that I already gained from my family will do something bad to me if I attend the health institutions and lose my blood outside my home. They also perceived that if a mother attend health institutions and assist by health professionals, the child will not grow or develop as expected as compared with attending delivery at home. Because of this reason they prefer to deliver at home by TBA or family member.* This finding is inconsistent with the study conducted in Uganda most of the participants would have opted for an institutional delivery ⁽³¹⁾. This discrepancy may be due to different socio demographic and socio cultural characteristics of the study participant. The possible explanation for this finding is that the presence of a deep rooted culture and belief which is transferred from generation to generation.

Gravidity has a negative association with maternal choice of institutional delivery. With an increase in number of pregnancy, the odds of choosing institutional delivery compared to the reference category (i.e. one child) decreases. It was revealed that women with an increase in number of pregnancy have chosen institutional delivery to a lesser extent than first births. With respect to the effect of gravidity on maternal choice of institutional delivery, the result appeared to be consistent with most studies done elsewhere, that indicated women are significantly more likely to choose institutional delivery for the first child than for the later children ⁽⁴¹⁾. This result was conceivably be explained for the low preference of choosing institutional delivery among high gravida women could be due to the already developed confidence and may receive that modern health care is not as necessary due to the experience and knowledge accumulated from previous pregnancies and births.

Consistent with the study conducted in different country like in *North gondor, Ghana and Laotians* ^(33, 41, 61), the participants in this study have also identified that those women who have access to medias like TV/ radio and urban residence were important predictors of maternal

choice of institutional delivery as clearly stated as follows; *"those mothers who are lived in urban residence have got a great opportunity in accessing different health services and health educations and medias like TV and radio. Because of this reasons they are more prone to choose delivery at health institution."* The possible explanation for this finding is that those mothers who have access to TV/radio are more prone to hear different maternal and child health related information and the importance of institutional delivery as well.

ANC follow up in the current study found to be one of the predictors of maternal choice of delivery place. This statement is clearly stated by one of the discussants from health professional said that, *"those mothers who do have a good knowledge status and ANC follow up attend institutional delivery. In addition to this there are mothers who attend health institution when they face a problem like excessive bleeding and prolonged labour."* (A 35 years of old female nurse participant from Feres bet health center) This study is consistent with the study conducted in New York, Ethiopia and other different countries that those women who were received of prenatal care during the last pregnancy and previous delivery in a health facility were more prone to choose institutional delivery ^(32, 34, 41, 58). The possible explanation is that women who had antenatal care follow up could received advice and health education about pregnancy related complications and advantages of giving birth at a health facility and assisted by skilled attendant. Those participants with greater than four visit of ANC were six times more likely to choose health institution delivery than those women with one visit of ANC. This finding is in line with the study done elsewhere like in New York, Ethiopia and other different countries, stated that relative to women who had received no or one ANC visits during their last pregnancy, women who had received 4 or more visits showed an increased likelihood of choosing institutional delivery ^(32, 34, 41, 58). This may be due to the fact that women with more ANC visits also showed a higher motivation with safe delivery service utilization. It is also that many ANC visits expose the women to more health education and communication.

7. Strength and Limitation of the Study

7.1. Strength of the Study

The reliability of the data maintained by:

- Selection bias was minimized since it was community- based study with probability sampling technique and similar sex interviewers were used who were non-health workers and largely unaware of the desired answers.
- It includes both the rural and urban residents (1 Urban and 8 rural kebeles)
- High response rate.
- Furthermore, the study approached both quantitative and qualitative study methods.

7.2. Limitation of the Study

- As the study included two year retrospective cross-sectional prior to the survey from April 2012 to April 2014, the possibility of recall bias misreporting of events was likely related to maternal age, a person assisting at health institution and obstetrical difficulties.

8. Conclusions

In conclusion, this study demonstrated that maternal choice regarding to institutional delivery is inadequate in general, as clearly depicted by the major maternal related variable which are confirmed by bivariate and multivariate analysis and are very significant predictors of choice of delivery place. Age of the respondents, respondent educational status, husband's educational status, and monthly household income were found to be significant on multivariate analysis and are independent predictors for maternal choice of institutional delivery.

Of the total respondents who gave at least one child birth within the last two years, 110(30.5%) of the participant experience health institution delivery whereas majority 251(69.5%) of them were practice home delivery during last child birth.

The present study identified that reasons for maternal choice of home delivery in the study area.

- About fifty percent of the respondents replied due to distance of health institution is too far, similarly fifty percent of them claim that no money to pay for transport and health service, sixty percent of them claim that no means of transportation, thirty five percent of them were due to culture/religion.

This study also identified that reasons for maternal choice of institutional delivery in the study area.

- About seventy six percent of them respond due to fear of complications, fifty seven percent of them claim that is because of better service and about thirty four percent of them were due to Antenatal attendance at the Health Institution

Factors related to geographical accessibility of health institution like; distance to the nearby HI and means of transportation were an important predictors of women choice of delivery place. Age at first marriage, age at first pregnancy, gravidity, parity and number of visits of antenatal care were independent obstetric determinants of women choice of delivery place.

Qualitatively through FGD; inaccessibility of health facilities (distance, transportation problem), lack of women's decision making power to use modern health service, inaccessibility of media, knowledge status and ANC follow up were identified to influence maternal choice of delivery place.

9. Recommendations

Based on the above finding of the study the following recommendations were made: -

❖ **The Woreda administration office should contribute in;**

1. Improving the maternal educational status and their autonomy

- As women's education is an important factor for the institutional delivery, improving education among girls, beyond the primary school, needs to be strongly encouraged. Likewise, improving paternal education is also an important factor for maternal choice of institutional delivery.
- Increase women's autonomy within the family, enhancing their ability to earn and control income and decide on their own health.

❖ **The Woreda and Zonal health bureau in collaboration with Ministry of health should provide;**

2. Information, education and communication on:

- Since being multi-gravida and elder in age were best predictors for practicing home delivery, these group should be one of the priorities criteria for targeting education campaigns on the benefits of safe motherhood programs.
- Health care provider should provide a complete package of essential information and make verification about the level of comprehension on risks of pregnancy, benefits of giving birth at health facilities, danger signs during pregnancy and labour to mothers, family members and the communities at all times.
- Strengthening promotion of antenatal and delivery care and creating strong linkage between the two services, and improve male involvement to maternal health issue.
- Vehicle (ambulance) should be made available for referral of the mother with obstetric complication to the nearest possible health facility.
- Ensure strong referral linkage among health center, health posts and the community.

❖ **The Woreda and Zonal health bureau in collaboration with Ministry of health should provide;**

3. Training and supervision

- Improving training and/or refreshment of TBAs, with the new role they should play in handling pregnancy and childbirth and integrate with in the formal health care system.

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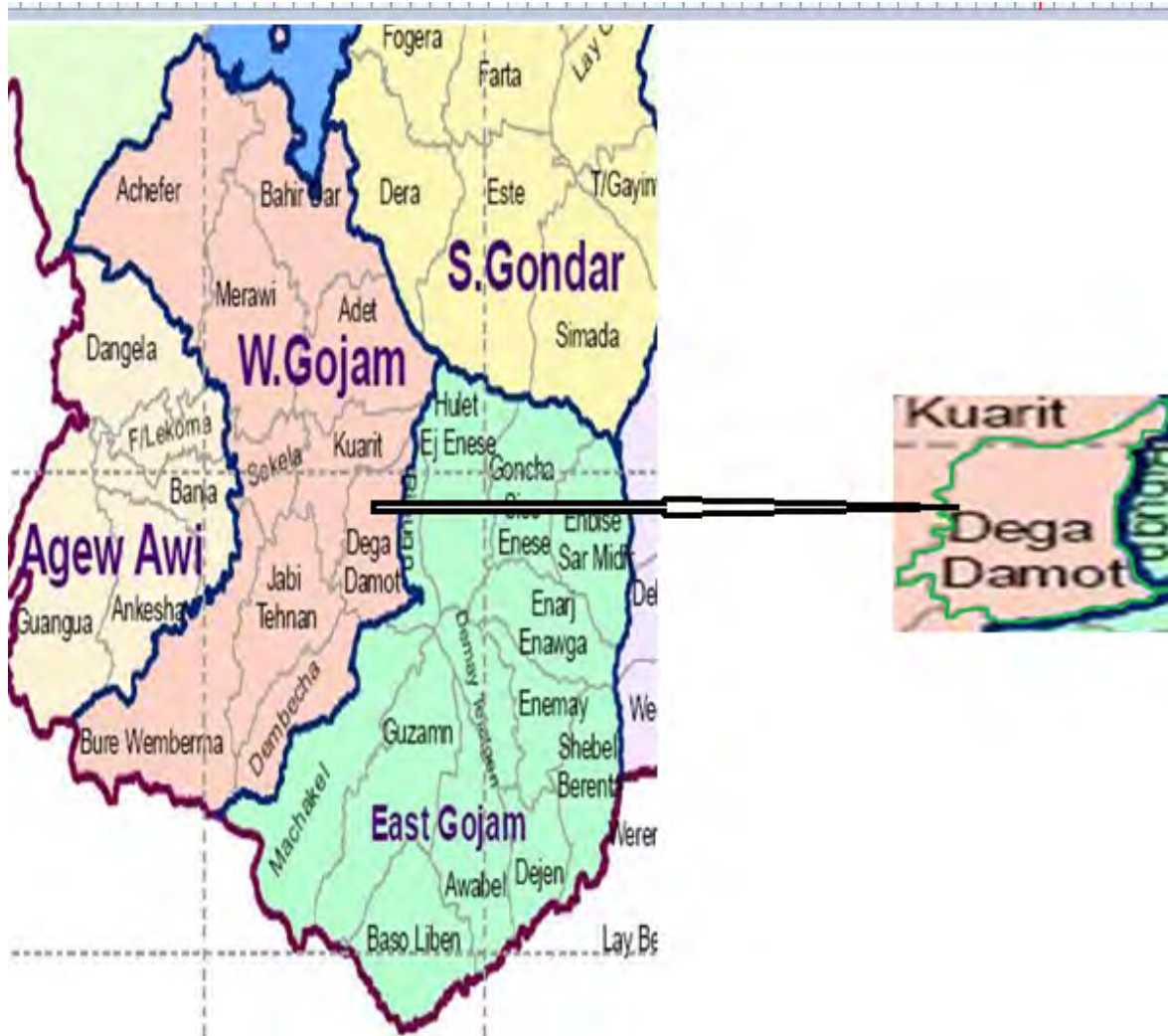
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11. ANNEXES

Annex 1: Map of the study area



Key

-  Dega Damot
-  West Gojjam
-  East Gojjam

Annex 2: English Version of Information Sheet, Consent Form & Questionnaire

Part One: INFORMATION SHEET

Information to be given to study participant before their participation in the study

I am a Master's student from Addis Ababa University currently carrying out my research on "assessment of the factors determining the choice of delivery place among women of child bearing age group in Dega Damot, West Gojjam Zone, Amhara, Ethiopia."

You are randomly selected to participate in the study. The study will provide information that might enable the health personnel and the government to improve maternal and child health services programs. The study and its procedures have been approved by the appropriate authorities. We would like to take your time to respond to our interview questions and it will take approximately half an hour. We request you to answer as truthfully as possible. Your answer will not be revealed to the health personnel or any other people, and the information you give will be treated anonymously and confidential. This research imposes no risk and therefore no compensation will be provided for your participation in this study. Your participation is totally voluntary and you can withdraw anytime or refuse to continue, and this will not influence the way you are treated in the health institution or in the community.

Part two: CONSENT FORM:

I have been explained all information and procedures that are part of this research study and I have understood the same. I understand that the research imposes no risk on my life and therefore no compensation would be provided.

I hereby agree to participate in this research study and give my voluntary consent. I hereby also give rights to the researcher for collecting the data that are required for the study.

Agreed _____ **Disagreed** _____

Name of the interviewer: _____ Sign. _____ Date of interview _____

Name of the supervisor: _____ Sign. _____ Date _____

Address of Principal Investigator:

Mobile No.: +251-911-669861

E-mail: alex.sayihalem2012@gmail.com

INTERVIEW QUESTIONNAIRE

1) Households Identification

001. Questionnaire Code _____

002. Woreda _____

003. Residence 1. Rural _____ 2. Urban _____

004. How long have you been living in this place? _____ Years

Part I: Respondents socio demographic characteristics

No.	Question	Option	Skip to ques.	Code
101	Age in years at present	-----		
102	Marital Status	1. Married 2. Single 3. Divorced 4. Separated 5. Widowed		
103	Religion	1. Orthodox 2. Muslim 3. Protestant 4. Catholic 66. Other(specify) _____		
104	Ethnicity	1. Amhara 2. Tigre 3. Oromo 66. Other(specify) _____		
105	Respondent's Main Occupation	1. House wife 2. Governmental worker 3. Merchant 4. Farmer 5. Daily labors 6. Student 66. Other(specify) _____		
106	What is the main occupation of your husband	1. Farmer 2. Daily laborer 3. Merchant 4. Governmental worker 66. Other (specify) _____		
107	What is your current educational status?	1. Illiterate 2. Read and write 3. Primary education (1-8) 4. Secondary education 5. Certificate 6. Diploma and above		
108	For those married husband educational status	1. Illiterate 2. Read and writes 3. Primary education (1-8) 4. Secondary education 5. Certificate 6. Diploma and above		
109	Monthly house hold income	_____ ETB		

Part II: Women's choice on place of delivery and the determinants for their choice

No.	Question	Option	Skip to ques	Code
201	Where is your choice regarding to your place of delivery?	1. Health institution 2. Home	If (health institution) skip to ques. 203	
202	(For those who prefer to home delivery) What is your main reason to prefer home delivery? (MORE THAN ONE ANSWER POSSIBLE)	1. Distance of health institution is far from my home 2. No means of transportation 3. I have no money to pay for transport and health service 4. I dislike the behavior of health workers 5. Trust on TBA 6. The service is not available 7. Not necessary to go to Health Inst. for labor & delivery 8. Because my culture/religion restrict me 9. Facility not open regularly 10. Poor quality service of HFs 11. No female provider at HFs 12. Husband will not allow me 13. Labor was smooth and short 66. Other (specify)_____		
203	For those who prefer health institution what is your main reason(MORE THAN ONE ANSWER POSSIBLE)	1. Better service 2. Safe and clean delivery 3. Close to my home 4. I was informed to deliver in health institution 5. Antenatal attendance at the Health Inst. 6. Fear of complications 7. HCWs offer friendly services 66. Other (specify)_____		
204	Where did your last delivery take place?	1. Health institution 2. Home	If (health institution) skip to ques. 208	
205	If you delivered at home who assisted you?	1. Mother 2. Mother –in-law 3. TTBA 4. Women from my Neighbor 5. Health extension workers 6. TBA 66. Other (specify)_____		

206	Is there any traditional medication given to the mother during child birth at home?	1. Yes 2. No	If No skip to q 208	
207	What is the reason for providing the medication?	1. To hasten child birth 2. To relief pain 3. To prevent complication of child birth 66. Other (specify)_____		
208	If at health facility who assisted you?	1. Health extension workers. 2. Nurse 3. Midwife 4. Health officer 5. Doctor 88. Don't remember		
209	Who decides on place of your delivery?	1. Just me 2. My husband 3. Both My husband and me 4. TBA 5. My Mother and mother in law 66. Other (specify)_____		
210	Where is the choice of your husband regarding your place of delivery?	1. Health institution 2. Home		
211	Where will your next delivery, when you are pregnant/ if you are pregnant now?	1. Health institution 2. Home		
212	What is the estimated distance from home to the nearby delivery institution?	1. below 2km 2. 2-5km 3. 5-10 km 4. >10 km		
213	What means of transport do you use to reach the health facility?	1. On foot 2. Traditional transportation/ by mule/ horse and traditional ambulance /Kareza 3. Motorcycle 4. Bicycle 5. Vehicle 66. Other (specify)_____		
214	How long would it take you to reach the health facility from your home?	1. Less than 1 hour 2. 1 – 2 hours 3. 3 – 4 hours 4. Over 5 hours		

III. Women's past obstetrical history

No.	Question	Option	Skip to ques	Code
301	Age at first marriage?	1. <18 yrs 2. >18 yrs		
302	Age at first pregnancy?	1. <18 yrs 2. >18 yrs		
303	Gravidity/total number of pregnancy	1. 1 2. 2-5 3. >5		
304	Parity/total number of births	1. 1 2. 2-5 3. >5		
305	Do you have any information about the benefit of delivery in health institution?	1. Yes 2. No	If No skip to q 307	
306	If yes what is the primary source of information	1. Health workers 2. Friends, neighbors who get similar service 3. Media like TV/Radio 66. Other (specify)_____		
307	Did you attend antenatal care during your last child pregnancy?	1. Yes 2. No	If No skip to q 309	
308	If yes how many visits you have for antenatal?	1. 1 2. 2-4 3. >4		
309	Have you come across any obstetric difficulties in previous delivery? (prolonged labor, hemorrhage)	1. Yes 2. No		
310	If yes, What specific measures were taken?	1. Nothing 2. Visited health institution 3. Massage, herbs, taking different soft drinks 66. Other (specify)_____		

"Thank you in advance"

Annex 3: Amharic Version Of Information Sheet, Consent Form & Questionnaire

ክፍል አንድ፡ ስለጥናቱ መረጃን በተመለከተ

የጥናቱ ተሳታፊ የሚሆኑ እናቶች ወደ ጥናቱ ተሳታፊ ከመሆናቸው በፊት ስለጥናቱ ጥቅም ማግኘት ያለባቸው መረጃን በተመለከተ

እኔ የአዲስ አበባ ዩኒቨርሲቲ የድህረ ምረቃ ተማሪ ስሆን በአማራ ክልል፣ በምእራብ ጎጃም ዞን፣ ደጋ ዳሞት ወረዳ መውለድ የሚችሉ የእድሜ ክልል ውስጥ ያሉ እናቶች የወሊድ ቦታ ምርጫን በተመለከተ እንዲመርጡ የሚያደርጓቸው ምክንያቶችን ወይም ችግሮችን በተመለከተ ጥናት በማድረግ ላይ እገኛለሁ።

እርስዎ የጥናቱ ተሳታፊ እንዲሆኑ ተመርጠዋል። ይህ ጥናት ለጤና ባለሙያዎች እና ለመንግስት አካላት የእናቶች እና ህጻናትን ጤና አገልግሎት መሻሻልን በተመለከተ እቅድ ለማውጣት ይጠቅማቸዋል። የጥናቱ አስፈላጊነት በሚመለከታቸው አካላት ተረጋግጧል። ለጥያቄዎች መልስ ይሰጡን ዘንድ ግማሽ ያህል ሰዓትዎን ልንሻማብዎት ነው። እርስዎም በተቻለ መጠን ትክክለኛውን መልስ ወይም መረጃ እንዲሰጡን ስንል በትህትና እንጠይቃለን።

የሰጡት መረጃ ለሌላ ጤና ባለሙያ ወይም ሌላ ሰው ያለ እርስዎ ስምምነት ተላልፎ የማይሰጥ መሆኑን ማለትም ምስጢሩ የተጠበቀ መሆኑን አረጋግጣለሁ። ጥናቱ ምንም አይነት ጉዳት እንዳለማድረሱ መጠን ምንም ዓይነት ካላም አያስፈልገውም። የእርስዎ ተሳትፎ ሙሉ በሙሉ በፈቃደኝነት ላይ የተመሰረተ ከመሆኑም ባሻገር በማንኛውም ሰዓት ማቋረጥ ይችላሉ ይህን በማድረግዎ ጤና ተቋም የሚያገኙት አገልግሎት በተመለከተ እና በማህበረሰቡ በኩል የሚደርሱብዎ ችግር የለም።

ክፍል ሁለት፡ የሚሰጥር አጠባበቅ ስምምነት

እኔ ጥናቱን በተመለከተ ተገቢውን የሆነ መረጃ በተገቢው ሁኔታ ተነግሮኝ በአግባቡ ተረድቻለሁ። ጥናቱ ምንም አይነት ጉዳት በህይወቴ ላይ እንደማያደርስ ተረድቻለሁ ስለዚህም ምንም ዓይነት ካላ አያስፈልገኝም።

እኔ የዚህ ጥናት ተሳታፊ ለመሆን ተስማምቻለሁ፤ የፈቃደኝነት ስምምነትም ሰጥቻለሁ በተጨማሪም ለመረጃ ሰብሳቢዎችም ለጥናቱ አስፈላጊ የሆነ ተገቢውን መረጃ እንዲሰጡ ፈቅጃለሁ።

ተስማምቻለሁ-----አልተስማማሁም-----

ፈቃደኝነትን ያረጋገጠው መረጃ ሰብሳቢ ስም -----ፊርማ-----ቀን-----/-----/-----

የመረጃ ተቆጣጣሪ ሰው ስም----- ፊርማ----- ቀን-----/-----/-----

የጥናቱ ባለቤት አድራሻ:

ስልክ ቁጥር: +251-911-669861
ኢ-ሜይል: alex.sayihalem2012@gmail.com

1. አጠቃላይ የቤተሰብ መረጃ

- 001. የመጠይቁ መለያ ቁጥር-----
- 002. ወረዳው -----
- 003. ነዋሪነት 1. ገጠር 2. ከተማ -----
- 004. በዚህ ወረዳ በቋሚነት ለምን ያህል ጊዜ ኖረዋል?----- አመት::

ክፍል አንድ፤ የተጠያቂው አጠቃላይ የማህበራዊና ኢኮኖሚያዊ መረጃ የተመለከተ መጠይቅ

ተ.ቁ	ጥያቄ	አማራጭ መልስ	እለፍ	ኮድ
101	ይህ ቃለ መጠይቅ ሲደረግልዎ አድሚዎ ስንት ነው(በዓመት)	-----		
102	የጋብቻ ሁኔታ	1. ያገባች አብረው የሚኖሩ 2. ያላገባች 3. አግብታ የፈታች 4. አግብታ ተለያይተው የሚኖሩ 5. ባልዋ የሞተባት		
103	ሐይማኖት	1. ኦርቶዶክስ 2. እስላም 3. ፕሮቴስታንት 4. ካቶሊክ 66. ሌላ (ይጠቀስ)-----		
104	ብሔር	1. አማራ 2. ትግሬ 3. ኦሮሞ 66. ሌላ (ይጠቀስ)-----		
105	ዋና ስራዎ ምንድን ነው	1. የቤት እመቤት 2. የመንግስት ሰራተኛ 3. ነጋዴ 4. ግብርና 5. የቀን ሰራተኛ 6. ተማሪ 66. ሌላ (ይጠቀስ)-----		
106	የባለቤትዎ ዋና ስራ ምንድን ነው	1. ግብርና 2. የቀን ሰራተኛ 3. ነጋዴ 4. የመንግስት ሰራተኛ 66. ሌላ (ይጠቀስ)-----		
107	የትምህርት ደረጃዎ	1. ምንም አላውቅም 2. ማንበብና መጻፍ ብቻ 3. የመጀመሪያ ደረጃ ት/ት ከ1-8ኛ ክፍል 4. ሁለተኛ ደረጃ ት/ት 5. ሰርተፍኬት 6. ዲፕሎማ እና ከዚያ በላይ		
108	በጋብቻ አብርዎት ያለ የባለቤትዎ የትምህርት ደረጃ ምንድን ነው	1. ምንም አያውቅም 2. ማንበብና መጻፍ ብቻ 3. የመጀመሪያ ደረጃ ት/ት ከ1-8ኛ ክፍል 4. ሁለተኛ ደረጃ ት/ት 5. ሰርተፍኬት 6. ዲፕሎማ እና ከዚያ በላይ		
109	የወር ገቢዎት በብር ሲሰላ?	----- ኢትዮጵያን ብር		

ክፍል ሁለት፡ የእናቶችን የወሊድ ቦታ ምርጫ እና የመረጡበትን ምክንያት በተመለከተ መጠይቅ

ተ.ቁ	ጥያቄ	አማራጭ መልስ	እለፍ	ኮድ
201	ልጅ ለመውለድ የወሊድ ቦታ ምርጫሽ የት ነው?	1. ጤና ተቋም ውስጥ 2. ቤት ውስጥ	ጤና ተቋም ውስጥ ከሆነ ወደ 203 እለፍ	
202	(ቤት ውስጥ ለወለዱ) ቤት ውስጥ ለመውለድ የመረጡበት ምክንያት ምንድን ነበር? (ከአንድ በላይ መልስ ይቻላል)	1. ጤና ተቋም ከቤቴ ስለሚርቅ 2. የትራንስፖርት ችግር ስላለ 3. ለጤና ተቋም እና ትራንስፖርት የምክፍለው ገንዘብ ስሌለለኝ 4. የጤና ተቋም ባለሙያዎች ባህሪ ጥሩ ስላልሆነ 5. ባልሰለጠኑ የልምድ አዋላጆች እምነት ስላለኝ 6. ጤና ተቋማት ውስጥ የወሊድ አገልግሎት ስለማይሰጥ 7. ለመውለድ ጤና ተቋም መሄድ አያስፈልገኝም 8. ባህል እና ሀይማኖቱ ስለማይፈቅድልኝ 9. ጤና ተቋማት ሁልጊዜ ክፍት ስለማይሆኑ 10. ጤና ተቋማት አገልግሎት ጥራት አነስተኛ ስለሆነ 11. ሴት ባለሙያዎች ስለማይኖሩ 12. ባለቤቴ ጤና ተቋም እንዲሄድ ስላለፈቀደልኝ 13. የምጥ ጊዜ አጭር ስለነበረ 66. ሌላ (ይጠቀስ)-----		
203	(ጤና ተቋም ውስጥ ለወለዱ) ጤና ተቋም ውስጥ ለመውለድ የመረጡበት ምክንያት ምንድን ነበር? (ከአንድ በላይ መልስ ይቻላል)	1. ከቤት የተሸለ አገልግሎት ስለሚሰጥ 2. ንጽህናውን የጠበቀ አገልግሎት ስለሚሰጥ 3. ጤና ተቋሙ ለቤቴ ቅርብ ስለሆነ 4. ጤና ተቋም ውስጥ እንደወልድ ስለተነገረኝ 5. የቅድመ ወሊድ እርግዝና ክትትል ስላደረግሁ 6. የወሊድ ችግር እንዳያጋጥመኝ ስለምፈራ 7. ጤና ባለሙያዎች ጥሩ የሆነ የጓደኝነት ዓይነት አቀራረብ ስላላቸው 66. ሌላ (ይጠቀስ)-----		
204	የመጨረሻ ልጅዎትን የት ነበር የወለዱት?	1. ጤና ተቋም ውስጥ 2. ቤት ውስጥ	ጤና ተቋም ውስጥ ከሆነ ወደ 208 እለፍ	

205	በቤት ውስጥ በሚወልዱበት ወቅት ማን አዋለድዎት?	1. እናቴ 2. የባለቤቴ እናት 3. በሰለጠነ የልምድ አዋላጆች 4. ሴት የጎረቤት አዋላጅ 5. ጤና ኤክስቴንሽን ሰራተኛ 6. ባልሰለጠነ የልምድ አዋላጆች 66. ሌላ (ይጠቀስ)-----		
206	በቤት ውስጥ ወሊድ ወቅት ለእናትየዋ የተሰጠ የባህል መድሀኒት አለ?	1. አዎ 2. የለም	የለም ከሆነ ወደ 208 እለፍ	
207	የባህል መድሀኒት መጠቀሙ ጠቀሜታው ምንድን ነው?	1. የወሊድ ጊዜውን ለማሳጠር 2. ህመምን ለማስታገስ 3. በወለድ ጊዜ የሚያጋጥሙ ችግሮችን ለመከላከል 66. ሌላ (ይጠቀስ)-----		
208	ጤና ተቋም ውስጥ በሚወልዱበት ወቅት ማን አዋለድዎት?	1. ጤና ኤክስቴንሽን ሰራተኛ 2. ክሊኒካል ነርስ 3. አዋላጃ ነርስ 4. ጤና መኮንን 5. ዶክተር 88. አላስታውስም		
209	የወሊድ ቦታዎችን የመረጠው ማን ነው?	1. እኔ በራሴ ነው 2. ባለቤቴ 3. እኔ እና ባለቤቴ 4. ያልሰለጠነ የልምድ አዋላጅ 5. እናቴ እና አማቴ 66. ሌላ (ይጠቀስ)-----		
210	የባለቤትዎ የወሊድ ቦታ ምርጫ የት ነው?	1. ጤና ተቋም ውስጥ 2. ቤት ውስጥ		
211	የሚቀጥለውን ልጅዎትን የት መውለድ ይፈልጋሉ?	1. ጤና ተቋም ውስጥ 2. ቤት ውስጥ		
212	ጤና ተቋሙ ከቤትዎ በምን ያህል ርቀት ገደማ ላይ ይገኛል?	1. ከ 2 ኪ.ሜ በታች 2. 2-5 ኪ.ሜ 3. 5-10 ኪ.ሜ 4. >10 ኪ.ሜ		
213	ጤና ተቋም ለመድረስ የሚጠቀሙበት የትራንስፖርት አገልግሎት ምንድን ነው?	1. በእግር 2. በባህላዊ መጓጓዣ ማለትም በበቅሎ እና ፈረስ እንዲሁም ቃሬዛ 3. በሞተር ሳይክል 4. በብስክሌት 5. በመኪና 66. ሌላ (ይጠቀስ)-----		
214	ከቤትዎ ጤና ተቋም ለመድረስ ምን ያህል ሰአት ይወስዳል?	1. ከ 1 ሰአት በታች 2. 1 — 2 ሰአት 3. 3 — 4 ሰአት 4. ከ 5 ሰአት በላይ		

ክፍል ሦሥት፡ የእናቶች ያለፈ የእርግዝና እና የወሊድ ታሪካቸውን በተመለከተ መጠይቅ

ተ.ቁ	ጥያቄ	አማራጭ መልስ	እለፍ	ኮድ
301	በመጀመሪያ ጋብቻዎ ወቅት እድሜዎ ስንት ነበር?	1. <18 ዓመት 2. >18 ዓመት		
302	በመጀመሪያ እርግዝናዎ እድሜዎ ስንት ነበር?	1. <18 ዓመት 2. >18 ዓመት		
303	ጠቅላላ የእርግዝናሽ ብዛት ስንት ነው?	1. 1 2. 2-5 3. >5		
304	ከሰባት ወር እርግዝና በኋላ የወለድሻቸው ልጆች ብዛት ስንት ነው?	1. 1 2. 2-5 3. >5		
305	ስለ ጤና ተቋም መውለድ ጠቀሜታ መረጃ አለውት?	1. አወ 2. የለም	የለም ከሆነ ወደ 307 እለፍ	
306	መልስዎ አዎ ከሆነ የመረጃ ምንጭዎ ምንድን ነው?	1. ጤና ባለሙያ 2. ተመሳሳይ እርዳታ ከገኙ ጓደኞች እና ጎረቤቶች 3. ከሬዲዮ ወይም ቴሌቪዥን 66. ሌላ (ይጠቀስ)-----		
307	የመጨረሻ ልጆዎትን ባረገዙ ወቅት የቅድመ ወሊድ እርግዝና ክትትል አድርገው ያውቃሉ?	1. አወ 2. የለም	የለም ከሆነ ወደ 309 እለፍ	
308	መልስዎ አዎ ከሆነ ስንት ጊዜ የቅድመ ወሊድ እርግዝና ክትትል አድርገው ያውቃሉ?	1. 1 2. 2-4 3. >4		
309	ባለፉት የወሊድ ታሪክዎ ወቅት ያጋጠመዎት ችግር ነበር ማለትም ከመጠን በላይ ደም መፍሰስ፣ ከ12 ሰዓት በላይ ምጥ መዘግየት እና የመሳሰሉት	1. አወ 2. የለም		
310	መልስዎ አዎ ከሆነ ምን አይነት እርምጃ ወሰዱ?	1. ምንም እርምጃ አልወሰድኩም 2. ወደ ጤና ተቋም ሄጃለሁ 3. መታሸት እና የተለያዩ እጾችን መጠቀም እንዲሁም ለሰላሳ መጠጦችን መጠጣት 66. ሌላ (ይጠቀስ)-----		

"ለትብብርዎ በጣም እናመሰግናለን "

Annex 4: English version FGDs consent form and questions

Good morning and thank you all for coming.

My name is----- . My colleagues name near to me are----- and -----.

We came from AAU and Woreda health bureau.

Read the following as it is:

“After we conduct some brief introduction, we will be talking about several different health related issues. We will be asking you questions about your overall experience with the maternal healthcare services in your locality and questions pertaining to pregnancy related health problems, preferences to place of delivery and factors influencing utilization of the available health services. Then, we will conclude the session by asking you for your recommendations on how such program might be implemented in your community in any way in the future. Would you be willing to participate in the discussion? If yes, proceed, if no, thank and stop the discussion.

Name of the moderator: ----- Sign----- .Date-----Time-----.

I. Objective of the discussion

To explore the community’s understanding and perceptions of preference to place of delivery and factors determining the choice of delivery place in Dega Damot.

II. Description of the focus group

The participant and the facilitator will sit in a circle or around a table for the discussion. The facilitator will begin the session by introducing himself and explain the purpose of the focus group. The focus group meeting will last about 45 to 60 minutes.

III. Ground rules

a) Issue of confidentiality

Please be assured that any information collected here is strictly confidential. The staff of research and other participants will not directly share the information in a way that would reveal an individual's personal identity.

b) Consent for participation and tape-recording

At this point it is important that we obtain your consent for conducting the session. Understand that this is more for your protection than anything else.

Read consent form out loud to the group:

“Your remaining in the session indicates that you voluntarily agree to participate in this discussion program. You have the right to refuse to answer any questions and to end the discussion if you find it necessary to do so. For the sake of accuracy and efficiency, we will take notes and tape recording this session, unless any one has any objections.”

c) Role of moderator, note taker and tape recorder

The moderator will guide the discussion when necessary, with carefully not to lead the discussion. The note taker will have the sole responsibility of capturing the sessions as accurately as possible. This will include not only participants' responses, but also nonverbal actions, physical environment, atmosphere of the session, as well as other vital characteristics of the session. On the other hand tape recorder will have his own task in adjusting the tape recorder and recording each statement that the participants will respond.

d) Importance of total group

In this group everybody should feel free to talk. Each and every opinion is important and wanted. It is very important that all the people in the group get a chance to express their opinions.

e) Agreement to disagree

In this group there is no right or wrong answers. Everybody should express the opinions or attitude pertinent to him or her. When you express your opinions you are encouraged to be honest in your views of the pregnancy and delivery related problems and choice of delivery place and factors that influence the women to select delivery place. We want you to focus your comments on the program and not toward each other or members of the staff.

Focus Group Discussion Topic Guide

Theme 1: Introduction

At this point, we would like to ask you to introduce yourself to the rest of the group. Let us start with the research team (Name, age, education status) and each of you please tell me your age, education status, for how long you have lived in this area and your job.

Name of FacilitatorName of Note taker

Name of Tape recorderDate.....

Place of discussionTime of discussion started.....

Time ended.....Code No. of participant

Total number of ParticipantsAge of participant

Occupation of participant----- Educational Status of participant.....

Theme 2: Warm up questions

1) Next we would like to hear a little about your experience or knowledge about ANC and delivery services.

- A. Who can tell us about antenatal care?
- B. Who can tell us about delivery care services?
- C. Who would like to tell us dangerous health problems related to pregnancy and childbirth?
 - a) What are the causes?
 - b) What are the consequences?
 - c) What are the prevention methods?

Probes

- ✓ Would you explain further?
- ✓ Would you give me an example?
- ✓ Has anyone else had similar experience?
- ✓ Is there anything else?
- ✓ "I don't understand."

- 2) Where do you think the best place for delivering a child? (home or health institution) Why? What are the advantages and disadvantages? **Using probes.**
- 3) What are the primary reasons for pregnant women to attend institutional delivery? (Short distance, friendly approach of health workers, ANC...etc) What are the advantages and disadvantages of delivering at health institution? **Using probes.**
- 4) What are the primary reasons for pregnant women to attend home delivery? (Long distance, cost, transportation ...etc) What are the advantages and disadvantages of delivering at home? **Using probes.**
- 5) Who do you think the best person to assist mothers during delivery? (Doctor, nurse, midwife, TTBA, TBA, family, neighbors) Why? What are the advantages and disadvantages? **Using probes.**
- 6) What is your opinion about ANC, and preferences to place of delivery from local cultural and religion point of view? **Using probes.**

Ending questions

Are there any issues, questions, comments that you would like to raise or points you want to add?

Debriefing

I would like to thank you for your participation. I also want to restate that what you have shared with us is confidential. No part of our discussion that includes age, occupation or other identifying information will be used in any reports, displays or other publicly accessible media coming from this research. Finally, I want to provide you with a chance to ask any questions that you might have about this research. Do you have any questions for me?

“Thank You!!”

Annex 5: Amharic version FGDs consent form and questions

እንደምን አደራችሁ፤ ሁላችሁም ስለተገኛችሁ በጣም አመሰግናለሁ።

እኔ ስሜ-----እባላለሁ። አብረው ያሉ ጓደኞቼ ደግሞ ስማቸው ----- እና
..... ይባላሉ። የመጣነውም ከአዲስ አበባ ዩኒቨርሲቲ እና ወረዳ ጤና ቢሮ ነው።

የሚከተለውን እንዳለ አንብብ፡

እንደመግቢያ የተወሰነ ከተነጋገርን በኋላ ስለተለያዩ ጤና ነክ ነገሮች እንወያያለን። እኛም ስለእናቶች ጠቅላላ የጤና አገልግሎት ልምድ፣ እርግዝናን በተመለከተ ስለሚያጋጥሙ ችግሮች፣ ስለ ወሊድ ቦታ ምርጫ እና የጤና አገልግሎት እንዳይጠቀሙ ስለሚያደርጋቸው ችግሮች እና የመሳሰሉትን ጥያቄዎች እንጠይቃችኋለን። በመቀጠልም ስለ እናቶች ጤና አገልግሎት በተመለከተ በአካባቢያችሁ ወደ ፊት እንዲህ ቢሆን ወይም ቢደረግ ብላችሁ የምታስቡት ሀሳብ፣ አስተያየት ወይም ማስተላለፍ የምትፈልጉትን ሀሳብ ተቀብለን ውይይታችንን እንጨርሳለን። በውይይቱ ላይ ለመሳተፍ ፈቃደኛ ናችሁ?

ፈቃደኛ ከሆኑ ይቀጥሉ፤ ፈቃደኛ ካልሆኑ በምስጋና ይለዩ።

የአስተባባሪው ስም----- ፊርማ----- ቀን----- ሰዓት-----

I. የውይይቱ ዓላማ

የውይይቱ ዓላማ የአካባቢውን ማህበረሰብ በደጋ ዳሞት ወረዳ ስለ ወሊድ ቦታ ምርጫ እና እንዲመርጡም የሚያደርጋቸው ምክንያቶችን ወይም ችግሮችን በተመለከተ ያላቸውን አመለካከት እና ግንዛቤ ለማወቅ ወይም ለመረዳት ነው።

II. ስለ ቡድን ውይይትን በተመለከተ

ለመወያየት ተሳታፊዎች እና አስተባባሪው በጠረንጴዛ ዙሪያ ከተቀመጡ በኋላ አስተባባሪው እራሱን በማስተዋወቅ ስለ ቡድን ውይይት ዓላማ ይናገራል። ይህ ውይይትም ከ 45 እስከ 60 ደቂቃዎችን ያህል ይፈጃል።

III. የውይይቱ ህገ ደንቦች

a) ምስጢራዊነትን በተመለከተ

የምትሰጡት መረጃ ምስጢሩ በጥብቅ የተጠበቀ መሆኑን እርግጠኛ ሁኑ። የጥናቱ ቡድን እና ሌሎች ተሳታፊዎች ስለ ሰጣችሁት መረጃ በተመለከተ ግላዊ ማንነታችሁን በሚያጋልጥ ሁኔታ ተላልፎ አይሰጥም።

b) ስለ ተሳትፎ እና ድምጽ ቀረጻን በተመለከተ ምስጢራዊ ስምምነት

ውይይቱን ለመጀመር የእናንተን ፈቃደኝነት ማግኘት ወይም ማወቅ በጣም አስፈላጊ ነው ከዚህም ባሻገር መረዳት ያለባችሁ ነገር መስማማታችሁ ከምንም በፊት እናንተን ነው የሚጠቅመው።

የስምምነት ቅጹን እንዳለ አንብቦው፤

የእናንተ እዚህ መቆየት በፈቃደኝነት ለመሳተፍ መስማማታችሁን የሚገልጽ ነው። ነገር ግን እናንተ የማትፈልጉትን ጥያቄ ያለመመለስም ሆነ ውይይቱ አስፈላጊ ሆኖ ካልታደሱ የማቋረጥ ሙሉ መብት አላችሁ። ለመረጃው ጥራት ሲባል የሚቃወም ሰው እስከሌለ ድረስ ማስታወሻ እንይዛለንም ድምጽ ቀረጻም እናካሂዳለን።

c) ስለ አስተባባሪው፣ ማስታወሻ ያገዙ እና ድምጽ ቀራጩ ሚና በተመለከተ

አስተባባሪው አስፈላጊ በሆነ ሰዓት ስብሰባውን አቅጣጫ ያስይዛል። ማስታወሻ ያገዙ ደግሞ የራሱ የግሉ የሆኑ ሚናዎች አሉት ማለትም የተሳታፊዎችን መልስ ብቻ ሳይሆን የተሳታፊዎችን እንቅስቃሴ ወይም ገጽታ በማየት እንዲሁም ስለ አካባቢው አየር ንብረት እና ሌሎች የውይይቱ መሰረታዊ ሁሌታዎችን በተመለከተ ይጽፋል። በሌላ በኩል ደግሞ ድምጽ ቀራጩ እንዲሁ የራሱ የሆነ ሚና አለው ይህም ድምጽ መቅረጫውን በማስተካከል እያንዳንዱ ተሳታፊ የሚናገረውን ይቀርጻል።

d) የቡድኑ ጥቅም

በዚህ ቡድናችሁ ውስጥ ሁላችሁም ለመናገር ነጻነት ሊሰጣችሁ ግድ ይላል። እያንዳንዱ የምትናገሩት ሀሳብ በጣም አስፈላጊ ነው። በቡድናችሁ ውስጥ ሁሉም ሰው የራሱ የሆነ አስተሳሰብ እና አመለካከቱን የመግለጽ እድል ቢያገኝ በጣም ጥሩ ነው።

e) ያለመስማማት ስምምነት

በቡድናችሁ ውስጥ እውነተኛ ወይም ደግሞ ስህተት የሚባል መልስ የለም። ማንኛውም ሰው የሚመስለውን አስተያየት ወይም አመለካከት መናገር ይችላል። እናቶች በደጋ ዳሞት ወረዳ በእርግዝና እና በወሊድ ወቅት ስለሚያጋጥሙ ችግሮች እንዲሁም ስለወሊድ ቦታ ምርጫ እና እንዲመርጡም የሚያደርጋቸው ምክንያቶችን ወይም ችግሮችን በተመለከተ ያላቸውን አመለካከት በምትናገሩበት ወቅት ትክክለኛውን መረጃ በታማኝነት እንድትነገሩን እንፈልጋለን። የምትሰጡን ሀሳብ ወይም አመለካከት ካለ እርስ በእርሳችሁ በተናገራችሁት ላይ ሳይሆን የየግላችሁን በመወያየት ርዕይ መሰረት ያላችሁን አስተያየት እንድትናገሩ እንፈልጋለን።

የቡድን ውይይት አጀንዳ መምሪያ ቅጽ

ክፍል አንድ፡ መግቢያ

ሁላችሁም ስለራሳችሁ ለቡድኑ አስተዋውቁ። ከጥናቱ ቡድን ከሆኑት ማለትም ስማቸውን፣ እድሜያቸውን እና የትምህርት ደረጃቸውን እንዲያስተዋውቁን ከእነሱ እንጀምር። በመቀጠልም ተሳታፊዎች እያንዳንዳችሁ ስለራሳችሁ እድሜ፣ የትምህርት ደረጃ፣ ስራ እና ለምን ያህል ጊዜ በአካባቢው እንደቆያችሁ ንገሩን።

የአስተባባሪው ስም----- የማስታወሻ ያገዙ ስም-----

የድምጽ ቀራጩ ስም ----- ቀን-----

የመወያያ ቦታ ----- ውይይቱ የተጀመረበት ሰዓት-----

ውይይቱ ያቆመበት ሰዓት----- የተሳታፊው ኮድ ቁጥር -----

የተሳታፊዎች ጠቅላላ ብዛት----- የተሳታፊ እድሜ-----

የተሳታፊ ስራ-----የተሳታፊ የትምህርት ደረጃ-----

ክፍል ሁለት፡ የመወያያ ጥያቄዎች

1. በመቀጠልም በቅድመ ወሊድ እርግዝና አገልግሎት እና ወሊድ አገልግሎትን በተመለከተ ስላላችሁ ልምድ እና እውቀት አካፍሉን ወይም ንገሩን
 - A. ስለ ቅድመ እርግዝና ክትትል የሚነግረን ማን ነው?
 - B. ስለ ወሊድ አገልግሎት የሚነግረን ማን ነው?
 - C. በእርግዝና እና በወሊድ ወቅት የሚያጋጥሙ አደገኛ የጤና ችግሮችን የሚነግረኝ ማን ነው?
 - a. ምክንያታቸው ምን ይሆናል ብላችሁ ታስባላችሁ?
 - b. የሚያስከትሉት ችግርስ ምን ይሆናል ብላችሁ ትገምታላችሁ?
 - c. መከላከያ መንገዳቸውስ ምን ይሆናል ብላችሁ ትጠብቃላችሁ?

ማበረታቻ ጥያቄዎች

- ✓ የበለጠ ልታብራራልኝ/ልታብራሪልኝ ትችላለህ/ትችያለሽ?
- ✓ ምሳሌ ልትሰጠኝ/ልትሰጭኝ ትችላለህ/ትችያለሽ?
- ✓ ከእናንተ መካከል ተመሳሳይ ልምድ ያለው አለ?
- ✓ ሌላ የምትነግረኝ/የምትነግሪኝ አለ?
- ✓ አልተረዳውህም/አልተረዳውሽም?

2. ለመውለድ አመቺ ቦታ ነው ብላችሁ የምትመርጡት ቦታ የት ነው? (ቤት ነው ወይስ ጤና ተቋም) ለምን? ጥቅምና ጉዳቱስ ምንድን ነው? የማበረታቻ ጥያቄዎችን ተጠቀም
3. እናቶች ጤና ጠቋም በመሄድ የወሊድ አገልግሎት እንዲያገኙ የሚያደርጋቸው ምክንያቶች ምንድን ናቸው? (ርቀቱ አጭር ስለሆነ፣ ከጤና ባለሙያዎች ጋር ጥሩ የሆነ አቀራረብ ስላለኝ፣ የቅድመ ወሊድ እርግዝና ክትትል ስለማድረግ እና የመሳሰሉት) (ጤና ጠቋም መውለዱ ጥቅምና ጉዳቱ ምንድን ነው?) የማበረታቻ ጥያቄዎችን ተጠቀም
4. እናቶች ቤት ውስጥ የወሊድ አገልግሎት እንዲያገኙ የሚያደርጋቸው ምክንያቶች ምንድን ናቸው? (በጣም ሩቅ ስለሆነ፣ ወጪውን መሸፈን ስለማልችል፣ የመጓጓዣ ችግር ስላለ እና የመሳሰሉት) (ቤት መውለዱ ጥቅምና ጉዳቱ ምንድን ነው?) የማበረታቻ ጥያቄዎችን ተጠቀም
5. በወሊድ ወቅት እናቶችን ማን ቢያደግባቸው ይሻላል ብላችሁ ትገምታላችሁ? (ዶክተር፣ ነርስ፣ አዋላጅ ነርስ፣ የሰለጠነ የልምድ አዋላጅ፣ ያልሰለጠነ የልምድ አዋላጅ እና የመሳሰሉት) ለምን? ጥቅምና ጉዳቱስ ምንድን ነው? የማበረታቻ ጥያቄዎችን ተጠቀም
6. ስለ ቅድመ ወሊድ እርግዝና ክትትል እና የወሊድ ቦታ ምርጫን በተመለከተ ከባህላዊ እና ህይወጥናታዊ እይታ ምን ይመስላል? የማበረታቻ ጥያቄዎችን ተጠቀም

የማጠቃለያ ጥያቄ

መጠየቅ የምትፈልጉት ጥያቄ፣ ማስተላለፍ የምትፈልጉት አስተያየት እንዲሁም መጨመር የምትፈልጉት ነጥብ አለ?

ማጠቃለያ መልዕክት

ስለተሳትፎአችሁ በጣም አመሰግናለሁ። በድጋሚ መናገር የምፈልገው ነገር ለኛ የሰጣችሁን መረጃ ምስጢሩ እንደተጠበቀ ይሆናል። ስለውይይታችን ማለትም የማንነት መገለጫ ስለሆነው እድሜ፣ ስራ፣ የትምህርት ደረጃ እና ሌሎች የመሳሰሉትን በተመለከተ ለማንኛውም የህዝብ መረጃ ማዕከል ተላልፎ አይሰጥም። በመጨረሻ ጥናቱን በተመለከተ ጥያቄ ካላችሁ መጠየቅ ትችላላችሁ። ለእኔም መናገር የምትፈልጉት ጥያቄ ካለ መጠየቅ ትችላላችሁ።

"በጣም አመሰግናለሁ"

Annex 6: Curriculum Vitae of Advisor

Curriculum Vitae

Personal data

Name: Endalew Gemechu Sendo

Address:

Tel (Mobile): +251-911-196298

Email: endalewaau2012@gmail.com

Date of Birth: Feb 24, 1972

Nationality: Ethiopian

Education:

Tertiary Education:

April 2006-August 2009: MSc Degree in Maternity & Reproductive Health, Addis Ababa University, Addis Ababa, Ethiopia.

September 1999- July 2002: BSc in nursing, Jimma University, Jimma, Ethiopia

September 1990 –July 1992: Diploma in Comprehensive Nursing, Gondar University, Gondar, Ethiopia

Secondary School: 1984- 1989: Lalo Aira Secondary School, West Wollega, Ethiopia

Job Experiences:

Oct 2011- to present time: Lecturer, Addis Ababa University, School of Nursing and Midwifery, Addis Ababa, Ethiopia.

November 2009- Oct 2011: Lecturer, Hawassa University, School of Nursing and Midwifery, Hawassa, Ethiopia.

Oct 2005- Oct 2009: Ass. Lecturer, Alkan University College, Addis Ababa, Ethiopia.

July 2002-July2004: Head, Aira School of Nursing, West Wollega, Ethiopia

June 1992- May 1999: In-charge, Dabassa Health Center, West Wollega, Ethiopia

Trainings:

1. Advanced Seminar on Good University Practices in Sexual and Reproductive Health and Rights with a Gender perspectives, held in Hawassa from 4th to 8th July 2011 in Collaboration with Hawassa University and Group 9 of Universities (Spain).
2. Finance for non-finance managers Training conducted by Ethiopian Management Institute from April 19- 23,2010, Addis Ababa, Ethiopia
3. Training the Trainers Course on Emergency Obstetrics and Neonatal Care from 7th November – 12th November 2010.
4. Basic training on Infection Prevention From March 7-11,2011
5. Integrated management of Newborn and Childhood Illness Case Management Course from May 10-15, 2009, Addis Ababa, Ethiopia.
6. Basic Emergency Obstetrics and Neonatal Care Training prepared for Midwifery Tutors and preceptors in Derartu Hotel, Assella Organized by Federal Ministry of Health (FMOH) in Collaboration with World Health Organization (WHO) July 13-31, 2010.
7. Teaching Methodology Course for Oromia Health Professional Schools Tutors, Assella, July 29-Sept.6,2002

Research and Publications:

1. Disclosure experience to partner and its effect on intention to utilize prevention of mother to child transmission service among HIV positive pregnant women attending antenatal care in Addis Ababa, Ethiopia: **Sendo et al. BMC Public Health 2013, 13:765**
<http://www.biomedcentral.com/1471-2458/13/765>
2. Assessment of Level of Knowledge and Practice of Nursing and Midwifery Students on HIV Post Exposure Prophylaxis in Hawassa University, Ethiopia. Journal of HIV for Clinical and Scientific Research. **www.peertechz.com**
3. Premarital Sexual Practice among Unmarried First Year Undergraduate Students in Alkan University College in Addis Ababa, Ethiopia. Global Journal of Medicine and Public Health. www.gjmedph.org **GJMEDPH 2014; Vol. 3, issue 2**
4. Prevalence and factors associated with sexual violence among female students of Hawassa University in Ethiopia. Global Health Action. <http://www.globalhealthaction.net/23291>

5. Risky sexual behavior for STIs/HIV infection among Alkan University College Students in Ethiopia. Tokyo, Japan. <http://www.spp-j.com>
6. Certificate for participation in Scientific Paper Presentation on the event of the 22nd Ethiopian Public Health Association Annual Conference, November 01-03,2011
7. Certificate of attendance on 13th World Congress on Public Health from April 23-27, 2012, Addis Ababa Ethiopia.
8. Reviewer, for Bio-Medical Central (BMC) Public Health International and Global Health Actions (GHA) peer reviewed Journals, British and Sweden, respectively.

Language Ability: Fluent in English, Oromo Language, and Amharic (Reading, Writing, and Speaking)

Professional Membership: Ethiopian Public Health Association and Ethiopian Nursing Association

Skills:

- Able to use personal Computer
- Good negotiator and interpersonal skills

References:

1. Amsale Cherie, Head, School of Nursing and Midwifery, Addis Ababa University, Ethiopia. Tel(Mobile): 0911-663763, E.mail: amsalec2002@yahoo.com
2. Asrat Demissie, Lecturer, School of Nursing and Midwifery, Addis Ababa University, Ethiopia. Tel(Mobile): +251-911-201135
3. Fakadu Aga, Lecturer, School of Nursing and Midwifery, Addis Ababa University, Ethiopia. Tel(Mobile):+251-910-033684

Up-dated on June 2014.

Annex 7: Curriculum vita of principal investigator

Alemayehu Sayih Belay

+251-911-669861

alex.sayihalem2012@gmail.com

Dear Sir /Madam

I would like to submit to Addis Ababa University, College of Allied health Science, Department of Nursing and Midwifery with the intention that you can ethically approving my proposal by considering my outstanding dedication and hard work in doing proposal development.

I was a graduate nurse of Jigjiga University with a CGPA of 3.62 and have a one year experience as a clinical nurse at black lion specialized referral hospital and one year experience as an instructor at Mizan Tepi University. Generally, I have two years of experience after graduation in 2002 E.C. (2010 G.C). Currently I am just attending post graduate program on Maternal and reproductive health at Addis Ababa University.

Enclosing here with my curriculum vita, my whole proposal writing/work will be sufficient to fulfill the criteria of Addis Ababa University proposal development. I am looking forward for your favorable positive response towards my proposal work and in accomplishment of my thesis work.

Yours Sincerely

Alemayehu Sayih

Curriculum Vita

Personal details

- ✦ Name Alemayehu Sayih Belay
- ✦ Sex.....Male
- ✦ Date of birth.....April 5, 1988 G.C
- ✦ Marital statusSingle
- ✦ Nationality.....Ethiopian

Permanent address

- ✦ Mobile number.....+251-911-669861/ 0923797246
- ✦ E-Mail address.....alex.sayihalem2012@gmail.com

Educational background

- ✦ 1995-2003 G.C Woin Woha elementary school
- ✦ 2004-2007 G.C Debre Markos secondary and preparatory school
- ✦ 2008-2010 G.C Higher education in Jigjiga University in studying of nursing bachelor of science with cumulative grade point average (CGPA) of 3.62.
- ✦ Currently in 2012 G.C am just attending post graduate program at Addis Abeba university.

Different certifications

English language improvement training certification.

Drug administration and control authority of Ethiopia.

Professional experience

One year of experience as a graduate nurse at black lion specialized referral hospital in pediatric ward and medical ICU and;

One year of experience as an assistant instructor at Mizan Tepi university, College Of Health Science, Department Of Nursing.

Research experience

A research project reported to asses KAP of female students of Dr. Abdul Mejid Hussian collage of teachers training institute about abortion and its legality in Ethiopia.

Language

	Speaking	Writing	Listening	Reading
Amharic	Excellent	Excellent	Excellent	Excellent
English	Excellent	Excellent	Excellent	Excellent

Hobby

Reading magazines', watching movies, listening different radio programs, reading recent academic information, reading books and making up to date myself.

References

Endalew Gemechu (MRH, BSc, RN), instructor at Addis Ababa University, college of health Science, Departement of nursing. Mob. +251-911-196298

Abyot Asres, MPH, dean of college of health science, Mizan Tepi university. Mob. +251-911-905554/ 0911684317

Yosef G/Yohannis ,MPH, department head of nursing, college of health science Mizan Tepi university. Mob. +251-932-974092

Dr. Abdi Mohammad medical doctor and facility head of health science in Jigjiga university Mob. +251-913-268666

Annex 8: 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: Alemayehu Sayih

Signature: _____

Date: June 2014

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

Name: Endalew Gemechu (MRH, BSc, RN)

Signature: _____

Date: June 2014