



ADDIS ABABA UNIVERSITY
COLLEGE OF HEALTH SCIENCE
SCHOOL OF PUBLIC HEALTH

ASSESSMENT OF MEGNITUDE OF UTILIZATION THE SKILLED BIRTH
ATTENDANCE SERVICES IN HARGEISA, SOMALILAND

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

JUNE 2016

ADDIS ABABA, ETHIOPIA



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ACKNOWLEDGMENT

First I would like to thank Allah.

Secondly, I would like to extend my sincere, deepest gratitude and appreciation to my Advisor DR. Demeke Assefa, for his unreserved guidance, valuable advises, comments and tireless support, from the research proposal up to completion of this thesis

My deepest gratitude goes to my Uncle Ibrahim Mahamed Hassan for sponsoring my study

My special thanks go to my lovely mother, dear Husband and my sister and young brother for their all rounded support throughout the study.

I would also like to thank Addis Ababa University School of Public health, for providing me this opportunity to apply my theoretical knowledge in to practice and for the cooperation to the successful accomplishment of this research.

My heartfelt thanks go to colleagues for their moral as well as material support.

Finally, I would like to acknowledge the supervisors, data collectors and study subjects who have kindly cooperated in providing the required information.

ACRONYMS Abbreviations

ANC	Antenatal Care
AOR	Adjusted Odds Ratio
COR	Crude Odds Ratio
EDHS	Ethiopian Demographic Health Survey
MOH	Ministry of Health
SBA	Skilled Birth Attendance
WHO	World Health Organization
MMR	Maternal Mortality Rate
MICS	Multi Indicator Cluster Survey
MDG	Millennium Development Goal
NGO's	Non Governmental Organizations
RHO	Regional Health Office

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Abstract

Background: Pregnancy and child birth complications are the leading causes of death and disability among women of reproductive age in developing countries including Somaliland, where maternal mortality ratio is one of the highest in the world. According to the world health organization, having a skilled birth attendant at every delivery can lead to marked reductions in maternal mortality. In Somaliland, most births take place at home, being not attended by a skilled birth attendant. The utilization of maternal health services is a complex phenomenon and it is influenced by several factors.

Objectives: This study assessed the magnitude of Utilization skilled birth attendee services among mothers who gave birth in the last one year in Hargeisa, Somaliland.

Methods: Community-based cross-sectional study was conducted from February to May 2014. A multi-stage sampling technique was used to select 435 mothers. A structured, pre-tested, and interview-administered questionnaire was used to collect data on the magnitude of Utilization of Skilled birth attendance was employed to collect the data. Data were entered and analyzed by SPSS version 22. Binary logistic regression model was used to identify associated factors. Odds ratio with 95% CI with p value of 44% was computed to assess the strength and significant level of the association

Results: A total of 434 mothers were included in the analysis. Only 44% of births were attended by SBAs. In multivariate analysis, Women education (AOR=4.4, 95% CI 2.017,9.958), ANC visit during the last pregnancy (AOR=2.2 95%CI 0.964,5.476), experience of health problem (AOR=3.2 95% CI 2.097,4.899), and favorable attitude towards danger signs of pregnancy, child birth and delivery (AOR=12.6, 95%CI 5.043,31.900) were most significant determinants of SBA use by mother. Age of respondents and distance to nearest health facility had also a significant effect on skilled birth attendant utilization with (AOR= 5, 95%CI 0.734, 44.977) and (AOR= 4.6, 95%CI 1.23, 17.74) respectively.

Conclusion and recommendation: Utilization of skilled delivery attendance services was still low with a high number of deliveries being attended by unqualified persons at home. Age of respondents, distance and knowledge of danger signs of pregnancy are the determinants of use of skilled birth attendance in Hargeisa Somaliland. Promotion of universal ANC follow-up and encouragement of mothers regarding the need for SBAs during childbirth is of paramount importance. Increase the awareness of mothers about the benefits of institutional delivery and SBAs is very fundamental.

1. INTRODUCTION

1.1 Background

The services of skilled birth attendants (SBAs) include delivery care service which is critically important for reducing maternal mortality because they provide timely delivery care when life threatening complications arise (1). Access to skilled birth care is key to reducing maternal mortality particularly in developing countries, where maternal mortality is a major challenge to the health system.

Globally an estimated 800 women die every day due to preventable pregnancy and childbirth related complications. Developing countries accounted for 90% of maternal death with sub-Saharan Africa alone accounting for 40% of the global burden of maternal deaths (2, 3).

Pregnancy and child birth complications are the leading causes of death and disability among women of reproductive age in developing countries. Most maternal deaths occurring during labor, delivery and immediate after postpartum period. Nearly two third 80% of maternal deaths worldwide are due to five direct causes: Obstetric hemorrhage (which is the main direct cause), infections, unsafe abortion , eclampsia and obstructed labor (2).

Major causes of maternal deaths in Somaliland are similar to most developing countries such as infection, hemorrhage, obstructed labor, abortion and hypertension in pregnancy (4).These deaths could be avoided if preventive measures were taken and adequate care is available particularly during pregnancy, childbirth and postpartum period through obstetric care services (5). Studies from different countries indicate that maternal mortality is generally lower in countries where a higher proportion of deliveries are conducted by skilled attendants (6).

Based on the information currently available at hand, experts and higher officials agree that skilled care is one of the most critical interventions for both an effective means to reduce maternal mortality as well as key to improving maternal health and it should be a central element of any program and strategies that aims to reduce maternal deaths (7).

1.2 Statement of the Problem

Globally there is difference in access of skilled birth across the region, in low income countries the access was only 46% compared with 64% in middle and 95% in upper income countries. In Africa, where the greatest maternal mortality occur, there has been only modest progress as still fewer than 50 % of birth are attended by skilled birth professional (3, 7). In Somaliland rates of maternal mortality are among the highest in the world with current estimate of MMR being 1000 per 100,000 live birth according to MICS 2011 (4).

The ministry of health in Somaliland has a goal of reducing maternal mortality by 75 percent and at least 60% of births assisted by a skilled birth attendant by 2015 and which has been adopted as an international development target as part of the Millennium Development Goals. It is amazing to note that in spite of all previous national efforts, the Maternal morbidity/mortality indices have shown no change and/or only marginal reductions in the last five years. Possible reasons for poor health outcomes among women is non-use of modern health care services by sizable proportion of women and little knowledge about the current magnitude and factors influencing the use of these services in Somaliland (4, 8).

Somaliland health survey was identified that no single factor influences skilled attendance, but group of factors could account for the problem such as socio-cultural, economic and geographical circumstances and quality of health care services among others are responsible for low coverage of professionally attended deliveries Similarly skilled birth attendance utilization is still low 44% (4, 8). Even if there was no community based study done in Hargeisa City, according to 2011MICS report coverage of skill delivery of the Hargeisa was still low 47% which is highest in the country (4).

Therefore, this study will be very crucial to assess the magnitude and those factors affecting utilization of safe delivery service in the studying area.

1.3 Rational of the Study

Despite the efforts being made by the Government and other stakeholders to mitigate the problems and subsequent consequences posed by home delivery, evidences are showing that most Somaliland women are giving birth at home and skill birth attendance remains low

To enhance utilization of health facilities and skilled birth attendant during delivery in the country, barriers to utilization of health facility during delivery among women need to be identified across all geographical regions. little is known about the current magnitude of utilization of maternity in health facilities especially skilled birth attendant services and determinants for their utilization.

Furthermore, there are no accurate researches done on the issue under this area in Hargeisa Region. Therefore, this research aimed to assess extent of skilled birth attendant utilization and attempts to explore determinant factors that are assumed to be barriers to skilled birth attendant utilization among mothers who gave birth in the past 12 months in Hargeisa City, Somaliland.

This information is important for informed decisions among stakeholders working in maternal health in the country in general and the study area in particular.

2. LITERATURE REVIEW

.1 Maternal Mortality

Maternal health refers to the health of women during pregnancy, delivery and postpartum period. Health of women is a fundamental human right, improving maternal health is important for development issue and reducing global poverty. WHO reported in 2013 that globally, 289,000 of women die due to pregnancy and childbirth related complications and the majority of death occurs in developing countries. About two third (62%) of global maternal death occurs in sub-Saharan Africa region followed by Southern Asia (24%.) The MMR in developing regions was found to be 14 times higher than in developed regions. Although Progress of 45% has been made to reduce maternal mortality, but still it is far behind the expected (3).

2.2 Skilled Birth Attendance

Most worldwide health organizations, including the International Confederation of Midwives and the WHO, promote the use of skilled attendants as a strategy to reduce maternal mortality. The WHO definition of skilled birth attendant refers “A skilled attendant is an accredited health professional. Who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate post-natal period, and in the newborn.” These skilled caregivers include midwives, nurses with maternity training, and physicians. They do not include traditional birth attendants (TBAs) because they have not had formal training (9, 10).

Utilization of skilled delivery attendant is more likely to be similar or slightly higher than institutional delivery because births delivered at health facility are more likely to be delivered by trained health professional and births delivered at home are usually more likely to be delivered without assistance from health professional. In Sub Sahara Africa where the most of maternal death occurs, the Skilled Birth Attendance remains low and it is a major problem (3).

2.3. Skilled Birth and Attendance Associated Factors

2.3.1 Socio demographic/economic Characteristics related factors

Different studies described socio-demographic and economic factor influencing the utilization of skilled birth attendant during delivery. For example studies in South-east Ethiopia, Kenya and Nepal reported, showed that factors like Age, women's level of education, husband's education and family income have an influence for the utilization of the skilled birth attendant services. Mothers with the age range of 15- 19yrs were about five times more likely to give birth at health facility when compared to those aged above 35yrs (11). While other study described that women's age has no significant association with the use of skilled birth attendance during delivery (12, 13).

The educational status of both mother and their husbands had association with use of skilled birth attendance during delivery, mothers who had a secondary level education were four times more likely to use while those with primary education were three times more likely to use a skilled birth attendant during delivery as compared with those with no education at all (14). In addition married women to husband whose completed secondary school were about fifteen times more likely to give birth at health facility than those uneducated (11).

Study conducted in Ethiopia showed that wealth or family income are positively associated with the utilization of skilled birth attendant(SBA), as to women in the highest wealth quintile have increased in the odds of delivery by a SBA compared to those in the lowest wealth quintile (12). Similarly, results from study done in Nepal also showed similar findings (13).

2.3.2. Obstetric Related Factor

Almost all the studies from different countries were showed that antenatal care visit to the pregnant mother has been found to have positively associated with utilization of skilled birth attendance during childbirth. Women who had completed four or more ANC visits were more likely to utilize delivery services twice as often compared to women who completed less than four visits. while others reveals those mothers never attended or attended once only were found to use about 43% less likely the professionally assisted delivery than those who received more than four times (11, 13, 15).

Different studies confirmed that marriage age of mother has a significant association with use of skilled birth attendance; mothers who had lower age at first pregnancy are commonly found to be significantly associated with safe delivery service utilization. In addition, birth order were found to be significant predictor of health facility utilization during delivery mothers who have more children are less likely to use SBA during delivery compared to those who have one and two children. Women with birth order above four were 98 % less likely to give birth at health facility than those with first order births (11, 14, 16, 17).

Women's Knowledge and Experience of Obstetric Risk

A cross sectional survey done in Ethiopia showed that women who have previous experience of a pregnancy/delivery related problem are positively and significantly associated with use of SBA, "women are more likely to use delivery services if they experience pregnancy related problems" (12).

Studies conducted in different context have been identified that women's knowledge of danger signs of pregnancy was important predictors for SBA utilization, women who know danger signs of pregnancy are more likely to deliver in a health facility compared to women with no knowledge of obstetric complications, "women who knew at least one danger sign of pregnancy and delivery were 1.3 times more likely to use SBA services at delivery" (13, 15).

2.3.4. Health Services and Quality Related Factors

Low level of skilled birth utilization is not always due to socio-demographic and Obstetric reasons but rather may be due to institutional services and perceived quality of mothers. In same studies, distance and inadequate transportation was found main reasons that women did not seek SBA services during delivery. In Kenya the distance to the health facility prevented mothers from using the services, similar study showed that" mothers who lived within 30 min or less from a health facility were 1.25 times more likely to use SBA during delivery compared to those who lived further away" (13, 14). Other studies done in Nigeria and South Ethiopia showed that distance to health facility was not significantly determinant for skilled birth attendant utilization during pregnancy and child birth (12, 15, 18).

Women's attitude toward Skilled birth attendants was found one of the predictors of SBA utilization, "Mothers with a positive attitude toward SBA utilization were 7.8 times more likely to utilize SBA compared with those with a negative attitude (19). Another study showed that " Women with an excellent perception about the quality of maternal health care at the nearest health facility were more likely to deliver assisted by a SBA compared to those who perceived the quality to be poor/average (17).

Availability of skilled birth attendants, equipment and supplies, cost of health care services and support of health care providers were identified as the barrier of skilled birth attendance utilization, studies showed that "lack of adequate information by skilled personnel to pregnant women serve as a barrier for utilization of SBA, as the health providers fail to provide the importance of skilled birth attendant during the delivery during the ANC visits" (13, 20, 21).

2.4. Conceptual Frame Work Factors Challenging Utilization of Skilled Birth Attendance

This framework considers maternal related factors as well as health system factors. The women's related factors include the mother's socio-demographic and economic characteristics, knowledge and experience toward the risks of delivery and also ANC which is important factor that have influence for care seeking behavior. Health system related factors include the distance of health facilities, attitude of mother toward the facility and professional affect the utilization of the service.

Conceptual Frame Work

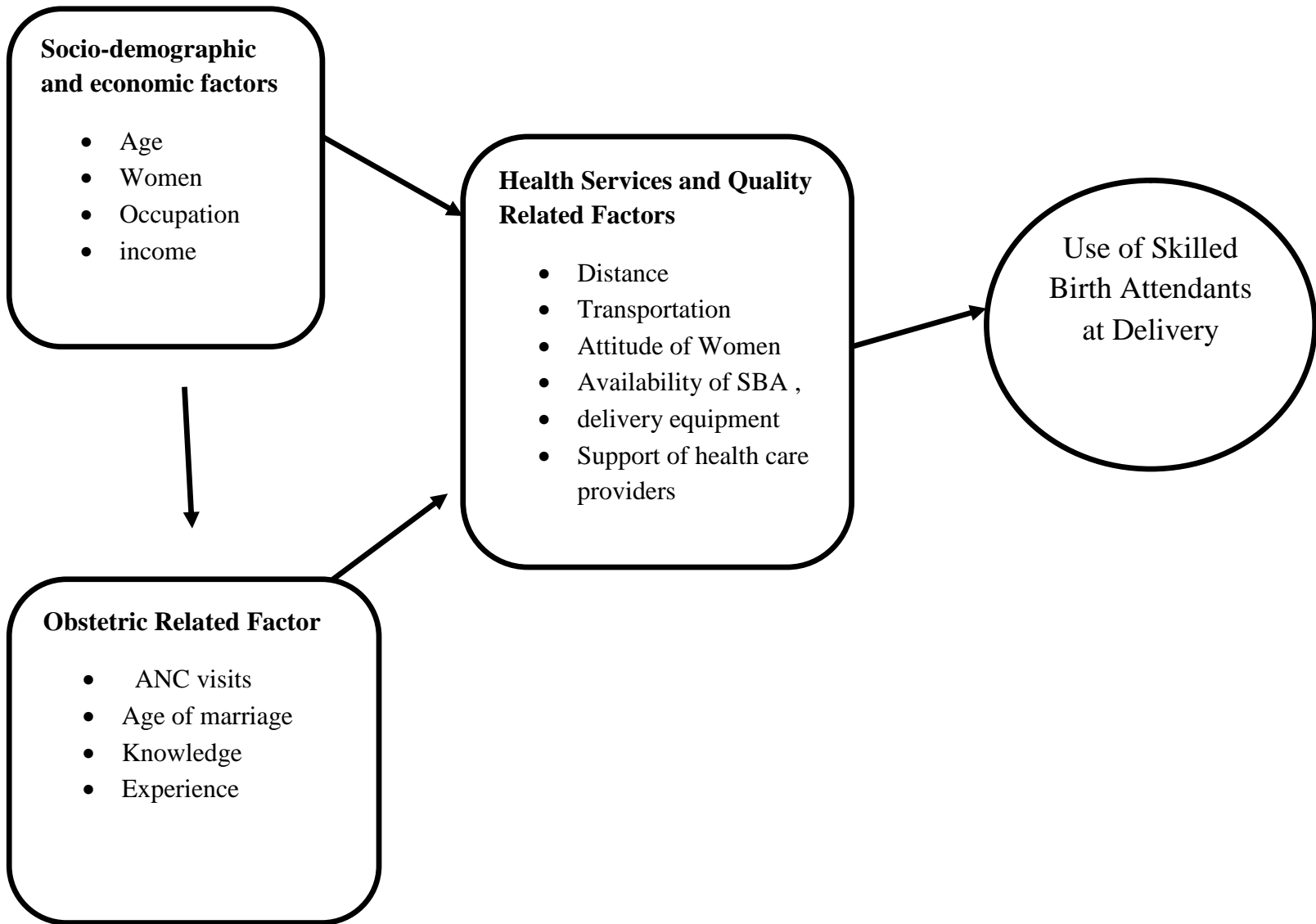


Figure 1: Conceptual Framework Showing the Association of Different Factors With Skilled Birth Attendance.

3. OBJECTIVES OF THE STUDY

3.1 General Objective

- To assess the magnitude of utilization the skilled birth attendee services in Hargeisa
Somalia

3.2 Specific Objective

- ✓ To assess the proportion of deliveries assisted by skilled birth attendants.
- ✓ To identify factors associated with use of skilled birth attendant among the child bring women who gave birth in the last 12 months.
- ✓ To describe the health services barriers that affect skilled Birth Attendance at delivery in the study area.



4.4 Source population

Women of reproductive age (15-49 yrs.) residing in Hargeisa City at the time of the study were considered as source population

4.5. Study Population

The study population was, women reproductive age in the selected Area who have given birth in the last one year before the study.

4.6 Inclusion and exclusion criteria

4.6.1. Inclusion:

- Women who gave birth within the last 12 months prior to the data collection, irrespective of the birth outcome and place of delivery

4.6.2. Exclusion:

- Women who are mentally and physically incapable of being interviewed
- Mothers who stayed for less than six month in the study area prior to the last delivery

4.7 Sample Size determination

The Sample size is determined by using single population proportion formula.

$$n = (z / 2)^2 \times p(1-p) / 2$$

Where n= Sample size

z= The standard z score value at 5% level of significance

P= Proportion of deliveries attended by skilled birth personnel of Hargeisa City is 44% (4).

Confidence interval, 5%

Marginal error and 10% of non response rate

$$n = (1.96)^2 \times 0.44(1-0.44) / 2$$

We got n= 397. Adding 10% non respondent rate, the overall sample size was 435 subjects

4.7 Sampling Procedures

Multi-stage sampling design was employed to select study subjects. First Hargeisa City was recruited purposely. Initially, five districts from available eight districts were selected randomly, of the five districts a total of 25 Sub districts were selected and included by using simple random sampling technique

Stage, simple random samplings were used to select the districts and sub-districts found in the city with probability proportionate-to their population size. In the second stage, systematically sampling procedures have been employed to obtain required number of sample size from selected households.

Sampling Procedure

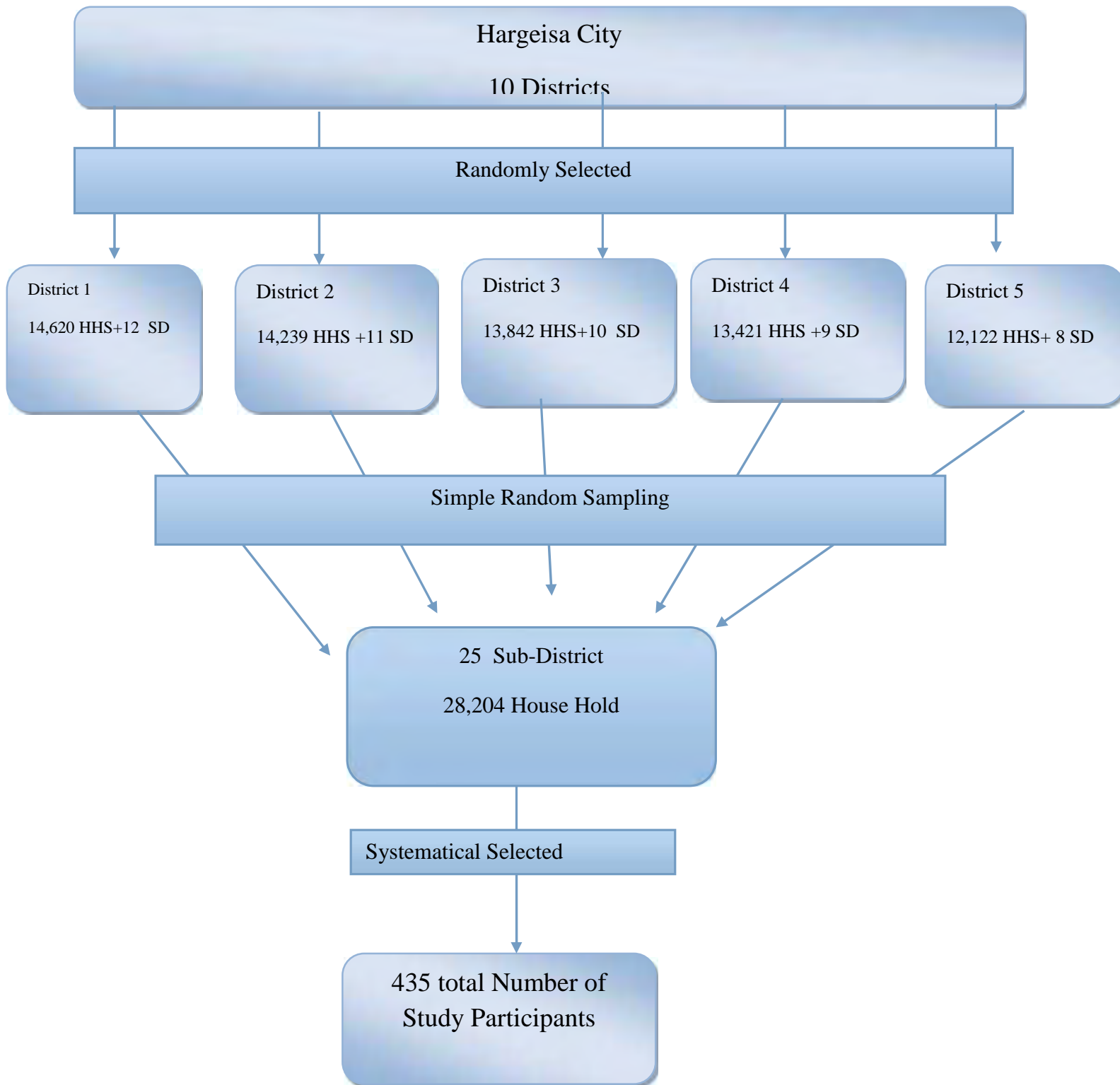


Figure 2: Schematic Presentation of Sampling Procedures

4.9 Study Variables

Dependent Variable

Use of killed Birth Attendant services

Independent Variable

- Socio-economic factors
 - Age
 - Women education
 - husband's education
 - Wealth Status
- Antenatal care visit
- Age at Marriage
- Knowledge and experience of the pregnancy related problems
- Perceived quality of health care providers and facility
- Distance from the nearest health center

4.10 Data collection procedures

Data were collected through face-to-face interview using pre-tested structured questionnaire developed in English after reviewing relevant literatures. The questionnaire was translated into the local language, and to check for its consistency, back translated into English. All the independent variables were included as a content of the questionnaires. The questionnaires were pretested in 5% from the study population before the actual collection begun. Six data collectors whom are 2nd or 3thrd class of university with previous experience of data collection were selected with two field supervisor. They were trained for 2 or 3 days on data collection techniques. Degree holders in health or related field were selected as field supervisors and also they were trained for data collation.

4.11 Data analysis

Data were cleaned for inconsistencies and missing values and analyze using SPSS version 22 statistical software. Descriptive statistics were computed for frequencies, percentages, means,

standard deviations in relation to socio-demographic and other relevant variable, Statistical association was done by chi-square, correlations as well as Regression analysis.

Significance was determined by using crude and adjusted odds ratios with 95% confidence intervals. To assess the association between the different predictor variables of skilled birth attendant utilization with the dependant variable, first bivariate relationships between each independent variable and outcome were investigated using a binary logistic regression model. Those independent variables found to be significant with p-value less than 0.05 at the bivariate level were included in a multivariate logistic regression model for each dependent variable to control for potential confounding variables. The analysis yielded standardized partial regression coefficients that estimate the direct effect of predictor variable on the dependent variable. The results were presented in the form of tables, figures and summary statistics.

4.12. Operational Definitions

Attitude: The way respondents think and feel about the health care providers and services they provide

Distance: is measured in time taken to the nearest health facility on foot.

Educated: refers to the level of education attended by the respondents consists of primary, secondary and above educational attainment

Favorable attitude: women who respond positively towards health care services and SBA related questions equal or more than the median score.

Health facility: Health institutions which includes hospitals, health centers and health posts.

High Income: Those monthly income is more or equal to mean and above.

Low Income: Respondents whose income level is less than mean score.

None Educated: refers respondents that unable to read and write.

Skilled attendance refers to a skilled attendant operating within an enabling environment or health system capable of providing care for normal deliveries as well as appropriate emergency obstetric care for all women who develop complications during childbirth (10).

Skilled attendant- Any person , Nurses, midwives and any other health care provider who has been educated or trained for attending or managing any complication of women during pregnancy and delivery (10).

Services Utilization: Is used of delivery services provided in the health facilities by skilled birth attendants.

Traditional birth attendant- is a community-based provider of care during pregnancy and childbirth, which is not trained to proficiency in the skills necessary to manage or refer obstetric complications. (10).

Knowledgeable: women were considered knowledgeable if they were aware of danger signs related to pregnancy and childbirth and advantages ANC visit, if they scored above mean of knowledge questions, and not knowledgeable if otherwise

4.13 Ethical Consideration

Ethical clearance was obtained from ethical review commit Addis Ababa university school of public health. Letter of support was obtained from Regional Health Office in Hargeisa, Somaliland. At the time of data collection verbal consent was obtained from the participant in addition privacy and confidentiality of the respondents was maintained.

4.14. Dissemination and Utilization of the Result

The study is communicated to the School of Public Health, College of Health Sciences as partial fulfillment of Master's Degree in Public Health. It will also be disseminated to the Regional Health Office and other concerned governmental and non-governmental organizations.

5. RESULTS

5.1. Socio-demographic Characteristics of the Respondents

A total of 434 women who had given birth in the past one year before the survey were interviewed to have decrease recall bias, making response rate of 99%.

The majority 186 (42.9%) of respondents were in the age range of 25-29 years making the mean age of 26.27 (\pm 4). (Standard deviation [SD]) For Marital status, almost all, 415(95.4%), respondents were married (Table 1).

Regarding the respondent's educational status more than half 242(55.7%) of study subjects and 149 (34,4%) of their husbands had never attend formal school. The majority 391(90.1%) of women were housewives, while 291 (67.1%) of husband were daily labor.

According to the respondents household monthly income, 312 (71.1%) of study subject had average income of \$ 257 (Table 1).

Table1: Socio Demographic Characteristics of the Respondents in Hargeisa, Somaliland, 2016

Variable	Frequency	Percentage
Marital status		
Married	414	95.3%
Divorced	15	3.5%
Widowed	5	1.2%
Age		
15-19yrs	12	2.8%
20-24yrs	167	38.5%
25-29yrs	186	42.8%
30-34yrs	24	5.5
35-39	45	10.4
Women education		
Educated	192	44.2%
Non educated	242	55.8%
Husband education		
Educated	285	65.6%
Non educate	149	34.4%
Women occupation		
House wife	391	90.1%
Government/privet Employee	43	9.9
Husband occupation		
Daily labor	291	67.1%
Government/Private employer	143	32.9%
Family Income		
Low income	312	71.9%
High Income	122	28.1%

5.2 Obstetric Characteristics of the Respondents In Hargeisa Somaliland

Regarding age at first marriage, majority 338(77.9%) of respondents were married before the age of eighteen with mean age of 17.5(SD \pm 1.8) and 302(69.9%) got first pregnancy at the range age of 15-19 years with mean age of 19(SD \pm 2). Concerning parity, majority 277(63.9%) of respondents do have 1-4 children with mean of 4 (SD \pm 2) (Table 2).

About the women's antenatal care service utilization, more than half 255(58.8%) of mothers had received at least one ANC visit during their last pregnancy. One hundred seventy one (39.4%) of women reported that their last pregnancy they prepared pace of delivery (Table 2)

According the birth preparedness, both in home and health facility only 171(39.4%) of respondents were prepared their s last birth the place they give birth where the majority 263 (60.6%) did not prepare place of birth..

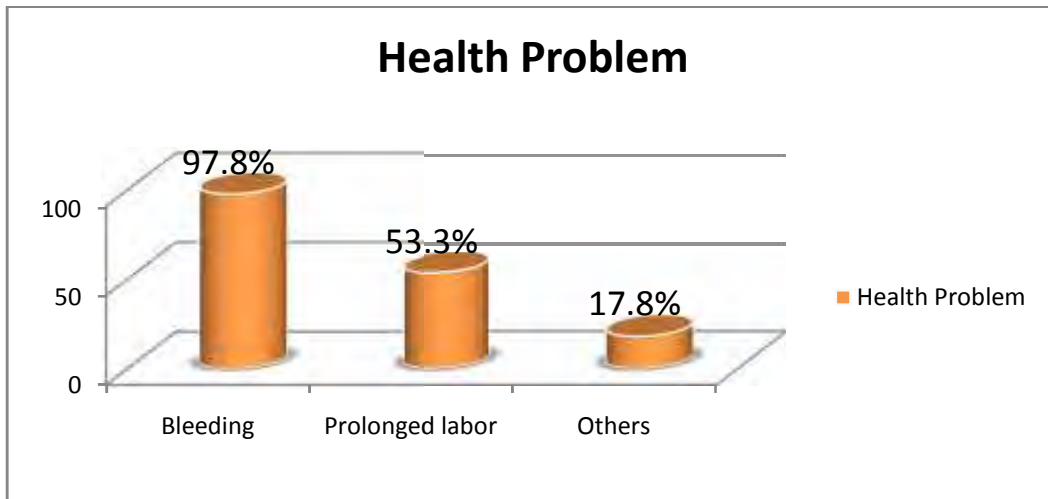
Two hundred nineteen (50.5%) of women reported that their partners prefer home delivery rather than institution delivery while 215(49.5%) of then said that husband prefer institutional delivery. Regarding the experience of health problem during the labor and delivery 135(31.1%) had experienced at least one adverse child birth outcome previously while 299(68.9%) didn't have any health problem.

Table2: Obstetric Characteristics of the Respondents in Hargeisa, Somaliland, 2016

Variable	Frequency	Percentage
Age at first Marriage		
15-19yrs	338	77.9%
20-24yrs	96	22.1%
Age of first Pregnancy		
15-19yrs	302	69.5%
20-24yrs	117	27%
25-29yrs	15	3.5%
Number of Children		
1	35	8.1%
2-4	242	55.7%
More than 4 children	157	36.2%
ANC visit in last pregnancy		
Yes	259	59.6%
No	175	40.4%
Number of times visit ANC		
One	35	8.1%
Two	71	16.4%
Three	73	16.8%
Four	40	18.4%
Prepared for delivery place		
Yes	171	39.4%
No	263	60.6%
Decision for place of delivery		
My Own	287	66.1%
Husband	147	33.9%
Husband Preference		
Home	291	50.5%
Health Institution	215	49.5%
Family Preference		
Home	219	50.5%
Health Institution	215	49.5%
Experienced health problem		
Yes	135	31.1%
No	299	68.9%

Out of the total women who had experienced health problem for previous labor, delivery and immediately after birth in their last birth, majority, 132 (97.8%) of respondents reported Bleeding, 72(53.3%) Prolonged labor, while only 24 (17..8) mentioned other health problems such as retained placenta.(Figure 3)

Figure 3: Health problems previously faced by study subjects in Hargeisa , Somaliland, 2016



Regarding of institutional delivery service utilization about 209(44.9%) of the women gave their last birth at health institutions with being attended by skilled birth attendant, and 225(55.1%) were give birth at home in their last birth without skilled attendance.

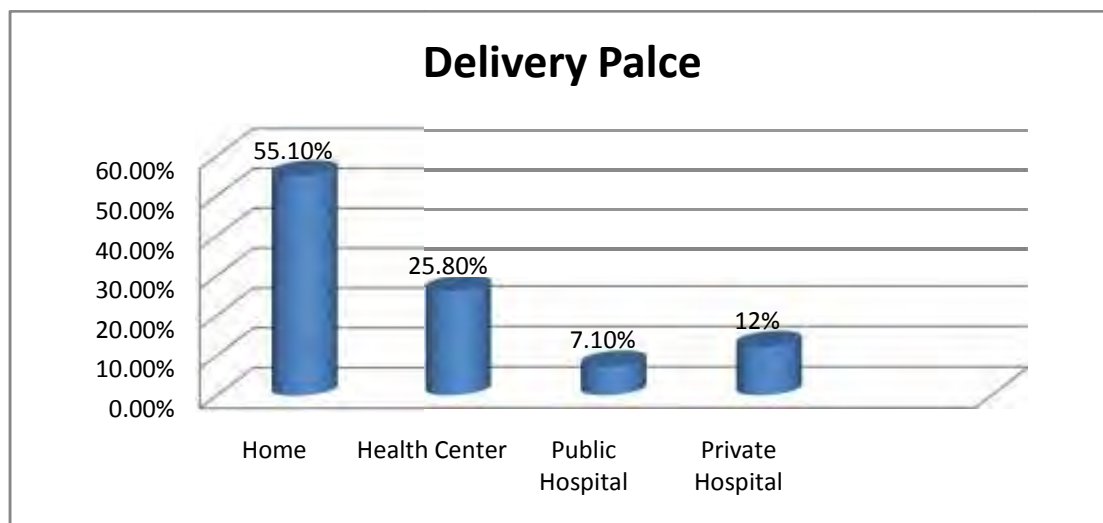


Figure4: Delivery Place of mothers in Hargeisa, Somaliland, 2016.

The reasons given by those who delivered their last child at home is shown in Table 3. Majority, 223(98.7%) of respondents said that it was their usual practice to delivery at home and they do not need to have skilled attend during delivery. while 109(84.1%) said that labour was urgent and also smooth and they didn't get time and facility to reach the institution, and since there was no longer labor or other difficulties home is the preferable place to delivery. More than half of participants 128(56.6%) declared that health facilities are far away from their places and as the labour come they can't walk so they stay at home, another more than half 132(58.4%) claimed lack of transportation to go the facility since the distance is far and during labor it's difficult to go without use of transportation, only 61(27.0%) of respondents reported poor behavior of health care providers, health care providers was are rude and not welcoming labor and child birthing mothers. while there is no participants which said lack of health workers, as there are three health providers in each health institution at each shifts.

Table 3: Reason for home delivery among study subjects in Hargeisa, Somaliland, 2016 (N= 225)

Variable	Frequency	Percentage
Home is my usual practice	223	98.7%
Labor was urgent and smooth	190	31.4%
Far away from where I live	128	56.6%
Un availability of transportation	132	58.4%
Poor behavior of health care workers	61	27%

Reasons mentioned among the respondents who gave birth in health institution is shown in Table 4. Majority of respondents 209(95.8%) reported that delivering in health facility is safe for both mother and also their babies, health care providers can manage and treat any problem that might happen during delivery. One hundred and ninety four(90.2%) respond that they get better services in health facility during the delivery and health care providers give good services. Another 165(76.7%) of participant reported that they were informed to deliver health facility by health care workers during ANC visits and tell advantage of use of SBA and to giving birth in health institution, while 63(29.3%) reported that the health institution is close to where they live and they can go easily any time of labor. Only 54(25. %) of respondents reported others reason such as they get medication and avoid excessive bleeding and removing blood clothes and no pain after delivery.

Table4: Reasons for Institution use among study subjects in Hargeisa, Somaliland, 2016 (N= 209)

Variable	Frequency	Percentage
Save for me and Baby	206	98.5%
Better Services	194	90.2%
Was Informed to delivery health facility	165	76.7%
Close place I live	63	29.3%
Others	54	25%

5.3 Knowledge and attitude about pregnancy, labor and delivery service,

Two hundred fifty (57.6%) of mothers scored less than the mean score on knowledge questions of danger signs related to pregnancy, labor and child birth, and also on advantages of ANC visits. On the other hand, their attitudes towards health care services and skilled birth Attendance 200(46.1%) study subjects showed favorable attitudes towards health care services and Skilled birth Attendance (Table 5).

Table 5: Overall knowledge and attitude of the respondents (n = 434) by residential area among mothers in Hargeisa, Somaliland, 2016.

Variable	Frequency	Percentage
General knowledge on danger of obstetrics problems related to pregnancy and child birth		
	250	57.6%
Not Knowledgeable	184	42.4%
Knowledgeable		
Over all respondents attitude on health care services		
Unfavorable	202	46.5%
Favorable	231	53.5%

Out of the total women who said, “Yes” regarding to the knowledge of danger signs of delivery related health problems, 164(37.8%) reported Prolonged labor, 232(53.5%) Bleeding, 102(24.2%) Increased blood pressure, 32(7.4%) retentions of placenta and 89(20.6%) mentioned early ruptured of membrane (Table 6)

In a concern about the knowledge about the advantages of ANC follow during pregnancy, participants were mentioned at least one advantage, to follow maternal health status, 326(75.1%),

fetal health status 264(60.8%), fetal position, 138 (31.8%) and 102 (23.5%) anticipate health problem (Table 6).

Table 6: Knowledge about danger signs during delivery, delivery among study subjects in Hargeisa, Somaliland, 2016

Variable	Yes	No
knowledge regarding danger signs of labor delivery		
Bleeding	232 (53.5%)	202(46.5%)
Prolonged Labor	164 (37.8%)	270(62.2%)
Increased Blood pressure	102 (24.2%)	329(75.8%)
Placenta retention	32 (7.4%)	400(92.6%)
Early rupture of membrane	89 (20.6%)	344(79.4%)
Knowledge about Advantage of ANC visit		
To follow maternal health Status	326 (75.1%)	108(24.9%)
To follow fetal health status	246 (60.8%)	170(39.2%)
To Know Fatal position	138 (31.8%)	296(68.2%)
To anticipate delivery problems	102 (23.5%)	332(76.5%)

NB: Multiple responses were possible

Among who used delivery services in the health institution, One hundred sixty five (38%) of respondents perceived that health facilities are staffed skilled health care providers. 203(46.8%) agree that the SBA in the facility has appropriate skills of skilled birth attendants to detect complication. 156(35.9%) of respondents identified that the delivery equipment in health facility are sufficient. Only 101(23.3%) of mother were agreed that health providers give support to the them and respects during labor and delivery. 192 (44.3%) of study subjects agree that near health institutions had good quality of delivery services One hundred forty one respondents (32.5%) disagree that the ability of delivery attendants during labor and child birth between skilled birth attendant and unskilled birth attendant such as TBAs was similar.

Table 7: Attitude of Mothers toward the Health care services in Hargeisa, Somaliland, 2016

Variable	Agree	Neutral	Dis-agree
Health facilities staffed with skilled professionals	156(35.9%)	21(4.8%)	257 (59.2%)
Health professionals have the appropriate skill to provide delivery services	203(46.8%)	27(6.3%)	204(47%)
The equipment in health facility are sufficient	156(35.9%)	21(4.8%)	257(59.2%)
Health providers give support and respect to the delivering mother	101(23.3%)	93(21.4%)	240(55.3%)
The ability of delivery between skilled birth attendant and unskilled birth attendant is similar.	166(38.2%)	27(29.3%)	41(32.5%)

5.3.3 Attitude of respondents about pregnancy related problems

According to the women's believes about problems related to pregnancy and delivery, more than half 225(56.2) of respondent believed that complication can be prevented by skilled birth attendants. One hundred ninety five (44.9) of respondents were perceived that they are susceptible for any health problems during the labor and delivery, only 195(44.9%) of them were believed that they are susceptible to face delivery complications.. Regarding the respondent's perception about benefit of attending skilled birth attendance during delivery to the both mother and child, more than half of them believed that SBA is beneficial to the health of both mother and baby. According to the respondent's perception toward un complicated women's use of health faculty during delivery, almost half of respondents didn't believe that women with no complication should go and delivery, this is due to perception of health women will not face any problem during delivery. .

Table 8: Attitude of respondents about pregnancy and SBA in Hargeisa Somaliland 2016

Attitude of problems related pregnancy	Yes	No
Delivery complications can be prevented and managed	224(56.2%)	190(43.8%)
Like any pregnant and laboring women, I am susceptible to face delivery complications	195(44.9%)	239(55.1%)
Being attended by a skilled delivery attendant is beneficial to my well being and baby	251(57.8%)	83(42.2%)
Women with no complication do not go health facility for delivery	219(50.5%)	215(49.5%)

5.4 Availability and Utilization of Health Services

According to the study, questions related to the health system and perceived quality of respondents was conducted in these tables below. 3749(86.2%) of respondents were mentioned presence of health facility in their area where only 60(13.8%) of them said there no health facility in our area,

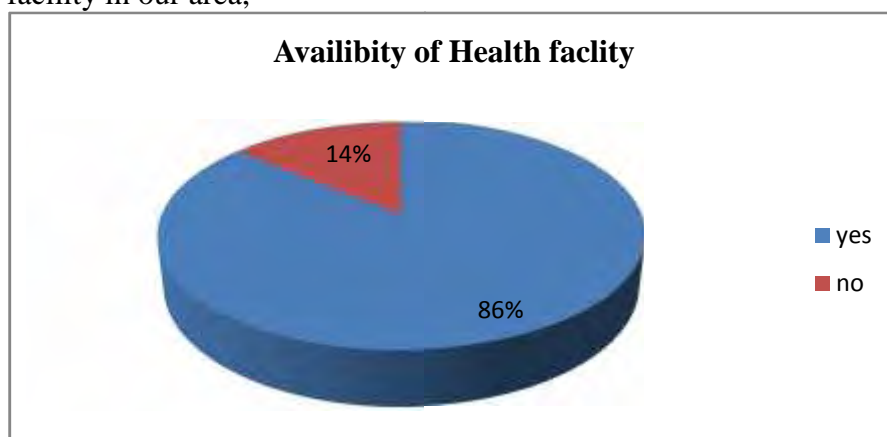
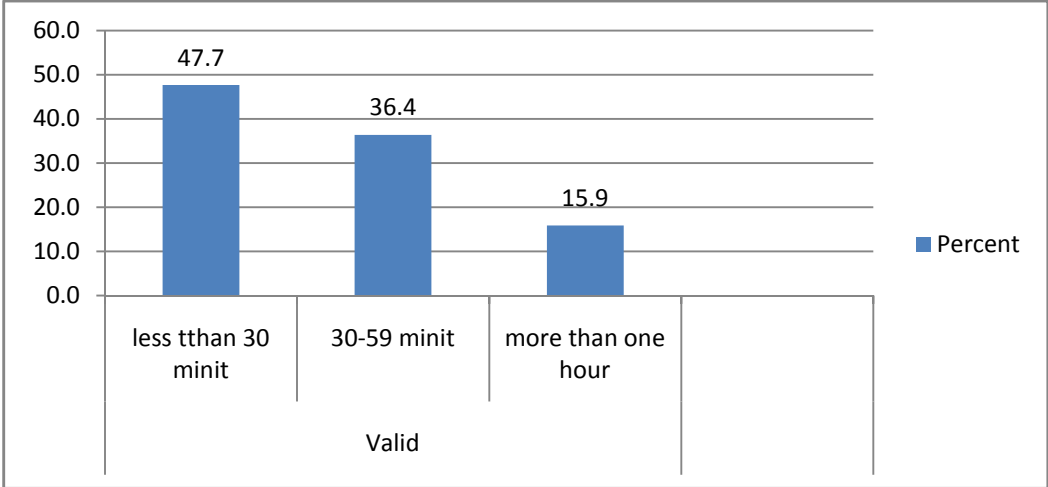


Figure9: Presence of Health Facility in the respondent's resident area in Hargeisa Somaliland, 2016



In this section the association between dependent and independent variable were assessed by using bivariate and multivariate logistic regression, variables those showed p-value of <0.05 in bivariate logistic regression analysis were put into multiple logistic regression by using Backward model.

5.5.1 Socio-demographic Factors.

Age of the respondent has been found to be strongly and significantly associated with skilled birth attendance utilization, women who had age group of 15-19 were five times (AOR=5, 95% CI 0.734,44.977) and one times (AOR=1.9, 95% CI 0.644,5.937) to be used Skilled birth attendant during delivery as compared to women with age range of 35-39. Mother with formal education were four times (AOR= 4.4 95% CI 2.017,9.958) more likely than an educated women for the use of skilled birth attendance during delivery. Similarly, husband formal education (AOR=5.7, 95% CI 2.28, 14.5) were nearly six times more likely to use skilled birth attendants compared to husband with no education.

Furthermore, women who were governmental or private employee were four time more likely to use (AOR=4.4, 95% CI 2.017,9.958) about skilled birth attendance as compared to those who are housewives Similarly women whose husband husbands who were governmental or private employee (AOR= 4.3 95% CI 1.692,11.424) were 4 times more likely to use SBA compared to women whose husband are daily labor.

The odds of using skilled birth attendants at delivery for high income respondents were AOR=5.7(2.492,13.5456) about five times more likely to utilization skilled birth compared among those have are low income category , AOR,0.127,95%CI:(0.012,1.37). (Table 9)

Table 9: Socio Demographic Characteristics Associated with Skilled Birth Attendance in Hargeisa, Somaliland, 2016

Variable	Skilled birth Attendance		COR (95%CI)	AOR(95%CI)
	Yes n%	No n%		

Age				
15-19	10(83.6%)	2(16.7%)	(12 ,2.365,644.045)**	(5, 0.734, 44.977)
20-24	138(82.6%)	29(17.4%)	(0.085,0.040,0.182)**	(0.54(0.017,0.172)
25-29	26(14%)	160(86%)	(2.5 ,1.162,5.380)	(1.9, 0.644,5.937)
30-34	8(33.3%)	16(66.7%)	(0.81,0.280,2.359)	(0.186,0.045,0.774)
35-39	13(28.9%)	32(71.1)	1	1
Women education				
Non educated	35(14.5%)	207(85.5)	(29,17.5,48.8)***	(4.4,2.017,9.958)**
Educated	160(83.3%)	32(16.7%)	1	1
Husband Education				
Non educated	5(3.4%)	144(96.6)	(5.9,2.791,12.610).**	(5.7,2.28,14.5)
Educated	190(66.7%)	95(33.3%)	1	1
Women occupation				
Housewife	156(39.9%)	23560.1%)	(14.6,(5.14,41.9)*	(13, 2.482,68.327)
Employee	39(90.7%)	4(9.3%)	1	1
husband occupation				
Daily labor	87(29.9%)	204(70.1%)	(7.23, 4.58,11.42)	(4.3, 1.692,11.424)
Employee	108(75.5%)	35(24.5%)	1.00	1.00
Family Income				
High income	94(30.1%)	218(69.6)	(11.5, 2.360,6.54)**	(5.7, 2.492,13.5456)**
Low income	101(82.8%)	21(17.2%)	1	1

** P < 0.001, *P< 0.01, ***P<0.000

5.5.2. Obstetric characteristics, Knowledge and experience of women about pregnancy and SBA, In Hargeisa Somaliland

This section described the association of obstetric related variables with skilled birth attendance utilization. According the WHO stander, age of marriage were found a higher risk factor with

utilization of skilled birth attendants, women who were deliver at age of 15-19 years were (AOR=2.8 95% CI 1.497,5.433) to times and nearly three times (AOR= 2.9 95% CI 1.127,7.910) more likely to utilize skilled birth attendance compared to those who were deliver at age of 25-29 years respectively.

According to the result, number of antenatal follow-up during pregnancy were found associated with use of SBA in both Bivariate and multivariate analysis,. Women who had one ANC visit were two times more likely to utilize SBA (AOR= 2.2, 95% CI 0.964,5.476) compared to those never attended Antenatal Care and (AOR= 2.8, 95% CI 1.027,6.815) those who attend two times .

Mother who has no previous experience of health problems were found to be two times more likely to use SBA than those who had not health problem in previous deliveries. (AOR= 3.2, 95% CI 2.097,4.899). Moreover, mothers with High attitude towards maternal health services particularly delivery services were (AOR= 12.6, 95% CI 5.043,31.900) around 13 times more likely to use skilled birth professionals during delivery compare to those mothers with low attitude. AOR=0.35,(0.18,0.71)

Regards health service, the distance of nearest health facility were found an independent variable to the utilization of skilled birth attendance, women who walks to the health facility less than 30minit and 30-59 miniature were (AOR= 4.6, 95% CI 1.23, 17.74) nearly five and AOR= 2 95% CI 0.686, 5.928) two times more likely to use SBA during delivery compared to those who walks more than one hour.

In addition, mothers who were knowledgeable about pregnancy problems were AOR=11, 95% CI 3.42, 39.17) times more likely to be attended by skilled birth attendants compared to women with un Knowledgeable about danger signs of delivery. Similarly women who were having favorable attitude toward both facility services and pregnancy problems were AOR=12.6(5.043, 31.900) and AOR=11,(3.42,39.17) respectively times more likely to be attended by SBA.

Table 10: Obstetric characteristics, Attitude, and Health services of respondents, in Hargeisa Somaliland, 2016

Variable	Skilled Birth Attendance		COR (95%CI)	AOR(95%)
	Yes n %	No n%		

Age at Marriage

15-19	168(62%)	103(38.0%)	(3.4(2.089,5.611)	AOR=2.8(1,497,5.433)
20-24	19(14.8%)	109(85.2%)	(3.8(1.688,8.788)	AOR=2.9(1.127,7.910)
25-29	8(22.9%)	27(77.1%)	1	1

ANC Visit

One	25(71.4%)	10(28.6%)	(3.1(1.039,9.445)***	(2.2, 0.964,5.476)**
Two	37(52.1%)	34(47.9%)	(2.8(1.027,6.815)	(2.8, 1.027,6.815)
Three	34(46.6%)	39(53.4%)	(1.2(0.424,3.910)**	(0.8, 0.367,2.159)
Four and more	59(73.8%)	21(26.3)	(10(3.739,30.047)	(8, 3.739,19.039)
No visit	40(22.9%)	135(77.1%)	1.	1

Experience of health

problem	87(64.4%)	48(35.6%)	(3.7, 2.088,6.840)**	(3.2, 2.097,4.899)**
Yes	108(36.1%)	191(63.9%)	1	1
No				

Distance of health facility

Less than 30 minute	139(67.1%)	68(32.9%)	(15(7.060,34.412)	(4.6, 1.23,17.74)
30mi- 59min	48(30.4%)	110(69.6%)	(4(2.998,7.319)	(2, 0.686, 5.928)
More than one hour	8(11.6)	61(8.4)	1	1

Knowledge

Knowledgeable	95(52.2%)	87(47.8%)	(1.6, 1.15,2.492)	(1.4, 0.58,3.52)
Not Knowledgeable	98(39.2%)	152(60.8%)	1.00	1.00

Total Attitude about

Health service	28(12%)	206(88%)	(37.2, 21.624,64.1)***	(12.6, 5.043,31.900)**
High Low	169(83.5%)	33(16.5%)	1.00	1.00

Attitude of pregnancy

problems	22(10.9%)	180(89.1%)	(2,(14.0,40.8)**	(11, 3.42,39.17)*
High	173(74.6%)	59(25.4%)	1	1
Lo w				

** P < 0.001, *P< 0.01, ***P<0.001

6. DISCUSSION

Delivery assisted by skilled providers is the most proven intervention in reducing maternal mortality and one of the MDG indicators (3). This community –based cross sectional study identified very important challenges that determines skilled birth attendant utilization among study subjects in Hargeisa Somaliland.

In the findings Mothers who were assisted by skilled birth attendant during delivery in their last birth were about 195(44.9%). This result is in line with that of survey done in the country (22). This might be due to the trust on the family or the relatives in giving support, close attention and fulfilling different cultural and religious ceremonies

The study showed that, respondent's age was significantly associated with skilled birth attendant utilization. Women who are younger age group were more likely to use skilled professionals compared to those with age of 35 and above. This finding was consistent with other research findings (14, 18, 24). This is due to when younger women are just starting child bearing, they might be told they are in a high risk and so they tend to fear home deliveries, while older women consider that giving birth at home is not risky as they had experienced previously. It is also higher proportion of younger women had formal education which in turn had different perspectives on delivery care when compared to the elder.

Among social factors women's education was statistically and positively related to the use of skilled birth attendants during delivery. Furthermore, women who had formal education were more likely to give birth assisted by skilled birth attendant than those who had no formal education. Again, the finding was consistent with other studies done in other countries (11). This may be due to the fact that education empowers females so as to increase autonomy and self confidence to make capable for decision making about their own and their families' health.

Family income is also one significant association factor which affects the utilization of SBA. The study subjects who were in high income category were 5 times more likely to utilize and this study in line with study done in, Ethiopia (14, 25). This also implies that those who are able to pay the cost of services are more utilized compared to those who can't.

Frequency of ANC visit during the last pregnancy was also found to be a strong predictors of utilization of skilled birth attendance when confounding factors were controlled. Women who had at least one ANC visits were two times more likely to use SBA compared to those who had no ANC visit (2.2, 0.964,5.476), This result was in line with research done indifferent countries (13, 14, 20, 26). This may be due to the fact that as the number of ANC visits increase, the more likely women will be acquainted with basic information on pregnancy and delivery related risks that require providers' intervention, also women having ANC visit are provided with health education and information regarding the benefits of having a skilled birth attendant during childbirth

Women with previous experience of health problem were found three times more likely (AOR= 3.2, 2.097,4.899) to use SBA than those who hadn't health problem in the previous delivery. As this increases the fact that mothers are frightened to experience same bad outcome. These findings were consistent with studies done in Nepal and Asia .(27) Women who had knowledge regarding pregnancy and delivery risk factors were more likely to give birth assisted by skilled birth attendant during delivery than those with poor or no knowledge. Similar findings were reported in other countries (13, 15).

Distance to the health facility was found to be a significant predictor. The study showed that mothers less than 30 minute walking distance were more likely to deliver with the assistance of skilled birth attendants than mothers walking more than 30 minute. This finding was consistent with other studies done in (11, 13).This is due to fact that women lives near to the health facility can get the health facility any time of labor while women who leave far can't go if labor comes at the middle of night. there is no available health facility transportation for maternal health services especially during delivery. This is why still women use traditional birth attendance which are always near to them. On the other hand, according the WHO, distance is categories the second delay for health care seeking (28, 29).

Women who had knowledge regarding danger signs of labor and delivery were more likely to give birth assisted by skilled birth attendant during delivery than those with poor/ un knowledge. Similar findings were reported in Sub-Saharan African countries. This finding was in agreement with a study (14,16). This is due to fact that old fashion thinking, traditional practices and lack of awareness among women and husbands are responsible for mother's poor knowledge.

Women's attitude towards danger signs related to pregnancy and childbirth was also important predictor for the utilization of skilled birth assistant as women with favorable attitudes were more likely to use skilled birth attendant than those with unfavorable attitude(30)

Concerning reasons for home delivery preference the finding revealed that delivering at home being the women's usual practice, Distance and lack of transportation and smoothness of labor were the commonest reasons. This finding is in agreement with studies done different areas (30, 31).

7. Conclusion and Recommendation

7.1 Conclusion

Utilization of skilled birth attendance services was low with a high number of home deliveries which is being attend ended by unskilled / traditional birth attendants.

Age of respondents Women's education, family income, ANC, experience of health problem and attitude of women both health care providers and services were found to be significant predictors of women's choice of place of delivery or SBA services utilization.

Age of marriage, distance to health facility and knowledge of danger signs of pregnant and delivery were found to be determinants of use of skilled birth attendance.

7.2 STRENGTHS AND LIMITATIONS OF THE STUDY

7.2.1 Strengths

- Multi stage Sampling was employed to select study area and participants
- Data collectors speak local languages and were the same sex with study subjects
- Standardized questionnaire based on similar studies were used
- Community base data collection was used to estimate the percentage of women delivery by an SBA.

7.2.2 Limitations

- The study design was cross-sectional, which implies that the direction of causal relationships cannot always be determined i.e., temporal relations could not be assessed.
- There could be recall bias, since the women were asked for events within the last one year prior to the survey

7.3 RECOMMENDATION

To MOH and health care policy makers

- Design strategies that increase the awareness of mothers and their partners about the benefits of institutional delivery and skilled birth attendants.

To Regional Health Office

- Assign qualified skilled and trained health care providers in each health facility
- Provide health institution vehicle for referral of women with complication to the nearest health facility.

To Health Care Providers

- Promote use of maternal health services and consistently counsel pregnant mothers to attend their antenatal follow-up during all months of pregnancy and childbirth
- Intensively educate pregnant mothers on risks associated with pregnancy and delivery.

To researchers

- To explore further factors related with use of skilled assistance at delivery such as socio-cultural factors, qualitative study needed to conduct

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ANNEX

1.1 Annex one

English version Questionnaires

Information Sheet and Consent Form

A. Information Sheet

This questionnaire was prepared for collecting information on Skilled Birth Attendance services utilization and associated factors In Hargeisa city , Somaliland. The evidence (finding) of the operational study is going to feed the partners and stakeholders on how best to strengthen and improve use of skilled birth attendant. The proposed study is believed to contribute to the eventual improvement of health care service benefits of mothers. The aggregate final result is going to get shared to the pertinent decision makers at all levels. Therefore, participation in the study is seen as vital citizenry and societal opportunities as well as contributions.

B. Informed consent

My name is _____. I am working as data collector in a survey conducted by the collaboration of Addis Ababa University, school of public health so as to assess Skilled Birth Attendance services utilization and associated factors among women's in reproductive age in Hargeisa Somaliland. A code number will identify every participant and no names will be used. Your response will be kept confidential. Your participation in this study is completely on voluntary basis; you have the right to participate, or not to participate or refuse to do so at any time during the interview. You don't have to answer any questions that you don't want to answer. There will be no way of linking your individual responses to the final results of the study findings. However, your honest answer to these questions is very important for the purpose of the study. We would very much appreciate your participation in this survey by genuinely responding to the interviews. It would take 30 minutes to complete the questionnaire. Would you be willing to participate?

Thank you.

Yes

No

001. Questionnaire Code _____

003. Household Number: _____

Q002. Name of the district _____

Q003. Name of data collector _____

003. Date of interview _____

I. Socio-demographics and economic related questions

Q/ code	Question	Response	
101	Marital Status of mother	1. Married 2. Divorced 3. widowed 4. Single	
102	How old are you?	Age-----	
103	have you ever attended formal school or preschool?	1. yes 2. No	
104	What is the highest level of formal school you attended?	1. Preschool 2. Primary 3. Secondary 4. Higher	

105	Have your husband ever attendee a formal school/ education?	1. Yes 2. No	
106	what is the highest level of formal school he attended?	Preschool Primary Secondary Higher	
107	What is your occupational status ?	1. House wife 2. Government employed 3. Merchant 4. Other specify	
108	How much is your monthly income?	-----	

II. Obsteristics charactersitics and history realed questions

Q/ code	Questions	Response	
201	How old were you in yor last birthday when you got married	----- in complete years	
202	How old were you in your last birthday when you got pregnant	----- in complete years	
203	Did How many sons and daughters did you have	1. Boys 2. Girls 3. Total	

204	Did you have ANC visit during your last pregnancy?	<ol style="list-style-type: none"> 1. yes 2. No 	
205	How many times did you receive antenatal care during your pregnancy?	<ol style="list-style-type: none"> 1. One 2. Two 3. Three 4. Four 5. More than four 	
206	At what gestational age you start ANC follow up in your lat pregnancy	<ol style="list-style-type: none"> 1. -----Months 2. I don't remember 	
207	Where did toy give birth to the last child	<ol style="list-style-type: none"> 1. Home 2. Institution 	
208	Was there preparation of place to deliver for the last birth	<ol style="list-style-type: none"> 1. Yes 2. No 	
209	Who advice you on where to give birth	<p>Health proffesional</p> <p>Realties</p> <p>No one</p>	
210	Who assisted with the delivery of last birth	<p>Midwie / health worker</p> <p>Traditional</p> <p>Realtives</p> <p>No one</p>	
211	What was your reasons for home delivery	<ol style="list-style-type: none"> 1. lack of health care providers 2. Delivering at home is my usual experience and acceptable 3. Labor was urgent and smooth 4. Long distance to health facility equipment 	

		<ul style="list-style-type: none"> 5. poor attitude of health workers 6. Un availability of transportation 7. Other specify _____ 	
212	If your answer to question 6 is health facility, why did you choose to deliver in health facility?	<ul style="list-style-type: none"> 1. Better service in health facility 2. Save for the mother and child life 3. I was informed to deliver in health institution 4. Close to where I live 5. Other specify 	
2013	What was preference of your husband about place of delivery	<ul style="list-style-type: none"> 1. Home 2. Institution 	
214	What was preference of your family about place of delivery	<ul style="list-style-type: none"> 1. Home 2. Institution 	
215	Did you experience any health problem during labor, delivery and immediately after birth in you last delivery	<ul style="list-style-type: none"> 1. Yes 2. No 	
216	If yes what was the problem	<ul style="list-style-type: none"> 1. Bleeding 2. Prolonged 3. Retained placenta 4. Other 	
217	Based on you experience and delivery outcome from your last childbirth where would you prefer in the future to give birth	<ul style="list-style-type: none"> 1. Home 2. Institution 	
218	If you prefer institution delivery what is your	<ul style="list-style-type: none"> 1. Better outcome in health center 2. save for me and my child 3. poor outcome in home 	

	main reason		
219	If you prefer Home delivery what is main reason	<ol style="list-style-type: none"> 1. Home is my usual 2. delivery can be handle at home 3. my husband didn't want institution 4. I face bad outcome in health center 	

III. Knowledge and Attitude of women about pregnancy and SBA

Q/ code	Question	Response	Remarks
301	Did you know the recommended number of ANC visits.	<ol style="list-style-type: none"> 1. Yes 2. No 	
302	If yes who many times	<ol style="list-style-type: none"> 1. One 2. Two 3. Three 4. Four 	
303	What do you think about advantage of ANC follow up	<ol style="list-style-type: none"> 1. To fallow maternal health 2. To follow child health to know fetal position 3. To anticipate the problem 	
304	Do you know any health risk a women might experience during labor and delivery	<p style="text-align: center;">Ys</p> <p style="text-align: center;">No</p>	
305	If yes what are they (possible answers)	<ol style="list-style-type: none"> 1. Prolonged Labor 2. Bleeding 3. Increased blood pressure 4. Maternal death 5. Fatal death 6. Others 	

306	Do you believe that majority of complications that are happen during labor and delivery are preventable and treatable	1. Yes 2. No	
307	Do you believe like any other women you could be at risk or susceptible for health problems related to the labor and delivery	1. Yes 2. No	
308	Do you know that being attended by skilled person during delivery may be beneficial to you and you baby	1. Yes 2. No	
309	Does the pregnant mother who has no health problem needed to go and give birth at health facility	1. Yes 2. No	

IV. Health services and perceived quality related Questions

Q/ code	Question	Response	
401	Is there any health facility near to you area	Yes No	
402	What type of health facility	Health center Health post Hospital	
403	Who much time it take you to reach the nearest health facility	Less than 30 minute 30mi- 59min More than one hour	

404	Did you get transportation services to go the health center	Yes No	
405	What type of services did you get from the health institution	ANC Delivery services Vaccination services	
406	What is the delivery services provider attitude toward laboring women	Very poor Poor Satisfactory Good Very good	
407	How did you receive the delivery services from this facility	Free of charge On payment	
408	Were you able to pay for the services	Yes No	
409	What is your belief on ability of birth attendants at delivery between skilled and unskilled birth attendants	Similar Skilled attendant is better than unskilled Unskilled is better than skilled birth attendants	

410	Health professionals in the nearest health facility have the appropriate skill to detect and treat or refer delivery complications?	<p>Strongly disagree</p> <p>Disagree</p> <p>Not sure</p> <p>Agree</p> <p>Strongly agree</p>	
411	The supplies and equipment used by the health worker during delivery are sufficient	<p>Strongly disagree</p> <p>Disagree</p> <p>Not sure</p> <p>Agree</p> <p>Strongly agree</p>	
412	The health professionals give support and respect to the mother during the labor and delivery	<p>Strongly disagree</p> <p>Disagree</p> <p>Not sure</p> <p>Agree</p> <p>Strongly agree</p>	
413	Health facility in nearby are staffed with skilled professionals to provide delivery services	<p>Strongly disagree</p> <p>Disagree</p> <p>Not sure</p> <p>Agree</p> <p>Strongly agree</p>	

Somali version Questionnaires

Xaashida xogta iyo Warqada ogolansha

A. Information Sheet

Xog ururintan waxa loo diyaraiya in xog lagag helo mawduuca ah caqabadaha in la la adeegsado umuliso tababaran wakhtiga dhalma ee magalada Hargisa, Somaliland. Cadaymaha laga helo xog ururintan waxa loo isticmalidonaa in xog laga siiyo kuwa ka shaqeeya iyo daneeyayaasha sida ugu wanagasan ee loo horumarin karo loona xoojin karo adeegsoiga umuliso tababaran. Baadhitaankani waxa uu rhormarinayaa in la horumariyo lana xoojiyo adeegyada caafiamd oo faa idad u leh hooyada . Isku gaynata natijada ugu dambaysa waxa lala wadagayaa dad ka leh go' amada kama dambaysta ah ee dhinacyada kala ducan sidaa darteed ka qyb qaadashada baadhitaantan waxay u muuqataa in ay muhim u tahay mu waadiniinta iyo furasad bulsheed iyo inay waxa ku soo kordhiso arima

B. Warqda Ogolaansha

Mgacaygu waa _____. waxan u shaqaynayaa sida xog ururiyo kaso ka shaqaynaya u kuurgal ayay samaynayso Jamaaca Addis Ababa Kuliyaada caafimadka guud , si l loo baadho adeegsiga umuliso tababaran iyo waliba arima ka hor joogsad adeegsi ee magala magalada Hargeisa Somaliland. Lmbarka r aqoonsi ayaa lagu ragaran doonaa ka qayb qaate kasta magacisana lama istic mala xuso doono. jawaab celin taada waxay noqon doontaa mid xafidan. kaqayb qaadashada baadhitaankan waa mid gabi ahaan ba mutdawa ah, waxad xaq u ledahay in aad ka qayb qaadato, ama inaad diido wakhti kasta xiliaga waraysiga. Ma ka jawabi doontin su aalaha aanad doonayan in aad ka jawabto. Ma jiri doonoto waxa xiddhidha oo ka dhaxayn doona qof ahantada iyo natijada ka dhalata baadhitaankan. Si kastaba, inad si daacad uga jawabto su aalahan waa darruri. waxan kugu dhiiri galinaynaya ain aad ka qayb qadato baadhitankan. Baadhitankan oo qaadan doona 30 daqiiro M rabataa ka qayb qaadashadiisa

Mahadsanid.

Haa

Maya

001. Nuberka xog ururinta _____

002. Goob ta daganansha _____

003. Lambarka guriga _____

003. Wakhtiga la u _____

Qaybka Kowwada

I. Su'alaha Xog ta bulshada iyo dhaqale

N/S	Su'asha	Jawabta		
101	Warbixinta Qoyska?	5. Xas leh 6. Xaas hore 7. Bilaa xaas		
102	Da ' daadu wa imisa?	Da'da-----		
103	Wali iskuul ma gashay	3. Haa 4. Maya		
104	Darajadee baad ka gaadhay waxa barasha cadiga ah ?	5. Dugsi hoose 6. Dugsi dhexe 7. Dugsi Sare 8. Heer jaamacadeed.		
105	Iamanahagu wax is kuul ah ma dhigtay?	3. Haa 4. Maya		
106	Darajadee ayu ayuu ka gadhay wax barasha caadiga ah?	1. Dugsi hoose 2. Dugsi Dhexe 3. Dugsi Sare 4. Heer jamacadeed		
107	Waa maxay sahqadaadu?	5. Guri joogto 6. Shaqaale dawladeed. 7. Xisaabiye 8. wax kale , qeex-----		
108	Ma ii sheegi kartaa dhaqaalaga bishii ku soo	-----		

	galaa			
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II. Su aalaha la xidhiidha Hooyada

N/ S	Su'asha	Jawabta		
201	Carrur ma leedahay?	<ol style="list-style-type: none"> 1. Haa 2. Maya 		
202	Imika uur ma leedahay	<ol style="list-style-type: none"> 1. Haa 2. Maya 3. Ma hubo 		
203	<p>Marka aad uurka leedahay ma raadsataa talo caafimad ama daawayn.?</p> <p>Hdii jawabtadu tahay Haa , xagee ayad ka raadsataa></p>	<p>Haa</p> <p>Maya</p> <ol style="list-style-type: none"> 1. Goob caafimad 2. Dawo dhaqameen 3. Meelo kale , Qeex ----- 		
204	Ma heshaa Daryelka hooyada uur ka leh wakhtiga aad uurka leedahay ?	<ol style="list-style-type: none"> 3. Guriga 4. Goob caafimad 5. Meelo kale , Qeex ----- 		

	Xgee ayad ka heshaa?			
205	Imisa goor ayad qadataa daryelka hooyada urka leh?	6. Hal mar 7. Labba jeer 8. Saddex jeer 9. Afar jeer 10.inka badan afar jeer		
206	Goobtee ayaad ku umushaa wakhtiga dhalmada ?	1. Gutiga 2. Goob caafimad 3. Dhakhtarka dawlada 4. Dhakhtarka bareefat ka 5. Meelo kale . Qeex -----		
207	Yaaa kaa Umuliya marka aad umulayo?	1. Dhaktar 2. Kalkaaliso aacifamd 3. Umuliso dhaqamed 4. Qaraabadayda 5. Cid kale , Qeex _____ 6. No one Midna		
208	Waa maxay sabata aad u dooratay in aad guriga ku dahsho.	8. Shaqale caafimad oo aan jirin 9. In aad gurigaa ku dhaa waa dhaqaqankayaga 10.Foosha ayaa dagdag igu ahayd 11.waxa iga fog goobata caafimadka 12.Waxa aan jitrin ama ku filmayan saaria yaala goobta caafimadka 13.Shaqla caafiamda oo dhaqan xun 14.waxa aanan helayn gaadiid i geeya goobta 15.wa yalo kel , Qeex _____		

209	Maxad u dooratay in aad ku dhsho goob caafimad	<ul style="list-style-type: none"> 6. Waxa ii fiican goobta caafimadka 7. Waxa ku badbaadays anolasha hooyada iyo ilmaha 8. waxa la igu waci galiyay in aan ku umulo goob caafimad 9. waxay iigu dhawdaay meesha aan ku noolahay. 10.Sabao kale Qeex ----- 		
2010	Ma og tahay khataro caaimad oo dhici kara xiliga uurka kaas oo halis ku ah nolosha hooyad uur ka leh>	<ul style="list-style-type: none"> 1. Haa 2. Maya 		
211	Ma ii sheegi kartaa khatarha dumarka uur kale heli kara xilga ay uur k ledahay?	<ul style="list-style-type: none"> 1. Dhiig bax 2. Madax xanuub badan 3. Dawakhad 4. Miyir doorsan 5. Moxoga oo xanuun 6. Qaar kale Qeex _____ 		
212	Ma jiran khataro caafimad oo dhici kara xiliga foosha ksoo halis galin kara nolosha hoouad uur kale?	<ul style="list-style-type: none"> 1. Haa 2. Maya 3. Ma garan karo 		
213	Ma ii sheegi kartaa	<ul style="list-style-type: none"> 4. Dhiig bax baladhan 		

	khatarha dumarka uur kale heli kara xilga ay umlayso?	<ol style="list-style-type: none"> 5. Miyir doorson 6. Foosha oo dheerata 7. Madheerta oo ku dhagta 8. Xuubka oo hoe u dilaca 9. Qaar kale , Qeex _____ 		
214	Ma ka war haysaa dhibatada aya leedahay in guriag lagu u mulo iyada o anay kula joogin kalkaaliso caafimad	<ol style="list-style-type: none"> 5. Haa 6. Maya 		
215	Ma garanysaa inta goor ee loo bahaynyahay in hooyada uur ka leh ay qaado xanaanayta hooyada uurka leh?	<ol style="list-style-type: none"> 1. Hal mar 2. Labba jeer 3. Saddex jeer 4. Afar jeer 		
216	Waa maxay faa'idoyinka laga helo in lagu dhalo goob caafimad			
217	Who advised you on where to give birth to Yaa kulaga laiya meesha aad ku dhali lahad marka dhalaysid?	<ol style="list-style-type: none"> 1. Dhakhta 2. Kalkaaliso caafimad 3. Lmanahaga 4. Qaraabadayda 5. Asxabtayda 6. Cid kale , Qeex _ 7. Cid-naba 		
218	Halkee ayay door biyadeen xaafadidi in aad ku umusho?	<ol style="list-style-type: none"> 1. Gurga 2. Goob caafimad 3. Meel kale, Qeex----- 		
219	Xagee ayaya dad kaagu jelaystaan in aad ku dhasho	<ol style="list-style-type: none"> 1. Guriga 2. Goob caafiamd 3. Meel kale, Qeex 		
220	Xagee ayuu nin kaagu jiclaytaa in ad ku dhasho	<ol style="list-style-type: none"> 1. Kaal kaaliso caafimad oo taba baran 		

		2. Umilo dhaqamed 3. Qrabada 4. Cid kale, Qeex		
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III. Su alaha la xidhiidha shaqalaha caafimadka iyo Nidamka caafimad ee dawlada

N/S	Su' asaha	Jawabta		
301	Ma jiran goobo cafiamd oo u dhow meesha ad ku nooshahay	1. Haa 2. Maya		
302	Mudu intee leeg ayay kugu qaadataa in aad ku gaadho goobtaas caafimad	1. In ka yar 30 daqiiqo 2. 30mi- 59min 3. In ka badan Hal saac		
303	Imika ayay kugu qaada inta ad sagayso la kulan ka shaqale caafimad	1. Aad baan ugu qancay 2. Waan ku qancay 3. Caadi 4. Kuma qancin 5. Kumaba qancin		
304	Intee in leeg ayaad qanacsantahay qalabka caafiamd ee ee loo is ticmalo xiliaga dhalmada	1. Aad baan ugu qancay 2. Waan ku qancay 3. Caadi 4. Kuma qancin 5. Kumaba qancin		
305	How is the support and respect offered by the provider during delivery Waa sidee qadarinak ito taagera aad ka hesho shaqlaha caafimad wakhtiga dhalmada	Excellent Good Average/ poor Don't know		

306	Sidee ayaad ku qiayasi kartaa awwoda ito aqoonta umuillasada ama shaqalaha caifmad ee wakhtiga dhalmada	Excellent Good Average/ poor Don't know		
307	How is the cleanness and comfort of the area Waa sidd nadaafada iyo daganshiya goobtu	Clean and comfort Clean but not comfort Not clean but comfort Not clean and comfort		
308	Sidee ayaad ugu qanacsantahay guud ahan shaqada goobta caafimad wakhtiga dhalmada.	1. Aad baan ugu qancay 2. Waan ku qancay 3. Caadi 4. Kuma qancin 5. Kumaba qancin		

