

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

**ANTENATAL CARE AND HEALTH FACILITY DELIVERY PRACTICE AMONG
MOTHERS IN KONSO WOREDA, SOUTHERN ETHIOPIA**

By

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**A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES, OF ADDIS
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APPROVED BY THE BOARD OF EXAMINERS

THIS MSCN THESIS BY KUSSE URMAL (BSC) IS ACCEPTED IN ITS PRESENTED FORM BY THE BOARD OF EXAMINERS IN SATISFYING THESIS REQUIREMENT FOR THE DEGREE OF MASTERS SCIENCES IN MATERNITY AND REPRODUCTIVE HEALTH NURSING.

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Abstract

Background: Worldwide, developing countries accounted for the majority of maternal deaths. Even though antenatal care and institutional delivery were mentioned among the interventions directed toward improving maternal health, their utilization is unsatisfactory in most resource-poor settings.

Objective: The main objective of this study was to assess antenatal care and health facility delivery practice among mothers in Konso Woreda, Southern Ethiopia from March 21 to April 16, 2016

Methods: A community based cross-sectional study was done from March 21, 2016 to April 16, 2016 on sample of 865 mothers who gave birth in the last one year prior to the study in Konso Woreda by employing multi-stage stratified cluster sampling technique. The data were collected using a pre-tested interviewer administered questionnaire. We analysed the data to identify the factors associated with antenatal care and health facility delivery practice using logistic regression analysis.

Results: The proportion of mothers who made at least one antenatal care visit for their most recent birth was 82.0% however, only 54% of them had received the recommended four or more visits. Although the proportion of at least one antenatal care visits was high, only 60% of the mothers gave birth at health institutions. After controlling for residence, husband education and household wealth quintile in the adjusted logistic regression model, maternal age, possession of communication Media and walking distance (in hours) to the nearest health were found significantly associated with antenatal care practice. Similarly after controlling for residence and pregnancy intention, provision of delivery care by the nearest health facility and proximity of the health facility to the residence were found to significantly affect institutional delivery.

Conclusions and recommendations: Despite high attendance of at least one antenatal care visit, low utilization of the recommended antenatal care visits and institutional delivery was observed. Socio-demographic, obstetric and health facility factors were associated with both antenatal care and health facility delivery practice. More effort should be taken to equip health facilities with the capacity to provide maternal health care services, delivery care in particular.

Keywords: Antenatal care practice, Health facility delivery practice, Konso Woreda.

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Acronyms and Abbreviations

AAU	Addis Ababa University
ANC	Antenatal Care
BPCR	Birth Preparedness and Complication Readiness
EDHS	Ethiopian Demographic and Health Survey
DHS	Demographic and Health Survey
FMoH	Federal Ministry of Health
HEPs	Health Extension Programmes
HD	Home Delivery
HF	Health Facility
MDG	Millennium Development Goal
MM	Maternal Mortality
MMR	Maternal Mortality Ratio
MOH	Ministry of Health
SNNPR	Southern Nations, Nationalities and Peoples' Region
SSA	Sub-Saharan Africa
TBA	Traditional Birth Attendant
WHO	World Health Organization

1. INTRODUCTION

1.1 Background

Maternal mortality (MM) is a key indicator of international development, and its reduction has long been and continue to be a global challenge, particularly in low-income countries, despite the existence of effective interventions [1, 2]. According to the recent estimates of World Health Organization (WHO), about 303,000 maternal deaths occur each year due to complications linked with pregnancy and childbirth [2].

Developing countries accounted for about 99% of global maternal deaths, with the maternal mortality ratio (MMR) of 239 per 100,000 live births, 20 times higher compared to the developed regions (12 maternal deaths per 100,000 live births) [2]. The estimated adult lifetime MM risk is 1 in 150 in low-income countries compared to 1 in 4,900 in high-income countries [2]. Despite an apparent global improvement made over the last two and half decades, the worldwide MM dropped by about 45% in 2015 [2-4], which is far from the decline targeted (75%) to be achieved by 2015. Moreover, the progress made in different parts of the world, within countries, between urban and rural areas have been uneven [2, 3, 5].

Sub-Saharan Africa (SSA) alone accounted for 66% of maternal deaths with the MMR of 546 per 100,000 live births and adult life time risk of 1 in 36 women, still leaving a miserable situation for women [2]. Ethiopia is one of the ten countries that jointly comprised about 60% of a global MM burden [2, 3]. Maternal mortality in Ethiopia is high despite its recognition as a major public health issue [6]. In Ethiopia, maternal mortality ratio is estimated at 353/100,000 live births according to 2015 report of WHO [2], indicating a significant improvement from that reported in 2005 EDHS [7]. However, this figure is far from the millennium development goal (MDG) target of 267 maternal deaths per 100,000 live births by 2015 [6]. This suggests that much effort is needed to go beyond the progress made so far in order to push the problem.

A vast majority of maternal deaths are due to preventable direct obstetric causes that can be detected and managed early during antenatal care (ANC) and intrapartum period by existing and well known medical interventions [8]. Access to skilled care before, during and after childbirth are among the key strategies to reduce MM and improve the health of women [8].

Proper ANC allows early detection and diagnosis of pregnancy related health problems like hypertensive disorders, anemia, syphilis, antepartum hemorrhage and placenta previa so that timely management is offered to improve the health of the woman and that of unborn fetus as well [9], which will provide a window of opportunity for the prevention of maternal and newborn mortality. Safe delivery care on the other hand plays a critical role in reducing the occurrence of obstetric complications that have a negative impact on the life of women and newborn [10]. In addition, skilled care during childbirth is mentioned as a key strategy in reducing maternal mortality as timely management and treatment of intrapartum complications can make the difference between life and death [3, 11]. However, despite their encouraging benefits, inequalities exist between high and low-income countries in their utilization [3, 8, 11].

Currently, about 83% of women received at least one antenatal care worldwide, while only 64% of the world reproductive age group attended the WHO recommended ANC visits [3]. Many countries, particularly in SSA and South/Southeast Asia, still have unsatisfactory levels of the recommended four or more antenatal visits [12]. Globally, the proportion of mother giving birth under the supervision of skilled health practitioner is 74%. Even though evidence shows an improving trend in the utilization of skilled delivery care, coverage is still only 51 % in African regions and low-income countries [3]. In Sahara African countries, utilization of health facility for delivery care was mixed [12].

In Ethiopia, the proportion of pregnant mothers with one or more antenatal visits is 40% and fewer than one-sixth of births are attended by skilled personnel [13], both are below the average for Africa and low-income countries [3]. Studies in Tigray, Denbecha, Wolaita and Hossina reported 54% [14], 80% [15], 86% [16] and 88% [17] of at least one ANC visit among pregnant women respectively. With regard to skilled care during childbirth, about 4% [14], 16% [18] and 63% [17] of mothers in Tigray, Amhara and Hossina respectively gave birth at health facilities. These findings indicate a range of variability in the utilization of both ANC and institutional delivery across different regions of Ethiopia. Therefore, the rationale of this study was to find out the antenatal care and health facility delivery practice among mothers in Konso Woreda, Southern Ethiopia.

1.2 Statement of the problem

Globally, despite a considerable effort to decrease MM, every day more than 800 women are dying due to ‘a preventable deaths’ that can be avoided if a women could have an access to high quality maternity care, like antenatal care and skilled delivery care [3]. Although antenatal care and institutional delivery have been thought to supplement each other in addressing and reducing maternal deaths [19], their utilization remain below the expectation in most developing countries, particularly in Sub-Saharan Africa where almost all maternal deaths occur [3]. Not surprisingly, behind most developing countries, Ethiopia was a country where low proportion of reproductive age women visit skilled provider during pregnancy and childbirth [12].

According to 2015 WHO estimates, more than 80% of pregnant women received at least one ANC worldwide, while 64% attended the WHO recommended four visits [3]. In African region about three-fourth received at least one ANC [3]. A community based cross-sectional studies revealed that about 90% [20] and 94% [21] of pregnant women in Kenya and Nepal made at least one antenatal visit, while 50% [20] and 87% [21] attended the WHO recommended visits respectively. The proportion of women who received the recommended four visits in Nigeria was 54% [22].

With regard to delivery care, about one-half of the reproductive age women in Africa and resource-poor countries gave birth under the assistance of skilled providers [3]. Concerning health facility delivery practice, 56% [23], 17% [20] and 37% [22] of mothers in Tanzania, Kenya and Nigeria respectively took skilled care during childbirth. Peculiarly, almost all mothers (99.6%) in India gave birth under the supervision of health practitioners [24]. Compared to other SSA countries, low utilization of health facility delivery was reported in Ethiopia [25].

In Ethiopia, maternal health care services are very limited for most of the women, particularly for those mothers living in rural areas [26]. According to Mini EDHS 2014, two-fifth of mothers received antenatal care from skilled providers and only 15% gave birth in health institutions. Urban-rural disparity exists, where only 35% and 10% of women residing in rural areas of Ethiopia received antenatal care and skilled delivery care respectively, far apart from the levels in urban areas, where 80% and 63% of women receive antenatal care and give birth at health institutions respectively [13]. Even though community-based studies in some regions of the country found high proportion of at least one ANC visit, only a small fraction of women received the recommended four visits [27-29]. Moreover, low proportion of births was assisted by skilled attendant in some

areas of the country [14, 18, 30] and a great majority (85%) of women nationwide gave birth at home [13].

Several studies have identified different factors affecting the utilization of prenatal and delivery care. Maternal education [14, 15, 20], maternal age [21, 24, 28], household income [29, 31] and parity [17, 21, 24, 31-33] were the major predictors found to have a strong relation with antenatal care. Similarly, institutional delivery have shown to be influenced by maternal education [33, 34], birth order [14, 20, 25, 28, 33, 35], maternal age [18, 20, 22, 28, 34, 35] and number of ANC visits [30, 36]. In addition, several other socio-demographic, household, obstetric and health system factors were identified to have an influence on antenatal and health facility delivery practice.

In Ethiopia, a number of activities were undertaken by Federal Ministry of Health (FMOH) to improve maternal health in the last two decades. Firstly, construction of health facilities was the step taken to fill the gap in the accessibility of essential obstetric and neonatal care [6, 37]. Secondly, the launch of the Health Extension Programmes (HEPs) has led to a substantial increase in potential health service coverage [6]. Thirdly, female education has given an emphasis to empower them in making decision about their health care need as the strategy for improving maternal health service utilization [6].

However, despite the struggle made so far, current utilization of antenatal care and skilled delivery care at national level is low, more than halfway from the 2015 target. In addition, the situation in rural part of the country is worse, where a vast majority of women don't receive skilled care during pregnancy and childbirth. So, the effort to improve maternal health care utilization should pivot on the identification and removal of different constraints. This urges the need for information on the level and determinants of services utilization.

To the best of our knowledge, in southern part of Ethiopia, specifically in Konso woreda, little is known about antenatal care and health facility delivery practice among mothers. Therefore, the aim of this community based study was to assess the level of utilization of antenatal care and health facility delivery care among mothers in Konso Woreda, Southern Ethiopia.

1.3 Significance of the study

This study would be important for different stakeholders addressing the issues related to maternal and perinatal morbidity and mortality. Firstly, findings from the study would provide information for the policy makers to develop strategies and guidelines or standards for scaling up the utilization of antenatal and delivery care as an important intervention in addressing the problems associated with maternal morbidity and mortality.

Secondly, health care providers are at the heart of health care system and have a great share in improving the quality of care provided by them. So, this study would provide information about the issue to be emphasised by health care workers to improve the quality of service. This improvement in the quality of the health care delivery system would attract mothers in order to utilize the service. In addition, the findings of this study would add a new insight in to the scientific body of knowledge in that particular area.

Thirdly, the findings of this study would contribute greatly to the benefit of society considering that better maternal health care service utilization results in improved wellbeing of women, thus leading to reduction in maternal mortality. Therefore, the information derived from the study would provide directions for the community in finding and deciding on the solutions for solving the problems which hamper maternal health care utilization and this would eventually leads to improvement in health service coverage and health of the women.

Lastly, the findings from this study would benefit researchers interested in the field by providing information regarding antenatal care and institutional delivery practice among mothers in the study area. In summary, these four levels of stakeholders; government, health professions, researchers and community would potentially have great use of this study findings.

2. LITERATURE REVIEW

2.1 Antenatal Care Practice

Antenatal care plays an indispensable role in the detection of early signs of or risk factors for morbidity and mortality during pregnancy, so that effective interventions are possible [9]. Therefore, utilization of antenatal service is very important and cannot be over looked.

According the estimates of the 2015 WHO report, 83% of women worldwide attended ANC at least once, while 64% received a minimum of four visits [3]. In developing countries, a comparative DHS reports on the level and trends of maternal health care services conducted by Wang *et al.*, in 2011 showed that over 80% of women in majority of countries received at least one antenatal care.

Evidences from the studies in different countries indicate a varying degree of antenatal care utilization. In East Delhi, a cross-sectional study done in urbanized village found that about 92% and 77% of pregnant women took at least one and three or more antenatal visits respectively [34]. Similarly, a study in Kenya showed that 90% of women visited ANC clinic at least once during pregnancy and majority (87%) of them initiated antenatal visit during second and third trimester [20]. In 2010, a hospital based study on pregnant women in the same country showed that approximately 95% of women received any antenatal care during pregnancy but majority of them started in their 2nd trimester. It was also revealed that 45% of them made less than the recommended visits [38].

A community-based descriptive observational study in India found high (94%) coverage of at least one ANC visit and low (13.5%) practice of four antenatal visits among pregnant women [24]. A prospective hospital based descriptive study in Nepal found that 87% of mothers who gave birth in the hospital reported having four or more antenatal visits [21]. In rural area in Nepal, another cross-sectional study conducted at health centers showed that almost all (97%) mothers who gave birth one year preceding the survey received antenatal care during pregnancy and about 80% of them have visited antenatal clinic four or more times [39]. These findings indicate that all mothers engaged in antenatal care do not attend the WHO recommended antenatal visits.

In Bangladesh, a retrospective cross-sectional study done on pregnant women using secondary data from Urban Health Survey found that antenatal care utilization was about 64.3% [40]. In Vietnam, a cross-sectional household survey conducted on mothers delivered one year prior to the study

between August 2013 and May 2014 showed that about 54 % of them received at least four visits [41]. From the analysis of DHS data in Nigeria, Dahiru and colleagues reported that 54% of women had attended at least the recommended antenatal care [22].

In Ethiopia, utilization of both at least one and the recommended antenatal care is below fifty percent at national level. According to mini EDHS 2014 estimates, 40% of mothers who gave birth five years prior to the survey attended antenatal clinic at least once during pregnancy and approximately one third of them received at least four visits. Of all antenatal attendees, 17% made their first visit during first trimester. The survey also showed a wide regional variation in ANC utilization from 15% in Somali to 94% in Addis Ababa [13].

In Tigray region, Ethiopia, a community based cross-sectional study reported that 54% of mothers who gave birth five years prior to the survey had attended antenatal care [14]. In Holeta town, central Ethiopia, a cross-sectional study conducted to assess maternal health care utilization among mothers who gave birth three years preceding the survey revealed that 87% of mothers attended ANC at least once, while about 34% of them had less than the recommended four visits. [27]. Another cross-sectional study on 495 childbearing women in Kombolcha district, Eastern Ethiopia revealed that 86% of women had at least one antenatal visit and 62% of them made less than four visits. [42].

A cross-sectional study among 759 pregnant women in Denbecha district, Northwest Ethiopia found that 57% of pregnant women attended at least one antenatal visit, while 81% received four or more antenatal care [15]. Similar survey on mothers who gave birth 12 months prior to the study in Yem Special Woreda, Southwestern Ethiopia revealed that 28.5% of mothers made at least one ANC visit and about 29% of them attended the recommended four and more visits [43].

Studies in Southern Ethiopia reported high proportion of at least one antenatal care visit. In Hossaina, study among childbearing women found that about 88% of women attended ANC at least once and more than half of them made the recommended four visits. It was also indicated that 61% women made their first antenatal visit during 2nd and 3rd trimester and only 26% of them started in the first trimester [17]. Another institution based study of 363 postpartum mothers in Wolaita showed that more than 85% of mothers received at least one antenatal care, while 53% of them attended antenatal care four or more times [16].

2.2 Factors Affecting Antenatal Care Practice

Disparity in the utilization of antenatal care across the world and different geographical areas of a given countries can be partly attributed to the factors affecting their uptake. Several studies have shown that antenatal care utilization is influenced by various socio-demographic and obstetric characteristics of women.

Maternal education was identified as an important predictor of antenatal care utilization by different studies in which the likelihood of using antenatal care was higher among educated women than those with no education. Studies in Nepal [21, 39] and India [24, 34] showed that women with higher educational level had higher number of visits than uneducated women. Likewise, cross-sectional studies in Vietnam [44], Uganda [45] and Kenya [20] have observed that women with low or no education had fewer antenatal visits.

Maternal age was another significant factor influencing antenatal care service utilization. A study in Nigeria showed that women younger than 25 years were more likely to have antenatal care than older women [22]. Similarly, another studies in Nepal [21] and Sudan [33] found higher utilization of antenatal care among women between 20-29 and 15-34 years respectively.

Antenatal care use was more common among women with lower number of births. In studies conducted in Colombia [35] and Nigeria [22], it was shown that the odd of using antenatal care was higher among women with first birth than those with a parity of two or above. Similarly, a prospective study in Nepal found that lower birth rank mothers were more likely to receive at least the recommended antenatal visits than higher birth order mothers [21].

In literatures reviewed, household wealth level was identified as a positive indicator of antenatal care utilization. Several other studies in different countries revealed that women from households with higher wealth level were more likely to visit antenatal clinics than those from household with lower income level [22, 33, 34, 40, 41, 44, 46]. This indicates that household wealth index plays a crucial role in determining whether or not a woman attends antenatal care during pregnancy.

In Ethiopia, several studies based on DHS data have shown that women residing in urban areas, younger than 35 years, with higher parity, having higher educational level and those living in the households with richest wealth quintile were more likely to receive antenatal care than those in the households with poorest wealth quintile [26, 47, 48]. In a study aimed to assess inequality in use

of antenatal care service in Ethiopia, Yesuf and Calderon found a low antenatal care utilization among uneducated and rural women and those from household with lower income [29]. Similarly, a cross-sectional study in Butajira, Southern Ethiopia[49] reported that residing in urban areas, having some level of education and living in the household with higher wealth index were positively correlated with women's use of antenatal care.

With regard to maternal age, a study based on DHS 2011 data on factors affecting maternal health care utilization in rural Ethiopia found that mothers below the age of 35 were more likely to receive antenatal care during pregnancy than mothers above 35 years [47]. Several cross-sectional studies in different regions of Ethiopia also report a significant association between maternal age and antenatal care utilization [15, 27, 42]. Even though different studies in Ethiopia observed high utilization ANC among younger women, a cross-sectional study in Tigray found high percentage of antenatal care among older women [14].

Marital status is another factor that affect antenatal care utilization in Ethiopia. Study on utilization of maternal health care services in Ethiopia found higher antenatal care utilization among married women [48]. In addition, cross-sectional studies in Tigray, Ethiopia and Denbecha district, Northwest Ethiopia showed that married women were more likely to visit antenatal clinics than single women [14, 15].

In addition to the factors mentioned above, husband occupation [14, 22], media exposure [27], and distance to health facility [14, 21, 43, 49] were identified as the significant predictors of ANC utilization. Moreover, obstetric history [24, 43], decision making autonomy [26, 46], and pregnancy intention [17, 22, 43] were also found to influence the women's use of antenatal care.

2.3 Health facility delivery practice

Increasing the proportion of deliveries attended by skilled health personnel is regarded as a crucial intervention strategy in reducing maternal deaths [13]. However, despite its encouraging benefit, health facility delivery practice across different regions of the world vary, where low utilization institutional delivery is reported in resource-poor countries.

Globally, about 75% of births was attended by skilled health professionals, while only 51% of women in Africa and other low-income countries gave birth under the supervision of health care providers [3]. Further analysis of DHS data in some developing countries revealed a varying degree

of health facility based delivery practice. In Kenya, this analysis showed that 53% of mothers gave birth at health institutions [50] and 37% of women in Nigeria visited health care facilities for delivery care [22]. A rate similar (37%) to that found in Nigeria was also reported from the analysis of DHS data of 4079 married women in Nepal [51].

In rural Bangladesh, a study based on data obtained from post-intervention survey of cluster-randomized controlled trial found that about 30% of mothers with live birth took assistance from skilled providers during delivery [52]. A cross-sectional study conducted among mothers who gave birth a year before the survey in Biharamulo district, Tanzania revealed that 56% of births occurred at health facilities [23].

In the population based study conducted in rural western Kenya, Van and his colleagues found that 17% of mothers gave birth in the health institutions [20]. Conversely, cross-sectional studies conducted in different parts of India reported a higher proportion of births at health facilities. In Rajasthan, India almost all (99.65%) births were attended by skilled personnel [24] and in Mumbai, India, a study of maternity in low income areas showed health facility delivery of 90% [53].

In Ethiopia, analysis of rural-urban differentials based on DHS 2011 datasets showed that only 15.6% of mothers gave birth at health facilities. This study also indicated that 64% and 4.5% of births in urban and rural areas occurred at health institutions respectively [54]. Similarly, Mini EDHS 2014 reported the proportion of institutional delivery of 15% with a great regional disparity ranging from 6% in Affar to 87% in Addis Ababa [13]. In South Tigray Zone, Ethiopia, high proportion (72.2%) of health facility based delivery practice was revealed from a community based follow-up study conducted on 2nd and 3rd trimester pregnant women [55].

Many community based cross-sectional studies conducted in different parts of Ethiopia have showed a varying degree of skilled care utilization during delivery. A study conducted among 371 mothers in Sekela District, Northwest Ethiopia in 2010 revealed a low facility based delivery of 12% [30]. Another study on the determinants of maternal health care utilization in Holeta town, central Ethiopia in January 2012 reported that over 60% of births occurred at health institutions [27]. In Woldia, Northern Ethiopia a similar study in March 2012 found a health facility delivery practice of 48.3% [56]. However, a study in Banja district, Northern Ethiopia in 2014 found that only 16% mother gave birth at health facilities [18].

By conducting a cross-sectional study among 623 married reproductive age women in Hossaina, Southern Ethiopia, Dutamo *et al.*, estimated that about 63% of women gave birth in the health facilities [17]. Another community based cross-sectional study among pregnant women in Agarfa town, South-East Ethiopia found an institutional delivery practice of 31% [57].

In Dodota woreda, Ethiopia, a cross-sectional study aimed to examine the prevalence of institutional delivery and associated factors showed that 18.2% of births two years preceding the survey occurred at health facilities [58]. Other studies that employed a similar methodology among mothers who had a birth a year prior the survey in Goba Woreda, Ethiopia and Munisa Woreda, South-East Ethiopia found a facility delivery rate of 47% [59] and 12.3% [60] respectively. Moreover, a study among 495 women of reproductive age in Kombolcha, in Eastern Ethiopia revealed that about 25% women gave birth at health institutions [47].

2.4 Factors Affecting Health Facility Delivery Practice

Similar to antenatal care utilization, health facility delivery practice has shown to be affected by multiple interrelated factors. Maternal age was reported as a significant predictor of institutional delivery. A population based study in Kenya found high percentage of institution deliveries among women below 30 years [20]. A community based cross-sectional studies in Ethiopia showed that women between the age of 15 and 24 years were more likely to visit health facility for delivery care than older women [18, 30]. In contrary, studies in Colombia and Nigeria demonstrated that older women were more likely to have their births attended at health facilities [22, 35].

Maternal education was appeared as an important predictor of institutional delivery. Studies in rural Africa [61], Tanzania [23] and urban Chandigarh [62] also revealed that mother with lower or no education have higher chance of giving birth at home. In Ethiopia, two studies that used the datasets of DHS 2011 [63] and 2005 [64] reported maternal education as an important predictor of health facility delivery practice. Several community based cross-sectional studies in different regions of Ethiopia have also reported women's education as a determinant of health facility delivery practice [14, 17, 18, 27, 30, 58-60, 65, 66].

Residence is another significant factor that affects women's preference of place of delivery. Studies based on DHS reports in Nigeria [22], Sudan [33], Kenya [50] and Nepal [51] showed that institutional deliveries were common among women residing in urban regions. Similarly, several

cross-sectional studies conducted in Ethiopia observed higher odds of giving birth at health institutions among women resided in urban areas [30, 47, 58-60, 66].

Literatures highlighted that antenatal care visits during pregnancy links women to health care system so that they would give birth at health institutions. In Kenya, analysis of DHS data showed that women who made four or more visits were twelve times more likely to delivery at health institution than those with no ANC visits [50]. A community based cross-sectional studies in Goba Woreda, Ethiopia [59], Sekela District, Northwest Ethiopia [30], and Holeta Town, Central Ethiopia [27] found high proportion of institutional delivery among women who received antenatal care during pregnancy.

Similar to antenatal care, institutional delivery was affected by parity. Several studies in different regions of Africa have showed the significance of parity in determining the use of health facilities for delivery care. Studies in Colombia [35], Nigeria [22], Sudan [33], Kenya [50] and Nepal [51] found that higher parity negatively influence institutional delivery. Similarly, studies in Bangladesh [52] and Chandigarh [62] reported an inverse relation between parity and institutional delivery. Across-sectional study intended to assess determinants of maternal health care utilization in Holeta Town, Central Ethiopia, Birmeta *et al.*, 2013 highlighted the influence of parity on health facility delivery practice [27].

In addition to factors mentioned above, women's decision making autonomy [23, 26, 27, 55, 58, 65], distance to health facilities [20, 23, 27], pregnancy intention [17] and exposure to mass media [25, 27] were highlighted to have an influence on institutional delivery practice.

In summary, utilization of antenatal care and health facility delivery care which are central to improve maternal health and reduce maternal mortality varies across different countries of the world, within different regions of a given country and within different area of the particular region. This variability in their utilization is attributed to broad set factors affecting them. Literature highlighted the implication of socio-demographic, household, obstetric and healthy system factors in determining the utilization of antenatal care and health facility delivery care. Generally, utilization of both ANC and health facility delivery care is low in Ethiopia compared to other countries. Therefore, assessment of their magnitude and consideration of the factors affecting their utilization would be crucial to improve their uptake.

2.5 Conceptual Framework

The theoretical basis of this study stems from concepts identified in the review of the literature. Selection of independent variables was based on their theoretical and empirical importance, as reported in literature. This conceptual framework was developed by the principal investigator after thorough literature review. The outcome variables of interest were antenatal care and health facility delivery practice and the later variable was influenced by the former one. Grouping of the independent variables represent the proximity of the factors to the dependent variables. The explanatory variables for both outcome variables were the same since they are closely related. This study tried to identify different factors that may affect women's use of antenatal care and delivery services offered at health institutions.

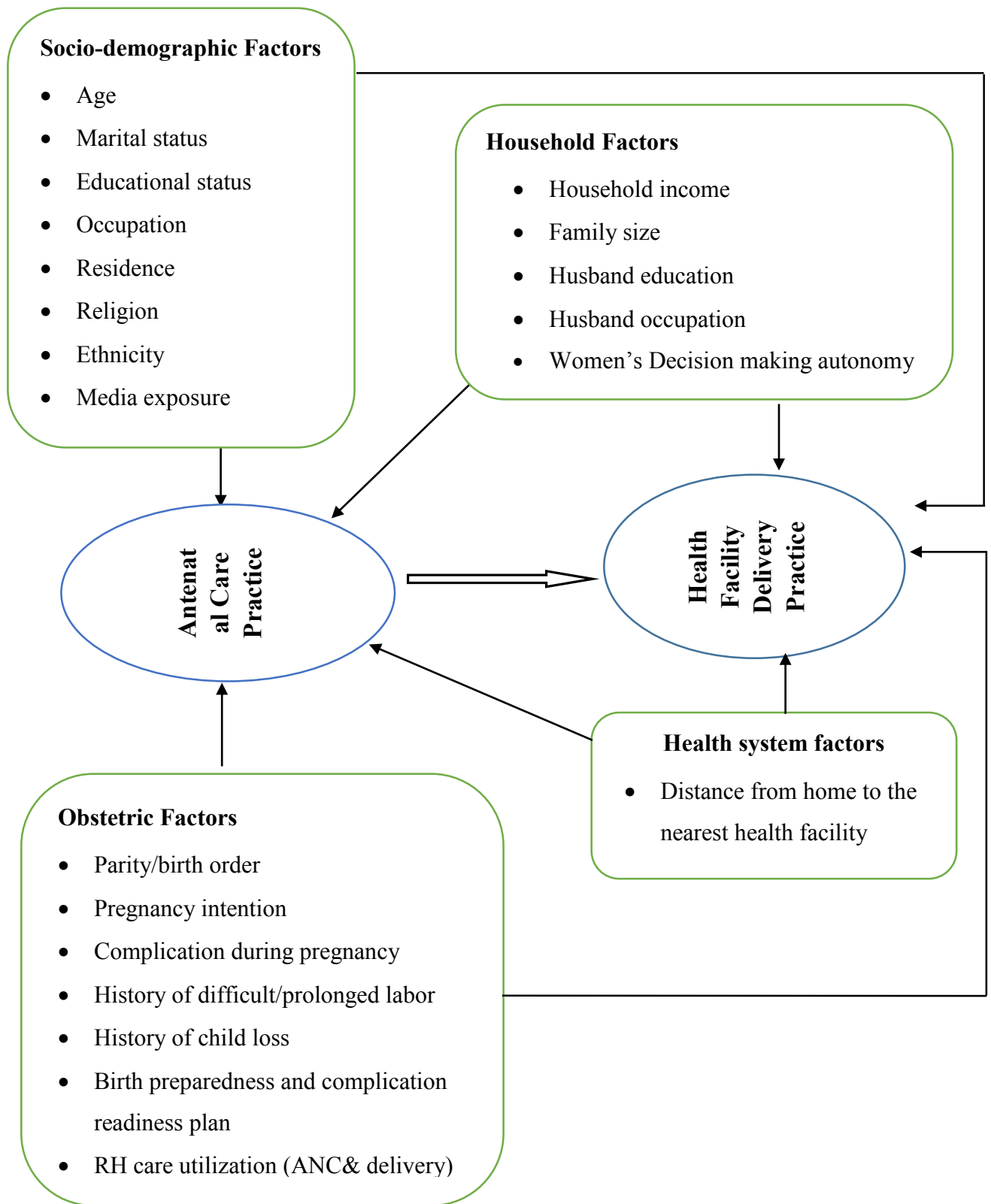


Figure 1 Conceptual framework of the factors affecting antenatal care and health facility delivery practice, March 2016.

Source: Literature review

3. OBJECTIVES

3.1 General objective

To assess antenatal care and health facility delivery practice among mothers in Konso Woreda, Southern Ethiopia from March 21 to April 16, 2016.

3.2 Specific objectives

- To determine antenatal care practice among mothers in Konso Woreda
- To determine health facility delivery practice among mothers in Konso Woreda
- To identify factors associated with antenatal care practice among mothers in Konso Woreda
- To identify factors affecting health facility delivery practice among mothers in Konso Woreda

4. METHODS

4.1. Study area

This study was conducted in Konso woreda, one of the woredas in Southern Nations, Nationalities and Peoples' Region (SNNPR) of Ethiopia. Konso is situated at a distance of 84 km from Arba Minch and about 600 km from Addis Ababa, the capital of Ethiopia [personal communication]. It is bordered on the south by the Oromia Region, west by the Weito River, north by the Dirashe woreda, northeast by Amaro woreda and on the east by Burji woreda [Wikimedia, April 2015]. The woreda has a total of 43 Kebeles (2 urban and 41 rural kebeles). According to the 2007 census of Ethiopia, the total population of the woreda was estimated at 235,087, of which 113,412 are males and 121,675 are females [67]. In this woreda there are 54 health posts, 12 health centers and one district hospital [personal communication].

4.2 Study design and period

Cross-sectional study design which was conducted during the period from March 21 to April 16, 2016.

4.3 Population

4.3.1 Source Population

All mothers who gave birth one year prior to the survey in Konso woreda regardless of their birth outcomes.

4.3.2 Study population

All mothers who gave birth one year prior to the survey in the randomly selected kebeles of Konso woreda.

4.3.3 Study subjects

Every individual sampled mothers who gave birth one year prior to the survey in the randomly selected villages of the sampled kebeles of Konso woreda.

4.4 Eligibility Criteria

4.4.1 Inclusion Criteria

Mothers who gave birth one year preceding the survey in the sampled villages and resided in the villages for at least one year with a mental and physical capability to be interviewed were included in the study.

4.4.2 Exclusion Criteria

Illegible mothers from unselected villages but who came to the sampled villages for some reasons during data collection period were excluded from the study. Mothers who were unavailable upon frequent visits during the period of data collection in each village were also excluded from the study.

4.5 Sample size determination

Sample size was estimated under varying assumptions using Epi Info 7.1.4.0 [CDC, 2014] and based upon each of specific objectives of the study in order to reveal that some but not all of objectives can be met or simply in order to indicate some variables need only to be measured on a sub-sample. Then, the sample sizes obtained under different assumptions were adjusted for anticipated non-response rate. The largest of all the sample sizes calculated based on the specific objectives was considered as the sample size for the study. In current study, the following calculations were done to estimate the sample size of each objectives using Epi Info.

For the first and second objectives, the following assumptions were made: 95% confidence level, 54,775 reference (as a proxy) population size estimated from total population of the woreda using the conversion factor (0.233) for reproductive age women, 29% expected prevalence of the WHO recommended ANC visits [43] (for the 1st objective), 47% expected prevalence of institutional delivery [59] (for the 2nd objective), 5% margin of error, a design effect of 2 for complex sampling, clusters of 33 and a 10% anticipated non-response rate.

For the third and fourth objectives, the following assumptions were made: 63% for proportion of mothers who attended at least four antenatal visits and had a history of illness during pregnancy (P1) and 37% for proportion of mothers who attended at least four antenatal visits and had no history of illness during pregnancy (P2) [43] (for 3rd objective), 58% for proportion of mothers who gave birth at health facilities and planned for birth preparedness and complication readiness (P1) and 42% for proportion of mothers who gave birth at health facilities and not planned for birth preparedness and complication readiness (P2) [59] (for 4th objective), precision of 5% at 95% confidence level, power of 80%, a design effect of 2, and non-response rate 10%.

Based on the above information, the largest of all the sample sizes calculated based on the specific objectives was 871. Since rural population was larger in number than urban population, allocation of the sample size was in the ratio of 2:1 (290-urban and 581 rural).

4.6 Sampling Procedure

The sampling was accomplished using a three-stage stratified cluster sampling design. In the first stage, from Konso woreda, two urban and 14 rural kebeles (primary sampling units) which were stratified by residence as rural and urban kebeles were selected by simple random sampling. In the second stage, from each kebele, a minimum of 75% from urban and 30% from rural kebeles (due to time and resource constraints) of the total villages (secondary sampling units), was selected using simple random sampling.

Since the villages within each kebeles are scattered throughout the kebeles and there was lack of adequate resources and up-to-date list of households' with illegible mothers in each village, the total sample size was equally allocated to all selected villages by dividing the total sample size by the total number of selected villages, which is the preferred method in such surveys [68]. Within each secondary sampling unit (villages), households with illegible mothers form the tertiary sampling units (third stage).

Finally, WHO EPI (bottle spinning) method was employed to select the study subjects (illegible mothers) in the villages until the desired numbers of sample was obtained. To select the households in each village, firstly, the center of the village was identified. Secondly, a pen was spin and the direction pointed by the tip of the pen was selected. Thirdly, the data collectors walked along this line (the random direction from the center) counting and numbering (1 through whatever number of houses there are) houses which fall on this imaginary line. Fourthly, one house was randomly (by lottery method) selected from these houses. This was the first house (random starting point) to include in the survey sample from each village and after finishing data collection at this house, the data collectors went to the next closest house and included it in the survey sample. The data collector continued selecting the next closest house until the correct number of houses were obtained in each villages. In a case when the study participants were not be able to be interviewed for some reason (e.g. absenteeism), attempt was made for three times to interview the respondent and after all, they were considered as non-respondents. Moreover, in the household with more than one candidate, one of them was taken randomly by employing lottery method.

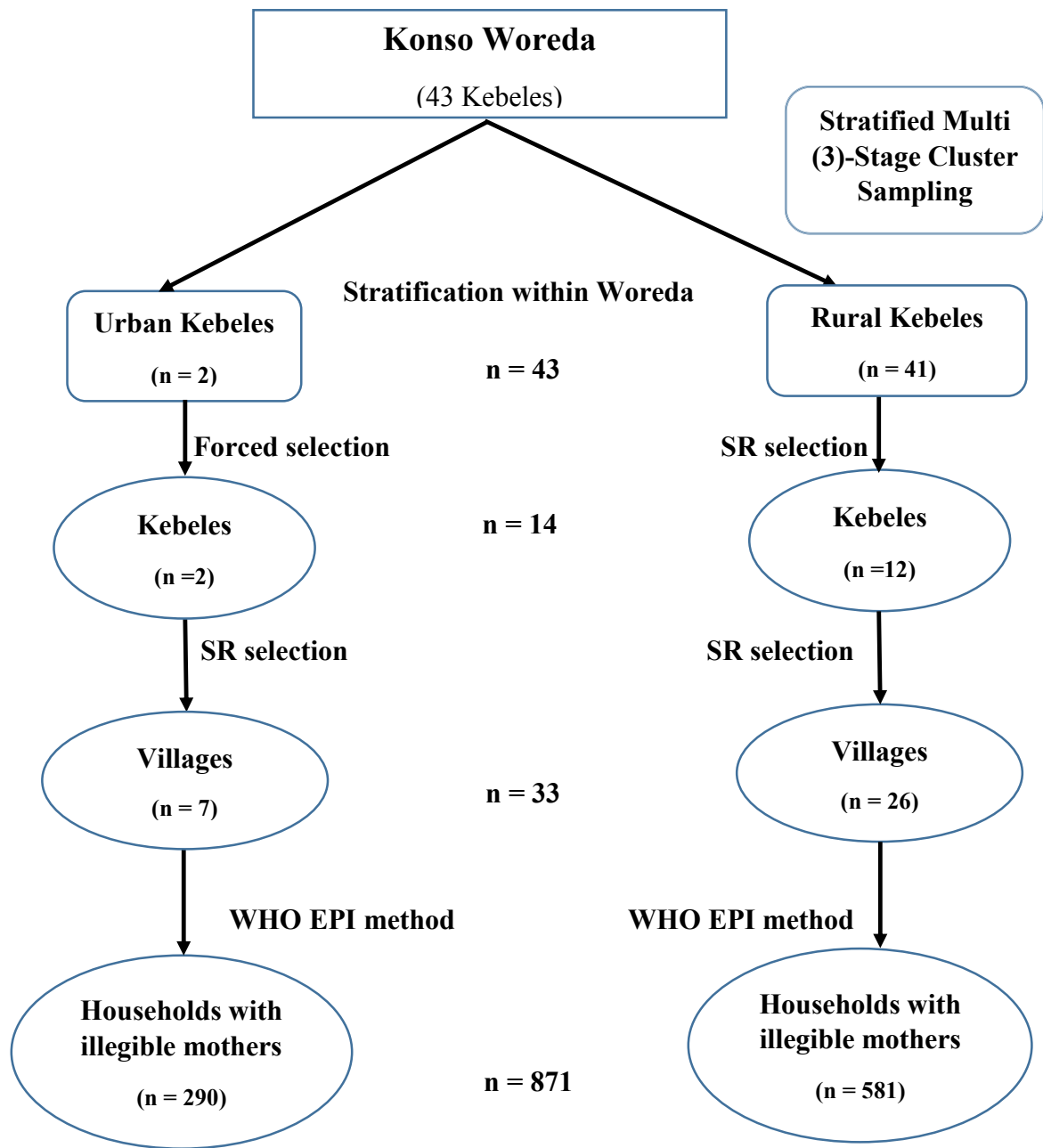


Figure 2 Schematic presentation of the sampling procedure.

4.7 Data Collection Instrument and Procedures

The data collection was accomplished using a pre-tested interviewer administered questionnaire. The questionnaire was initially prepared in English and was translated to Amharic and Konso (local language). The questionnaire was back translated to English by an independent translator (language expert) to check the conceptual consistency of items. The Amharic version of the questionnaire was made available for those mothers (urban) reporting difficulty understanding Konso language.

Part of the questionnaire was adapted from a previous study [17] and reviewing relevant literature to the problem under study to include all the possible variables that address the objectives of the study. Besides, some questions for the questionnaire were adapted from the Ethiopian Demographic and Health Survey 2011 women's questionnaire [69].

The questionnaire contains items on basic background profile of mothers, past reproductive history of respondents, mothers antenatal and delivery service utilization, and other health related pertinent information. The questionnaire was administered through face to face interview by six (6) data collectors recruited from the study area. All data collectors had an educational level of college and above.

During data collection period, in circumstances where the selected houses were closed or mothers were not present, frequent visits was made until we communicate them throughout the data collection. Mother in the next household was considered in place of those who were not available and those who were unable to communicate during data collection period. In the households where there were two illegible mothers, lottery was drawn at random to select the one to be included in the study.

4.8 Study Variables

4.8.1 Dependent Variables

“Antenatal care practice” and “health facility delivery practice”.

4.8.2 Independent Variables

Socio-demographic factors; included age at interview, age at marriage, marital status, educational status, occupation, residence and religion. Obstetric factors included; parity/birth order, pregnancy intention, history of difficult/prolonged labour, complications during pregnancy, history of child loss and reproductive health care utilization (ANC, delivery). Household factors; included income,

family size, husband education, husband occupation and women's decision making autonomy. Health system factors; included distance to health the nearest facilities and means of transportation to the nearest health facilities

4.9 Operational Definitions

Antenatal care practice: referred to whether a mother attended antenatal care visits at any of health facilities (health posts, health centers and hospital) during her index pregnancy.

Health facility delivery practice: referred to whether a mother gave birth at any of health facilities to her recent child. This variable had two possible options, yes (when a mother reported that she had given birth to her recent child at health facility) and no (when a mother reported that she had not given birth to her recent child at health facility).

4.10 Data Processing and Analysis

Data was coded and entered using the software Epi Info Version 7.1.4.0 [CDC, 2014] and then cleaned for errors and inconsistencies. The cleaned data was then exported into SPSS version 22.0 [IBM, Armonk, NY, USA] for further processing. All required variable recoding and transformation was done before the final data analysis.

Frequency distributions, cross-tabulations and graphs were used to describe the variables of the study. Findings was presented in text, tables and graphs. The association between the outcome variables (Antenatal care and place of delivery) and several predictor variables including maternal socio-demographic characteristics was first analyzed in the bivariate logistic regression model with each independent variable separately. Predictor variables with p-value less than 0.25 in the bivariate analysis and those variables deemed important based on literature were retained in the final multivariate logistic regression model [70, 71].

Before conducting the multivariate logistic regression analysis, preliminary analyses were conducted to ensure no violation of the assumptions of sample size, multicollinearity and outliers. All correlations among the independent variables were weak to moderate. This indicates that multicollinearity was unlikely to be a problem [72]. Then, in the multivariate analysis, p-value < 0.05 was considered as a cut-off point for a variable to be considered as an independent predictor of the outcome variable. Association between outcome and predictor variables was calculated using odds ratio at p-value <0.05 and 95% confidence interval.

4.11 Data Quality Control

Data quality was ensured during data collection, coding, entry and analysis. Prior to the actual data collection activities, the instrument was pre-tested on 43 mothers (5% of sample size) in Jarso kebele and ketena 03 of Karat town by principal investigator, supervisors and data collectors. After completing the pretest of the questionnaire, the participants were asked if they have difficulty understanding any of the questions. Necessary changes (addition of alternative responses, removal of some repeated questions and skipping patterns) were made after pre-testing based on the information obtained from participants to make questions more understandable.

A brief explanations about sampling procedures and on how to ask and record questions in the questionnaire were provided for data collectors and supervisors during training sessions. Respondents who refuse to participate in the study were included in the non-response rate and mothers in the next household were considered in place of those who were not available upon frequent visits during data collection.

A three days training was given for data collectors and supervisors about the objective, confidentiality of the information, respondent's rights, informed consent and technique of the interview. Data collectors were given the responsibility to check for the completeness of the questionnaire at the end of each interview.

On-going supervision of the data collection activities was undertaken by two supervisors throughout the data collection period. The completeness of the questionnaire and accuracy of the information recorded was checked at the end of each day by supervisors.

Code was given for questionnaire and households during data collection so that any identified errors was traced back using the codes. Completeness and consistence of the collected data was finally reviewed by principal investigator prior to data entry. The entered data was thoroughly cleaned before analysis.

4.12 Ethical Considerations

Ethical clearance and permission was obtained from Institutional Review Board of Department of Nursing and Midwifery of College of Health Sciences of Addis Ababa University (AAU), Addis Ababa, Ethiopia. Permission was also secured from Konso Woreda Health Bureau and all sampled Kebeles through a formal letter.

Participation in the study was only on the voluntary basis. Written informed consent was obtained from each participants prior to the interview. Oral informed consent and finger print was also considered for participants who were unable to read and write. No personal identifiers of the study participants was taken hence the information obtained remain anonymous and confidential.

4.13 Result Dissemination Plan

The findings of this study would be important to those with closely related research interests regarding maternal and child health programs. And the findings of this study would be disseminated to different levels of stakeholders such as policy makers, health professionals and researchers through all available forums, workshops and conferences. A copy of the final report of this study would be given to Department of Nursing and Midwifery, School of allied Health Sciences, College of Health Sciences, AAU and Konso Woreda Health Bureau and for all concerned bodies as well. The output of this study would also be made publically accessible through publications in international journals.

5. RESULTS

5.1 Socio-demographic characteristics of the study participants

Of the total 871 mothers who had given birth one year preceding this survey, 865 mothers were interviewed resulting in a response rate of 99.31%. Slightly more than half (52.6%) of the respondents were between the ages of 20 to 29 years, while 186 (22%) didn't know their age at interview. Majority (97%) of the mothers were currently married. A great majority (92.8%) of the participants were from Konso ethnic group. More than three-fourth (66.2%) of the mothers are protestant by religion followed by Orthodox religion which accounted for nearly 30%.

With regard to educational level, 539 (62.3%) respondents reported having not joined any formal education, and 233 (27%) attended primary education. Moreover, nearly half (49.8%) of the mothers had husband with no education. Among the respondents, 369 (42.7%) and 317 (36.6%) were farmers and housewives respectively. Approximately half (49.4%) of the mothers reported that their husband's occupation was farming with 203 (23.3%) reporting their husband's occupation as merchant

Concerning family composition, 460 (53.2%) of mothers had a family size of 2-5 and the remaining 405 (46.8%) had more than five family members within their households. Five hundred twenty eight (61%) of the respondents had radio or television and the other 337 (39%) didn't possess the respective medias of communication. Details of the background characteristics of the study participant are given in the **Table 1**.

Table 1 Socio-demographic characteristics of the study participants in Konso Woreda, Southern Ethiopia, March 2016 (n=865)

Variables	Frequency	Percent
Age at interview		
15-19	90	10.4
20-24	225	26.0
25-29	230	26.6
30-34	89	10.3
35-40	45	5.2
Don't know	186	21.5
Ethnicity		
Konso	803	92.8
Wolaita	30	3.5
Gamo	15	1.7
Others ^a	17	2.0
Religion		
Protestant	573	66.2
Orthodox	266	30.8
Others ^b	26	3.0
Educational status of the respondent		
No education	539	62.3
Primary education	233	26.9
Secondary education	65	7.5
Above secondary education	28	3.2
Educational status of the husband		
No education	431	49.8
Primary education	136	15.7
Secondary education	125	14.5
Above secondary education	169	19.5
Refused	4	0.5
Marital status		
Married	838	96.9
Others ^c	27	3.1
Respondents occupation		
Farmer	369	42.7
House wife	317	36.6
Merchant	104	12.0
Civil servant	36	4.2
Others ^d	39	4.5

Husband occupation		
Farmer	427	49.4
Merchant	203	23.3
Civil servant	170	19.7
Others ^e	62	7.2
Refused	3	0.3
Family size		
2-4	460	53.2
≥5	405	46.8
Has radio/television		
Yes	528	61.0
No	337	39.0

^a Amhara, Oromo and Tigre. ^b Catholic, Muslim and Pagan. ^c Cohabiting, Divorced and Single.

^d Daily laborer, House maid, NGO employee, student and Unemployed. ^e Daily laborer, Driver, Guardian, NGO employee and Student.

5.2 Past obstetric characteristics of the study participants

Sixty percent (60%) mothers were married when they were between the ages of 15-19. Approximately, one fourth (24.5%) of the study participants had their first pregnancy between the ages of 25-29 years and half (50%) of them reported that their last pregnancy was between the age ranges of 20 -29 years.

Three hundred sixty nine (42.7%) mothers were gravida two to four and 305 (35.3%) of them were gravida five and above. Three hundred sixty four (42.1%) of the respondents had 2-4 currently living children, while the rest 297 (34.3%) had parity of five and above respectively. Of the total participants, 14 (1.6%), 17 (2%), 36 (4.2%) and 44 (5.1%) had ever had abortion, still birth, infant died within one week and infant died after seven days respectively. Concerning pregnancy intention, 594 (68.7%) of mothers had planned their last pregnancy, while 271 (31.3%) of them had not planned their index pregnancy (see **Table 2**).

Table 2 Past obstetric history of the study participants in Konso Woreda, Southern Ethiopia, March 2016 (n=865)

Variables	Frequency	Percent
Age at marriage		
15-19	519	60.0
20-24	151	17.5
25-29	11	1.3
Don't know	184	21.3
Age at 1st pregnancy		
15-19	13	1.5
20-24	167	19.3
25-29	212	24.5
Don't know	473	54.7
Age at last pregnancy		
15-19	146	16.9
20-24	216	25.0
25-29	216	25.0
30-34	71	8.2
35-40	31	3.6
Don't know	185	21.4
Gravidity		
1	191	22.1
2-4	369	42.7
5 and above	305	35.3
Parity		
1	204	23.6
2-4	364	42.1
5 and above	297	34.3
Ever had abortion		
Yes	14	1.6
No	851	98.4
Ever had still birth		
Yes	17	2.0
No	848	98.0
Ever had neonatal death within 7days		
Yes	36	4.2
No	829	95.8
Ever had infant death after 7 days		
Yes	44	5.1
No	821	94.9

Last pregnancy planed		
Yes	594	68.7
No	271	31.3

5.3 Antenatal care practice

About 82.0% (95% CI: 79.0%-84.0%) of mothers who gave birth a year preceding the survey attended at least one antenatal care visit. However, only 54.1% (95% CI: 50.4%-57.8%) of mothers were found to have visited antenatal clinic four or more times (the WHO recommended visits) during their last pregnancy. Of those mothers who reported attending antenatal care during their index pregnancy, 403 (56.9%) of them commenced their first antenatal visit during first trimester, while the rest 305 (43.1%) made their first visit during second and third trimester of pregnancy.

Five hundred sixty five (92.7%) mothers who had received antenatal care during their last pregnancy were advised for follow-up visits during their first visit, while the remaining 52 (7.3%) reported having not received any advice from ANC providers. Majority (90.8%) and 445 (62.9%) of mothers were told about the importance of institutional delivery and the expected date of delivery by ANC providers respectively. Four hundred six (57.3%) of the respondents reported that their husbands have visited health facilities with them at least once throughout the course of their antenatal visits and 529 (61.2%) of mothers mentioned receiving antenatal care in previous pregnancies other than the last one. Nearly, 88% of the participants were willing to attend antenatal care in their future pregnancies (See **Table 3**).

Table 3 Antenatal care practice among mothers in Konso Woreda, Southern Ethiopia, March 2016

Variables	Frequency	Percent
Attended ANC during last pregnancy (n=865)		
No ANC	157	18.2
1-3 visits	325	37.6
At least 4 visits	383	44.3
Number of months pregnant at 1st visit (n=708)		
≤ 4 months	403	56.9
≥ 5 months	305	43.1
Advised for follow-up visit (n=708)		
Yes	656	92.7
No	52	7.3
Do your husband visited HF with you (n=708)		
Yes	406	57.3
No	302	42.7
Attended ANC before last pregnancy (n=865)		
Yes	529	61.2
No	336	38.8
Told about importance of HF delivery (n=708)		
Yes	643	90.8
No	65	9.2
Told about EDD (n=708)		
Yes	445	62.9
No	263	37.1
Willing to attend ANC in the future (n=865)		
Yes	764	88.3
No	101	11.7

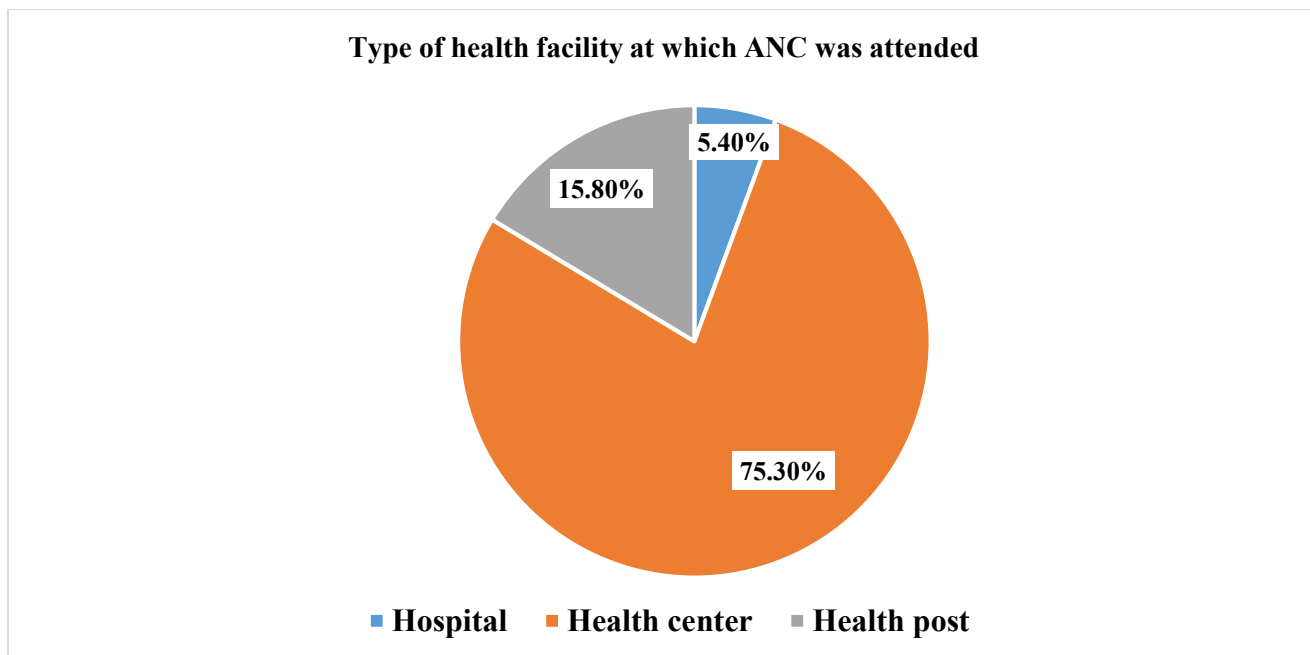


Figure 3 Type of health facilities where antenatal care was attended by mothers in Konso Woreda, Southern Ethiopia, March 2016

Nearly, three-fourth (75.3%) of the respondents received antenatal care for their last pregnancy from health centers, while 137 (15.8%) of them reported attending antenatal care at health posts (see **Figure 3**).

5.3.1 Reasons for attending Antenatal care during last pregnancy

Of 708 mothers who reported receiving at least one antenatal care, 75.3% and 80.0% of them visited antenatal clinics in order to know their health status and that of their fetus respectively. Proximity of health facility to the residence, spousal support and good quality of the service were also mentioned among the reasons for attending antenatal care during last pregnancy (**Table 4**).

Table 4 Reasons for attending antenatal care during last pregnancy among mothers in Konso Woreda, Southern Ethiopia, March 2016

Reasons for attending ANC (n=708)	Proportion
To know the health status of the fetus	80.0
To know my health status	75.3
To take medication	18.4
Health facility is closer to my residence	10.5

Husband supported me	10.4
Good quality services are provided by HFs	7.1
Other*	4.7

*I was ill; to obtain ANC card.

5.3.2 Reasons for not attending Antenatal care during last pregnancy

Being too busy (9.8%), distant location of health facility from residence (7.7%) and being healthy (6.4%) were the common reasons mentioned for not receiving antenatal care during index pregnancy (**Table 5**).

Table 5 Reasons for not attending antenatal care during last pregnancy among mothers in Konso Woreda, Southern Ethiopia, March 2016

Reasons for not attending ANC (n=157)	Proportion
Too busy to attend ANC	9.8
HF far from the residence	7.7
Was not ill	6.4
Poor quality of the service	4.9
Others**	3.9

**Feeling shame; not know the importance of ANC; husband refused; having no experience; ANC not necessary.

5.4 Health Facility delivery practice

Out of the interviewed mothers, 60% (95% CI: 56.7%-63.3%) of mothers delivered their last child at health facilities in the year preceding the survey, while the rest 40% (95% CI: 36.7%-43.3%) gave birth at home. Concerning the mode of delivery, majority (91.6%) of births were delivered by spontaneous vaginal delivery followed by instrumental and cesarean delivery which accounted for 52 (6%) and 21 (2.4%) of births respectively. Six hundred thirty eight (73.8%) were planned to give birth to their last child at health institutions and 535 (61.8%) of them were reported having a plan for birth preparedness and complication readiness prior to the last childbirth. About half (49.5%) of mothers had ever given birth at health facilities before their last childbirth and 738 (85.3%) mothers are willing to give birth at health institutions in the future (**Table 6**).

Table 6 Place of delivery and prior delivery history of the mothers in Konso Woreda, Southern Ethiopia, March 2016 (n=865)

Variables	Frequency	Percent
Place of delivery		
Home	346	40.0
Health facility	519	60.0
Mode of last delivery		
Spontaneous vaginal delivery	792	91.6
Instrumental delivery	52	6.0
Cesarean section	21	2.4
Planned to give birth at HF		
Yes	638	73.8
No	227	26.2
Planned for birth preparedness and complication readiness		
Yes	535	61.8
No	330	38.2
Ever given birth at HF before last childbirth		
Yes	428	49.5
No	437	50.5
Willing to deliver at HF in the future		
Yes	738	85.3
No	127	14.7
Encountered any health problem during labor, delivery and immediate postpartum		
Yes	143	16.5
No	722	83.5

5.4.1 Reasons for delivering at health institutions and home

Among those mothers who delivered their last child at health facilities, need of better service (44.6%), previous better HF delivery outcome (18.5%) and being told to deliver at health institution (22.9%) were the commonly reported reasons for giving birth at health facilities (**Table 7**).

Table 7 Reasons for delivering at health facilities among mothers who gave birth in Konso Woreda, Southern Ethiopia, March 2016 (n=519)

Reasons for delivering at HFs	Proportion
Need better service	44.6
Told to deliver at HF	22.9
Previous better HF delivery outcome	18.5
HF was nearer to residence	8.8
Difficult labor	7.6
Previous bad home delivery outcome	2.5

Concerning the reasons for home delivery, the smooth nature of labor, health facility being far from residence, previous home deliver being normal and presence of TBA were among the reasons for delivering at home (**Table 8**).

Table 8 Reasons for delivering at home among mothers who gave birth in Konso Woreda, Southern Ethiopia, March 2016 (n=346)

Reasons for delivering at home	Proportion
Labor was smooth and short	18.0
HF was too far	13.6
Previous home delivery was normal	7.4
Presence of TBA	6.8
Lack of accompanies	6.6
Was told your pregnancy was normal	5.3
Un-welcoming approach of health workers	4.2
Nearest HF not provides delivery care	3.0
Poor quality of the service in HF	3.0
Others*	4.0

*Lack of transportation; husband not allow to go to HF; no female provider at HFs; need to be with relatives; feeling shame, not having ANC card; sever medical illness.

5.5 Women's health service utilization and decision making power

On average, mothers who gave birth a year preceding the survey were lived at a walking distance of 32.65(\pm 30.39) minutes from the nearest health facilities. Of the total study participants, 687 (79.4%) reported that the health facilities nearest to their residence provided delivery service with 178 (20.6%) reporting that health institutions in their locality didn't provide delivery care. A great majority (97.2%) of mothers had ever used health facilities proximal to their place of residence.

Regarding the decision making autonomy, 494 (57.1%), 513 (59.3%) and 514 (59.4%) mothers made the decision for health service utilization, place of delivery and choice of assistant during child birth by themselves respectively. However, 371 (42.9%), 352 (40.7%) and 351 (40.6%) of them reported that the decision for each of the respective issues i.e., decision for health care utilization, where to give birth and whom to see during childbirth was jointly made by themselves and their husbands.

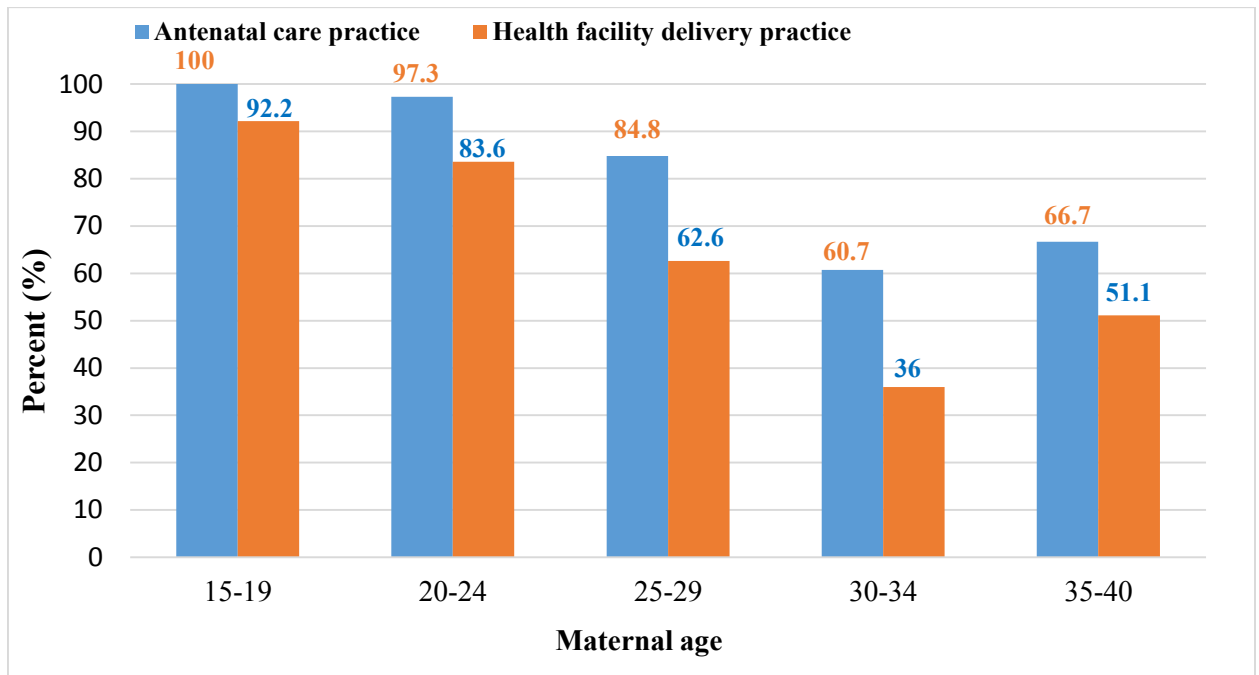


Figure 4 Antenatal care and health facility delivery practice across age categories in Konso Woreda, Southern Ethiopia, March 2016

Figure 4 indicates that almost all mothers between the age group of 15-19 and 20-24 had received antenatal care during their last pregnancy. Similarly, higher proportion of mothers below the ages of 30 years gave birth to their last child at health institutions. Generally, as age increased, the proportion of mothers who attended at least one antenatal care visit and delivered their last child at health institutions tend to decline with exception for those mothers between the age of 35-40 years. Therefore, efforts should be made to increase community based health education and awareness creation.

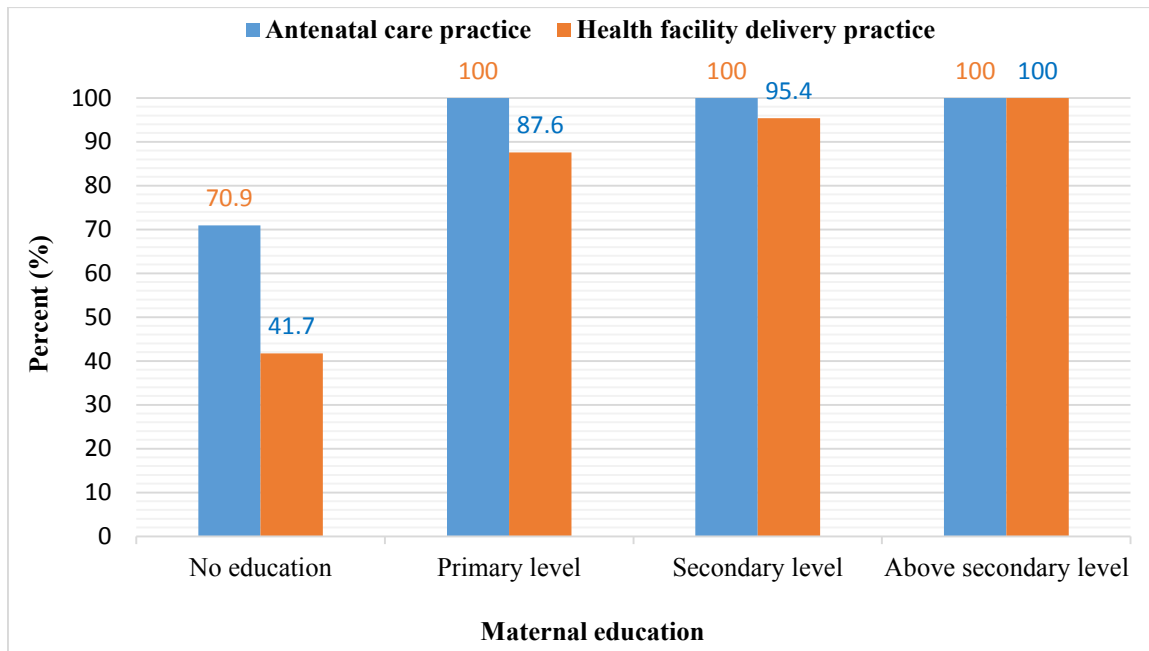


Figure 5 Antenatal care and health facility delivery practice across educational level of the respondents in Konso Woreda, Southern Ethiopia, March 2016

Antenatal care and health facility delivery practice proportionally increased with the education level of the respondents (see **Figure 5**). The figure also indicates that antenatal care use and institutional delivery almost equivalently improved with mothers' level of education.

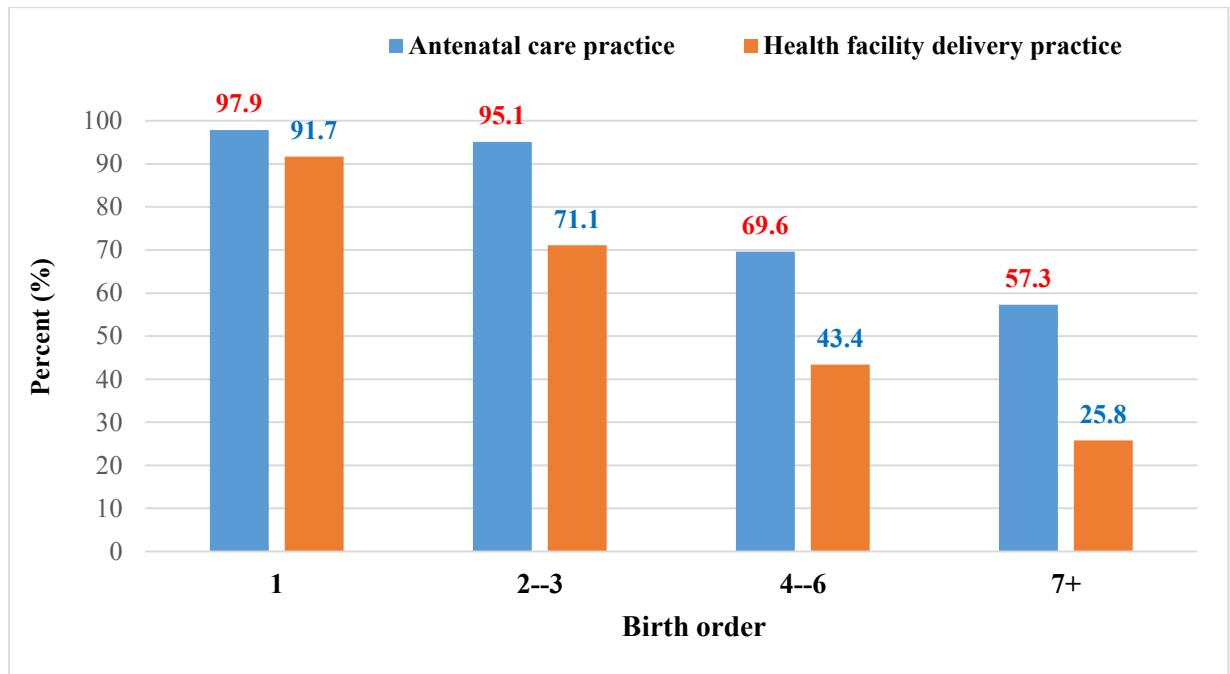


Figure 6 Antenatal care and health facility delivery practice across birth order in Konso Woreda, Southern Ethiopia, March 2016

Approximately, over 90% of the respondents with the first birth order received antenatal care and delivered at health facilities. Overall, antenatal care and health facility delivery practice consistently decreased with increasing parity. The result also shows that the decline for institutional delivery across the parity is higher than that for antenatal care use (see **Figure 6**).

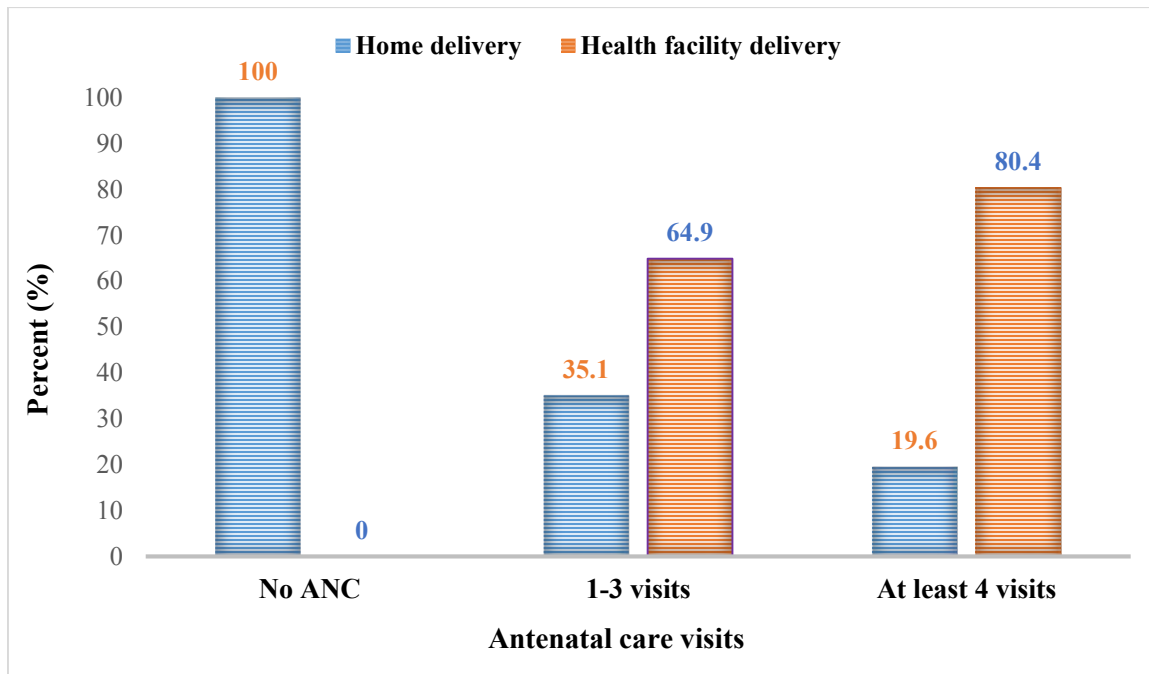


Figure 7 Place of delivery and antenatal care visits among mothers in Konso Woreda, Southern Ethiopia, March 2016

Our findings reveals that institutional delivery increased with increasing number of antenatal care visits. On the other hand, with increased number of antenatal visit, the proportion of mothers who gave birth at home was declined. This indicates that place of delivery has a relationship with the frequency of antenatal visits (**Figure 7**).

5.6 Factors associated with antenatal care practice

Table 9 presents the result of bivariate and multivariate logistic regression analysis of some socio-demographic characteristics of the mothers and other variables with antenatal care practice. The result of crude analysis showed a significant difference in antenatal care use between mothers resided in urban and rural kebeles. However, on the multivariate logistic regression analysis this association was not significant [Adjusted OR = 1.57(0.64, 3.87)].

Maternal age was found as an important predictor of antenatal care utilization. The likelihood of receiving ANC at least once was significantly higher for mothers below the age of 25 years [Adjusted OR = 6.88 (2.14, 22.16)] compared to mothers aged 30 years and above.

Possessing the Medias of communications (radio/television) also had an influence on the antenatal care service utilization. On bivariate logistic regression, there was a significant relationship between having the Medias of communication and maternal use of antenatal care. Similarly, an adjusted logistic regression analysis presented that mothers who lived in the household not possessing at least one of the two Medias of communication [Adjusted OR = 0.13 (0.05, 0.31)] were less likely to visit antenatal clinics than their counter parts.

Distance to the nearest health facility (in hours) from the residence is another significant factor that influenced antenatal care practice during last pregnancy. Mothers who lived at a walking distance of one hour [Adjusted OR = 3.48 (1.41, 8.62)] from the nearest health institutions had about 3.48 times higher odds of antenatal care practice relative to those lived at a walking distance (in hours) of more than an hour.

Similar to the result of bivariate logistic regression analysis, an adjusted analysis presented that mothers who had not planned their last pregnancy [Adjusted OR = 0.07 (0.03, 0.15)] were less likely to receive antenatal care during their last pregnancy than those who had planned.

Table 9 Bivariate and multivariate logistic regression analysis of antenatal care practice among mothers in Konso Woreda, Southern Ethiopia, March 2016 (n= 865)

Predictors¹	Attended ANC n (%)	Not attended ANC n (%)	Crude OR (95% CI)	Adjusted OR (95% CI)
Residence				
Urban	269(92.8)	21(7.2)	3.97 (2.45, 6.44)	1.57 (0.64, 3.87)
Rural	439(76.3)	136(23.7)	1	1
Age at interview				
< 25 years	309(98.1)	6(1.9)	30.66 (12.71, 73.94)	6.88 (2.14, 22.16)
25-29 years	195(84.8)	35(15.2)		3.26 (1.49, 7.14)
≥ 30 years	84(62.7)	50(37.3)	3.32 (2.01, 5.48)	1
Husband education				
No education	288(66.8)	143(33.2)	0.24 (0.06, 0.01)	0.13 (0.014, 1.26)
Primary and secondary	250(95.8)	11(4.2)	0.27 (0.60, 1.24)	0.45 (0.05, 4.33)
Above secondary	167(98.8)	2(1.2)	1	1
Wealth quintile				
Lowest	177(63.7)	101(36.3)	0.08 (0.04, 0.14)	0.92 (0.32, 2.65)
Medium	218(88.3)	29(11.7)	0.34 (0.17, 0.67)	1.58 (0.49, 5.01)
Highest	287(95.7)	13(4.3)	1	1
Has radio/TV				
No	199(59.1)	138(40.9)	0.05 (0.03, 0.09)	0.13 (0.05, 0.31)
Yes	509(96.4)	19(3.6)	1	1
Walking distance (in hours) to nearest HF				
< 1 hour	603(85.2)	105(14.8)	2.84 (1.92, 4.21)	3.48 (1.41, 8.62)
1-2 hours	105(66.9)	52(33.1)	1	1
Last pregnancy planned				
No	136(50.2)	135(49.8)	0.04 (0.02, 0.06)	0.07 (0.03, 0.15)
Yes	572(96.3)	22(3.7)	1	1

Notes: Bolded values indicate statistically significant associations on adjusted analysis.

*n=679, since 186 of the respondents didn't know their age at interview.

Abbreviations: COR, crude odds ratio; AOR, adjusted odds ratio; CI, confidence interval; HF, health facility; TV, television.

5.7 Factors affecting health facility delivery practice

In bivariate analysis, residence, ownership of mass media, household wealth quintile, family size, walking distance (in hours) to the nearest health facility, pregnancy intention, birth preparedness and complication readiness plan (BPCR), planning to give birth at health facility and provision of delivery care by the nearest health institution were found significantly associated with institutional delivery. However, in the multivariate logistic regression analysis, ownership of communication Medias, family size, walking distance (in hours) to the nearest HF, birth preparedness and complication readiness plan, planning to give birth at health facilities and provision of delivery service by the nearest health facility were identified to be significantly associated with delivery care utilization (**Table 10**).

Ownership of communication media was also found as a significant predictor of institutional delivery, where mothers who lived in households not possessing the communication medias (radio/television) had a lesser likelihood of giving birth at health facilities than those who had at least one of the communication medias [Adjusted OR = 0.45 (0.27, 0.76)].

The result of both bivariate and multivariate logistic regression analysis also revealed a strong association between family size and health facility delivery practice. The odds of institutional delivery among mothers with family size of 2-4 was about 2.36 times higher than for mothers having a family members of 5 and above [Adjusted OR = 2.36 (1.44, 3.87)].

There was a statistically significant association between walking distance (in hours) to the nearest health facility and delivery care utilization. Mothers who lived at a walking distance of less than one hour from the nearest health facility had 2.32 times higher odds of giving birth at health facilities than those who walked more than one hour to the health facility proximal to their residence [Adjusted OR = 2.32 (1.16, 4.62)].

Compared with mother who had planned for birth preparedness and complication readiness, those not planned for BPCR had lesser likelihood of using health institutions during childbirth [Adjusted OR = 0.12 (0.07, 0.21)]. Similarly, the odds of health facility delivery practice was lesser for mothers who had not planned to give birth at health institution than those who had planned [Adjusted OR = 0.03 (0.01, 0.10)].

Provision of delivery care service by the health facility nearest to the residence was also found to be an independent predictor of institutional delivery. Mothers who resided closer to the health facilities that provided delivery care had more than three times higher odds of having their birth took place at health facilities than for those whose nearest health institutions didn't provide delivery care service [Adjusted OR = 3.13 (1.62, 6.07)]. Relative to mothers with highest household monthly income, mothers in the households with lowest monthly income were less likely to use health institutions for birthing [Adjusted OR = 0.45 (0.23, 0.96)].

Table 10 Bivariate and multivariate logistic regression analysis of institutional delivery among mothers in Konso Woreda, Southern Ethiopia, March 2016 (n= 865)

Predictors ¹	Institutional delivery n (%)	Home delivery n (%)	Crude OR (95% CI)	Adjusted OR (95% CI)
Residence				
Urban	231(79.7)	59(20.3)	3.90 (2.81, 5.42)	1.72 (0.90, 3.28)
Rural	288(50.1)	287(49.9)	1	1
Has radio/TV				
No	107(31.8)	230(68.2)	0.13 (0.09, 0.18)	0.45 (0.27, 0.76)
Yes	412(78.0)	116(22.0)	1	1
Wealth quintile				
Lowest	106(38.1)	172(61.9)	0.11 (0.07, 0.16)	0.45 (0.23, 0.96)
Medium	139(56.3)	108(43.7)	0.22 (0.15, 0.33)	0.69 (0.37, 1.27)
Highest	256(85.3)	44(14.7)	1	1
Family size				
2-4	368(80.0)	92(20.0)	6.73 (4.96, 9.12)	2.36 (1.44, 3.87)
≥ 5	151(37.3)	254(62.7)	1	1
Walking distance to nearest HF				
< 1 hour	448(63.3)	260(36.7)	2.09 (1.47, 2.96)	2.32 (1.16, 4.62)
1-2 hours	71(45.2)	86(54.8)	1	1
Pregnancy planned				
No	89(32.8)	182(67.2)	0.19 (0.14, 0.26)	1.07 (0.59, 1.9)
Yes	430(72.4)	164(27.6)	1	1
Planned for BPCR				
No	55(16.7)	275(83.3)	0.03 (0.02, 0.05)	0.12 (0.07, 0.21)
Yes	464(86.7)	71(13.3)	1	1

Planned to give birth at HF				
No	3(1.3)	224(98.7)	0.003 (0.001, 0.01)	0.03 (0.01, 0.10)
Yes	516(80.9)	122(19.1)	1	1
Nearest HF provides delivery care				
Yes				
No	449(65.4)	238(34.6)	2.91 (2.07, 4.09)	3.13 (1.62, 6.07)
	70(39.3)	108(60.7)	1	1

Notes: Bolded values indicate statistically significant associations on adjusted analysis.

Abbreviations: COR, crude odds ratio; AOR, adjusted odds ratio; CI, confidence interval; HF, health facility; BPCR, birth preparedness and complication readiness; TV, television.

6. DISCUSSION

This study was intended to assess antenatal care and health facility delivery practice among mothers in Konso Woreda, Southern Ethiopia. Antenatal care and skilled care during childbirth were mentioned among the key strategies in reducing maternal deaths as timely management and treatment of pregnancy and intrapartum complications can make the difference between life and death [3, 11]. Therefore, investigating their levels and determinants would provide an evidence for policy direction and basis for programmatic planning. Our analysis of community based, cross-sectional data from mothers who gave birth in one year preceding the survey attempted to identify the levels and determinants of antenatal care and health facility delivery practice.

6.1 Antenatal care practice

The result of this study showed that approximately 8 out of 10 mothers reported attending at least one antenatal care visit during their last pregnancy. However, only 54% of them made the WHO recommended antenatal visits (at least four visits). Even though the proportion of at least one ANC visit was encouraging, the percentage of mothers who made the recommended antenatal visits was low.

The proportion of at least one ANC visit in this study was lower than the findings from the studies in India [24, 34], Kenya [20], Nigeria [38], Nepal [39], and rural Bangladesh [73]. Similarly, the finding of this study was slightly lower than that reported from the studies conducted in Hossaina [17], Holeta town [27], Kombolcha district [42] and Wolaita [16] which was 88%, 87%, 86% and 85% respectively. However, the figure from this study was higher than that reported in other studies conducted in Bangladesh (64.3%) [40] and Dembecha, Ethiopia (57%) [15] and Yem woreda, Ethiopia 28.5% [43]. Some of this discrepancy could be partly explained by difference in the study designs employed by different studies. These differences could also be due to socio-demographic, economic and cultural variations between the population groups under investigation in these studies.

Our finding that 54% of mothers had received at least four antenatal visits was almost similar with that reported in the studies conducted in Nigeria 55% [38], Vietnam 54% [41] and Wolaita, Southern Ethiopia 53% [16]. But, compared with the findings in the studies done in East Delhi 77% [34], Nepal 87% [21] and 80% [39] and Bangladesh 65% [73], the percentage of mothers who attended at least the recommended ANC visits in our study was lower. This variation could be due

to difference in population variables and difference in the distribution of health service infrastructure. On the other hand, the figure was much higher than those found in other studies conducted in India 13.5% [24] and in different parts of Ethiopia 38.7% [17], 38% [42], 34% [27] and 29% [43]. This difference could be partially explained by the fact that the expansion of service delivery points, particularly health posts to the grass root (village) level could have increased the utilization of antenatal care in the study area.

In this study, maternal age at interview was a significant predictor of maternal use of antenatal care during pregnancy, where younger mothers had a higher likelihood of attending antenatal care than older mothers. This might indicate that younger mothers had lesser pregnancy experience and had higher tendency to visit antenatal clinics than older mothers. This finding was consistent with the findings reported in the studies conducted in Nigeria [22] and Nepal [21]. Similarly, several studies in Ethiopia found a decline in the utilization of ANC with an increasing maternal age [15, 27, 42, 47]. However, this finding is not in line with that reported in studies done in Tigray, Ethiopia [14] which reported higher ANC utilization among older women. This variation could be due to the difference in the socio-demographic characteristics of the population under investigation.

Possession of Medias of communication was also found to have a statistically significant relation with antenatal care practice. Our finding is in agreement with that reported in the study conducted in Holeta town, central Ethiopia [27] which might be due to similarity in the study design used by both studies.

The present study showed that, as the walking distance (in hours) to the nearest health facility decreased the likelihood of receiving at least one antenatal care during pregnancy increased. This finding was similar to the that indicated in the studies conducted in Ethiopia, Tigray [14], Kombolcha [43] and Butajira [49]. This relationship could be partly explained due to the fact that as distance to health facility decreased, transportation and road problem may not impose a significant problem so that maternal use of ANC could be increased. Therefore, effort should be taken to make health facilities closer to the community at a reasonable distance.

Our finding that mothers who had not planned their pregnancy had lesser odds of attending antenatal care [Adjusted OR = 0.07 (0.03, 0.15)] was consistent with the study finding reported in different studies [17, 22, 43] which reported a lesser likelihood of ANC utilization among mothers

whose pregnancy was not intended. This finding implies that proper care might not be offered for unplanned pregnancies since they were conceived without intention.

6.2 Health facility delivery practice

Out of the total 865 mothers who gave birth in the year preceding the survey, 60% of them took delivery care at health institutions. This finding indicated that skilled delivery care utilization in the study area was low which may be due to inadequate health care infrastructures and was consistent with the study conducted in Holeta town (60%) [27] but lower than those found in others studies in India [24, 53] and Ethiopia [17, 55]. These difference could be due to the fact that most of the health posts which were near to the community's house, in particular did not provide delivery care as the result of training and equipment gap although they provide antenatal care service. The other reason given to explain this difference might be due to the unpredictable nature of the onset of the labor combined by lack of transportation and poor road network.

The proportion of mothers who gave birth at health facilities in this study was higher compared to the figures reported in the studies conducted in Tanzania 56% [23], Bangladesh 30% [52] and Kenya 17% [20]. Similarly, the finding of this study was higher than those reported in several studies conducted in Ethiopia [18, 30, 47, 56-60]. This difference could be due to the fact that our study was based on recent information of mothers who delivered in the past one year prior to the survey which might be supported by improved delivery care utilization of the mothers in the study area.

Similar to antenatal care practice, skilled delivery care utilization was found to be significantly associated with possessing a communication Medias. In our study, it was revealed that mothers with the households not possessing any of the two communication Medias (radio/TV) were less likely to give birth at health institution. This implies that messages from communication media have a positive influence on using health care services. This finding was consistent with findings reported in other studies in Ethiopia [25, 27].

Distance (in walking hours) to the nearest health institution was also found to have a statistically significant association with health facility delivery practice. This finding was in line with that reported in other studies conducted in Kenya [20], Tanzania [23] and Holeta town, Ethiopia [27] which reported an increased likelihood of institutional delivery with decreasing distance from health facility to residence.

7. STRENGTHS AND LIMITATIONS OF THE STUDY

7.1 Strengths of the study

First, the findings of this study might be generalizable to the woreda. Second, this study has used a structured questionnaire adapted from standard questionnaire after the necessary modification and pre-test was made. Third, the use of bilingual data collectors may increase the quality of the data collected and made the result more valid and the use of statistical methods to control possible confounding factors was also considered as the strength of the study.

7.2 Limitations of the study

This study had some limitations worth mentioning. Firstly, since the study included mothers who gave birth one year preceding the survey, there might be a recall bias which may cause the mothers to respond wrongly during interview. Secondly, social desirability bias which may occur as a result of mothers systematically provided a socially acceptable response during interview.

8. CONCLUSIONS AND RECOMMENDATIONS

8.1 Conclusions

The result of the study revealed that 82.0% of the mothers made at least one ANC visit during pregnancy. However, the percentage of mothers who attended the WHO recommendation of at least four ANC visits was 54.0%. Despite high proportion of at least one antenatal visit, only 60% of the mothers gave birth at health institutions.

Maternal age, possession of communication Medias, walking distance (in hours) to the nearest health facility and pregnancy intention were found to influence the maternal use of antenatal care during pregnancy. On the other hand, the result of this study showed that health facility delivery practice was affected by socio-demographic factors involving possession of communication Medias, household wealth quintile and family size. In addition, walking distance (in hours) to the nearest health facility, planning for birth preparedness and complication readiness and planning to give birth at health facility and provision of delivery care service by the nearest health institution were also identified as the factors determining the utilization of institutional delivery.

8.2 Recommendations

Policy makers and health planners

- Need to recognize the factors affecting antenatal care and health facility delivery practices and incorporate a factor specific interventions during design and planning of health programs.
- Improved access to information for mothers regarding maternal health care which would be imperative should be taken by the government and others concerned stakeholders

Konso woreda health bureau

- Should take an effort to equip health facilities with the capacity to provide maternal health care services, delivery care in particular.
- Emphasis should be given for capacity building (training) for health care providers and HEWs in order to provide a need based quality maternal health care services.

Health extension workers

- Should make efforts to increase community based health education, awareness creation.

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ANNEXES

Annex I: English version Information Sheet

Introduction

Hello, my name is ----- . I am working as data collector for the study being conducted in this community by Mr. Kusse Urmale (BSc in Clinical Nursing), who is studying his master's degree at Addis Ababa University, College of Health Sciences, School of Nursing and Midwifery. I kindly request you to lend me your attention to explain you about the study and being selected as the study participant.

Study Title

“Antenatal care and health facility delivery practice among mothers in Konso Woreda, Southern Ethiopia”

Purpose

This study is intended to assess antenatal care and health facility delivery practice and factors affecting them among mothers who gave birth in the last one year. Therefore, the information obtained from this study may be used by MOH, organizations supporting services in your community, researchers and local health planners for promotion of utilization of antenatal care and health facility delivery care services and prevention of factors influencing their utilization in general. Moreover, the main aim of this study is to write a thesis as a partial requirement for the fulfillment of Degree of Master's program in Maternity and Reproductive Health Nursing.

Procedure and duration

First of all, you were selected by lottery method. I will be interviewing you using a questionnaire to provide me with pertinent data about antenatal care and health facility delivery care for recent birth that is helpful for the study. There are about 73 questions to answer where I will fill the questionnaire by interviewing you. The interview will take about 20-30 minutes, so I kindly request you to spare me this time for the interview.

Risks

The risks of being participating in this study are very minimal, but only taking few minutes from your time. Other than this the interview will not cause any physical harm on you and the community.

Benefit

There would not be any direct payment for participating in this study. But the findings from this research may reveal important information for the local health planners.

Confidentiality

The information that you provide us will be confidential. There will be no information that will identify you and your organization. The findings of the study will be general for the study population and will not reflect anything particular of individual persons or housing. The questioner will be coded to exclude showing names; no references will be made in oral or written reports that could link participants to the research.

Rights

Participation in this study is fully voluntary. You have the right to declare for your organization to participate in this study. You may refuse to answer any question or choose to stop the interview at any time. However, we hope you will answer the questions, which will benefit the services you provide and the nation.

Contact address

If there are any questions or enquires any time about the study, please contact and speak to principal investigator. Name: **Kusse Urmale**, Phone number: **09 1615 7088** or **09 6014 3231** and Email: kussesinbo@gmail.com.

Annex II: Statement of Consent (English version)

I have read (was read to me) the participant information sheet. I have clearly understood the purpose of the research, the procedure, risks and benefits, issues of confidentiality, rights of participating and contact address for any queries. I have given the opportunity to ask questions for things that may have been unclear. I was informed that I have the right to withdraw from the study at any time or not to answer any question that I do not want. Therefore, I declare my voluntary consent to participate in this study with my initials (signature) as indicated below.

Participant's signature _____ date ____ / ____ / 2008

Interviewer's name and signature _____ date ____ / ____ / 2008

May I begin the interview? **Yes**

No

Annex III: English version questionnaire

Part I: Socio-demographic and economic information

	Question	Response	Code
101	Questionnaire code	<input type="text"/>	A1
102	Name of the Kebele	-----	A2
103	Village's/Ketena's name/number	-----	A3
104	Household code	<input type="text"/>	A4
105	Date of interview (in Ethiopian calender)	<input type="text"/> (Day/month/year)	A5
106	Where is your place of residence?	1. Urban 2. Rural	A6
107	How old were you at your last birthday?	<input type="text"/> (in years) 98. Don't know	A7
108	How old were you at your marriage?	<input type="text"/> (in years) 98. Don't know	A8
109	What is your educational level?	1. Unable to read and write 2. Able to read and write 3. 1-4 grade 4. 5-8 grade 5. 9-10 grade 6. 11-12 grade 7. College/university student 8. Under graduate/Post graduate degree 88. Refused	A9
110	What is your husband's educational level?	1. Unable to read and write 2. Able to read and write 3. 1-4 grade 4. 5-8 grade 5. 9-10 grade 6. 11-12 grade 7. College/university student 8. Post graduate degree 88. Refused	A10
111	What is your ethnicity?	1. Konso 2. Wolaita 3. Gamo 4. Tigre 5. Oromo 6. Amhara 7. Other (please specify) ----- 88. Refused	A11
112	What is your marital status?	1. Single 2. Cohabiting 3. Married 4. Divorced 5. Widowed	A12

		88. Refused	
113	What is your religion?	1. Protestant 2. Orthodox 3. Catholic 4. Muslim 5. Other (please specify) ----- 88. Refused	A13
114	What is your occupation in the last one year?	1. Farmer 2. House wife 3. Merchant 4. Civil servant 5. Daily laborer 6. Unemployed 7. NGO employee 8. Unpaid employee 9. House maid 10. Pensioner 11. Other (please specify) ----- 88. Refused	A14
115	What is your husband's occupation in the last one year?	1. Farmer 2. Merchant 3. Civil servant 4. Daily laborer 5. Unemployed 6. NGO employee 7. Unpaid employee 8. Pensioner 9. Other (please specify) ----- 88. Refused	A15
116	Do you have monthly income?	1. Yes 2. No 3. I don't want to tell	A16
117	Taking the past year, how much is the average monthly earnings of your household?	┌───┬───┬───┬───┬───┬───┬───┬───┬───┬───┐ (in birr) 88. Refused	A17
118	If you don't know the amount, please give an estimate of your household assets if I read some options to you.	1. ┌───┬───┐ Goats 2. ┌───┬───┐ Cattles 3. ┌───┬───┐ Sheep 4. Other (please specify) ----- 88. Refused	A18a A18b A18c A18d A18e
119	Family size (in number)	┌───┬───┐ (in number)	A19
120	Do you have radio/television?	1. Yes 2. No	A20

Part II: Obstetric Information

	Question	Response	Code
201	How old were you at your 1 st pregnancy?	<input type="text"/> (in years) 98. Don't know	B1
202	How old were you at your last pregnancy?	1. <input type="text"/> (in years) 98. Don't know	B2
203	How many pregnancies have you had in your life? (including the recent birth)	<input type="text"/> (in number) 88. Refused	B3
204	What were the outcomes of all pregnancies you have had? (Ask for each question and put numbers on the space provided.)		
	How many of them are alive ?	<input type="text"/> (in number)	B4a
	How many of them were abortion ?	<input type="text"/> (in number)	B4b
	How many of them were still birth ?	<input type="text"/> (in number)	B4c
	How many of them were died within 7days ?	<input type="text"/> (in number)	B4d
	How many of them were died b/n 7days & 1 year ?	<input type="text"/> (in number)	B4e
	How many of them were survived to greater than one year ?	<input type="text"/> (in number)	B4f
	Other (please specify)	-----	B4g
205	How many sons and daughters do you have currently?	<input type="text"/> Sons (in number) <input type="text"/> Daughters (in number)	B5a B5b
206	When was your last pregnancy?	<input type="text"/> months back	B6
207	Was the pregnancy planned?	1. Yes 2. No	B7
208	Did you receive antenatal care for your last pregnancy?	1. Yes 2. No... If No, go to B20	B8
209	If 'YES' for Q208, why did you attend ANC for your recent pregnancy? (Participants can provide more than one responses)	1. I was ill 2. In order to take medication 3. Health facility closer to residence 4. Husband supported me 5. Good quality of the services provided by health facilities 6. In order to know my health status 7. In order to know health status of the fetus 8. Other (please specify) -----	B9a B9b B9c B9d B9e B9f B9g B9h
210	If you attended ANC, in which health facility did you attend it?	1. Hospital 2. Health center 3. Health post 4. Private clinic 5. Other (please specify) -----	B10

211	If you attended ANC, by whom did you see during your ANC visit?	1. Physician 2. Health officer 3. Nurse 4. HEW 5. Other (please specify) -----	B11
212	How many months pregnant were you when you first receive antenatal care for last pregnancy?	<input type="text"/> (in months) 98. Do not know	B12
213	During your first antenatal visit, did health care provider advise you to attend the remaining follow-up visits?	1. Yes 2. No 3. Do not remember	B13
214	How many times did you visit ANC during your last pregnancy?	<input type="text"/> (in number) 98. Do not know	B14
215	During ANC visits of your last pregnancy, were any of the following done at least once as a part of your antenatal care?		
	Were you weighed ?	1. Yes 2. No	B15a
	Was your height measured?	1. Yes 2. No	B15b
	Was your blood pressure measured?	1. Yes 2. No	B15c
	Did you give a urine sample ?	1. Yes 2. No	B15d
	Did you give a blood sample ?	1. Yes 2. No	B15e
	Was general physical examination done?	1. Yes 2. No	B15f
	Were you informed about danger sign of pregnancy ?	1. Yes 2. No	B15g
216	During antenatal care visits, were you given an injection on the arm?	1. Yes 2. No..... If No, go to B18	B16
217	If 'YES' for Q216 , how many times did you get this tetanus injection?	<input type="text"/> (in number) 98. Do not know	B17
218	Was your husband visited health facility with you during your ANC visits of your last pregnancy?	1. Yes 2. No If No, go to B21	B18
219	If 'YES' for Q218 , for how many times did your husband visited HF with you?	<input type="text"/> (in number) 98. Do not know	B19

220	<p>If ‘NO’ for Q208, why didn’t you attend ANC for your last pregnancy?</p> <p>(Participants can provide more than one responses)</p>	<ol style="list-style-type: none"> 1. I was not ill 2. I was too busy to attend ANC clinic 3. Health facility is far from my residence 4. My husband refused me 5. Afraid of service fee 6. Poor quality of the services provided by HFs 7. I feel shame 8. I don't know importance of ANC 9. Other (please specify) <p>-----</p>	<p>B20a B20b B20c B20d B20e B20f B20g B20h B20i</p>
221	<p>Have you ever attended antenatal care in other pregnancies before your last pregnancy?</p>	<ol style="list-style-type: none"> 1. Yes 2. No 3. It is my 1st pregnancy <p style="text-align: right;">} Go to B25</p>	B21
222	<p>If ‘YES’ for Q221, in how many pregnancies?</p>	<p><input type="text"/> (in number)</p> <p>98. Do not remember</p>	B22
223	<p>Were you told about the importance of HF delivery by health care providers during antenatal visits?</p>	<ol style="list-style-type: none"> 1. Yes 2. No 	B23
224	<p>Were you clearly told about the expected date of delivery by health care provider during your antenatal visits?</p>	<ol style="list-style-type: none"> 1. Yes 2. No 	B24
225	<p>Are you willing to attend ANC visit at health facility in the future?</p>	<ol style="list-style-type: none"> 1. Yes 2. No 	B25
226	<p>Where did you deliver your last baby?</p>	<ol style="list-style-type: none"> 1. Home 2. Hospital 3. Health center 4. Private clinic 5. Health post 6. Other (please specify) <p style="text-align: right;">} Go to B28</p> <p>-----</p>	B26
227	<p>Why did you prefer to deliver at home? (Ask for those delivered at home only)</p> <p>(Participants can provide more than one responses)</p>	<ol style="list-style-type: none"> 1. Too much cost of HFs 2. Facility not open regularly 3. Facility too far 4. Poor quality of service in HFs 5. No female provider at HFs 6. Husband not allow to go HF 7. Need to be with relatives 8. Unwelcoming approach of health workers 9. Presence of TBAs 10. Labor was smooth and short 11. Previous HDs was normal 12. Lack of accompanies 13. I was told my pregnancy is normal 14. Lack of transportation 15. Other (please specify) 	<p>B27a B27b B27c B27d B27e B27f B27g B27h B27i B27j B27k B27l B27m B27n B27o</p>

228	Why did you prefer to deliver at Health facility? (Ask for those delivered at health institutions only) (Participants can provide more than one responses)	1. HF was near to me 2. Need better service 3. Previous better outcome with delivering at HF 4. I was told to deliver at health facilities 5. Difficult labor 6. Bad outcome with previous HD 7. Other (please specify) -----	B28a B28b B28c B28d B28e B28f B28g
229	What was the mode of your last delivery?	1. Spontaneous vaginal delivery 2. Instrumental delivery 3. Cesarean section 4. I do not remember 5. Other (please specify) -----	B29
230	Who assisted your last childbirth? (Participants can provide more than one responses)	1. Physician 2. Health officer 3. Nurse 4. Health extension workers 5. Trained TBA 6. Untrained TBA 7. My mother 8. Mother-in-law 9. Husband 10. No-body 11. Other (please specify) -----	B30a B30b B30c B30d B30e B30f B30g B30h B30i B30j B30k
231	What was the condition of your last baby after birth?	1. Live birth 2. Live birth but died soon after 3. Died before seven (7) days 4. Still birth 5. Other (please specify) -----	B31
232	Did you encounter any health problems during labor, delivery and immediately after birth during your last delivery?	1. Yes 2. No 3. Don't remember } Go to B37	B32
233	If 'YES' for Q232, what were the problems? (Participants can provide more than one responses)	1. Excessive Vaginal bleeding 2. Prolonged labor (>12 hrs.) 3. Retained placenta (>1hr) 4. Inability to control urine/faces/both 5. Mal-presentation 6. Fetal death 7. Early rupture of membrane 8. Loss of consciousness 9. Other (please specify) -----	B33a B33b B33c B33d B33e B33f B33g B33h B33i
234	If 'YES' for Q232, what measures were taken to alleviate the problem?	1. Taken to health facility 2. Took traditional medicine	B34

		3. Consulted TBA 4. No action taken 5. Other (please specify) -----	
235	If you were taken to HF, were you referred further to other health facility?	1. Yes 2. No..... If No, go to B37	B35
236	What mode of transport did you use to reach the health facility?	1. On foot 2. On the back of donkey 3. Local stretcher 4. Rented car 5. Ambulance 6. Other (please specify) -----	B36
237	According to your birth order, where does the last baby belong?	<input type="text"/> (in number)	B37
238	What is the birth interval for the last two pregnancies?	<input type="text"/> (in months) 77. It is my first birth	B38
239	Were you planned to give birth at HF for your last pregnancy?	1. Yes 2. No	B39
240	Did you plan for birth preparedness and complication readiness during your last pregnancy?	1. Yes 2. No	B40
241	Have you ever given birth at HF before your last birth?	1. Yes 2. No 3. It is my first birth } Go to B43	B41
242	If 'YES' for Q241 , in how many pregnancies?	<input type="text"/> (in number)	B42
243	Are you willing to deliver at health facility in the future?	1. Yes 2. No	B43

Part III: Women Health Service Utilization and Women Decision Making Power

Question		Response	Code
301	How long it takes to reach the nearest health facility from your home?	<input type="text"/> walking (in minutes)	C1
302	What type of health facility is it?	1. Hospital 2. Health center 3. Health post 4. Private clinic 5. Other (please specify) -----	C2
303	Does the health facility provide delivery care?	1. Yes 2. No 3. Don't know	C3
304	Have you ever used any health facility in your locality?	1. Yes 2. No If No, go to C6	C4

305	If 'YES' for Q305 , what services did you get so far? (Participants can provide more than one responses)	1. ANC 2. Delivery 3. PNC 4. Immunization 5. Family planning 6. Curative services 7. Other (please specify) -----	C5a C5b C5c C5d C5e C5f C5g
306	If 'NO' for Q305 , what are the reasons? (Participants can provide more than one responses)	1. Facility too far 2. I was not seriously ill 3. High cost of facilities 4. It is culturally prohibited 5. Presence of traditional healers 6. I was too busy with HHs tasks 7. Other (please specify) -----	C6a C6b C6c C6d C6e C6f C6g
307	Have you ever given births at HFs in your locality?	1. Yes 2. No 3. It is my first child	C7
308	Who decides your health service utilization?	1. Myself 2. Me and my husband 3. My husband only 4. My relatives 5. Other (please specify) -----	C8
309	Who decides place for your child birth?	a. Myself b. Me and my husband c. My husband only d. My relatives e. Other (please specify) -----	C9
310	Who decides about whom would attend your delivery?	1. Myself 2. Me and my husband 3. My husband only 4. My relatives 5. Other (please specify) -----	C10

Thank You!

Annex IV: Amharic version Information Sheet

የመረጃ ቅጽ መግቢያ

ጤና ይስጥልኝ፣ ስሜ -----ይባላል። እኔ በአዲስ አበባ ዩኒቨርሲቲ ጤና ሳይንስ ኮሌጅ በነርስንግ እና ሚዲካል ስራ ት/ቤት የድህረ ምረቃ ትምህርቱን ለምክታተለው ኩሴ ኡርማሌ (BSc ነርስ) በዚህ መንደር በምካሄደው ጥናት እንደ መረጃ ሰብሳቢ ሆኜ እየሰራሁ ነው። ስለዚህ ስለጥናቱ እና እርሰዎ የተመረጡበትን ምክንያት ስገልጽሎት በጽሞና እንዲከታተሉኝ በታላቅ አክብሮት አጠይቆታለሁ።

የጥናቱ ርዕስ

በደቡብ እትዮጵያ፣ በኮንሶ ወረዳ የእናቶች የቅድመ ወሊድ ምርመራ የመከታተል እና በጤና ተቋማት የመወለድ ልምድ

የጥናቱ ዓላማ

ይዚህ ጥናት ዓላማ ባለፈው አንድ ዓመት ውስጥ ልጅ የወለዱ የእናቶች የቅድመ ወሊድ ምርመራ ክትትል እና በጤና ተቋማት የመወለድ ልምድን እና ለነዚህ የጤና አገልግሎቶችን ልምድ እንቅፋት የሆኑ ነገሮችን ለማወቅ የሚረዳ ሲሆን በዚህ ጥናት የሚገኘው ውጤትም ለጤና ጢባቃ ሚኒስቴር ፣ ለድጋፍ ሰጪ ድርጅቶች፣ ለጥናት ባለሙያዎች እና ለአካባቢው የጤና እቅድ አወጭ አካላት መረጃው ከደረሰባቸው በኋላ ጥናቱን ውጤት አስመልክተው ለበለጠ ዕቅድ ለማቀድ ይጠቅማቸዋል። ከዚህም በላይ የጥናት ዋና ዓላማ በእናቶች እና ስነተዋልዶ ጤና ነርስንግ ለሁለተኛ ዲግሪ በከፊል ለማሟላት የምያስፈልግ የመመረቂያ ጥናታዊ ጽሁፍ ለማቅረብ ነው።

የጥናቱ ሂደት እና ጊዜ

በመጀመሪያ እርሶ የተመረጡት በዕጣ ነው። አሁን የምጠይቁት በቅርብ ጊዜ ለወለዱት ልጅ የቅድመ ወሊድ እና የወሊድ ጤና አገልግሎት አጠቃቀም ልምድን በተመለከተ ጥናቱን የምረዳ ትክክለኛውን መረጃ እንድሰጡኝ ነው። ጥያቄዎቹ 73 ሲሆኑ ጠቅላላ 20-30 ደቂቃ ሊፈጁ ይችላሉ እናም መጠይቁን የምሞላው ጥያቄዎቹን እየጠየኩ ነው። ስለሆነም ይህንን መረጃ ለመስጠት ጊዜዎትን በመስጠት እንድትባባሩን በአክብሮት አጠይቃለሁ።

ጉዳት

በዚህ ጥናት በመሳተፍዎ ያለው ጉዳት በጣም አነስተኛ ነው። ከአረፍት ሰዓቶ ላይ ጥቂት ደቂቃ ልውሰድ ይችላል። ከዚህ በተረፈ ጥናቱ በእርሶም ሆነ በህብረተሰብ ላይ ምንም ጉዳት አያደርስም።

ጥቅም

በዚህ ጥናት በመሳተፍዎ ቀጥተኛ ክፍያ ላያገኙ ይችላሉ ግን የጥናቱ ውጤት ለአካባቢው የጤና እቅድ አወጭ አካላት መረጃው ጠቃም መረጃ ልሰጥ ይችላል።

ምስጢር አጠባበቅ

ለሚሰጡን መረጃ ሁሉ ምስጢርነቱ የተጠበቀ ነው። ለዚህም አርሶነትን እና ቤትን የሚገልጽ ምንም ነገር የለም። የጥናቱ ውጤት ለግለሰብ ወይም ደግሞ ለቤት ብቻ ሳይሆን ለአጠቃላይ ህብረተሰብ የሚውል ይሆናል። ጥያቄው በምስጢር ፅሁፍ ስለሆነ ምንም የእርሶን መልስ ከአረሶ ጋር በቃል ወይም በጽሁፍ የሚያያይዝ ነገር አይኖርም።

የተሳታፊው ሙብት

በዚህ ጥናት ለመሳተፍ ሙሉ በሙሉ በፈቃደኝነት ነው። በዚህ ጥናት መሳተፍዎን ለቤትዎ የመግለጽ ሙብት አለዎት። ማንኛውም ጥያቄ አለመመለስ ይችላሉ ወይም ለመሳተፍ ካልፈለጉ ደግሞ በማንኛውም ጊዜ ራስዎን ከጥናቱ ማግለል (ማቋረጥ) ይችላሉ። ሆኖም ግን ለእርሶ እና ለህዝብ ጥቅም ስሉ ጥናቱ ላይ እንደምሳተፉ ተስፋ እናደርጋለን።

አድራሻ

ጥናቱን በተመለከተ ማንኛውም ጥያቄ ካለዎት በየትኛውም ሰዓት የጥናቱን መሪ በምክታተለው አድራሻ ማግኘትና ማነጋገር ይችላሉ። ስም፡ ኩሴ ኡርማሌ፣ ስ.ቁ. 0916157088 ወይም 0960143231 እና Email: kussesinbo@gmail.com.

Annex V: Statement of Consent (Amharic version)

የስምምነት ማረጋገጫ ፎርም

የተሳታፊው መረጃ ፎርም አንብቤዋለሁ (ተነበልኛል)። የጥናቱ ዓላማ ፣ ያለውን ጉዳት እና ጥቅም ፣ ምስጢር አጠባበቅ፣ የመሳተፍ እና ያለመሳተፍ መብት እንዲሁም ችግር ካለ (ብፊጠር) ከማን ጋር መገናኘት እንዳለብኝ ሁሉ ተገልጾልኝ ጥያቄ ካለኝ ደግሞ እንድጠይቅ እድል ተሰጥቶኝ በመሀል ደግሞ ጥናቱን ለማቆም ከፈለኩኝ በማንኛውም ጊዜ ከጥናቱ/ከተሳታፊነት/ መውጣት እንደምችል በመጨረሻም መመለስ የማልፈልገውን ጥያቄ አለመመለስ መብት እንዳለኝ ከተረዳሁኝ በኋላ በሙሉ ፈቃደኝነት በዚህ ጥናት ለመሳተፍ የወሰንኩኝ መሆኔን ከዚህ በታች በተቀመጠው ፊርማዬ አረጋግጣለሁ።

የተሳታፊው ፊርማ _____ ቀን ____/____/2008

የመረጃ ሰብሳቢ ስም እና ፊርማ _____ ቀን ____/____/2008

ጥያቄዎችን መጠየቅ ልጀምር? **አዎን** **አይ**

Annex VI: Amharic version questionnaire

መጠይቅ

ክፍል አንድ፤ የተጠያቂው አጠቃላይ የማህበራዊና ኢኮኖሚያዊ መረጃ

ጥያቄ		አማራጭ መልሶች	መለያ
101	የመጠይቁ መለያ ቁጥር	<input type="text"/>	A1
102	የቀበሌወ. ስም	-----	A2
103	የመንደሩ/የቀጠናው ስም/ቁጥር	-----	A3
104	የአባወራወ. መለያ ቁጥር	<input type="text"/>	A4
105	የተጠየቀበት ቀን (በኢትዮጵያ አቆጣጠር)	<input type="text"/> (ቀን/ወር/ዓመት)	A5
106	የእርሶ የመኖሪያ ቦታ የት ነው?	1. ከተማ 2. ገጠር	A6
107	በመጨረሻው ልደትዎ ዕድሜዎ ስንት ነው?	<input type="text"/> (በዓመት) 98. አላወቅም	A7
108	ሲያገቡ ዕድሜዎ ስንት ነበር?	<input type="text"/> (በዓመት) 98. አላወቅም	A8
109	የትምህርት ደረጃዎ ምንድን ነው?	1. ማንበብና መጻፍ የማይችል 2. ማንበብና መጻፍ የሚችል 3. 1-4ኛ ክፍል 4. 5-8ኛ ክፍል 5. 9-10ኛ ክፍል 6. 11-12ኛ ክፍል 7. ኮሌጅ/ዩኒቨርሲቲ 8. የድህረ ምረቃ ዲግሪ 88. መናገር አልፏልግም	A9
110	የባለቤትዎ የትምህርት ደረጃ ምንድን ነው?	1. ማንበብና መጻፍ የማይችል 2. ማንበብና መጻፍ የሚችል 3. 1-4ኛ ክፍል 4. 5-8ኛ ክፍል 5. 9-10 ኛ ክፍል 6. 11-12ኛ ክፍል 7. ኮሌጅ/ዩኒቨርሲቲ 8. የድህረ ምረቃ ዲግሪ 88. መናገር አልፏልግም	A10
111	ብሔርዎ ምንድን ነው?	1. ኮንሶ 2. ወላይታ 3. ጋሞ 4. ትግሬ 5. አሮሞ 6. አማራ 7. ሌላ ካለ (እባክዎትን ይጥቀሱ) -----	A11

		88. መናገር አልፏልግም	
112	የጋብቻ ሁኔታዎ ምንድን ነው?	1. ያላገባች 2. ሳይጋቡ አብረው የሚኖሩ 3. ያገባች 4. አግብታ የፈታች 5. ባልዋ የሞተባት 88. መናገር አልፏልግም	A12
113	ሀይማኖትዎ ምንድን ነው?	1. ፕሮቴስታንት 2. ኦርቶዶክስ 3. ካቶሊክ 4. ሙስሊም 5. ሌላ ካለ (እባክዎትን ይጥቀሱ) ----- 88. መናገር አልፏልግም	A13
114	ባለፈው አንድ ዓመት ውስጥ ስራዎ ምን ነበር?	1. ገበሬ 2. የቤት እመቤት 3. ነጋዴ 4. የመንግስት ሰራተኛ 5. የቀን ሰራተኛ 6. ስራ አጥ 7. የመንግስታዊ ያልሆነ ድርጅት ሰራተኛ 8. ሳይከፈላት/በነጻ የምትሰራ 9. የቤት ሰራተኛ 10. ጡረተኛ 11. ሌላ ካለ (እባክዎትን ይጥቀሱ) ----- 88. መናገር አልፏልግም	A14
115	ባለፈው አንድ ዓመት ውስጥ የባለቤትዎ ስራ ምን ነበር?	1. ገበሬ 2. ነጋዴ 3. የመንግስት ሰራተኛ 4. የቀን ሰራተኛ 5. ስራ አጥ 6. የመንግስታዊ ያልሆነ ድርጅት ሰራተኛ 7. ሳይከፈለው በነጻ የሚሰራ 8. ጡረተኛ 9. ሌላ ካለ (እባክዎትን ይጥቀሱ) ----- 88. መናገር አልፏልግም	A15
116	የወር ገቢ አለዎት?	1. አዎ 2. የለኝም 3. መናገር አልፏልግም	A16
117	ከባለፈው ዓመት ገቢ በመነሳት፣ የቤታችሁ አማካይ ወራዊ ገቢ ስንት ነው?	<input type="text"/> (ቡብር) 88. መናገር አልፏልግም	A17
118	የገቢ መጠኑን የማያውቁ ከሆነ፤ የተወሰኑ ምርጫዎችን ስያነብሎት እባክዎትን የቤተሰብዎን ንብረት በግምት ይገነዘቡ።	1. <input type="text"/> ፍየሎች 2. <input type="text"/> ከብቶች 3. <input type="text"/> በጎች 4. ሌላ ካለ (እባክዎትን ይጥቀሱ) ----- 88. መናገር አልፏልግም	A18a A18b A18c A18d A18e

119	የቤተሰብ ብዛት (በቁጥር) ስንት ነው?	<input type="text"/> (በቁጥር)	A19
120	ራዲዮ/ተሌቪዥን አለዎት?	1. አዎ 2. የለኝም	A20

ክፍል ሁለት: የእርግዝናና የወሊድ ሁኔታን በተመለከተ መጠይቅ

ጥያቄ		አማራጭ መልሶች	መለያ
201	በመጀመሪያ እርግዝናዎ ጊዜ ዕድሜዎ ስንት ነበር?	<input type="text"/> (በዓመት) 98. አላወቅም	B1
202	በመጨረሻ እርግዝናዎ ወቅት እድሜዎ ስንት ነበር?	1. <input type="text"/> (በዓመት) 98. አላወቅም	B2
203	በአጠቃላይ በእድሜዎ ስንት ጊዜ እርግዝዋል? (የአሁኑን ወሊድ ጨመሮ)	<input type="text"/> (በቁጥር) 88. መናገር አልፈልግም	B3
204	የሁሉም የእርግዝናዎ ወጤት ምን ነበር? (እያንዳንዱን ጥያቄ በመጠየቅ ቁጥሩን በተሰጠው ቦታ ይሙሉ)		
	ከነዚህ ውስጥ አሁን በህይወት ያሉ ስንት ናቸው?	<input type="text"/> (በቁጥር)	B4a
	ከነዚህ ውስጥ ወርጃ ስንት ነበር?	<input type="text"/> (በቁጥር)	B4b
	ከነዚህ ውስጥ ሞተው የተወለዱ ስንት ነበሩ?	<input type="text"/> (በቁጥር)	B4c
	ከነዚህ ውስጥ በህይወት ተወልደው በሰባት ቀን ውስጥ የሞቱ ስንት ነበሩ?	<input type="text"/> (በቁጥር)	B4d
	ከነዚህ ውስጥ በህይወት ተወልደው በሰባት ቀንና በአንድ ዓመት መካከል የሞቱ ስንት ነበሩ?	<input type="text"/> (በቁጥር)	B4e
	ከነዚህ ውስጥ በህይወት ተወልደው ከአንድ ዓመት በኋላ የሞቱ ስንት ነበሩ?	<input type="text"/> (በቁጥር)	B4f
	ሌላ ካለ (እባኮዎትን ይጥቀሱ)	-----	B4g
205	አሁን ስንት ወንድ እና ሴት ልጆች አለዎት?	<input type="text"/> ወንዶች (በቁጥር) <input type="text"/> ሰቶች (በቁጥር)	B5a B5b
206	የመጨረሻ እርግዝናዎ መቼ ነበር?	ከ <input type="text"/> ወር በፊት	B6
207	እርግዝናዎ የታቀደ ነበር?	1. አዎ 2. አይደለም	B7
208	የነፍሰጡር /የቅድመ ወሊድ ክትትል/ የጤና ምርመራ ክትትል ለመጨረሻ እርግዝናዎ አድርገው ያዉቃሉ?	1. አዎ 2. አላደረጉም ወደ B20 ሂድ	B8
209	ለጥያቄ 208 መልሱ አዎ ከሆነ፣ የነፍሰጡር ጤና ምርመራ ክትትል ያደረጉበት ምክንያት ምን ነበር? (ተሳታፊዎቹ ከአንድ በላይ መልስ ሊሰጡ ይችላሉ)	1. ታምሜ ስለነበር 2. መድኃኒት ለመውሰድ 3. ጤና ተቋሙ ከምኖርበት ቅርብ ስለሆነ 4. ባለቤቱ ስለበረታታኝ 5. አመቺ አገልግሎት ስለሚሰጥ 6. የራሴን ጤና ሁኔታ ለማወቅ 7. የጽንሱን ጤና ሁኔታ ለማወቅ 8. ሌላ ካለ (እባኮዎትን ይጥቀሱ) -----	B9a B9b B9c B9d B9e B9f B9g B9h
210	የነፍሰጡር ጤና ምርመራ ክትትል አድርገው ከሆነ፣ ከየትኛው የጤና ድርጅት ነው ሲከታተሉ የነበረው?	1. ሆስፒታል 2. ጤና ጣቢያ 3. ጤና ኬላ 4. የግል ክሊኒክ 5. ሌላ ካለ (እባኮዎትን ይጥቀሱ) -----	B10

211	የነፍሰጡር ጤና ምርመራ ከትትል ካደረጉ፣ ምርመራውን ያደረገልዎት ባለሙያ ማን ነው?	1. ዶክተር 2. ጤና መኮንን 3. ነርስ 4. ጤና ኤክስቴንሽን ባለሙያ 5. ሌላ ካለ (እባኮዎትን ይጥቀሱ) -----	B11
212	ለመጨረሻ እርግዝናዎ፣ የመጀመርያውን የነፍሰጡር ጤና ምርመራ ከትትል ያደረጉት በስንተኛው የእርግዝና ወር ነበር?	<input type="text"/> (በወር) 98. አላወቅም	B12
213	የመጀመርያውን የነፍሰጡር ጤና ምርመራ ከትትልዎን በሚያያደርጉበት ጊዜ የቀሩትን የምርመራ ክትትሎች እንዲከታተሉ በጤና ባለሙያ ተመክረው ነበር?	1. አዎ 2. አይደለም 3. አላስታወስም	B13
214	በመጨረሻ እርግዝናዎ በአጠቃላይ ስንት ጊዜ የነፍሰጡር ጤና ምርመራ ከትትል አድርገው ያወቃሉ?	<input type="text"/> (በቁጥር) 98. አላወቅም	B14
215	ከሚከተሉት የነፍሰጡር ጤና ምርመራ ክትትል አገልግሎቶች (የነፍሰጡር ጤና ምርመራ ክትትል እንክብካቤ አካል) ለመጨረሻ እርግዝናዎ ምርመራ ክትትል በሚያደረጉበት ወቅት ቢያንስ አንድ ተደርጎሎት ያወቃሉ?		
	ከብደትዎ ተለክቶ ነበር?	1. አዎ 2. አይደለም	B15a
	ቁመትዎ ተለክቶ ነበር?	1. አዎ 2. አይደለም	B15b
	ደም ግፊትዎ ተለክቶ ነበር?	1. አዎ 2. አይደለም	B15c
	የሽንት ምርመራ ተደርጎሎት ነበር?	1. አዎ 2. አይደለም	B15d
	የደም ምርመራ ተደርጎሎት ነበር?	1. አዎ 2. አይደለም	B15e
	አጠቃላይ የአካል ምርመራ ተደርጎሎት ነበር?	1. አዎ 2. አይደለም	B15f
	በነፍሰጡር ወቅት ሊከሰቱ የሚችሉ አደገኛ ምልክቶች ተነግሮት ነበር?	1. አዎ 2. አይደለም	B15g
216	የነፍሰጡር ጤና ምርመራ ከትትል ሲያደርጉ የመንጋጋ ቆልፍ ክትባት ከንድዎት ላይ ተሰቶት ያወቃሉ?	1. አዎ 2. አላወቅም ወደ B18 ሂዱ	B16
217	ለጥያቄ 216 መልሶ አዎ ከሆነ፣ የመንጋጋ ቆልፍ ክትባት መርፌ በከንድዎ ስንት ጊዜ ተወግተዋል?	<input type="text"/> (በቁጥር) 98. አላወቅም	B17
218	ለመጨረሻ እርግዝናዎ የነፍሰጡር ጤና ምርመራ ክትትል በሚያደርጉበት ወቅት ባለቤትዎ ከእርሶ ጋር ወደ ጤና ተቋም ሄደው ያወቃሉ?	1. አዎ 2. አይደለም ወደ B21 ሂዱ	B18

219	ለጥያቄ 218 መልሶአዎከሆነ፣ ባለቤትዎ ከእርሶ ጋር ወደ ጤና ተቋም የሄዱት ስንት ጊዜ ነው?	<input type="checkbox"/> (በቁጥር) 98. አላወቅም	B19
220	ለጥያቄ 208 መልሶ 'አላደረኩም' ከሆነ፣ የነፍሰጡር ጤና ምርመራ ከትትል ያላደረጉበት ምክንያት ምን ነበር? (ተሳታፊዎቹ ከአንድ በላይ መልስ ሊሰጡ ይችላሉ)	1. ስላላመመኝ 2. ምርመራውን ለመከታተል ጊዜ ስላልነበረኝ 3. ጤና ተቋሙ ከምኖርበት ስለሚርቅ 4. ባለቤቴ ስለተቃወመኝ 5. የአገልግሎት ክፍያውን ፈርቼ 6. ጤና ተቋሙ አመቺ አገልግሎት ስለማይሰጥ 7. አፍረት ተስምቶኝ 8. የክትትሉን ጥቅም ስለማላወቅ 9. ሌላ ካለ (እባክዎትን ይጥቀሱ) -----	B20a B20b B20c B20d B20e B20f B20g B20h B20i
221	ከመጨረሻ እርግዝና በፊት ባሉት እርግዝናዎች የነፍሰጡር ጤና ምርመራ ከትትል አድርገዋል ያወቃሉ?	1. አዎ 2. አላወቅም 3. የመጀመሪያ ልጄ ነው } ወደ B25 ሂዱ	B21
222	ለጥያቄ 221 መልሶ አዎ ከሆነ/የጤና ምርመራ ከትትል ካደረጉ/፣ ለስንት እርግዝናዎ ነው ያደረጉት?	<input type="checkbox"/> (በቁጥር) 98. አላስታወስም	B22
223	የነፍሰጡር ጤና ምርመራ ከትትል በሚያደርጉበት ወቅት፣ በጤና ተቋም ልጅ መወለድ ያለውን ጥቅም በጤና ባለሙያዎች በግልጽ ተነግሮዎት ነበር?	1. አዎ 2. አይደለም	B23
224	የነፍሰጡር ጤና ምርመራ ከትትል በሚያደርጉበት ወቅት፣ ልጅዎን የሚወልዱበትን ቀን (በየትኛው ቀን እንደሚወልዱ) በጤና ባለሙያ በግልጽ ተነግሮዎት ነበር?	1. አዎ 2. አይደለም	B24
225	ለወደፊት በጤና ተቋም የነፍሰጡር ጤና ምርመራ ከትትልን ለማድረግ ፍቃደኛ ነዎት?	1. አዎ 2. አይደለሁም	B25
226	የመጨረሻ ልጅዎን የወለዱት የት ነበር?	1. ቤት 2. ሆስፒታል 3. ጤና ጣቢያ 4. የግል ክልኒክ 5. ጤና ኬላ 6. ሌላ ካለ (እባክዎትን ይጥቀሱ) -----	B26
227	ቤት ለመወለድ የመረጡበት ምክንያት ምንድን ነው? (ቤት የወለዱትን እናቶች ብቻ ይጠይቁ) (ተሳታፊዎቹ ከአንድ በላይ መልስ ሊሰጡ ይችላሉ)	1. የጤና ተቋማት ክፍያ ብዙ ስለሆነ 2. ጤና ተቋማት ሁል ጊዜ ክፍት ስለማይሆኑ 3. ጤና ተቋማት በጣም ሩቅ ስለሆኑ 4. የጤና ተቋማት አገልግሎት ጥራት አነስተኛ ስለሆነ 5. ጤና ተቋማት ወስጥ ቤት ባለሙያ ስለማይኖር 6. ባለቤቴ ጤና ተቋም እንዲሄድ ስላለፈቀደ 7. ዘመዶቹ ባሉበት መወለድ ስለፈለኩ 8. የጤና ባለሙያዎች አቀራረብ ጥሩ ስላልሆነ 9. የልምድ አዋላጆች ስለነበሩ 10. የምጡ ጊዜ አጭር ስለነበረ 11. ከአሁን በፊት ቤት ወልጄ ችግር ስላላጋጠመኝ	B27a B27b B27c B27d B27e B27f B27g B27h B27i B27j B27k

		12. ወደ ጤና ተቋም የሚወሰደኝ ሰው ስላለነበረ 13. እርግዝናዬ ችግር እንደሌለበት ስለተነገረኝ 14. ለመጓጓዣ የትራንፖርት/የገንዘብ/ ችግር ስላጋጠመኝ 15. ሌላ ካለ (እባኮዎትን ይጥቀሱ)	B27l B27m B27n B27o
228	በጤና ተቋም ውስጥ ለመውለድ የመረጡበት ምክንያት ምንድን ነው? (በጤና ተቋማት የወለዱትን እናቶች ብቻ ይጠይቁ) (ተሳታፊዎቹ ከአንድ በላይ መልስ ሊሰጡ ይችላሉ)	1. ጤና ተቋሙ ከምኖርበት ቦታ ቅርብ ስለሆነ 2. የተሻለ እንክብካቤ ለማግኘት ፈልገ 3. ከዚህ በፊት ጤና ተቋም ወልጄ ጥሩ ነገር ስላጋጠመኝ 4. በጤና ተቋም እንድወልድ ስለተነገረኝ 5. የምጥ ችግር ስላጋጠመኝ 6. ከዚህ በፊት ቤት ወልጄ ችግር ስላጋጠመኝ 7. ሌላ ካለ (እባኮዎትን ይጥቀሱ)	B28a B28b B28c B28d B28e B28f B28g
229	የመጨረሻ ልጅዎን የወለዱት በምን መልኩ ነው?	1. በማህጸኔ ያለምንም መሳሪያ 2. በማዋላጃ መሳሪያ 3. በሆዴ በኩል ቀዶ ጥገና ተደርጎልኝ 4. በትክክል አላስታወስም 5. ሌላ ካለ (እባኮዎትን ይጥቀሱ)	B29
230	የመጨረሻ ልጅዎን ሲወልዱ ያገዙት/ ያዋለዱት ሰው ማን ነበር? (ተሳታፊዎቹ ከአንድ በላይ መልስ ሊሰጡ ይችላሉ)	1. ዶክተር 2. ጤና መኮንን 3. ነርስ 4. የጤና ኤክስቴንሽን ባለሙያ 5. የሰለጠነ የልምድ አዋላጅ 6. ያልሰለጠነ የልምድ አዋላጅ 7. እናቴ 8. የባለቤቴ እናት 9. ባለቤቴ 10. ማንም አላገዘኝም 11. ሌላ ካለ (እባኮዎትን ይጥቀሱ)	B30a B30b B30c B30d B30e B30f B30g B30h B30i B30j B30k
231	ለመጨረሻ ጊዜ የወለዱት ህፃን ከወሊድ በኋላ ሁኔታው እንዴት ነበር?	1. በህይወት ነው የተወለደው 2. በህይወት ተወለዶ ወዲያው ሞቷል 3. 7 ቀናት ሳይሞላው ሞቷል 4. ሞቶ ነው የተወለደው 5. ሌላ ካለ (እባኮዎትን ይጥቀሱ)	B31
232	የመጨረሻ ልጅዎን ሲወልዱ በምጥ፣ በወሊድ እና ከወሊድ በኋላ ባሉት አጭር ቀናት ውስጥ የትኛውም ዓይነት የጤና ችግር አጋጥመዎት ነበር?	1. አዎ 2. አላጋጠመኝም 3. አላስታወስም	} ወደ B37 ሂድ
233	ለጥያቄ 232 መልሶ አዎ ከሆነ፣ ያጋጠሞት ችግር ምንድን ነበር? (ተሳታፊዎቹ ከአንድ በላይ መልስ ሊሰጡ ይችላሉ)	1. ከመጠን ያለፈ ደም መፍሰስ 2. የምጥ መዘግየት /ከ12 ሰዓታት በላይ/ 3. የእንግዴልጅ መዘግየት /ከ1 ሰዓት በላይ/ 4. ሽንትና ዓይነ ምድርን መቆጣጠር አለመቻል 5. የጽንሰ አመጣጥ ትክክለኛ አለመሆን 6. የሽል ሞት 7. የሽርት ወ.ሃ ያለጊዜው መፍሰስ 8. ራስን መሳት	

		9. ሌላ ካለ (እባክዎትን ይጥቀሱ) -----	B33i
234	ለጥያቄ 232 መልሶ አዎ ከሆነ፣ ለችግሮቹ የተወሰደው መፍትሄ ምን ነበር?	1. ወደ ጤና ተቋም ተወሰድኩ 2. የባህል መድኃኒት ተጠቀምኩ 3. የልምድ አዋላጅ አማካርኩ 4. ምንም እርምጃ አልተወሰደም 5. ሌላ ካለ (እባክዎትን ይጥቀሱ) -----	B34
235	ወደ ጤና ተቋም ተወሰደው ከሆነ፣ በተጨማሪ ወደ ሌላ ከፍተኛ የጤና ተቋም ተልከው ነበር?	1. አዎ 2. አይደለም..... ወደ B37 ሂድ	B35
236	ወደተላኩበት የጤና ተቋም ለመድረስ የተጠቀሙት መጓጓዣ (ትራንስፖርቴሽን) ምን ነበር?	1. እግር 2. አህያ ጀርባ 3. ቃሬዛ 4. ኪራይ መኪና 5. አምቡላንስ 6. ሌላ ካለ (እባክዎትን ይጥቀሱ) -----	B36
237	በወለዱት ልጆች ቅደም ተከተል መሰረት፣ የመጨረሻ ልጅዎ ስንተኛ ነው?	<input type="checkbox"/> (በቁጥር)	B37
238	በመጨረሻ ሁለት እርግዝናዎ መካከል ያለው የጊዜ ልዩነት በወራት ምን ያህል ነው?	<input type="checkbox"/> (በወራት) 77. የመጀመሪያ ልጅ ነው	B38
239	የመጨረሻ እርግዝናዎን በጤና ተቋም ለመወለድ አቅደው ነበር?	1. አዎ 2. አይደለም	B39
240	በመጨረሻ እርግዝናዎ ጊዜ ለወሊድና ከወሊድ ጋር ተያይዘው ለሚመጡ ችግሮች ተዘጋጅተው አቅደው ነበር?	1. አዎ 2. አይደለም	B40
241	ከመጨረሻዎ ወሊድ በፊት በጤና ተቋም ወልደው ያወቃሉ?	1. አዎ 2. አላወቅም 3. የመጀመሪያ ልጅ ነው } ወደ B43 ሂድ	B41
242	ለጥያቄ 241 መልሶ አዎ ከሆነ (ወልደው ከሆነ) ፣ በምን ያህል እርግዝናዎች?	<input type="checkbox"/> (በቁጥር)	B42
243	ለወደፊት በጤና ተቋም ለመወለድ ፍቃደኛ ነዎት?	1. አዎ 2. አይደለም	B43

ከፍል ሶስት፡ የጤና አገልግሎት አጠቃቀም እና ዉሳኔ ሰጪነት

ጥያቄ	አማራጭ መልሶች	መለያ	
301	በአቅራቢያዎ ያለው የጤና ተቋም ለመድረስ ምን ያህል ሰዓት ይወስዳል?	<input type="checkbox"/> በእግር ጉዞ (በደቂቃ)	C1
302	ምን ዓይነት የጤና ተቋም ነው?	1. ሆስፒታል 2. ጤና ጣቢያ 3. ጤና ኬላ 4. የግል ክሊኒክ 5. ሌላ ካለ (እባክዎትን ይጥቀሱ) -----	C2
303	የጤና ተቋሙ የወሊድ አገልግሎት ይሰጣል?	1. አዎ 2. አይሰጥም 3. አላወቅም	C3

304	ከዚህ በፊት በአቅራቢያዎ ባለዉ የጤና ተቋም ተጠቅመዉ ያዉቃሉ?	1. አዎ 2. አላዉቅም.....ወደ C6 ሂድ	C4
305	ለጥያቄ 305 መልሶ አዎ ከሆነ /ተጠቅመዉት ከሆነ/፣ እስከአሁን ምን ዓይነት አገልግሎቶችን አግኝተዋል? (ተሳታፊዎቹ ከአንድ በላይ መልስ ሊሰጡ ይችላሉ)	1. የቅድመ ወሊድ ክትትል 2. የወሊድ አገልግሎት 3. የድህረ ወሊድ አገልግሎት 4. ክትባት 5. የቤተሰብ ምጣኔ አገልግሎት 6. የፈወሰ ህክምና አገልግሎት 7. ሌላ ካለ (እባኮዎትን ይጥቀሱ) -----	C5a C5b C5c C5d C5e C5f C5g
306	ለጥያቄ 305 መልሶ አይደለም ከሆነ /ተጠቅመዉ የማያዉቁ ከሆነ/፣ ምክንያቶቹ ምድን ናቸዉ? (ተሳታፊዎቹ ከአንድ በላይ መልስ ሊሰጡ ይችላሉ)	1. ተቋሙ በጣም ስለራቀኝ 2. በጣም ስላልታመምኩ 3. ክፍያዉ በጣም ወድ ስለሆነ 4. በባህላችን ስለሚከለከል 5. የባህል ሀኪሞች ስላሉ 6. የቤት ዉስጥ ስራ ስለበዛብኝ 7. ሌላ ካለ (እባኮዎትን ይጥቀሱ) -----	C6a C6b C6c C6d C6e C6f C6g
307	ከዚህ በፊት በአቅራቢያዎ ባለዉ የጤና ተቋም ወልደዉ ያዉቃሉ?	1. አዎ 2. አላዉቅም 3. የመጀመሪያ ልጄ ነዉ	C7
308	የጤና አገልግሎት አጠቃቀምዎትን የሚወስነዉ ማን ነዉ?	1. ራሴ 2. እኔና ባለቤቴ 3. ባለቤቴ ብቻ 4. ዘመዶቼ 5. ሌላ ካለ (እባኮዎትን ይጥቀሱ) -----	C8
309	በወሊድ ወቅት የት መዉለድ እንዳለብት የሚወስነዉ ማን ነዉ?	1. ራሴ 2. እኔና ባለቤቴ 3. ባለቤቴ ብቻ 4. ዘመዶቼ 5. ሌላ ካለ (እባኮዎትን ይጥቀሱ) -----	C9
310	የሚያዋልዶትን ሰዉ ማን መሆን እንዳለብት የሚወስነዉ ማን ነዉ?	1. ራሴ 2. እኔና ባለቤቴ 3. ባለቤቴ ብቻ 4. ዘመዶቼ 5. ሌላ ካለ (እባኮዎትን ይጥቀሱ) -----	C10

እናመሰግናለን!

Annex VII: Konso Version Information Sheet

ዋርቃታ አመረጃ

ኩላይሱማ

ናካይታዌ፣ ማኸዮ -----ከዳም፡፡ አንት ጥናተኛ አረ ካንታሲታ እናስ ኩሴ ኡርማሌ (BSc ነርስ) ከዳማ አዲስ አበባ ዩኒቨርሲቲ ጤና ሳይንስ ኮሌጅ ትካ ታማሪታ አነርስንግ ካ አሚድዋይሬሪት ማስተርስታ ታማራትን ኮዳምቶኤን አካ መረጃ ፖህምፓይታ/ስፕሪት ምና ኮደ ካ ኮን፡፡ ሰማላ ቆታ ጥናተኛት ደሳ ካማ አት ምክንያታ ማላ ረኽምተ/ማራጣምተ አን ከለሎዩ አካ ድክዳይታን አና ዳካይሳቶኤ ኡልፊናታ አኩታትን ከካሳን፡፡

ኩታ ጥናተኛት

“ደቡብ እትዮጵያዩ፣ ዋራዳ ኾንሶ ካራዩ ኮሎማ አካይዳ አምርመራ አካንታ ካማ አትካ አክመታ ካራ እና ኻይታ”

ዓላማ ጥናተኛት

ዓላማ ጥናተኛት ቆታ ኮሎማ ምርመራ አካንታ ካ አትካ አክመታት አና ኻይታ አካይዳ ፓሮስ ታካ ታፓረ ካራ ሄላ ኻይት ካማ ዋ ኮሎማስነት ከሀይታ ኮደ ኡፕናታኤ ቃርቃርታ፡፡ ወጤታ አጥናተኛ አረ ከቶፓ አካቶ ማኒስቴረት አናካይታ ቶይትንቶኤ፣ ድርጅተዋ አቃርቃርሳ ኮናትእ፣ አራ ጥናተታ ኮናትእ ካማ አራ እቅደታ ናካይታ አካካፓፕታ አረ ከቶኤ ሶክኖቲክ አ መረጃ አሾና ቃራ ካዮ ካማዩ፣ ወጤታ አጥናተኛት ቃራ ኻማነ አቃረን ቃፕቶኤ እቅደታ አቃዳታኤ አሾና ታቃም፡፡ አሰ ቃራን ቃፕቶ ዓላማ አጥናተኛት አኩታ ቆታ ናካይታ አካይዳ ካ አኻይት ደሳ ዲግሪታ ሳማታ አካታኤ ጸፊታ ጥናተታ አምረቃ ቆቶታን እማካ ፓርፓኾስንቶ ደሀሳ፡፡

አንታ ጥናተኛት ካ ከሰታድ

ፓዮታ ቃራዩ አት እጣነ ማራጣምተ/ረኽምተ፡፡ አማ ዋን ከ ካሳዳ እናሰን/ታእሞስ አደሀዩንታ ኻይተት ቆታ ምርመራ አንታት ካማ ቆታ ትካ አክመታት ኻይታት ደሳ ጥናተኛ ቃርቃራኤ አካ መረጃ ልክታን አና ደሰ ማላ፡፡ ሙሎታኤ ካሱማ 73 ኮድን፣ ናማ ታካ ካሳታኤ ሀካ ታቀቃ 20-30 ፕራ እኤታንሳ ካማ ካሱማዳሰን ነፉ ከዩ ካሳታንን እማካ፡፡ አኩድቶማ መረጃስ አረኾ አና ዳሳኤ አካ ከሰታዩት ዳሳን እኖ ታፓፓርቶ አልፈናታነ ከ ካሳን፡፡

ኩዳተታ

ጥናተኛ አረ ከቶፓ ታሳታፋ ኩዳተታ አቃፕቶ አካታ ማል ሻክ፡፡ ሳተታ ነሱማ ቃራ ታቀቃ ሻካይታ ከቃራ ቀዳ እኤታንሳ፡፡አሰ ከላ ሀስተ ጥናተኛ ከ ከድተ ቶክ ህዝፔታ ቃራ ራኮታ ታካ ነፉ አንደአሰ፡፡

ትቅመታ

ጥናተኛ አረ ከቶፓ ታሳታፋ ማላ ዋ ከ ኻፋላማ እንቻን፡፡ ማኾሪ ወጤታ አጥናተኛት አራ አካፓፓስ አረ ከቶ እቅደታ ሶክንቶኤ መረጃ አታቃሞ ዳሳ፡፡

ቶይቱማ አምስጢረታ

ምስጢረታ አመረጃ አካኖ ዳንቶ ፕሳት አቶይታምተ፡፡ ሰማላ ዋ አይኑማይተታይት ካማ ቆታ ትካይትት ደሳ ከ ኡፕናይሻ ታካ ነፉ እንቻን፡፡ ወጤታ አጥናተኛ ትቅመታ አናማ ታካቲ ቶክ አቶላ ታካት እንክንን ማልይ ትቃመታ አናማ ፕሳት (አህዝፕታ) ቃራ ናካይታ፡፡ ካሱማዳ ካሱ ቆታ ጸፊታ ምስጢረታትን ኮደን ማላ ዌ ታካን አቃለታን ቶክ ጸፊታን ከ ካማ ማልሰታይት ቀዳ ካ አልን ካይ ታካ ነፉ እንቻዳን፡፡

ማፕተታ አናማ ታሳታፍኖቲ

ጥናተኛ አረ ከቶፓ ታሳታፋኤ ሙሎታ ሙሎታኤ ፈቃታ ካሳን፡፡ ጥናተኛ አረ ከቶፓ ታሳታፋይት ቶላይሽና ኡፕናሳኤ ማፕተታ ቃፕታ፡፡ ካሱማ አክን አክንን አርሳ ድሳ እኤታንሳ ቶክ አን ታሳታፋ አፋናክንንይ ከሰታ አከ አክቶፓ አለ ድሳ እኤታንሳ፡፡ አኮድቶማ ቆታ ትቅመታይት ካ ትቅመታ ህዝፔታ ማላ አካ ጥናተኛታ ታሳታፍቶኤ ኻሳን ኮንና፡፡

አድራሻ

ቆታ ጥናተኛት ደሳ ካሱማ አቃፕታ ፕሳ ከሰታ አከ አክቶፓ ማሪታ ጥናተኛት አድራሻ እኤካማ ጻፋመን አከታ ካ ሀሳወስሳ እኤታንሳ፡፡ ማኻ፡ ኩሴ ኡርማሌ፣ ስልክታ፡ 0916157088 ቶክ 0960143231 ካማ Email: kussesinbo@gmail.com.

Annex VIII: Statement of Consent (Konso version)

ፎርምታ አላልካላይሱማ ኡፕናሳ

ፎርምታ መረጃ አናማ ታሳታፍኖት እንከናፓፔ (እአና አናፓፓምቴ):: ዓላማ አጥናሰቲ፣ ኩዳተታ ካማ ትቅመታ ኢቃፕቶ፣ ቶይቱማ አምሰጠረታ፣ ማፕተታ አአፓ ታሳታፋ ካ አአፓ ታሳታፈ ድሳት ካማ አራኮታ ከቶየ (ደሀቶየ) አይኖ ሀሳዉሰሳ አካ አና ፓርፓቸሰንቶ ፕሳ እአና ለላምተ::አን ካሱማ ቃፓየ ደግሞ አካን ካሳይኤ እድለታ እአና ዳሳምተ፣ አርታፓን ደሳ አን ታሳታፋን ቃትሳ ሄናየ ከሰታ አአና አከቶፓ አካን ጥናተሰፓ ታሳታፋ ድሳ ኤታንሾ ካማ አድካታኤዉ ካሱማን አርሳ አንሄንን አርሳ ድሳኤ አካን ማፕተታ ቃፓ ኤአና ካልተ ካማየ ጥናተሰ አረ ከቶፓ ታሳታፋኤ ፈቃትዮ ሙሉታን አካን ዋሳነ ፊሩምዮ አን አካማ ፋራመነን ኡፕናን::

ፊሩማ አናማ ታሳታፍኖት _____ ለታ _____ / _____ /2008

ማኻ ካ ፊሩማ አናማ መረጃ ፓሆኖት _____ ለታ _____ / _____ /2008

እን ካሱማ ካሳታ ፓያ? አ ሄኤ

Annex IX: Konso version questionnaire

ካሱማ

ቆቶታ ፓዮታ፡ ቆታ ካላታ ካ ትካማ አናማ አካሱማሞት

ካሱማ		ማልሰዋ	መለያ
101	ቁቱሮታ መለያ አካሱማ	<input type="text"/>	A1
102	ማኻ ቃባሌታ	-----	A2
103	ማኻ/ቁቱሮታ ካንታ	-----	A3
104	ቁቱሮታ መለያ አቶላ/አአፓዋራ	<input type="text"/>	A4
105	ሊታ አፓዮ ካሱማ ደሀደን (ድኮታ እትዮጵያትን)	<input type="text"/> (ሊታ/ለአ/ፓራ)	A5
106	አይሻዬ ካልታ?	1. ካታማ 2. ካንታዳ	A6
107	ፓራይት መቃ?	<input type="text"/> (ፓራኔ) 98. አንኡፖ	A7
108	አሄማምቶዬ ስትይ ፓራይት መቃ?	<input type="text"/> (ፓራኔ) 98. አንኡፖ	A8
109	ደረጃ ታማረታይት ማና?	1. አ አናባባ ካ ጻፊታ ኤታንንክን? 2. አ አናባባ ካ ጻፊታ ኤታንኖ 3. አ ክፍለታ 1-4ካዬ 4. አ ክፍለታ 5-8ካዬ 5. አ ክፍለታ 9-10ካዬ 6. አ ክፍለታ 11-12ካዬ 7. አ ኮሌጃታ/ዩኒቨርሲታታ ካዬ 8. አ ማስተርሲታ ታማረ 88. ለላ አንሄኖ	A9
110	ደረጃ ታማረታ ድርታይት ማና?	1. አ አናባባ ካ ጻፊታ ኤታንንክን? 2. አ አናባባ ካ ጻፊታ ኤታንኖ 3. አ ክፍለታ 1-4ካዬ 4. አ ክፍለታ 5-8ካዬ 5. አ ክፍለታ 9-10ካዬ 6. አ ክፍለታ 11-12ካዬ 7. አ ኮሌጃታ/ዩኒቨርሲታታ ካዬ 8. አ ማስተርሲታ ታማረ 88. ለላ አንሄኖ	A10
111	ኾታት ማና?	1. ኾንሶ 2. ወላይታ 3. ጋሞታ 4. ትግረታ 5. አሮሞታ 6. አማራ 7. አፕላ ኦን ክታ ለሌ ----- 89. ለላ አንሄኖ	A11
112	ቃልፕታ ሄምታይት ማና?	1. አንሄማምን	A12

		2. አ አልን ሄመምንን ማልይ አልን ካላ 3. አ ሄመምቴ 4. አ ሄመምቴ ካ ድርታ አል ድሽ 5. አ ድርታድ ቃራዬ ራካደ 88. ለላ አንሄኖ	
113	አማንተታይት ማና?	1. ክርስታና 2. አርቶዶክስ 3. ካቶሊክ 4. እስላማ 5. አፕላ ኦን ክታ ለሌ ----- 88. ለላ አንሄኖ	A13
114	ፓሮስ ታካ ታፓረዬ ካራ ኮዳይታ ኮተ ማና?	1. ካባርተታ 2. አያ ትኮፓ 3. ናካትተታ 4. አ ኮዳ ማንክስተታ ኮንቶ 5. ናማ ቀን ስራ ኮኖ 6. ናማ ኮዳ ዳፔ 7. ናማ ኮዳ ድርጅተታ ኮኖ 8. ናማ እሽን ኻፋላምን ማልይ ኮዳ ኮኖ 9. ናማ ኮዳ ትካ ላዮት ኮኖ 10. ናማ ጡራታ ሶክ 11. አፕላ ኦን ክታ ለሌ ----- 88. ለላ አንሄኖ	A14
115	ፓሮስ ታካ ታፓረዬ ካራ ኮዳ ድርታይት ኮደ ማና?	1. ካባርታ 2. ናካትታ 3. ናማ ኮዳ ማንክስተታ ኮኖ 4. ናማ ቀን ስራ ኮኖ 5. ናማ ኮዳ ዳፔ 6. ናማ ኮዳ ድርጅተታ ኮኖ 7. ናማ እሽን ኻፋላምን ማልይ ኮዳ ኮኖ 8. ናማ ጡራታ ሶክ 9. አፕላ ኦን ክታ ለሌ ----- 88. ለላ አንሄኖ	A15
116	ካፕታ ሴአፓ አካንቶ እቃፕታ?	1. አ 2. አንቃፖ 3. ለላ አንሄኖ	A16
117	ካፕታ አ ፓራ ታፓረ ቃራ ኻማነ ዋ ቶላይሽን ለአፓ አካና መቃ?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> (ብረታነ) 88. ለላ አንሄኖ	A17
118	አን ካፕቶስ አ ኡብንንይ፣ አን ምርጫዳ ከ አናፓፕኖየ ክምተታን ንፕረተታ አቶላን ቃፕታን አና ለላ።።	1. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> ተላላ 2. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> አካያ 3. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> ካህራ 4. አፕላ ኦን ክታ ለሌ ----- 89. ለላ አንሄኖ	A18a A18b A18c A18d A18e
119	ቶላን ድኮታን አናማ መቃ?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> (ቁቴሮታነ)	A19
120	ራዲዮታ/ተሌቪዥነታ እቃፕታነ?	1. አ 2. አንቃፕኖ	A20

ቆቶታ ላማታ፡ ካሱማዳ አቆታ እና ቃጥናታ ካ አካያይት ደሳ ደሀደ

	ካሱማ	መልስዋ	መለያ
201	ክሰታ እና ፓዮታ ካርቶፓ ቃጥቶ ፓራይት መቃ ስትይ?	<input type="checkbox"/> (ፓራኔ) 98. አንኡፖ	B1
202	ክሰታ እና ድካታ ካርቶፓ ቃጥቶ ፓራይት መቃ ስትይ?	1. <input type="checkbox"/> (ፓራኔ) 98. አንኡፖ	B2
203	ሙሎታኤ መቃነ ሂተ? (እና ሰነ አማ አሎፔኤ)	<input type="checkbox"/> (ቁቱሮታነ) 88. ለላ አንሄኖ	B3
204	ዉጤተታ ሄላ ህቴት ጥሳ አታ ፓሀታ? (ካሱማ ጥሳ ካሳታነ ቁቱሮታ ቦታ ዳስማደፓ እማካ)		
	ኤሾኖፓ አማ አናጥሰታን ቻ መቃ?	<input type="checkbox"/> (ቁቱሮታነ)	B4a
	ኤሾኖፓ አካይማላዌ/አ ሰከ መቃ?	<input type="checkbox"/> (ቁቱሮታነ)	B4b
	ኤሾኖፓ አቶታን ደላደ መቃ?	<input type="checkbox"/> (ቁቱሮታነ)	B4c
	ኤሾኖፓ አናጥሰታን ደላደ ካ ሌታ ታፓ (7) ካራ ቶኤ/ራካደ መቃ?	<input type="checkbox"/> (ቁቱሮታነ)	B4d
	ኤሾኖፓ አናጥሰታን ደላደ ካ አርታ ሌታ ታፓ ካ ፓራ ታካ ካራ ቶኤ/ራካደ መቃ?	<input type="checkbox"/> (ቁቱሮታነ)	B4e
	ኤሾኖፓ አናጥሰታን ደላደ ካ ፓራ ታካ ካማ ቶኤ/ራካደ መቃ?	<input type="checkbox"/> (ቁቱሮታነ)	B4f
	አጥላ አን ክታ ለሌ	-----	B4g
205	አማ ሄላ ሀማ ካ ቱፓራ መቃ ቃጥታ?	<input type="checkbox"/> ሀማ (ቁቱሮታነ) <input type="checkbox"/> ቱፓራ (ቁቱሮታነ)	B5a B5b
206	እና ድካታ አይታም ህቴ (ለአ መቃ ቱራነ ህቴ)?	ለአ <input type="checkbox"/> ቱራነ	B6
207	እና ሰነ አ ድካታ አህቴ እድካተ?	1. አ 2. ሄኤ	B7
208	አ እና ሰነ አድካታ ቃጥቶ እምርመራ አንቴ ካ ኡፐታ?	1. አ 2. ሄኤ B20 አፓ ታፓረ	B8
209	አን ማልሰታይት አካሱማ 208 'አ'ዮ፣ ምክንያታ ማላ ምርመራ አንተ ማና? (አያዳ ታሳታፍና ማልሰታ ታካ ቃሮፓ አርሳ እኤታንሻን?)	1. ቆታን ፓቅኖ/ማከ ማላ 2. ቆራቻ ተያታ ማላ 3. ቆታ ትካ አክመታ አና ካፓ ደህ ማላ 4. ቆታ ድርትዮ አና ቻፕሰ ማላ 5. ቆታ አክመታ ፓኻራ ዳናን ማላ 6. ናካይታ አ ዳክንትዮ ኡፐታ ማላ 7. ናካይታ አ እና ካርቶፓ ቻ ኡፐታ ማላ 8. አጥላ አን ክታ ለሌ -----	B9a B9b B9c B9d B9e B9f B9g B9h
210	አን ምርመራ አአንተዬ፣ ትካ አክመታ አ ኻመፓ ምርመራ ሰነት አንተ?	1. ሆስፒታላታ 2. ጤና ጣቢያ 3. ጤና ኬላ 4. ትካ አክማታ አ ክሊታ 5. አጥላ አን ክታ ለሌ -----	B10
211	አን ምርመራ አአንተዬ፣ ስትይ አይኖ ከ ማራማረ?	1. ዶክተርታ 2. ጤና መኮንንታ 3. ነርሲታ	B11

		4. ጤና ኬልተታ 5. አጥላ አን ከታ ለሌ -----	
212	እናሰነ አድካታት አ ምርመራ ፓዮታት አንተዩ እናት ካርቶፓ ለአ መቃ?	<input type="checkbox"/> (ለአነ) 98. አንኡፖ	B12
213	አ ምርመራ ፓዮታት አንተዩ አዉሰትይ ናማ ከ ማራማረ አካ ምርመራዳ ከላ ሀሰቲ አአንቶኤ እከ ደሀመ/ኮኮናይሸ?	1. አ 2. ሄኤ 3. ማተዩ አንኦርሳንንቾ	213
214	አ እና ድካታ ቃፕቶዬ መሎታ መቃነ ምርመራ አንተ?	<input type="checkbox"/> (ቁቱርታነ) 98. አንኡፖ	B14
215	አካ ቃራ ቶይይሱማ ሰነ ጊዜታ ምርመራት ዳሰማንቶ ታካ ምነኤ አገልግሎታሰ አርፓ ኻታ ድካምተ ኤ ቃጭቶ ቃጭቶ እታካን አፓር ከ ኮዳምተ ካ ኡፕታአ ከሰታ አ ምርመራ እና ድካታት አአንቶዩ?		
	ኡልሱምታይት እኤከሳምተ?	1. አ 2. ሄኤ	B15a
	ደሩምታይት እኤካይሳምተ?	1. አ 2. ሄኤ	B15b
	ኮብና ድካ(ደም ከፍተታ)እኤካይሳምተ?	1. አ 2. ሄኤ	B15c
	ምርመራ ሰንዳ እከ ኮዳምተ?	1. አ 2. ሄኤ	B15d
	ምርመራ ድካ እከ ኮዳምተ?	1. አ 2. ሄኤ	B15e
	ምርመራ አ ዳክንታ መሎታ እከ ኮዳምተ?	1. አ 2. ሄኤ	B15f
	ቆታ ምልክታዳ ሰነ አካታ ማል ኮኮካ አእና ካርቶፓ ቻነዩ ናማ ቃረ ካይናት ደሳ እከ ለላምተ?	1. አ 2. ሄኤ	B15g
216	አ ምርመራ አአንቶ ማርፊታ አክትፓተታ ፓቃ ካዋራይታ አሀርኮፓን ከ ዶታምተ/ዶታምተ?	1. አ 2. ሄኤ B18 አፓ ታፓረ	B16
217	አን ማልሰታይት አካሱማ 216 'አ'ዩ፣ ማርፊታሰ አ ክትፓተታ ፓቃ ካዋራይታ መቃነ ሀርኮፓን ከ ዶታምተ?	<input type="checkbox"/> (ቁቱርታነ) 98. አንኡፓ	B17
218	ከሰታ አምርመራ አእና ድካታት አአንቶዩ ድርታይት እከ አል ትካ አክመታ አፓ አነ ካ ኡፓ?	1. አ 2. ሄኤ B21 አፓ ታፓረ	B18
219	አን ማልሰታይት አካሱማ 218 'አ'ዩ፣ ድርታይት መቃነ ትካ አክመታ አፓ ከአል አነ?	<input type="checkbox"/> (ቁቱርታነ) 98. አንኡፓ	B19
220	አን ማልሰታይት አካሱማ 208 'ሄኤ'ዩ፣ ምክንያታ ማላ ምርመራ አአንን ማና? (አዶዳ ታሳታፊና ማልሰታ ታካ ቃርፓ አርሳ እኤታንሻን?)	1. ቆተን አንማክንን/አንፓቅንን ማላ 2. ቆታን ምርመራ አንታ ጊዜታ ዳፕ ማላ 3. ቆታ ትካ አክመታ ሰክ ማላ 4. ቆታ ድርትዮ አን ዳዉረ ማላ 5. ቆታን ኻፋላ ፋረ ማላ 6. ቆታ አክመታ አፓኻራ ዳሳምንክንን ማላ 7. ቆታ ፋራ አና ዳካደን ማላ	B20a B20b B20c B20d B20e B20f

		8. ቆታን ትቆመታ ምርመራ እንኩፕናን ማላ 9. አፕላ ኦን ክታ ለሌ -----	B20g B20h B20i
221	ሄላ እና ድካታ ቱራን ሀተትይ እምርመራ አንተ ካ ኡፕታ?	1. አ 2. አንኡፖ } B25 ኢፓ ታፓረ 3. እናዮ ኢፓዮታ }	B21
222	አን ማልሰታይት አካሱማ 221 'አ'የ/አን ምርመራ አንተየ/፤ሄላ መቃኤ ምርምራ አንተ?	□ (ቁቱርታካ) 98. ማተየ አንኢርሳንንቾ	B22
223	ክሰታ ምርመራ አአንቶየ ትካ አክመታት እና ኻየታ ትቆመታ ኢቃፕቶ እኦራ አክመታ አክሞን ግልጸታን ከ ለላምተ?	1. አ 2. ሄኤ	B23
224	ክሰታ ምርመራ አአንቶየ አይታም አካ ኻይቶ (ኩያታ ኢፓ ኻይቶ)እኦራ አክመታ አክሞን ግልጸታን ከ ለላምተ?	1. አ 2. ሄኤ	B24
225	አርፓ ደሳ አእና ቃፕናቶየ ትካ አክመታ ኢፓ ምርመራ አንታ እሄንታ?	1. አ 2. ሄኤ	B25
226	እና ድካታ አይሸ ኻይተ?	1. ትኩፔኤ 2. ሆስፒታለታኤ 3. ጤና ጣቢያኤ 4. ትካ አክመታ አክለታትአ } B28 ኢፓ ታፓረ 5. ጤና ኪላኤ 6. አፕላ ኦን ክታ ለሌ -----	B26
227	ምክንያታ ማላ ትኩፓ ኻይ ጫላተ ማና? (አያዳ ትኩፓ ኻይ ፓታ ካሳዳ) (አያዳ ታሳታፊና ማልሰታ ታካ ቃርፓ አርሳ እኤታንሻን?)	1. ዋ ትካ አክመታት ኻፋላነ ቆታ ኩት ማላ 2. ቆታ ትካ አክመታ ኩያታ ፕሳ ፓንምንክንን ማላ 3. ቆታ ትካ አክመታ አካታ ማል ሰከ ማላ 4. አክመታ አ ትካ አክመታት ዳስማንቶ ቆታ ፓኻሩምታድ ሻክ ማላ 5. ትካ አክመታ ካራየ እስካተታ አክምቶ ቆታን ከንን ማላ 6. ቆታ ድርትዮ አካን ትካ አክመታ ኢፓ አኖ አነን ፋቃንን ማላ 7. ፖራ ኢፓ ፍሪዮ ቾ ኢፓ ቆታን ኻይ ፋደ ማላ 8. ቆታ ቃልፕታ ኦራ አክመታ አክሞቲ ፓኻርን ከንን ማላ 9. ቆታን ናማ አና ኻይሰሶ ቃፖ ማላ 10. ክሰታ ኻይ ቃፓምታ ቆታ ሻካተ ማላ 11. ቆታን ቱራን ትኩፓ ኻይ ካ ራኩታ ካ አና ቃረን ካይንን ማላ 12. ቆታ ናማ ትካ አክመታ ኢፓ አናን አኖ ዳፕ ማላ 13. እና ቃፕናትዮ ቃራ አካ ራኩታን ከንን ቆታ አና ለላምተ ማላ 14. ትካ አክመቶፓ አንታኤ ቆታ ራኩታ ካጫ/አፕረዋ አንቃራ ካይተ ማላ 15. አፕላ ኦን ክታ ለሌ -----	B27a B27b B27c B27d B27e B27f B27g B27h B27i B27j B27k B27l B27m B27n B27o
228	ትካ አክመታት ኻይ ማና ማላ ማራጣተ?	1. ቆታ ትካ አክመታ ፖራን ኢፓ ካሎ ካፓ ደሀ ማላ 2. ቃራ ቶያይሱማ አፋይ አካታ ማላ	B28a

	(አያዳ አትካ አክመታት ኻየ ፓታ ካሳዳ) (አያዳ ታሳታፊና ማልሰታ ታካ ቃሮፓ አርሳ እኤታንሻን)	3. ቆታን ቱራን ትካ አክመታት ኻየካ ዋ ፓኻራ አካደ 4. አካን ትካ አክመታት ኻየ ቆታ እና ለላምተ ማላ 5. ቆታ ራኩታ ኻየ እና ቃራ ካይተ ማላ 6. ቱራን ቆታን ትኩፓ ኻየካ ራኩታካ እና ቃራ ካይተ ማላ 7. አፕላ ኦን ክታ ለሌ ----- B28g	B28b B28c B28d B28e B28f
229	እኖሰነ አ ድካታ አታ ኻይተ?	1. አሰ ፓታን ኻየ ማሳራ ታካ ማልይ 2. ማሳራ አኻይሰሳትን 3. ቃሎታነን ኻየ 4. ልከታን ማተየ አንአርሳንንኛ 5. አፕላ ኦን ክታ ለሌ -----	B29
230	አ እና ድካታ ኻይንቶየ ናማ ከ ቃርቃረ/ኻይሰሰ አይኖ? (አያዳ ታሳታፊና ማልሰታ ታካ ቃሮፓ አርሳ እኤታንሻን)	1. ዶክተርታ 2. ጤና መኮንንታ 3. ነርስታ 4. ጤና ከልተታ 5. ናማ ኮሎማን ኻይሰሰኖ አሳናጣለ 6. ናማ ኮሎማን ኻይሰሰኖ አንሳናጣልን 7. አያኖ 8. አያ ድርትዮ 9. ድርትዮ 10. ናማ ታካ ነፉ አናን ቃርቃረ/ኻይሰሰነ 11. አፕላ ኦን ክታ ለሌ -----	B30a B30b B30c B30d B30e B30f B30g B30h B30i B30j B30k
231	እና አድካታ ኻይተ፣ አደላደን ካማየ ቃልፕታ አታ ፓሀታ ስትይ?	1. ናፕሰታነ ደላዳን 2. ናፕሰታነ ደላዳን ካ ኤኖኤዉ ራካደን 3. አ ለታ ታፓን እማክንን ማል ራካደን 4. አ ቶኤ ደላደ 5. አፕላ ኦን ክታ ለሌ -----	B31
232	አእና ድካታ ኻይንቶየ ጊዜታ አሰሩምታ ኻይ፣ አኻይ ካማ ኻይ ካማየ እራኩታ ከ ቃራ ካይተ?	1. አ 2. አንቃረን ካይነ 3. ማተ እንአርሳናንኛ } B37 አፓ ታፓረ	B32
233	አን ማልሰታይት አካሱማ 232 ‘አ’የ፣ ራኩታ ስትይ ከ ቃራ ካይተ ማና? (አያዳ ታሳታፊና ማልሰታ ታካ ቃሮፓ አርሳ እኤታንሻን)	1. ድካ ኮፕኖን ኡርቀ 2. ኻይ ጫረ /ሳተታ 12 ቃሮፓ/ 3. አንፓቶታ እናኤ ጫረ /ሳተታ 1 ቃሮፓ/ 4. ስንዳ ካ አታ ዱባታ ማላለታ 5. ደማ አእን ደላን አ ልከታን ክንን 6. እና ካራቶባ ራካደ 7. ፋሻንተታ አ ጊዜታ ማል ኡርቅተ 8. እስ ዳፕታ/ተይመታ 9. አፕላ ኦን ክታ ለሌ -----	B33a B33b B33c B33d B33e B33f B33g B33h B33i
234	አን ማልሰታይት አካሱማ 232 ‘አ’የ፣ ረኮዋሰን ቃራ ማፍተታ አቀዳምተ ማና?	1. ትካ አክመታ አፓን አነ 2. ቆራቻ ፓሀለተን ታቃማደ 3. ናማ ኻይሰሰ ኮሎማ ቃፓን ሀሳዉስስ 4. እርምቻ ታካን ነፉ ቀዳመ 5. አፕላ ኦን ክታ ለሌ -----	B34
235	አን ትካ አክመታ አፓ ሀዳምተየ፣ እኤይደሳ ትካ አካመታ አፕላፓ ከ ኤርከነ ካናየ?	1. አ 2. ሄኤ..... B37 አፓ ታፓረ	B35
236	ትካ አክመታ አኡፓ ኤርካምተ ካይኤ ማናነ አንተ/ሀዳምተ?	1. ሎቆታነ 2. ሀረታነ	B36

		3. ፓታነ 4. ማክና ክራትን 5. አምፍላንሲታነ 6. አፕላ ኦን ክታ ለሌ -----	
237	ድክታ ካይትን እና ሰነ አ ድካታ አ መቃታ?	<input type="checkbox"/> (ቁቱርታነ)	B37
238	ጊዜታ አ ሄላ ድካታ ላክይ ኢታንቶፓ ክቶ አታ ክታ?	<input type="checkbox"/> (ለአነ) 77. እናዮ ኢፓዮታ	B38
239	እናሰነ አድካታ አካርቶፓ ቃፕቶ ስትይ እትካ አክመታት ካየታ እድካተ?	1. አ 2. ሄኤ	B39
240	ጊዜታ እና ድካታ ካርቶፓ ቃፕቶ ካይ ካማ ራኮዋ ሰነ ካይ ቁራን ደናቲ እሀርምሳተ ካ ድካተ?	1. አ 2. ሄኤ	B40
241	ካይ ድካታ ቱራን አፓሪ እትካ አክማታት ካይተ ካ ኡፕታ?	1. አ 2. ሄኤ 3. እናዮ ኢፓዮታ } B43 አፓ ታፓረ	B41
242	አን ማልሰታይት አካሱማ 241 'አ'የ፣ አን ካይተ ካ ኡፕታየ ሄላ መቃ ኤየ ካይተ?	<input type="checkbox"/> (ቁቱርታነ)	B42
243	አርፓ ደሳ ትካ አክመታት ካየታ እሄንታ?	1. አ 2. ሄኤ	B43

ቆቶታ ሰሳታ፡ ካሱማዳ አክመታ አክማታ ካ ዉሳነታ ዳሳት ደሳ ደሀዳ

	ካሱማ	ማልሰዋ	መለያ
301	ትካ አክመታ አክ ካፓ ደሀ አፓ አንታኤ ሳተታ መቃ ቀን?	<input type="checkbox"/> አንታ ሎቅታ (ታቀቃነ)	C1
302	አይናታ ትካሰ አክመታት ማና?	1. ሆስፒታሊታ 2. ጤና ጣቢያ 3. ጤና ኬላ 4. ትካ አክመታ አክለታ 5. አፕላ ኦን ክታ ለሌ -----	C2
303	ትካሰ አክመታ ቆታ ካይት ደሳ እቃርቃርሳ ዳን?	1. አ 2. ዳንንክቶ 1. አንኡፖ	C3
304	ትካ አክመታ አክ ካፓ ደሀት እአፓር ታቃማተ ካ ኡፕታ?	1. አ 2. ሄኤ.....C6 አፓ ታፓረ	C4
305	አን ማልሰታይት አካሱማ 304 'አ'የ /አን ታቃማተየ/፣ ሀካ አማቲ አክመታ አክታ ፓሀቶ ተይተ? (አያዳ ታሳታፊና ማልሰታ ታካ ቃርፓ አርሳ እኤታንሻን?)	1. አክመታ ምርመራ 2. አክመታ ካይ 3. አክመታ አክሰታ ኮራንታ (አማና ከላ) 4. ክትፓተታ 5. ክመታ አካይ ዳዉርንቶ(ማርፈቴ ካይ) 6. አክመታ ፓቃዳ ፕላቲ 7. አፕላ ኦን ክታ ለሌ -----	C5a C5b C5c C5d C5e C5f C5g
306	አን ማልሰታይት አካሱማ 304 'ሄኤ'የ /አን አታቃማንን/፣ ማና ማላ አታቃማንን?	1. ቆታ ትካ አክመታ አካታ ሰክ ማላ 2. ቆታን ድክቲ አንማክንን/አንፓቅንን ማላ 3. ቆታ ክፍያሶ አካታ ኮኮክ ማላ 4. ቆታ አታይተትኖ/ፓህለትኖ ዳውራንቶ ማላ 5. ቆታ አክመዋ ኢፓህለታ ቻን ማላ	C6a C6b C6c C6d C6e

	(አያዳ ታሳታፊና ማልሰታ ታካ ቃሮፓ ኦርሳ እኤታንሻን)	6. ቆታ ኮዳ ትኩፓ እና ቃራ ኮፕ ማላ 7. አፕላ አን ከታ ለሌ -----	C6f C6g
307	ቱራን አፓሪ እትካ አክመታ አከ ካፓ ደሀ ካራ ካይተ ካ ኡፕታ?	4. አ 5. አንኡፓ 6. እናዮ አፓዮታ	C7
308	አካ ትካ አክመታ አፓ አንቶ ካ አክመታ አክማቶኤ አይኖ ዋሳን?	1. አና 2. አና ካ ድርትዮ 3. ድርትዮ ፓታ 4. ዳልታያዮ/ፍሪዮ 5. አፕላ አን ከታ ለሌ -----	C8
309	ከሰታ ካይት አይሻ ካይ አካ ከፓርፓትሰንቶ አዋሳኖ አይኖ?	1. አና 2. አና ካ ድርትዮ 3. ድርትዮ ፓታ 4. ዳልታያዮ/ፍሪዮ 5. አፕላ አን ከታ ለሌ -----	C9
310	ኩያታ ካይት አይኖ አካ ከ ካይስሶ/ከቃርቃሮ/ አዋሳኖ አይኖ?	1. አና 2. አና ካ ድርትዮ 3. ድርትዮ ፓታ 4. ዳልታያዮ/ፍሪዮ 5. አፕላ አን ከታ ለሌ -----	C10

እንካላታይሳንና!

Annex X: Declaration

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

Name: Kusse Urmale (BSc)

Signature: _____

Date: _____

This project work has been submitted with my approval as university advisor.

Name: Mr. Engida Yisma (MSc, Lecturer)

Signature: _____

Date: _____