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WOMEN'S PREGNANCY COMPLICATIONS AND HEALTH ASSISTANCE  
SEEKING BEHAVIOR AT ARBA MINCH ZURIA DISTRICT, SOUTH WEST  
ETHIOPIA.

BY:

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This thesis by Serawit Lakew is accepted in its present form by the board of examiners as satisfying thesis requirement for the degree of master in maternity Nursing and reproductive health.

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## LIST OF ABBREVIATIONS

|         |  |
|---------|--|
| AAU     | Addis Ababa University   |
| ANC     | Antenatal Care   |
| ANV     | Antenatal visit  |
| CI      | Confidence Interval  |
| DHS     | Demography and Health Survey                                       |
| EDHS    | Ethiopian Demography and Health Survey                             |
| FDREMOH | Federal Democratic Republic of Ethiopia Ministry of Health         |
| FMOH    | Federal Ministry of Health   |
| HCSB    | Health care seeking behavior                                       |
| HCSDB   | Health Care Seeking Decisions                                      |
| HEW     | Health Extension Worker  |
| HSDP    | Health Services Development Program                                |
| IEC     | Information Education and Communication                            |
| ICD-10  | The Tenth Revision of the International Classification of Diseases |
| MDSR    | Maternal Death Surveillance and Response                           |
| MHN     | Maternal Health Nursing  |
| MMR     | Maternal Mortality Rate  |

|        |  |
|--------|--|
| NGO    | Non-Governmental Organizations                     |
| AOR    | Adjusted Odds Ratio                                |
| PHCU   | Primary Health Care Unit                           |
| PI     | Principal Investigator                             |
| PPS    | Population Proportionate to Size                   |
| RH     | Reproductive Health                                |
| RHB    | Regional Health Bureau                             |
| SA     | Skilled Assistance                                 |
| SANC   | Skilled Antenatal Care                             |
| SNNPR  | Southern Nations Nationalities and People's Region |
| SPSS   | Statistical Package for Social Sciences            |
| SRS    | Simple Random Sampling                             |
| SS     | Systematic sampling                                |
| TBAs   | Traditional Birth Attendants                       |
| THWs   | Traditional Health Workers                         |
| TTBAs  | Trained Traditional Birth Attendants               |
| UNICEF | United Nations International Children's Fund       |

|      |                                 |
|------|---------------------------------|
| UNDF | United Nations Development Fund |
| UNGA | United Nations General Assembly |
| USA  | United States of America        |
| WHO  | World Health Organization       |
| WY   | Women Year                      |

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## ABSTRACT

**Background:** All pregnant women are at risk of developing life-threatening complications; around 15 % of all pregnant women develop this complication worldwide. Most complications can neither be predicted accurately nor prevented. Once a woman develops complications, she needs prompt access to maternal care services if death or disability is to be prevented. In Southern Ethiopia, little is known about women's experience of complications and their care seeking behaviour during pregnancy. This study attempted to assess women's pregnancy complications and seeking assistance from a skilled provider among those who gave birth in the last 1 year preceding the study.

**Method:** This study was a cross-sectional community based survey of women who gave birth within one year preceding the study regardless of their delivery place but stayed pregnancy period in the study area. The study was carried out in eight randomly selected kebeles In Arba Minch Zuria District, South West Ethiopia. Data was collected house-to-house using a pretested Amharic questionnaire. During the survey, 399 women were interviewed. Data entry was done using Epi Info version 3.5.2 and was exported to SPSS version 20 for analysis. Logistic regression was applied to control confounders.

**Results:** Out of the total sample, 172(43.1%) respondents reported at least any one of the problems faced in the index pregnancy. The most common complications reported were Malaria, Nausea/Vomiting and severe head ache. Out of the total women who faced complications, 156(73.8 %) sought assistance from a skilled provider. Did not think seriousness of the problems, thought as not necessary, and because family did not allow were the reasons for not seeking care from skilled providers. Belonging to a middle monthly household income (AOR = 3.4, 95% CI; 1.04, 11.4), getting antenatal care from a skilled provider (AOR= 10.6, 95%CI; 3.3,

34.5), Women in the age 20-34years old (AOR = 3.8; 95% CI, 1.2, 12.3), use of vehicle transport services (AOR = 72.2; 95% CI; 17.2, 303.5) were significantly associated with seeking assistance from a skilled provider. 90(70.9%) respondents who had a skilled assistance had knowledge of life threatening pregnancy complications and 69(54.3%) respondents had knowledge of non-life threatening complications.

**Conclusions:** More than 2/3rd of the women who faced complications did use skilled providers at the time of pregnancy complications. Family, client, income, transportation use, ANC services were a concern for not using skilled assistance from a skilled provider.

**Key words:** Skilled assistance, skilled provider, south west Ethiopia, Arba Minch Zuria district.

## 1. INTRODUCTION

### 1.1 BACKGROUND OF THE STUDY

Maternal death is the death of a woman while pregnant or within 42 days of the 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. Major causes of death are obstructed/prolonged labor, ruptured uterus, severe pre-eclampsia/eclampsia, malaria, Hemorrhage. Maternal Morbidity includes any illnesses attributable to maternal deaths. (1-3)

An estimated 287,000 maternal deaths occurred in 2012 worldwide. Accordingly, nearly one woman dies every minute from preventable causes related to pregnancy and childbirth. Sub-Saharan Africa (with 56 per cent of these deaths) and Southern Asia (29 per cent) together accounted for 85 per cent of the global burden in 2012, with 245,000 maternal deaths between them.(4, 5) 25 percent of these maternal deaths occur during pregnancy.(6) This reflects inequalities in access to health services, and highlights the gap between rich and poor. More than half of these deaths occur in sub-Saharan Africa and almost one third occur in South Asia.(7) In developing regions was still 15 times higher than in the developed regions. The maternal mortality ratio in developing countries is 240 per 100 000 births versus 16 per 100 000 in developed countries. Poor women in remote areas are the least likely to receive adequate health care. This is especially true for regions with low numbers of skilled health workers, such as sub-Saharan Africa and South Asia.(4, 7)

Every year about 210 million women become pregnant; an estimated 30 million develop complications and 515 000 of these women die; three million babies are stillborn, a further three

million die in the first week of life. Pregnancy is a very important event from both social and medical points of view. Therefore, pregnant women should receive special care and attention from the family, community and from the health care system. (6, 8, 9) Making Pregnancy Safer (MPS) initiative, launched in 2000, also enhances these care. (8) Antenatal care (ANC) is a key entry point for pregnant women to receive a broad range of health promotion and preventive health services. (6) Pregnancy and related complications continued and becoming a terrible toll on women, especially impoverished women, in many countries worldwide between 10 and 15 million more women suffer debilitating complications annually, and severely affecting their well-being. Studies show that if availability, accessibility and quality of health services assured, about 88 to 98 % of this maternal morbidities can be prevented. (10)

MDSR and FMOH, Ethiopia 2012 report suggested that each year 20,000 women die (56 women died/ day) from complications of pregnancy and child birth in Ethiopia with many more maternal morbidities occurring for each maternal death. This makes Ethiopia to be one of the countries with the highest rates of maternal deaths in the developing world. (1) The maternal mortality rate, maternal death per 15-49 years of age women population, was 1.14 per 1,000 woman-years (WY) of exposure. (11) It was 30 percent of all deaths to woman -years (in 2011) as compared with 21 percent (in 2005) and 25 percent (in 2000). Maternal mortality ratio (MMR), estimated 676 in 2011 during the seven-year period. In other words, for every 1,000 live births about seven women (6.76) died in the given period. It was 673 in the 2005 EDHS. (1, 11-14)

## **2 PROBLEM STATEMENT OF THE STUDY**

All pregnant women are at risk of developing life-threatening complications; around 15 % of all pregnant women develop this complication.(15) Most complications can neither be predicted accurately nor prevented; Once a woman develops complications, she needs prompt access to obstetric care services if death or disability is to be prevented.(16)

These complications can involve the mother's health, the baby's health, or both. Some women have health problems that arise during pregnancy, and other women have health problems before they become pregnant that could lead to complications. It is very important for women to receive health care before and during pregnancy to decrease this risk. Pregnancy symptoms and complications can range from mild and annoying discomforts to severe, sometimes life-threatening, illnesses. Sometimes it can be difficult for a woman to determine which symptoms are normal and which are not. Problems during pregnancy may include physical and mental conditions that affect the health of the mother or the baby. These problems can be caused by or can be made worse by being pregnant. Many problems are mild and do not progress; however, when they do, they may harm the mother or her baby. Keep in mind that there are ways to manage problems that come up during pregnancy. some of these complications include anemia, urinary tract infections, hypertension, gestational diabetes mellitus, infections, obesity and weight gain, and hyper emesis gravid arum.(17)

Availability, Accessibility and Quality become a problem for woman health seeking in many areas in the world. These includes availability of hospitals, clinics and other health-related buildings, trained medical and professional personnel receiving domestically competitive salaries, and essential drugs; Accessibility in four overlapping dimensions: physical, economic (affordability), non-discrimination, and regarding information; Acceptability in terms of respect for medical ethics and of the culture of individuals, minorities, peoples and communities,

sensitive to gender and life-cycle requirements, as well as being designed to respect confidentiality and improve the health status of those concerned; Quality, including skilled medical personnel, scientifically approved and unexpired drugs and hospital equipment, safe and potable water, and adequate sanitation; and respectful care for women using health services is a critical dimensions.(10)

women's decision to seek care are complex and depend on a range of factors such as nature of the illness or injury and its perceived severity and consequences, understanding of disease and communicability, understanding causation of disease (spiritual or infectious), availability, affordability and acceptability of services. These factors interact in a dynamic way within and across social groupings to determine how actively people seek modern health care in response to a health threat or bout of illness. Health seeking behaviors will therefore be different, being dependent on individuals, their knowledge and prior experience with services, the social perspective in which they live and exist, and perceived and/or real obstacles they face in accessing services (time, distance, cost, quality, and acceptability). Despite the obvious fact that there is low understanding of modern concepts of disease, and major social and behavioral barriers to the uptake of certain services, it remains difficult to quantify the importance of such behavioral barriers given the extremely low levels of quality service delivery. (18)

Many factors can prevent women from getting medical advice when they are sick in Ethiopia. Information on such factors is particularly important in understanding and addressing the barriers women may face in seeking care during pregnancy.

### **1.3 SIGNIFICANCE OF THE STUDY**

Improving care-seeking behavior of a woman can be achieved by 1/ Developing capacities of the woman to make self-care and make healthy decisions 2/ Increasing awareness of potential problems related to maternal health, Human and reproductive rights, the role of men and other influential's, community epidemiological surveillance and maternal-perinatal death audits 3/ linkages for social support between women, families, communities and with the health delivery system community financing and transport schemes and 4/ Improving quality of care and health services, interactions with women and communities. Such as Community involvement for Interpersonal and intercultural competence of health care Providers. (8, 19)

Accordingly, this study identified the magnitude of the problems at pregnancy, women's treatment seeking behaviors and important associated factors. So these findings can be used by the Policy makers, health sector, practitioners, community leaders and other stake holders in that experiences identified and then plan and make their implementation program can be done. This enables them to compare their final achievements if this finding used as base line. On the other hand researchers will use this findings for review of literature in the future research and make the findings more up to date.

After publication, this paper will be accessible online so that any interested person, researcher, the community on which study will be undertaken, practitioners and health sector development program (HSDP) workers can get the result in the Google.

Moreover, this findings will be presented to Arba Minch surrounding district Health sector program coordinators, key health care informants (1 to 5 leaders) and other interested guests with invitations cordially for appreciation and initiation to work, plan and further a research for the same and other health related tasks, giving them confidence to practice evidence based work.

Last, but not least, NGO's who are interested and has plan to implement in the area can use this findings for the ease of their program implementations.

## 2. LITERATURE REVIEW

### 2.1 Perceived awareness of maternal complications during pregnancy

Health seeking behaviors are personal actions to promote optimal wellness, recovery, and rehabilitation of women's health with or without illness (20). There is no doubt that knowledge about maternal morbidity is very important for women's physical and mental health during pregnancy. Different studies also supported this(11), that, in a cross-sectional study, Rural Bangladesh, 83.1 percent of the respondents have good knowledge about maternal morbidity. However, 16.9 percent women did not have any knowledge about maternal morbidities. Among the respondents who claimed to have knowledge about maternal morbidity, 56.12 percent of them believed that it meant physical weakness, 11.23 percent thought it was related to low blood pressure, 7.15 percent thought it was asthma, 9.18 percent thought it meant heart diseases, and 16.32 percent thought it was gastric disturbances. (8, 21)

A finding in Blantyr District, Malawi, added differently in which 15% of participants did not know any problems that could occur during pregnancy. Three frequently mentioned problems were vaginal bleeding, malaria and severe anemia. The highest, vaginal bleeding was mentioned by only 39% of the participants and Malaria, mentioned by 30% of the participants. Another 15% of the participants identified minor disorders of pregnancy as complications that could occur. This may be because these participants were not aware of the physiological changes of pregnancy and therefore did not know the likely complications that could develop.(22)

Perceived awareness of complications, its health seeking and self-care also benefits woman during pregnancy for safe motherhood and the society as a whole. (8) a recent study in Ethiopia suggests 78% of women(95% CI 71-85) were able to state at least one life-threatening conditions, with each woman stating an average of 2.4 pregnancy life-threatening signs(95% CI 2.1-2.7)

without any prompting from the interviewer. (23) A cross-sectional study at North Gondar, North Ethiopia and other studies also showed out of the total unprompted responses, excessive bleeding (22%) was the top mentioned as life threatening complications. This was mentioned by 65.3% of the respondents. About 72.6% associated it as some groups of women were at higher risk of complications compared with others. Also a significant proportion of the participants believed that women in advanced age (67.8%), women giving frequent births (53.2%), poor women (51%), women in their first pregnancy (48.3%), those with pregnancy in early age (43.9%), short women (43.7%), and women giving multiple births (41.3%) are at higher risk of developing complications.(16, 24)

## **2.2 Women's reporting of recent maternal complications during pregnancy**

Woman's reporting of treatment need for health problems during pregnancy increases care seeking behavior positively. A cross-sectional Indian study, Mumbai slums, shows about 60% women reported health problems during the index pregnancy. Most experienced more than one problem, with a mean of 2.7 per woman. This can be summarized as vomiting or diarrhea (40%), tiredness or weakness (32%), headache (29%), swollen legs (25%), abdominal pain (24%) and backache (16%).(25)

Maternal Mortality Survey of ever-married women aged 13–49 in Bangladesh 2007 reported that women considered almost half of all the complications they reported to be potentially life threatening. The complications most likely to be perceived as life threatening were retained placenta (75%), prolonged or obstructed labor (70%), convulsions (57%) and excessive bleeding (55%). (26)

Another half of the pregnant women, in Gulu district, Uganda, reported that they have been suffered from malaria in pregnancy and out of this majority got treatment while a few did not get treatment for malaria. (27) And a few of the pregnant women reported not to have got treatment for malaria. This could be due to drug stock out at the health facilities as noted in the annual health sector performance report.(28)

In Ethiopia, Where health services are present, these factors include—social, cultural, and economic—that cause women not to use the services, particularly when the health concern is related to sexual or reproductive matters. Rural women particularly reported the most problems with access to health care. Among regions, women in Somali (98 percent) and Gambella (97 percent) were most likely to report at least one problem when accessing health care for themselves, while women in Addis Ababa were the least likely (74 percent). Women with more than secondary education (72 percent) and women in the highest wealth quintile (84 percent) were least likely to report at least one problem when accessing health care for themselves.(13)

### **2.3 Extent of Antenatal Care and associated factors**

World Health Organization recommends a minimum of four visits for antenatal care by any health care provider or at least one visit by a doctor, nurse or Midwife for the coverage.(29) Poor quality in ANC clinics, correlated with poor service utilization, is common in Africa. This is often related to an insufficient number of skilled providers (particularly in rural and remote areas), lack of standards of care and protocols, few supplies and drugs, and poor attitudes of health providers. An effective ANC package depends on competent health care providers in a functioning health system with referral services and adequate supplies and laboratory support.(6, 11)

W.H.O recommends regular antenatal care as important to identify women who are at an increased risk of adverse pregnancy outcomes and to establish good relations between the women and their health care providers(30). The quality of ANC in many countries remains very poor and requires renewed effort to reach MDG4 and MDG5 by 2015.(31-33)

In Ethiopia, DHS 2011, knowledge on life threatening signs of pregnancy has also seen associated significantly with ANC utilization(13).

Results of the republic of south Sudan (SPLM) shows that Nurses or midwives provided most of the antenatal care, representing 18 percent of women under this study; the proportion of women who met with the doctors for the same need is 12 percent. (34) In Mru, underprivileged rural community in Bangladesh, Most visits were to traditional midwives in their rural villages, rather than to health complexes or hospitals, as showed by 374 sample size cross-sectional findings of 3 Upazilas sub-districts(35).

Skilled ANC in Ethiopia is ANC visit at least once during the current pregnancy, by a skilled health professional (Nurse, Midwife, Health Officer, and Doctor) for reasons related to pregnancy(36).

#### **2.4 Decision maker for Seeking Treatment**

Who usually makes decisions about the health care? Survey of Uganda 2006 reported, although the proportion of women who reported that they jointly decided with their husbands/partners about their health care when they were sick was 39.1 percent, only about 40.0 percent reported their husbands/partners alone or someone else decided for them with no significant variation in these proportions. Conversely, only 20.8 percent reported they made independent decisions pertaining to their own health care. (37)

#### **2.5 Reasons for not seeking Treatment or sought treatment**

Indian slum study showed minimal (<2%) exclusive home treatment, and most women who did choose home care also consulted a health provider; 15% took no curative action. The main reasons for not seeking care for two common and two trigger symptoms such as swollen leg and backache and vaginal bleeding and waters leaked, respectively, 64–83% of responses was that the woman had not felt a need to seek medical care for her condition. Other important reasons were that she recovered; that family members did not allow her to seek care, and that there was nobody to look after the children. The severity of the condition did not significantly alter the reasons for not seeking care.(25)

In Bangladesh 2007 survey, among reasons women gave for not seeking treatment for obstetric complications perceived as life threatening, the most prominent was cost-related considerations, cited by 44%. The second most common reason was the perception that treatment was not necessary or that the condition was not serious (39%). One possible explanation for this apparent discrepancy is that different family members were involved in evaluating the seriousness of the complication. Other service-related barriers to seeking care included transportation and access issues (12%), family opposition (12%) and concerns related to service quality (6%; women could give multiple reasons).(26) Also, Most of the women seek health care services from unqualified providers such as village doctors (*polli chikitshok*) and drugstore salespersons. About 69 percent women receive healthcare services from village doctors, 21.43 percent women from drugstore salespersons, and 5.10 percent women from *kobiraj*. this is associated with low socio-economic status of woman.(21)

The tendency to seek curative care in the same sector was also seen high. 46% of women who had received antenatal care in the private sector received treatment in the same sector and 36% received both types of care in the public sector. More clients switched from public to private

sector (11%) than from private to public (7%). In the public sector, continuation was most common at general hospitals (78%), the municipal tertiary or government hospitals (72%). Although continuation was also high at urban health centers (61%), absolute numbers were low. Use of health posts was minimal, cross-sectional Indian slum study. (25)

Older mothers are not ready to travel long distance due to some other responsibilities such as other younger children left home with no one to take care of them, a report of Ugandan Survey 2006.(37)

Some of the women who reported complications did not seek services due to the following reasons: Inability to judge the graveness of condition (38.4%), distance/transport problems (22.6%), lack of money/cost considerations (19.5%), and use of traditional options at home (13.1%). The reasons varied with relative difference in wealth. The main reason for the lowest (poorest) quintile was lack of money/cost consideration (32.8%), followed by inability to judge the graveness of condition (30.7%), and use of home remedy (15.4%), whereas the main reasons for the wealthiest quintile were others, mainly quality of service (26.3%), use of home options (23.1%) and transport problems (22.4%), study in North Gondar, Ethiopia. (13, 24)

Moreover, 94% of women, in DHS Ethiopia 2012 report, reported that they have at least one of the specified problems when accessing health care for themselves when they become ill. About six in every ten (58 percent) were concerned that drugs may not be available at the facility or said that they did not want to go alone to a health facility. More than half of women were concerned that there may not be a health provider at the health facility (56 percent) or that there may not be a female health provider (53 percent). Twenty-nine percent expressed concern about getting permission to go for treatment.(13)

## 2.6 Place Where Treatment Sought

In Indian slum there was an overall preference for private health care. This was most marked for the treatment of vaginal bleeding and vomiting or diarrhea, for which 64% and 62% of clients, respectively, sought treatment in the private sector. Second, private hospitals were the most common care-seeking site. Third, almost a third of clients sought treatment for convulsions or unconsciousness at a general hospital. The municipal tertiary hospital and maternity homes were the next most commonly utilized sites, while the use of urban health centers and health posts was low. (25)

Bangladesh 2007 survey showed only one in three women who perceived their condition as life threatening received care from a qualified provider, 24% went outside of their home to seek care (19% from facility-based providers and 5% from providers not based at a facility) and 8% received services from providers who came to their home. Treatment was most likely to have been sought by women with convulsions (77%) and those with high fever and foul-smelling vaginal discharge (75%), followed by those with excessive bleeding (65%), malpresentation or prolonged or obstructed labor (57%), and retained placenta (39%). For all types of complications, levels of treatment seeking were consistently lower when they were not perceived as life threatening. 29% sought care from an unqualified provider either at home or outside the home (24% vs. 5%). Overall, almost equivalent proportions sought treatment within or outside the home (32% vs. 30%). Most home-based treatment, however, was from unqualified providers rather than qualified providers (24% vs. 8%). As might be expected, the proportion of non-life-threatening complications for which treatment was sought from a qualified provider was even lower (22% not shown).(26)

The cross-sectional study in Gulu district Uganda revealed that the majority of the respondents sought treatment from health facilities. However, few pregnant women got treatment from clinics and drug shops or did not get treatment for malaria. Pregnant women should be advised to seek treatment whenever they have malaria from health facility.(27)

The majority (55.2%) of the respondents in Ethiopia mentioned health center as their place to get a skilled attendant, while the rest 27.4%, 3.1%, and 0.7% mentioned government hospital, health post, and private clinic, respectively. (24)

### **2.7 Association of treatment sought for referent medical illnesses with differential factors**

Increasing wealth was associated with greater use of private hospitals and less use of public general hospitals and maternity homes. The remainder of the findings was more variable. For example, the association of greater maternal age with more use of private hospitals and less use of public general hospitals, of parity with more use of public general hospitals, of male infants (which technically should be unknown during pregnancy) with less use of private practitioners and of maternal literacy with less use of public maternity homes. There was also some variation between sources of care for common symptoms: diarrhea or vomiting was associated with more visits to single-handed private practitioners, leg swelling and abdominal pain with fewer such visits and abdominal pain with more visits to public general hospitals. For trigger symptoms, there was a borderline association of leaking waters with fewer visits to single-handed practitioners, and an association of vaginal bleeding with more visits to private hospitals.(25)

Ugandan Survey 2006, as the educational level of the mother rises; the more likely she is to receive care from skilled providers. Results indicate a larger proportion of those with higher education (80.6 percent) compared to 20.0 percent of those with no education reported to have

received care from skilled personnel (medical doctors, nurses/midwives and clinical officers). Twenty two percent and 38.9 percent of those with no education were assisted by TBA and relatives/friends respectively. This may be attributed to the fact that a well-educated woman may have a better job and earn more money, which improves her economic access to resources and reinforces the effect of access to adequate information.(37)

Seeking treatment for malaria was significantly associated with antenatal visit. This could be because during antenatal visit, pregnant women who complain that they were sick of malaria were treated. Also, during antenatal visit, pregnant women normally undergo health education session before being seen by midwife. This health education session makes her more enlighten about common health problem for pregnant women and she is more likely to seek treatment for malaria whenever she experiences malaria signs and symptoms, by a cross-sectional study in Gulu district Uganda.(27)

So, there is little evidence that is known in South West Ethiopia about health assistance seeking behaviors of women to health problems at pregnancy time illnesses and related complications. In the region and study district, also little evidence exists about treatment seeking behavior. So, this study is aimed to identify the existing barriers and those enhancing women's care seeking behavior to common problems at pregnancy. Moreover, the extent of ANC utilization and its associated factors with skilled assistance was also assessed in the area of study.

## 2.8 CONCEPTUAL FRAMEWORK OF SKILLED ASSISTANCE

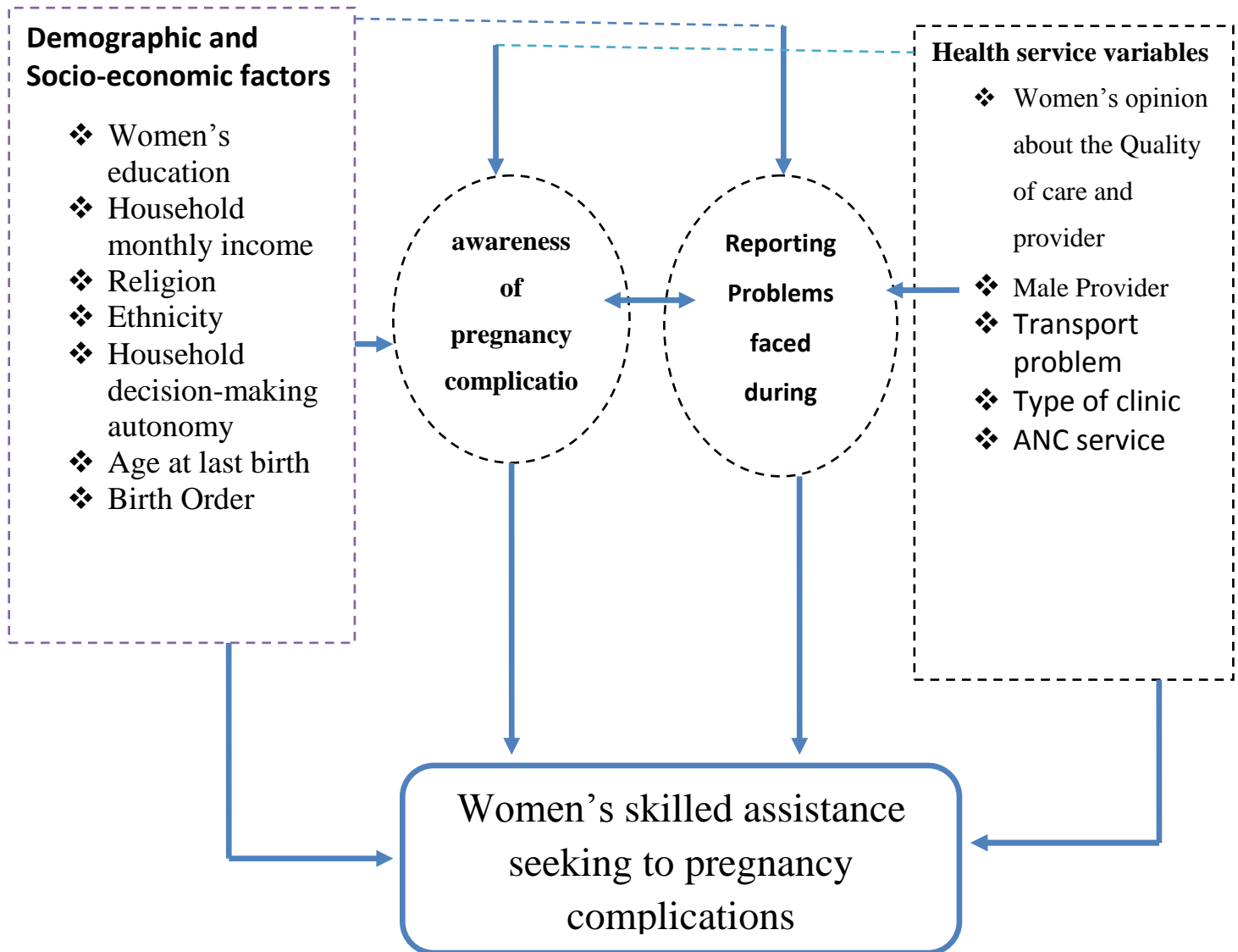


Fig1. Conceptual Framework that shows skilled assistance as an outcome variable

Source: developed from various literature reviews and partly adopted from HBM (Rosenstock 1966 & Becker 1974).

### **3. OBJECTIVES OF THE STUDY**

#### **3.1 GENERAL OBJECTIVE**

To assess women's pregnancy complications and health assistance seeking behavior at Arba Minch Zuria district, SNNPR, South West Ethiopia.

#### **3.2 SPECIFIC OBJECTIVES**

- To determine Magnitude of complications during pregnancy among the study participants
- To assess health assistance seeking behaviour among the study participants
- To assess factors associated with seeking skilled assistance to pregnancy complications among the study participants

## 4. MATERIALS AND METHODS

### 4.1 Study area

The Southern Nations, Nationalities and People's Region (SNNPR) State is one of the nine Regional States in Ethiopia. It is located in the Southern and South-Western part of Ethiopia. It is bordered with Kenya in South, the South Sudan in South West, Gambella region in North West and surrounded by Oromiya region in North West, North and East directions. The Region divided into 13 zones (sub-divided in to 126 districts) and 8 special districts. This again divided into 3678 rural Kebeles. (38)

Gamo Gofa is a Zone in SNNPR. It is named for the Gamo and Gofa peoples, whose homelands lie in this Zone. The centre of this Zone is Arba Minch town, located 505 Kms south of Addis Ababa, the capital city of Ethiopia. (38)

Arba Minch Zuria is one of the districts in the SNNPR state and Gamo Gofa Zone of Ethiopia. It is located in the Great Rift Valley; it is bordered on the south by the Dirashe special woreda, on the west by Bonke, on the north by Dita and Chench, on the northeast by Mirab Abaya, on the east by the Oromiya Region, and on the southeast by the Amaro special district. The district town is Arba Minch, but not administered under the woreda. Based on 2013 report of this district, there were 30 kebeles and a total population of 195,315, of whom 95,704 were men and 99,611 women; none of its population was urban dwellers. the woreda had a total of 6 governmental health centers with its corresponding health posts (30 health posts) (39) By Census 2007, the majority of the inhabitants were Protestants, with 53.91% of the population reporting that belief, 29.31% were Orthodox Christians, and 12.6% practiced traditional beliefs. The five largest ethnic groups reported in Arba Minch Zuria were the Zayse (66.02%), the Gamo (9.53%), the Amhara (7.94%), the Welayta (6.75%), and the Oromo (3.64%); all other ethnic groups made up 2.28% of

the population. Gamo is spoken as a first language by 57.7%, 16.97% Amharic, 5.93% Zergula, 5.13% Welayta, and 2.46% spoke Oromiffa; the remaining 3.74% spoke all other primary languages reported. (38, 40)

### Map showing Study Area

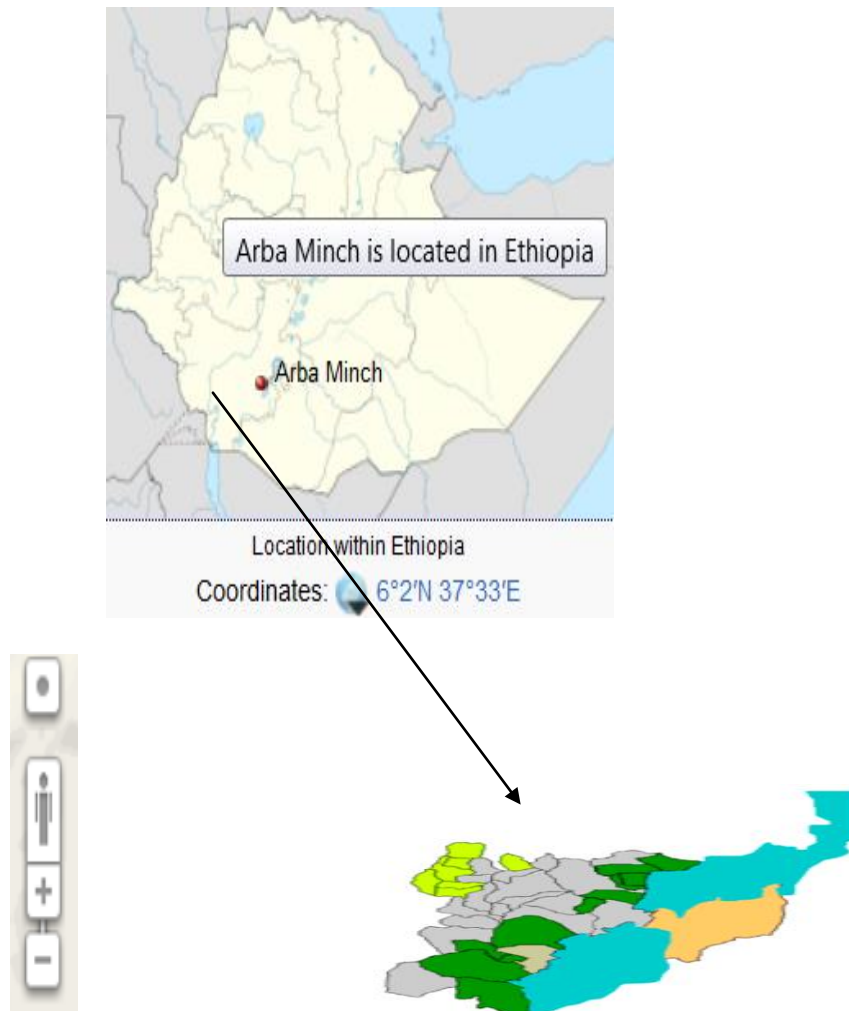


Fig2. Map of Arba Minch Zuria District in Ethiopia and SNNPR  
Source: Arba Minch Zuria - Wikipedia, the free encyclopedia.htm

## **4.2 Study design**

A community based cross-sectional study conducted with quantitative data collection technique to carry out assessment of maternal health care seeking behavior and experiences of complications during pregnancy at Arba Minch Zuria district.

## **4.3 SOURCE POPULATION**

All women who have given at least one birth in Arba Minch Zuria District are the source population of the study.

## **4.4 STUDY POPULATION AND STUDY PARTICIPANTS**

### **4.4.1 The study population**

All women who gave live or still birth in the last 1 year in the district of Arba Minch Zuria.

### **4.4.2 The study participants**

Those women who were respondents and within 1 year after birth in the selected Kebele were study participants of the study.

## **4.5 INCLUSION AND EXCLUSION CRITERIA OF THE STUDY POPULATION**

### **4.5.1 Inclusion criteria**

- Women in 15-49 years of age
- Women with 1 year of post-delivery or still birth.
- Women, who were mentally and physically capable of being interviewed.
- Women who were permanent residents

### **4.5.2 Exclusion criteria**

- Critically ill, could not talk or listen, or refused consent

- Women who were care givers but not the actual mother of baby
- Women who were not available in home after three times visit at the time of interview.

#### 4.6 THE SAMPLE SIZE DETERMINATION

The sample size for this particular study was calculated using formula for a single population proportion (Kish Leslie) considering the following assumptions.

**Assumptions:** A 95% confidence level, margin of error (0.05).

Prevalence (P): proportion of skilled assistance at North Gondar Zone (p= 59.2%)(24).

Substituting in Kish Leslie (1996) single population proportion formula, gives:-

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

$$= \frac{(1.96)^2 (.592) (.408)}{(0.05)^2} = 371$$

Where

- ❖ n= required sample size
- ❖ Z= critical value for normal distribution at 95% confidence level which equals to 1.96 (z value at  $\alpha = 0.05$ , two tailed)
- ❖ P= proportion of SA.
- ❖ d= 0.05 (5% margin of error)
- ❖ Contingency (for non-response and incompletes=10%).

The total sample size is **408**

## **4.7 SAMPLING PROCEDURES**

Arba Minch surrounding district was purposely selected in the region for this study. This was because of financial constraints and interest. There were 30 kebeles in the district. From these, 8 kebeles were randomly selected in the study. For each 8 kebeles, sampling frame of household was obtained from district administration Health Office. For selection of respondents in each kebele, population proportionate to size (PPS) technique was employed. All the respondents were considered homogenous to study variables, since they are all rural community. For the selection of **408** respondents from the sampling frame of the eligible household, systematic sampling technique was used. One center of the kebele was selected for each kebele. From this center a pen was thrown up. The household in the direction of Tip of pen was started with a nearby first. After a successful interview of each household, the interviewer continued to the immediate nearby household of the eligible woman until the required sample size was achieved in each of the kebele. When two eligible women existed in one household, the one with recent birth was selected. For better clarity, see Figure 2 below.

## **4.8 MEASURING INSTRUMENTS**

### **4.8.1 Interview**

A face- to- face interview was conducted by using structured questionnaire specially developed for this purpose having the information on socio-demographic characteristics, economic status, and maternal health care seeking conditions by door-to-door interviewing the respondents.

SCHEMATIC PRESENTATION OF SAMPLING PROCEDURE

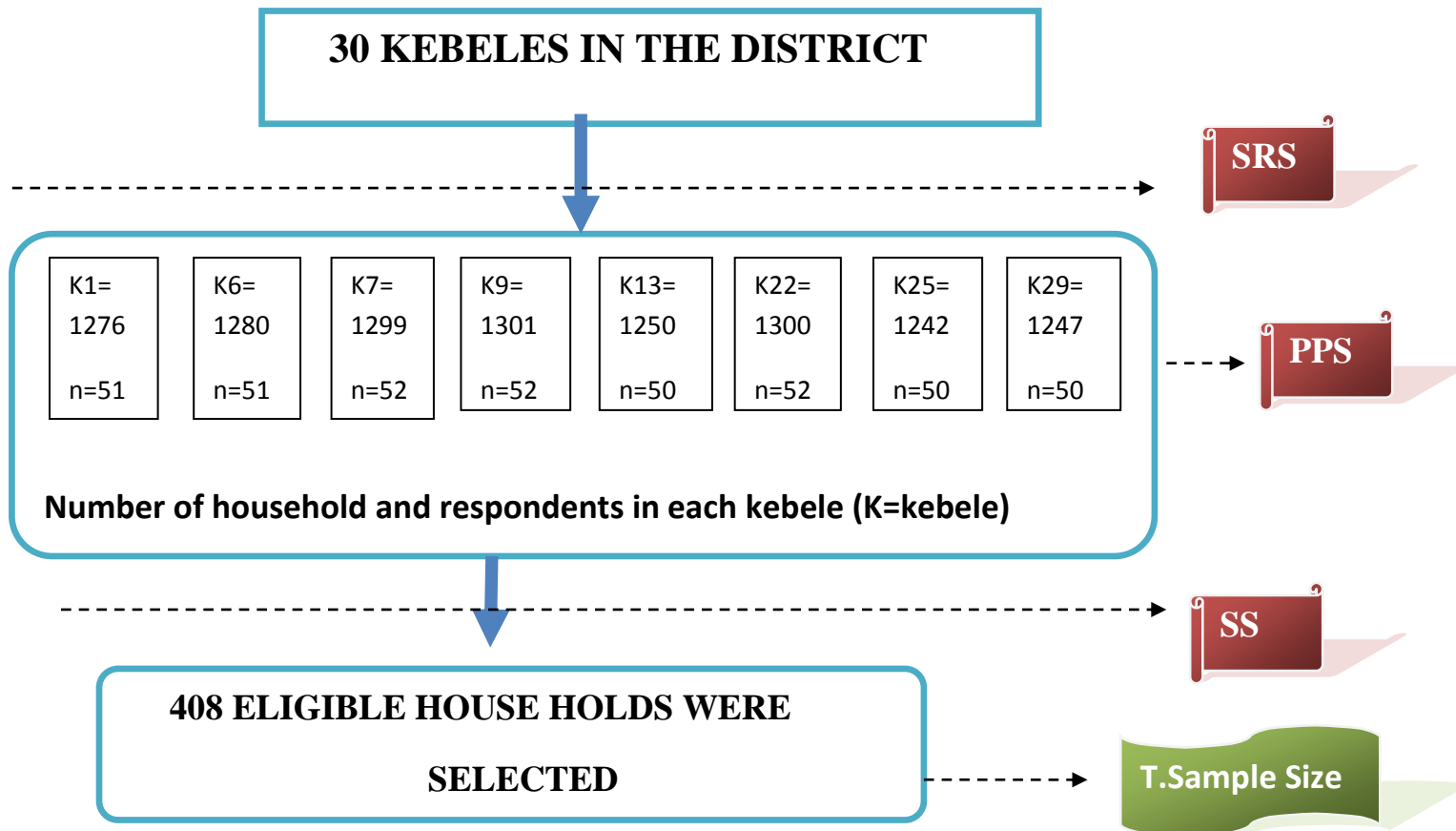


Figure3. Schematic presentation of sampling procedure and selection

#### 4.8.2 Questionnaire Development

Questionnaire was adopted from previous similar studies(16) and also partly developed from various literature reviews that could address the objectives of the study. The questions and statements were grouped and arranged according to the particular that they can address. After extensive revision, the final version of the English questionnaire was developed. An individual who were graduates of English and Amharic languages study translated the English version to Amharic. Another individual of similar ability then re-translated the final or the agreed Amharic

version of the questionnaire back to the English with the first to check for any inconsistencies or distortion in the meaning of words in the content of the instrument.

## **4.9 STUDY VARIABLES**

### **4.9.1 Outcome variables**

- Seeking Skilled Health Assistance to pregnancy complications

### **4.9.2 Independent variables**

- Demographic and Socioeconomic variables, such as age of mother, religion, ethnicity, marital status, age at marriage, education, household monthly income.
- Reproduction variables, such as birth order and pregnancy number.
- Individual factors, such as Knowledge and pregnancy complications faced either life threatening or non-life threatening.
- Health service factors, such as cost of health service and transport, distance, women's opinion about the quality of care and provider, not punctual, not customary and male provider, problems of ANC.
- Decision making factors, such as depend on decision of family, husband, friends, and other relatives.

## **4.10 DATA COLLECTION PROCESS**

### **4.10.1 Recruiting and training**

Eight male/female data collectors, who currently completed nursing diploma and could speak local language was hired. Four experienced nurses with diploma for supervision was selected elsewhere (not working in the study area). Both the interviewers and supervisors were given three days training before the actual work about the aim of study, sampling procedures, and data

collection techniques to go through the questionnaires question by question, art of interviewing, ways of collecting the data and clarification was given on each doubt. Practical exercise was made through peer interviewer. They were also provided an interview guide prepared in English, which was developed before the training.

#### 4.10.2 Criteria for selection of data collectors:

- Being Male/female and had previous experiences, being nurse, speak the local language were given priority.
- Known to be honest and diligent, willing to face difficulties that may arise during the process of interviewing
- Know the study area very well and successful performance during the training
- Willing to sign for contract of a month working days with accountability and responsibility attached to it.

#### 4.11 PRE-TESTING

The pretest of the questionnaire was carried out one week prior to the actual data collection period in a Kebele outside the selected kebele. A total of 37 respondents (10%) were interviewed. On average, it had taken 30minutes (range from 20' to 40') to complete the interview. Both the interviewers and supervisors assessed clarity, understandability; uniformity and completeness of the questions, and then the results were edited and coded.

#### 4.12 DATA COLLECTION

After completing the result of the pre-test, discussion was made with supervisors, and data collectors all together. Then, the data were collected using house-to-house interview questionnaire's, which consists of 25 variables, categorized into four parts. A maximum effort

was made to ensure privacy during interview. The supervisors were there every day to monitor the progress and support data collectors. The actual data collection process was carried out from March 19, 2014 to April 30, 2014.

#### 4.13 SUPERVISION

During the actual data collection data collectors were assigned for each supervisor, two collector and one supervisor in a kebele. The supervisors checked the activities of each data collectors by walking with them in each kebele and sometimes made a random spot-checking of the households to ensure reliability of the data collected. Every night the supervisors checked all the filled questionnaires for completion, clarity and proper identification of the respondents. Then, the principal investigator randomly checked at least 10% of the supervisors' work every other day for completeness and relevancies. Incomplete and unclear questionnaires were returned back to the interviewers to the next morning to be got it corrected.

#### 4.14 OPERATIONAL DEFINITIONS

**Skilled assistance:** refers to maternity services by a health professional with midwifery skills that can be provided at different levels (home, health centers, hospitals, private sector) by a skilled care provider. **Skilled care provider:** Is health professionals (midwives, nurses and doctors) who have been effectively educated and trained in the skills needed to manage normal (uncomplicated) pregnancies as well as in the identification, management or referral of complications. **non-skilled providers** : include health extension workers (HEWs), traditional birth attendants (TBAs) and relatives or family members who cannot fulfill the definition of a skilled provider(42, 43).In this situation health officer(HO) was an additional on skilled assistance.

**Sought health service assistance:** the respondent sought either skilled or unskilled assistance or both with complications in the index pregnancy.

**Not-Sought health service assistance:** the respondent failed to seek either skilled or unskilled assistance with complications in the index pregnancy.

**Skilled ANC Attendance:** Antenatal services given to pregnant women by skilled Health personnel, such as Nurse, Midwife, Health Officer, or Doctor.

**Good Knowledge of pregnancy complications:** If the respondent's response score is average or above average of number of reference complications responded.

**Poor knowledge of pregnancy complications:** if the respondent's response score was below average of number of reference complications responded.

**Permanent residence:** any woman who passed pregnancy period in the study area and currently living there more than 6months.

**Index pregnancy:** is last pregnancy for still birth or live birth.

#### **4.15 DATA QUALITY ASSURANCE**

The quality of data was assured through: tool adopted and pre-tested, training given to interviewers and supervisors on data collection procedures, categorization and coding of the questionnaire used. Every day completed questionnaires were reviewed and checked for completeness and relevance by the supervisors and every other day by the PIs and all the necessary feedback were offered to data collectors in the next morning before the actual procedure.

Data entered by epi info and exported to SPSS for cleaning and analysis

#### **4.16 DATA PROCESSING AND ANALYSIS**

After data collection, the template scheme for data entry was developed and pre-tested for ranges, skipping patterns and allowed legal values by entering 30 questionnaires. After this validation the principal investigator entered the data using EPI INFO version 3.5.2 and exported to SPSS version 20 statistical software packages for data cleaning and analysis. Computer frequencies and summary statistics were used to describe the study population by variables of interest. Any errors identified at this time will be corrected after revision of the original data using the code numbers and statistical commands. The degree of association between independent and dependent variables were analysed by logistic regression model using binary analysis with 95% CI.

#### **4.17 ETHICAL CLEARANCE**

The proposal was reviewed by the Department of Nursing and Midwifery Ethical Clearance Committee. The study was commenced after letter of cooperation written to kebele HEWs from District Health Office. Informed verbal consent was secured for each study subjects. Each respondent was informed about the objective of the study and assurance of confidentiality, risks and Benefits. Moreover, psychological support and protection was given to the respondents' by the principal investigator through data collectors after completion of interview.

#### **4.18 COMMUNICATION OF THE RESULT**

The final report were presented as partial fulfillment of the degree of Masters of Science in Maternal Health Nursing(MHN) and Reproductive Health(RH) to the department of Nursing and Midwifery, College of Health Sciences, Addis Ababa University, and a copy of it will be given to FMOH Family Health Department, to SNNPR regional health Bureau, Gamo Gofa Zone Health Offices and dissemination through publication (local or international journals), presentation on annual Scientific meetings, conferences, etc.

## 5. RESULTS

In this study, 399 eligible women having live or still births in the last one year were interviewed, that was between 1April 2013 and 1March 2014. Total response rate was 98%. All eligible women availed at the time of data collection in the house hold responded to the questionnaire.

### 5.1 SOCIO-DEMOGRAPHIC CHARACTERISTICS OF STUDY PARTICIPANTS

Table1 showed that, majority of women (78.2%) at the time of last pregnancy were 20-34years of age. Mean age was 25.7 years  $\pm$  6.3 standard deviation and had a range of 15-49years of age. The vast majority of the respondents were married (96.5%). About 71.4% of the respondents were Christian protestant religion followers. The Gamo, the Ganta and the Welayta ethnic groups were the dominant (97.9%). The median monthly income of the family was 900ETB in which about more than one third (37.6%) of the family had below 500ETB monthly income and the rest (62.2%) had 500ETB and more monthly income per family per month. It was also showed that, about 24.1% of the respondents had no any formal education. Regarding the respondents Birth Order (Number of live and still births), about half of the respondents (49.4%) had 2-3 births with a median of 2 births, minimum 1 birth and maximum 11births.

Table1: Frequency and percentage distribution of respondents according to selected socio-demographic characteristics, Arba Minch Zuria District, South West Ethiopia, 2014.

| <b>Characteristics</b> |                        | <b>Frequency (n)</b> | <b>Percentage (%)</b> |
|------------------------|------------------------|----------------------|-----------------------|
| <b>Age(years)</b>      | 15-19                  | 48                   | 12.0                  |
|                        | 20-34                  | 312                  | 78.2                  |
|                        | 35-49                  | 39                   | 9.8                   |
|                        | Total                  | 399                  | 100%                  |
|                        | Mean age $\pm$ std.dev | 25.7 $\pm$ (6.3)     |                       |
| <b>Religion</b>        | protestant             | 285                  | 71.4                  |
|                        | orthodox               | 113                  | 28.3                  |
|                        | Others <sup>1</sup>    | 1                    | .3                    |
|                        | Total                  | 399                  | 100%                  |

Table1: Socio-demography.....continued

|                                   |                     |         |      |
|-----------------------------------|---------------------|---------|------|
| <b>Ethnicity</b>                  | Gamo                | 293     | 73.4 |
|                                   | Ganta               | 52      | 13.0 |
|                                   | Welayta             | 46      | 11.5 |
|                                   | Others <sup>2</sup> | 8       | 2.0  |
|                                   | Total               | 399     | 100% |
| <b>Marital Status</b>             | Married             | 385     | 96.5 |
|                                   | Others <sup>3</sup> | 14      | 3.5  |
|                                   | Total               | 399     | 100% |
| <b>Family Monthly Income(ETB)</b> | <500                | 150     | 37.6 |
|                                   | 500-2000            | 197     | 49.4 |
|                                   | >2000               | 52      | 13   |
|                                   | Total               | 399     | 100% |
|                                   | Median              | 900 ETB |      |
| <b>Women Education</b>            | No Education        | 96      | 24.1 |
|                                   | Primary             | 221     | 55.4 |
|                                   | Secondary           | 62      | 15.5 |
|                                   | College/University  | 20      | 5    |
|                                   | Total               | 399     | 100% |
| <b>Birth Order</b>                | 1                   | 115     | 28.8 |
|                                   | 2-3                 | 197     | 49.4 |
|                                   | 4-5                 | 63      | 15.8 |
|                                   | 6+                  | 24      | 6    |
|                                   | Total               | 399     | 100% |
|                                   | Median              | 2       |      |

N.B <sup>1</sup> muslim, <sup>2</sup>Zayse, Oromo, Amhara and Ganjule, <sup>3</sup>widowed, divorced, single

## **5.2 AWARENESS OF THE WOMEN TO LIFE THREATENING AND NON-LIFE THREATENING COMPLICATIONS**

About 62.9% respondents had knowledge of at least one complication in the index pregnancy. 52.9% respondents had knowledge of 2 or more complications that could occur during pregnancy and 47.1% respondents had knowledge of below two complications. About 60.7% respondents had knowledge of at least one life threatening complications and 43.1% respondents had knowledge of at least one non-life threatening complications. Women's knowledge of pregnancy complications were above average for majority of the respondents. The median knowledge of number of complication was 1 for life threatening and Median 0.0 for non-life threatening complications. For both complications, median knowledge was 2.0. The major 156(39.1%) of the respondents had knowledge of malaria as life threatening and 100(25.1%) had knowledge of Nausea and Vomiting as non-life threatening complications.

Table2: percent distribution of respondent’s knowledge to common life threatening and non-life threatening pregnancy complications, Arba Minch Zuria District, South West Ethiopia, 2014.

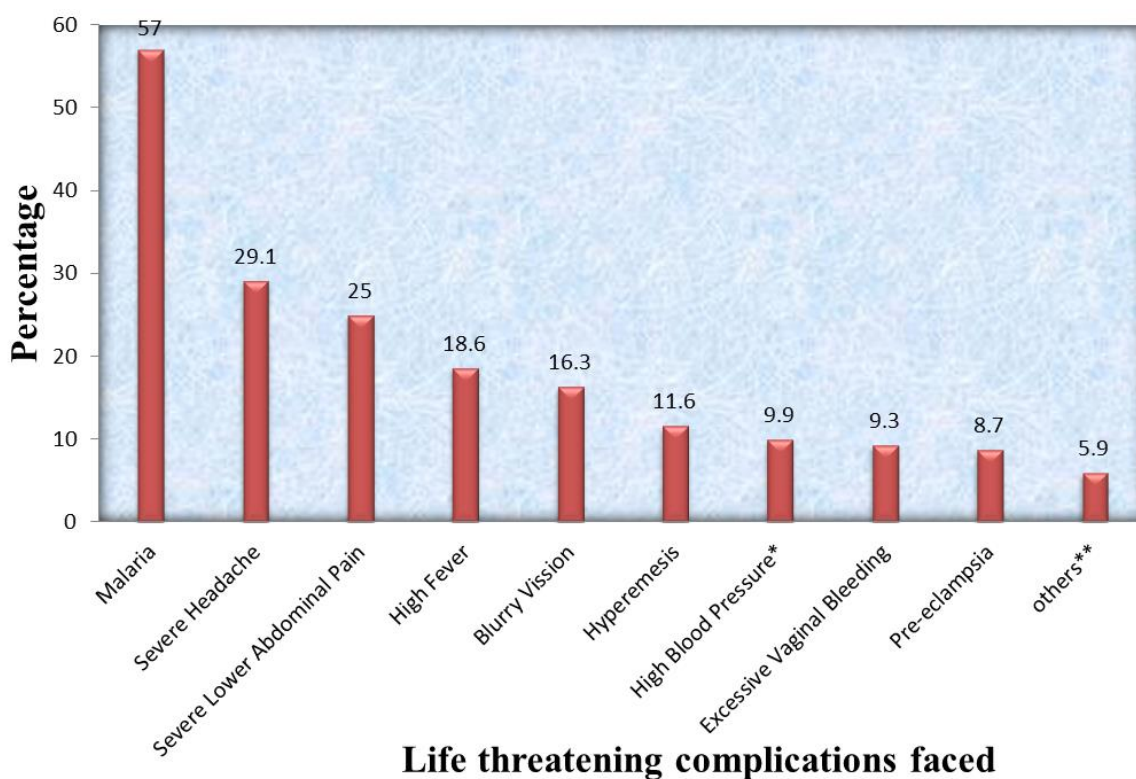
| complications        |                             | Awareness to the complication |           |
|----------------------|-----------------------------|-------------------------------|-----------|
|                      |                             | Yes n (%)                     | No (%)    |
| life-threatening     | Malaria                     | 156(39.1)                     | 243(60.9) |
|                      | Severe Head Ache            | 80(20.1)                      | 319(79.9) |
|                      | Severe Lower Abdominal Pain | 72(18.0)                      | 327(82.0) |
|                      | High Blood Pressure         | 72(18.0)                      | 327(82.0) |
|                      | Hyperemesis                 | 64(16.0)                      | 335(84.0) |
|                      | Blurry Vision               | 53(13.3)                      | 346(86.7) |
|                      | Excessive Vaginal Bleeding  | 49(12.3)                      | 350(87.7) |
|                      | Low Baby Movement           | 43(10.8)                      | 356(89.2) |
|                      | Others <sup>1</sup>         | 40(10.1)                      | 359(89.9) |
|                      | Median                      | 1                             |           |
| Non-life threatening | Nausea and Vomiting         | 100(25.1)                     | 299(74.9) |
|                      | Leg Edema                   | 73(18.3)                      | 326(81.7) |
|                      | Varicus Vein                | 62(15.5)                      | 337(84.5) |
|                      | Others (%) <sup>2</sup>     | 14(3.5)                       | 325(96.5) |
|                      | Median                      | 0                             |           |

N.B: <sup>1</sup>Foul smelling vaginal discharge, eclampsia/convulsion, pre-eclampsia, high fever <sup>2</sup> gastric pain, weakness, mild depression.

### 5.3 LIFE THREATENING COMPLICATIONS OCCURRED DURING PREGNANCY

Out of 399 women included in the study, 172(43.1%) respondents had encountered at least any one of the problems including both life threatening and non-life threatening pregnancy complications. About 167(97.1%) respondents faced life threatening and 90(52.3%) respondents faced non-life threatening pregnancy complications. Most experienced more than one problem,

with a mean occurrence  $2 \pm 1$  standard deviation for life threatening pregnancy complications and mean occurrence  $0.72 \pm 0.8$  standard deviation for non-life threatening pregnancy complications. As summarized in fig4. Of faced complications, 156(91.3%) respondents sought assistance in which 127(81.4%) sought skilled assistance while 29(18.6%) respondents sought unskilled assistance. The major life threatening complications faced at the index pregnancy were Malaria 98(57%) respondents; severe headache 50(29.1%) respondents; and Severe Lower Abdominal Pain 43(25%) respondents. All the rest occurred in 138(80.3%) of the respondents in the index pregnancy.

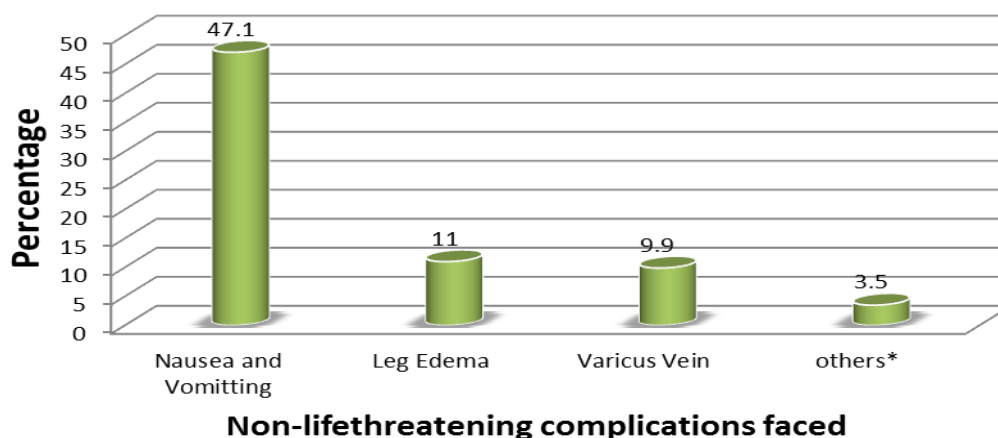


N.B \*High Blood Pressure without pre-eclampsia, \*\*Foul smelling vaginal discharge, Convulsion/Eclampsia, and malposition after 36wks of gestation

Fig4: percent distribution of respondents by problems faced in the index pregnancy, Arba Minch Zuria District, South West Ethiopia, 2014.

### 5.3 NON LIFETHREATENING COMPLICATIONS OCCURRED DURING PREGNANCY

Out of all complications respondents faced in the index pregnancy, Nausea and Vomiting occurred on 81(47.1%) respondents, which was the larger non-life threatening pregnancy complication. The other, Leg Edema and varicus vein 36(20.9%), and the rest 6(3.5%) took other portion of non-threatening complications. Fig5: summarized non-life threatening complications where woman faced at any time in the index pregnancy of the previous one year duration.



N.B: \* gastric pain, weakness, mild depression and diarrhea

Figure4. percentage distribution of respondents by non-life threatening pregnancy complications faced in the index pregnancy, Arba Minch Zuria District, South West Ethiopia, 2014.

### 5.5 HEALTH ASSISTANCE SEEKING BEHAVIOUR OF THE RESPONDENTS

#### 5.5.1 HEALTH ASSISTANCE SEEKING OF THE RESPONDENTS BY SELECTED CHARACTERISTICS

Of the total respondents who had at least one pregnancy complications at the time of pregnancy in the previous one year, 156(91.3%) respondents had health care assistance (skilled and/or

Unskilled). Of this, about 127(81.4%) respondents sought skilled assistance (doctor, nurse, midwife, and health officer) and 29(18.6%) respondents sought unskilled assistance (by HEW, TBA, other unqualified person). About 36(20.9%) respondents had mixed assistance (both skilled plus Unskilled). Majority of the women 103(81.1%) who had skilled assistance were in the middle age group (20-34 years of age). The rest, below 20 years of age 15(11.8%) and above 34 years of age 9(7.1%) had skilled assistance for pregnancy complications. out of the total respondent who sought any type of assistant, 74(47.4%) had 2-3 previous births. Other portion of birth order included 37 (23.6%) only had one previous birth, 4-5 birth order 34 (21.8%), and 6+ birth order 14(9.0%) of respondents. women who were in the middle category of monthly income (500-2000ETB) 73(57.5%) respondents had skilled assistance out of skilled assistances, but majority of women 13(44.8%) who had unskilled assistance included in the low income category(below 500ETB). Of 127(81.4%) women who had skilled assistance and 29 (18.6%) women who had unskilled assistance, 100(78.7%) and 28(96.6%) had either primary or no formal education, respectively. Large number of women 99 (78%) who used transportation services had skilled assistance while majority 27 (93%) who had not used transportation (visited by foot) had unskilled assistance from their respective total. similarly, out of women who had skilled assistance, 94 (74%) knows at least one of common complications that could occur at the time of pregnancy. Table3 summarized all.

Table3: percent distribution of the respondents by skilled and unskilled assistance sought to the complications in the index pregnancy, Arba Minch Zuria District, South West Ethiopia, 2014.

| characteristics              |                    | Sought assistance                    |                                      |          |                                |
|------------------------------|--------------------|--------------------------------------|--------------------------------------|----------|--------------------------------|
|                              |                    | skilled assistance*<br>n=127 (81.4%) | unskilled assistance<br>n=29 (18.6%) | Mixed= n | Total <sup>+</sup><br>N=156(%) |
| <b>Age(yrs)***</b>           | 15-19              | 15(9.6)                              | 2(1.3)                               | 1        | 17(10.9)                       |
|                              | 20-34              | 103(66.0)                            | 21(13.5)                             | 27       | 124(79.5)                      |
|                              | 35-49              | 9(5.8)                               | 6(3.8)                               | 8        | 15(9.6)                        |
|                              | Total              | 127(81.4)                            | 29(18.6)                             | 36(20.9) | 156(100.0)                     |
| <b>Birth order</b>           | 1                  | 31(19.8)                             | 6(3.8)                               | 6        | 37(23.6)                       |
|                              | 2-3                | 61(39.1)                             | 13(8.3)                              | 20       | 74(47.4)                       |
|                              | 4-5                | 26(16.7)                             | 8(5.1)                               | 6        | 34(21.8)                       |
|                              | 6+                 | 9(5.8)                               | 5(3.2)                               | 4        | 14(9.0)                        |
|                              | Total              | 127(81.4)                            | 29(18.6)                             | 36       | 156(100.0)                     |
| <b>Family monthly income</b> | <500               | 42(26.9)                             | 13(23.2)                             | 10       | 55(50.1)                       |
|                              | 500-2000           | 73(46.8)                             | 9(16.1)                              | 23       | 82(62.9)                       |
|                              | >2000              | 12(7.7)                              | 7(4.5)                               | 3        | 19(12.2)                       |
|                              | Total              | 127(81.4)                            | 29(18.6)                             | 36(20.9) | 156(100.0)                     |
| <b>education</b>             | No education       | 33(21.2)                             | 6(3.8)                               | 9        | 39(25.0)                       |
|                              | primary            | 67(42.9)                             | 22(14.1)                             | 18       | 89(57.0)                       |
|                              | secondary          | 17(10.9)                             | 1 (.7)                               | 9        | 18(11.6)                       |
|                              | College/university | 10(6.4)                              | 0(00.0)                              | 0        | 10(6.4)                        |
|                              | Total              | 127(81.4)                            | 29(18.6)                             | 36(20.9) | 156(100.0)                     |
| knowledge complications      | yes                | 94(60.2)                             | 14(9.0)                              | 19       | 108(69.2)                      |
|                              | no                 | 33(21.2)                             | 15(9.6)                              | 17       | 48(30.8)                       |
|                              | Total              | 127(81.4)                            | 29(18.6)                             | 36(20.9) | 156(100.0)                     |

N.B: <sup>+</sup> Total didn't include mixed assistance, \*skilled assistance may include unskilled

### 5.5.2 SKILLED AND UNSKILLED ASSISTANCE BY ANC SERVICES

As summarized in the table4 below, of the total 127 respondents who had skilled assistance to pregnancy complications, about 85(72.3%) respondents had ANC by a skilled provider in the index pregnancy. Of 29 respondents who had unskilled assistance to pregnancy complications, about 26(89.7%) respondents had unskilled ANC follow up in the index pregnancy.

Table 4: percent distribution of skilled and unskilled assistance to pregnancy complications by four choices of ANC provider at the index pregnancy, Arba Minch Zuria District, South West Ethiopia, 2014.

| ANC Provider         | Sought assistance |                                 |                                   |
|----------------------|-------------------|---------------------------------|-----------------------------------|
|                      | Total             | skilled assistance <sup>1</sup> | unskilled assistance <sup>2</sup> |
|                      | n (%)             | n (%)                           | n (%)                             |
| <b>Skilled ANC</b>   | yes               | 83(65.4%)                       | 2(6.9%)                           |
|                      | no                | 44(34.6%)                       | 27(93.1%)                         |
|                      | Total             | 127(100%)                       | 29(100%)                          |
| <b>Unskilled ANC</b> | yes               | 42(33.1%)                       | 26(89.7%)                         |
|                      | no                | 85(66.9%)                       | 3(10.3%)                          |
|                      | Total             | 127(100%)                       | 29(100%)                          |

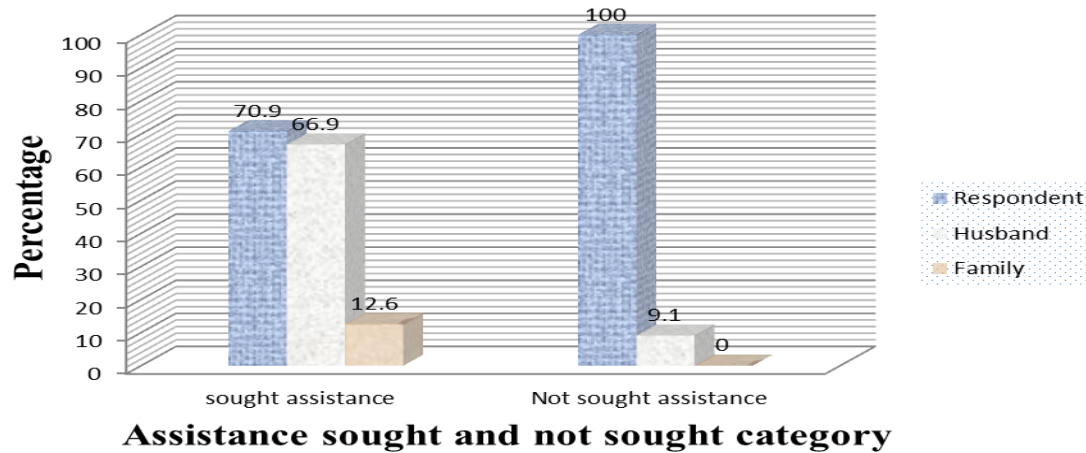
N.B: <sup>1</sup>skilled assistance is those who had sought treatment by doctor, nurse, midwife, or HO

<sup>2</sup>unskilled assistance =those who had sought treatment by HEWs, TBAs, or other unqualified person only

### 5.5.3 DECISION MAKER FOR SOUGHT AND NOT SOUGHT ASSISTANCE

As described in the figure6, about 47.1% of decision makers to seek assistance to pregnancy complications were respondents herself; and 44.5% of decision makers were parents of the respondents all together. On the other hand, about 100% of decisions were made by the

respondents for not to seek assistance to health services while she had pregnancy complications, and 9.1% decisions made by the husband of the respondents.



N.B: Percentage is more than 100 because there are multiple responses

Fig6. Percentage distribution of specified person/people who decided that treatment should be sought or should not be sought for the women with pregnancy complications, Arba Minch Zuria District, South West Ethiopia, 2014.

#### 5.5.4 REASON FOR NOT SOUGHT ASSISTANCE BY SELECTED CHARACTERISTICS

Some of the women who reported complications did not seek assistance due to the following reasons .Out of 172(43.1 %) respondents who had encountered at least any one of the complications, about 16(9.3 %) respondents did not see any of the health care assistance. As seen in figure, 69.2% of the reasons for not sought health care assistance was ‘‘did not think seriousness of the complications’’. This majorly included in the low and middle income category of the respondents.

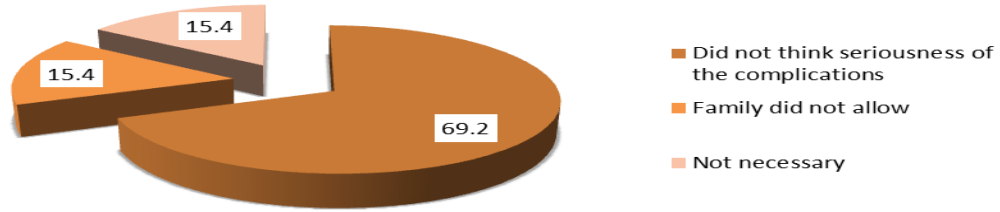


Fig7. Percent distributions of respondents by reason for not sought health care assistance to pregnancy complications, Arba Minch Zuria District, South West Ethiopia, 2014.

### **5.5.5 CHOICE OF PLACE FOR SEEKING ASSISTANCE BY SELECTED CHARACTERISTICS**

Of 156 women who had assistance, 89(56.3%) respondents from all differential characteristics sought assistance from government health center, 61(7.0%) respondent assisted at government health post, 42(26.6%) respondent assisted at government Hospitals, and only 8(4.0%) respondents assisted at own home and private health sectors. about 70(44.3%) respondents aged 20-34 years sought assistance at Health center of the Government and which was the largest from all other places by age. Table below also shows out of 61(38.6%) respondents who had assisted at Health post, about 51(32.3%) had educational status either no formal education or only primary class complete.

Table5: Percentage distribution of respondent's place of health assistance to pregnancy complications by selected characteristics, Arba Minch Zuria District, South West Ethiopia, 2014.

| characteristics      |                    | Place of assistance |               |             |                     |            |
|----------------------|--------------------|---------------------|---------------|-------------|---------------------|------------|
|                      |                    | Hospital            | Health Center | Health Post | Others <sup>1</sup> | Total      |
|                      |                    | n (%)               | n (%)         | n (%)       | n (%)               | n(%)       |
| <b>age</b>           | 15-19              | 2(1.3)              | 13(8.2)       | 3(1.9)      | 0(00.0)             | 18         |
|                      | 20-34              | 36(22.8)            | 70(44.3)      | 44(27.8)    | 7(4.0)              | 157        |
|                      | 35-49              | 4(2.5)              | 6(3.8)        | 14(8.9)     | 0(00.0)             | 24         |
|                      | Total n(%)         | 42(26.6)            | 89(56.3)      | 61(7.0)     | 8(4.0)              | 200(125.5) |
| <b>Birth Order</b>   | 1                  | 15(9.5)             | 17(10.7)      | 11(18.0)    | 2(1.0)              | 45         |
|                      | 2-3                | 23(14.6)            | 40(25.3)      | 31(19.6)    | 3(1.5)              | 93         |
|                      | 4-5                | 4(2.5)              | 24(15.2)      | 13(8.2)     | 1(0.5)              | 42         |
|                      | 6+                 | 0(00.0)             | 8(5.1)        | 6(3.8)      | 2(1.0)              | 16         |
|                      | Total n(%)         | 42(26.6)            | 89(56.3)      | 61(38.6)    | 8(4.0)              | 200(125.5) |
| <b>Family Income</b> | <500               | 13(8.2)             | 30(19.0)      | 21(13.3)    | 7(3.5)              | 71         |
|                      | 500-2000           | 20(12.7)            | 55(34.8)      | 30(19.0)    | 1(0.5)              | 116        |
|                      | >2000              | 9(5.7)              | 4(2.5)        | 10(6.3)     | 0(00.0)             | 23         |
|                      | Total, n (%)       | 42(26.6)            | 89(56.3)      | 61(38.6)    | 8(4.0)              | 200(125.5) |
| <b>Education</b>     | No education       | 2(1.3)              | 32(20.2)      | 14(8.9)     | 2(1.0)              | 50         |
|                      | primary            | 19(12.0)            | 49(31.0)      | 37(23.4)    | 6(3.0)              | 111        |
|                      | secondary          | 12(7.6)             | 6(3.8)        | 10(6.3)     | 0(00.0)             | 28         |
|                      | college/university | 9(5.7)              | 2(1.3)        | 0(00.0)     | 0(00.0)             | 11         |
|                      | Total, n (%)       | 42(26.6)            | 89(56.3)      | 61(38.6)    | 8(4.0)              | 200(125.5) |

N.B: <sup>1</sup>Private sector, respondent home, and TBA home.

## **5.6 FACTORS ASSOCIATED WITH SEEKING ASSISTANCE AT THE TIME OF COMPLICATIONS DURING PREGNANCY**

The multivariable analysis carried out using binary logistic regression indicated that four variables: Family monthly income, having ANC by a skilled provider, age of respondents, and use of transportation to facility were the factors found to be significantly associated with seeking assistance from a skilled provider. Women who had antenatal care by a skilled provider found to be 10.6 times (AOR= 10.6, 95%CI; 3.3, 34.5) more likely to seek assistance from a skilled provider for pregnancy complications as compared to women who did not have antenatal care. Women with medium monthly income (500-2000ETB/month) were about 3.4 times (AOR = 3.4, 95% CI; 1.04, 11.4) more likely to be assisted by a skilled provider at the time of pregnancy complications than women who were in the low (who belonged to below 25<sup>th</sup> percentile) family monthly income(<500ETB). Women who were in the age 20-34 years were about 3.8 times (AOR = 3.8; 95% CI, 1.2, 12.3) more likely to be assisted by a skilled provider at the time of pregnancy complications as compared to older women (below 20 years of age) who had assistance. Similarly, women who used transportation to go to the facility were 72.2 times (AOR = 72.2; 95% CI , 17.2, 303.5) more likely to be assisted by a skilled provider for pregnancy complications as compared to those women who were not using transportation (traveled by foot). As can be observed in table6, the significant association was observed for the variable, knowledge of women to common obstetric complications, by bivariate analysis disappeared during multivariate analysis.

Table6: Adjusted and unadjusted odds ratio of logistic regression model showing effects of predictor variables on the likely hood of skilled assistance for pregnancy complications, Arba Minch Zuria District, South West Ethiopia, 2014.

| Variables                     |          | Assisted by a skilled provider |                          |        |        |       |       |        |                    |
|-------------------------------|----------|--------------------------------|--------------------------|--------|--------|-------|-------|--------|--------------------|
|                               |          | yes<br>n=127                   | no<br>n <sup>1</sup> =45 | COR    | 95% CI |       | AOR   | 95% CI |                    |
|                               |          |                                |                          |        | lower  | upper |       | lower  | Upper              |
| Age(yrs)                      | 15-19    | 15                             | 4                        | 5.8    | 0.99   | 34.4  | 4.2   | 0.6    | 28.1               |
|                               | 20-34    | 103                            | 32                       | 3.6*   | 1.2    | 10.8  | 3.8*  | 1.2    | 12.3               |
|                               | 35-49    | 9                              | 9                        | 1.0+   |        |       | 1.0+  |        |                    |
| Family Monthly Income(ETB)    | <500     | 42                             | 21                       | 1.0+   |        |       | 1.0+  |        |                    |
|                               | 500-2000 | 73                             | 16                       | 5.4*   | 0.6    | 16.8  | 3.4*  | 1.01   | 11.4               |
|                               | >2000    | 12                             | 8                        | 2.0    | 0.68   | 5.89  | 5.7   | .59    | 55.5               |
| Had ANC by a skilled provider | yes      | 83                             | 11                       | 12.7*  | 4.1    | 38.7  | 10.6* | 3.3    | 34.5               |
|                               | no       | 44                             | 34                       | 1.0+   |        |       | 1.0+  |        |                    |
| knowledge of complications    | yes      | 94                             | 31                       | 0.23** | 0.1    | 0.52  | 1.13  | 0.2    | 6.4                |
|                               | no       | 33                             | 14                       | 1.0+   |        |       | 1.0+  |        |                    |
| Vehicle travel transport used | yes      | 99                             | 3                        | 33*    | 9.3    | 116.6 | 72.2* | 17.2   | 303.5 <sup>2</sup> |
|                               | no       | 28                             | 42                       | 1.0+   |        |       | 1.0+  |        |                    |

N.B: \*Statistically Significant Association, \*\*significant by binary analysis, + Reference category, <sup>1</sup>sought either unskilled assistance or no assistance for problem/s.

## 6. DISCUSSION

This Community based cross-sectional study attempted to assess pregnancy complications and seeking assistance from a qualified provider among women who gave birth in the last 1 year prior to the study at Arba Minch Zuria District, South West of Ethiopia. In addition, the study tried to investigate perceived awareness of the respondents on commonly known complications to a pregnant mother in the study area.

In this study, about 52.9% of respondents had Good knowledge of pregnancy complications that could occur during pregnancy and 47.1% respondents had poor knowledge of complications, this was based on below average and above average median knowledge classification (median 2). This was not in line with other studies in that 83.1 % of the respondents in Bangladesh had good knowledge about pregnancy complications. Among the respondents who claimed to have knowledge, 56.12% of them believed that it meant physical weakness, 11.23 percent thought as it was related to low blood pressure(8, 21). The differences may be due to the overall maternal service utilization pattern which is very low in Ethiopia(13). This study also showed that about 60.7% respondents had knowledge of at least one life threatening complications and 43.1% respondents had knowledge of non-life threatening complications. Overall, 62.9% respondents had knowledge of at least one complication that could occur during pregnancy.

About 28.5% of the women reported at least one kind of pregnancy complications as life threatening in the study of north Gondar.(24) This difference may be due to the improvements in awareness of women to report pregnancy complications due to the current expansion of primary health care facilities and the Community Based HEWs Program in Ethiopia. In the Health Extension Program, the target of one health post and two health extension workers per kebele has been reached(44). Top three complications mentioned in these study were malaria(50.6%), severe head ache(26.2%), and severe lower abdominal pain(25%) as life threatening; and Nausea and

Vomiting(27.3%), leg edema(23.8%), and varicous vein(19.2%) as non-life threatening problems. In other African studies, three frequently mentioned problems were vaginal bleeding, malaria and severe anemia(22) . It is similar in case of malaria, whereas the difference in others may be due to difference in prevalence of problems by country and the difference in preventive health services activities.

This study showed, 43.1% of the respondents had encountered any one or more of the pregnancy complications. This finding was lower from a cross-sectional Indian slum study, which showed about 60% of women reported health problems during the index pregnancy. (25) and Higher than Ethiopian North Gondar study findings of 28.5% of respondents reported some kind of complications.(24)The differences, Higher may be showing an increasing health services awareness and facilitation in Ethiopia by increasing HEWs effort and health services infrastructures for preventive activities and perceived severity from time to time; and lower may show low reporting of the complns & low perceived severity of it in Ethiopia, as compared to the Indian's.

In this study, skilled ANC attendance and skilled health service assistance to pregnancy complication was statistically significantly associated (AOR= 10.6, 95%CI; 3.3, 34.5). The contribution of ANC by skilled provider to further maternal service utilizations was observed in previous studies conducted in Ethiopia (24, 45). Its positive effect for timely care-seeking during obstetric complications was also observed in studies outside Ethiopia (46).

This study revealed that some of the women who reported complications did not seek services due to reasons, like did not see seriousness of the problems, seen as not necessary, and because family did not allow to seek assistance. Inability to judge the graveness of condition, distance/transport problems, lack of money/cost considerations, and use of traditional options at home were other study findings (24).

In this study, it was identified that there is statistically significant association between medium household monthly income and skilled assistance to pregnancy complications (AOR = 3.4, 95% CI; 1.04, 11.4). This was not concurrent with the studies in that skilled assistance either for life threatening complications and non-life threatening was higher among wealthier households, in Bangladesh study (16). The difference may be due to difference in income classification between the two studies.

Women in the age 20-34years old had statistically significant association with seeking skilled assistance to pregnancy complications (AOR = 3.8; 95% CI, 1.2, 12.3). This association was may be due to high number of women in the last one year post birth exist in the age group of 20-34 years old in the study district. Also, women who used transportation had statistically significant association (AOR = 72.2; 95% CI, 17.2, 303.5) with skilled assistance. This was may be due to existence of treatment facility far from the respondent's house hold and those who come by foot were minimal.

## **7. STRENGTHS AND LIMITATIONS OF THE STUDY**

### **7.1 STRENGTHS OF THE STUDY**

Being community based study is an advantage for representing the community of woreda as compared to facility based and beneficiary to the woreda to plan their health service activities in the area by identifying the existing experiences as base line information.

Professional data collectors (midwifery nurse) used was an advantage for effective collection of medical information from the respondent's.

## **7.2 LIMITATIONS OF THE STUDY**

The cause effect relationship for all significant associations may have a chicken egg dilemma, since this is cross-sectional study. The reliability of self-reported complications based on a woman's recall may be limited compared to the results of medical examinations at health care facilities. Judging the severity of the illness is also a challenge to respondents, since severity can be subjective, even though women's self-report will be the primary option for capturing maternal morbidity in places where women do not usually use skilled care providers or facilities for maternal services. The fact that women who died from obstetric complications were excluded from the study, might underestimate the results.

## **8. CONCLUSION**

In this study, About Seven women out of Ten (70.9%) who had a skilled assistance had knowledge of life threatening pregnancy complications and about Five women out of Ten (54.3%) had knowledge of non-life threatening complications. More than two out of three women who faced complications did use skilled providers at the time of pregnancy complications. About 172(43.1%) respondents reported at least any one of the problems faced in the index pregnancy. The most common complications reported were Malaria, Nausea/Vomiting and severe head ache. Of women faced complications, about more than seven out of ten (73.8 %) sought assistance from a skilled provider. Did not think seriousness of the problems, thought as not necessary, and because family did not allow were the reasons for not seeking care from skilled providers. Belonging income group 500 to 2000ETB, getting antenatal care from a skilled provider, maternal age of 20-34 years, use of transport services were significantly associated with seeking assistance from a skilled provider.

## 9. RECOMMENDATIONS

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

### 1. Maximizing Awareness of women

- ❖ As there is more than half shortage of women's awareness on complications, woreda focal persons are encouraged to do educational campaigns on the benefit of skilled assistance and maximize their knowledge.
- ❖ Health extension workers of the woreda are also encouraged to give more health information to women of child bearing via home to home and at Health Post ANC visit.
- ❖ Community awareness program must focus on life threatening pregnancy complications on seeking assistance.

### 2. Health services

- ❖ Since antenatal visit by skilled personnel was significant predictor, The Regional and Woreda Government bodies should give focus on skilled provision of ANC through refresher training of health professionals on effective ANC services via maximizing IEC activities.
- ❖ Transport problem was another significant predictor so that bringing the health facility near the community will be an option and encouraged to the woreda health office.
- ❖ Recruiting and training Rural HEWs from diploma nurses or midwives as of urban HEWs will be another option to achieve closeness of the skilled provider near the community for the regional governor.

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## **ANNEXES:**

### **RESPONDENTS INFORMATION SHEET ENGLISH VERSION**

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

Here, I the undersigned, at Addis Ababa University School of Graduate Studies Program, currently undertaking research on a topic entitled women's health assistance seeking behavior and Problems faced during Pregnancy at Arba Minch Zuria district, South West Ethiopia. For this study, you will be selected as a participant and before getting permission of your participation, you need to know all necessary information related to the study. Thus, this information will be detailed as:

**Purpose of the study:-** To assess Women's Health care Seeking Behavior and problems faced during Pregnancy at Arba Minch Zuria district.

**Participants to be included:-** Women who have at least one live or still birth before one year of data collection period and who are voluntary to participate in the study are included.

**Risks of the study:** The study will be carried out by asking you the already prepared and structured questions. The procedure doesn't bear any physical or psychological trauma. Furthermore, you will not be forced to respond to the information you do not know.

**Benefits of the study:** For your participation in the study no payment will be granted or has no any special privilege to you. On the other hand, participating in the study and giving your information to questions asked will have great input in efforts at reducing maternal deaths.

**Confidentiality:** All information you give will be kept confidential and won't be accessible to any third party. Your name won't be registered on the original question sheet so that you will not be identified.

**Consent:** Your participation in the study will be totally based on your willingness. You have the right not to participate from the beginning, or stop any time after starting participation. You will not be forced to respond to the information you do not know.

Finally, I would like to acknowledge you for your either responses after listening me.

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## RESPONDENTS INFORMATION SHEET AMHARIC VERSION

### በጥናቱ ተሳታፊዎች የመረጃ ቅጽ (ከእንግሊዝኛው የተተረጎመ)

በአድስ አበባ የኒቨርሲቲ ጤና ሳይንስ ኮሌጅ በድህረ ምረቃ ትምህርት ፕሮግራም የነርቪንግና ሚድ ዋይፊሪ ትምህርት ክፍል። ከዚህ በታች እንደተመለከተው በአድስ አበባ የኒቨርሲቲ በድህረ ምረቃ ትምህርት ፕሮግራም ነርቪንግና ሚድ ዋይፊሪ ትምህርት ክፍል በአሁኑ ወቅት “የእናቶችን በእርግዝና ጊዜ የጤና አገልግሎት አጠቃቀምንና ሽፋንን የምዳስስ” በምለው ርዕስ በአርባ ምንጭ ዙሪያ ወረዳ ጥናት እያካሄድኩ ነው።

የዚህ ጥናት ተሳታፊ ለመሆን እርስዎ ተጋብዘዋል። በጥናቱ ላይ ለመሳተፍ ፍቃደኝነትዎ ከመጠየቁ በፊት ጥናቱን በተመለከተ አስፈላጊ የሆኑ መረጃዎችን ማግኘት ያስፈልግዎታል። ስለሆነም በጥናቱ ላይ ለመሳተፍም ሆነ ላለመሳተፍ መጀመሪያ ማወቅ የምገባዎትን መረጃ እንደምከተለው እናቀርብልዎታለን።

- 1. የጥናቱ አላማ:** የእናቶችን በእርግዝና ጊዜ ህመም የጤና አገልግሎት አጠቃቀምንና ሽፋንን የምዳስስ ነው።
- 2. በጥናቱ የምከተቱ ተሳታፊዎች:** ማንኛውም ባለፉት አንድ ዓመት ጊዜ ውስጥ ልጅ የወለደች ወይም ሞቶ የተወለደባት እናትና ለመረጃው ፍቃደኛ የሆኑት።
- 3. ከጥናቱ ጋር የተያያዘ ጉዳት:** ጥናቱ የምካሄደው ቀደም ለዚህ ጥናት የተዘጋጀውን ጥያቄ በመጠየቅ ነው። ሆኖም በጥናቱ ተሳታፊዎች አካል ላይም ሆነ አእምሮ ላይ ፈፅሞ ጉዳት የለውም። ያልገባዎትን መረጃ ለመመለስ አይገደዱም።

4. ጥቅም፡ በጥናቱ በመሳተፍ የምክፈልዎት ክፍያ ወይም የተለየ ጥቅም የለውም። በሌላ በኩል በጥናት መሳተፍ ለምጠባዎች ጥያቄዎች ተገቢውን መረጃ መስጠት የእናቶችን ሞት ለመቀነስ ለምደረገው ስራ ከፍተኛ እገዛ ይኖረዋል።

5. ምስጥር የመጠበቅ ሁኔታ፡ እርስዎ የምስጥር መረጃ በምስጥር የጠበቃል። ለሶስተኛ ሰው ተላልፎ አይሰጥም ወይም አይጋለጥም። ማንነትዎ እንዳይታወቅ ስምዎ በዋናው ኮፒ አይመዘገብም።

6. ፍቃደኝነትዎን በተመለከተ፡ በጥናቱ ላይ መሳተፍ ሙሉ በሙሉ የምመስረተዎ በራስዎ ፍላጎትና ፍቃደኝነት ላይ ነው። ከመጀመሪያው በጥናቱ ላይ መሳተፍ ሆነ ላለመሳተፍ ይችላሉ። ካልተስማማዎት በመሀል የማቋረጥ መብትዎ ሙሉ በሙሉ የተጠበቀ ነው። ያልገባዎትን መረጃ ለመመለስ አይገደዱም።

7. ጥያቄው የምወስደው ጊዜ በአማካይ 30 ደቅቃ ብቻ ነው። በመጨረሻም ስላዳመጡኝ ክልብ አመሰግናለሁ።

አጥኚው ስም፡- ሠራዊት ላቀው ስልክ፡ 0913273829 ኢሜይል፡ lserawit@yahoo.com

ፊርማ እና ቀን \_\_\_\_\_

የ IRB አድራሻ፡ Tel: 0115538734/0913273829 ኢ-መይል፡ [aaumfirb@yahoo.com](mailto:aaumfirb@yahoo.com)

## CONSENT SHEET, ENGLISH VERSION

### INFORMED CONSENT

Hello. My name is \_\_\_\_\_ (data collector) and I am Temporarily working as a researcher at Addis Ababa University (A.A.U). We are conducting a research on women's health assistance-seeking behavior regarding health problems that occur during pregnancy. The information we collect will help the local governor to plan health services. Your household was selected for the survey. This interview usually takes about 30 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of this research team. You don't have to be paid in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

Do you have any questions?

May I begin the interview now?

Signature of interviewer: \_\_\_\_\_ Date: \_\_\_\_\_

RESPONDENT AGREES TO BE INTERVIEWED: Name & Sign\_\_\_\_\_.

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED..... . 2      END HERE

**CONSENT SHEET, AMHARIC VERSION**

**የተሳትፎ ፈቃደኝነት ማረጋገጫ**

ጤና ይስጠልኝ። ስም \_\_\_\_\_ (መረጃ ሰብሳቢ) ይባላል።

የምሰራው በአድስ አበባ ዩኒቨርሲቲ በጤና ሳይንስ ኮሌጅ ለምገኝ የምርምር ቡድን በግዜያዊነት ነው። የምናጠናው ጥናት የእናቶችን በእርግዝና ጊዜ የጤና አገልግሎት አጠቃቀምንና ሽፋንን የምዳስስ ነው። እኛ የምንሰበስበው መረጃ በአከባቢያ ያለው የጤና አገልግሎት ድርጅት የተለያዩ የጤና አገልግሎት ዕቅድ ለማውጣት እንዲችል ይጠቅማል። ቤትዎ ለጥናቱ ተመርጧል። አጠቃላይ የምፈጀው ሰዓት 30 ደቅቃ ያህል ነው። እርስዎ የምሰጡት መረጃ ከምርምር ቡድን ውጪ ከማንም ጋር የማንጋራ መሆኑን እየገለፅኩ ምስጢራዎ በሙሉ እንደተጠበቀ መሆኑን አረጋግጣለሁ። በዚህ ጥናት ለእርስዎ ምንም ዓይነት ክፍያ የለዎትም፣ ይሁን እንጂ አመለካከትዎ መልካም ስለሆነ በጥሩ ሁኔታ መልስ እንደምትሰጩ አምናለሁ። ምናልባት የማይፈልጉትን ጥያቄ የጠየኩ ከሆነ አስቀድመው ይንገሩኝ እና ወደ ቀጣይ ጥያቄ እሻገራለሁ ወይም መጠይቁን ሙሉ በሙሉ ማስቆም ይችላሉ።

ያልገባዎት ነገር አለ?

መጠይቁን አሁን መጀመር እችላለሁ?

የጠያቂው ፊርማ : \_\_\_\_\_

ቀን \_\_\_\_\_

ተጠያቂዎ እናት ተስማምታለች : ስም እና ፍርማ \_\_\_\_\_

ተጠያቂዎ እናት አልተስማማችም: ስም እና ፍርማ \_\_\_\_\_ 2

(መጠይቁን እዚህ ያብቁ)

**ANNEX I: DATA COLLECTION TOOL, ENGLISH VERSION**

REGION \_\_\_\_\_ DISTRICT \_\_\_\_\_ KEBELE \_\_\_\_\_

NAME OF HOUSEHOLD HEAD \_\_\_\_\_

HOUSEHOLD NUMBER. \_\_\_\_\_

NAME OF ELIGIBLE WOMAN \_\_\_\_\_

**INTERVIEWER VISITS**

|   | 1 | 2 | 3 | Final visit  |
|---|---|---|---|--|
| DATE                                    |   |   |   | DAY <input type="text"/> <input type="text"/>  |
|   |   |   |   | MONTH <input type="text"/> <input type="text"/>  |
| INTERVIEWER'S NAME                      |   |   |   | YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> |
| RESULT*                                 |   |   |   | Int. no <input type="text"/> <input type="text"/> <input type="text"/>                   |
|   |   |   |   | RESULT* <input type="text"/>   |
| NEXT VISIT:<br>DATE _____<br>TIME _____ |   |   |   | TOTAL NO. <input type="text"/><br>OF VISITS  |

**\*RESULT CODES:**

1 COMPLETED

3 POSTPONED

5 PARTLY COMPLETED

2 NOT AT HOME

4 REFUSED

6 INCAPACITATED

7 OTHER( specify) \_\_\_\_\_

SUPERVISOR: NAME \_\_\_\_\_

DATE \_\_\_\_\_ sign \_\_\_\_\_

PI: NAME \_\_\_\_\_

DATE \_\_\_\_\_ Sign \_\_\_\_\_

**SECTION I: BACKGROUND CHARACTERISTICS OF RESPONDENTS**

| S. NO. | QUESTIONS and FILTERS   | CODING CATEGORIES   | S<br>K<br>IP |
|--------|---|---|--------------|
| 101    | RECORD THE TIME STARTED.  | HOUR, MINUTES <input type="text"/> <input type="text"/>   |              |
| 102    | First I would like to ask some questions about you. For most of the time including pregnancy and delivery, did you live in this locality? | If yes ..... 1 Locality.....<br>If No.....2 Locality.....end here   |              |
| 103    | How old are you at your 1 <sup>st</sup> marriage?   | AGE( <i>IN COMPLETED YEAR</i> ) <input type="text"/> <input type="text"/><br>If don't know..... 99                          |              |
| 104    | How old are you at your last birthday?  | AGE ( <i>IN COMPLETED YEAR</i> ) <input type="text"/> <input type="text"/><br>If don't know..... 99                         |              |
| 105    | What is your marital status now?  | MARRIED and LIVE TOGETHER .....1<br>MARRIED and SEPARATED.....2<br>DIVORCED .....3<br>WIDOWED .....4<br>NEVER MARRIED.....5 |              |
| 106    | What is your religion?  | MUSLIM .....1<br>CHRISTIAN ORTHODOX.....2<br>CHRISTIAN PROTESTANT.....3<br>OTHER.....4                                      |              |
| 107    | What is your ethnicity? Record the major ethnic group.  | Gamo.....1 Welayta....2 Amhara.....3 Oromo...4<br>Zayse...5 Ganta...6 other.....7(specify)                                  |              |

|     |   |   |
|-----|---|---|
| 108 | What is the highest level of school you attended: | Grade(in completed year) <input type="text"/><br>Never attended school.....99       |
| 109 | Do you listen to the radio?                       | AT LEAST ONCE A WEEK ..... 1<br>LESS THAN ONCE A WEEK ..... 2<br>NOT AT ALL ..... 3 |
| 110 | Do you read a newspaper or magazine?              | AT LEAST ONCE A WEEK ..... 1<br>LESS THAN ONCE A WEEK ..... 2<br>NOT AT ALL ..... 3 |
| 111 | Do you watch television?                          | AT LEAST ONCE A WEEK..... 1<br>LESS THAN ONCE A WEEK ..... 2<br>NOT AT ALL ..... 3  |
| 112 | Total Income per month                            | Amount in birr <input type="text"/> <input type="text"/>                            |

**SECTION II: REPRODUCTION AND ANTE NATAL CARE**

|     |  |   |
|-----|--|---|
| 201 | Have you ever been pregnant                                      | YES ..... 1      NO ..... 2(end here)   |
| 202 | If yes, How often  | Number <input type="text"/>   |
| 203 | Have you ever given birth  | YES .....1      NO..... 2   |
| 204 | How many live births do you have                                 | Number <input type="text"/> ma <input type="text"/> fe <input type="text"/> tal     |
| 205 | How many still births do you have? <i>IF NONE, RECORD '00'</i> . | Number <input type="text"/> ma <input type="text"/> f <input type="text"/><br>Total |
| 206 | Do you have birth in the last one year (September 1/2012)        | YES ..... 1<br>NO ..... 2 (end here)  |

|     |  |  |   |
|-----|--|--|---|
| 207 | When you were pregnant, did you see anyone for antenatal care? (for last pregnancy only)                 | YES ..... 1<br>NO ..... 2 (skip to 21)   |   |
| 208 | Whom did you see? Anyone else?<br><br><i>(PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS SEEN.)</i> | DOCTOR.....1<br>NURSE/MIDWIFE.....2<br>HEW.....3<br>TBA.....4<br>OTHER .....5(SPECIFY) | S<br>k<br>i<br>p<br>t<br>o<br>2<br>1<br>0 |

|     |   |  |
|-----|---|--|
| 209 | <p>Why did you not see anyone?</p> <p>Any other reason?</p> <p>( RECORD ALL MENTIONED )</p>                                   | <p>NOT NECESSARY .....1</p> <p>NOT CUSTOMERY .....2</p> <p>COST TOO MUCH.....3</p> <p>LACK OF MONEY .....4</p> <p>TOO FAR .....5</p> <p>TRANSPORT PROBLEM .....6</p> <p>NO ONE TO ACCOMPANY .....7</p> <p>POOR QUALITY SERVICE .....8</p> <p>FAMILY DID NOT ALLOW .....9</p> <p>BETTER CARE AT HOME .....10</p> <p>NOT KNOWN HOW TO GO .....11</p> <p>NO TIME TO GET SERVICES .....12</p> <p>NOT KNOWN WHERE TO GO .....13</p> <p>NOT WANT SERVICE FROM MALE DOCTOR ....14</p> <p>DID NOT THINK OF SERIOUSNESS OF<br/>COMPLICATION.....15</p> <p>OTHER_____16</p> <p>(SPECIFY)</p> |
| 210 | <p>When you were pregnant, the first time you go for antenatal care, did you go for just to checkup or you had a problem?</p> | <p>BECAUSE OF PROBLEM .....1</p> <p>FOR CHECKUP ONLY .....2(skip to 24)</p>  |
| 211 | <p>For what problem did you first go for antenatal care?</p>  | <p>SEVER HEADACHE.....1</p> <p>BLURRY VISION.....2</p> <p>HIGH BLOOD PRESSURE.....3</p> <p>LEG EDEMA.....4</p> <p>PRE-ECLAMPSIA.....5</p> <p>EXCESSIVE VAGINAL BLEEDING.....6</p>  |

|     |   |  |
|-----|---|--|
|     |   | CONVULSION/ECLAMPSIA.....7<br>FOUL-SMELLING VAGINAL DISCHARGE....8<br>HIGH FEVER.....9<br>SEVERE LOWER ABDOMINAL PAIN.....10<br>BABY MOVEMENT WAS LOW.....11<br>VARICUS VEIN.....12<br>NAUSEA AND VOMITING.....13<br>TETANUS.....14<br>MALARIA.....15<br>OTHER_____16(SPECIFY) |
| 212 | How many times did you receive medical checkup during this pregnancy? | NO. OF TIMES..... <input type="text"/> <input type="text"/><br>DON'T KNOW .....98  |

**SECTION III. KNOWLEDGE OF COMMON PREGNANCY COMPLICATIONS AND ANC**

|     |  |   |
|-----|--|---|
| 301 | What are the problems at the time of pregnancy which are life threatening?<br><br><i>(Probe for all possible answer)</i> | SEVER HEADACHE.....1<br>BLURRY VISION.....2<br>HIGH BLOOD PRESSURE.....3<br>LEG EDEMA.....4<br>PRE-ECLAMPSIA.....5<br>EXCESSIVE VAGINAL BLEEDING.....6<br>CONVULSION/ECLAMPSIA.....7<br>FOUL-SMELLING VAGINAL DISCHARGE....8<br>HIGH FEVER.....9<br>SEVERE LOWER ABDOMINAL PAIN.....10<br>BABY MOVEMENT WAS LOW.....11<br>VARICUS VEIN.....12<br>NAUSEA AND VOMITING.....13 |
|-----|--|---|

|     |   |   |
|-----|---|---|
|     |   | TETANUS.....14<br>MALARIA.....15<br>OTHER.....16(SPECIFY)<br>I DON'T KNOW .....98                                 |
| 302 | What are the problems at the time of pregnancy which are non-life threatening? ( <i>Probe for all possible answer</i> ) | VARICUS VEIN.....1<br>NAUSEA AND VOMITING.....2<br>TETANUS.....3<br>OTHERs.....4 (SPECIFY)<br>I DON'T KNOW.....98 |

|     |   |  |
|-----|---|--|
| 303 | Do you think that women should have a medical checkup when they are pregnant even though they are not sick? | YES ..... 1<br>NO..... 2<br>DON'T KNOW ..... 8                 |
| 304 | If yes, How many times?   | One.....1<br>Two .....2<br>Three .....3<br>Four or more .....4 |

**SECTION IV: ITEMS FOR LAST PREGNANCY ONLY**

|     |   |   |
|-----|---|---|
| 401 | <p>Did you experience any of the following problems at any time of pregnancy?</p> <p>( <i>CIRCLE ALL RESPONDENT MENTIONED</i> )</p> | <p>SEVER HEADACHE.....1</p> <p>BLURRY VISION.....2</p> <p>HIGH BLOOD PRESSURE.....3</p> <p>LEG EDEMA.....4</p> <p>PRE-ECLAMSIA.....5</p> <p>EXCESSIVE VAGINAL BLEEDING.....6</p> <p>CONVULSION/ECLAMPSIA.....7</p> <p>FOUL-SMELLING VAGINAL DISCHARGE.....8</p> <p>HIGH FEVER.....9</p> <p>SEVERE LOWER ABDOMINAL PAIN.....10</p> <p>BABY MOVEMENT WAS LOW.....11</p> <p>VARICUS VEIN.....12</p> <p>NAUSEA AND VOMITING.....13</p> <p>TETANUS.....14</p> <p>MALARIA.....15</p> <p>OTHER_____16(SPECIFY)</p> <p>I DON'T KNOW.....98 (end here)</p> <p>NONE.....17 (end here)</p> |
|-----|---|---|

|     |   |  |
|-----|---|--|
| 402 | <p>Which complication/s occurred last?</p> <p>( CIRCLE ALL RESPONDENT MENTIONED )</p>   | <p>SEVER HEADACHE.....1</p> <p>BLURRY VISION.....2</p> <p>HIGH BLOOD PRESSURE.....3</p> <p>LEG EDEMA.....4</p> <p>PRE-ECLAMPSIA.....5</p> <p>EXCESSIVE VAGINAL BLEEDING.....6</p> <p>CONVULSION/ECLAMPSIA.....7</p> <p>FOUL-SMELLING VAGINAL DISCHARGE.....8</p> <p>HIGH FEVER.....9</p> <p>SEVERE LOWER ABDOMINAL PAIN.....10</p> <p>BABY MOVEMENT WAS LOW.....11</p> <p>VARICUS VEIN.....12</p> <p>NAUSEA AND VOMITING.....13</p> <p>TETANUS.....14</p> <p>MALARIA.....15</p> <p>OTHER_____16(SPECIFY)</p> |
| 403 | <p>From Q.No 28 response, which problem is/are life threatening?</p> <p>(list all answer)</p> <p>(read from responses on Q No 28)</p> | <p>SEVER HEADACHE.....1</p> <p>BLURRY VISION.....2</p> <p>HIGH BLOOD PRESSURE.....3</p> <p>LEG EDEMA.....4</p> <p>PRE-ECLAMPSIA.....5</p> <p>EXCESSIVE VAGINAL BLEEDING.....6</p> <p>CONVULSION/ECLAMPSIA.....7</p> <p>FOUL-SMELLING VAGINAL DISCHARGE.....8</p> <p>HIGH FEVER.....9</p> <p>SEVERE LOWER ABDOMINAL PAIN.....10</p> <p>BABY MOVEMENT WAS LOW.....11</p>   |

|     |   |  |
|-----|---|--|
|     |   | VARICUS VEIN.....12<br>NAUSEA AND VOMITING.....13<br>TETANUS.....14<br>MALARIA.....15<br>OTHER_____16(SPECIFY)   |
| 404 | Did you see seek any assistance for last complication?  | YES .....1(SKIP TO 34)<br>NO .....2  |
| 405 | Why you did not seek treatment?<br><br>Any other reason?<br><br>PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS SEEN. | NOT NECESSARY .....1<br>NOT CUSTOMERY .....2<br>COST TOO MUCH.....3<br>LACK OF MONEY .....4<br>TOO FAR .....5<br>TRANSPORT PROBLEM .....6<br>NO ONE TO ACCOMPANY .....7<br>POOR QUALITY SERVICE .....8<br>FAMILY DID NOT ALLOW .....9<br>BETTER CARE AT HOME .....10<br>NOT KNOWN HOW TO GO .....11<br>NO TIME TO GET SERVICES .....12<br>NOT KNOWN WHERE TO GO .....13<br>NOT WANT SERVICE FROM MALE DOCTOR ....14<br>DID NOT THINK OF SERIOUSNESS OF COMPLICATION.....15<br>OTHER_____16 (SPECIFY) |

|     |  |   |                                     |
|-----|--|---|-------------------------------------|
| 406 | <p>Who took the decision that you should not seek treatment?</p> <p>Anyone else?</p>             | RESPONDENT .....1<br>HUSBAND .....2<br>PARENT .....3<br>5 to 1 leader.....4<br>OTHER(SPECIFY) .....5<br>NONE .....6<br>DON'T KNOW .....98   | E<br>n<br>d<br><br>h<br>e<br>r<br>e |
| 407 | <p>If more than one complication in Q.No 31, Which complication did you see seek assistance?</p> | SEVER HEADACHE.....1<br>BLURRY VISION.....2<br>HIGH BLOOD PRESSURE.....3<br>LEG EDEMA.....4<br>PRE-ECLAMPSIA.....5<br>EXCESSIVE VAGINAL BLEEDING.....6<br>CONVULSION/ECLAMPSIA.....7<br>FOUL-SMELLING VAGINAL DISCHARGE.....8<br>HIGH FEVER.....9<br>SEVERE LOWER ABDOMINAL PAIN.....10<br>BABY MOVEMENT WAS LOW.....11<br>VARICUS VEIN.....12<br>NAUSEA AND VOMITING.....13<br>TETANUS.....14<br>MALARIA.....15<br>OTHER_____16(SPECIFY) |                                     |
| 408 | <p>Whom did you see for first assistance?</p>  | DOCTOR.....1<br>NURSE/MIDWIFE.....2<br>HEW.....3<br>TBA.....4   |                                     |

|     |   |  |  |
|-----|---|--|--|
|     | Anyone else?  | OTHER .....5(SPECIFY)  |  |
| 409 | Where did you first receive treatment?<br><br>Any other places? | HOME.....1<br>GOVT. HOSPITAL .....2<br>HEALTH CENTER.....3<br>HEALTH POST .....4<br>Private sector.....5<br>OTHER(SPECIFY).....11                          |  |
| 410 | Who took the decision that you should seek treatment?           | RESPONDENT .....1<br>HUSBAND .....2<br>PARENT .....3<br>5 to 1 leader.....4<br>OTHER(SPECIFY) .....5<br>NONE .....6<br>DON'T KNOW .....98                  |  |
| 411 | After what time treatment sought?                               | Time (in Hours)..... <input type="text"/>  |  |
| 412 | How much facility did you visit for this treatment?             | NUMBERS ..... <input type="text"/><br>DID NOT GO ANY PLACE.....0 (end here)  |  |
| 413 | If more than two, list from first to last visited?              | 1. HC/Hospital/Private sector<br>2. Hospital/HC/Private sector<br>3. private sector/HC/Hospital<br>4. Private sector/Hospital/HC<br>5. Other(specify)_____ |  |
| 414 | Why you visited more treatment center?                          | 1.Referal 2. Preference 3. Other(specify)_____   |  |

**INTERVIEWER: Qs. 41-46 ARE APPLICABLE FOR FIRST TREATMENT FACILITY ONLY**

|     |   |  |  |
|-----|---|--|--|
| 415 | Who accompanied you to go the treatment center<br><br><i>CIRCLE ALL THE PERSONS</i> | HUSBAND .....1<br>PARENT .....2<br>1 to 5 leader.....3<br>OTHER(SPECIFY) .....4<br>NONE .....5 |  |
|-----|---|--|--|

|     |  |  |                      |
|-----|--|--|----------------------|
|     | <i>ACCOMPANIED</i>   |  |                      |
| 416 | How far is facility from your house<br><i>WRITE '00' IF LESS THAN A km</i>         | IN KILLO METER (Km).....<br>DON'T KNOW..... 98   | <input type="text"/> |
| 417 | How did you go to this treatment center?   | CAR/BUS .....1<br>AMBULANCE .....2<br>ON FOOT..... 3 (SKIP TO 46)<br>OTHER(SPECIFY) .....4   |                      |
| 418 | Did you have difficulty in obtaining _transportation?                              | VERY MUCH .....1<br>SOMEWHAT .....2<br>NOT AT ALL.....3<br>DON'T KNOW .....8   |                      |
| 419 | Did your condition improve after treatment in this place, or did it stay the same? | NO CHANGE .....1<br>IMPROVED .....2<br>WORSNED.....3<br>DON'T KNOW .....8  |                      |
| 420 | How did you get this money for treatment?  | FAMILY FUNDS .....1<br>BORROWED .....2<br>SOLD ASSETS .....3<br>FROM RELATIVES .....4<br>MORTGAGE (salary early).....5<br>OTHER.....6<br>DON'T KNOW.....,.....98 |                      |

**ANNEX II: DATA COLLECTION TOOL, AMHARIC VERSION**

አድሰ አበባ ዩኒቨርሲቲ መረጃ መሰብሰቢያ ቅፅ = መልሱን ያክብቡ፣ Q. Code \_\_\_\_\_

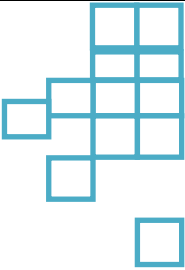

**ክፍል አንድ: መሠረታዊ ጥያቄ**

ክልል \_\_\_\_\_ ወረዳ \_\_\_\_\_ ቀበሌ \_\_\_\_\_

ጎጥ \_\_\_\_\_ ቤት ሀላፊ ሥም \_\_\_\_\_ የቤት ቁጥር \_\_\_\_\_

ለመጠይቁ የበቃች ሴት ሥም \_\_\_\_\_

**የመረጃ ሰብሳቢው ጉብኝት**

|                              | 1                  | 2         | 3            | የመጨረሻ ጉብኝት  |
|------------------------------|--------------------|-----------|--------------|---|
| ቀን<br>የመረጃ ሰብሳቢው ስም<br>ወጤት*  |                    |           |              | ቀን<br>ወር<br>አመት<br>የጠያቂው ቁጥር<br>ወጤት  |
| ዳግም ጉብኝት<br>ቀን ____ ሰዓት ____ |                    |           |              | አጠቃላይ የጉብኝት ብዛት                      |
| *የወጣት ኮድ:                    | 1. ያለቀ             | 3. የተላለፈ  | 5. ቤክፍል የተማላ | 7. ለላ(ይጥቀሱ).....  |
|                              | 2. ቤት የለለ          | 4. ያልተስማማ | 6. የአቅም መድከም |   |
| ሰፊ ጥያቄ ስም:<br>ፍርማ:           | እንሸራሸር ስም:<br>ፍርማ: |           |              |   |

|     |  |   |
|-----|--|---|
| 101 | በመጀመሪያ ስለእርስዎ አንዳንድ ነገር ልጠይቅ: : የእርግዝናና ወልድ ግዜን ያሳለፉት እዚሁ አካባቢ ነው? | አዎ.....1 ፣ የቀበሌው ስም.....<br>አይ.....2፣ የቀበሌው ስም..... (መጠይቁን ያብቁ)                             |
| 102 | በመጀመሪያ ስያገቡ እድመዎ ስንት ነበር?  | እድሜ(ባለቀ አሜት ይጻፍ) <input type="text"/><br>አላወቅም ከሆኑ..... <input type="text"/>                |
| 103 | የመጨረሻውን ልጅ ሰወልዱ እድመዎ ስንት ነበር?                                      | እድሜ(ባለቀ አመት ይጻፍ) <input type="text"/><br>አላወቅም ከሆኑ.....98 <input type="text"/>              |
| 104 | የጋብቻ ሁኔታ?  | ያገቡ/አብረው የምኖሩ.....1<br>ያገቡ/ተለያይተው የምኖሩ.....2<br>የተፋቱ.....3<br>የሞተባት.....4<br>ፈፅሞ ያላገባ.....5 |
| 105 | ሐይማኖትዎ ምን ነበር?   | እስልምና.....1<br>ክርስቲያን ኦርቶዶክስ.....2<br>ክርስቲያን ፕሮተስታንት.....3<br>ሌላ ካለ(ስም ይጠቀስ).....4          |
| 106 | ብሔረሰብዎ ምንድነው?  | 1. ጋሞ 2. ወላይታ 3. አማራ 4. ኦሮሞ 5.ዛይሴ 6.ጋንታ<br>7. ሌላ ካለ (ስም ይጠቀስ).....                          |
| 107 | የትምህርት ደረጃዎ ስንት ነው?  | የከፍል ብዛት(ባለቀው አመት)..... <input type="text"/><br>ምንም ዓይነት ትምህርት አልተከታተልኩም.....98             |
| 108 | ፊደሉ ያዳምጣሉ?   | ቢያንስ በሳምንት አንድ ግዜ.....1<br>በሳምንት ከአንድ ባነሴ ግዜ.....2<br>ፊፅሞ አልጠቀምም.....3                      |
| 109 | ጋዜጣ ወይም በራሪ ፅሁፍ ያነባሉ?  | ቢያንስ በሳምንት አንድ ግዜ.....1<br>በሳምንት ከአንድ ባነሴ ግዜ.....2<br>ፊፅሞ አልጠቀምም.....3                      |
| 110 | ተሌቪዥን ያያሉ?   | ቢያንስ በሳምንት አንድ ግዜ.....1<br>በሳምንት ከአንድ ባነሴ ግዜ.....2<br>ፊፅሞ አልጠቀምም.....3                      |
| 111 | አጠቃላይ በወር ምን ያህል ገቢ ያገኛሉ?  | በብር ..... አላወቅም..... <input type="text"/>   |

**ክፍል 2: ስነ-ተዋልዶ እና ቅድመ-ወልድ**

|     |   |  |
|-----|---|--|
| 201 | አርግዘው ያዉቃሉ?   | አዎ..... 1 አይ..... 2 ( መጠይቁን ያብቁ)   |
| 202 | አዎ ከሆኑ ስንት ግዜ?  | ቁጥር <input type="text"/>   |
| 203 | ወልደው ያዉቃሉ?  | አዎ..... 1 አይ .....2  |
| 204 | አዎ ከሆኑ በህይወት የተወለደ ስንት ነው?                            | ብዛት በቁጥር <input type="text"/> ወንድ <input type="text"/> ሴት <input type="text"/> |
| 205 | በህይወት ያልተወለደ ስንት ነው?<br>(ወርጃን አያካትትም)<br>ከለለ "00" ይጻፉ | ብዛት በቁጥር <input type="text"/> ወንድ <input type="text"/> ሴት <input type="text"/> |
| 206 | ባለፉት አንድ አመት ውስጥ ወልደዎል?<br>(ከመስከረም 1/2004 ዓ.ም ጀምሮ )   | አዎ.....1 አይ .....2 ( መጠይቁን ያብቁ)  |
| 207 | የመጨረሻውን ልጅ ባረገዙበት ግዜ የቅድመ-ወልድ ክትትል አድርገዋል?            | አዎ.....1 አይ .....2 ( ወደ 209 ዝለል)   |

|     |  |  |  |
|-----|--|--|--|
| 208 | <p>አዎ ከሆነ በማን ነው የታዩት?<br/><br/>ማንም ቢሆን ይናገሩ?<br/>(አይነብብ፣ያወጣጡ)</p>                     | <p>ዶክተር .....1<br/>ነርስ/አዋላጅ ነርስ .....2<br/>ጤና ኤክስፔንሽን ባለሙያ .....3<br/>የልምድ አዋላጅ .....4<br/>ለላ የተለዩ ካለ (ስም ይጠቀስ) .....5</p>   | <p>ወይ<br/>21<br/>0<br/>ዝለ<br/>ል</p>  |
| 209 | <p>አይ ከሆነ ለምን?<br/><br/>(ምመልሱትን በሙሉ ይክበቡ)<br/>(ከአንድ በላይ መልስ ይቻላል)<br/><br/>(አይነብብ)</p> | <p>አስፈላጊ ስላልሆኑ .....1<br/>ደንበኝነት ስለማያወቁ .....2<br/>ወድ ስለሆኑ .....3<br/>ብር ስለሌላኝ .....4<br/>ጤና ተቋሙ ሩቅ ስለሆኑ .....5<br/>የትራንስፖርት ችግር አለ .....6<br/>ምያስከደኝ ሰው የለም .....7<br/>የህክምና አገልግሎቱ ጥራት የለውም .....8<br/>ቤተሰብ አይፈቅድም .....9<br/>ቤት መታየት/መሆን ጥሩ ስለሆኑ .....10<br/>እንዴት እንደምከድ አላወቅም .....11<br/>ግዜ ስለሌላኝ .....12<br/>የት መሄድ እንዳለብኝ ስለማላወቅ .....13<br/>አገልግሎት ሰጪው ወንድ ባለሙያ ስለሆነ.....14<br/>የከፋ ችግር ስላልመሰለኝ .....15<br/>ለላ ካሌ(ስም ይጠቀስ) .....16</p> |  |
| 210 | <p>እርጉዝ ሆነሽ ለመጀመሪያ ግዜ ጤና ተቋም ስትሄጁ ፣ ለእርግዝና ክትትል ነው ወይስ ስላመመሽ ነው?</p>                   | <p>ስላመመኝ..... 1<br/>ለምርመራ ብዬ..... 2 (ወይ 212 ዝለል)</p>   |  |
| 211 | <p>ለምን ህመም ነው ለመጀመሪያ ግዜ ጤና ድርጅት የሄዱት?</p>  | <p>ከፍተኛ ራስ ምታት.....1<br/>ቪሽታ .....2<br/>ከፍተኛ የደም ግፍት .....3<br/>የእግር እብጠት .....4<br/>ፕሪ-ኤክላምፕሪያ/pre-eclampsia .....5<br/>በብልት ውስጥ ደም መፍሰስ .....6<br/>ማንቀጥቀጥ/eclampsia .....7<br/>ሽታ ያለው ፈሳሽ በብልት .....8<br/>ከፍተኛ ትኩሳት .....9<br/>ከፍተኛ የሆድ ህመም .....10<br/>የህፃኑ እንቅስቃሴ መቀነስ .....11<br/>የደም ስር መታየት/varicous vein.....12<br/>ትሁከት ወይም ማቅለሽለሽ .....13<br/>ከፍተኛ ትሁከት/hyperemesis.....14<br/>የወባ ህመም .....15<br/>ለላ ካሌ(ስም ይጠቀስ).....16</p>         |  |
| 212 | <p>ስንት ግዜ የቅድመ-ወልድ ክትትል አደረግሽ?</p>   | <p>በቁጥር ይጠቀስ.....<br/>ካላወቁ.....98</p>  | <div style="border: 1px solid black; width: 40px; height: 20px; display: inline-block;"></div> |

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| <b>ክፍል 3: የታወቁ የእርግዝና ግዜ ህመሞች እና ቅድመ-ወልድ ዕውቀት ዳሰሳ</b> |                          |                   |  |
| 301   | በእርግዝና ግዜ ለህይወት አስጊ የሆኑት | ከፍተኛ ራስ ምታት.....1 |  |

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|     | ምልክቶች/በሽታ እነማን ናቸው?<br>(ምመልሱትን በሙሉ የክበቡ)       | ቪሻታ .....2<br>ከፍተኛ የደም ግፍት .....3<br>የእግር እብጠት .....4<br>ፕሪ-ኤክላምፕሲያ/pre-eclampsia .....5<br>በብልት ዉስጥ ደም መፍሰስ .....6<br>ማንቀጥቀጥ/eclampsia .....7<br>ሽታ ያለዉ ፈሳሽ በብልት .....8<br>ከፍተኛ ትኩሳት .....9 |  |
|     |  | ከፍተኛ የሆድ ህመም .....10<br>የህፃኑ እንቅስቃሴ መቀነስ .....11<br>ከፍተኛ ትሁከት/hyperremesis.....12<br>የወባ ህመም .....13<br>ለላ ካሌ(ስም ይጠቀስ).....14<br>አላዉቅም.....98  |  |
| 302 | በእርግዝና ጊዜ ለህይወት አስጊ ያልሆኑት ምልክቶች/በሽታ እነማን ናቸው ? | የደም ስር መታየት/varicous vein .....1<br>ትሁከት ወይም ማቅለሽለሽ .....2<br>ለላ ካሌ(ስም ይጠቀስ) .....3<br>አላዉቅም.....98  |  |

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| 303 | ነፍሰጡር እናት ያለምንም ህመም የእርግዝና ክትትል ማድረግ ይኖርባታል ብለዉ ያምናሉ? | አዎ .....1<br>አይ.....2 (ወደ ክ.4 ዝለል)<br>አላዉቅም.....98 (ወደ ክ.4 ዝለል) |  |
| 303 | አዎ ከሆነ ስንት ጊዜ   | በቁጥር _____  |  |

**ክፍል 4: የመጨረሻዉን እርግዝና ይመለከታል**

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| 401 | በመጨረሻዉ የእርግዝና ጊዜ በማንኛዉም ሰዓት ያጋጠመሽን ማንኛዉንም ምልክት/በሽታ ይናገራሉ?<br><br>(ምመልሱትን በሙሉ ይክበቡ)<br><br>(ያወጣጡ)<br><br>(አይነበብ) | ከፍተኛ ራስ ምታት.....1<br>ቪሻታ .....2<br>ከፍተኛ የደም ግፍት .....3<br>የእግር እብጠት .....4<br>ፕሪ-ኤክላምፕሲያ/pre-eclampsia .....5<br>በብልት ዉስጥ ደም መፍሰስ .....6<br>ማንቀጥቀጥ/eclampsia .....7<br>ሽታ ያለዉ ፈሳሽ በብልት .....8<br>ከፍተኛ ትኩሳት .....9<br>ከፍተኛ የሆድ ህመም .....10<br>የህፃኑ እንቅስቃሴ መቀነስ .....11<br>የደም ስር መታየት/varicous vein.....12<br>ትሁከት ወይም ማቅለሽለሽ .....13<br>ከፍተኛ ትሁከት/hyperremesis .....14<br>የወባ ህመም .....15<br>ለላ ካሌ(ስም ይጠቀስ).....16<br>ምንም የለም _____.....17 (መጠይቅን ያብቁ)<br>አላዉቅም .....98 (መጠይቅን ያብቁ) |  |
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| 402 | የትኛው ምልክት/ባሽታ ነዉ መጨረሻ ላይ የተከሰተዉ?   | ከፍተኛ ራስ ምታት.....1<br>ቪሽታ .....2<br>ከፍተኛ የደም ግፍት .....3<br>የእግር እብጠት .....4<br>ፕሪ-ኤክላምፕሽያ/pre-eclampsia .....5<br>ባብልት ዉስጥ ደም መፍሰስ .....6<br>ማንቀጥቀጥ/eclampsia .....7<br>ሽታ ያለዉ ፈሳሽ ባብልት .....8<br>ከፍተኛ ትኩሳት .....9<br>ከፍተኛ የሆድ ህመም .....10<br>የህፃኑ እንቅስቃሴ መቀነስ .....11<br>የደም ስር መታየት/varicous vein.....12<br>ትሁከት ወይም ማቅለሽለሽ .....13<br>ከፍተኛ ትሁከት/hyperemesis .....14<br>የወባ ህመም .....15<br>ለላ ካሌ(ስም ይጠቀስ).....16 |
| 403 | በጥያቄ ቁጥር 28 ላይ ካጋጠመዎት በሽታ/ምልክት የትኛዉ ነዉ ለህይወት አስጊ የምሆነዉ?<br><br>(ምመልሱት በሙሉ ይከብቡ)<br><br>(ከላይ የተመለሱት ይነበቡ) | ከፍተኛ ራስ ምታት.....1<br>ቪሽታ .....2<br>ከፍተኛ የደም ግፍት .....3<br>የእግር እብጠት .....4<br>ፕሪ-ኤክላምፕሽያ/pre-eclampsia .....5<br>ባብልት ዉስጥ ደም መፍሰስ .....6<br>ማንቀጥቀጥ/eclampsia .....7<br>ሽታ ያለዉ ፈሳሽ ባብልት .....8<br>ከፍተኛ ትኩሳት .....9<br>ከፍተኛ የሆድ ህመም .....10<br>የህፃኑ እንቅስቃሴ መቀነስ .....11<br>የደም ስር መታየት/varicous vein.....12<br>ትሁከት ወይም ማቅለሽለሽ .....13<br>ከፍተኛ ትሁከት/hyperemesis .....14<br>የወባ ህመም .....15<br>ለላ ካሌ(ስም ይጠቀስ).....16 |
| 404 | ለመጨረሻዉ ለዚህ ምልክት/ባሽታ ማንኛዉንም የህክምና አገልግሎት አድርገዋል?  | አዎ..... 1 (ወደ 407 ዝለል)<br>አይ..... 2   |
| 405 | ለምንድነዉ ለዚህ ምልክት/ባሽታ ማንኛዉንም የህክምና አገልግሎት ያላገኙት?<br><br>(ማንኛዉንም ምክንያት የጥቀሱ)<br><br>(ያወጣጡ)                  | አስፈላጊ ስላልሆኑ .....1<br>ደንበኝነት ስለማያወቁ .....2<br>ዉድ ስለሆኑ .....3<br>ብር ስለሌላኝ .....4<br>ጤና ተቋሙ ሩቅ ስለሆኑ .....5<br>የትራንስፖርት ችግር አለ .....6<br>ምያስከደኝ ሰዉ የለም .....7<br>የህክምና አገልግሎቱ ጥራት የለዉም .....8<br>ቤተሰብ አይፈቅድም .....9<br>ቤት መታየት/መሆን ጥሩ ስለሆኑ .....10<br>እንዴት እንደምከድ አላወቅም .....11  |

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|     |  | ግዜ ስለለላኝ .....12<br>የት መሄድ እንዳለብኝ ስለማላወቅ .....13<br>አገልግሎት ሰጪው ወንድ ባለሙያ ስለሆነ.....14<br>የከፋ ችግር ስላልመሰለኝ .....15<br>ለላ ካሌ(ስም ይጠቀስ) .....16  |          |
| 406 | ማንኛውንም የህክምና አገልግሎት እንዳይታገኝ ያደረገው ማንነው? ለላስ?<br>ያወጣጡ               | እኔ ራሴ.....1<br>ባለበቴ.....2<br>ቤተሰቦቼ.....3<br>የልምድ አዋላጆች.....4<br>ለላ ካለ(ስም ይጠቀስ)..... 5   | መጠይቅ ያብቁ |
| 407 | ጥያቄ ቁጥር 31, ከአንድ በላይ መልስ ከሆኑ፣ የትኛውን ነው የህክምና ዕርዳታ የፈለጉት እና ያደረጉት ? | ከፍተኛ ራስ ምታት.....1<br>ቪሻታ .....2<br>ከፍተኛ የደም ግፍት .....3<br>የእግር እብጠት .....4<br>ፕሪ-ኬክላምፕሲያ/pre-eclampsia .....5<br>በብልት ውስጥ ደም መፍሰስ .....6<br>ማንቀጥቀጥ/eclampsia .....7<br>ሽታ ያለው ፈሳሽ በብልት .....8<br>ከፍተኛ ትኩሳት .....9<br>ከፍተኛ የሆድ ህመም .....10<br>የህፃኑ እንቅስቃሴ መቀነስ .....11<br>የደም ስር መታየት/varicous vein.....12<br>ትሁከት ወይም ማቅለሽለሽ .....13<br>ከፍተኛ ትሁከት/hyperemesis .....14<br>የወባ ህመም .....15<br>ለላ ካሌ(ስም ይጠቀስ).....16 |          |
| 408 | በማን ነው የህክምና እርዳታ ያገኙት? ለላስ?                                       | ዶክተር .....1<br>ነርስ/አዋላጅ ነርስ .....2<br>ጤና ኤክስቴንሽን ባለሙያ .....3<br>የልምድ አዋላጅ .....4<br>ለላ የተለዩ ካለ (ስም ይጠቀስ) .....5   |          |
| 409 | የት ነው የህክምና እርዳታ ያገኙት ? ለላስ?                                       | በበቴ .....1<br>ሆስፒታል .....2<br>ጤና ጣቢያ .....3<br>ጤና ከላ .....4<br>መንግስታዊ ባልሆነ የህክምና ተቋም.....5<br>ለላ ካሌ(ስም ይጠቀስ) .....6   |          |
| 410 | የህክምና አገልግሎት እንዲታገኝ ያደረገው/የወሰነው ማንነው? ለላስ?<br>ያወጣጡ?                | እኔ ራሴ.....1<br>ባለበቴ.....2<br>ቤተሰቦቼ.....3<br>የልምድ አዋላጆች.....4<br>ለላ ካለ(ስም ይጠቀስ).....5<br>አላወቅም .....98   |          |
| 411 | ከምን ያህል ሰዓት በኋላ ህክምና አድርገዋል ?                                      | ሰዓት _____   |          |

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|-----|--|---|--|
| 412 | ለዚህ ህክምና ስንት ጤና ተቋም ጎበኝተዋል?                  | ቁጥር.....<br>የትም አልሄድኩም.....'0'' (መጠይቁን ያብቁ) <input type="text"/>          |  |
| 413 | ከሁለት በላይ ከሆኑ ከመጀመሪያዉ እስከ መጨረሻዉ የተጎበኙትን ይጥቀሱ? | የጤና ድርጅት ዝርዝር: _____ / _____<br>_____ / _____                             |  |
| 414 | ለምን ከአንድ በላይ ጤና ተቋም ጎበኝተዋል ?                 | ከጤና ባለሙያ ሪፈረስ ስለሆነ.....1<br>የተሻለ ህክምና ስለፈለኩ.....2<br>ለላ ካለ(ስም ይጠቀስ).....3 |  |

**የመጀመሪያ የህክምና አገልግሎት ለወሰዱበት ተቋም ብቻ የምጠየቅ**

|     |                                     |   |  |
|-----|-------------------------------------|---|--|
| 415 | የህክምና ተቋም ስትሄጂ አብሮሽ የሄደዉ ማንነዉ ?     | ባለቤቱ.....1<br>ቤተሰቦቹ.....2<br>የልምድ አዋላጆች.....3<br>5ለ1 መሪ.....4<br>ለላ ካለ(ስም ይጠቀስ).....5<br>ማንም/ብቻዬን ሄጃለሁ.....6                              |  |
| 416 | ይህ የህክምና ተቋም ከምትኖሩት ቤት ምን ያህል ይርቃል? | በኪ.ሜ.....<br>ከመኖሪያ ቀበሌ ዉጪ.....<br>አላዉቅም .....98   |  |
| 417 | ወደዚህ የህክምና ተቋም በምንድነዉ ምትሄጂዉ?        | በመኪና.....1<br>በእምቡላንስ .....2<br>በእግር .....3 (ወደ 419 ዝለል)<br>ለላ ካለ(ስም ይጠቀስ).....4  |  |
| 418 | ትራንስፖርት ለማግኘት ተቸግረዋል?               | እጅግ በጣም .....1<br>በመጠኑ .....2<br>በጨረሽ አልተቸገርኩም.....3<br>አላዉቅም .....98   |  |
| 419 | ከህክምና በኋላ ተሻለልዎት?                   | ለዉጥ የለዉም .....1<br>ተሻለኝ .....2<br>ተባባሰ .....3<br>አላዉቅም .....98  |  |
| 420 | የህክምና ገንዘብ ከየት አገኙ?                 | ከቤተሰብ .....1<br>ተባባሪዎች .....2<br>ንብረት/ምርት ሽጫ .....3<br>ከሰራ ባልደረቦቹ .....4<br>ደመወዝ ቅድሚያ ወስጄ .....5<br>ለላ ካለ(ስም ይጠቀስ).....6<br>አላዉቅም .....98 |  |

**CV of PI****Name:** Serawit Lakew Chillo**Mobile:** 0913273829/0932517602; **Fax** +251468811147(Office)**E mail:** lserawit@yahoo.com**P.O. Box 155 Arba Minch College of Health Sciences, Ethiopia****II. LANGUAGE ABILITY**

| <i>LANGUAGE</i> | <i>SPEAKING</i> | <i>READING</i> | <i>WRITING</i> |
|-----------------|-----------------|----------------|----------------|
| Amharic         | Excellent       | Excellent      | Excellent      |
| English         | Excellent       | Excellent      | Excellent      |
| Wolayta         | Excellent       | Excellent      | Excellent      |
| Gofa            | Excellent       | Excellent      | Excellent      |

**III. EDUCATIONAL QUALIFICATIONS**

| <b>Period</b> | <b>Institution/Country</b>                                      | <b>Qualification Achieved</b>         |
|---------------|---|---------------------------------------|
| 2002-2006     | Haramaya University, College of Health Science, Harar, Ethiopia | Bachelor of Science Degree in Nursing |
| 1998-2002     | A/Minch Senior Secondary School Arba Minch, Ethiopia            | Certificate                           |

**IV. CERTIFIED TRAININGS**

| <b>YEAR</b> | <b>TYPE OF TRAINING/WORKSHOPS</b>                               | <b>Organizers or Sponsors</b> | <b>Awards</b>   |
|-------------|---|-------------------------------|-----------------|
| 2013        | Data collection   | Jarcoo Consulting plc         | Certificate     |
| 2011        | Integrated Management of Neonatal and childhood illnesses/IMNCI | WHO                           | Certificate TOT |
| 2011        | Injection Safety and Solid waste Management                     | AIDSTAR-ONE                   | Certificate TOT |
| 2010        | Basic Computer Skill and Internet                               | CANA'AN COMPUTER SOLUTIONS    | Certificate     |

**V. Work Experience**

| <b>Position</b>           | <b>Employer</b>                                    | <b>Duration</b>  |
|---------------------------|--|------------------|
| 1. Ass. Lecturer          | Arba Minch College of Health Sciences              | 4 years          |
| 2. District Health Center | Southern Region Health Bureau, Gamo Gofa, Ethiopia | 1 and half year  |
| 3. Instructor             | Bethelihem & Gofa College of Health Sciences       | 1 and half years |

**VI. Skills**

|   |
|---|
| <ul style="list-style-type: none"> <li>• Computer skills (Microsoft offices, Internet application)</li> </ul>   |
| <b>VII. Professional License and membership</b>   |
| <ul style="list-style-type: none"> <li>• Ethiopian Nursing Association Member</li> </ul>  |
| <b>VIII. Interests</b>  |
| Research activities, Sharing new information with other, Creativity, Voluntary work, Reading.   |
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**Declaration Sheet:**

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

Name of student \_\_\_\_\_

Signature \_\_\_\_\_

**Place of submission:** Addis Ababa University, Centralized School of Nursing and Midwifery.

Date of submission \_\_\_\_\_

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

Name \_\_\_\_\_

signature \_\_\_\_\_