

**INTENTION TO INSTITUTIONAL DELIVERY AMONG  
PREGNANT WOMEN OF WOLKITE TOWN, ETHIOPIA:-A  
COMMUNITY BASED CROSS SECTIONAL STUDY  
USING THE THEORY OF PLANNED BEHAVIOUR**

BY

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## **ABSTRACT**

**Background:**-Recent estimates suggest that more than 500,000 women die annually of pregnancy related complications ninety-nine percent (99%) of those deaths occur in less developed regions particularly Africa and Asia. In addition 3.9 million newborn and 3 million still births are lost each year. In Ethiopia MMR, which are around 673 per 100,000 live births, one of the highest in the world. Interestingly, a large proportion of these deaths could be prevented through timely and appropriate interventions such as delivery care.

**Objective:**-To assess the intention of pregnant women in utilizing institutional delivery in Wolkite town, South Nation's Nationalities and Peoples Regional State, Ethiopia by using the theory of planned behavior.

**Methods:**-A community based cross sectional study design employed both quantitative and qualitative data collection methods were carried out in Wolkite town. The theory of planned behavior was used as a conceptual framework. Simple random sampling technique was employed to select 320 study subjects from all pregnant women that were found in the town. For qualitative study Key informants were selected using "purposive sampling" technique to identify the study subjects from the study area. The data were collected through interviewer administered questionnaire then entered and analyzed using SPSS V.16. Bivariate and Multivariate analysis was carried out to identify the most important predictors of institutional delivery intention. Qualitative data were analyzed manually by summarizing into key thematic area

**Result:** In this study 303 pregnant women were participated obtaining a response rate of 95%. The 26th percentile of mean score of the respondents on overall intention gives a score of 12 which implies that 74% of the respondents on overall intention scored above uncertain. Intending to utilize institutional delivery services is higher among younger women, those women who visit ANC service for the current pregnancy, those women who have favorable attitude towards utilization of institutional delivery and those women who had higher subjective norm while it is lower among older women.

**Conclusion and recommendation:** majority of the respondents were intended to deliver in the institution based on TPB. But still a significant proportion of them were not intended to deliver in the institution due to different reasons. Women with higher maternal age were less likely intended to deliver in the institution. This implies that this group should be one of the priorities areas for targeting education campaigns on the benefits of safe motherhood programs.

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## **LIST OF ACRONYMS**

ANC	Anti natal care
DHS	Demographic and Health Survey
EDHS	Ethiopian Demographic and Health Survey
FGD	Focus group discussion
HEW	health extension worker
HF	health facility
ID	Institutional delivery
IEC	Information Education Communication
MOH	Ministry of health
PBC	Perceived behavioral control
SN	Subjective norm
SNNPR	South Nations Nationalities and People's Region
SPSS	Statistical package for social science studies
SRS	Simple random sampling
TPB	Theory of planned behavior
TRA	Theory of reasoned action
UNICEF	United Nations International Children's' Emergency Fund
WHO	World Health Organization



## **CHAPTER 1: INTRODUCTION**

### **1.1 BACKGROUND OF THE STUDY**

Institutional delivery is any delivery that occurred in a modern health facility and was assisted by medically trained professionals such as medical doctors, nurses and midwife/auxiliary midwife. Appropriate delivery care is crucial for both maternal and prenatal health and increasing skilled attendance at birth is a central goal of the safe motherhood and child survival movements. Skilled attendance at delivery is an important indicator in monitoring progress towards Millennium Development Goal 5 to reduce the maternal mortality ratio by three quarters between 1990 and 2015(1).

In addition to professional attention, it is important that mothers deliver their babies in an appropriate setting, where life saving equipment and hygienic conditions can also help reduce the risk of complications that may cause death or illness to mother and child (2). Each year around four million newborns die in the first week of life, worldwide and an estimated 529,000 mothers die due to pregnancy-related causes (3). Women play a major role in the rearing of children and the management of family affairs, hence, their loss from delivery complications is a significant social and personal tragedy. There is a strong link between low use of maternal health services for delivery and high maternal mortality. Globally, about 60 million women give births outside health facilities, mainly at home, and 52 million births occur without a skilled birth attendant every year (4).

In low and middle-income countries many deliveries still occur at home and without the assistance of trained attendants (4). In Ethiopia only 16 % of delivery is attended by skilled attendant (5). A study done in Bangladesh reported that around 20-30% of neonatal mortality could be reduced by implementing skilled delivery care services (6). The effort to increase access to trained birth attendants was initiated by the World Health Organization in 1987 in Nairobi, Kenya, through the launching of the Safe Motherhood Initiative, aimed at ensuring women have a safe pregnancy and childbirth (7). Attention to maternal health was demonstrated in 2000 when 147 heads of state and government and 189 nations in total signed the Millennium Declaration, in which the proportion of births assisted by trained birth attendants became an important indicator to

measure the progress of improving maternal health (Millennium Development Goal 5) (8). Early and regular check-ups by health professionals are essential in assessing the physical status of women during pregnancy and ensuring appropriate interventions during delivery. In spite of the national and global effort at curbing maternal morbidity and mortality, through the safe motherhood initiative, the phenomenon is on the ascendancy in many developing countries (9).

The United Nations International Children's' Emergency Fund (UNICEF) estimates that yearly about 515,000 women die of pregnancy and childbirth complications. Each year worldwide, almost 600,000 maternal deaths occur due to complications of pregnancy and delivery and majority of them occur in developing countries (10).

Complications of pregnancy and delivery remain the leading causes of death and disability among women of reproductive age in developing countries (11). Interestingly, a large proportion of these deaths could be prevented through timely and appropriate interventions such as delivery care (12).

If we work to improve maternal and newborn health and survival, it is generally agreed that women should be assisted during delivery by trained healthcare professionals with appropriate equipment, medications and access to referral systems (1).

Intention to use health services might be affected by a multiple factors including not only availability, distance, cost, and quality of services, but also by socioeconomic factors and personal health beliefs or perception, knowledge, attitude and social influences can have their own contribution. Therefore the main aim of this study is to describe or assess the pregnant women's intention in utilization of institutional delivery.

## **1.2 STATEMENT OF THE PROBLEM**

About 600, 000 maternal deaths occur each year from any cause related to or aggravated by the pregnancy. An additional 300 million women suffer from short or long term illnesses related to child bearing. This shows that the maternal deaths show only the tip of the iceberg (5). Maternal disabilities are strongly associated with poor or nonexistent medical care during delivery and immediately after delivery. Only about half of all births in less developed countries are attended by a doctor, nurse, or trained midwife. In many cases, women who experience complications do not receive adequate medical attention in time to avert serious illness or injury. Women and their families may not recognize the warning signs of complications or may fear poor treatment or high fees at health facilities. Even deliveries in health facilities can be risky, because the quality of obstetric care may be inadequate. In some cases, the delay between arriving at a health facility and receiving care results in the death of the mother or child.

In Ethiopia, delivery attended by health professionals is only 16% (3). This situation very well explains the high MMR in Ethiopia, which is around 673 per 100,000 live births, one of the highest in the world. It is well established phenomenon that maternal morbidity and mortality can be reduced substantially if all women get the assistance of skilled health worker during pregnancy and delivery and access to emergency medical care when a complication arises. Two thirds of maternal deaths occur within the 48 hours after delivery and it is estimated that 16-33% of maternal deaths can be prevented by the use of skilled birth attendant as they can ensure timely management of complications by themselves (2).

Data show that less than two thirds (62%) of women in developing countries receive assistance from a skilled health worker when giving birth (5). This means that 45 million home deliveries each year are not assisted by skilled health personnel. There are many reasons why women do not receive the care they need during delivery. Many pregnant women do not intend to get it because there are no services where they live, they cannot afford the services because they are too expensive or reaching them is too costly. Some women do not use services because they do not like how care is provided or because the

health services are not delivering high-quality care (3).The use of traditional birth attendants and home delivery were preferable for some community members in spite of the availability of a village midwife in the village. Some major factors for the use of both traditional birth attendants and home delivery were the economic and pragmatic reasons, since delivery costs with a midwife or at health care facility were perceived unaffordable. This was aggravated by the low economic status of the community members. Other reasons found were the trust and tradition that traditional birth attendants engendered; they shared the same culture and were long-serving members of the community. The services of trained birth attendants during childbirth or an institutional delivery were perceived important by some community members only during obstetric complications. Furthermore, difficult access to health care personnel and facilities was amongst the major reasons for preferring traditional birth attendants and home delivery. On study done in Indonesia home delivery was considered more convenient for some women because of their responsibilities to children or other household members (15).

Further, cultural beliefs or a woman's low status in society can prevent a pregnant woman from getting the care she needs. To improve maternal health, gaps in the capacity and quality of health systems and barriers to accessing health services must be identified and tackled at all levels, down to the community. However in Wolkite town no studies have been undertaken concerning utilization of institutional delivery service as well as maternal health service. The main aim of this study is to assess the intention of pregnant women in utilizing institutional delivery in the town by using the theory of planned behavior.

## **CHAPTER 2 LITERATURE REVIEW**

### **Trends in utilization of institutional delivery**

Globally, it is estimated that 34% of the mothers deliver without skilled attendant; this means there are 45 million births occurring at home without skilled health personnel each year. Skilled attendants assist in more than 99% of deliveries in developed countries compared with 62% in developing countries. In five countries including Ethiopia the percentage drops to less than 20% (13). Globally modest improvements in coverage of skilled care at delivery have occurred with an annual average of 1.7 percent increase over the period of 1989-1999. typically in sub-Saharan Africa, the average annual rate of skilled attended deliveries increased by only 0.1 percent (14).

### **Factors affecting intention to institutional delivery service**

Intention to utilize institutional delivery service is affected by a multitude of factors. Several studies have attempted to identify and measure the effects of factors that contribute to differentiation in the utilization of health care services (15). Review of literature across the globe suggests that these factors can be identified as cultural beliefs, socio-demographic status, women's autonomy, economic conditions, physical and financial accessibility, and health services issue (16).

### **Socio economic and demographic factors**

Intention to use institutional delivery service is expected to be associated with demographic and socioeconomic factors. One important demographic variable that affects the intention of utilization of health seeking behavior is mothers' age at the time of birth. Studies show that lower utilization of maternity care services is observed among mothers who are over 35 years of age (17).

Parity, the number of children ever born, is strongly associated with health seeking behavior. Studies show that primiparous women are consistently more likely

to deliver with the assistance of a health professional than any other parity group. High parity women are the least likely to seek maternity care services (5) due to greater confidence and cumulative experience (21). On the other hand, nulliparous women seek early maternity care services (10). Economic status has recently been described by using DHS data to classify women into quintile group according to household wealth. Wealth is measured by means of an asset score that is based on principal component analysis on more than 40 asset variables: durable consumer goods, housing facilities and housing materials (18). Hence, economic status is to be found as an important indicator of access to health care services. Intending to utilize maternity care services is expected to be substantially higher among mothers in the upper quintiles of the wealth index (28).

### **Knowledge about institutional delivery**

Lack of education and poor knowledge about maternal health care can contribute to delays in seeking care during delivery (13). Women with no education were less likely intended to be attended delivery by a health professional than women with some secondary or higher education (15). In a study of maternal health service utilization in Turkey, pointed out that the educational attainment of women a positive and statistically significant impact on the use of maternity care. This result showed both with one to five years of schooling and women with six or more years of schooling were substantially more likely to use health care services than the without any schooling (16). Low education was significantly associated with increased risk of home delivery as shown by a study conducted in Nepal. (17). A study from India have pointed out that the low utilization of maternity services seems to be due to high illiteracy (18). Another study in north Gondar Zone identified that the use of skilled birth attendants was significantly influenced by the level of education. Women with higher level of education (secondary and above) were 10.6 times more likely to use safe delivery services that those with lower education levels (19).

### **Perception on institutional delivery**

In Uganda the perception normal vs. abnormal pregnancy can influence the delivery site. Mothers go to institution only if they know they usually get complications in labor (20). At government hospitals, women felt that health staff were rude and unhelpful, and made them wait for hours before receiving any services. On the other hand, TBAs play a significant role during and after delivery, particularly providing neonatal care. In addition at home births women are surrounded by family members and receive special care (21). TBAs were known or seen as fellow community members and their services were familiar and acceptable in the community (22). A similar study in Pakistan described perceptions and low literacy level of the mother's causes of poor utilization of primary health care services (23). The study in Gullele District, Addis Ababa, revealed that one fourth of women preferred to deliver at home. The risk of preference to deliver at home was higher for those whose husbands' or partners' attitude toward ANC attendance was negative and for those who did not attend ANC clinics (24).

### **Preference of place of delivery**

Studies conducted in rural Butajira and Adamitulu revealed that 88% and 83% mother preferred to give birth at home (25). In Gullele district, Addis Ababa most pregnant women (55.3%) preferred to deliver in hospital, 18.1% preferred health center or health station while 24.3% of the women preferred to deliver at home. Reasons for preferring to deliver in a particular health institution were high quality of service, closeness to health facilities and health workers approach at the health institution. Some women wanted to deliver at home where relatives are nearby and out of whom 67% of them wanted the deliveries to be conducted by traditional birth attendants, while 25% preferred the deliveries to be conducted by close relatives (26).

### **Attitude towards institutional delivery service**

A prospective community based follow up study which conducted in Jimma was shown that 70.4% have good attitudes, only (3) 1.5% of them have bad attitudes

towards institutional delivery. And Majority 73% of the women was intending to deliver in health facilities, while 24% intended to deliver at home. Out of 184 women who have been interviewed after they deliver, 67.4% of them have delivered in health facilities, while the rest 32.6% have delivered at home (27). Women whose husbands or partners have favorable attitude towards ANC follow up were found more likely to prefer delivering in health facilities (20). And women whose families perceive the need for maternal health care are more likely to utilize such services (28).

### **Social influences on place of delivery**

Social pressure especially from spouses and other relatives has emerged as an important factor influencing the intention of pregnant women delivering in a particular place (21). The delay in care seeking might be compounded by male dominated decision making. The dependence of women on their husbands and senior household members have pertained them to seeking health care (28). However the influences of intentions and practices of men and close relatives on delivery outcome have not been thoroughly investigated in both developed and developing countries (29).feedback from other people that may encourage or discourage a certain behavior or practice. The influences from other people are important in determining intentions and practices of the women and these influences from can be reflected in terms of their perceptions and their preferences about place of delivery and delivery attendants (30).

Influences from husbands and other relatives is sometimes very crucial in determining institutional delivery service utilization by the women, because the influences from these people may not always end by only encouraging or discouraging the women to utilize the services, as in some instances these same people might be the primary decision makers about institutional delivery Service utilization of the women as demonstrated in a series of studies conducted in rural Bangladesh, which finds out that the influences of husbands, mothers and mother in laws were important in determining women's institutional delivery service Utilization (31). Women's decision making power in relation to delivery service utilization is another critical factor, because whether the previously discussed factors are favorable or not favorable to have institutional delivery services, the most important step in intending or actually getting



the services largely relies on whether they have the power to make the final decision to get institutional delivery, if they wanted to or if they have to. Accordingly a study conducted in rural Zimbabwe has shown that, where a good number of women (41.8%) were decision makers regarding ANC attendance, the attendance was as high as 79.3% (32).

### **Decision making power of women**

Women in rural areas have limited access to facilities and low social status. For example, one-third of women in Ethiopia report that their husbands make decisions about their healthcare without consulting them, while only 15% of women make their own decision (33). In Nigeria women are economically and socially dependent on their husband because of lack of access to production, despite they provide most of the farm labor. Consequently, women have to seek their husband's permission to obtain any treatment that may be costly. Whenever the husband is not available a close kinsman has to make the decision considering the financial burden that it may induce (34). In Bolivia the education level of the grandmother can significantly influence the number of antenatal care visits and the delivery location for women (35). Uzma and his colloquies reported that in complicated deliveries, often the mother in law is the decision maker (36). In patriarchal societies, women are generally left out of the decision making process even on issues that pertain uniquely to them. Studies in developing countries suggested that the decision regarding delivery is generally made at an early stage of pregnancy. Generally the head of the household makes the decision and selects the place of delivery with or without consulting other adult family members (37).

### **Traditional and cultural factors**

Social and cultural factors play a crucial role in the decision making process on maternal health service utilization in traditional societies, delivery is viewed as a normal event. It takes place at home and highly supported by the family to meet the need for emotional and physical care support. According to Jordan delivery is biosocial phenomenon, it involves a universal physiological process which is associated with specific sociocultural practices deferentially defined by each society. In Nigeria most

health problems were perceived as the consequence of one's sins. Complications of pregnancy are often assumed to be caused by committing extramarital affair or bewitching their spouses. Consequently women tend to accept complications in pregnancy and after deliver as punishment for their sins, and men are often lukewarm over providing financial assistance or allowing their wife to seek treatment (38). A qualitative study made in Tigray shows that Most of the FGD participants also described traditional and religious factors were hindering the use of institutional delivery. Since most of the respondents were Christians they mentioned that St. Mary (Mother of Christ) had helped them to have a safe birth during labor. It is traditional that all the relatives, mothers, husbands, religious leaders gather and practice religious prayers till the mother gives birth instead of taking the laboring mother to the health. They believe the prayer will help the mother to have an easy delivery without the assistance of a skilled attendant (39).

## **Conceptual Frame work**

The theory of planned behavior and its precursor the theory of reasoned action are prominent models in health psychology research. From 1985-to April 2004, the TPB has featured in 622 papers. The TPB is established to answer the limitation in the TRA. The construct of PBC was added in to TRA in to an effort to deal with situations where individuals may lack complete volitional control over the behavior (41). This mostly featured behavioral model that has been used to predict human behavior. In this study TPB is used to identify personal and behavioral factors that are important in influencing pregnant women's intentions in utilizing institutional delivery. A major assumption in this theory is that people are usually rational and make predictable use of the information available to them. It states that intentions are the most immediate influence on behavior (42). Thus if a woman intends to utilize institutional delivery then it is likely she will do so and if the woman doesn't intend to perform it, then the behavior is unlikely to be performed. Intentions are influenced by attitudes. I.e. good feeling about utilizing institutional delivery and by subjective norms i.e. the person's perceptions of influences from significant others, or influential people, about utilizing institutional delivery. The theory further hypothesizes that attitudes are determined by people's perception about what that the control the people have in relation to the behavior is another factor, which determines, their intentions towards performing the behavior.

Thus the theory predicts that a person is most likely to perform a behavior when he/she feels good about performing the behavior, if he/she feels influences from influential people about performing the behavior and if he/she feels that she has personal control over the behavior.

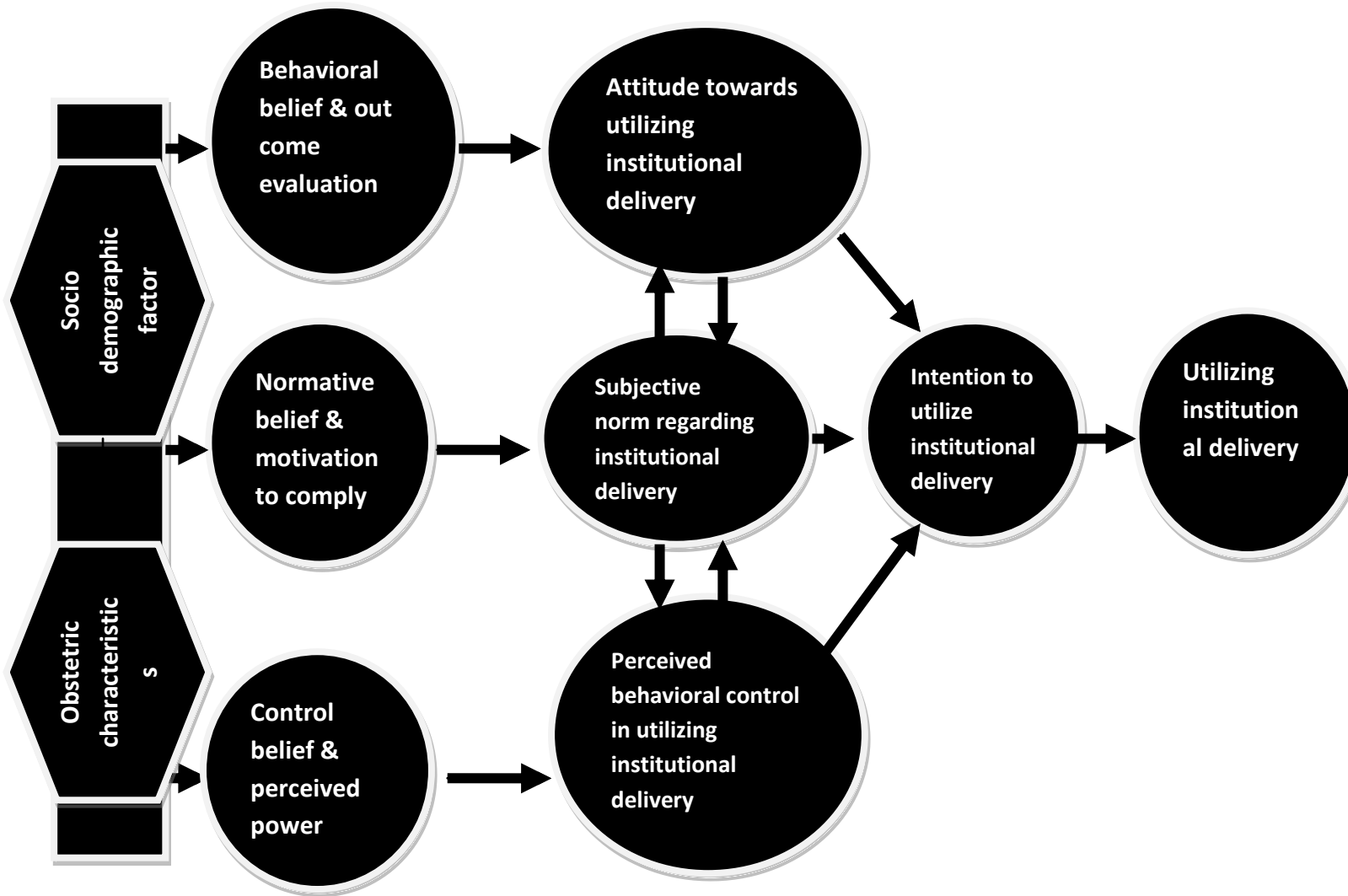


Figure 1. Conceptual frame work on determinants of intention of pregnant women in utilizing institutional delivery (Icek Ajzen, 2006)

## **2.2. SIGNIFICANCE OF THE STUDY**

Though women comprise a large proportion of a given society, still many women in developing countries are at greater disadvantage. A large number of women are needlessly dying due to factors related to pregnancy and childbirth. Experiences from both developed and some developing countries have shown that these deaths could have been prevented if women had access to basic maternity care services. However, in less developed world particularly in SSA countries availability and utilization of maternal healthcare services are low (8, 13).

In Ethiopia, the levels of maternal and infant mortality and morbidity are among the highest in the world. One explanation for poor health outcomes among women is the non-use of modern health service by a sizable proportion of women in the country. In sub-Saharan Africa, many more women attend ANC clinics than seek skilled attendant delivery services (UNICEF and WHO 2006). This means that even among women who have formal interactions with the healthcare system through ANC-seeking, a significant sub-set still delivers without adequate obstetric care. This situation is the same in our country, Ethiopia and in the study area too. Studies in the highland major urban towns of Ethiopia have shown that less than 16 % of deliveries are attended by health professionals (22). If a person intends to perform a behavior then it is likely he or she will do so and if the person doesn't intend to perform it, then the behavior is unlikely to be performed (43).

Therefore, assessing the intention of pregnant women towards utilizing institutional delivery is an essential step in targeting the problem associated with deliveries attended without trained health personnel. Studies have not been conducted on such matters in the area and empirical evidence is very helpful to act on the problem locally. The findings from this study will give a highlight into the factors that determine delivery service utilization of pregnant women and this will be helpful for the relevant stakeholders in the planning and implementation of intervention activities to improve the delivery service utilization of pregnant women in Wolkite town.

## **CHAPTER 3: OBJECTIVES**

### **3.1. GENERAL OBJECTIVE**

- To assess the intention and influencing factors of pregnant women in utilizing institutional delivery in Wolkite town, SNNPRs, Ethiopia 2011 by using the Theory of Planned Behavior.

### **3.2. SPECIFIC OBJECTIVES**

1. To measure level of pregnant women's intention to institutional delivery in Wolkite town.
2. To assess the attitude of pregnant women towards institutional delivery in Wolkite town.
3. To describe subjective norms about institutional delivery in Wolkite town.
4. To assess the perceived behavioral control of utilizing institutional delivery.
5. To identify the determinants of intention to institutional delivery service utilization.

## **CHAPTER 4: METHODS AND MATERIALS**

### **4.1. STUDY AREA AND PERIOD**

Wolkite town is found in SNNPRs, Gurage zone which is located 156 km south west of Addis Ababa along Jimma road. The town has five kebeles with a total population of 32,352. The town has 2 governmental health institutions that are one health center and one health post, eight private clinics & one NGO (FGAE). In addition to this, the number of health professionals that are found in the town is: twenty two nurses, five health officers, two TTBA's five HEWs (1 per kebele) & others are thirty two. The estimated number of pregnant women in the town is 1212 (Wolkite town health office record review).

The study was undertaken from March to April 2011 GC

### **4.2. STUDY DESIGN**

A community based cross sectional study design employed both quantitative and qualitative data collection methods were carried out.

### **4.3. POPULATION**

#### **4.3.1. Source population**

All pregnant women found in Wolkite town.

#### **4.3.2. Study Population**

Study population was the eligible pregnant women selected from the source population included in the study. During enumeration (listing of pregnant women), the women's gestational age, estimated by the women themselves and their ANC follow up status was assessed and those women who knew their pregnancy status was identified as eligible for the study and selected through simple random sampling.

#### 4.4. INCLUSION AND EXCLUSION CRITERIA

##### **Inclusion Criteria**

All Pregnant women who knew their pregnancy status were included.

##### **Exclusion criteria**

Pregnant women who didn't know their pregnancy status, who were seriously ill could not communicate and mentally ill during the data collection period were excluded from the study.

#### 4.5. SAMPLE SIZE AND SAMPLING TECHNIQUES

##### **Sample size determination**

The sample size was calculated by using a single population proportion sample size calculation formula considering the following assumptions.

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

P = 50% (proportion of pregnant women who are intended to deliver in the health institution)

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

Z  $\alpha/2$  = 1.96 (level of significance)

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

n = 384 individuals. Hence N < 10,000, a correction formula was used.

$$n_f = \frac{n}{1 + (\frac{n}{N})}$$

The corrected sample size was 291, and by considering 10% non-response rate the final sample size was **320**.



## **Sampling Techniques**

### **For quantitative study-**

Simple random sampling technique was employed for the study. Before the actual data collection process enumeration was carried out to identify pregnant women in all kebeles that are found in the town. Each house hold was given consecutive corresponding house number to households which satisfied inclusion criteria. Finally sampling frame which contain 524 pregnant women was created and simple random sampling technique was employed to select study subjects.

### **For qualitative study-**

For focus group discussion and key informant interview “purposive sampling” technique was used to select the study subjects from the study area based on experience(exposure), had overview with respect to the topic & willing to share this information.

## **4.6. MEASUREMENT AND VARIABLES**

### **4.6.1 DATA COLLECTION TECHNIQUES**

#### **Data collectors’ recruitment**

Ten data collectors, who were diploma nurses, graduated from private college, currently unemployed; know the local language and the study area very well. For supervisor two experienced diploma nurse was recruited. The data collectors and supervisors have been given three days training on the objective of the study, its relevance, confidentiality of participant’s response, participant’s right, informed consent, techniques of interview which is supplemented with practical demonstration.

#### **4.6.2 DATA COLLECTION INSTRUMENT**

Two separate data collection instrument were developed to collect qualitative and quantitative data. The quantitative data collection instrument has three sections socio demographic in formations, obstetric history and direct measures of behavioral intention. The direct measures of behavioral intention are adapted to the local context from the manual developed from constructing questionnaires using the TPB (42). These questions are presented in a multiple item, where each constructs of TPB had four questions and likert scale ranging from strongly disagree with a value of 1 to strongly agree with a value of 5 was used..

### **For Qualitative study**

Two FGD with married men and four key informant interviews were conducted with midwife nurse and with health extension professionals in order to supplement the result of the quantitative data. A semi-structured interview guide was used to facilitate the key informant interview. The data collection was employed interview with exploration through probing questions.

A checklist was prepared to guide the discussion in such a way to generate relevant information. It was held in a quiet and comfortable place. The principal investigator was the moderator and one temporary employed note taker; was taking short notes of the discussion. A tape recorder was used to record the discussion.

### **4.6.3 STUDY VARIABLES**

#### **Dependent variable**

- Intention to institutional delivery.

#### **Independent variables**

- Attitude towards institutional delivery,
- Subjective norm regarding institutional delivery
- perceived behavioral control towards institutional delivery
- Obstetric and related factors
- Socio economic and demographic variables

### **4.7 DATA COLLECTION PROCESS**

Data was gathered through interviewer administered technique using translated and pretested structured questionnaire. Data was collected by trained data collectors. Supportive supervision was conducted during the entire data collection period by the investigator and supervisors.

### **4.8. OPERATIONAL DEFINITION**

- **Pregnant women:** - During enumeration the women's gestational age was estimated by the women themselves and their ANC follow up status was assessed and those women who knew their pregnancy status were identified as pregnant women.
- **Institutional delivery-** any delivery that occurred in a modern health facility and which is assisted by medically trained professionals such as medical doctors, nurses and midwife/auxiliary midwife.
- **Behavior:** - utilization of institutional delivery

- **Intention to institutional delivery**:-it is the pregnant woman's motivation in the sense of her conscious plan to exert effort to utilize institutional delivery. It is measured by asking four items in five scale response format ranging from strongly disagree to strongly agree.
- **Level of intention**: - percentile of the mean score of the overall intention of the respondent.
- **Perceived behavioral control** - is Response on likert scale to specific question about easiness or difficulties of utilization of institutional delivery. It was measured directly with three items that assess the respondents PBC in five scale category.
- **Subjective norm**: - is response on likert scale to specific question about perceived social pressure of pregnant woman to utilize or not to utilize institutional delivery. Four items was used to measure the SN directly with five scale measures.
- **Attitude** - is the response on likert scale to specific question about the degree of favor or disfavor (positive or negative feelings) of institutional delivery. It was measured by asking the respondents direct degree of favor or disfavor through four items presented in five response category.
- **Skilled delivery attendant** - people with midwifery skills (Doctors, Nurses, Health officers Midwives and TBAs) who have proficiency in skills necessary to manage normal deliveries, and diagnose, manage or refer obstetric complications
- **Traditional birth attendants**: A birth attendant who initially acquired the ability by delivering babies herself or through apprenticeship to other TBAs.

#### **4.8 DATA MEASUREMENT**

In each subscales different items was used to rate different aspects of the variable. Each question was scored on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). To examine the underlying factors (components) of the sub scales, an exploratory factor analysis was conducted. And it produced one meaningful factor with Eigen value greater than one for each construct. Intention was assessed using four items on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). The items in this scale include: "I want to deliver my baby in the institution "I intended to deliver my baby in the institution "I have a plan to deliver my baby in the institution", and "I expect pregnant women to deliver in the institution". However, when factor analysis was computed, only one factor with eigenvalue greater than one was identified. And then the percentile of the mean score of the overall intention was used to measure the overall level of intention to deliver in health institution.

## **4.9 DATA ANALYSIS**

### **Quantitative**

Data was coded, entered and cleaned by using SPSS version 16. A number of variables were included in the questionnaire to measure the explanatory factors in the study. Attitudes, subjective norm perceived behavioral control and intention to institutional delivery have several component items included to measure them. In order to assess the association of these factors, with outcomes of interest scores in each factor are summed up, to come up with a single scoring for each factor, for every respondent, to represent each factor as a single variable in the analysis. Negatively stated items were inversely coded and entered to SPSS. Bivariate analyses (correlation) were carried out to test the relationship or association between external factors and direct measures with intention (dependent variable) and P value of 0.05 was taken as cut off point to label the significance of the variables. Multivariate regression analysis was done too see the relative contribution of independent variables in determining the variability of institutional delivery intention. Summary tables and graphs were used to present the descriptive findings.

### **Qualitative**

The audio taped from FGD and key informant interviews was transcribed in full text and translated from Amharic to English. The analysis started with listening of the audio, reading and re-reading of the text in order to extract important statements from the description. It was analyzed manually by summarizing into key thematic area.

## **4.11. DATA QUALITY CONTROL**

To ensure the quality of gathered data from the study subjects, a range of mechanisms was employed to address major areas of bias introduction during the data collection process. First, the questionnaire was pre- tested by taking 5 percent of the sample size on similar subjects but different setting and necessary modification in the questionnaire was made based on the nature of gaps identified.

A three days training was given for data collectors and supervisors on how to gather the appropriate information, procedures of data collection techniques and the whole contents of the questionnaire.

A day to day on site supervision was carried out during the whole period of data collection by the investigator and by the supervisors who were identified during training. The questionnaire was checked for completeness, accuracy and consistency by the supervisors

and investigator and corrective discussion was under taken with all the data collectors and the supervisors. Data were cleaned and edited after it is entered in to the SPSS software.

#### **4.13 ETHICAL CONSIDERATIONS**

Prior to data collection appropriate ethical clearance was obtained from the ethical clearance committee of the Jimma University. Formal letter of permission was produced from administrative bodies of the zone to the woreda and to kebele. Letter of cooperation from kebele administrators was also obtained.

Confidentiality was also assured for the information provided since the name of the information provider was not stated on the questionnaire rather coding system was applied. Finally verbal consent was requested from every study participant included in the study during data collection time after explaining the objectives of the study.

#### **4.14 DISSEMINATION PLAN**

The findings will be presented and submitted to Jimma University the department of Health education and behavioral science and college of public health and medical sciences. The findings will also be communicated to local health planners and other relevant stake holders at zonal and regional level in the area to enable them take recommendations in to consideration during their planning process. It can also be communicated to health planners and managers at regional level. Publication in peer reviewed, national or international journals will also be considered.

## CHAPTER 5 RESULT AND DISCUSSION

### 5.1 RESULTS

#### Socio-demographic characteristics of the respondents

Three hundred three pregnant women were participated and this makes the response rate of the study 95%.

One hundred eighteen (38.9%) of the respondents were in the age group of 26-30 years, 66(21.8%) of them were between the age of 21-25 years, 60(19.8%) were in the age group of 31-35, 39(12.9%) were below the age of 20 and the rest 20(6.6%) were above the age of 35 years. The mean age of respondents was  $27.5 \pm$  (SD, 5.2) years. Seventy eight (25.7%) of the respondents were never attended any formal education and 33(10.9%) of the respondents were unable to read and write, 74 (24.4%) attended primary school and 80(26.4%) had completed secondary high school and 35(12.5%) higher education. Out of the total respondents 142(46.9%) were Muslims and 127(41.9%) were Orthodox, the rest 15(5%) and 19(6.3%) are Catholic and Protestant respectively. The majorities were Gurage 229(75.6%) followed by Amhara ethnic group 45(14.9%), Oromo 16(5.3%) and Tigres were 7(2.3%).

Regarding the respondents' occupation housewives were 172(56.8%), followed by merchant 71(23.4%) government employee 42(13.9%) and students were 18(5.9%). Almost all 299 (98.7%) were married and the rest 4(1.3%) were single. One hundred sixty eight (55.4%) of the respondents had monthly income below (500 Birr), while 126(41.6%) of them reported 501-1000 Birr per month and the rest 9(3%) of them reported above 1000 Birr. The average monthly income was  $598.43 \pm$  (321.53) Birr. (Table1).

**TABLE 1: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS IN WOLKITE TOWN, SNNPRs, ETHIOPIA, MARCH –APRIL, 2011**

Variables	Number (n=303)	Percentage
<b>Age</b>		
≤20	39	12.9
21-25	66	21.8
26-30	118	38.9
31-35	60	19.8
≥36	20	6.6
Mean + SD		27.5±(5.2)
<b>Educational status</b>		
Never attended	78	25.8
Read and write only	33	10.9
Elementary school	74	24.4
Secondary high school	80	26.4
12+	38	12.5
<b>Ethnicity</b>		
Gurage	229	75.6
Amhara	45	14.8
Oromo	16	5.3
Tigre	7	2.3
Others	6	2.0
<b>Occupation</b>		
House wife	174	56.8
Government employee	42	13.9
Merchant	71	23.4
Student	18	5.9
<b>Religion</b>		
Muslim	142	46.8
Orthodox	127	41.9
Protestant	19	6.3
Catholic	15	5.0

<b>Marital Status</b>		
Married	299	98.7
Single	4	1.3
<b>Income per month</b>		
≤ 500 birr	168	55.4
501-1000	126	41.6
≥1001	9	3.0
<b>Mean ± SD</b>		598.43±(321.53)

### **Obstetric characteristics of the respondents**

Seventy eight (25.7%) of the respondents were primigravidae or it was their first pregnancy. Two hundred (88.9%) of the respondents had 1-4 children and 22(9.7%) of them had five and more than five children. Nine (4%) of the respondents ever had an abortion. Fourteen (6.2%) of them have had still birth, 22 (9.9%) of the respondents had one or two infant death. (Table 2)

**TABLE 2: OBSTETRICS CHARACTERISTICS OF THE RESPONDENTS IN WOLKITE TOWN, SNNPRS, ETHIOPIA, MARCH –APRIL, 2011**

VARIABLES	NUMBERS	PERCENT
<b>Gravidity(n=303)</b>		
1	78	25.7
2-4	174	57.4
≥5	51	16.9
<b>Parity (n=225)</b>		
0	3	1.4
1-4	200	88.9
≥5	22	9.7
<b>Number of live births(n=225)</b>		
0	6	2.7
1-4	197	87.6
≥5	22	9.7
<b>Ever had abortion(n=225)</b>		
Yes	9	4
No	216	96
<b>Ever had still birth(n=225)</b>		
Yes	14	6.2
No	211	93.8
<b>Ever had infant death(n=222)</b>		
Yes	22	9.9
No	200	90.1



### **Previous maternal health service utilization**

Hundred eighty four (60.7%) of the respondents' were visiting ANC service for their current pregnancy and the rest 119(39.3%) did not. Regarding place of last delivery, 160(72.1%) of the deliveries took place at health institution and 62 (27.9%) deliveries took place at home. The reasons for delivering at home were dislike behaviors of health workers which account 20(32.3%), one FGD participant stated that *".....if they go to the health institution they will be seen by male delivery assistances with no adequate privacy, and unfriendly of some of the staffs who are not committed to their work."* So, that they feel shy and therefore unless there are life threatening conditions they do not prefer to deliver at health institutions. (Married man, 44 years), another age 35 married man stated that *"to tell you the truth, health professionals themselves that are found in this town are not treating patients appropriately. All the residents are complaining about this issue. They are not treating us like human being. Let me tell you one thing sometimes even only good approach of health worker for a patient is enough but they are not acting like health professional."* expenses for delivering in health facility was unaffordable 16(28.8%), wishes to deliver at home where relatives are nearby 12(19.4%).Twenty nine (46.8%) of home deliveries were attended by TBAs, 28(45.2%) of deliveries were attended by close relatives or friends and 5(6.1%) were attended by neighbors. reasons given by the respondents to deliver in particular health institution was close to where I live 70(43.5%),high quality service 51(31.7%),little expenses to deliver in this particular health institution 25(15.5%),good approaches of health workers 8(5.0%) and other reasons 7(4.3%). (Table 3)

**TABLE 3: PREVIOUS MATERNAL HEALTH SERVICE UTILIZATION OF RESPONDENTS IN WOLKITE TOWN SNNPRS, ETHIOPIA 2011**

<b>Variables</b>	<b>Number</b>	<b>Percentage</b>
<b>ANC follow up for current pregnancy(n=303)</b>		
Yes	184	60.7
No	119	39.3
<b>Last delivery place(n=222)</b>		
Health center	91	41
Home	62	27.9
Hospital	43	19.4
Health station/clinic	26	11.7
<b>Reasons for delivering in health institution(n=160)</b>		
Close to where I live	69	43.1
High quality service	51	31.8
Little expenses to deliver in this particular health institution	25	15.7
Good approaches of health workers	8	5.1
Others	7	4.3
<b>Reasons for delivering at home(n=62)</b>		
Dislike behaviors of health workers in health institution	27	43.5
Expenses for delivering at HF is unaffordable	16	25.8
Wishes to deliver at home where relatives are nearby	18	29.0
More trust on TBAs and relatives than health workers	11	17.7
Others	3	4.84
<b>Assistance during home delivery(n=62)</b>		
TBAs	29	46.8
Close relatives/friends	28	45.1
Neighbors	5	8.1

### **Reliability analysis:-**

Reliability analysis result indicated that all direct measures had reliabilities that were acceptable. Which is greater than 0.70, indicating that high internal consistency or the scales used in this study can successfully measure the constructs of interest.

**TABLE 4 : CRONBACH'S ALPHA VALUE FOR EACH CONSTRUCT**

<b>Construct</b>	<b>Cronbach's alpha</b>
Intention	0.981
Attitude	0.947
Subjective norm	0.846
Perceived behavioral control	0.724

### **Assessments of attitude**

This study revealed that 45.5% and 41.9% of the respondents somewhat agreed and strongly agreed respectively when they were asked whether institutional delivery is beneficial or not. When respondents were interviewed whether or not the institutional delivery as good, 48.2% of the respondents somewhat agreed while 40.6% were strongly agreed. 40.6% of the respondents were somewhat agreed when they were interviewed whether or not institutional delivery as pleasant. When they were interviewed whether the institutional delivery as useful or not, 47.2% and 41.3% of them were somewhat agreed and strongly agreed respectively.

### **Subjective norm**

Regarding subjective norm 43.2% and 44.2% of the respondents somewhat agreed and strongly agreed respectively on their idea asked about this item: "most people who are important to me think that I should utilize institutional delivery". When respondents were asked their idea on "It is expected of them to deliver in the institution", 38.9% respondents somewhat agreed and 47.9% strongly agreed. Similarly when they were interviewed on "I feel like I am under social pressure to deliver in the institution" 38% of the respondents somewhat agreed and 39.3% of the respondent strongly agreed, finally when they were asked about "people who are important to me want me to deliver in the institution." 43.9% and 44.6% of the respondents somewhat agreed and strongly agreed respectively.

### Perceived behavioral control

Concerning Perceived behavioral control, when respondents were asked about their agreement on “I am confident to utilize institutional delivery if I wanted to” 35% of the respondent somewhat agreed and 42.9% strongly agreed.

Thirty nine point six percent and 30.7% of the respondents agreed and strongly agreed respectively, when they were asked their agreement on “for me institutional delivery is very easy”. When respondents were interviewed whether or not the decision to utilize institutional delivery is beyond their control, 32.7% and 35.0% of the respondents strongly disagree and somewhat disagreed respectively. Finally when they were asked whether utilizing institutional delivery is up to them, 29% of the respondents were somewhat agreed and 42.2% strongly agreed.

**TABLE 5. ATTITUDE, SUBJECTIVE NORM, AND PERCEIVED BEHAVIORAL CONTROL REGARDING INSTITUTIONAL DELIVERY IN WOLKITE TOWN, SNNPRs, ETHIOPIA, 2011**

<b>ATTITUDE</b>	<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>	<b>%</b>
institutional delivery is beneficial”	1	3.6	7.9	45.6	41.9	100
institutional delivery is good”	1	4	6.3	48.1	40.6	100
institutional delivery is pleasant	2	7.5	12	41.6	37.3	100
institutional delivery is useful”	1	4	6.5	47.2	41.3	100
<b>SUBJECTIVE NORM</b>						
Most people who are important to me think that I should utilize institutional delivery	1.1	5.9	5.6	43.2	44.2	100
It is expected of me to deliver in the institution	2.6	7.6	3	38.9	47.9	100
I feel like I am under social pressure to deliver in the institution	5	13.7	4	38	39.3	100
People who are important to me want me to deliver in the institution	2	8.6	1	43.9	44.5	100
<b>PERCEIVED BEHAVIORAL CONTROL</b>						
I am confident to utilize institutional delivery if I wanted to	3.3	16.5	2.3	35	42.9	100
Institutional delivery is very easy	8.6	17.8	3.3	39.6	30.7	100
The decision to utilize institutional delivery is beyond my control	33	35	3.6	21.1	7.6	100

Key SD=strongly disagree, D=Disagree, N=Neutral, A=Agree, SA=strongly agree

### **Level of Intention to institutional delivery**

Based on the original scoring of 1 to 5 for each item, mean of the overall intention would have a potential range from 4 to 20, with a midpoint of 12. The 26<sup>th</sup> percentile of mean score of the respondents on overall intention provided 12 which imply that 74% of the respondents on overall intention scored above uncertain. Supported by qualitative finding “...there is an improvement from the previous situation since nowadays many pregnant women are in need or want to deliver in health institution even if there are some deliveries outside health institution. (Midwife nurse, 28 years).

### **Determinants of behavioral intention to institutional delivery**

Bivariate analysis was done to assess the association between direct measures of behavioral intention and pregnant women’s intention to institutional delivery. All direct measures were strongly correlated with intention to institutional delivery with a p value of <0.001 (Table 5). But by applying multiple linear regression, when they were adjusted for other direct measures of behavioral intention both attitudes and subjective norms made significant contributions to the prediction of intention to institutional delivery. ( $R^2=0.44$ ) (P value <0.05). (Table 6)

**TABLE 5 CORRELATIONS OF DIRECT MEASURES WITH OVER ALL INTENTION**

	N	Correlation coefficient	Sig. (2 tailed)
Over all attitude	303	.518	<0.001
Over all subjective norm	303	.623	<0.001
Over all PBC	303	.498	<0.001

**TABLE 6 MULTIPLE REGRESSION MODEL FOR PREDICTING BEHAVIORAL INTENTION BASED ON DIRECT MEASURES IN WOLKITE TOWN, SNNPRs, ETHIOPIA, 2011**

Model		Un standardized Coefficients		Standar dized Coeffici ents	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta		Lower Bound	Upper Bound
1	(Constant)	-4.380	1.345		.001	-7.027	-1.733
	over all attitude	.393	.087	.239	<.001	.221	.564
	over all subjective norm	.685	.094	.438	<.001	.500	.871
	over all PBC	.150	.101	.088	.140	-.049	.349

### **Socio-demographic and Obstetric related factors as predictors of Intention**

Categorical (non-dichotomous) predictor variables before they were entered into the regression model they are converted to dummy variables using the recode command in the case for multiple regressions. The relationship between socio-demographic and obstetric factors with intention is quantified in the table below. Accordingly, age and ANC utilization appeared to be statistically associated with intention. The intention score of pregnant women whose age greater or equal to 36 decreased by an average of 4.375 (95%CI: -7.726 to -1.024) as compared to pregnant women whose age from 26 to 30 as matching part. And respondents who did not use ANC service had an average of 2.733 unit lower intention score comparing to respondents who visited ANC service. (95%CI: -5.346 to -0.12). (Table 7) “.....exposure of women to health information or health service is very good for them. Most of pregnant women visiting ANC service in this health center return to the facility for delivery service”. (Midwife nurse, 29 years old). “Even some pregnant women who visit ANC service sometimes deliver outside health facility due to different reasons. But mostly ANC attendants come to health facility during labour” (An other 25 years old midwife nurse).

**TABLE 7 SOCIO-DEMOGRAPHIC AND OBSTETRIC RELATED VARIABLES AS PREDICTORS OF INTENTION.**

Variables	No.	Un standardized Coefficients $\beta$	Standardized coefficients $\beta$	P-value	95% Confidence Interval for B	
					Lower Bound	Upper Bound
<b>Education Background</b>						
Never attended	78	-1.239	-.122	0.402	-4.189	1.71
Only read and write	33	-2.806	-.225	0.117	-6.339	0.728
Secondary high school*	80					
<b>Age group</b>						
<=20	39	2.25	.095	0.506	-4.507	9.006
21-25	66	3.275	.227	0.109	-0.764	7.315
26-30*	118					
31-35	60	-2.101	-.173	0.201	-5.358	1.157
>=36	20	-4.375	-.360	<b>0.012</b>	-7.726	-1.024
<b>ANC for current pregnancy</b>						
Yes*	184					
No	119	-2.733	-.257	<b>0.041</b>	-5.346	-0.12
<b>Ethnicity</b>						
Gurage*	229					
Amhara	45	3.557	.222	0.094	-0.632	7.747
Oromo	16	1.061	.026	0.851	-10.231	12.353
<b>Occupational status</b>						
Students	18	-2.473	-.221	0.086	-5.307	0.361
House wife*	172					
<b>Religion</b>						
Muslim*	142					
Orthodox	127	-2.45	-.237	0.06	-5.006	0.105
Catholic	15	-1.703	-.072	0.6	-8.205	4.798
<b>Income</b>						
<=500*	168					
501-1000	126	0.916	.064	0.622	-2.8	4.632
<b>Parity</b>						
0	81	-3.865	-.255	0.442	-13.896	6.166
1-4*	200					
<b>Number of life birth</b>						
0	84	3.568	.247	0.482	-6.558	13.693
1-4*	197					

R=0.71 R<sup>2</sup>=0.504

## 5.2 DISCUSSION

This community based cross-sectional study tried to assess intention to institutional delivery services in the town. In addition, the study tried to investigate determinants of intention to institutional delivery service.

This study revealed that maternal age is a strong predictor of intention to institutional delivery service. The intention score of pregnant women whose age greater or equal to 36 decreased by an average of 4.375 (95%CI: -7.726 to -1.024) as compared to pregnant women whose age from 26 to 30 as matching part. Since the younger and the older women differ in their experience and influence of the health seeking behavior is likely to vary between younger and older women. In general, younger women are more likely to accept modern health care as they are likely to have greater experience to modern medicine and have greater amount of schooling than older women. Another possible explanation for this is that pregnant women with their first child were more cautious about their pregnancies and therefore sought out trained professionals. Older women on the other hand, tend to believe that modern health care is not as necessary due to experiences and accumulated knowledge from previous pregnancies and births and therefore likely to have more confidence about pregnancy and childbirth and thus may give less importance to institutional delivery service (4).

ANC follow up is one of the factors identified from this study as determinants of intention to institutional delivery, respondents who did not use ANC service had an average of 2.733 unit lower intention score comparing to respondents who visited ANC service. (95%CI: -5.346 to -0.12). This means those attending ANC being more likely to intend to deliver in HFs when compared to those not attending. This finding is consistent with findings from other local studies which show that ANC follow up is important in influencing women's preferences and their place of delivery (3,9).The importance of ANC follow up in determining intention to institutional delivery, may be explained in such a way that, exposure of the women to the health service in general and the information as well as the experiences they have gathered during the follow up in particular, might have influenced them to deliver in health facilities. Another possible explanation may be, considering facts that ANC follow up is service utilization by itself and both ANC and institutional delivery services are a continuum of pregnancy and delivery related service, factors which influence utilization of ANC might have influenced institutional delivery service utilization in a



similar manner. Home delivery is still a norm in many developing countries; maternal mortality tends to be highest where this is the case. In this study, 27.8% of births took place at home. This finding is different from the previous studies from Butajira (88%), Adamitulu (83%), Gondar (86.5%), report of Safe motherhood Need Assessment of Ethiopia (1996), and DHS (2000) (37, 57). This large difference is explained by the fact that the present study is exclusively urban population based. The urban women tend to have better access to health facilities, education, and information about maternal health care services that showed to have effect on the preference to institutional deliveries. In addition, health promotion programs, which use urban, focused mass media, may work to the advantage of the urban residents. All of these studies reported that large numbers of women are delivering at home being assisted by untrained traditional birth attendants. In this study the reasons for delivering at home were dislike the behaviors of health workers, expenses for delivering at health institution is unaffordable, preferred to give birth in the presence of relatives and, more trust on TBAs. This study finding is consistent with a study conducted in Afar region (47). This implies significant proportion of women seek for help from skilled birth attendants after developing obstetric complications and other traditional interventions failed. This finding is supported by qualitative finding. From midwife nurse age 25 *“some pregnant women thought that they have to go to health institution only the pregnancy is complicated or generally if they face a certain problem.”* According to some behavioral models human behaviors and intentions are sometimes influenced largely by the preferences or attitudes of influential people towards the behavior or practice (42). In view of this assumption, and based on the finding from this study which shows that Pregnant women who had a favorable attitude towards institutional delivery had an average .393 unit greater intention score than pregnant women who had unfavorable attitude.. This study is consistent with cohort study which is done in Jimma (27). In this study perceived behavioral control was not a significant predictor for intention to institutional delivery. This implies whether the women have confidence or the power to make the final decision to get institutional delivery, she may not be intended to deliver in health institution. One explanation for this could be even if the women had confidence to deliver or not to deliver in the institution, if she doesn't have the interest or a positive attitude towards institutional delivery (if she prefers home delivery), she may not intend to deliver in the institution. The finding from this study which shows that pregnant women with higher subjective norm had an average 0.685 unit greater intention score than pregnant women with lower subjective norm. This means women to whom their important person in their life approves delivering in health institution are more

likely intend to deliver in health institution. Because, sometimes, the discouraging or encouraging influence from other people about delivery attendants may not always be limited by giving suggestions to the women about their place of delivery because in certain instances, these same people may be the primary decision makers in terms of utilizing institutional delivery services. And this implies that in such scenarios, women who are discouraged by other people from getting institutional delivery services and those who still cannot decide by themselves to get institutional delivery services are very unlikely to deliver in health facilities. This relationship between influences from other people and decision-making power of women is demonstrated by a series of studies, which include baseline surveys, interventions and post-intervention assessment focusing on improving maternal health care utilizations conducted in rural Bangladesh (15). According to the studies, after interventions to raise awareness among then community about pregnancy and delivery care are conducted, a post intervention assessment revealed that, not only the level of knowledge among the community has increased but also, the institutional delivery service utilization has risen to from its baseline 0.7 % to 4.2%. And this improvement is ascribed, to the interventions, which have improved the level of awareness about benefits of delivering in HFs, among women and other influential people. And based on this, the authors have finally concluded by recommending that in order to improve the service utilization to a better level, further activities should be strengthened by targeting husbands, mothers and mothers in laws. This judgment sounds correct when combined with another finding from the same studies, which revealed that women's husbands, mothers and mother in laws are usually the primary decision makers with regard to the person to be consulted for obstetric care (44, 45).

## **CHAPTER 6 CONCLUSION AND RECOMMENDATION**

### **6.1 CONCLUSIONS**

- Majority of the respondents were intended to deliver in the institution. But still a large proportion of them were not intended to deliver in the institution due to different reasons.
- Majority of the respondents had favorable attitude towards institutional delivery service utilization.
- Intending to utilize institutional delivery services is higher among younger women, who have less children (pregnancy) and those women who have favorable attitude towards utilization of institutional delivery, while it is lower among older women.
- Those pregnant women who attend ANC visit for the current pregnancy are more likely intended to deliver in health institutions.
- The main reasons for not intending to deliver in health institution were dislike the behaviors of health worker in the institution and low awareness of the community about danger sign of pregnancy and delivery related complication.

## 5.2 RECOMMENDATIONS

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

### **For Gurage zone health bureau and Wolkite town health office**

- Women with higher maternal age were less likely intends to attend institutional delivery services. This implies that this group should be one of the priorities areas for targeting education campaigns on the benefits of safe motherhood programs.
- Since pregnancy related complications are the main reasons for utilization of health facilities, community awareness program must focus on the danger signs surrounding pregnancy and delivery.
- Interventional IEC activities focusing on women's husbands and other relatives will be helpful in utilizing these people, so that their influences can be directed in the line of encouraging women to utilize institutional delivery services. Additionally, this will have a far reaching advantage, since the positive impacts of the favorable influences form these people in promoting institutional delivery service utilization will be reflected through the role of these influences in directing the decision making process on matters related to women's delivery practices.

### **For Health facilities in the town**

- Health services in the town should be involved in promoting ANC attendance and improving the services given during the follow up, may be helpful to maximize the contribution of the follow up in promoting safer pregnancy and delivery.

### **For further study**

- It is important to understand what factors else might contribute to the intention of pregnant women to give birth in health facility

## **STRENGTH AND LIMITATION OF THE STUDY**

### **Strength**

- Qualitative method was used to complement or triangulate the findings.

### **Limitation**

- Some pregnant women did not know their pregnancy status. This resulted in omission of those pregnant women from the study.

## REFERENCE

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**ANNEXES:-**

**Annex: 1. Questionnaire**

**Questionnaire for community based survey on intention of pregnant women to institutional delivery services in wolkite town SNNPRs**

**Verbal consent**

**Greetings**

Hello! My name is \_\_\_\_\_.

I am working in research team of jimma University College of public health and medical science. We are conducting a study on pregnant women intentions regarding institutional delivery,

You are kindly requested to be included in the study, which will have importance in improving maternal health services. No information concerning you, as individual will be passed to another individual or institution without your agreement. Your participation is voluntary and you have the right to not participate fully or partially. If you agree to be included in the study I will start my questions by asking general identification points. Only honest answers would contribute to improvement of health planning.

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

If yes, continue interviewing

If No, thank and stop interviewing

Name of the interviewer \_\_\_\_\_ Sign \_\_\_\_\_

Date of Interview \_\_\_\_\_

Name of the Supervisor \_\_\_\_\_ Sign \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_\_\_

Part one questionnaire on socio-demographic characteristics. It has been found that it is necessary to understand the socio-demographic history as to their contribution to intention of utilization of institutional delivery. Therefore, I would like to ask you some questions in this respect.

S.N	Questionnaire on identification of the respondents	Alternative choice for responses	Skip
1	Age	_____ yrs	
2	What is the highest level of schooling you have ever attended?	1. Never attended 2. Only read & write 3. Elementary school 4. Secondary high school 5. 12+ 99. Other Specify	
3	What ethnic group do you belong?	1. Gurage 2. Amhara 3. Oromo 4. Tigrie 99. Other specify	
4	What is your occupation?	1. Housewife 2. Maid servant 3. Civil servant 4. Merchant 5. Student 99. Other specify	

5	What is your religion?	1. Muslim 2. Orthodox 3. Catholic 4. Protestant 99. Other specify	
6	What is your marital status?	1. Married 2. Divorced 3. Widowed 4. Single 5. Separated	
7	What is the average family income per months?	_____birr	
8	Number of pregnancy		If the answer is 1 go to question no.14
9	Number of delivery		
10	Number of live births		
11	Number of abortions		
12	Number of still births		
13	Number of infant deaths		

For the following questions the response format is prepared in a form of scale ranges from 1 to 5, the definitions for each of the scales is given below.

1=strongly disagree

2=somewhat disagree

3=Neutral

4= somewhat agree

5=strongly agree

PART TWO QUESTIONS ON BEHAVIORAL INTENTION								
S No	Questions	Response format						
14 I	I expect pregnant women to deliver in the institution	Strongly disagree	1	2	3	4	5	Strongly agree
15 I	I want to deliver my baby in institution	Strongly disagree	1	2	3	4	5	Strongly agree
16 I	I intend to deliver my baby in institution	Strongly disagree	1	2	3	4	5	Strongly agree
17 I	I have a plan to deliver my baby in health institution	Strongly disagree	1	2	3	4	5	Strongly agree
18 AT	Institutional delivery is	Harmful	1	2	3	4	5	Beneficial
		Bad	1	2	3	4	5	Good
		Unpleasant	1	2	3	4	5	Pleasant
		Worthless	1	2	3	4	5	Useful
19	Most people who are	I should	1	2	3	4	5	I should not

SN	important to me think that	Utilize institutional delivery						
20 SN	It is expected of me to deliver in institution	Strongly disagree	1	2	3	4	5	Strongly agree
21 SN	I feel like I am under social pressure to deliver in institution	Strongly disagree	1	2	3	4	5	Strongly agree
22 SN	People who are important to me want me to deliver in institution	Strongly disagree	1	2	3	4	5	Strongly agree
23 PBC	I am confident to utilize institutional delivery if I wanted to	Strongly disagree	1	2	3	4	5	Strongly agree
24 PBC	For me to utilize institutional delivery is	Very difficult	1	2	3	4	5	Very easy
25 PBC	The decision to utilize institutional delivery is beyond my control	Strongly disagree	1	2	3	4	5	Strongly agree
26 PBC	Whether utilizing institutional delivery or not is up to me	Strongly disagree	1	2	3	4	5	Strongly agree

**PART THREE QUESTIONS ON THE CHOICES OF DELIVERY AND ASSISTANCES DURING DELIVERY(OBSTETRIC HISTORY)**

S.NO	Questions	Alternative choice responses	Skip
27	Do you attend ANC for current pregnancy?	1.yes 2.No	
28	Is it your first pregnancy?	1.yes 2.No	If NO go to the next question
29	Where did you deliver your last baby?	1. Hospital 2. Health center 3. Health station/clinic 4. Home, 99. Others specify-----	
30	Why did you want to deliver your baby in that particular place? (If in a health institution)	1. Close to where I live 2. High quality services 3. Good approach of health workers 4. Little expenses to deliver in this particular institution 99.Otherpecify_____	
31	If you delivered at home. Why? (More than one answer is possible)	1.Expences for delivery at health institution is unaffordable 2.Dislike behaviors of health workers at health institution 3.Wishes to deliver at home where relatives are nearby 4.More trust on TBAs/relatives than	

		health workers at health institution 99.Others specify-----	
32	If you delivered at home who assisted you during delivery?	1. Health workers 2. TBA 3. Close relatives/friends 4. Neighbors 5. No one 99. Others specify_____	



## ANNEX: 2. FGD GUIDE

### Introduction

Good morning and thank you all for coming.

My name is-----My colleague near to me is-----.

We came from Jimma University

Read the following as it is:

“After we conduct some brief introduction, we will be talking about several different issues. We will be asking you questions about your overall experience with the institutional delivery services in your locality and questions pertaining to pregnancy related health problems, preferences to place of delivery and factors influencing utilization of the available health services. Then, we will conclude the session by asking you for your recommendations on how such program might be implemented in your community in any way in the future.

Would you be willing to participate in the discussion? If yes, proceed, if no, thank and stop the discussion.

Name of the moderator.\_\_\_\_\_ Sign\_\_\_\_\_.

(Signature of the moderator certifies that consent has been obtained verbally).

Date\_\_\_\_\_ Time\_\_\_\_\_

### Preparation

**Topic;** Community perception on utilization of institutional delivery and preferences to place of delivery

**Target audience:** Husbands

### Objective of the discussion

- To explore the community’s understanding and perceptions of institutional delivery utilization and preference to place of delivery in the town
- To assess factors affecting intention to utilization of institutional delivery service.

**Description of the focus group**

The participant and the facilitator will sit in a circle or around a table for the discussion. The facilitator will begin the session by introducing himself and explain the purpose of the focus group. The focus group meeting will last about 30 to 60 minutes.

**Potential use of data**

The gathering of this information will have an effort to gain further insight about underutilization of institutional delivery services among pregnant women in the town.

**Issue of confidentiality**

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

**Consent for participation and tape-recording**

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

**Read consent form out loud to the group:**

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

**Role of moderator and note taker**

The moderator will be in charge of facilitating the discussion .The moderator will bring the discussion back to the topic at hand should it go beyond the main issues. The moderator will not give any indication (verbal or physical) that would encourage certain types of comments or discourage other types of comments.

In short, the moderator will guide the discussion when necessary, with carefully not to lead the discussion. It is our role to facilitate, but your role to tell us what you think. The note taker will have the sole responsibility of capturing the sessions accurately as possible. This will include not only participants' responses, but also nonverbal actions, physical environment, atmosphere of the session, as well as other vital characteristics of the session.

## **Importance of total group**

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

## **Agreement to disagree**

In this group there is no right or wrong answers. Everybody should express the opinions or attitude pertinent to him or her. When you express your opinions you are encouraged to be honest in your views of the pregnancy and delivery related problems and preventive programs (especially antenatal and institutional delivery care services). We want you to focus your comments on the program and not toward each other or members of the staff.

## **FGD topic guide**

### **Theme 1. Introduction**

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

### **Theme 2. Warm up questions**

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

1.1. Who can tell us about delivery care services?

1.2. Who would like to tell us dangerous health problems related to pregnancy and delivery?

1.3 What are the causes?

1.4 What are the consequences?

1.5 What are the prevention methods?

- Probes
1. Would you explain further?
  2. Would you give me an example?
  3. Has any one else had similar experience?
  4. Is there any thing else?
  5. "I don't understand."

5. Where do you think the best place for delivering a child? Why?

What are the advantages and disadvantages?

- Probes. 1. Would you explain further?
2. Would you give me an example?
  3. Has any one else had similar experience?
  4. Is there any thing else?
  - 5."I don't understand."

6. Who do think the best person to assist during delivery? Why?

What are the advantages and disadvantages?

- Probe 1. Would you explain further?
2. Would you give me an example?
  3. Has any one else had similar experience?
  4. Is there any thing else?
  - 5."I don't understand."

7. What is your opinion about preferences to place of delivery from local cultural and religion point of view?

- Probes 1. Would you explain more?
2. Would you give me example an example?
  3. Anyone else similar experiences
  4. Is there anything else?
  - 5."I don't understand."

### **Ending questions**

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

### **Debriefing**

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

**Thank You**

## **KEY INFORMANT INTERVIEW GUIDE**

1. How do you see the intention of pregnant women regarding delivery practice in the town?
2. What are the reasons for intending or not intending to deliver in the institution?
3. What do you think about contributing factors for intending to utilize institutional delivery?
4. What points do you recommend for better intention to institutional delivery?



		<p>3.ትግሬ</p> <p>4.አሮሞ</p> <p>99.ሌላ ይገለጽ</p>
4	የትምህርት ደረጃ	<p>1.ያልተማረች</p> <p>2.ማንበብና መጻፍ ብቻ</p> <p>3.አንደኛ ደረጃ</p> <p>4.ሁለተኛ ደረጃ</p> <p>5.ከፍተኛ ደረጃ</p> <p>99.ሌላ ይገለጽ</p>
5	የጋብቻ ሁኔታ	<p>1.ያገባች</p> <p>2.ያላገባች</p> <p>3.የተፋታች</p> <p>4.ባሏ የሞተባት</p>
6	የስራ ሁኔታ	<p>1.የቤት እመቤት</p> <p>2.የመንግስት ሰራተኛ</p> <p>3.ነጋዴ</p> <p>4.ተማሪ</p> <p>99.ሌላ ይገለጽ</p>
7	አማካይ የወር ገቢዎ ስንት ነው	_____
8	የእርግዝና ቁጥር	_____
9	የወሊድ ቁጥር	

		_____
10	በህይወት የወለዱት ቁጥር	_____
11	የውርጃ ብዛት	_____
12	ሞተው የተወለዱት ቁጥር	_____
13	ከአንድ አመት በታች ህጻን ሞት ቁጥር	_____

ማብራሪያ ለሚከተሉት ጥያቄዎች ከአንድ እስከ አምስት መለኪያ እንደሚከተለው ተዘጋጅቶላቸዋል እባክዎን ምን ያህል እንደሚስማሙ አንዱን ብቻ በመምረጥ ይመልሱ

- 1- በጣም አልስማማም      2 -አልስማማም                      3 -ምንም አይሰማኝም  
4- እስማማለሁ      5- በጣም እስማማለሁ

ክፍል ሁለት በጤና ተቋም የመውለድ ፍላጎትና እቅድን በተመለከተ								
ተ. ቁ	ጥያቄ	መለኪያ						
14	ነፍስ ጡር ሴቶች በጤና ተቋም ውስጥ እንደሚወልዱ እጠብቃለሁ	በጣም አልስማማም	1	2	3	4	5	በጣም እስማማለሁ
15	ልጄን በጤና ተቋም ውስጥ መውለድ እፈልጋለሁ	በጣም አልስማማም	1	2	3	4	5	በጣም እስማማለሁ
16	ልጄን በጤና ተቋም ውስጥ ለመውለድ ተዘጋጅቻለሁ	በጣም አልስማማም	1	2	3	4	5	በጣም እስማማለሁ
17	ልጄን በጤና ተቋም ውስጥ የመውለድ ዕቅድ አለኝ	በጣም አልስማማም	1	2	3	4	5	በጣም እስማማለሁ



18	በጤና ተቋም ውስጥ መውለድ	ጎጂ ነው	1	2	3	4	5	ጠቃሚ ነው
		መጥፎ ነው	1	2	3	4	5	ጥሩ ነው
		አያስደስትም	1	2	3	4	5	አስደሳች ነው
		አያስፈልግም	1	2	3	4	5	አስፈላጊ ነው
19	አብዛኛው ለኔ ጠቃሚ የሆኑት ሰዎች የሚያስቡት	አለብኝ	1	2	3	4	5	የለብኝም
		በጤና ተቋም ውስጥ መውለድ						
20	በጤና ተቋም ውስጥ መውለድ ከኔ ይጠበቃል	በጣም አልስማማም	1	2	3	4	5	በጣም እስማማለሁ
21	በጤና ተቋም ውስጥ ለመውለድ በማህበረሰቡ ግፊት ስር እንዳለሁ አስባለሁ	በጣም አልስማማም	1	2	3	4	5	በጣም እስማማለሁ
22	አብዛኛው ለኔ ጠቃሚ የሆኑ ሰዎች በጤና ተቋም እንድወልድ ይፈልጋሉ	በጣም አልስማማም	1	2	3	4	5	በጣም እስማማለሁ
23	እኔ ከፈለኩ በጤና ተቋም ውስጥ መውለድ እንደምችል አውቃለሁ	በጣም አልስማማም	1	2	3	4	5	በጣም እስማማለሁ
24	ለኔ በጤና ተቋም ውስጥ መውለድ	በጣም እስቸጋሪ ነው	1	2	3	4	5	በጣም ቀላል ነው
25	በጤና ተቋም ውስጥ ለመውለድ ውሳኔው የኔ አይደለም	በጣም አልስማማም	1	2	3	4	5	በጣም እስማማለሁ
	በጤና ተቋም ውስጥ መውለድም	በጣም አልስማማም	1	2	3	4	5	በጣም እስማማለሁ

26	አለመውለድም የኔ ውሳኔ ነው							
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ክፍል ሶስት የወሊድ ቦታ ምርጫ እና በወሊድ ወቅት የሚረዷቸው ሰዎች			
ተ. ቁ	ጥያቄ	የመልስ ምርጫ	የሚዘለል
27	ለእርግዝናዎ የጤና ክትትል ያደርጋሉ?	1 አዎ  2 አይደለም	
28	እርግዝናው የመጀመሪያዎ ነው?	1 አዎ  2 አይደለም	መልስዎ አይደለም ከሆነ ወደሚቀጥለው ጥያቄ ይለፉ
29	የመጨረሻ ልጅዎን የት ነው የወለዱት?	1.ሆስፒታል  2.ጤና ጣቢያ  3.ጤና ኬላ(ክሊኒክ)  4.ቤት  99.ሌላ ይግለጹ	

30	በጤና ተቋም ከወለዱ ለምን እዚያ መውለድ ፈለጉ?	<p>1.ቅርብ ስለሆነ</p> <p>2.አገልግሎቱ ጥራት ስላለው</p> <p>3.የጤና ባለሙያዎቹ ጥሩ አቀራረብ</p> <p>4.ርካሽ ስለሆነ</p> <p>99.ሌላ ይግለፁ</p>	
31	በቤት ውስጥ ከወለዱ ለምን? ከአንድ በላይ መልስ መስጠት ይቻላል	<p>1.የጤና ተቋሙን ወጪ ስለማልቸለው</p> <p>2.በጤና ተቋም ውስጥ የባለሙያዎቹን በህሪ ስለማልወደው</p> <p>3.ዘመዶቹ አጠገቤ ሆነው በቤቱ ውስጥ መውለድ ስለምፈልግ</p> <p>4.የልምድ አዋላጆቹን ከጤና ባለሙያዎቹ የበለጠ ስለማምናቸው</p> <p>99.ሌላ ይግለፁ</p>	
32	በቤት ውስጥ ከወለዱ ማን አዋለደት?	<p>1.የጤና ባለሙያ</p> <p>2.የልምድ አዋላጅ</p> <p>3.የቅርብ ዘመድ(ጓደኛ)</p> <p>4.ጎረቤት</p> <p>5.ማንም ሰው</p> <p>99.ሌላ ይግለፁ</p>	

ጥያቄዎቹን በመመለስ ስለተባበሩን እጅግ በጣም እናመሰግናለን

Annex 4 የተጨማሪ ጥናት ቃለ መጠይቅ

መግቢያ

ጤና ይስጥልኝ \_\_\_\_\_ እባላለሁ በጅም ዩኒቨርሲቲ የህክምና ኮሌጅ የህብረተሰብ ጤና ፋካሊቲ የጥናት ቡድን አባል ነኝ የዚህ ጥናት አላማው በአካባቢው የነፍስ ጡር ሴቶች የሚወልዱበትን ቦታ በተመለከተ ጥናት እያካሄድን ነው ከዚህ በመቀጠል በአካባቢዎ የጤና ተቋም ወሊድን በተመለከተ ስለ ጠቅላላ ልምድዎ እና ሃሳብዎ እንጠይቅዎታለን በተለይም ከእርግዝና ጋር የተያያዙ የጤና ችግሮችን የወሊድ ቦታ ምርጫን እንዲሁም የጤና ተቋምን እንዳይጠቀሙ የሚያደርጉ ምክንያቶችን እንወያያለን

ቃለ መጠይቁ የተደረገበት ቀን \_\_\_\_\_

ቃለ መጠይቁ የተጀመረበት ሰዓት \_\_\_\_\_

ቃለ መጠይቁ ያለቀበት ሰዓት \_\_\_\_\_

ቃለ መጠይቁን ያደረገው ሰው ስም \_\_\_\_\_

1. ስለ ወሊድ ያልዎትን ልምድ ወይም እውቀት ቢነግሩን
2. ከእርግዝና ጋር ተያይዘው የሚመጡ የጤና ችግሮችን ማን ሊነግረኝ ይችላል?
- 3 . ምክንያቶቹ ምንድን ናቸው?
- 4 . ምን አይነት የጤና ቀውስ ሊያስከትል ይችላል?
5. በምንስ መከላከል ይቻላል?
6. ትክክለኛ የወሊድ ቦታ የት ነው ብለው ያስባሉ? ለምን?
- 7 . እንደ እርስዎ ግምት ትክክለኛ አዋላጅ ማን ነው? ለምን?
8. በእርስዎ ሀሳብ እንደ አካባቢው ልማድ እና እምነት ተመራጭ የወሊድ ቦታ የት ነው?  
ማጠቃለያ መጨመር ወይም ማንሳት የሚፈልጉት ሀሳብ አስተያየት እንዲሁም ጥያቄ አለ?

ስለ ትብብርዎ እናመሰግናለን