

ADDIS ABABA UNIVERSITY

FACULTY OF MEDCINE

DEPARTMENT OF COMMUNITY HEALTH

ASSESSMENT OF UTILIZATION OF SKILLED BIRTH ATTENDANT
AT DELIVERY IN MEKELLE TOWN, NORTHERN ETHIOPIA

BY

Tsehainesh Abay (B.Sc.)

**A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES
OF ADDIS ABABA UNIVERSITY IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTERS IN PUBLIC
HEALTH**

JANUARY 2007

ADDIS ABABA

ETHIOPIA

ADDIS ABABA UNIVERSITY

FACULTY OF MEDCINE

DEPARTMENT OF COMMUNITY HEALTH

ASSESSMENT OF UTILIZATION OF SKILLED BIRTH ATTENDANT AT DELIVERY IN
MEKELLE TOWN, NORTHERN ETHIOPIA

BY

Tsehainesh Abay (B.Sc.)

**A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES
OF ADDIS ABABA UNIVERSITY IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTERS IN PUBLIC
HEALTH**

ADVISOR

**Yamane Berhane (MD, MPH, Phd)
Professor of Epidemiology and Public Health**

**JANUARY 2007
ADDISABABA**

ETHIOPIA

ADDIS ABABA UNIVERSITY
FACULTY OF MEDCINE
DEPARTMENT OF COMMUNITY HEALTH

ASSESSMENT OF UTILIZATION OF SKILLED BIRTH ATTENDANT
AT DELIVERY IN MEKELLE TOWN, NORTHERN ETHIOPIA

BY

Tsehainesh Abay (B.Sc.)

Approved by the Examining Board

Chairman, Dep.Graduate Committee

Prof. Yemane Berhane
Advisor

Dr.Mesganaw Fantahun
Examiner

DECLARATION

The under signed, declare that this is my original work and has never been presented in this or any other university and that all the source material used for this thesis have been duly acknowledged.

Name Tsehainesh Abay

Signature _____

Place ADDIS ABABA

Date of submission _____

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

Name Prof.Yemane Berhane

Signature _____

Date _____

Acknowledgments

First and foremost I am deeply grateful to acknowledge my advisor professor Yemane Berhane, for his relevant, timely and constructive comments and guidance during the whole research process.

I would like to appreciate and give very special thanks to Pathfinder International\Ethiopia for providing me financial support to conduct this research.

I am also very happy to thank Ato Araya Kahsu, Deputy Tigray Health Bureau Head for his unreserved help to facilitate financial and administrative supports during the research work.

My thanks also go to Department of Community Health, Faculty of Medicine, Addis Ababa University for all the efforts to provide me with the necessary knowledge and skill to conduct the study.

My very great gratitude goes to my husband Mehari Hadgu, my children Amanuel, Semhal and Abrehet for their unlimited encouragement and financial support through out the course and the research work.

I am also very glad to forward my special thanks to my brothers and sisters, particularly my brother Ermias Abay, for their encouragement and for the support they offered me during my research work

My thanks also go to Ato Hailemariam Kasahun, Head of HMIS, Tigray Reginal Health Bureau for the technical support he offered me.

Finally, I would like to acknowledge all the women who participated in this study for their kindly cooperation in providing the information required for the study.

TABLE OF CONTENTS	page
Acknowledgment-----	I
Table of content-----	II
List of Tables-----	III
List of Figures-----	IV
Acronyms-----	V
Abstract-----	VII
1. Background	
1.1 Introductions-----	1
1.2. Literature review-----	3
2. Objective-----	10
3. Methodology-----	11
4. Ethical Considerations -----	15
5. Dissemination of findings-----	15
6. Results-----	17
7. Discussions-----	33
8. Strengths and limitations of the study-----	39
9. Conclusions and recommendations-----	40
Références-----	42
Annexes I : Conceptuel Framework-----	I
Annexes II : Map of study area-----	II
Annexes III : English version of the questionnaire-----	III

List of Tables

Title	Page
<p>Table 1: Socio-demographic characteristics of respondents, MekelleTown, Tigray, September, 2006 -----</p>	15
<p>Table 2: Obstetric History and ANC experience of the respondents, Mekelle Town, September, 2006 -----</p>	17
<p>Table3: Predisposing, enabling, & reinforcing factors in utilizing SDA at the last delivery, Mekelle Town, September, 2006. (n=600)-----</p>	22
<p>Table 4: Client satisfaction to institutional delivery service during the last delivery Mekelle Town, September, 2006-----</p>	
<p>Table 5: Women’s utilization of skilled delivery attendant verses Socio- demographic variables adjusted for Socio- demographic variables, in Mekelle Town, Tigray, September 2006-----</p>	28
<p>Table 6: Women’s actual utilization of skilled delivery attendant verses obstetric variables Adjusted for obstetric variables, Mekelle Town, September, 2006--</p>	31
<p>Table 7: Association of skilled delivery attendant utilization with Women’s selected predisposing, enabling and reinforcing factors, Availability of HF, & preferences of others in Mekelle Town, September, 2006-----</p>	33

List	of	Figures	
			<u>Page</u>
FIGURE 1: Reported reasons for home delivery -----			20
FIGURE 2: Reported reasons for Institutional delivery-----			20

List of acronyms

<u>AAU</u>	<u>Addis Ababa University</u>
<u>ANC</u>	<u>Antenatal Care</u>
<u>CI</u>	<u>Confidence Interval</u>
<u>CSA</u>	<u>Central Statistics Office</u>
<u>DCH</u>	<u>Department Of Community Health</u>
<u>DHS</u>	<u>Demographic and Health Survey</u>
<u>DHP</u>	<u>Delivery with Health Professional</u>
<u>DWOUTH</u>	<u>Delivery without Health professional</u>
<u>EPIINFO</u>	<u>Epidemiological Information</u>
<u>HD</u>	<u>Home Delivery</u>
<u>HF</u>	<u>Health Facility</u>
<u>ID</u>	<u>Institutional Delivery</u>
<u>MCH</u>	<u>Maternal & Child Health</u>
<u>MDG</u>	<u>Millennium development goal</u>
<u>OR</u>	<u>Odds Ratio</u>

<u>SDA</u>	<u>Skilled Delivery Attendant</u>
<u>SPSS</u>	<u>Statistical Package for Social Sciences</u>
<u>TBA</u>	<u>Traditional Birth Attendant</u>
<u>TTBA</u>	<u>Trained Traditional Birth Attendant</u>
<u>UNFPA</u>	<u>United Nation Population Fund</u>
<u>UNICEF</u>	<u>United Nation Children's Fund</u>
<u>USAID</u>	<u>United States Agency for International Development</u>
<u>WHO</u>	<u>World Health Organization</u>

ABSTRACT

Background: skilled attendant for every pregnant woman during childbirth is the most critical intervention for improving maternal and child health. Ethiopia with maternal mortality ratio of 673 per 100,000 live births, the majority of births are delivered at home and the proportion of deliveries assisted by skilled attendant is very low.

Objective: to assess utilization of skilled birth attendant at delivery, among mothers who gave birth the last one year prior to the survey in Mekelle town.

Methodology: A cross-sectional household survey was conducted from Sep. 2006 to Oct.2006. Women who had delivered in Mekelle Town, within the last one-year prior to the survey obtained using proportional to population size of 10 “Tabias” through random walking were interviewed using structured and pre-tested questionnaire.

Result: A total of 600 women were included in the study. 69% of the women utilize skilled birth attendant during delivery. Among the client who had institutional delivery their satisfaction to the time the health worker spent with them, cleanliness of instrument or equipment, the courtesy and respect offered by the provider, measures taken to assure their privacy and comfort , and professional competency and skill of the health worker during delivery was (95%). Births to women with primary education are two times more likely (OR=2.19 and 95%CI=1.33-3.61), and births to women with secondary and above education are four times more likely (OR=3.90 and 95%CI=1.95-7.81) to utilize SDA as compared to illiterate women. Women who have secondary and above educated husband are three times more likely to utilize SDA than those illiterate (OR=3.10 and 95%CI=1.29-7.42). Women with first pregnancy OR=4.11 and 95%CI= 2.20, 7.68), women who have ANC visits OR=2.95 and (95%CI= 1.63, 5.37), women who know presence of pregnancy and delivery complication OR=3.40 and 95%CI 1.76.-6.57), women who obtained MCH information 2.27 and 95%CI

1.17-4.41), Those who have visit to health facility OR=2.95 and 95%CI=1.06-8.21), those who can get transportation OR=2.67 and 95%CI=1.59-4.49), and those their husband's prefer to use skilled delivery attendant during delivery OR=4.65 and 95%CI=2.37-9.13), were more likely to utilize skilled delivery attendant than those who are disadvantaged.

Conclusions: increasing educational opportunities for both women and their husbands and particularly for girls, promotion of ANC follow-up with provision of MCH information particularly, the need for SDA at every childbirth, health workers particularly health extension workers should promote community awareness programs, home visit, and community-based delivery systems which focus the disadvantaged women and facilitation of supportive environment, such as supplies, equipment, establishing functioning system of referral and appropriate training of midwives are recommended.

1. INTRODUCTION

The use of a skilled attendant has been cited as the single most critical intervention for improving maternal and child health (WHO, UNFPA, 1999).

“Skill attendance refers to professionally trained health workers with the skills necessary to manage a normal delivery and diagnose or refer obstetric complications. This usually refers to a doctor, midwife or nurse. Skilled attendants must be able to manage a normal labor and delivery, recognize complications early on and perform an essential interventions, start treatment, and supervise the referral of mother to the next level of care if necessary (WHO/UNFPA/Word Bank,1999).

Although, the definition is being standardized many attendants who are described as “skilled” would probably not meet the international accepted criteria. In many settings mid-level providers such as midwives were not trained or authorized to perform some of the procedures required of a skilled attendants such as management of complications of incomplete abortion, vacuum extraction and manual removal of placenta. However if they get appropriate training, equipment, supplies and support, mid level providers can safely and competently perform this life saving procedures (UNFPA, 2004).

The proportion of women who delivered with the assistance of a skilled birth attendant is one of the indicators in meeting the fifth millennium development goal (2000). (UNFPA, 2004). Moreover, providing skilled care at birth goes hand in hand with the MDG to reduce child mortality, particularly neonatal mortality. Nearly 3.4 million of the 8 million infant deaths each year occur with in the first week of life and are often due to a lack of or inappropriate

care during pregnancy, delivery and the post-partum period (UNFPA, 2004). In addition, in the developing world, complications from HIV/AIDS and malaria are increasingly becoming indirect causes of maternal deaths and morbidity. (UNFPA, 2004).

Utilization of skilled delivery attendant is more likely to be similar or slightly increase from institutional delivery because births delivered at a health facility are more likely to be delivered by a trained health professional and births delivered at home are usually more likely to be delivered without assistance from a health professional (EDHS, 2005).

Due to the historical data showing a correlation between having skilled care at delivery & declining maternal mortality “proportion of births attended by skilled health personnel” is being accepted to be one of the most relevant process indicators to track changes in maternal mortality levels, (Graham et al. 2001). In almost all countries where health professionals attend more than 80% of deliveries, maternal mortality ratios are below 200 per 100,000 live births (UNFPA, 2004).

In Ethiopia with maternal mortality of 673 per 100,000 live births, the majority of births delivered at home without any supervision from health professionals’. Only 45% of deliveries in urban area were assisted by health professionals (EDHS, 2005). In Tigray 35% of deliveries were assisted by health professionals (EDHS, 2005). Particularly, in Mekelle town, where majority of the population lives within 5 kilometers of staffed health facilities, women who have delivery assistance from health professionals are low.

For the low coverage of professionally attended deliveries, there are factors that influence the care a pregnant woman receives. A study in Jimma town indicates that, maternal age, their

educational status, influence from their husbands and relatives in relation to delivery attendants, women's power to make the decision in terms of getting institutional delivery services and ANC follow up are important predictors of their place of delivery (Ayele B, 2005). In addition to lack of sufficient maternity care services, low utilization of those services that are available has been recognized as a problem (Walt G, 1990).

Therefore, this study was aimed to measure proportion of women who delivered with the assistance of a skilled birth attendant and to identify the factors that influence utilization of skilled attendant at delivery among mothers who gave birth in Mekelle Town, Tigray Regional state of Ethiopia. The result of this study will give information on the proportion of deliveries conducted by skilled delivery attendant and factors which influence the utilization of SDA and can help program planners, policy makers and health care providers to focus on the factors and the disadvantaged women.

1.2 LITERATURE REVIEW

1.2.1 Definition of skilled attendant

Skill attendance refers to professionally trained health workers with the skills necessary to manage a normal delivery and diagnose or refer obstetric complications. This usually refers to a doctor, midwife or nurse. Skilled attendants must be able to manage a normal labor and delivery, recognize complications early on and perform an essential interventions, start treatment, and supervise the referral of mother to the next level of care if necessary (WHO/UNFPA/World Bank,1999)

One of the major challenges in measuring and interpreting the skilled attendant indicator is determining who is counted as a skilled attendant. Many attendants who are described as “skilled” may not meet the internationally accepted criteria. Therefore, doctors, midwives, nurses, health assistants and auxiliary midwives are considered as skilled attendant, who have been regularly admitted to an educational programme, recognized in the country, have successfully completed the prescribed course of studies in midwifery and acquired the qualifications to be registered and legally licensed to practice midwifery (UNFPA, 2004). This definition of skilled attendant clearly distinguishes between providers who are simply trained. “Trained” implies but does not guarantee the acquisition of knowledge and competence with regard to midwifery skill. Therefore, trained or not adequately skilled community health worker TBA, TTBA do not fall under the WHO accepted definition of skilled attendant (UNFPA, 2004).

1.2.2 Maternal Mortality

Complications of pregnancy and childbirth are the leading cause of disability and death among women between the ages of 15-49 (World Bank, 1999). Approximately 585,000 women die every year from maternal mortality pregnancy and childbirth complications, for each woman that dies, more than 25 others suffer a debilitating injury, often with life long consequences. More than 90% of these deaths and morbidity occur in developing countries, indicating that they could be averted with adequate and available recourses and health service (World Bank, 1999)).

Maternal mortality affects not only women, but also their families and communities. The risk of an infant dying increases significantly with the mother’s death (UNFPA, 2002). The death

of a woman of reproductive age also brings significant economic losses and setbacks to community development. Hence, most recently, at the millennium summit in 2000, the UN member states issued the MDG that call for a three-fourth reduction in maternal mortality rate by the year 2015 (UNFPA, 2004).

The slow success in reducing maternal mortality rates is mainly due to complex political and social issues related to poverty and the status of women. It is also due, in part, to the original misguided emphasis of maternal mortality programs in the developing world. That shifted the focus away from the critical period of delivery (UNFPA, 2002).

What makes maternal mortality such a challenge is the fact that the complications related with pregnancy and childbirth are extremely difficult to predict. Nearly two third of maternal deaths worldwide are due to five direct causes: hemorrhage (24%), obstructed labor (8%), eclampsia (pregnancy induced hypertension) (12%), Sepsis (15%) and unsafe abortion (13%). The remaining 20% and 8% are due to indirect cause and an existing medical condition that is worsened by pregnancy or delivery (World Bank, 1999)).

About 15 percent of all pregnancies results complications and if untreated; many of these complications will be fatal (UNFPA, 2002). Hospital records from earlier study also indicated that 70% of maternal deaths are directly attributed to complications of pregnancy, labor and delivery, and unsafe abortion (Kwast B.E. 1985). For this reason, the focus for addressing maternal mortality has shifted from predicting complications during pregnancy to preparing for efficient emergency intervention (UNFPA, 2002).

In some developing countries where maternal mortality reduction programmes have been successful; they made a gradual shift to professional attendance at birth and move towards facility-based deliveries (UNFPA, 2002). In Cuba, Malaysia and Sri Lanka where maternal mortality is comparatively low, governments made a commitment to strengthen the entire health care delivery system. This has resulted in high proportion of births attended by skilled professionals with access to a reliable referral system for complicated deliveries (UNFPA, 2002).

It is well established that giving birth in a medical institution under the care and supervision of skilled care providers promotes child survival and reduces the risk of maternal mortality (Sugathan KS., 2001). In developed countries and in many urban areas of developing countries, skilled care at delivery is usually provided in a health facility. However, birth can take place in a range of appropriate places, from the home to a referral center, depending on availability and need. The home may be appropriate for a normal delivery if the person attending the delivery is skilled attendant and if referral to a higher level of care is possible (World Bank, 1999).

According to UNFPA's strategies to reduce maternal mortality, skilled attendance at birth is one of the strategies that address the care a woman should receive at the time of delivery. Therefore, as Starrs.1997 indicate "Having a health worker with midwifery skills present at childbirth, backed-up by transportation in case emergency referral is required, is the most critical intervention for making motherhood safer (Starrs, 1997).

1.2.3 Factors influencing utilization of skilled attendant at birth

1.2.3.1 Socio-demographic factors

A number of studies have stressed the role of socio economic and demographic factors in influencing demand for utilization of attended delivery. Many of these studies have also showed that utilization of attended delivery is strongly affected by women's education. That is educated women are more likely to have attended institutional delivery (World Bank, 1999).

As study in India showed mother's education had large positive effects on the odds of institutional delivery (Sugathan KS., 2001). In another study conducted in Bangladesh the utilization of a trained attendant consistently increased with mother's education. About 46% of women with ten or more years of schooling delivered in a health facility compared to 13% with no education (Sugathan KS., 2001).

Studies done in Ethiopia also indicate similar conclusions. According the community-based study in Gulele district, Addis Ababa, the risk of choosing to deliver at home was found high for those who were illiterate (Fantahun M, 1992). Similarly, the study done in Arsi zone central Ethiopia indicate, women who had no formal schooling were found to attend antenatal care less likely (Mesfin M, 1996). Urban females in Butajira town also had the lowest mortality rates, which could be associated with greater opportunities for female education in urban areas (Berhane Y, 2000)

Women's economic factor also determines utilization of skilled attendant care. For this reasons even when formal fees are low or non-existent, poor women often face expenses of transport, drugs, and food or lodging for the women for delivering and other pregnancy related emergencies (World Bank, 1999).

1.2.3.2 Previous Obstetric care utilizations

Worldwide experience verifies that antenatal care use is higher than delivery by skilled attendants. In Ethiopia according to DHS 2000, EDHS, 2005 antenatal care coverage is 27%, 27.6% respectively and professionally assisted deliveries were 6% (EDHS, 2000, EDHS, 2005). In most studies antenatal follow up of pregnant mother have been found to have strong positive correlation with institutional delivery. In Andhra Pradesh India, pregnant mothers who received an antenatal check up are found several times more likely to give birth in a medical institution than mothers who didn't receive any antenatal check up, even after controlling for a number of potentially confounding variables. With age, birth order, religion, and tribe controlled by holding them constant at their mean values in the underlying logistic regression, the odds of giving birth in a medical institution is 5.4 times higher for mothers who received an antenatal check up than for mothers who did not receive on antenatal check up (Sugathan KS. 2001).

With regard to parity, a professional assisted delivery to mothers is inversely related to women's parity. Women with more than one child are 50% less likely to receive professional delivery care than parity one women (Mekonen Y, 2003). Similarly women in Undra Pradesh, India are more likely to get care for their first delivering than others that follow. This is

associated with factors like fear of the unknown or excitement that is probably associated with the first child birth (WHO, SEAR, 2003).

1.2.3.3 Women's decision making power

Women's decision-making power is another factor usually exists within the community that influences use of skill attendant at delivery. In many parts of the world, women's power to make decisions is limited, even over matters directly related to their own health. In Bangladesh, it is usually the mother in law and husband who make the decisions to seek (or not to seek) care (Safe Motherhood 1997). According to the three levels of delay in decision making for emergency obstetric care, decisions at the first two levels are dependent on the woman's family and community resource. Poor community tends to delay decision making or making wrong choices when there are complications. (UNFPA, 2002).

1.2.3.4 Predisposing factors

Some studies have presented evidence that the effect of knowledge of women about delivery complications have influence on skill attendant utilization. With regard to access to information women and community members often do not know how to recognize, prevent or treat pregnancy complications, or when and where to seek obstetric help. The study in Ghana shows that, 64% of women who died of pregnancy complications sought help from a traditional birth healer before going to a health facility and had no information with regard to pregnancy related complications (www.safemotherhood.org). Study conducted in India in four states, shows that, mothers who are regularly exposed to electronic mass media are several times more likely to give birth in a medical institution than mothers not exposed (Sugathan KS., 2001).

1.2.3.5 Beliefs, attitudes and perception of women about skill attendant utilization

In a study done in southern Ethiopia, professionally assisted delivery was very low. A medically trained person attended only 3.3% of the women during the study period (Mekonnen Y, 2003). For this low coverage Cultural norms, perceptions and practices of mothers may negatively impact on skill attendant care at delivery. Studies indicated that the perception of health and risk during pregnancy, birth and post partum periods strongly influence health seeking behavior. On the other side, formal health services also can conflict with ideas about what is normal or acceptable including preference for privacy, modesty of female attendants. The Saraguro Indians in Ecuador did not use the affordable, accessible maternal care because they feel that hospitals violate women's privacy during childbirth and because many health professionals are men (Leslie J, Gupta RG. 1989).

This is also true in Ethiopia where only 6% of women deliver with a skilled attendant and 8% postnatal care with 48 hours of delivery (DHS, 2000). Thus, obstetric services are often unused even when accessible because of low acceptability (most health workers are men) (Knippenberg R, et al.2005).According to the study conducted at Gulele District among those who wished to deliver at home (42.9%) their reasons were, relatives would be near by, (23.8%) unaffordable cost for delivery at health institution, more trust on TBA or relatives than health professional.

1.2.3.6 Enabling factors

The availability of skilled attendant, accessibility of health institutions and the presence of referral system are some factors that enable mothers to utilize skilled attendant care. Studies

indicate that one of the reasons women give for choosing not to use available obstetric care is poor access to health institutions. Since most women live more than five kilometers from the nearest health institutions, vehicles shortages and poor road conditions affect skilled attendant care. In Tanzania 84% of women who gave birth at home intend to deliver at a health facility, but couldn't because of distance and lack of transportation (G. Biego *et al*, 1995.). Study conducted at Gullele district in Addis Ababa also shows that the reasons given for preferring to deliver in health institution is high quality of service 50.1%, following by nearness of health institution 36.8%, and the approach of good health workers 9.0 %. (Fantahun M, 1992).

Delays made by health professionals in referring women from community health facilities to hospitals, is also an important barrier to life saving maternal care. In Massavingo Zimbabwe a significant proportion of maternal deaths were caused by avoidable factors including failures by health workers to identify women suffering from serious complications and to refer them to a higher level of the health care system (S. Fawcus *et al*. 1996). A study of 718 maternal deaths in Egypt also found that 92% of them could have been avoided if good quality care had been provided (World Bank, 1999).

Therefore, this study tries to measure the proportion of utilization of skilled attendant at birth and identify factors influencing utilization of skilled birth attendant among mothers who gave birth for the past one year prior to the survey in Mekelle town.

2. Objective

2.1 General Objective

To assess utilization of skilled birth attendant at delivery, among mothers who gave birth during the last one year in Mekelle town, prior to the survey.

2.2 Specific Objectives

1. Measure proportion of deliveries assisted by skilled birth attendant, among mothers who gave birth during the last one year prior to the survey.
2. Identify factors affecting utilization of skilled birth attendant at delivery, among mothers who gave birth during the last one year prior to the survey.

3. Methodology and Materials

3.1 Study design: Descriptive cross sectional, household survey with internal comparison.

3.2 Study period: From September 2006 to Oct. 2006

3.3 Study area: The study was conducted in Mekelle town, which is 776 km, North of Addis Ababa. The town has 10 localities called "Tabias" with an area of 24.44 square kilometers. Its population is estimated to be 161,738. Out of this 82,030 are males and 79,708 are females (Mekelle Zonal Health Beuroe Report, Dec 2004). There is one referral hospital, one NGO hospital, three Health centers and one NGO clinic, which render reproductive health service and private clinics. In addition there are two public and one private health professional training institutions in Mekelle.

3.4 Source population: All women of childbearing age (15-49yrs) in Mekelle town.

3.5 Study population: The study population includes all mothers who had given birth in the past one year in Mekelle town prior to the survey.

Exclusion criteria: - Mothers who did not gave birth in Mekelle town in the past one year prior to the survey

- Mothers who stay for less than six month prior to the last birth
- Mothers who were not mentally and physically capable of being interviewed

3.6 Sample size Determination:

To measure the proportion of utilization of skilled attendant among mothers who gave birth:

- Women who can give birth in the town are estimated to be 2.5 % of 161,738 = 4,043, assuming 40% loss = 1,617
- Prevalence of delivery assistance from health professionals is 6% (DHS, 2000).

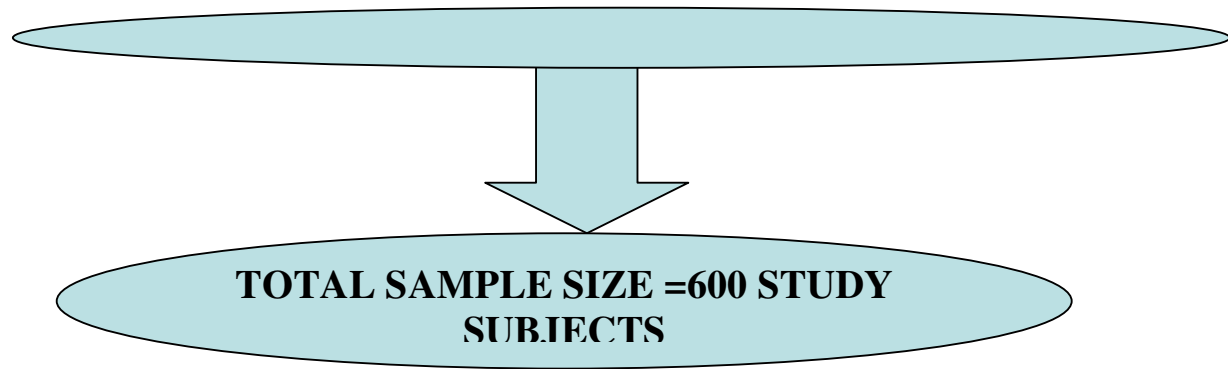
- Considering α 5% and power of the study 80%

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

The sample size for the study was 600 women who had given birth with in the last year prior to the survey.

3.7 Sampling Procedure: Sample size was obtained by using proportional to population size of the ten localities. By communicating with key – informant of each locality starting point was randomly selected and going straight with in each house hold, mothers who gave birth in Mekelle town for the past one year before September, 2006 were interviewed until the total sample size was obtained.

MEKELLE TOWN										
	Addis Alem	AdiHak i	Ayder	Aynalem	Hadenet	Hawelti	Industry	Kedamaye Weyan	Sewhinugus	Qul
Tabia										
HH	3715	3411	4575	697	3972	4138	3915	3411	3911	329
No										
%	10	10	13	2	11	12	11	11	11	9
sample	60	60	78	12	66	72	66	66	66	54



3.8 Data collection Instrument: Interview using standard structured questionnaire was used after reviewing relevant literatures and adapting from previous similar studies. The English version was translated to Tigrigna. Data collectors were 10 female midwife students and two midwife supervisors. They conduct the interview at the women's house of those who were eligible. The interview time was in the morning and evening where most women are in their home. In addition the interviewers were giving appointment through the Tabia agents mainly for those who could not be available at working hours and days to be interviewed on Sundays.

Variables

Dependent (outcome) Variable

- Utilization of skilled attendant at delivery

Independent (determinant) Variable

- Socio demographic factors (Age of mother, marital status, Religion, Ethnicity, occupation, education, monthly income, information obtained).

- Obstetrics factors (Obstetrics history, parity, birth order, past history of pregnancy, delivery and post partum)
- Predisposing factors(knowledge of mothers about pregnancy and delivery complications and services, beliefs and attitudes of mothers about health facilities, place of delivery, perception of mothers about benefits of having skilled attendant at delivery and barriers to utilization of skilled attendant at delivery)
- Reinforcing factors (influence from husband and relatives Information)
- Enabling factor (referral system, availability and accessibility of delivery service, income level)
- Women’s decision making power
- ANC utilization
- Client satisfaction, for time spent by health worker, cleanliness of place & instruments, supplies, respect& comfort, and competency of health workers.

3.9 Data quality assurance: Training was given for 2 days by the principal investigator, on the general objective of the study, technique of interview on how to approach the respondents and keep confidentiality and privacy. The questionnaire was pre tested on twenty women in Wukuro town who have similar socio- demographic characteristics with the people of the study area before the starting of the actual study. Findings and experiences from the pre – test were used to modify and rearrange the data collection instrument. Questionnaires were checked for completeness on daily basis by immediate supervisors. After checking for consistency and completeness, the supervisor’s submit the filled questionnaire to the principal investigator. Incorrectly filled or missed ones were sent back to the respective data collectors

for correction .The principal investigator also rechecked the completed questionnaire to maintain the quality of the data

3.10 Data entry, cleaning and analysis; the coded data were entered, using Epi-info version 6.04 and exported to SPSS version 11.0 for data cleaning and analysis.

Analysis was done according to the objectives of the study as described below.

Specific Objective 1

- Proportion of deliveries assisted by skilled attendant, among mothers who gave birth during the last one year prior to the survey was calculating.

of births by skilled delivery attendant during the specific period X 100

Total # of live births occurring within the same specific period

- Description of the study population was done by analyzing the distribution of the respondents by the variables listed in terms of frequencies and percentages

Specific Objective 2

- Crude odds ratio was calculated to see if there is any association between the main dependent and selected independent variables
- Multiple logistic regression was used to asses any association between the main dependent and selected independent variables by adjusting for the potential effects of confounding variables (Adjusted ORs). Variables were selected for the logistic model based on previous literature reviewing. In the analysis of client satisfaction the very satisfied and very dissatisfied were categorized as satisfied and dissatisfied group, because the number of the

respondents who were very satisfied or very dissatisfied was small in number. In addition, neutral responses were classified as dissatisfied considering that they may represent a subtle way of expressing dissatisfaction.

4. Ethical Consideration: The ethical approval and clearance were obtained from the Department of community Health and Medical Faculty of the Addis Ababa University. Formal permission was also obtained from Tigray Regional Health Bureau, Mekelle zonal Health Office, and Mekelle Town administration and from each Tabia administrations. Data collectors were health professionals and created a trusting environment by respecting the participant's privacy. Participation in the survey was voluntary. More over, individual verbal consent of the study participant was obtained.

5. Dissemination of Findings: The findings of this study will be disseminated to Department of community Health, Addis Ababa University, Federal Ministry of Health/Tigray Health bureau, Mekelle Zonal Health office and Pathfinder International/Ethiopia. The findings also will be presented in various Seminars/workshops and may be also published in a scientific journal.

Operational definition

- **Skilled attendant:** are doctors, Midwives, Nurses or Health assistants Auxiliary Midwives, who undergo formal education in educational programme, and successfully completed the qualification to be registered and legally licensed to practice midwifery.
- **Urban Town:** Are localities in which urban kebele administration that have 1000 or more persons whose inhabitants are primarily engaged in non agricultural activities are identified as towns.
- **Maternal death:** Deaths of women while pregnant or within 42 days after 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.

- **Predisposing factors:** Any characteristics of an individual which facilitates or hinders utilization of skilled birth attendant, like knowledge, perception.
- **Reinforcing factors:** are influences of significant people that encourage or discourage behavioral change.
- **Enabling factors:** are factors that make it possible or convenient for the individuals to carry out the utilization of skilled birth attendant

6. RESULT

6.1 Socio-Demographic Characteristics of study population

A total of 600 women were interviewed for the survey; 156(26.0%) were less than the age of 20 years, 393(65.5%) between the age of 20 and 34 and the remaining 51(8.5%) were between the age of 35 and 49 with mean age of 24.90 ± 5.4 (Table.1).

Concerning marital status, 519(86.5%) of the women were currently married followed by 72(12%) single and the rest 9(1.5%) were divorced and widowed. With regard to religion 544(90.7%) were Orthodox Christian while 8.5% were Muslims.

The majority (97.8%) belong to the Tigray ethnic group. Among the interviewed mothers 293(48.8%) have primary education and 174(29 %) were with secondary education and the rest 133(22.2%) were with no education.

By occupation 491(81.8%) were housewives and 109(18.2%) were having some job. With regard to the income of respondents, 514(85.7%) were with no income and the mean (\pm SD) for monthly income of the respondents was found to be ETB 476.93 \pm (343.56). With husband's education of the respondents' 259(49.9%) were having primary education and 228(43.9%) secondary education and the rest 32(6.2%) has no education.

Table 1: Selected Socio-demographic characteristics of respondents,

Mekelle Town, September, 2006. (n=600)

Variable	Frequency	Percent
Age of Respondents	156	26.0
<20	393	65.5
20-34	51	8.5
35-49		
Marital status		
Married	519	86.5
Single	72	12.0
Divorced	5	0.8
Widowed	4	0.7
Religion		
Orthodox	544	90.7
Muslim	51	8.5
Others	5	0.8
Ethnicity		
Tigray	587	97.8
Amhara	11	1.8
Others	2	0.3
Women's education		
Illiterate	133	22.2
Primary education	293	48.8
Secondary education & above	174	29.0
Women's Work status		
Housewife	491	81.8
Gov. Employee	43	7.2
Private Business	47	7.8
Private Employee	12	2.0
Others	7	1.2
Monthly Income		
< 150Birr	16	20.3
150- 499 Birr ₂	26	32.9
≥ 500 Birr	37	46.8
Husband's education		
Illiterate	32	6.2
primary education	259	49.9
Secondary education & above	228	43.9

6.2 Obstetric History and ANC Experience of the respondents

For 231 (38.5%) mothers the last pregnancy was their first and 63 (10.6%) of them have 5 to 10 pregnancies. Among the respondents 231 (38.5%) have one child, 322 (53.7%) have 2-4 children, 47 (7.8%) have ≥ 5 children with mean parity of 2.04 ± 1.37 .

Regarding the prenatal service utilization of respondents 539 (89.8%) have attended at least once for the last pregnancy and 453 (84.2%) have received information on pregnancy and delivery complications during their visit. Only 425 (78.8%) were informed to deliver in health facility and 386 (71.6%) of them were recommended to use health professional during their delivery.

Information received on pregnancy and delivery complications, information obtained on place of delivery and delivery attendant, recommended place of delivery, and delivery attendant were calculated among those who have attended prenatal service at least once. With regard to MCH information, 550 (91.7%) women had obtained MCH information during their last delivery and most of them 472 (85.8%) get the information from health professionals.

The median age at first marriage was 18 years and 510 (85%) women were first married at the age of <20 years and 38 (14.7%) women at the age of 21-29 years. The rest 2 (0.3%) women

they married at the age of ≥ 30 years. The median age at first pregnancy was 19 years. 405 (67.5%) women become pregnant at the age of <20 years, 191 (31.8%) between the age of 21-29 years and the rest 4 (0.7%) at the age of ≥ 30 years.

Table 2: Obstetric History and ANC Experience of the respondents, Mekelle Town, September, 2006 (n=600)

Variable	Frequency	percent
Gravida(Total No. of Pregnancy)		
1	231	38.5
2 – 4	306	51.0
≥ 5	63	10.5
Parity(total No. of Children)		
1	231	38.5
2-4	322	53.7
≥ 5	47	7.8
ANC visits		
Yes	539	89.8
No	61	10.2

Age at first marriage		
<20	510	85.0
21-29	38	14.7
≥30	2	0.3
Age at first pregnancy		
<20	405	67.5
21-29	191	31.8
≥30	4	0.7
Obtained MCH information		
Yes	550	91.7
No	50	8.3

6.3 Actual Delivery Practice of respondents during the last delivery prior to the survey

Among the 600 interviewed 404 (67.3%) were having institutional delivery while 196 (32.7%) home delivery. From the total births 591 were live birth and 9 were still births. From the total ANC service attendants 386 (71.6%) have used health professional during their

actual delivery. Delivery in health facility is more common among younger mothers (age <35 yrs), 378 (93.6%).

Out of the total home deliveries only 6 (3.1%) were attended by skilled attendants. 27 (13.8%) of the home deliveries were encountered problem at the time of delivery and out of these only 15 of them were taken to health facility. In general utilization of skilled delivery attendant among total number of live births surveyed, among the age group 15-49 years with a birth in the 1 year prior to the survey was 410 (69.3%).

Reasons given for home delivery includes, short labor 59 (30%), usual practice 63 (32.1%), feeling of more comfortable just being at home 21 (10.7%), close attention from relatives & family members 15 (7.7%), to exercise cultural values 12 (6.1%), not liking health facility 2 (1.0%) and other reasons 24 (12.4%).(Figure 1)

Reasons given for institutional delivery are, better service in health facility 206 (51.0%), better outcomes from Institutional delivery 128 (31.7%), informed to deliver in HF 30 (7.4%), close to where they live 24 (5.9%), Poor out comes from home delivery 13 (3.2%) and Others 3 (0.7%).(Figure 2).

Figure 1. Reason for home delivery of respondents Mekelle Town, September 2006(n=196)

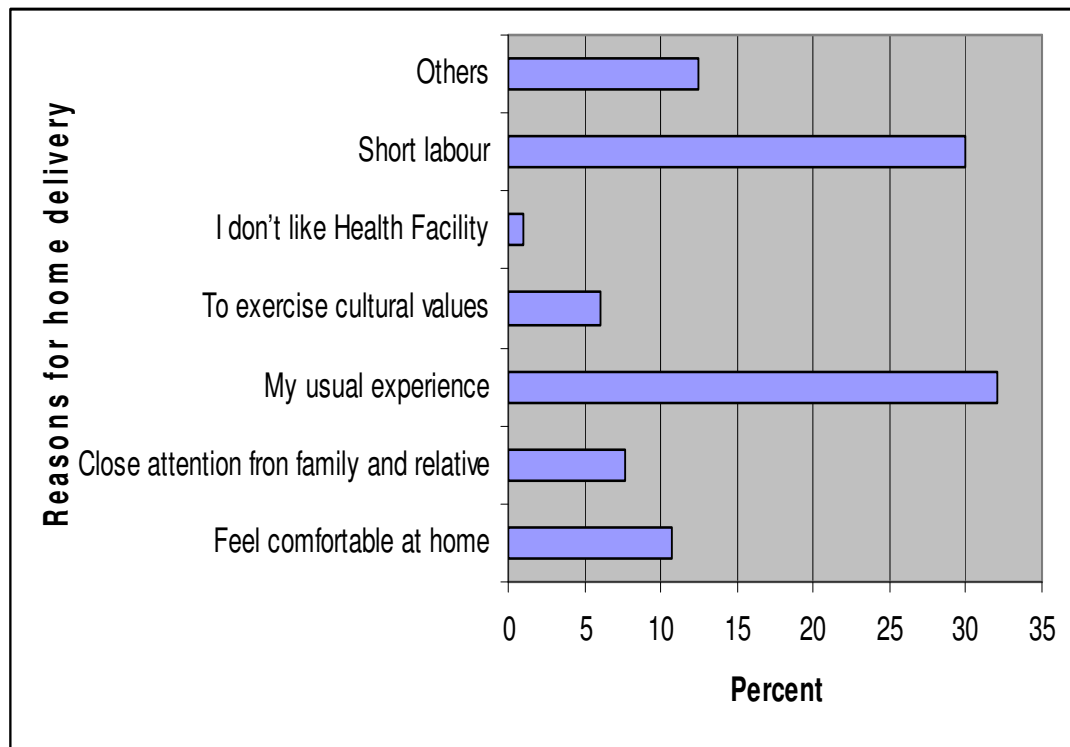
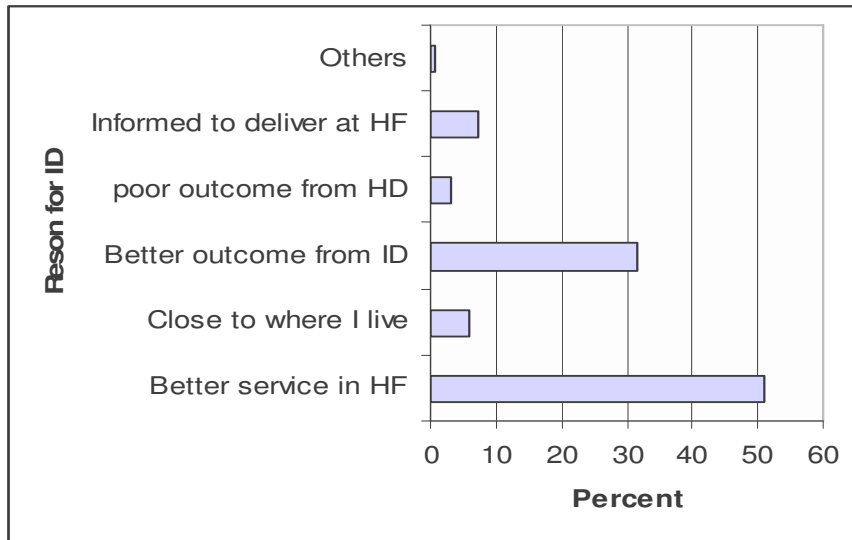


Figure 2. Reason for Institutional delivery of respondents Mekelle Town, September, 2006 (n=404)



Key
 HF-Health Facility
 HD-Home Delivery
 ID- Institutional Delivery

6.4 Knowledge, attitude & Perception, of respondents and preference of other's, during the last delivery

Among the respondents only 258 (43.0%) were knowledgeable about the advantage of prenatal care service. When the women who were knowledgeable about the advantage of prenatal care service compared with those who used the service they were below half of them. Regarding attitude of mothers who delivered at health facility towards institutional delivery, 394 (97.5%) were having good attitude while 9 (2.2%) had bad attitude. Almost all of the respondents 595 (99.1%) agree that any pregnant women could face pregnancy & delivery complications. 552 (92%) women visited health facility for different reasons during their pregnancy time however only 404 of them attended skilled delivery. It was also reported by

478 (79.7%) women that there was availability of transportation when they want to go to health facilities.

Concerning referral of mothers to higher health institutions 452 (75.3%) of the respondents has information that health facilities refer mothers to higher health service in case of emergency during delivery, however, 128 (21.3%) mothers have no information whether health facilities refer mothers. Only 20 (3.4%) mothers responded as health institutions do not refer mothers to higher level.

Regarding the preference of delivery attendant, the women expressed that 438 (84.4%) of their husbands, 446 (74.3%) of family members & relatives, were preferred the use of skilled birth delivery attendants. However, a number of husbands 81(15.6%), family & relatives 154 (25.6%), were preferred to use TBA, family members & neighbors, and TTBA.

Table 3: Predisposing, enabling, & reinforcing factors in utilizing SDA at the last delivery, Mekelle Town, September, 2006. (n=600)

Variables	Frequency	Percent
Availability of HF which give pregnancy & delivery services		
Yes	565	94.2
No	35	5.8
Availability of transportation to go to HF with SDA	478	79.7
Yes	122	20.3
No		
Any visit to health facility	552	92.0
Yes	48	8.0
No		
Heard about referral to higher health services	452	75.3
Yes	20	3.3
No	128	21.3
I don't know		
Husband's preference to Delivery Attendant		
Delivery with health professional	438	84.4
Delivery without health professional	81	15.6
Families preference to Delivery Attendant		
Delivery with health professional	446	74.3
Delivery without health professional	154	25.6
Presence of Skilled attendant in nearby HF	563	93.8
Yes	37	6.2
No		

N.B For the assessment of husband's preference, only married women (519) were asked.

6.6 Client Satisfaction during Institutional Delivery.

Among the clients who used institutional delivery (404), there is high satisfaction for, time the health worker spent with the client, cleanliness of the delivery place, cleanliness of instrument or equipment used by the health worker, the courtesy and respect offered, measures taken to assure privacy and comfort, and professional competency and skill of the health worker ranging from 392(97%) to 393(97.3%) (Table 4).

With regard to the over all client satisfaction based on the analysis of each factor considering those who score very satisfied and satisfied as satisfied and those who score neutral, dissatisfied and very dissatisfied as dissatisfied , it is found that among the clients who used institutional delivery 384 (95%) were satisfied and 20 (5%) dissatisfied.

**Table 4: Client satisfaction to institutional delivery service during the last delivery
Mekelle Town, September, 2006**

Variables	Satisfied N (%)	dissatisfied N (%)
Client satisfaction with the time the health worker spent with the client during delivery	392(97%)	12(3%)
Client satisfaction with the overall cleanliness of the delivery place	394(97.5%)	10(2.5%)
Client satisfaction with the availability of supplies and equipment used by the health worker during delivery	375(92.8%)	29 (7.2%)
Client satisfaction with the overall cleanliness of any instrument or equipment used by the health worker during delivery	391(96.8%)	13 (3.2%)
Client satisfaction with the courtesy and respect offered by the provider during delivery	387(95.8%)	17 (4.2%)

Client satisfaction with the measures taken to assure privacy, comfort.	383(94.8%)	21 (5.2%)
Client satisfaction with the professional competency and skill of the health worker during delivery	393(97.3%)	11(2.7%)
*Over all client satisfaction to the service obtained during Institutional delivery	384(95%)	20(5%)

***Overall client satisfaction on Institutional delivery service**

6.2: Factors influencing utilization of skilled delivery attendant

6.2.1 Socio- demographic influencing factors on Utilization of skilled Delivery attendant

By Applying multiple logistic regression on socio demographic variables, age of respondents, religion, women’s education, women’s work status, and husbands education ,only their educational status and their husband’s educational status was significantly associated with

utilization skilled delivery attendant (p-values<0.05). If women have primary education and secondary education and above and husband has secondary and above level education they are more likely to utilize SDA. OR=2.19 and 95%CI= 1.33- 3.61), OR=3.90 and 95%CI=1.95-7.81), and OR=3.10 and 95%CI=1.29-7.42) respectively (Table 5).

Table 5: Socio- demographic factors influencing Utilization of skilled birth attendant adjusted for Socio- demographic variables, in Mekelle Town, September, 2006

Variable	Utilization of skilled delivery attendant		Crude ORs (95% CI)	Adjusted ORs (95% CI)
	Yes	No		
Age of respondents				
< 20	110	125	1.00	1.00
20 – 34	268	46	0.91(0.61,1.37)	0.84(0.51,1.37)
35-49	26	25	0.46(0.24,0.87)*	0.74(0.34,1.61)
Religion				
Orthodox	367	177	1.00	1.00
Muslim	38	13	1.41(0.73,2.71)	1.44(0.70,2.96)
Women's education				
Illiterate	56	77	1.00	1.00
Primary Education	204	89	3.15 (2.06,4..82)*	2.19(1.33,3.61)*
Secondary education & above	150	24	8.59(4.95,14..91)*	3.90(1.95,7.81)*
Women's Work status				
Housewife	317	174	1.00	1.00
Gov. Employee	39	4	7.00(2.13,22.95)*	3.03(0.87,10.56)
Private Business	32	15	1.12(0.59,2.13)	1.87(0.75,4.65)
Private Employee	10	2	2.62(0.57, 12.11)	4.47(0.53,37.46)
Husband's education				
Illiterate	12	20	1.00	1.00
primary education	157	102	2.57(1,20,5.47)*	1.69(0.76,3.73)
Secondary education & above	188	40	7.83(3.55,17.31)*	3.10(1.29,7.42)*

* Those that belong to neither Orthodox nor Muslim were excluded due to small size

6.2.2 Obstetric factors on actual utilization of Skilled Delivery Attendant

When the obstetric factors, gravid a, ANC visit, age at first pregnancy, presence of pregnancy and delivery complications, Presence of health facility with skilled delivery attendant nearby, and obtained MCH information, were adjusted and only gravid a, ANC visit, presence of pregnancy and delivery complications and obtained MCH information have significantly associated with utilization of skilled delivery attendant (P-values<0.05). But, age at first pregnancy and presence of health facility with skilled delivery attendant nearby were not associated with utilization of skilled delivery attendant. Particularly, age at first pregnancy and presence of health facility with skilled delivery attendant nearby were not associated both in the crude association and multiple logistic regressions (Table 6).

Women with first pregnancy were four times OR=4.11 and 95%CI= 2.20, 7.68) more likely to utilize skilled delivery attendant than women who have ≥ 5 pregnancies.

Women who had ANC visits were three times OR=2.95 95%CI= 1.63, 5.37) more likely to utilize skilled delivery attendant when compared to those who did not have ANC visit.

The presence of pregnancy and delivery complications is another significant variable, That is women who know about presence of pregnancy and delivery complication are three times more likely to utilize skilled delivery attendant (adjusted OR=3.40 and 95%CI 1.76-6.57). Women who obtained MCH information were two times OR=2.27 95%CI 1.17-4.41) more likely to utilize skilled delivery attendant. (Table 6)

Table 6: Factors influencing women’s actual utilization of skilled delivery attendant, Mekelle Town, September, 2006

Variable	Utilization of skilled delivery attendant		Crude ORs (95% CI)	Adjusted Ors (95% CI)
	Yes	No		
Gravid a(Total No. of Pregnancy)				
(1)	183	48	4.47(2.48,8.05)*	4.11(2.20,7.68)**
(2 – 4)	198	108	2.15(1.24,3.72)*	1.98(1.11,3.54) **
(≥ 5)	29	34	1.00	1.00
ANC visits				
(Yes)	386	153	3.89(2.25,6.72)*	2.95(1.63,5.37)**
(No)	24	37	1.00	1.00

Age at first pregnancy				
(<20)	266	139	0.64(0.07,6.19)	0.30(0.03,3.52)
(21-29)	141	50	0.94(0.10,9.25)	0.42(0.04,4.99)
(≥30)	3	1	1.00	1.00
presence of pregnancy & delivery complications				
(Yes)	352	136	1.90(1.06,3.41)*	3.40(1.76,6.57)**
(I don't know)	28	32	0.64(0.30,1.36)	1.68(0.74,3.82)
(No)	30	22	1.00	1.00
Presence of health facility with skilled delivery attendant nearby				
(Yes)	387	176	1.34(0.67,2.66)	0.58(0.25,1.32)
(No)	23	14	1.00	1.00
Mothers informed about maternal and child health				
(Yes)	387	163	2.79(1.55,5.01)*	2.27(1.17,4.41)**
(No)	23	27	1.00	1.00

* Statistically significant at P<0.05 in the crude analysis

** Statistically significant at P<0.05 after adjusting for selected confounding variables: -

age at first pregnancy, Presence of health facility with skilled birth attendant nearby

6.2.3: Predisposing, enabling and reinforcing factors influencing utilization of skilled delivery attendant, Availability, preferences

when the factors, availability of pregnancy & delivery services, any visit to health facility, availability of transportation, heard referral to higher health facility, and preference of husband, family to delivery attendant were adjusted, only any visit to health facility, availability of transportation, and preference of husband were found significantly associated with utilization of skilled delivery attendant (P-values <0.05). (Table 7)

Women who have any visit to health facility were three times OR=2.95 and (95%CI=1.06-8.21) more likely to utilize skilled delivery attendant than those who did not have any visit to health facility. However, availability of pregnancy and delivery services by itself did not associate with utilization of skilled delivery attendant P-value=0.695. Women who deliver at health facility explained that, most frequent reason for utilizing of institutional delivery are, better service in health facility 206(51.0%), better outcomes from Institutional delivery 128(31.7%), informed by health professionals to deliver in HF 30 (7.4%), and close to where they live 24(5.9%).

Those who can get transportation to go to health facility are almost three times more likely to utilize skilled delivery attendant (Adjusted OR=2.67 and 95%CI=1.59-4.49) when compared to women who can not get transportation. (Table 7).

Regarding the preference of the respondent's husbands, those who prefer delivery with health professional were five times OR= 4.65 (95%CI=2.37-9.13) more likely to utilize skilled delivery attendant as compared with those, their husbands prefer TBA (trained, untrained) and family and relatives (Table 7).

Table 7: Association of skilled delivery attendant utilization with Women's selected predisposing, enabling and reinforcing variables, in Mekelle Town, September, 2006 (n=600)

Variable		Utilization of skilled delivery		Crude ORs (95% CI)	Adjusted ORs (95% CI)
		Yes	No		
Availability of pregnancy & delivery services	(Yes)	386	179	0.99(0.47,2.06)	0.82(0.31,2.19)
	(No)	24	11	1.00	1.00
Any Visit to HF During pregnancy	(Yes)	305	157	5.54(2.93,10.47)*	2.95(1.06,8.21)**
	(No)	15	33	1.00	1.00
Availability of transportation	(Yes)	349	129	2.71(1.80,4.07)*	2.67(1.59,4.49)**
	(No)	61	61	1.00	1.00
Heard about referral to higher health services	(yes)	335	117	1.23(0.46,3.22)	1.36(0.41,4.47)
	(I don't)	61	67	0.39(0.14,1.08)	0.66(0.19,2.30)
	(No)	14	6	1.00	1.00
Husband's preference to Delivery Attendant	(DHP)	338	100	11.03(6.30,19.31)*	4.65(2.37,9.13)**
	(DWOUTH P)	19	62	1.00	1.00
Family preference to Delivery Attendant	(DHP)	350	96	5.71(3.85,8.48)*	1.73(0.91,3.29)
	(DWOUTH P)	60	94	1.00	1.00

* Statistically significant at $P < 0.05$ in the crude analysis

**Statistically significant at $P, 0.05$ after adjusting for selected confounding variables;- Availability of HF, Heard referral, and preferences of family to delivery attendant

Discussion

This community –based study has attempted to identify the extent and factors associated with utilization of skilled attendant at delivery in Mekelle town. The study finding revealed that proportion of institutional delivery was 67.3% and that of skilled delivery attendant was 69.3%. Among the client who had institutional delivery their overall satisfaction to the service given was 95%. This study also showed that births to women with primary education are two times more likely and births to women with secondary or higher education are four times more likely to utilize skilled birth attendant than illiterate women. In addition women with first pregnancy, women who have ANC visits, women who know presence of pregnancy and delivery complication, women who received information on MCH, those who have visit to health facility, those who can get transportation, and those their husband's prefer to use skilled birth attendant during delivery, are more likely to utilize skilled delivery attendant than those who are disadvantaged.

As this study revealed utilization of skilled birth attendant is almost similar with institutional delivery, only one percent of the total deliveries were assisted by health professionals. Utilization of skilled delivery attendant is more likely to be similar or slightly increase from institutional delivery because births delivered at a health facility are more likely to be delivered by a trained health professional and births delivered at home are usually more likely to be delivered without assistance from a health professionals (EDHS,2005)..

For those who had institutional delivery their satisfaction to, time the health worker spent with them (97%), cleanliness of delivery place (97.5%), cleanliness of instrument or equipment (96.8%), the courtesy and respect offered by the provider (95.8%), measures taken to assure their privacy and comfort (94.8%), and professional competency and skill of the health worker (97.4%) during delivery was high. The over all client's satisfaction to institutional delivery service was (95%). However, many studies though they are mostly done on family planning, out patient clients, they revealed low level of client satisfaction (Girmay, A, 2006), For example, if we consider one of the factors, courtesy and respect offered by the provider, it was among the major reasons for dissatisfaction in Gondar .The finding was rated to be 36% for the unsympathetic behavior of the health workers. (.Dagneu, Zakus, 1997).In some studies respondents have been seen to report unrealistically high levels of satisfaction which are likely to be prone to courtesy or gratitude biases. Langer A, Villar J, 2000, Williams T, 2002). Another study of client satisfaction emphasized that the relationship of dependency which exists between clients and their relatives on service providers may make them unwilling to express their dissatisfaction for fear of antagonizing service providers and experiencing even worse service in the future (Claire Batchelor, David J, 1994).This high result could also be explained by, as the data collectors were health workers working in the

area there might have been created social desirability bias. On the other side, it could also be explained as, it could be expected in the study area because of the new changes introduced into the hospitals and health centers in relation to the improvement of the service delivery which could have brought changes (Girmay, A, 2006). Therefore, clients might have responded by comparing their previous experience with the current civil service reform introduced into the health institutions found in the study area which has brought some changes in the service delivery.

Utilization of skilled delivery attendant is higher (69.3%) than studies done in urban areas of Ethiopia, which revealed 45% of deliveries, were assisted by health professionals (.EDHS, 2005). However, it is less than Addis Ababa (88.3%) and more than Dire Dawa (52.9%) (EDHS, 2005). This high result of utilization could be explained by as Patient satisfaction is a related concept as it aims to determine "individual perceptions of the quality of health care delivered" (Sitzia J, Wood N, 1997), the women might use the SDA or the respondents might not know the credentials of their birth attendants which could increase the number of the skilled attendant.

Some of the reasons given by the respondents for utilization of health facility for delivery are, better service in health facility 51.0%, better outcomes from Institutional delivery 31.7%, information received from health professionals to deliver in health institution 7.4%, and closeness of HF to where they live 5.9%. An earlier study conducted at Gulelle district in Addis Ababa also shows that the reasons given for preferring to deliver in health institution is high quality of service 50.1%, following by nearness of health institution 36.8%, and the approach of good health workers 9.0%. (Mesganaw F, 1992). The role that quality of care

plays in the decision to seek care is related to people's own assessment of service delivery, which largely depends on their own experiences with the health system and those of people they know (Mesfin, 2003). In a review of satisfaction-theory, Sitzia and Wood infer that expectations govern satisfaction, i.e. the more a service meets with the expectations of a user; the more that user will be satisfied with that service (Sitzia J, Wood N,1997).It is also noteworthy that Sitzia and Wood dispute high levels of satisfaction equate with high quality care. They infer that high levels of satisfaction commonly reported suggest that "dissatisfaction is only expressed when an extreme negative event occurs" (Sitzia J, Wood N, 1997).

The study has identified several variables that have important influence on utilization of skilled delivery attendant. It revealed women's education, husband's education, gravida (total number of pregnancy), ANC visit, obtaining MCH information, any visit to HF, availability of transportation, and husband's preference to delivery attendant as influencing factors for utilization of skilled delivery attendant. Most of these findings are consistent with previous studies (Belay, 1997; Mekonnen, 1998, Sugathan KS, 2001, Mesganaw F, 1992, MekonnenY, 2002, Mesfin M, Farrow J, 1996, EDHS, 2005).

If the women are not literate and husband has secondary and above level education they are more likely to utilize SDA.The reason why education is so important predictor for utilization of skilled care could be explained as that education helps to empower women to decide on their own health.

Gravidity is another obstetric variable found to be significantly affecting the utilization of skilled delivery attendant. Women with first pregnancy are four times more likely to utilize skilled delivery attendant as compared to those who are pregnant for ≥ 5 . This finding is consistent with other studies, which indicate that women are more likely to utilize professional assistance for their first births (Mekonnen, 1998, Sugathan KS, 2001, Mekonnen Y, 2003, EDHS, 2005). Study in India, revealed that women are more likely to get care for their first delivering than others that follow. This is associated with factors like fear of the unknown or excitement that is probably associated with the first child birth (WHO, SEAR, 2003).

As many study findings indicate, this study also revealed that those who have ANC visits were almost three times more likely to utilize skilled delivery attendant than those who did not have ANC visit. In study done in India, on the effect of ANC on professional assistance at delivery indicate that, after controlling for other variables (including ANC), pregnancy complications and access to health facilities do not have much effect on assistance at delivery. By contrast, ANC has a large effect on assistance at delivery, even after all other variables are controlled (Vinod M, et al, 2006). The effect of ANC on professional assistance at delivery can be explained by, as women receiving antenatal care come in contact with health-care providers, they may encourage them to seek professional assistance at delivery or to give birth in a medical facility (Vinod M, et al, 2006). However there is a complicating factor that women with pregnancy complications are more likely than other pregnant women to receive antenatal check-ups and to receive professional medical assistance at delivery because of the pregnancy complication. This study also examines the association between ANC and use of skilled delivery attendant at delivery (SDA) after adjusting for the potential confounding effect of presence of pregnancy complications and it revealed that ANC visit influences utilization of SDA. The present study

also revealed that, from the total ANC service attendants 71.6% have used skilled attendants during their actual delivery.

Those who know the presence of pregnancy and delivery complication were three times more likely to use professional assistance from skilled delivery attendant during their delivery. It was also stated in other study conducted in Ghana that, 64% of women who died of pregnancy complications sought help from a traditional birth healer before going to a health facility (www.safemotherhood.org). Other studies from India and Iraq also showed that lack of recognition of perceived seriousness of health problems are significant reason for not using available health care that accounts for half of maternal deaths (Habib SO, and Vaugan P.J, 1986). An earlier community- based study in Addis Ababa on maternity mortality also found that one of the reason for not having ANC was low level awareness of problems of child bearing (Fantahun M, 1992).

With regard to obtaining information, particularly to mother and child health, this study revealed that those who have obtained MCH information are two times more likely to utilize skilled delivery attendant during their child birth. Increasing awareness of women to maternal and child health, particularly to the potential health problems of childbearing will improve the use of skilled delivery attendant. Recent updates on ANC suggest provision of information about pregnancy and delivery complication to the women and their families help them to prepare for safe delivery (WHO, 1997). Moreover, provision of information about reproductive health services is recommended action for reducing maternal mortality. The intention is to promote increased use of health services for antenatal and delivery care (Vinod M, et al, 2006)

Any visit to health facility is significantly associated with utilization of skilled delivery attendant. Those who visit health facilities were three times more likely to utilize skilled delivery attendant. This could be explained by, those who visit health facility may have the chance to get information on the importance of institutional delivery and utilization of skilled delivery attendant which can help them to make informed decision on the delivery plan (WHO, 1997). This study also showed that from those who visit health facility (72%) utilize skilled delivery attendant at their child delivery.

Another finding of this study is availability of transportation to go to health facilities. Those who were able to get transportation were almost three times more likely to utilize skilled delivery attendant. Improving access to services has been a primary strategy for increasing health-service utilization in developing countries. Several studies have stressed the importance of access to health services as a factor affecting the utilization of services (Rao and Richard 1984; Sarita and Tuominen 1993; Kumar et al. 1997; Rohde and Viswanathan 1995). In developed countries and in many urban areas of developing countries, skilled care at delivery is usually provided in a health facility. Studies indicate that one of the reasons women give reason for choosing not to use available obstetric care is poor access to health institutions because of vehicles shortage and poor road conditions which affect skilled attendant care. In Tanzania 84% of women who gave birth at home intend to deliver at a health facility, but couldn't because of distance and lack of transportation (World Bank, 1999). Therefore, the context of skilled attendance goes beyond the presence of health professional which needs the necessary skill and enabling environment for early detection of complications and referral to a higher level care (UNFPA, 2004).

Another finding of this study showed that, women to whom their husbands preferred delivery with health professional are five times more likely to utilize skilled delivery attendant than those their husbands prefer delivery attendant other than health professionals. Some behavioral models explained that human behaviors are influenced by the preference of influential people towards the behavior. This finding is consistent with findings from other studies (Ayele B, 2005,) In Pakistan, for example, a study found that two-thirds of women delivered at home because the husbands or other family members forbade hospital delivery (Bachman et al, 1997).

7. Strength and Limitations of the study

Strength

- The study was community- based, Data collectors were similar sex.
- Data collectors were similar sex.
- There was no none response rate.

Limitations

- Selected variables that affect utilization of skilled delivery attendant have been investigated, and their importance was determined by comparing users and non users at a specific point in time. So difficult to know whether the determinant or the outcome occurred first. For example, some factors (religion, parity, age at first pregnancy etc.) were present before ANC attendance or preferences of delivery place and delivery attendant where as if we take knowledge on maternal health care, like the knowledge on pregnancy and delivery problems could either follow or precede the outcomes of interest.
- Since the study was retrospective cross-sectional, the probability of recall bias miss reporting of events was likely. Women's experience and perception of their care during delivery is best described and interpreted by themselves. Open-ended questions

encouraged women to describe their experiences in their own terms and using their own language. This allowed them to freely recount factors that were of importance to them without being influenced by the line of questioning (Lucia D'A et al, 2005). Therefore, it would have been good to supplement by FGDs using semi-structured guides and included open-ended questions.

- It would have been more appropriate to use non-health worker data collectors to avoid the possibility of introducing desirable answers.
- The respondents might not know the credentials of their birth attendants which might increase the rate of skilled birth attendant.

8. Conclusion

- Women educational status and husband's education, their number of pregnancy, ANC visit, presence of pregnancy and delivery complication, MCH information, any visit to health facility, availability of transportation, and preference of their husbands to delivery attendant are important predictors for their utilization of skilled birth attendant.
- Proportion of deliveries assisted by skilled birth attendant and Client satisfaction to institutional delivery was high. However, the rate might be increased due to social desirability bias and the women might not know the credentials of their attendants.
- Based on the study there are women who are disadvantaged in every aspect of the investigated factors. Therefore, if conditions like education, ANC visit, provision of

MCH information, transportation and positive influences from husbands is available utilization of skilled birth attendant can be facilitated.

Recommendations

1. As women's and their husband's education is an important predictor for their utilization of skilled delivery attendant there should be increasing education opportunities for both groups and particularly for the girls. Therefore, policy makers and concerned

stockholders, government and non-government bodies should give great emphasis to education.

2. Health professionals should promote ANC follow up and provide information on the problems of pregnancy and delivery complications and on the importance of skilled delivery attendant at every child birth for every woman who came to health facility in general and at ANC visit in particular.
3. Since skilled attendance goes beyond the presence of a medically trained health professional, even normal deliveries require a climate of prepared watchfulness to ensure that complications are detected as early as possible and that referral to higher level care is available and organized, Regional Health bureau should be commuted to facilitate supportive environment, such as supplies, equipment, and establishing functioning system of referral and focus on training of competent Midwives.
4. All women should have access to skilled care during pregnancy and at delivery to ensure detection and management of complications and referral. Therefore, training in midwifery for health extension package workers should be given emphasis in order to reach the disadvantaged women.
5. Community health activities such as community awareness programs, home visit, and community-based delivery systems must focus those who are not literate, who did not get MCH information and who did not come for ANC.
6. Further studies should be conducted on client –provider interaction, to address the effect on utilization of skilled delivery attendant.

References

Ayele B. what factors Determine delivery practices of pregnant women? MPH thesis Addis Ababa University, 2005.

Balaji R, Dilip TR, Duggal R. Utilization of and expenditure on delivery care services: some observation from Nashik District. Regional health forum WHO South-East Asia Region. 2003; 7(2).

Bachman et al., District health system; user's preference for services in Benin health policy and planning. 1997; 6(4): 361-370. *Perspectives* 21(2): 64-9.

Berhane Y. Women's health and reproductive outcome in rural Ethiopia. [Dissertations] Umeå University, 2000; serial No 674-ISSN 0346-6612.

Bertrand, J.T., Hardee, K., Magnani, R.J., & Angle, M.A. (1995). Access, quality of care, and medical barriers in family planning programs. *International Family Planning*

Central statistics Authority (CSA) Ethiopia. Demographic and health survey, 2005.

Chen LC, Geshe MC, Ahmed S, et al. Maternal mortality in rural Bangladesh. *Stud. Fam. Plann.* 1974; 19: 1-2

Family Care International, Inc. Skilled Care during Childbirth: Policy Brief, 2002

Family Care International. Patterns in seeking skilled care at delivery: House hold survey findings from Burkina Faso, Kenyan and Tanzania. www.familycareint.org. Accessed on February 6, 2006.

Fantahun M, Olwit G, and Shamebo D. A determinant of antenatal care attendance and preference of site of delivery in Addis Ababa. *Ethiop. J. Health Dev.* 1992; 1(2): 17-22

Graham,W,J,Bell,J,S,,Bullough,C.H.W, can skilled attendance at delivery reduce maternal mortality in developing countries? In:safe motherhood strategies:a review of the evidence. (eds VDe Brouwer and WVan Lerberghe).2001,ITG Press.Antwerp.pp97-129.

Habib SO, and Vaugan P.J, Factors affecting maternal health care *Int. Epidemiology*, 1986, 15:394-402.

Koenig, M.A. & Khan, M.E. *Improving Quality of Care in India's Family Welfare Programme: The Challenge Ahead.* New York: The Population Council. 1999.

Kumar, R., Singh, M.M., & Kaur, M. Impact of health centre availability on utilization of maternity care and pregnancy outcome in a rural area of Haryana.*Journal of the Indian Medical Association.* 1997, 95(8): 448-50.

Kwast BE, kidane-Mariam W, Saed EM, Fowkes FGR. Epidemiology of Maternal Mortality inAddis Ababa, a community-based study. *Ethiop. Med. J.* 1985; 23(7): 7-16

Langer A, Villar J,et al, Are women and providers satisfied with antenatal care? Views on a standard and a simplified, evidence based model of care in four developing countries. *BMC Women's Health* 2002, 2:7.

Leslie J, Gupta RG. Utilization of formal services for maternal nutrition and health care. International center for research on women, Washington D.C, February 1989.

Lucia D'Ambruso¹, Mercy Abbey² and Julia Hussein¹, Please understand when cry out in pain: women's accounts of maternity services during labor and delivery in Ghana, *BMC Public Health* 2005, **5**:140

Mekelle Zonal Health Office 1st round Polio vaccination Plan Doc.Oct, 2005.

Mekelle Zonal Health Beuroe,Report,Dec,2004

Mesfin M, Farrow J. Determinants of antenatal care utilization in Arsi Zone, Central Ethiopia. *Ethiop. J. Health Dev.* 1996; 10(3):171-178.

Paine P. et al., with free health Services, why does the Brazilians working class delay on seeking the Doctor. *Tropical Doctor* 1989; 19: 120-123.

Rao, P.S. & Richard, J. Socio-economic and demographic correlates of medical care and health practices. *Journal of Biosocial Science* 1984, 16(3): 343-355.

Rohde, J. & Viswanathan, H. *The Rural Private Practitioner* New York: Oxford University Press. 1995.

Safe motherhood: A woman's right to life, information Kit. MOH and Family Welfare, Bangladesh, 1997.

Sarita, P.T. & Tuominen, R. Use of health care services in two rural communities in Tanzania. *Community Dentistry and Oral Epidemiology* 1993. 21(3): 133-135.

S. Fawcus *et al.*, "A Community-based Investigation of Avoidable Factors for Maternal Mortality in Zimbabwe". *Studies in Family Planning*, Vol. 27, No. 6, November – December 1996.

Shen L, John BW. Maternal Mortality women's economic dependency in less developed countries: a cross-national analysis, *social sciences and medicine* 49 (1999).

Starrs A. The safe motherhood action agenda: Priorities for the next decade. Inter-agency group for safe motherhood and family care international, 1997.

Stock R Distance and the utilization of health facilities in rural Nigeria. Soc. Sci. Med. 1983; 17: 563-570.

Sugathan KS, Mishra V, and Retherford RD. Promoting institutional deliveries in rural India: The role of antenatal-care services, National Family health Subject reports number 20, Mumbai; International Institute of Population Sciences; East-West Center, population and Health Studies, Hawaii, 2001.

UNFPA. Delivering in to good hands, material mortality updates 2004.

UNFPA. Maternal mortality updates 2000: A focus on emergency obstetric care.

Vinod Mishra^{1,2} and Robert D. Retherford², The Effect of Antenatal Care on Professional Assistance at Delivery in Rural India. 2006.

Walt G. Community Health workers in National programmers just another pair of hands. Milton Keynes, Open University presses, 1990.

WHO. Coverage of maternity care: A history of available information. 4th edition, Geneva, 1995.

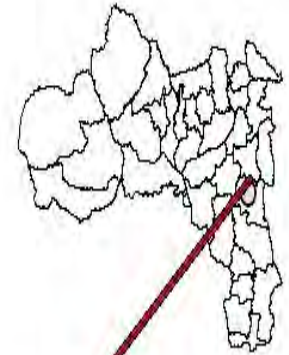
WHO Reduction of maternal mortality: a joint WHO/UNFPA/UNICEF/world Bank statement. World Health Organization, Geneva, 1999.

Williams T, Schutt-Aine J, Cuca Y: Measuring family planning service quality through client satisfaction exit interviews. International Family Planning Perspectives 2000, 26:63-71

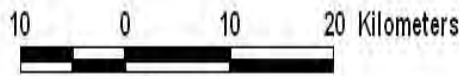
G. Biego *et al.*, *Survey on Adult and Childhood Mortality, Tanzania*. Macro International, Calverton, MD, 1995. World Bank, *Safe motherhood and the World Bank: lessons from 10 years experience*. The World Bank, Washington DC, 1999.

Yared M. Patterns of maternal care service utilization in southern Ethiopia: Evidence from a community and family survey. *Ethiop. J. Health Dev.* 2003; 17(1):27-33.

Map showing the study area



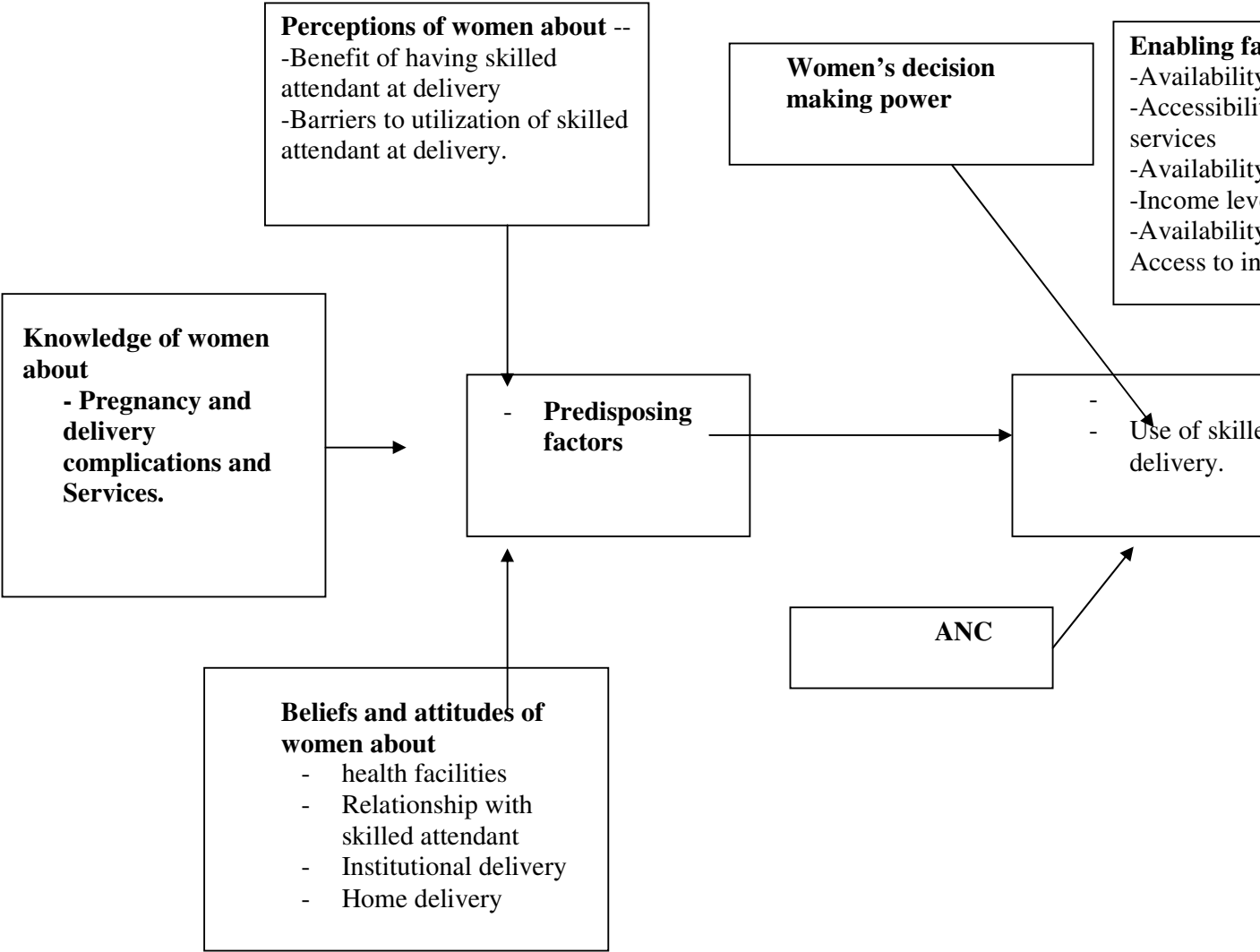
Mekelle



HMS Division
Department of Planning and Programming
Tigray Health Bureau
Jan, 2007

Appendix I

To develop the conceptual framework, previous study findings and the framework developed based on the concept of PRECED, HEALTH BELIFE and theory of PLANNED BEHAVIOUR by (Ayele B, 2005) is used.



Appendix II

**ADDIS ABABA UNIVERSITY
DEPARTMENT OF COMMUNITY HEALTH
DATA COLLECTON INSTRUMENT**

General Information

INTRODUCTION AND CONSENT

INFORMED CONSENT

Hello. My name is _____ and I am part of a team of people who are carrying out a survey on “Assessment of utilization of skilled attendant at delivery in Mekelle town” (Show a letter of approval from ZHO). We would very much appreciate your participation in this survey. I would like to ask you some questions and it will take about 30 minutes. Your answers will remain confidential, Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?
 May I begin the interview now?

IF RESPONDENT AGREES TO BE INTERVIEWED
 Start time _____: End time _____:
 Date ____/____/____ CONTINUE THE INTERVIEW

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED THANK HER AND GO TO THE NEXT RESPONDANTS HOUSE

- 001. Questionnaire Code _____
- 002. Locality _____
- 003. Household No. _____

004 Result of visiting

HH No.	Name of Respondent	Was there a birth during the last 12 months in this household		If residency in Mekelle is <6month Not eligible 0=Not eligible 1=Refuse 2=Accepted → Interview
		Yes	.No	

107	Do you have monthly income	Yes-----1 No-----2 I don't want to tell-----3	
108	Monthly Income in Birr		
109	Family Size (in No.)		
110	Husband's Education Status	Illiterate-----1 primary Education (1- 8)-----3 Secondary education & above (9-12+)-----4	Read and write----2

Part II. Obstetric Factors

No	Questions	Alternative /choice of response	S																		
201.	Age at first marriage																				
202.	Age at first Pregnancy																				
203.	Gravidity(Total No. of pregnancy)																				
204.	Parity(Total No. of births)																				
205.	Any visit to health facility during your last pregnancy?	Yes -----1 No-----2																			
206.	What was your reason for visiting Health Facility?	<table style="width:100%; border:none;"> <tr> <td></td> <td style="text-align:right">Yes</td> <td style="text-align:right">No</td> </tr> <tr> <td>For ANC-----1</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>Delivery-----1</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>Postnatal-----1</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>Problem not related to pregnancy---1</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>Other , Specify _____</td> <td style="text-align:right">88</td> <td></td> </tr> </table>		Yes	No	For ANC-----1	1	2	Delivery-----1	1	2	Postnatal-----1	1	2	Problem not related to pregnancy---1	1	2	Other , Specify _____	88		
	Yes	No																			
For ANC-----1	1	2																			
Delivery-----1	1	2																			
Postnatal-----1	1	2																			
Problem not related to pregnancy---1	1	2																			
Other , Specify _____	88																				
207	If your visit was for ANC, how many times do you visit?	1-3visits-----1 4 visit-----2 4+visits-----3																			
208.	During ANC follow up did you get any information regarding pregnancy and delivery complications?	Yes ----1 No----- 2 I do not know -----9																			
209.	Were you informed about where to deliver?	Yes -----1 No -----2																			
210.	If yes where did they recommend you to deliver?	Health facility -----1 Home-----2																			
211.	Were you informed as to who should attend you during delivery?	Yes -----1 No-----2																			

Part III. Practice and satisfaction of respondents during the last delivery

No.	Questions	Alternative /choice of response	S																								
301	Did the birth in the last 12 months resulted in a baby that was born alive or dead?	Live birth-----Yes----1 No-----2 Still birth ----- Yes----1 No-----2																									
302	Where did you deliver (this specific birth?)	Home ----- Yes----1 No -----2 Health Facility-----Yes-----1 No-----2 Other, Specify _____ 88																									
303	If your answer to question No.302 is Home, why did you choose to deliver at home?	<table style="width:100%; border:none;"> <tr> <td></td> <td style="text-align:right">Yes</td> <td style="text-align:right">No</td> </tr> <tr> <td>I feel more comfortable just being at home-----1</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>Close attention from relatives & family members1</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>It is my usual practice-----1</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>I don't like the service in the health facility-----1</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>Previous bad experience from institutional delivery1</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>Unwelcoming approach of Health workers-----1</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>Other,</td> <td></td> <td></td> </tr> </table>		Yes	No	I feel more comfortable just being at home-----1	1	2	Close attention from relatives & family members1	1	2	It is my usual practice-----1	1	2	I don't like the service in the health facility-----1	1	2	Previous bad experience from institutional delivery1	1	2	Unwelcoming approach of Health workers-----1	1	2	Other,			
	Yes	No																									
I feel more comfortable just being at home-----1	1	2																									
Close attention from relatives & family members1	1	2																									
It is my usual practice-----1	1	2																									
I don't like the service in the health facility-----1	1	2																									
Previous bad experience from institutional delivery1	1	2																									
Unwelcoming approach of Health workers-----1	1	2																									
Other,																											

304	If you deliver at Home Who assisted you during delivery	Yes No	
		No attendant----- 1 2	
		Health professionals -----1 2	
		Trained TBA-----1 2	
		Untrained traditional birth attendant----- 1 2	
		Family Members & Relatives -----1 2	
		Others, Specify _____88	
305	Have you had any problem while you give birth at home?	Yes-----1 No-----2	
306	If your answer to question No.302 is Health Facility, why do you choose to deliver in health Facility?	Yes No	
		Better service in health facility ----- 1 2	
		Close to where I live ----- 1 2	
		Better outcomes from Institutional delivery--- 1 2	
		Poor out comes from home delivery----- 1 2	
		I was informed to deliver in health institution- 1 2	
		Other, specify _____88	
307	Which Health Facility did you use to deliver?	Yes No	
		Hospital----- 1 2	
		Health station/clinic----- 1 2	
		Health center----- 1 2	
		Other, Specify _____88	
308	Who assisted you during delivery?	Yes No	
		No attendant-----1 2	
		Doctor----- 1 2	
		Health Officer ----- 1 2	
		Midwife & Nurses----- 1 2	
		Health assistant ----- 1 2	
		TBA-----1 2	
309	How satisfied are you with the time the health worker spent with you during your delivery	1 2 3 4 5	
		Very satisfied Satisfied Neutral Dissatisfied Very dissatisfied	
310	How satisfied are you with the overall cleanliness of the delivery place?	1 2 3 4 5	
		Very satisfied Satisfied Neutral Dissatisfied Very dissatisfied	
311	How satisfied are you with the availability of supplies and equipment used by the health worker during your delivery ?	1 2 3 4 5	
		Very satisfied Satisfied Neutral Dissatisfied Very dissatisfied	

312	How satisfied are you with the overall cleanliness of any instrument or equipment used by the health worker during delivery ?	1 Very satisfied	2 Satisfied	3 Neutral	4 Dissatisfied	5 Very dissatisfied	
313	How satisfied are you with the courtesy and respect offered by the provider during delivery?	1 Very satisfied	2 Satisfied	3 Neutral	4 Dissatisfied	5 Very dissatisfied	
314	How satisfied are you with the measures taken to assure your privacy, comfort? E.g. private room, screened etc.	1 Very satisfied	2 Satisfied	3 Neutral	4 Dissatisfied	5 Very dissatisfied	
315	How satisfied are you with the professional competency and skill of the health worker(s) during delivery?	1 Very satisfied	2 Satisfied	3 Neutral	4 Dissatisfied	5 Very dissatisfied	

Part IV. Predisposing Factor

A. Beliefs and Attitudes on Health facilities, Home delivery, and delivery attendants

No.	Questions	Alternative /choice of response					Ski																																
401	If you deliver at health facility what is your attitude to wards delivery services?	Excellent 1	Good 2	Indifferent 3	Fair 4	Bad 5	If b																																
402	Why good attitude to the institutional delivery service?	<table border="0"> <tr> <td></td> <td>Yes</td> <td>No</td> <td></td> </tr> <tr> <td>Better quality of service -----</td> <td>1</td> <td>2</td> <td></td> </tr> <tr> <td>Good approach of health workers-----</td> <td>1</td> <td>2</td> <td></td> </tr> <tr> <td>Fair price of services-----</td> <td>1</td> <td>2</td> <td></td> </tr> <tr> <td>Better out come of institutional delivery -----</td> <td>1</td> <td>2</td> <td></td> </tr> <tr> <td>Other specify_____</td> <td colspan="2">88</td> <td></td> </tr> </table>						Yes	No		Better quality of service -----	1	2		Good approach of health workers-----	1	2		Fair price of services-----	1	2		Better out come of institutional delivery -----	1	2		Other specify_____	88											
	Yes	No																																					
Better quality of service -----	1	2																																					
Good approach of health workers-----	1	2																																					
Fair price of services-----	1	2																																					
Better out come of institutional delivery -----	1	2																																					
Other specify_____	88																																						
403	Why bad attitude to the institutional delivery service?	<table border="0"> <tr> <td></td> <td>Yes</td> <td>No</td> <td></td> </tr> <tr> <td>Poor quality of services -----</td> <td>1</td> <td>2</td> <td></td> </tr> <tr> <td>Unable to perform cultural ceremonies-----</td> <td>1</td> <td>2</td> <td></td> </tr> <tr> <td>Unpleasant approach of health worker -----</td> <td>1</td> <td>2</td> <td></td> </tr> <tr> <td>Unfair & expensive price -----</td> <td>1</td> <td>2</td> <td></td> </tr> <tr> <td>Poor out come of services-----</td> <td>1</td> <td>2</td> <td></td> </tr> <tr> <td>others, specify_____</td> <td colspan="2">88</td> <td></td> </tr> </table>						Yes	No		Poor quality of services -----	1	2		Unable to perform cultural ceremonies-----	1	2		Unpleasant approach of health worker -----	1	2		Unfair & expensive price -----	1	2		Poor out come of services-----	1	2		others, specify_____	88							
	Yes	No																																					
Poor quality of services -----	1	2																																					
Unable to perform cultural ceremonies-----	1	2																																					
Unpleasant approach of health worker -----	1	2																																					
Unfair & expensive price -----	1	2																																					
Poor out come of services-----	1	2																																					
others, specify_____	88																																						
404	If you deliver at home what is your attitude to home delivery?	Excellent 1	Good 2	Indifferent 3	Fair 4	Bad 5	If t																																
405	Why good attitude to home delivery?	<table border="0"> <tr> <td></td> <td>Yes</td> <td>No</td> <td></td> </tr> <tr> <td>I feel more comfort being at home-----</td> <td>1</td> <td>2</td> <td></td> </tr> <tr> <td>To get care and attention from family members--</td> <td>1</td> <td>2</td> <td></td> </tr> <tr> <td>To perform cultural ceremonies-----</td> <td>1</td> <td>2</td> <td></td> </tr> <tr> <td>It is my usual practice -----</td> <td>1</td> <td>2</td> <td></td> </tr> <tr> <td>I don't like the services in the health service-----</td> <td>1</td> <td>2</td> <td></td> </tr> <tr> <td>I have experienced poor out come of delivery in health facility -----</td> <td>1</td> <td>2</td> <td></td> </tr> <tr> <td>Unwelcoming approach of Health workers -----</td> <td>1</td> <td>2</td> <td></td> </tr> </table>						Yes	No		I feel more comfort being at home-----	1	2		To get care and attention from family members--	1	2		To perform cultural ceremonies-----	1	2		It is my usual practice -----	1	2		I don't like the services in the health service-----	1	2		I have experienced poor out come of delivery in health facility -----	1	2		Unwelcoming approach of Health workers -----	1	2		
	Yes	No																																					
I feel more comfort being at home-----	1	2																																					
To get care and attention from family members--	1	2																																					
To perform cultural ceremonies-----	1	2																																					
It is my usual practice -----	1	2																																					
I don't like the services in the health service-----	1	2																																					
I have experienced poor out come of delivery in health facility -----	1	2																																					
Unwelcoming approach of Health workers -----	1	2																																					
406	Why bad attitude to home delivery?	<table border="0"> <tr> <td></td> <td>Yes</td> <td>No</td> <td></td> </tr> <tr> <td>Better services in health facility -----</td> <td>-1</td> <td>2</td> <td></td> </tr> <tr> <td>Better out come of delivery from health facility- -</td> <td>-1</td> <td>2</td> <td></td> </tr> <tr> <td>Good approach of Health. workers-----</td> <td>-1</td> <td>2</td> <td></td> </tr> <tr> <td>Poor out comes from home delivery -----</td> <td>-1</td> <td>2</td> <td></td> </tr> <tr> <td>other specify_____</td> <td colspan="2">88</td> <td></td> </tr> </table>						Yes	No		Better services in health facility -----	-1	2		Better out come of delivery from health facility- -	-1	2		Good approach of Health. workers-----	-1	2		Poor out comes from home delivery -----	-1	2		other specify_____	88											
	Yes	No																																					
Better services in health facility -----	-1	2																																					
Better out come of delivery from health facility- -	-1	2																																					
Good approach of Health. workers-----	-1	2																																					
Poor out comes from home delivery -----	-1	2																																					
other specify_____	88																																						

Part III: Predisposing Factor B. perceptions (perceived severity, susceptibility, benefits and barriers)

No.	Questions	Alternative /choice of response				
407	Like any pregnant women, I am susceptible to face pregnancy & delivery complication.	I strongly agree 1	I agree 2	Indifferent 3	I disagree 4	I strongly d 5
408	Delivery complication can be severe and may be hazardous to my well being.	I strongly agree 1	I agree 2	Indifferent 3	I disagree 4	I strongly d 5
409	Delivery complication can be severe and may be hazardous to the newborn.	I strongly agree 1	I agree 2	Indifferent 3	I disagree 4	I strongly d 5
410	Being attended by a skilled delivery attendant may be beneficial to my well being.	I strongly agree 1	I agree 2	Indifferent 3	I disagree 4	I strongly d 5
411	Being attended by a skilled delivery attendant may be beneficial to the newborns well being.	I strongly agree 1	I agree 2	Indifferent 3	I disagree 4	I strongly d 5

Part III. Predisposing Factor

C .Knowledge on Pregnancy and delivery complications and services

No	Questions	Alternative /choice of response		S																														
413	Are there some health problems that can occur during pregnancy that could endanger the life of a pregnant woman?	Yes—1	No-----2	Don't know-----87	4																													
414	Can you mention obstetric problems that can occur during pregnancy? (Probe: ask for the problems which are not mentioned spontaneously)	<table border="0"> <tr> <td></td> <td>Yes</td> <td>No</td> </tr> <tr> <td>Vaginal bleeding-----</td> <td>1</td> <td>2</td> </tr> <tr> <td>Sever headache -----</td> <td>1</td> <td>2</td> </tr> <tr> <td>Blurred vision-----</td> <td>1</td> <td>2</td> </tr> <tr> <td>Convulsion-----</td> <td>1</td> <td>2</td> </tr> <tr> <td>High fever-----</td> <td>1</td> <td>2</td> </tr> <tr> <td>Marked and fast weight gain-----</td> <td>1</td> <td>2</td> </tr> <tr> <td>Loss of consciousness-----</td> <td>1</td> <td>2</td> </tr> <tr> <td>Sever abdominal pain-----</td> <td>1</td> <td>2</td> </tr> <tr> <td>Others, specific _____</td> <td></td> <td>88</td> </tr> </table>			Yes	No	Vaginal bleeding-----	1	2	Sever headache -----	1	2	Blurred vision-----	1	2	Convulsion-----	1	2	High fever-----	1	2	Marked and fast weight gain-----	1	2	Loss of consciousness-----	1	2	Sever abdominal pain-----	1	2	Others, specific _____		88	
	Yes	No																																
Vaginal bleeding-----	1	2																																
Sever headache -----	1	2																																
Blurred vision-----	1	2																																
Convulsion-----	1	2																																
High fever-----	1	2																																
Marked and fast weight gain-----	1	2																																
Loss of consciousness-----	1	2																																
Sever abdominal pain-----	1	2																																
Others, specific _____		88																																
415	Are there some obstetric problems that can occur during labor and child birth that could endanger the life of a pregnant woman? (Probe: ask for the problems which are not mentioned spontaneously)	<table border="0"> <tr> <td></td> <td>Yes</td> <td>No</td> </tr> <tr> <td>Sever vaginal bleeding-----</td> <td>1</td> <td>2</td> </tr> <tr> <td>Sever headache-----</td> <td>1</td> <td>2</td> </tr> <tr> <td>Convulsion-----</td> <td>1</td> <td>2</td> </tr> <tr> <td>High fever -----</td> <td>1</td> <td>2</td> </tr> <tr> <td>Loss of consciousness-----</td> <td>1</td> <td>2</td> </tr> <tr> <td>Labor lasting >12 hours -----</td> <td>1</td> <td>2</td> </tr> <tr> <td>Placenta not delivered after 30 minutes baby is delivered-----</td> <td>1</td> <td>2</td> </tr> <tr> <td>Others specify _____</td> <td></td> <td>88</td> </tr> </table>			Yes	No	Sever vaginal bleeding-----	1	2	Sever headache-----	1	2	Convulsion-----	1	2	High fever -----	1	2	Loss of consciousness-----	1	2	Labor lasting >12 hours -----	1	2	Placenta not delivered after 30 minutes baby is delivered-----	1	2	Others specify _____		88				
	Yes	No																																
Sever vaginal bleeding-----	1	2																																
Sever headache-----	1	2																																
Convulsion-----	1	2																																
High fever -----	1	2																																
Loss of consciousness-----	1	2																																
Labor lasting >12 hours -----	1	2																																
Placenta not delivered after 30 minutes baby is delivered-----	1	2																																
Others specify _____		88																																
416	What do you think the advantages of pregnancy and delivery related services?	<table border="0"> <tr> <td></td> <td>Yes</td> <td>No</td> </tr> <tr> <td>For anticipating problems-----</td> <td>1</td> <td>2</td> </tr> <tr> <td>For early detection of health Problems-----</td> <td>1</td> <td>2</td> </tr> <tr> <td>For appropriate management of health problems</td> <td>1</td> <td>2</td> </tr> <tr> <td>For better health care to the women-----</td> <td>1</td> <td>2</td> </tr> <tr> <td>For better care to the newborn -----</td> <td>1</td> <td>2</td> </tr> <tr> <td>Others Specify _____</td> <td></td> <td>88</td> </tr> </table>			Yes	No	For anticipating problems-----	1	2	For early detection of health Problems-----	1	2	For appropriate management of health problems	1	2	For better health care to the women-----	1	2	For better care to the newborn -----	1	2	Others Specify _____		88										
	Yes	No																																
For anticipating problems-----	1	2																																
For early detection of health Problems-----	1	2																																
For appropriate management of health problems	1	2																																
For better health care to the women-----	1	2																																
For better care to the newborn -----	1	2																																
Others Specify _____		88																																

Part V: ENABLING FACTORS (Availability & Accessibility of services)

No.	Questions	Alternative /choice of response		
501	Is there a Health facility with skilled Delivery attendant in your nearby?	Yes-----1	No----- 2	Do not know---- 87
502	Can you afford to pay for services from Skilled delivery attendant?	Yes-----1	No----- 2	Do not know---- 87

503	Have you heard that Health Centers refer mothers to higher Health Facility?	Yes-----1 No----- 2 Do not know---- 87
504	How long does it take to travel from your home to the nearest health facility which gives delivery service?	30minutes----1 One hour---2 >one hour----3
505	Do you have access to Maternal and Child Health information?	Yes-----1 No----- 2
506	If yes to Q.No.505,What is the source of the information	Radio-----1 TV-----2 Newspaper----3 Health workers-----4 Others_____88

Part VI. REINFORCING FACTORS (Influences, & social supports)

No.	Questions	Alternative /choice of response	S																		
601	What was the preference of your husband to your place of delivery?	<table style="width:100%; border:none;"> <tr> <td></td> <td style="text-align:right">Yes</td> <td style="text-align:right">No</td> </tr> <tr> <td>Home delivery -----</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>Institutional delivery -----</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>Other, Specify _____</td> <td></td> <td style="text-align:right">88</td> </tr> </table>		Yes	No	Home delivery -----	1	2	Institutional delivery -----	1	2	Other, Specify _____		88							
	Yes	No																			
Home delivery -----	1	2																			
Institutional delivery -----	1	2																			
Other, Specify _____		88																			
602	What was the Preference of your husband about your delivery attendant?	<table style="width:100%; border:none;"> <tr> <td></td> <td style="text-align:right">Yes</td> <td style="text-align:right">No</td> </tr> <tr> <td>Skilled Delivery Attendant-----</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>TTBA-----</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>TBA -----</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>Family member &Relatives-----</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>Others,Specify _____</td> <td></td> <td style="text-align:right">88</td> </tr> </table>		Yes	No	Skilled Delivery Attendant-----	1	2	TTBA-----	1	2	TBA -----	1	2	Family member &Relatives-----	1	2	Others,Specify _____		88	
	Yes	No																			
Skilled Delivery Attendant-----	1	2																			
TTBA-----	1	2																			
TBA -----	1	2																			
Family member &Relatives-----	1	2																			
Others,Specify _____		88																			
603	What was the preference of other family members about your place of delivery	<table style="width:100%; border:none;"> <tr> <td></td> <td style="text-align:right">Yes</td> <td style="text-align:right">No</td> </tr> <tr> <td>Home delivery -----</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>Institutional delivery -----</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>Other, Specify _____</td> <td></td> <td style="text-align:right">88</td> </tr> </table>		Yes	No	Home delivery -----	1	2	Institutional delivery -----	1	2	Other, Specify _____		88							
	Yes	No																			
Home delivery -----	1	2																			
Institutional delivery -----	1	2																			
Other, Specify _____		88																			
604	What was the preference of other family members about your delivery attendant?	<table style="width:100%; border:none;"> <tr> <td></td> <td style="text-align:right">Yes</td> <td style="text-align:right">No</td> </tr> <tr> <td>Skilled Delivery Attendant-----</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>TTBA-----</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>TBA -----</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>Family members & Relatives -----</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>Other, Specify _____</td> <td></td> <td style="text-align:right">88</td> </tr> </table>		Yes	No	Skilled Delivery Attendant-----	1	2	TTBA-----	1	2	TBA -----	1	2	Family members & Relatives -----	1	2	Other, Specify _____		88	
	Yes	No																			
Skilled Delivery Attendant-----	1	2																			
TTBA-----	1	2																			
TBA -----	1	2																			
Family members & Relatives -----	1	2																			
Other, Specify _____		88																			
605	What was the preference of other community members as your place of delivery?	<table style="width:100%; border:none;"> <tr> <td></td> <td style="text-align:right">Yes</td> <td style="text-align:right">No</td> </tr> <tr> <td>Home delivery -----</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>Institutional delivery -----</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>Other. Specify _____</td> <td></td> <td style="text-align:right">88</td> </tr> </table>		Yes	No	Home delivery -----	1	2	Institutional delivery -----	1	2	Other. Specify _____		88							
	Yes	No																			
Home delivery -----	1	2																			
Institutional delivery -----	1	2																			
Other. Specify _____		88																			

Part VII. Women's decision making power

No.	Questions	Alternative /choice of response	S																					
701	If you give birth in Health Facilities, who make the final decision to deliver in Health Facility	<table style="width:100%; border:none;"> <tr> <td></td> <td style="text-align:right">Yes</td> <td style="text-align:right">No</td> </tr> <tr> <td>Just me -----</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>My husband/ partner-----</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>My family & relatives-----</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>.Health Professionals-----</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>Other people, Specify _____</td> <td></td> <td style="text-align:right">88</td> </tr> </table>		Yes	No	Just me -----	1	2	My husband/ partner-----	1	2	My family & relatives-----	1	2	.Health Professionals-----	1	2	Other people, Specify _____		88				
	Yes	No																						
Just me -----	1	2																						
My husband/ partner-----	1	2																						
My family & relatives-----	1	2																						
.Health Professionals-----	1	2																						
Other people, Specify _____		88																						
702	If you give birth at Home Who make the final decision to seek help when you have problem?	<table style="width:100%; border:none;"> <tr> <td></td> <td style="text-align:right">Yes</td> <td style="text-align:right">No</td> </tr> <tr> <td>Just me-----</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>husband/ partner-----</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>My family & relatives -----</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>Health Professionals-----</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>TBA-----</td> <td style="text-align:right">1</td> <td style="text-align:right">2</td> </tr> <tr> <td>Other people, Specify _____</td> <td></td> <td style="text-align:right">88</td> </tr> </table>		Yes	No	Just me-----	1	2	husband/ partner-----	1	2	My family & relatives -----	1	2	Health Professionals-----	1	2	TBA-----	1	2	Other people, Specify _____		88	
	Yes	No																						
Just me-----	1	2																						
husband/ partner-----	1	2																						
My family & relatives -----	1	2																						
Health Professionals-----	1	2																						
TBA-----	1	2																						
Other people, Specify _____		88																						

Date of Data collection _____
Name of Data collection _____
Code of Data collector _____
Signature of Data collector _____
Name and signature of supervisor _____

**አዲስ አበባ ዩኒቨርሲቲ ኮሚኒቲ ሄልዝ ዲፓርትመንት
ሐበሬታ መክታቢ ቸጥላ**

ጠቅላላ ሐበሬታ

መጠቀሚያ

□ መይ አለኝ/አለኝ □ :: ሽመይ-----እዩ :: እነ ካብቶም ብዛዕባ ብ□.ኢላ ሰብ ሞያ
ምውላድ ዝጥምት መፅናዕቲ ሐበሬታ ዝእክባ ሰባት ሓደ እዩ :: ኣብዚ መፅናዕቲ
ብምስታፍክ□/ብምስታፍክ□ ብጣዕሚ እዩ ዘመስግ□ :: ሓደ ሓደ ሕቶ ክሓተ□/ክሓተክ□ እዩ ::
ዝውድኦ ፯ ወይ 30 ደቂቃ እዩ ዝኸው□ :: ዝሃበክዩ/ዝሃብክናኒ መልሲ □ ማ□ም ኣይ□ገር□ ::
ብተወሳ□ ኣብዚ መፅናዕቲ ምስታፍ ብድልዩት ኣዩ :: ኣብ □ ይዲ ምምላስ □ ሎም ወይ □ ዓ ሓደ
ሓደ ሕቶታት □ ይትምልሳ ትኸኣላ ኢኸ□ :: ይኹ□ ኣምበር እዚ ፅ□ ዓት ኣብ ጥዕና ኣዴታት ዝወሃብ
ግልጋሎት ጥዕና □ ምምሕያሽ ዓብይ ረብሓ ስለዘለዎ እትህብና/እትህባና ሐበሬታ ብጣዕሚ ጠቓሚ
እዩ :: ስለዝኾነ ኣብዚ መፅናዕቲ □ ኸትሳተፊ/ክትሳተፋ ብኣ□ ብሮት እዩ ዝሓትት ::

001 ምፍለይ ሕቶ ቁፅሪ _____

002 ጣብያ _____

003 ቁፅረ ገዛ _____

004 ውፅኢት መጠይቅ ዝነበራሉ እዋ

ተቼ	ስም ተሓታዊት	ኣብዚ ዓመት ኣዙይ ዝወለደ ኣለዎ ዶ?		ኣብ መቀለ ነባርነተ <input type="checkbox"/> ትሕቲ ሽዱሽተ ወርሒ እ <input type="checkbox"/> ተኮይኑ ተደላይት ኣይኮና <input type="checkbox"/> 0 ተደላይት ኣይኮና <input type="checkbox"/> 1 ክስተታ ኣይደልዩ <input type="checkbox"/> 2 ክስተታ ፍቓደኛ እዩ <input type="checkbox"/> → ምስታት
		ኣለዎ	የለዎ <input type="checkbox"/>	

ክፍለ ሐደ፤ ውልቀ ኢኮኖሚያዊ ማህበራዊ ሐበራታ

ተቁ	ሕቶታት	መማሪፅ፣ መልስታት
101	ዕድሜኸ <input type="checkbox"/> ክ <input type="checkbox"/> ደይ እዩ?	_____ ዓመት
102	<input type="checkbox"/> ናታት ሓዳርክ <input type="checkbox"/> ይገልጻለይ ዶ?	በዓል፣ ሓዳር.....1 ሓዳር ዘይበላ.....2 ዝፈትሐት.....3 ሰብኣይ ዝሞታ4
103	ናይ ኦዮናይ ሃይማኖት ተሽታሊት እዩ <input type="checkbox"/> ?	ኦርቶዶክስ.....1 ሙስሊም2 ካሊእ ይገለፅ88
104	ናይ ኦዮናይ ብሄረ ተወላዲት እዩ <input type="checkbox"/> ?	ትግራይ.....1 አምሓራ.....2 አሮሞ.....3 ካሊእ ይገለፅ88
105	ናይ ትምህርቲ ደረጃኸ <input type="checkbox"/> ይገልጻለይ ዶ?	ም <input type="checkbox"/> ባብ ምፅሓፍ ዘይትክእል.....1 ም <input type="checkbox"/> ባብ ምፅሓፍ ትክእል.....2 ቀዳማይ ብር <input type="checkbox"/> ቤት ትምህርቲ (1-8)-----3 ካልኣይ ብር <input type="checkbox"/> ቤት ትምህርቲ <input type="checkbox"/> ካብኡ <input type="checkbox"/> ላዕሊ <input type="checkbox"/> (9-12+)-----4
106	<input type="checkbox"/> ናታት ስራሕ ይገልጻለይ ዶ?	አብ ገዛ ትውዕል ስራሕ ዘይበላ.....1 ናይ መ <input type="checkbox"/> ግስቲ ስራሕተኛ.....2 ናይ ውልቂ ስራሕ ትሰርሕ.....3 አብ ውልቂ ሰብ ሓፍቲ ትሰርሕ.....4 ካሊእ ይገለፅ88
107	ወርሓዊ እቶተ አለወ <input type="checkbox"/> ዶ?	እወ.....1 የብለይ <input type="checkbox"/>2 <input type="checkbox"/> ምግላፅ ፍቃደኛ አይኮ <input type="checkbox"/> <input type="checkbox"/>3
108	ወርሓዊ እቶተ <input type="checkbox"/> ክ <input type="checkbox"/> ደይ እዩ?	_____ ቅርሽ አብ ወርሐ
109	በዝሐ ስድራ	_____ ብቁፅሪ
110	ናይ በዓል ገዛኸ <input type="checkbox"/> ትምህርቲ <input type="checkbox"/> ናታት ይገልጻለይ ዶ?	ም <input type="checkbox"/> ባብ ምፅሓፍ ዘይትክእል.....1 ም <input type="checkbox"/> ባብ ምፅሓፍ ዝክእል.....2 ቀዳማይ ብር <input type="checkbox"/> ቤት ትምህርቲ(1-8)-----3 ካልኣይ ብር <input type="checkbox"/> ቤት ትምህርቲ <input type="checkbox"/> ካብኡ <input type="checkbox"/> ላዕል <input type="checkbox"/> (9-

ክፍሊ ክልተኛ ምስ ወሊድ ዝተተሓዙ ሕተታት

ተቁ	ሕተታት	መግሪፅ፡ መልስታት	ናብ ደስገሩ
201	መጀመርያ <input type="checkbox"/> ትምርጻዊ <input type="checkbox"/> ለኽ <input type="checkbox"/> ዕድመኽ <input type="checkbox"/> ክ <input type="checkbox"/> ደይ ነይሩ?	_____ ዓመት	
202	ኣብ ናይ መጀመርያ ጥ <input type="checkbox"/> ስኽ <input type="checkbox"/> ዕድመኽ <input type="checkbox"/> ክ <input type="checkbox"/> ደይ ነይሩ?	_____ ዓመት	
203	ክ <input type="checkbox"/> ደይ ጊዜ ነፍሰፀር ኮይ <input type="checkbox"/> ክ <input type="checkbox"/> ?	_____ ብቁፅሪ	
204	ክ <input type="checkbox"/> ደይ ቆልዑ ወሊድ ክ <input type="checkbox"/> ?	_____ ብቁፅሪ	
205	ኣብ ናይ መወዳእታ ጥ <input type="checkbox"/> ስኽ <input type="checkbox"/> ናብ ጥዕና ትካል <input type="checkbox"/> ይድክ <input type="checkbox"/> ዶ ነይር <input type="checkbox"/> ?	እወ <input type="checkbox"/> ይደ.....1 አይ <input type="checkbox"/> ድ <input type="checkbox"/> <input type="checkbox"/>2	
206	ናብ ጥዕና ትካል ዝኸድክናሉ ምኽ <input type="checkbox"/> ዶት እ <input type="checkbox"/> ታይ ነይሩ?	<input type="checkbox"/> ቅድመ ወሊድ ምርምራ.....1 ምስ ወሊድ ረክቢ ዘለዎም ፀገማት.....2 ምስ ወሊድ ረክቢ ዘይብሎም ናይ ጥዕና ፀገማት.....3 ካለእ እ <input type="checkbox"/> ተኮይኑ ይገለፅ88	301
207	ናብ ጥዕና ትካል ዝኸድክናሉ ምኽ <input type="checkbox"/> ዶት <input type="checkbox"/> ቅድመ ወሊድ ምርምራ እ <input type="checkbox"/> ተኮይኑ ክ <input type="checkbox"/> ደይ ጊዜ <input type="checkbox"/> ድክ <input type="checkbox"/> ?	ካብ ሓደ ስጋብ ሰለስተ ጊዜ.....1 አርባዕተ ጊዜ.....2 ካብ አርባዕተ ጊዜ <input type="checkbox"/> ላዕሊ.....3	
208	ኣብ እዋ <input type="checkbox"/> ቅድመ ወሊድ ክትትል ብዛዕባ ኣብ እዋ <input type="checkbox"/> ጥ <input type="checkbox"/> ስ <input type="checkbox"/> ወሊድ <input type="checkbox"/> ጊዜ ዘጋጥሙ ፀገማት ሓበሬታ ተዋሂቡክ <input type="checkbox"/> ዶ ነይሩ?	እወ ተዋሂቡኒ.....1 አይተውሃበ <input type="checkbox"/> <input type="checkbox"/>2 አይፈልጦ <input type="checkbox"/>87	
209	አበይ ክትወልዳ <input type="checkbox"/> ምዘለክ <input type="checkbox"/> ተሓቢሩልክ <input type="checkbox"/> ዶ ነይሩ?	እወ ተሓቢሩለይ.....1 አይተሓበረለይ <input type="checkbox"/>2	
210	<input type="checkbox"/> ሕቶ ቁፅሪ 209 እወ እ <input type="checkbox"/> ተኮይኑ መልስኽ <input type="checkbox"/> አበይ ክትወልዳ ተነገሩክ <input type="checkbox"/> ?	ኣብ ጥዕና ትካል.....1 ኣብ ገዛ.....2	

		ካሊኦ ኦቲዮፊያ ይገለፅ _____ 88	
211	አብ ኦቲዮፊያ ወሊድ መጠን ምዕራፍ ክፍል ምዕራፍ ተሓቢሩልክ ዶ ነይሩ?	እወ ተሓቢሩልድ _____ 1 ኣይተሓቢሩልድ _____ 2	
212	ኦቲዮፊያ ቁፅር 211 እወ ኦቲዮፊያ መልስክ መጠን ምዕራፍ ክፍል ምዕራፍ ክፍል?	ሰብ ሞያ ሞያ _____ 1 ናይ ልምዲ መዋለዲት _____ 2 ዝሰልጠነ ልምዲ መዋለዲት _____ 3 ቤተሰብ ዘመድ _____ 4 ካሊኦ ኦቲዮፊያ ይገለፅ _____ 88	

ክፍሊ ሰለስተኛ ኣድታት ኣብዝ መወዳእታ ዝወለዱ እዋን ዝነበረ ኣኣታት ወሊድ ስግባት ግልጋሎት

ተቋ	ኣኣታት	መግረፅ፡ መልስታት	ናብ ይስገሩ
301	አብ ዘሓለፈ ዓመት ቅድሚኡ እዚ ፅዕንት ኣብ ዘሎ እዋን ዝተወለደ ህፃን ብሂወት ዶ ተወለዱ ወይስ ሙት ኮይኑ ተወለዱ?	ብሂወት ተወለዱ _____ 1 ሞይቲ ተወለዱ _____ 2	
302	ኣበይ ኢኹን ወሊድክ?	አብ ገዛ _____ 1 አብ ሞያ ትካል _____ 2 ካሊኦ ኦቲዮፊያ ይገለፅ _____ 88	307
303	ኦቲዮፊያ ቁፅር 302 መልስክ ኣብ ገዛ ዝብል ኣኣታት ኣኣታት ኣብ ገዛ ወሊድክ?	አብ ገዛ ምኽት ሰለዝበኒ _____ 1 ኣብ ቀረባ ኣዝማደይ ቤተሰብ ናይ ቀረባ ክትትል ስለዝገበረሊይ _____ 2 ኡሎሳዕ ኣብ ገዛ ምውላድ ልምደይ ስለዝኾነ _____ 3 ናይ ባህሊ እምነተይ ኣኣታት ምፍጻም _____ ስለዝምኽወኒ _____ 4 አብ ሞያ ትካል ዝወገብ ግልጋሎት ኣይፈትዎ _____ 5 ቅድም ክብል ኣብ ሞያ ትካል ኣብ ዝወልድሉ ጊዜ ዘጋጠመኒ ሕግ ተሞክሮ ስለዝነበረ _____ 6 ብሕግ ኣቀባብላ ሰብ ሞያ ሞያ ምክያት _____ 7 ካሊኦ ኦቲዮፊያ ይገለፅ _____ 88	
304	አብ ገዛ ኣድሕር ወሊድክ ኮይኑ ኣኣታት መጠን ኣዋለዱ?	ባዕሊ _____ 1 ሰብ ሞያ ሞያ _____ 2 ናይ ልምዲ መዋለዲት _____ 3 ዝሰልጠነት ልምዲ መዋለዲት _____ 4 ቀረባ ኣዝማደይ ኣዕሩክተይ ንበቢተይ _____ 5 ካሊኦ ኦቲዮፊያ ይገለፅ _____ 88	
305	አብ ገዛ ክትወልዱ ስለኹን ፀገም ኣጋጠሙክ ዶ ነይሩ?	እወ ኣጋጠሙኒ _____ 1 ኣየጋጠመኑ _____ 2	307
306	ኦቲዮፊያ ቁፅር 305 መልስክ እወ ዝብል ኣኣታት ኣኣታት እቲ ፀገም ምእላይ እቲ ስጉምቲ ተወሲዱ.	ናብ ሞያ ትካል ተወሲደ _____ 1 ናብ ባህሊ መድሓኒት ፈላጊ ተወሲደ _____ 2 በልምዲ ኣዋላዲት ተሓመ _____ 3	

		ብሰብ ሞያ ጥዕና ተላ <input type="checkbox"/> መ4 ም <input type="checkbox"/> ም አይተገበረለይ <input type="checkbox"/>5 ካሊ እ <input type="checkbox"/> ተኮይኑ ይገለፅ88	
307	<input type="checkbox"/> ሕቶ ቁፅሪ 301 መልስሽ <input type="checkbox"/> አብ ጥዕና ትካል አ <input type="checkbox"/> ተኮይኑ <input type="checkbox"/> ም <input type="checkbox"/> ታይ እዩ ትብላ?	አብ ጥዕና ትካል ዝበለፀ ግልጋሎት ስለዘረክብ1 ናብ ዝነበረሉ <input type="checkbox"/> ባቢ ቀረባ ስለዘኮነ2 አብ ጥዕና ትካል ግልጋሎት ምርካብ ፅቡቅ ውፅኢት ስለዘለዎ3 አብ ገዛ ምውላድ ውፅኢቱ ሕግቅ ስለዘኾነ4 አብ ጥዕና ትካል <input type="checkbox"/> ክወልድ ስለዘተሓበረለይ5 ካሊ እ <input type="checkbox"/> ተኮይኑ ይገለፅ88	
308	አበዩናይ ጥዕና ትካል ወሊድክ <input type="checkbox"/> ?	ሆስፒታል1 ጣብያ ጥዕና2 <input type="checkbox"/> ሊኒክ3 ናይ ውልቂ ክሊኒክ4 ካሊ እ <input type="checkbox"/> ተኮይኑ ይገለፅ88	
309	አብ ጥዕና ትካል አ <input type="checkbox"/> ድሕር ወሊድ <input type="checkbox"/> <input type="checkbox"/> መ <input type="checkbox"/> አዋሊዱ <input type="checkbox"/> <input type="checkbox"/> ?	ካልእ ሰብ አይነበረ <input type="checkbox"/>1 ዶክተር2 ጥዕና መኮነ <input type="checkbox"/>3 መዋልዳ <input type="checkbox"/>4 ነርስ5 ጤና ረዳት6 ካሊ እ <input type="checkbox"/> ተኮይኑ ይገለፅ88	
310	እቲ/እታ ዘዋለደ <input type="checkbox"/> ፒዕና በዓል ሞያ አብ ዝወለዳሉ እዋ <input type="checkbox"/> ምስእ <input type="checkbox"/> <input type="checkbox"/> ዝፀ <input type="checkbox"/> ሓሉ/ <input type="checkbox"/> ዝፀ <input type="checkbox"/> ሓትሉ ጊዜ ዘለዎ <input type="checkbox"/> ዕግበት <input type="checkbox"/> መይ ይግምግመኦ?	ብጣዕሚ ዘዕግብ ነይሩ1 ዘዕግብ ነይሩ2 ም <input type="checkbox"/> ም ክብል አይደል <input type="checkbox"/>3 ዘዕግብ አይነበረ <input type="checkbox"/>4 ብጣዕሚ ዘዕግብ አይነበረ <input type="checkbox"/>5	
311	<input type="checkbox"/> ዝተዋለዳሉ መዋለዲ ቦታ ዝነበሮ ፅሬት ዘለዎ <input type="checkbox"/> ዕግበት <input type="checkbox"/> መይ ይግምግመኦ?	ብጣዕሚ ዘዕግብ ነይሩ1 ዘዕግብ ነይሩ2 ም <input type="checkbox"/> ም ክብል አይደል <input type="checkbox"/>3 ዘዕግብ አይነበረ <input type="checkbox"/>4 ብጣዕሚ ዘዕግብ አይነበረ <input type="checkbox"/>5	
312	አብ እዋ <input type="checkbox"/> ወሊደ <input type="checkbox"/> ፒዕና በዓል ሞያ ዝተዋለዳሉ አቁሕት <input type="checkbox"/> አድለይቲ ቀረባት <input type="checkbox"/> ዘለዎ <input type="checkbox"/> ዕግበት <input type="checkbox"/> መይ ይግምግመኦ?	ብጣዕሚ ዘዕግብ ነይሩ1 ዘዕግብ ነይሩ2 ም <input type="checkbox"/> ም ክብል አይደል <input type="checkbox"/>3 ዘዕግብ አይነበረ <input type="checkbox"/>4 ብጣዕሚ ዘዕግብ አይነበረ <input type="checkbox"/>5	
313	አብ እዋ <input type="checkbox"/> ወሊደ <input type="checkbox"/> ፒዕና በዓል ሞያ ዝተጠቀሙሉ አቁሕት ፅሬት ዘለዎ <input type="checkbox"/> ዕግበት <input type="checkbox"/> መይ ይግምግመኦ?	ብጣዕሚ ዘዕግብ ነይሩ1 ዘዕግብ ነይሩ2 ም <input type="checkbox"/> ም ክብል አይደል <input type="checkbox"/>3 ዘዕግብ አይነበረ <input type="checkbox"/>4 ብጣዕሚ ዘዕግብ አይነበረ <input type="checkbox"/>5	

314	አብ እዋ <input type="checkbox"/> ወሊደ <input type="checkbox"/> ፕሪና በዓል ሞያ ዝገበሩለ <input type="checkbox"/> ሓልዮት <input type="checkbox"/> ክብር <input type="checkbox"/> ዘለዎ ዕግበት <input type="checkbox"/> መይ ይግምግመኦ?	ብጣዕሚ ዘዕግብ ነይሩ.....1 ዘዕግብ ነይሩ.....2 ም <input type="checkbox"/> ም ክብል አይደል <input type="checkbox"/>3 ዘዕግብ አይነበረ <input type="checkbox"/>4 ብጣዕሚ ዘዕግብ አይነበረ <input type="checkbox"/>5	
315	አብ እዋ <input type="checkbox"/> ወሊደ <input type="checkbox"/> ምቶተ <input type="checkbox"/> ክብረ <input type="checkbox"/> <input type="checkbox"/> ምሕላው <input type="checkbox"/> ዝተወሰደ ስጉምቲታት ዘለዎ ዕግበት <input type="checkbox"/> መይ ይግምግመኦ? <input type="checkbox"/> አብነት ውልቀ ክፍሊ መጋሪጃ	ብጣዕሚ ዘዕግብ ነይሩ.....1 ዘዕግብ ነይሩ.....2 ም <input type="checkbox"/> ም ክብል አይደል <input type="checkbox"/>3 ዘዕግብ አይነበረ <input type="checkbox"/>4 ብጣዕሚ ዘዕግብ አይነበረ <input type="checkbox"/>5	
316	አብ እዋ <input type="checkbox"/> ወሊደ <input type="checkbox"/> ፕሪና በዓል ሞያ ዝነበሮ/ዝነበራ ክእለት <input type="checkbox"/> ብቛዓት <input type="checkbox"/> ዘለዎ ዕግበት <input type="checkbox"/> መይ ይግምግመኦ?	ብጣዕሚ ዘዕግብ ነይሩ.....1 ዘዕግብ ነይሩ.....2 ም <input type="checkbox"/> ም ክብል አይደል <input type="checkbox"/>3 ዘዕግብ አይነበረ <input type="checkbox"/>4 ብጣዕሚ ዘዕግብ አይነበረ <input type="checkbox"/>5	

ክፍሊ አርባዕተ፤ አመለካኸታ እምነታት አብ ገዛነ ጥዕና ትካል ምውላድ ዝመል ት

ተቁ	ሕቶታት	መግረፅቲ መልስታት	ናብ ዶስገሩ
401	አብ ጥዕና ትካል እ <input type="checkbox"/> ተወሊድ <input type="checkbox"/> ኮይ <input type="checkbox"/> ክ <input type="checkbox"/> አብ ወሊድ ግልጋሎት ዘለክ <input type="checkbox"/> አመለካኸታ እ <input type="checkbox"/> ታይ እዩ?	ፅቡቅ.....1 ሕማቅ.....2 <input type="checkbox"/> ሱ ሓደ.....3	403
402	<input type="checkbox"/> ሕቶ ቁፅሪ 401 ፅቡቅ አ <input type="checkbox"/> ተኮይኑ መልስክ <input type="checkbox"/> ም <input type="checkbox"/> ታይ አዩ ትብላ?	ዝሓሸ ፅሬት ገልጋሎት ሰለዘሎ.....1 ፅቡቅ አቀባብላ ሰብ ሞያ ጥዕና ሰለዘሎ.....2 <input type="checkbox"/> ዝወሃበ ግልጋሎት ደሓ <input type="checkbox"/> ዋጋ ሰለዘክፍል.....3 ፅቡቅ ውፀኢት ግልጋሎት ወሊድ ሰለዘሎ.....4 ካለእ አ <input type="checkbox"/> ተሃልዩ ይገለፅ88	
403	<input type="checkbox"/> ሕቶ ቁፅሪ 401 ሕማቅ አ <input type="checkbox"/> ተኮይኑ መልስክ <input type="checkbox"/> ም <input type="checkbox"/> ታይ አዩ ትብላ?	አብ ጥዕና ትካል ደ <input type="checkbox"/> ም <input type="checkbox"/> ፅሬቲ ዘይሓለወ ግልጋሎት ሰለዘሎ.....1 ባህላዊ <input type="checkbox"/> ሃይማኖታዊ <input type="checkbox"/> ልምድ ክፍፅም ሰለዘይክእል2 ዘዩሕጉሰ አቀባብላ ሰብ ሞያ ጥዕና ሰለዘሎ.....3 ግቡእ ዘይኮነ ክፍሊት ሰለዘሎ4 ቤተሰብ አብ መዋለዲ ክእትው ሰለዘይፍቀድ.....5 እቲ መዋለዲ ዓራት ሰለዘይምቶው.....6 ብዙሕ ሰራሕተኛ <input type="checkbox"/> ተመሃሮ <input type="checkbox"/> አብ መዋለዲ ቦታ ስለዝበዘሐ.....7 ድ <input type="checkbox"/> ም ውፅኢት ግልጋሎት ወሊድ አብ ጥዕና ትካል ሰለዘሎ.....8 ካለእ አ <input type="checkbox"/> ተሃልዩ ይገለፅ88	
404	አብ ገዛ ምውላድ <input type="checkbox"/> መይ ትረእእ?	ፅቡቅ.....1 ሕማቅ.....2 <input type="checkbox"/> ሱ ሓደ.....3	406

405	<input type="checkbox"/> ሕቶ ቁፅሪ 404 ፅቡቅ እና ተኮይኑ መልስክ <input type="checkbox"/> ምታይ አዩ ትብላ?	አብ ገዛ ምቶት ስለዘህበኒ1 ክክክክክክ ካብ ቤተሰብ <input type="checkbox"/> ምርካብ.....2 <input type="checkbox"/> ሉ ጊዜ አብ ገዛ እዩ ዝወልድ.....3 አወሃህባ ጥዕና ግልጋሎት ወሊድ ፅቡቅ ስለዘይኮነ.....4 አብ ጥዕና ትካል ሕማቅ ሕሉፍ ውፅኢት ወሊድ ስለዘለኒ.....5 ዘይፅቡቅ አቀባብላ ጥዕና ትካል ስራሕተኛታት ስለዘሎ.....6 ካለእ አብ ተሃልዮ ይገለፅ88	
406	<input type="checkbox"/> ሕቶ ቁፅሪ 404 ሕማቅ እና ተኮይኑ መልስክ <input type="checkbox"/> ምታይ አዩ ትብላ?	ዝሓሸ ፅፈት ግልጋሎት አብ ጥዕና ትካል ስለዘሎ.....1 ፅቡቅ ውፅኢት ግልጋሎት ወሊድ አብ ጥዕና ትካል ስለዘሎ.....2 ፅቡቅ አቀባብላ ሰብ ሞያ ጥዕና ስለዘሎ.....3 አብ ገዛ ዝወሃብ ወሊድ ግልጋሎት ውግኢቱ ድጋም ስለዘኮነ.....4 ካለእ አብ ተሃልዮ ይገለፅ88	

ክፍሊ አርባዕተኛ አብ እዋን ወሊድ ጥዕና በዓል ሙያ ምጥቃም ዝሕግዙ አመለካከታታት፣ ጥቅም ፀገማት

ተቁ	ሕቶታት	መግሪፅቴ መልስታት
407	ዝኾነት ጥበብ ኣዶ አብ እዋን ወሊድ ፀገማት ጋጥማ ይክእል እዩ	ብጣዕሚ እዩ ዝሰማመዓሉ1 ደሰማመዓሉ እዩ.....2 <input type="checkbox"/> ሉ ሓደ.....3 አይሰማመዓሉ <input type="checkbox"/>4 ብጣዕሚ አይሰማመዓሉ <input type="checkbox"/>5
408	<input type="checkbox"/> ም ዝኾነት ጥበብ ኣዶ አኑ አው <input type="checkbox"/> አብ እዋን ወሊድ ፀገማት ጋጥመኒ ይክእል እዩ	ብጣዕሚ እዩ ዝሰማመዓሉ1 ደሰማመዓሉ እዩ.....2 <input type="checkbox"/> ሉ ሓደ.....3 አይሰማመዓሉ <input type="checkbox"/>4 ብጣዕሚ አይሰማመዓሉ <input type="checkbox"/>5
409	አብ ወሊድ እዋን ዘጋጥሙ ፀገማት በደ <input type="checkbox"/> ሃውተይ አብ ሓደጋ ዘጋልፅ ክው ይክእል እዩ	ብጣዕሚ እዩ ዝሰማመዓሉ1 ደሰማመዓሉ እዩ.....2 <input type="checkbox"/> ሉ ሓደ.....3 አይሰማመዓሉ <input type="checkbox"/>4 ብጣዕሚ አይሰማመዓሉ <input type="checkbox"/>5
410	አብ ወሊድ እዋን ዘጋጥሙ ፀገማት በደ <input type="checkbox"/> ዝውለድ ህፃን አብ ሓደጋ ዘጋልፅ ክው ይክእል እዩ	ብጣዕሚ እዩ ዝሰማመዓሉ1 ደሰማመዓሉ እዩ.....2 <input type="checkbox"/> ሉ ሓደ.....3 አይሰማመዓሉ <input type="checkbox"/>4 ብጣዕሚ አይሰማመዓሉ <input type="checkbox"/>5
411	<input type="checkbox"/> ድሕንት ሓብቲ ጥበብ ኣዶ ብእላ ሰብ ሞያ ጥዕና እናተወለዳ <input type="checkbox"/> ጥዕና ፅቡቅ እዩ	ብጣዕሚ እዩ ዝሰማመዓሉ.....1 ደሰማመዓሉ እዩ.....2 <input type="checkbox"/> ሉ ሓደ.....3 አይሰማመዓሉ <input type="checkbox"/>4 ብጣዕሚ አይሰማመዓሉ <input type="checkbox"/>5
412	ወሊድ ኣዶ ብእላ ሰብ ሞያ ጥዕና እናተወለዳ <input type="checkbox"/> ጥዕና እቲ ህፃን ፅቡቅ እዩ	ብጣዕሚ እዩ ዝሰማመዓሉ1 ደሰማመዓሉ እዩ.....2

		<input type="checkbox"/> ሱሉ ሓደ.....3 <input type="checkbox"/> አይሰማመዓሉ.....4 <input type="checkbox"/> ብጣዕሚ አይሰማመዓሉ.....5
413	ዋላ እኳ <input type="checkbox"/> ኢላ ሰብ ሞያ አብ እዋ <input type="checkbox"/> ወሊድ እ <input type="checkbox"/> ተደለኸ -በዞም ዘስዕቡ ምኽ <input type="checkbox"/> የት <input type="checkbox"/> ይረኽቦ ይኽእል እየ	<input type="checkbox"/> ኢላ ሰብ ሞያ አብ ቀረባ ዘይምህላው..... 1 <input type="checkbox"/> ኢላ ሰብ ሞያ ጥዕና አብ ቀረባ ጥዕና ትካል ዘይምርካብ2 ክፍሊት ምኽባር.....3 መጋዓዝ ያስእ <input type="checkbox"/>4 ካልኢት ምኽ <input type="checkbox"/> የታት ይገለፅ <input type="checkbox"/> ባህላዊ <input type="checkbox"/> ሃይማኖታዊ <input type="checkbox"/> ስርዓት <input type="checkbox"/> ምፍጻም <input type="checkbox"/> ስለዘይ <input type="checkbox"/> አል ኣብነት “እልልታ”,ቡና ምፍላሕ.....
414	አብ እዋ <input type="checkbox"/> ወሊድ ጥዕና ትላል <input type="checkbox"/> ዘይምጥቃም ምኽ <input type="checkbox"/> የታት እ <input type="checkbox"/> ታይ እየም ይብላ?	<input type="checkbox"/> ስለዘይ <input type="checkbox"/> አል ኣብነት “እልልታ”,ቡና ምፍላሕ..... 1 ቤተሰብ ናብ መዋለዲ ስለዘይኣቲ.....2 ዝውለደሉ ኣቀማምጣ (birthing position) ስለዘይምኛውኒ.....3 እ <input type="checkbox"/> ግዳዕ ምሕላይ <input type="checkbox"/> ምድጋፍ <input type="checkbox"/> ስልዘየለ..... 4

ክፍሊ ኣርባዕተኛ ፍልጠት አብ ጥ ስ ወሊድ ዘጋጥሙ ፀገማት ጥዕና ግልጋሎት ዝምል ት

ተቁ	ሕቶታት	መግረፅ፡ መልሰታት	ናብ ደስገፋ
415	ናይ ጥ <input type="checkbox"/> ስ <input type="checkbox"/> ወሊድ <input type="checkbox"/> ግልጋሎት ዝህባ ጥዕና ትካላት አለዋ ዶ?	እወ አለዋ.....1 የለዋ <input type="checkbox"/>2 አይፈልጥ <input type="checkbox"/>3	
416	አብ እዋ <input type="checkbox"/> ጥ <input type="checkbox"/> ስ <input type="checkbox"/> ጋጥሙ ይኽእሉ እየም ተባሂሎም ትፅቢት ዝግበረሎም ፀገማት አለው ዶ?	እወ አለው.....1 የለው <input type="checkbox"/>2 አይፈልጥ <input type="checkbox"/>87	419
417	<input type="checkbox"/> ሕቶ ቁፅሪ 416 እወ እ <input type="checkbox"/> ተኮይኑ መልሰኸ <input type="checkbox"/> አብ እዋ <input type="checkbox"/> <input type="checkbox"/> ጥ <input type="checkbox"/> ስ <input type="checkbox"/> ጋጥሙ ይኽእሉ እየም ተባሂሎም ትፅቢት ዝግበረሎም ፀገማት እ <input type="checkbox"/> ታይ እየም?	እወ አይኮነ <input type="checkbox"/> ካብ ማህፀ <input type="checkbox"/> ደም ምፍላስ.....1 2 ርአሲ ሕማም.....1 2 ናይ ዓይኒ ምጭብርባር.....1 2 ም <input type="checkbox"/> ቅጥቃጥ.....1 2 ዝለዓለ ርስኒ ሰውነት.....1 2 ርኡይ <input type="checkbox"/> ቁልጡፍ <input type="checkbox"/> ዝኾነ ክብደት ምውሳኽ.....1 2 ነብስኻ ምስሓት.....1 2 ዝለዓለ <input type="checkbox"/> ብዲ ቃ <input type="checkbox"/> ዛ.....1 2 ካልእ እ <input type="checkbox"/> ተኮይኑ ይገለፅ88	
418	<input type="checkbox"/> ሕቶ ቁፅሪ 416 እወ እ <input type="checkbox"/> ተኮይኑ መልሰኸ <input type="checkbox"/> አብ እዋ <input type="checkbox"/> ወሊድ <input type="checkbox"/> ጋጥሙ ይኽእሉ እየም ተባሂሎም ትፅቢት ዝግበረሎም ፀገማት እ <input type="checkbox"/> ታይ እየም?	እወ አይኮነ <input type="checkbox"/> ካብ ማህፀ <input type="checkbox"/> ደም ምፍላስ.....1 2 ርአሲ ሕማም.....1 2 ናይ ዓይኒ ምጭብርባር.....1 2 ም <input type="checkbox"/> ቅጥቃጥ.....1 2 ዝለዓለ ርስኒ ሰውነት.....1 2	

		ነብስኻ ምስሓት-----1 2 ካብ 12 ሰዓት <input type="checkbox"/> ላዕሊ ዝኾኖ ሕርሲ-----1 2 መዳሕ <input type="checkbox"/> ቲ ልዕሊ 30 ደቂቃ ምፅናሕ ---1 2 ካሊእ ኣ <input type="checkbox"/> ተኮይኑ ይገለፅ _____88	
419	ግልጋሎት ቅድመ ወሊድ <input type="checkbox"/> ግልጋሎት ወሊድ <input type="checkbox"/> ጥቕሙ እ <input type="checkbox"/> ታይ እዩ ትብላ?	እወ እይኮኛ <input type="checkbox"/> <input type="checkbox"/> ቅድመ ጥ <input type="checkbox"/> ቃቕ-----1 2 ኣቐዲምካ ጥዕናዊ ፀገማት <input type="checkbox"/> ምፍላጥ----- 1 2 ጥዕናዊ ፀገማት ብትኽ <input type="checkbox"/> ል <input type="checkbox"/> ምእላይ- 1 2 ዝሕሸ ክ <input type="checkbox"/> ክ <input type="checkbox"/> ጥዕና <input type="checkbox"/> ኣይ <input type="checkbox"/> ምርካብ-1 2 ዝሕሸ ክ <input type="checkbox"/> ክ <input type="checkbox"/> ጥዕና <input type="checkbox"/> ዘውለድ ሕፃ <input type="checkbox"/> <input type="checkbox"/> ምርካብ- 1 2 ካሊእ ኣ <input type="checkbox"/> ተኮይኑ ይገለፅ _____88	

ክፍሊ ሓሙሽተ ግልጋሎት ወሊድ ምህላው ክርብ ምኽኣሉ

ተቁ	ሕቶታት	መግረፅቲ መልስታት	ናብ ይስገሩ
501	<input type="checkbox"/> ኢላ ሰብ ሞያ ዘለወ <input type="checkbox"/> ጥዕና ትካላት ብኸባቢኽ ኣሎ ዶ?	እወ ኣሎ-----1 የለ <input type="checkbox"/> ----- 2- ኣይፈልጥ <input type="checkbox"/> -----87	
502	ብ <input type="checkbox"/> ኢላ ሰብ ሞያ <input type="checkbox"/> ዘወሃብ ግልጋሎት ወሊድ ናይ ምክፋል ዓቀማ ኣለክ <input type="checkbox"/> ዶ?	እወ ኣለኒ-----1 የበለይ <input type="checkbox"/> -----2 ኣይፈልጥ <input type="checkbox"/> -----87	
503	ጥዕና ትካላት ካብ ዓቅመ <input type="checkbox"/> <input type="checkbox"/> ላዕሊ <input type="checkbox"/> ዝኾኖ ወላድ ኣዴታት ናብ ዝለዓለ ጥዕና ትካል ይልእኻ ዶ?	እወ ይልእኻ እየ <input type="checkbox"/> -----1 ኣይልእኻ <input type="checkbox"/> -----2 ኣይፈልጥ <input type="checkbox"/> -----87	505
504	<input type="checkbox"/> ሕቶ ቁፅሪ 503 ኣወ ኣ <input type="checkbox"/> ተኮይኑ መልስኽ <input type="checkbox"/> መ <input type="checkbox"/> እዩ ዘተሓባብሮ?	ባዕለይ-----1 ሰብ ሞያ ጥዕና-----2 ቤተሰብ-----3 ካሊእ ኣ <input type="checkbox"/> ተሃልዩ ይገለፅ _____88	
505	ናብ <input type="checkbox"/> ኢላ ሰብ ሞያ ዘለወ <input type="checkbox"/> ጣብያ ጥዕና <input type="checkbox"/> ምካድ መጋዓዝያ ትረኽባ ዶ?	እወ ይረክብ -----1 ኣይረክብ <input type="checkbox"/> -----2	507
506	<input type="checkbox"/> ሕቶ ቁፅሪ 505 ኣወ ኣ <input type="checkbox"/> ተኮይኑ መልስኽ <input type="checkbox"/> ክ <input type="checkbox"/> ይይ ጊዜ ይወስደልክ <input type="checkbox"/> ?	30 ደቂቃ -----1 ካብ 30 ደቂቃ <input type="checkbox"/> ላዕሊ ስጋብ 1ሰዓት ----- 2	
507	ናይ ኣዴታት <input type="checkbox"/> ሕፃናት <input type="checkbox"/> ዝምል <input type="checkbox"/> ት ሓበሬታ ትረኽባ ዶ?	እወ ይረክብ -----1 ኣይረክብ <input type="checkbox"/> -----2	601
508	<input type="checkbox"/> ሕቶ ቁፅሪ 507 ኣወ ኣ <input type="checkbox"/> ተኮይኑ መልስኽ <input type="checkbox"/> እ <input type="checkbox"/> ታይ እዩ ፍልፍል ሓበሬታኽ <input type="checkbox"/> ?	ራድዩ-----1 ቴሌቪዥ <input type="checkbox"/> -----2 ጋዜጣ----- -3 ሰብ ሞያ ጥዕና-----4 ካሊእ ኣ <input type="checkbox"/> ተሃልዩ ይገለፅ _____88	

ክፍሊ ሽዱሽተኛ ግልጋሎት ወሊድ ምጥታም ሓገዝቲ ሐሳባት

ተቁ	ሕቶታት	መግረፅቲ መልስታት
601	በዓል ገዛኽ <input type="checkbox"/> አበይ ክትወልዲ አዩም ዝመርፅ?	አብ ገዛ.....1 አብ ጥዕና ትካል.....2 አይፈልጥ <input type="checkbox"/>87
602	በዓል ገዛኽ <input type="checkbox"/> መ <input type="checkbox"/> ግልጋሎት አዩም ዝመርፅ ነይሮም?	ሰብ ሞያ ጥዕና.....1 ናይ ልምዲ መዋለዲት.....2 ዝሰልጠነ ልምዲ መዋለዲት.....3 ቤተሰብ, ጎረቤት4 ካለእ አ <input type="checkbox"/> ተኮይኑ ይገለፅ88
603	ካልኣት ቤተሰብክ <input type="checkbox"/> <input type="checkbox"/> አበይ ክትወልዲ አዩም ዝመርፁ?	አብ ገዛ.....1 አብ ጥዕና ተካል.....2 አይፈልጥ <input type="checkbox"/>87
604	ካልኣት ቤተሰብክ <input type="checkbox"/> <input type="checkbox"/> መ <input type="checkbox"/> ግልጋሎት አዩም ዝመርፁ?	ሰብ ሞያ ጥዕና.....1 ናይ ልምዲ መዋለዲት.....2 ዝሰልጠነ ልምዲ መዋለዲት.....3 ቤተሰብ, ጎረቤት4 ካለእ አ <input type="checkbox"/> ተኮይኑ ይገለፅ88
605	ካልኣት ሕብረተሰብ <input type="checkbox"/> አበይ ክትወልዲ አዩም ዝመርፁ?	አብ ገዛ.....1 አብ ጥዕና ትካል.....2 አይፈልጥ <input type="checkbox"/>87
606	ካልኣት ሕብረተሰብ <input type="checkbox"/> መ <input type="checkbox"/> ግልጋሎት አዩም ዝመርፁ?	ሰብ ሞያ ጥዕና.....1 ናይ ልምዲ መዋለዲት2 ዝሰልጠነ ልምዲ መዋለዲት.....3 ቤተሰብ, ጎረቤት4 ካለእ አ <input type="checkbox"/> ተኮይኑ ይገለፅ88

ክፍሊ ሽዱሽተኛ ናይ አድታት ናይ ምውሳኔ ዓቅጫ

ሰቁ	ሕቶታት	መግረፅቲ መልስታት
701	አ <input type="checkbox"/> ድሕር አብ ጥዕና ትካል ወሊድክ <input type="checkbox"/> ኮይ <input type="checkbox"/> ክ <input type="checkbox"/> አብኡ <input type="checkbox"/> ክትወልዲ ናይ መወዳእታ ውሳኔ ዝገበ መ <input type="checkbox"/> አዩ?	ባዕለይ.....1 ባዓል ገዛይ.....2 አዝማይይ.....3 ሰብ ሞያ ጥዕና.....4 ካለእ አ <input type="checkbox"/> ተኮይኑ ይገለፅ88
702	አ <input type="checkbox"/> ድሕር አብ ገዛ ወሊድክ <input type="checkbox"/> ኮይ <input type="checkbox"/> ክ <input type="checkbox"/> አብኡ <input type="checkbox"/> ክትወልዲ ናይ መወዳእታ ውሳኔ ዝገበ መ <input type="checkbox"/> አዩ?	ባዕለይ.....1 ባዓል ገዛይ.....2 አዝማይይ.....3 ሰብ ሞያ ጥዕና.....4 ካለእ አ <input type="checkbox"/> ተኮይኑ ይገለፅ

ሓበሬታ ዝተኣበሉ ዕለት _____
ሓበሬታ ዝኣበሉ ስም _____
መፍለጫ ቁጽር ኣካቢ ሓበሬታ _____
ፊርማ ኣካቢ ሓበሬታ _____
ሰም ፊርማ ተቆጻጻሪ _____