ADDIS ABABA UNIVERSITY

SCHOOL OF PUBLIC HEALTH,

COLLEGE OF HEALTH SCIENCES

BIRTH PREPAREDNESS AND COMPLICATION READINESS AMONG RURAL WOMEN OF REPRODUCTIVE AGE IN ABESHIGE WOREDA, GURAGHE ZONE, SNNPR, ETHIOPIA

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Acronyms

ANC-Antenatal Care

AOR -Adjusted Odds Ratio

BPCR -Birth Preparedness and Complication Readiness

CI- Confidence Interval

COR - Crude Odds Ratio

EDHS-Ethiopia Demographic and Health Survey

FGD-Focus Group Discussion

HF-Health Facility

HEWs-Health Extension Workers

HWs-Health workers

KAP-Knowledge Attitude and practice

MDGs-Millennium Development Goals

MMR - Maternal Mortality Ratio

MPH-Masters of Public Health

NGO-Non Government Organization

PI-Principal Investigator

REC-Research and Ethical Committee

SPSS-Statistical package for social science

TBA-Traditional Birth Attendant

UNFPA -United Nation Population Fund

WHO-World Health Organization

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Abstract

Background: Every pregnant woman is at risk of pregnancy complications which are unpredictable and can lead to maternal and neonatal morbidity or mortality. Birth preparedness and complication readiness (BPCR) is a tool that promotes utilization of maternal health services there by improving maternal and neonatal survival.

Objective: To assess the current level of practice regarding BPCR and associated factor among rural women of reproductive age at community level in Abeshige woreda guraghe zone SNNPR Ethiopia.

Method: Community-based cross-sectional study supplemented by qualitative design was conducted from February to march 2015. A total of 454 women from 8 kebeles were selected after proportionally allocated to population size and interviewed using structured and semi-structured, pre-tested questionnaires. Qualitative data also collected from purposely selected members of the community by using open ended questionnaires .Quantitative data were analyzed using SPSS and associations were determined using regression analysis. Qualitative data on the other hand were analyzed in line of study objective manually.

Results: In This study about 37.2% of the respondents were prepared for birth and its complications. BPCR was lower among mothers who were farmer (AOR= 0.50, 95% CI:0.28, 0.91).However, BPCR was higher among Women who live with in one hour walk from health center (AOR =3.51, 95% CI:1.78,36.79),Women who had awareness on danger signs of pregnancy (AOR=1.72, 95% CI=1.78, 2.94) and on danger signs of postpartum (AOR=2.32, 95% CI: 1.32, 4.21).Source of information about BPCR from health extension worker and mother's one to five network (AOR=2.81, 95% CI:1.34, 6.21) and (AOR=2.52, 95% CI=1.17, 5.54) respectively also had significant association with BPCR.

Conclusion: This study revealed practice of BPCR was low (37.2%) due to; access to health facility, awareness on danger signs of obstetric complication, and health information related factors. Based on this finding; enhancing women awareness about obstetric danger signs through repeated sensitization, strengthening BPCR information netwok at grass root level and better acces to health facility help to improve practice of BPCR.

1. Introduction

Pregnancy is a very important event from both social and medical points of view [1]. Every pregnant woman is at risk of pregnancy complications which are unpredictable and can lead to maternal and neonatal morbidity or mortality [2].Therefore; pregnant women should receive special care and attention from the family, community and from the health care system [1].

The crucial factors for maternal mortality are 'three delays': delay in seeking health care, delay in reaching to health care and delay in obtaining appropriate health care[3]. Birth-preparedness and complication-readiness (BPCR) reduces these delays by planning for normal birth and predicting actions needed in case of emergency. It encourages women, family, and communities to make arrangements such as identifying (skilled provider, place of delivery, and transport to place of delivery, setting aside money to pay for service fees and transport, and blood donor) in order to make simple decision and reduce delays in reaching care once a problem arises. Responsibilities for BPCR must be shared among all safe motherhood stakeholders, since coordinated effort is needed to reduce the delays that contribute to maternal and newborn deaths [2]. Improving maternal health and reducing maternal mortality rates by 75% is set as a key objective in the Millennium Development Goals [1].

Statement of the problem

In the year 2010 about 287,000 maternal deaths occurred worldwide from cases linked to pregnancy and child birth 85 % of these deaths occur in sub-Sahara Africa and south Asia [4]. In Ethiopia according to 2011EDHS report maternal mortality ratio is 676 maternal deaths per 100,000 live births (5). In Ethiopia direct obstetric complication accounts for 85% of maternal deaths. Most of these deaths are preventable when there is access to adequate reproductive health services, equipment, supplies and skilled healthcare workers [6]. This can be achived by preparing for normal birth and predicting actions needed in case of emergency (2). The safe motherhood initiative declared that the skilled attendance to assist child birth is the most important intervention to reduce maternal mortality [2].However in Ethiopia according to EDHS 2011 report only10% of births was attended by health professionals. [5].This insignificant decline of maternal mortality ratio and insignificant improvement of skilled birth attendance might be due to the none or less use of birth preparedness and complication readiness.

Despite the potential contribution of birth preparedness and complication readiness to the utilization of safe maternal health services, yet believed only few mothers practice it, especially in the rural part of Ethiopia. Only few studies were conducted in Ethiopia and showed that BPCR practice is low (7, 8, 9). And these few studies did not adressed all the possible factors.

Rationale of the study

Thus; it is important to have up-to-date information about status of BPCR and factors influencing its practice**.**This study was conducted to fill this gap by determining the current level of practices regarding BPCR and associated factors among women of reproductive age in rural set up.

Significance of the study

The findings could help planners, administrators and stakeholders to modify BPCR strategy that will improve maternal health service utilization .It will also be used by researchers to conduct further research based on the gap identified. The finding will also be a base line for the study area.

Research questions

1. What proportion of reproductive age women in Abeshige woreda prepared for birth and its complication?
2. What factors influence practice of birth preparedness and complication readiness in Abeshige woreda?

2. Literature Review

As study results showed the practice of women regarding BPCR varies from area to area and time to time. Saving money had been a common practice as component of BPCR [10,11, 12].The proportion of participant saving money were in Uganda 91%.(10), in Tanzania 89% [11], in Robe Ethiopia 76.3% [7],in Adigrat town Ethiopia 68.9% [8].

The proportion of participant who identified place of delivery, in Tanzania 86%, among those who identified place of delivery 68% of them planned to be delivered by skilled attendant, while 32% of them planed home delivery [11], In robe Ethiopia 45.6 %, however 41% of those planned home delivery, while only 5% planned to use the nearest health facility [7].In Adigrat town Ethiopia 39% [8]. In case of identifying means of transportation in Uganda 61% [10], in robe Ethiopia 70% [7], In Adigrat town 3.2% [8]. However identifying blood donor is a neglected practice [7, 11, 12]. In robe Ethiopia 10% [7], In Tanzania 8.7 % [11]

The level of practice regarding BPCR ,In west Bengal 35 % [13], In robe Ethiopia 16.5% [7] in Adigrat town Ethiopia 22% [8], in Addis Ababa Ethiopia 68.6% [14].

A number of factors like socio demographic and economic are found to have influence on utilization of BPCR. They include women's age, education level, occupation, house hold asset, religion. A community based study on BPCR from India showed that women of low risk age group(20-35yrs)had better perception to wards BPCR when comparing with their counter parts(<20 and >35 years) [15].

Studies showed that women with post primary education had better perception in identifying health institusion for delivery when comparing with their counter parts [7, 11,13,16. 17]. Mothers whose educational status was secondary high school and above were more likely to prepare for birth and it's complication than women with other levels of education [7].

From India study result showed higher proportion of working women save money than house wife,While house wife had better awareness on community transport system for labor/emergency [15]. Another study from Uganda and Tigray Ethiopia showed participant from households that

had high assets ownership score were more likely to be knowledgeable and birth prepared than those with lower household assets ownership score [10, 18].The same study from India result showed religion had its own effect on BPCR, Hindu has better awareness on community transport scheme than their counter parts, while Muslims had better awareness on essential newborn care [15].

In Ethiopia place of residence and access to health facility have also been shown to influence BPCR and delivery services. A study conducted in Jima Ethiopia on factors associated with BPCR showed Access to health center found to have statistically significant association with BPCR, Women from urban residence six times and women who were from within two hours travel on foot from health center were two times more likely to be prepared for birth and its complications [9].

Some studies indicate spouse approval had great effect on BPCR. From Uganda study reported that women who had spouse support were more likely to prepare for birth and its complication [19].

As studies showed cultural factor also have effect on preparation for birth and its complication, a qualitative study from Indonesia and Goba woreda Ethiopia reported that most mothers prefer to deliver at home by reasoning celebrating birth with relatives and neibour is better [20]. If there is no obstetric complication no need of delivering at health facility [16, 21]. Delivering at health facility can exposed to cold [16].

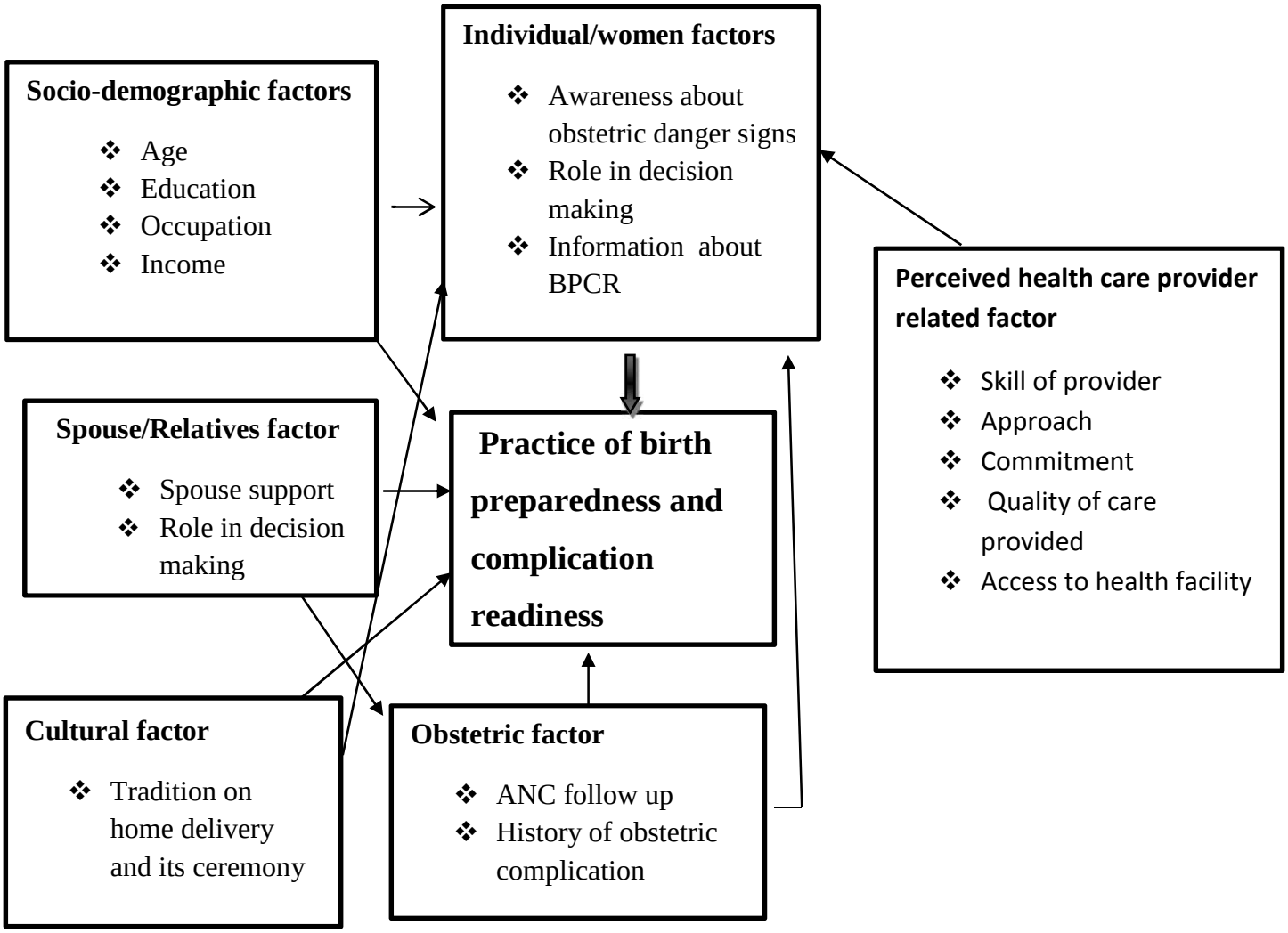
In some studies ANC visit and obstetric history were found to be factors associated with BPCR. Women who had history of antenatal visit were more likely to prepare for birth and its complication than those didn't follow ANC [7, 13, 15, 22,]. A study from Uganda, Ethiopia (Robe) report showed having history of pregnancy complication was found to have association with BPCR [7,8,19]

As some studies showed parity and birth order affect BPCR. Birth order of four or more or being grand multipara found to be significantly associated with BPCR, means as birth order increases BPCR decrease.[7.8]

Some studies indicated that quality of ANC affect the utilization of BPCR [2, 15, 20, 13]. A study from India showed that the less awareness about BPCR at the individual level may be due to lack of BPCR counseling by the service providers during antenatal checkups [15]. A qualitative study conducted in Malawi showed that some health care provider did not routinely provide women with information on BPCR as part of ANC [20].

Studies showed individual perception affect BPCR practice [7, 21].A qualitative study from Indonesia showed that trained delivery attendants or an institutional delivery is aimed only when women experienced obstetric complication [21]. A community based study from Robe Ethiopia reported that the main reasons mothers gave for their home delivery were; short and smooth labor 98%, normal previous home delivery 35.4%, too much cost of health facility 13%, presence of TBAs 1.1%, perceived poor quality service of health facility 0.6%, informed that their pregnancy was normal 0.4%, health facility too far 0.4% and other reasons 0.8% [7].

Some studies showed that women awareness about danger sign of obstetric complication had influence on BPCR. A community based crosesectional study from Robe, Rural Uganda, Tanzania and west bengal [7, 10, 11, 13,].Women who had awareness about obstetric complication were more likely to prepare for birth and its complications than who didn’t have awareness on the presence of obstetric complication [7,11].



- Perceived health care provider and service related factors were assessed based on the respondent's perception

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Figure.1. Conceptual framework on factors those affect birth preparedness and complication readiness among women of reproductive age.

3. Objective

General objective

To assess the current level of practices regarding BPCR and associated factors among rural women of reproductive age in Abeshige woreda, Gurage zone, SNNPR, Ethiopia.

Specific objectives

- To determine current level of practices regarding BPCR among women of reproductive age who gave birth within 12 month prior to the survey

- To identify factors influencing practice of BPCR among women of reproductive age who gave birth with in12 month prior to the survey.

4. **Methods**

4.1. Study area and period

The study was conducted in February to march 2015 at community level in Abeshige woreda. Abeshige woreda is one of the districts in Guraghe zone and it is located 185 km south west of Addis Ababa. It has two urban and 26 rural kebeles. The population of Abeshige woreda is estimated about 76610, of which female accounts to 51%, the estimated total number of women of reproductive age and women who gave birth with in the last 12 month in the woreda were 17,926 and 2528 respectively (Data from woreda health office).This woreda has four health centers (three governments and one NGO), 2 urban and 26 rural health posts, 12 private clinics, one drug store and one rural drug vender. All the health centers and health post gives maternal health services. According to woreda health office report of 2013, antenatal care and institutional delivery service were 97% and 21% respectively. (25).

4.2. Study design

A community based Cross-sectional study supplemented with qualitative method was conducted.

4.3. Source population

All women in the reproductive age group in Abeshige woreda

4.4. Study population

Women who gave birth with in12months prior to the survey irrespective of place of delivery and birth outcome were included based on the inclusion criteria.

For qualitqtive method different groups of participants were selected. From the users perspectives(i.e. mother and their husbands who were assumed to be involved in the decision making process about seeking health care),from care provider perspectives (i.e.health extension workers because they play a prominent role in creating awareness and providing maternal health service and traditional birth attendants because they also play a role in providing maternal health services

Inclusion criteria:

- Women who gave birth with in12 months preceding the survey.
- Willing to participate in the study and able to give informed consent.
- Women who permanently live in the study area (live for six months or more).

Exclusion criteria

- Too sick to give consent or to be interviewed.

4.5. Study variables

-Dependent variable

Practice of birth preparedness and complication readiness

-Independent variables

Socio demographic variables: age, marital status, educational status, occupation, monthly income.

Husband/Relatives and HEWs influence:-Husband support and role in decision making.
-Relatives support and role in decision making
-HEWs role in awareness creation

Cultural/ritual factors: Tradition on home delivery and its ceremony

Obstetric/service utilization factors: parity, history of obstetric complication and ANC visit

Perceived health care provider and Health facility/ service related factors: -
-Skill, approach and commitment of health care provide
- Perceived quality of care provided
-Accessibility of health facility

Woman/individual factor: -Awareness on danger sign of obstetric complication, source of information, perception on institutional delivery, and role in decision making.

4.6. Sample size determination

The sample size was calculated by using a single population proportion formula. By assuming p=expected proportion of population practicing BPCR = 16% from the study conducted in Robe Ethiopia.

Zα\2=the critical value at 95% confidence level of certainty (1.96)

d=the margin of error between the sample and the population 5%. The actual sample size:

$n = \frac{(z\alpha\backslash 2)^2 P(1-P)}{(d)^2} = \frac{(1.96)^2 .16(1-.16)}{(0.05)^2} = 206$

Non response rate of 10% and design effect of 2 is considered. Thus, the required sample size calculated to be 454 women.

For qualitative method by considering homogeneity of population, a total of 40 participants were recruited.These consists of 16 mothers who deliver with in twelve months prior to this servey, 16 fathers, 4 HEWs and 4 TBAs. The recruitment of mothers , fathers and TBAs was assisted by each kebele administrators .

4.7. Sampling procedure

For quantitative multistage cluster sampling technique was used, Each of the four health center in this woreda has catchment area, based on it all rural kebeles in the woreda were grouped in to four clusters (Hole, mamede, walga and darge).Since these clusters are homogeneous one cluster was selected randomly by lottery method. The final calculated sample size was allocated to each kebele under the selected cluster proportionally based on population size (women who deliver with in 12 month prior to this servey). By selecting the starting point randomly individual women was selected until the desired sample size was reached in each kebele. For households' which has more than one eligible woman, interview was done by selecting a woman by using lottery method.

For qualitative study, all kebeles under the selecte cluster were grouped in to two based on their accesiblity to health center.Those kebeles lacated with in one hour walk were ambelta, mamede ,tatesa, lay geraba and tach geraba and those kebeles located > one hour walk were Michele,tuba and dire lafto.Then 8 mothers ,8 fathers, 2 health extension worker and 2 TBAs from kebele within one hour walk from health center and the same number from kebeles >one hour away from health center were recruited (Fig 3). Participants interviewed in the quantitative survey were excluded from FGD. The groups were homogeneous in terms of age and sex, this help participant to talk freely whatever they know.

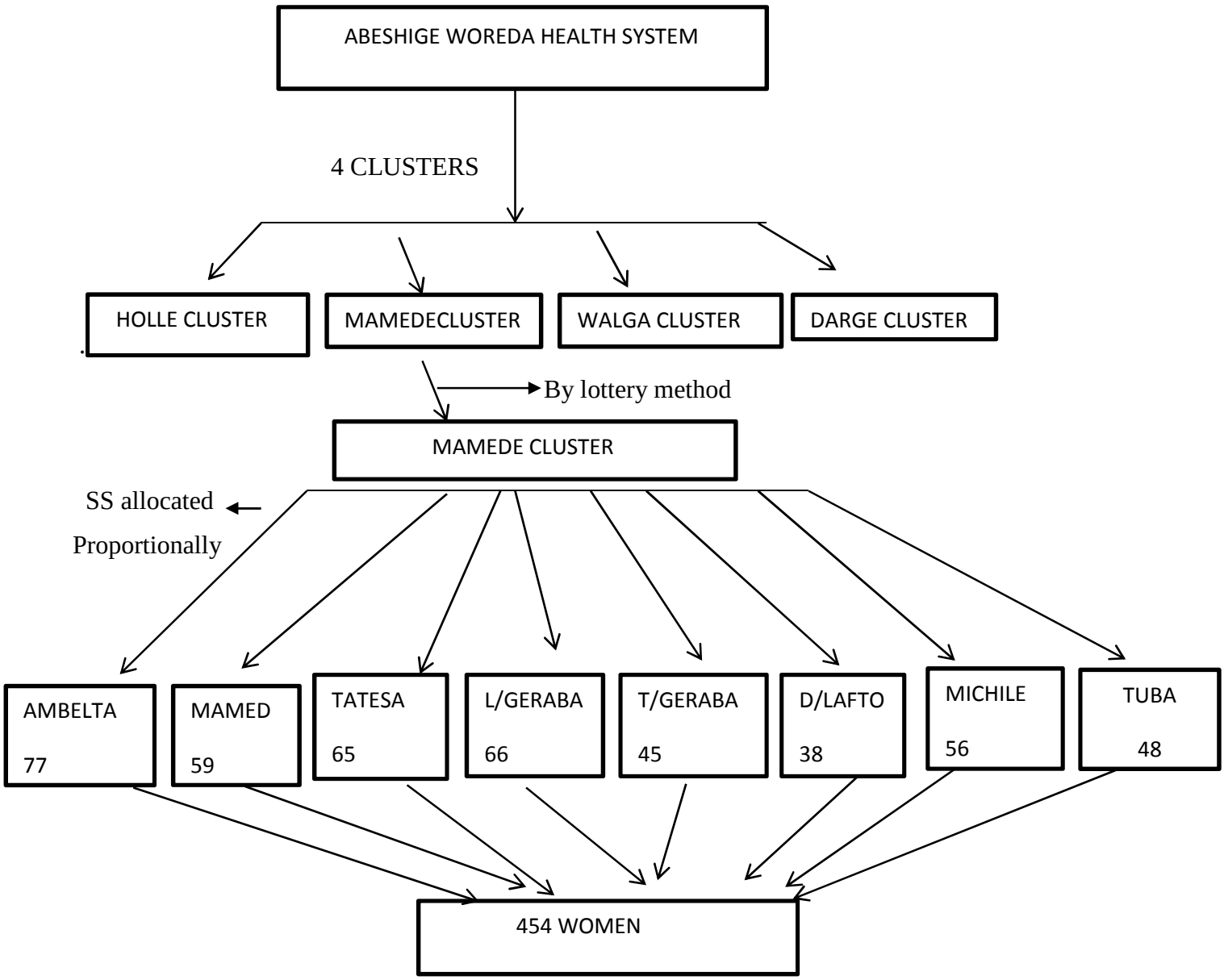

Figure 2: Schematic presentation of the sampling procedure used in the study, Abeshige, SNNPR, Ethiopia, 2014/15.

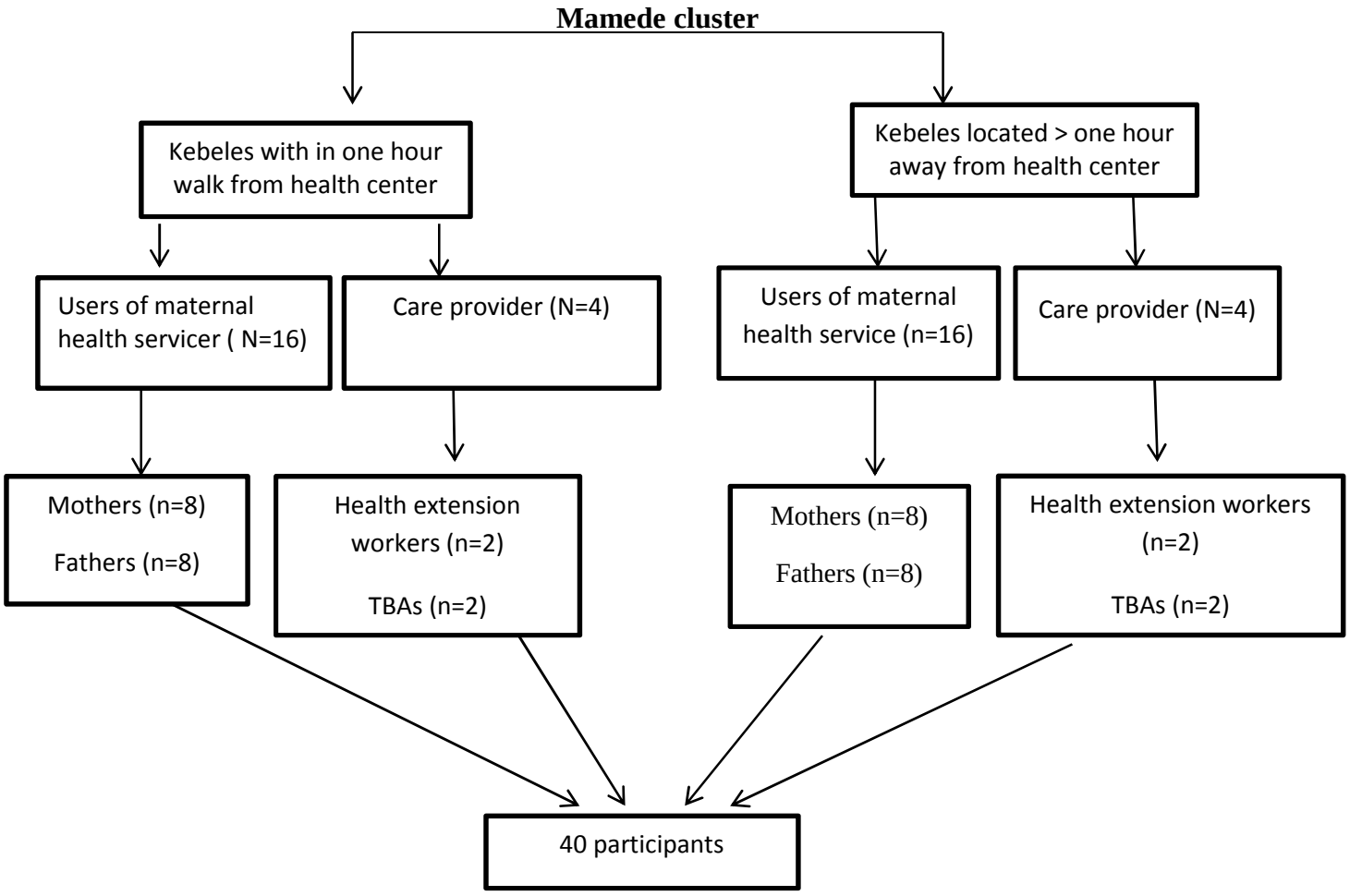

Figure 3: Schematic presentation of the sampling procedure used for qualitative study, Abeshige, SNNPR, Ethiopia, 2014/15.

4.8. Data collection tools and procedure:-

For the quantitative method, a pretested structured and semi structured questionnaire, which mainly adapted from monitoring birth preparedness and complication readiness, tools and indicators for maternal and newborn health (2) was used. The tool was translated in to Amharic and back to English to ensure consistency for the data collection purpose. The questionnaire used to collect information on socio-demographic characteristics, obstetric history, awareness about obstetric danger sign and practice of BPCR and personal and social factors influencing the practice of BPCR. The data were collected by six female diploma nurses from health facilities out of the selected cluster and supervised by two BSC degree health professionals. A two day training complemented with practical exercise was given to data collectors and supervisors before the actual data collection regarding the aim of the study, data collection tool and procedures by going through the questionnaires question by question.

For qualitative method by using open ended/guiding questionnaire, four sessions of FGDs and eight in-depth interviews were undertaken to explore cultural and social experience of the community regarding BPCR and their reasons. After explaining the purpose of the study and obtaining informed consent in-depth interview was conducted by principal investigator, and FGDs was moderated by principal investigator and note taker, note taking and tape recording was used.

4.9 Operational definitions and Measurement

Awareness on key danger signs of pregnancy: - A woman was considered as had awareness on key danger signs of pregnancy, if she can mention at least two of the three key danger signs for pregnancy spontaneously (vaginal bleeding, swollen hand/ face, blurred vision).

Awareness on key danger signs of labor /child birth:-A woman was considered as had awareness on key danger signs of labor/childbirth, if she can mention at least three of the four key danger signs for labor/childbirth spontaneously(vaginal bleeding, prolonged labor (>12hrs), convulsion, retained placenta).

Awareness on key danger sign of postpartum: - A woman was considered as had awareness on key danger signs of postpartum, if she can mention at least two of the three key danger signs for postpartum spontaneously (vaginal bleeding, foul smelling vaginal discharge and high fever).

Birth preparedness and complication readiness: A woman was considered as prepared for birth and its complication if she was found to have made arrangements for at least three of the component practices of BPCR (identified place of delivery, identified skilled provider, saved money, identified transport ahead of emergency and identified blood doner). The remaining women were considered as not prepared for birth and its complication.

Skilled provider/skilled attendant: people with midwifery skills (for example, midwives, doctors and nurses) who have been trained to proficiency in the skills necessary to manage normal births and diagnose, manage or refer obstetric complications.

4.10. Data analysis procedure.

Data from the questionnaires were first checked manually for completeness and coded. Prepared template, data entered and cleaned using Epi-Info 3.5.3 statistical software; then transferred to SPSS version 21 for analysis. Descriptive analysis was done to show the distribution of characteristics among respondents by using frequency and percentage and was presented in the form of text and tables. Bivariate analysis was used to determine the association between different factors and BPCR by using odds ratio. Those variables showed significant association on bivariate analysis were adjusted each other for potential confounding by using Multivariate logistic regression. P-value (<0.05) and 95% confidence interval (CI) for OR were used in judging significance of the associations. The qualitative data were transcribed into English text by replaying the recorded interview and revising the note taken.Contents were analyzed in line of research obective manually. Then the result was presented in narration by triangulating with quantitative findings.

4.11. Data quality management

Data quality was ensured at each step. A week before data collection training of the data collectors and their supervisors was undertaken for two days on the objectives, relevance of the study, method of interviewing, confidentiality of information and informed consent. The questionnaire was translated in to Amharic and back to English to ensure consistency for the data collection purpose. The questionnaire was pretested in one of the kebele out of the selected cluster in the study area which have similar characteristics with the study population. About 5% of sample size(22mothers) were interviewed. Findings were discussed among data collectors and supervisors in order to ensure better understanding to the data collection process. Based on the pretest, questions were revised, and those found to be unclear or confusing were modified. Supervisors followed the data collection closely throughout the data collection period along with the principal investigator. All the questionnaires were checked each night on the same day, questionnaire found incomplete and/or inconsistent were back to the data collector based on the id number and to get complete on the next day. Data were entered and cleaned using Epi-Info before exported to SPSS for analysis.

4.12. Ethical consideration.

Written ethical clearance was obtained from the Research and Ethical committee (REC) of the School of Public Health, Addis Ababa University. First a formal letter was written to Abeshige woreda health office from the School of Public health and then permission to conduct the study was obtained from woreda health office and each kebele administration. The information was kept confidential. Furthermore; during data collection informed consent was obtained from each respondent by first explaining the objectives and procedures of the study, Since the study area is rural majority of the respondents were illiterate, so also used verbal consent but the consent form and information sheet was properly written and read by data collectors for the study subjects, when they agree continued to ask if not they terminated and continued to other respondent. For the qualitative data the moderator and interviewer explained the purpose of the study and obtained voluntary informed consent prior to the discussion and interview including to take note and to use tape recording.

4.13. Dissemination of result

This thesis first be presented for defense at school of public health Addis Ababa University, and the result will be communicated to all concerned bodies. Presentations at professional, local, and national meeting and Publication on scientific journals will be considered.

5. Result

5.1. Socio-demographic characteristics of the study population

A total of 449 women (98.9%) from 454 who gave birth with in twelve months prior to this study were participated. The sample age range was 17 to 40 years with a mean age of 29+/- 6 years. Majority (60.4%) were 25- 34 years of age while age 35-44 years were 101(22.5%). More than half (57.2%) of the respondent were Muslim while orthodox and protestant were 191(42.5%) and 1(0.2%) respectively (Table 1).

Majority (96.6%) were currently married while the remaining proportion was separated, divorced, widowed and single**.** Out of the total respondent 378 (84.2%) belongs to Guraghe ethnic group while the remaining were Amhara, kebena and Oromo. Regarding their educational status, about 250 (55.7%) were illiterates (not read and write), 15(3.4%) attended informal education, 167(37.2%) attended primary education (grade 1-8) and only 17(3.7%) attended secondary and above (Table 1).

Occupational characteristics of respondent showed that more than half (53.9%) were housewife followed by merchant and farmer 98(21.8%) and 90(21.4%) respectively.The mean family size was 5.5±1.6 SD with a range of 2-10 people. About 43.4% of the women reported as they live within 30-60 minute walk from health center, while 30.3% reside more than one hour away from health center (Table 1)**.**

Table 1: Socio demographic characteristics of women of reproductive age group, Abeshige woreda January 2015 (n=454)

Variables	Number	Percent
Age		
15-24	77	17.1
25-34	271	60.4
35-44	101	22.5
Religion		
Muslim	257	57.2
Orthodox	191	42.6
Protestant	1	0.2
Marital status		
Married	434	96.7
Separated	6	1.3
Divorced	3	0.7
Widowed	1	0.2
Single	5	1.1
Ethnicity		
Guraghe	378	84.2
Amhara	26	5.8
Kebena	26	5.8
Oromo	19	4.2
Educational status		
Illiterate	250	55.7
Read and write(informal)	15	3.4
Primary education (1-8)	167	37.2
Secondary and above	17	3.7

Table 1: Socio demographic/economic characteristics of women of reproductive age group, Abeshige woreda January 2015 (n=454)

Table 1 continued..

Variables	**Number**	**Percent**
Occupational status		
House wife	242	53.9
Merchant	98	21.8
Farmer	96	21.4
Daily laborer	7	1.6
Employee	4	0.9
student	2	0.4
Family size		
1-3	53	11.8
4-6	266	59.2
≥7	130	29.0
Time it take from home to health center in minute/hour		
<30 min	120	26.7
30min-60 min	193	43.0
>1hr	136	30.3

5.2. Obstetric history of the respondent

Sixty one (13.6%) of the respondent were primigravid while158 (35.2%) of them had 5 and above pregnancies. Among the respondents more than half (52.3%) had 2–4 children, while proportion of respondents who had ≥ 5 children were 148(33%), mean gravidity and parity of 3.8 ±1.9 SD and 3.6 ± 1.9 SD respectively. More than one third (34.1%) of the women became pregnant for the first time at the age of <25 years while 296 (65.9%) of respondent became pregnant the first time at the age of 25–34 years. Forty (8.9%) of the respondents had history of abortion while 15(3.3%) of them had history of still birth.

Table 2: Obstetric history among women of reproductive age, Abeshige woreda January 2015 (n=454)

Variables	Frequency	Percent
Gravid		
1	61	13.6
2-4	230	51.2
≥5	158	35.2
Parity		
1	66	14.7
2-4	235	52.3
≥5	148	33.0
Age at first pregnancy		
<25	153	34.1
25-34	296	65.9
Age at recent pregnancy		
<25	103	22.9
25-34	282	62.8
35-44	64	14.3
Birth order		
First	59	13.1
Second	70	15.6
Third	86	19.2
Fourth and above	234	52.1
History of abortion		
Yes	40	8.9
No	409	91.1
History of still birth		
Yes	15	3.3
No	434	96.7

5.3. **Regarding maternal health service utilization**

Almost all (99.3%) of the participants had at least one ANC visit during their recent pregnancy. Among those who attended ANC more than three quarter (78.4%) have made 4 and more visits while only 3(0.7%) have made one visit ,majority (87.5%) of them attended their first ANC between four and six months of their pregnancy and forty six(10.2%) attended their first ANC before three month of their pregnancy. Three hundred thirty two (73.9%) of mothers had ANC visit by a skilled care provider while 114(25.4%) of them had visit by health extension workers. Almost all (97.1%) of the respondent reported as they received advice about *BPCR* during their ANC visit (Table 3) .

Four hundred twenty two (94%) respondents gave birth at health Institutions, whereas 27(6%) of respondents gave birth at home and elsewhere out of health institutions. Among the respondents 153(34.1%) reported as they had history of previous health facility delivery, while 10 (2.2%) and 5(1.1%) of the respondent gave birth by Cesarean section and instrumental respectively(Table 3).

Among those who gave birth at health institution, they reasonout for their institutional delivery were; need better service from health facility 381(89.6%) told to deliver at health facility267 (59.5%).The qualitative finding from this study also revealed that majority of the mother were informed about planning institutional delivery for better service, FGD discussant and in-depth interview participant explained the issue as follow;

“I said in the previous time many mothers had been buried with their fetus in the womb, thanks to Allah! Today such problem has been reduced, due to the availability of health extension worker and health worker almost all mothers go to health center for delivery because they (HEWs) teach them to do so, WE (the community) also set 500 birr punishment rule for those mother who deliver at home and 300 birr for those who assisted birth at home” (38 years old husband from mamede FGD).

One TBA in-depth interview participant expressed the issue as follow; “ Now a day mothers prefer to deliver in health center, I also support this ,but if labor start at in appropriate time they (mothers) call me , as you know I am illiterate ,I don’t have any instrument, injection or tablet,if she deliver normally I give better care for her and her baby than other village mother, otherwise health facility is better because if position of baby is not normal they manage it, if operation is needed they do it”(49 years oldTBA).

" Currently our(health extension workers) role is awareness creation ,I gave a family guidance manual for each mother it contain list of obstetric danger signs and list of birth plan ,while I teach them I use it, so every mother in my kebele plan for birth during pregnancy to deliver at health facility"(35 years old HEW),

One hundred twenty eight (30.1%) reason out better outcome from previous institutional delivery), while poor outcome from previous home delivery 40(9.4%), some mothers from focus group discussant expressed their experience as follow and one similar to it; "previously when I gave birth at home, village mothers accompany and assisted me by pushing down my shoulder to let the baby out, I remember it was pain full even for about a month. But now the health extension worker teach us to attend ANC and to deliver at health center, so in my last deliver I started my routine activity at home within a week" (30 years old mother from tuba FGD),

Ninety six (22.6%) reason out health facility near to where they live, finding from qualitative also showed that access to health facility affect women's maternal health service utilization, A husband from FGD explained his idea using the expression as follow; "I said there were several obstacles but now such obstacles has being reduced, as my village (got two) when a mother feel labor sign she ask someone to accompany her and go to health center on foot" because it is not far (33 years old husband), Twenty two (5.2%) gave other reasons) .(more than one answer possible so cannot be sum up to 100%)

The women who gave birth at home reason out; short and smooth labor 23(85%), health facility too far 7 (25.9%), lack of transport 7(25.9%), afraid of family 2(7%) and 0thers 2 (7%). (more than one answer possible so cannot be sum up to 100%) .

Table 3: Maternal health service utilization among women of reproductive age Abeshige woreda January 2015 (n=454)

Variables	Frequency	Percent
ANC visit		
Yes	446	99.3
No	3	0.7
Get ANC service from		
Health professional	332	73.9
Health extension worker	114	25.4
ANC frequency/number of time attend		
1	3	0.7
2-3	91	20.2
≥4	352	78.4
Month start ANC		
≤3 month	46	10.2
4-6	393	87.5
≥7 month	7	1.6
Received advise about BPCR during ANC		
Yes	436	97.1
No	10	2.2
History of previous health facility delivery		
Yes	259	57.7
No	150	33.4
Place of delivery in recent pregnancy		
Hospital	38	8.5
Health center	356	79.3
Health post	28	6.2
Home and elsewhere out of health institution	27	6.0

5.4.1 Awareness of respondent about danger signs of obstetric complication

Awareness of respondents about danger signs during pregnancy

Out of the total respondent 404(90 %) reported that they had information about danger signs during pregnancy. Among those who had the information 328 (73.1%), 139 (31.0%) and 97(21.6%) of the respondents spontaneously mentioned vaginal bleeding, swollen hands/face and blurred vision respectively as danger signs during pregnancy. About one third (34.9%) 0f the respondent spontaneously mentioned at least two key danger signs of pregnancy**.**

Qualitative finding also revealed that vaginal bleeding was the most known pregnancy danger signs .twins pregnancy and death of baby in the womb were also raised as main danger sign of pregnancy which explained by mothers as follow and one similar to it; “I said when the pregnancy is twins the mother is in dangerous condition, as all you (the discussant) know three years back my neibour delivered twins baby at home ,the firs one born alive but the second one died inside and born dead, after two weeks the mother herself died,”(25 years old mother).

On the other hand most of the husband focus group discussant mistook danger signs of pregnancy by using expression as follow and one similar to it; “I said abdominal pain, pregnancy time being beyond nine month ,and malposition of baby are the main danger signs” (35 years old husband fom mamede FGD).

Awareness on danger signs during labor/childbirth

Majority (91.5%) of the respondent reported that they had information about danger signs during labor and delivery, Among those who had the information 333(74.2), 131 (29.3%), 121 (26.9%) and 65(15.4%) of the respondents spontaneously mentioned vaginal bleeding, retained placenta, prolonged labor and convulsions respectively as danger signs during labor/delivery. 103(22.9%) of the respondent spontaneously mentioned at least three key danger signs of labor/delivery.

The qualitative finding also showed vaginal bleeding was the most known danger signs of labor/delivery, in addition mal presentation and retained placenta were danger signs discussed or

mentioned by most of the discussant and interviewee by using the following expression and one similar to it;

" I said vaginal bleeding at any time, when feet or hands of baby come first during labor and retained placenta the mother is in dangerous condition, especially in case of retained placenta it may cut down inside and her abdomen be distended ,she may die due to this" (27 years old mother from tuba FGD**).** "I said vaginal bleeding and malposition of baby are danger signs, when I was working as birth assistant when there was excess bleeding and I checked position of the baby was not good I had referred them"(49 years old TBA)

Awareness on danger signs during postpartum period

Three hundred ninety nine (88.8%) of the respondent reported that they had information about danger signs during postpartum, out of them 320 (71.3%), 96(21.4%) and 37(8.2%) of the respondents spontaneously mentioned severe vaginal bleeding, high fever and foul smelling vaginal discharge respectively as danger signs during postpartum period. 90(20.3%) of the respondent spontaneously mentioned at least two key danger signs of postpartum.

One TBA participated in in-depth interview expressed her idea as follow; "In my experience, vaginal bleeding and green vaginal discharge during postpartum are dangerous conditions, I know a mother she had green vaginal discharge she suffered for a long period ,when she consulted me I advised her to go health center and she went, they gave her medicine after that she had got better" (40 years old TBA).However, husband from focus group discussant mistook the postpartum danger sign as follow; " I said abdominal cramp and breast pain after delivery, are the main danger signs" (38 years old husband from mamede FGD).

The most frequently mentioned danger sign was vaginal bleeding which spontaneously mentioned by 73.1% , 74.2% and 71.3 % of the respondents during pregnancy, labor/ delivery and postpartum respectively while Convulsion during labor and foul smell vaginal discharge during postpartum were mentioned by very few respondents. Among the total respondents; 34.9% had awareness on danger signs of pregnancy, 23.6 % had awareness on danger signs of delivery and 20.3% had awareness on danger signs of postpartum (Table 4).Since there is no clear operational definition for obstetric danger signs in general, it was not assessed.

Table 4**: Awareness on obstetric danger signs among women of reproductive age group, Abeshige woreda, January 2015.(n=454**)

Variables	Spontaneous response	Catagory	Frequency	Percent
Danger signs of pregnancy	Sever vaginal bleeding	Yes No	328 121	73.1 26.9
	Swollen hand/ face	Yes No	139 310	31.0 69.0
	Blurred vision	Yes No	97 352	21.6 78.4
Danger signs of labor/delivery	Sever vaginal bleeding	Yes No	333 116	74.2 25.8
	Prolonged Labor />12hrs/	Yes No	121 328	26.9 23.1
	Convulsion	Yes No	69 380	15.4 84.6
	Retained placenta	Yes No	131 318	29.2 70.8
Danger signs of Postpartum	Sever vaginal bleeding	Yes No	320 129	71.3 28.7
	Foul smelling vaginal discharge	Yes No	37 412	8.2 91.8
	High fever	Yes No	96 353	21.4 78.6
Awareness on obstetric danger sign during	Pregnancy	Yes No	157 292	34.9 65.1
	Labor/delivery	Yes No	106 343	23.6 76.4
	Postpartum	Yes No	90 359	20.3 79.7

5.4.2. Source of information about BPCR, support and roles in decision making

Vast majority (95.8%) of the respondent were informed about BPCR. They were asked about the source of information, they stated that; more than three quarter (82.9%) from health extension worker, 222(49.4%) from health worker, 98(21.8%) from radio, 44(9.8%) from women one to five network and 16(3.6%) from pregnant mother conference.

Some of the qualitative participant expressed the information issue as follow and one similar to it; “When I was attending ANC ,I was informed to deliver in health facility ,If they(health worker, HEW) informed us to stay at health facility or around we prepare cloth for the baby , money and food for our stay” (28 years old mother).
“As I heard from our one to five network, vaginal bleeding and severe headache are danger signs during pregnancy”(A 26 years old mother from Tatesa FGD)

Majority (92.7%) and 356(79.3%) of respondent reported as they were supported by husband and relatives respectively in connection to their preparation for birth and its complication; prepare money for transport, accompany while going health facility, and took care of children at home were among the types of support they mentioned. Relatively small proportion (8.7%) of respondent reported making decision on seeking health care in relation to their pregnancy labor and postpartum by their own while 403(89.8%) making decision jointly with their husbands.

The qualitative finding also showed that, husband has great role in making decision on seeking health care. Mothers from focus group discussant explained their experience about decision making by using the following expression ; “ Even I told him as I feel labor sign in the morning he went far from home to work, until he returned back to home at night I delivered at home , in this condition how could I go to health facility by what money and transport ? ” (A 29years old mother).

Table 5: Distribution of respondent by source of information about BPCR, Abeshige woreda January 2015 (n=454).

Variables	Number	Percent
Any information about BPCR		
Yes	330	95.8
No	19	4.2
Source of information about BPCR		
Health worker	222	49.4
Health extension worker	372	82.9
Radio	98	21.8
Pregnant mother conference	16	3.6
Women 1 to 5 network	44	9.8
Supported by husband		
Yes	416	92.7
No	33	7.3
Supported by relative		
Yes	356	79.3
No	143	20.7
Decision maker		
Self	39	8.7
Husband	7	1.6
Self and husband jointly	403	89.7

***For source of information multiple answers possible so cannot sum up to 100%**

5.6: Practices of respondents regarding preparation for birth and its complication

Four hundred forty two (98.4%) of the respondents reported as they made arrangement for birth during their recent delivery.Preparing food items and cloth for new born are among the preparations mentioned by majority of the respondents .Regarding the very important component of BPCR, among the total respondent spontaneously reported 427(95.1%) identified place of delivery, Among respondents who identified place of delivery425(94.6%) of respondent plan to give birth in health institution by skilled provider while only 2(0.5%) planned to give birth at home, 296(65.9%) saved money for child birth, 225(50.1%) identified skilled provider and 213(47.4%) identified a mode of transportation while only 35(7.8%) of the respondent identified blood donor.By considering the important component (identified place of delivery, saving money and identified transport) 37.2% of respondent were prepared for birth and its complication.(Table 6).

The qualitative part of this study revealed that respondents considered anything which is done before child birth like preparing food item as birth preparedness, it also showed that the health extension worker are on the right way of creating awareness on mother towards institutional delivery and the community reflect positive perception by arranging local transport scheme and financial support for emergency from village “Edir”.

The focus group and in-depth interview participant discussed and mentioned about practice of mother regarding preparation for birth and its complication in the area using the expression below;

“ We prepared as our economic capacity permit, by preparing bulla , kocho , butter and the like ,if she has no money she cannot buy anything” (25 years old mother)

“ Currently our(HEWs) role is awareness creation ,I gave a family guidance manual for each mother it contain list of obstetric danger signs ,while I teach them I use it, so every mother in my kebele plan for birth during pregnancy to deliver at health facility”(35 years old health extension worker)

“ When I was attending ANC ,I was informed to deliver in health facility ,If they(HWs, HEWs) informed us to stay at health facility or around we prepare cloth for the baby , money and food for our stay” (28 years old mother).

“ Since our kebele is far from main road each development team prepared local ambulance to make available at each got(village), when there is emergency the village people carry her to the main road and even not able to get the government ambulance they get Bajaj or other transport” (36 years old HEW).

Among the total respondent 33(7.3%) experienced obstetric complications during their recent delivery, of those 25(75.85%) of them referred further for management and all those who referred went to where they referred, most (84%) of them used government ambulance while 4(16%) of them were carried by people (local ambulance).

As indicated from the qualitative part, most of the mother planned for normal birth to deliver at the nearby health facility and reach there by any means. But there is difficulty if any complications happen and referred beyond the nearby health facility, due to economic and transport problem. Some of the focus groups discussant and in-depth interview participants expressed their idea about urgent referral issue as follow;

“ I said in the rural setting like our’s getting everything easy is not possible, when mothers referred, husband run here and there to get money from village “edir” or someone else, that can take time”(38 years old husband)

“ I said in our setting all referred mother may not go immediately as they referred ,we can reach to the nearby health center by any means but if we are referred further ,and the ambulance is not functional paying for contract transport is difficult”(43 years old mother)

“ If he (her husband) is economically good he take her to the referred hospital immediately otherwise there is delay until he return back to home ,consult “edir” leader and get money “(38 years old mother).

Another mother from the same group share the above idea as follow;

" I said even the village "edir" set rule to lend money for health emergency ,the husband or the "edir" leader may not be around at the time of emergency so getting money in this condition is difficult" (25 years old mother tuba).

Some of the practices the mother/family or community do for mothers during pregnancy labor/delivery or postpartum by considering as use full are expressed as follow;

" In the previous time when mothers labouring at home the village mothers tell her to sit on a small round seat(sorer) and they push her shoulder down to let the baby out ,and if the placenta be late they (village mothers) lift her up shake and let her to sit on an empty pot by considering as it facilitate expulsion of placenta, but now I don't support such practice "(35 years old mother)

" In the postpartum time we drink yetebedere (juice of a leaf that become red when boiled) to replace the blood we loss during delivery, because for most of us our economic condition not permit to get goat blood that is the best to replace lost blood, I accept it as useful "(34 years old mother)

"previously until the burial ceremony of placenta conducted the mother did not eat any food, because believed as it cause abdominal cramp, I don't support it ,rather an empty stomach cause the cramp"(38 years old mother)

Table 6: practice of preparation for birth and its complication among women of reproductive age group Abeshige woreda January 2015 (n=454)

Variables	Category	Frequency	Percent
Identify place of delivery	Yes	427	95.1
	No	22	4.9
Identify skilled provider	Yes	225	50.1
	No	224	49.9
Save money	Yes	296	65.9
	No	153	34.1
Identify mode of transportation	Yes	213	47.4
	No	236	52.6
Prepare essential item for child birth	Yes	357	79.5
	No	92	20.5
Identify blood donor	Yes	35	7.8
	No	414	92.2
prepared for birth and its complication	Yes	167	37.2
	No	282	62.8

5.7. Factors influencing birth preparedness and complication readiness

5.7.1. Socio-demographic factors

In bivariate analysis mother's education status and occupation were significantly associated with birth preparedness and complication readiness. Literate mothers were 2 times more likely to prepare for birth and its complication than illiterate counterparts (COR = 2.01, 95% CI: 1.36, 2.95).Women with occupational status of merchant were two times more likely to prepare for birth and its complication than house wife counter parts (COR =2.301, 95% CI: 1.305, 4.056) while farmer women were 0.4 times less likely to prepare for birth and its complication than house wife mothers(COR=.422, 95% CI: .260, .681)(Table 7).

This study revealed that women who live within one hour walk from health center were Almost 5 times more likely to prepare for birth and its complication than women who reside more than one hour away from health center. (COR = 4.73, 95% CI: 2.00, 38.05)(Table7).

Table 7: Association of socio-demographic factors with BPCR among women of reproductive age group, Abeshige woreda, January 2015(n=454)

Variables	Practice of BPCR		COR	95%CI
	Yes n(%)	No n (%)		
Age of respondent				
15-24	33(42.9)	44(57.1)	0.77	0.42, 1.41
25-34	97(35.8)	174(64.2)	1.03	0.64, 1.66
35-44	37(36.6)	64(63.4)	1.00	
Religion				
Muslim	97(37.7%)	160(62.3)	0.95	0.64, 1.40
Orthodox	70(36.6)	121(63.4)	1.00	
Ethnicity				
Guraghe	134(35.4)	244(64.6)	1.56	0.70, 3.47
Oromo	12(63.2)	7(36.8)	0.50	0.14, 1.67
Amhara	9(34.6)	17(65.4)	1.61	0.53, 4.94
Kebena	12(46.2)	14(53.8)	1.00	
Educational status				
Literate	92(46.2)	107(53.8)	2.01	**1.36, 2.95***
Illiterate	75(30.0)	175(70.0)	1.00	
Occupational status				
House wife	88(36.4)	154(63.6)	1.00	
Merchant	56(57.1)	42(42.9)	2.30	**1.30, 4.05***
Farmer	20(20.8)	76(79.2)	0.42	0.**26, 0.68**
Time it take from home to health center				
1.< 1hour	118(37.7)	195(62.3)	4.73	**2.00, 38.05***
2.>1hour	49(36.0)	87(64.0)	1.00	

COR=Crude odds ratio CI=confidence interval

***=significant association**

5.7.2. Association of Obstetric history and maternal health service utilization with BPCR practice.

In bivariate analysis there was no significant association between obstetric history and maternal health sevice utilization factor with BPCR. (Table 8).

Table 8: Association of obstetric history and service utilization factors with practice of BPCR among women of reproductive age Abeshige woreda January 2015(n=454)

Variables	Practice BPCR		COR	95% CI
	Yes n (%)	No n (%)		
Gravida				
1	21(34.4)	40(65.6)	0.33	0.72, 2.46
2-4	81(35.2)	149(64.8)	1.28	0.85, 1.95
>=5	65(41.1)	93(58.9)	1.00	
Parity				
1	24(36.4)	42(63.6)	1.32	0.12, 14.95
2-4	84(35.7)	151(64.3)	1.15	0.63, 2.12
>=5	59(39.9)	89(60.1)	1.00	
Age at first Pregnancy				
<25	48(31.4)	105(68.6)	0.68	0.45, 1.03
25-34	119(40.2)	177(59.8)	1.00	
Age at recent pregnancy				
<25	37(35.9)	66(64.1)	1.30	0.68, 2.46
25-34	103(36.5)	179(63.5)	1.26	0.73, 2.20
35-44	27(42.2)	37(57.8)	1.00	
History of abortion				
Yes	15(37.5)	25(62.5)	1.01	0.52, 1.98
No	152(37.2)	257(62.8)	1.00	
History of still birth				
Yes	3(20.0)	12(80.0)	1.41	0.11, 1.48
No	164(37.8)	270(62.2)	1.00	
Get ANC service from				
Health professional	115(34.6)	217(65.4)	1.63	0.95, 2.52
Health extension worker	52(45.6)	62(54.4)	1.00	
Received advice about BPCR during ANC				
Yes	164(37.6)	272(62.4)	1.20	0.20, 3.03
No	3(30.0)	7(70.0)	1.00	
Gave birth at health facility before recent delivery				
Yes	61(40.7)	89(59.3)	1.20	0.82, 1.88
No	92(35.5)	167(64.5)	1.00	

5.7.3. Association of individual women awareness about obstetric danger sign with BPCR practice

In bivariate analysis women's awareness on danger sign of obstetric complications was significantly associated with BPCR.Women who had awareness on danger signs of pregnancy were 3 times more likely to prepare for birth and its complication than who had no awareness on danger signs of pregnancy(COR=3.02,95% CI:2.01,4.53),mothers who had awareness on danger signs of postpartum were four times more likely to prepare for birth and its complication than who had no awareness on danger signs of postpartum(COR=4.01,95% CI:2.47,6.50)(Table 9).

Table 9: Association of awareness about obstetric danger signs with practice of BPCR among women of reproductive age Abeshige woreda January 2015(n=454)

Variables	Practice of BPCR		COR	95% CI
	Yes no (%)	No n (%)		
Awareness on danger signs during pregnancy				
Yes	85(54.1)	72(45.9)	3.02	**2.02, 4.53***
No	82(28.1)	210(71.9)	1.00	
Awareness on danger signs during labor/delivery				
Yes	47(44.3)	59(55.7)	1.48	0.95, 2.30
No	120(35.0)	223(65.0)	1.00	
Awareness on danger signs during post-partum				
Yes	58(63.7)	33(36.3)	4.01	**2.47, 6.50***
No	109(30.4)	249(69.6)	1.00	

5.7.4. Association of source of information about BPCR, support and decision making role of women with BPCR.

In bivariate analysis source of information about BPCR was significantly associated with practice of BPCR. Women who had got information abou BPCR from health extension workers were 2.6 times (COR=2.67,95% CI: 1.26, 5.72) and from mothers one to five network 3 times (COR=3.2,95% CI :1.54, 6.66) more likely to prepare for birth and its complication compared to women who had not got information about BPCR from health extension worker and women one to five network. (Table 10)

Mothers who had got support from relatives were 2 times more likely to prepared for birth and its complication (COR= 2.2 ,95% CI: 1.35,3.74)) than those who had not got support from relatives (Table10).

Table 10: Association of information source, support and decision making role with BPCR among women of reproductive age group, Abeshige woreda, January 2015(n=454)

Variables	Practice of BPCR		COR	95%CI
	Yes n (%)	No no (%)		
Information about BPCR				
Yes	164(38.1)	266(61.9)	3.28	**1.04, 11.46***
No	3(15.8)	16(84.2)	1.00	
Source of information about BPCR				
Health worker				
Yes	72(32.4)	150(67.6)	0.72	0.47, 1.10
No	92(44.2)	116(55.8)	1.00	
Health extension worker				
Yes	154(41.4)	218(58.6)	2.68	**1.26, 5.72***
No	10(17.2)	48(82.8)	1.00	
Radio				
Yes	43(43.9)	55(56.1)	1.22	0.75, 1.98
No	121(36.4)	211(63.6)	1.00	
Pregnant mother conference				
Yes	12(75.0)	4(25.0)	2.78	0.77, 10.06
No	152(36.7)	262(63.3)	1.00	
Women1 to 5 network				
Yes	30(68.2)	14(31.8)	3.20	**1.54, 6.66***
No	134(34.7)	252(65.3)	1.00	
Husband support				
Yes	158(38.0)	258(62.0)	0.61	0.27, 1.35
No	9(27.3)	24(72.7)	1.00	
Relatives support				
Yes	145(40.7)	211(59.3)	2.21	**1.31, 3.74***
No	22(23.70	71(76.3)	1.00	
Decision maker				
Self	14(35.0)	26(65.0)	0.71	0.14, 3.67
Husband	3(42.9)	4(57.1)	0.90	0.45, 1.78
Self and husband jointly	150(37.3)	252(62.7)	1.00	

5.7.5 Multivariate analysis of socio-demographic, awareness and health information related factors with BPCR adjusted for possible confounding variables

By applying multivariate logistic regression analysis: women's education status, occupation and time it take from health facility from socio demographic factor and awareness of women on danger signs of obstetric complication ,source of information and relative support were adjusted each other.Only occupation and time it take from health facility were significantly associated with BPCR among the socio-demographic and health system related factors while awareness on obstetric danger signs and source of information about BPCR were also significantly associated with BPCR among the individual women factor.(Table 11).

Farmer women were 0.50 times less likely to prepare for birth and its complication than their housewife counterparts (AOR=0.50, 95% CI: .28, .91).Women who live within one hour walk from health center were 3.5 times more likely to prepare for birth and its complication than women who reside more than one hour away from health center (AOR=3.51(1.78, 36.79)(Table 11).

Mothers who had awareness on danger signs of pregnancy 2 times and mothers who had awareness on danger signs of postpartum also 2 times more likely to prepare for birth and its complication than mothers who had no awareness on danger signs of pregnancy and postpartum (AOR=1.75, 95% CI: 1.04, 2.94) and (AOR= 2.35, 95% CI: 1.31, 4.21) respectively (Table 11).

Women who had got information about BPCR from health extension worker almost 3 times (AOR = 2.89, 95% CI =1.34, 6.21) and from mother's one to five network 2.5 times (AOR=2.52, 95% CI=1.17, 5.39) more likely to prepare for birth and its complication compared to women who had not got information about BPCR from health extension worker and women one to five network respectively (Table 11).

Table 11: Factors influencing practice of BPCR adjusted for confounding variables, in Abeshige woreda January 2015(n=454)

Variables	Practice of BPCR		COR(95% CI)	AOR(95%CI)
	Yes no(%)	No no(%)		
Education				
Literate	92(46.2)	107(53.8)	**2.01(1.36, 2.95)**	1.20(.75 ,1.91) 1.00
Illiterate	75(30.0)	175(70.0)	1.00	
Occupational status				
House wife	88(36.4)	154(63.6)	1.00)	1.00
Farmer	20(20.8)	76(79.2)	**0.42(0.26, 0.68) ***	**0.50(0.28, 0.91)** *
Merchant	56(57.1)	42(42.9)	**2.30(1.30, 4.05)***	1.34(0.79, 2.57)
Relative support				
Yes	145(40.7)	211(59.3)	**2.22(1.31, 3.74)***	1.64(0.89, 3.01)
No	22(23.7)	71(76.3)	1.00	1.00
Access to health center				
1.< 1hr	118(37.7)	195(62.3)	**4.73(2.00, 38.05)***	**3.51(1.78, 36.79)***
2. > 1 hour	49(36.0)	87(64.0)	1.00	1.00
Awareness on danger signs of pregnancy				
Yes	85(54.1)	72(45.9)	**3.02(2.02, 4.53)***	**1.75(1.04, 2.94)***
No	82(28.1)	210(71.9)	1.00	1.00
Awareness on danger signs of Postpartum				
Yes	58(63.7)	33(36.3%)	**4.01(2.48, 6.51)**	**2.35(1.31, 4.21)***
No	109(30.4)	249(69.6)	1.00	1.00
Source of information Health extension worker				
Yes	154(41.4)	218(58.6)	**2.69(1.26, 5.72)***	**2.89(1.34, 6.21)***
No	10(17.2)	48(82.8)	1.00	1.00
women 1to 5 network	30(68.2)	14(31.8)	**3.21(1.54, 6.66)***	**2.52(1.17, 5.39)***
Yes	134(34.7)	252(65.3)	1.00	1.00
No				

COR= crude odds ratio **AOR=Adjusted odds ratio**

CI=Confidence interval ***=Significant**

The qualitative participant explained some of the barriers that restrict mothers from preparing for birth and its complication using the expression as follow;

“I said as mothers deliver in winter time, they also deliver in summer, this river is the main obstacle “ (33 years old husband from mamede FGD)

“ I said far distance and transport problems are the main obstacle, last year we bring a mother to mamede health center by local ambulance, they referred her to Woliso hospital, when the government ambulance was called asked us three hundred birr for fuel ,is it appropriate ?” (33 years old husband)

“ Economic problem is one of the main obstacle for us to be prepared, even we work equally with husbands the decision maker on final product is the husband ,so how can we save money?”(28 years old mother)

“ Even if mothers saved money for their birth preparation they expend it for other need rather than allocating it for emergency purpose ,culturally in our community saving money for emergency is the role of husband ,so some husband may save money for this purpose” (35years old husband)

“ In our community when women become pregnant they make their sprit with God ,unless she praying to him(GOD) to save her life saving money for emergency is not common, but husband might save”(38 years old father)

“As me some husbands are negligent , during my recent labor , I told him (the husband) as I feel labor sign in the morning, he went away for work ,until he return back at night I delivered at home ,so in this condition how could I went to health center ? by what money and transport” (30 years old mother)

6. Discussion

The crucial factors for maternal mortality are 'three delays' in seeking health care, reaching to health care and obtaining appropriate health care. Birth-preparedness and complication-readiness reduces these delays by planning for normal birth and predicting actions needed in case of emergency (2).This study included purely rural settings. The survey was also supplemented by qualitative data collection methods, to identify the current level of practice and associated factors regarding BPCR in Abeshige woreda.

In this study 37.2% of respondent were prepared for birth and its complication.By making arrangement in comprehensive way by identifying health facility for delivery, identifying a means of transportation and saving money for tansport and other expense. This showed that BPCR practice in the study area was low as compared to expectation for every pregnant mother to prepare for birth and its complication.

This finding was consistent with the study finding from west Bengal, 2014 (35%) [13]. However, finding from this study was relatively higher than finding from Adigrat town Northern Ethiopia, 2006 (22%)[28], Robe Ethiopia 2012 (16.5%)[7], and Jimma Zone South West Ethiopia ,2012(23.3%)[9].This difference in BPCR practice between those study population might be time difference between these study and within these years several efforts exerted on strengthening maternal health activity by government and other stake holders.

This finding was less compared to finding from India 2014,(49.4%)[15] and Addis Ababa Ethiopia ,2011,un published (68.6%)[14] ,the difference might be due to difference in residential (urban to rural) and area (country),this might be due to respondents socio economic ,educational and awareness difference between these setting because both are urban study but the current study is rural.

In this study, about 95.1% of the respondent identified place of delivery.Place of delivery identification is very important because in our setting the only means to get skilled provider is to deliver at health institusion [2]. Among those who identified place of delivery 425(94.6%) planned to deliver at the nearest health institution while only 2(0.5%) planed to deliver at home.

This implied that majority of mothers preferred to give birth at health institution; It was far different (high) from other studies, either rural or urban [7, 8 10,16,] even Addis Ababa 76.2%, unpublished [14].This is a step in the right direction and should be encouraged. However, when comparing practice of BPCR and health facility delivery there was huge difference (37.2% and 94%), this may be due to, mothers focus towards preparation for normal birth, but their attention towards readiness for emergency complication was far less.

As found in qualitative part of this study the reason for this difference may be the benefit of institutional delivery was perceived positively by majority of the community members. This might be due to the effort applied to community mobilization through health extension worker and women one to five network.As participants expressed their positive perception towards maternal health service by comparing the previous bad history of maternal health condition with the current one and this change had been brought due to the awareness they get fom health extension worker, even the traditional birth attendant experessed their positive perception by comparing the difference in the quality of service provided by them versus health proffesionals.

In this study 296(65.9%) of the respondent saved money for child birth.To reach the place of delivery they identified on time, seting aside money for necessary expence and arranging transport is vital. This finding was somewhat consistent with study in Adigrat (68.9%)[8], However, was lower compared to studies in Uganda(91%)[10] and a study in Tanzania(89%)[11].This could be due to the socio economic difference between these countries.

Even when money is available, it can be difficult to secure transport at the last minute after a complication has occurred. Arranging transport ahead of time reduces the delay in seeking and reaching services. In this study, almost half (47.4%) of the respondent identified transportation ahead of childbirth which is higher compared to a study in Adigrat (24.7%) [8], Robe (28.5%)[7] and Jimma (3.2%)[9].This could be due to difference in transport type and social network in the community. As found from the qualitative part; in this study area some of the villages in the community developing good practice that is preparing local ambulance and make it available at each got(village) for emergency. However; this finding was less compared to the study from

Uganda (61%).This difference may be due to difference in awareness level and transportation type.

Identifying blood donor seems a neglected practice, only 7.8 % of the respondent identified blood donor.This finding is consistent with previous study, Tanzania and Adigrat Ethiopia, [8,11]

In this study women's occupation was significantly associated with BPCR. Farmer women were 0.50 times less likely to prepare for birth and its complication than housewife. This may be due to poor awareness and time constraint due to work over load (their double role at home and in the farm).

Access to health center was found to have statistically significant association with BPCR practice. Women who live with in one hour walk from health center were three poin five times more likely to prepare for birth and its complication than women who reside >1 hour away from health center. This finding was consistent with other studies [9, 11]. This may be due to the fact that women, having nearby health facility increases access to health information and also reduces distance barriers and transport problem .

Women awareness on danger signs of obstetric complication was significantly associated with BPCR.Women who had awareness on danger signs of pregnancy 2 times and on postpartum also 2 times more likely to prepare for birth and its complication compared to those who had no awareness. The reason for this might be mothers with awareness of obstetric complications may fear problem may happen and need support from health personnel.

A surprising finding in this study was lack of significant association between awareness of danger signs during childbirth and BPCR. This might be due to mother's consideration of delivery time danger signs as normal labor and delivery signs .This finding was consistent with the study finding from Uganda [10]

Source of information about BPCR also significantly associated with BPCR. women who had got information about PBCR from health extension worker 3 times and from women one to five network two point five times more likely to prepare for birth and its complication compared to those women who had not got information about BPCR from health extensionworker and women

one to five network. This indicated that, Strengthening BPCR information network at grass root level bring a change**.**

7. Strength and Limitation

Strength

- The study was supplemented by qualitative method
- Included women who gave birth within 12 month prior to this study to minimize recall bias

Limitation

- Since it was cross-sectional study design may not be strong to show direct cause and effect between dependent and independent variable.
- Since the data collectors were health professionals there may be some social desirable responses for some of the variables.
- Monthly income was not assesed

8. Conclusion:

- Practice of BPCR was low
- Despite the highest risk of fatal maternal complications is at the time of childbirth and the period just after delivery the insignificance of association between awareness of danger signs during child birth and birth preparedness was surprising.
- No clear criteria (operational definition) that help to assess obstetric danger signs in general (pregnancy through postpartum)
- Women awreness about obstetric danger signs, community level BPCR information, accesiblity of healthfacility and women occupation, were important predictor of BPCR practice.

9. Recommendation

- Women need to be empowered with awareness about obstetric danger signs through repeated sensitization
- Due emphasis should be given to strengthening BPCR information netwok at grass root level.
- Adequate government transport system with appropriate infrastructure(road) that consider the rural community is also recommended
- Researchers should set clear criteria (operational definition) that help to assess general awareness on obstetric danger sign

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11. Annex

11.1 Study information sheet

Good morning /after noon

My name is----------

First of all I would like to thank you for your time.

I am working as data collector with the research team of Addis Ababa University School of public health which conducting research on women of reproductive age from August 2014 to June 2015 in Abeshige woreda. The aim of this study is to assess current level of practices regarding birth preparedness and complication readiness among women of reproductive age group. The information obtained from this study by your participation will help you/mothers to prepare for safe delivery, the health care provider for proper service provision, the government for logistic supply and to design evidence based strategy to improve institutional delivery. The study will not cause any harm to you except giving the information.

The information will be collected from the above mentioned mothers by using pretested structure questioners on socio-demographic characteristics, obstetric factors, knowledge and practice of BCR through house hold in selected kebeles.to supplement quantitative finding focus group discussion will be conducted.

We are inviting women of reproductive age group who gave birth within the last 12 month to contribute for the study. You have been selected randomly for this interview, So I would like to ask you some questions related to the subject. Your name will not be recorded and all the information you give will be kept strictly confidential and is to be used only for the purpose of this study. You have the right to refuse participation, the right not to respond any question `you don't want to respond, and you can end the interview at any time. The interview will take approximately 30 min. Are you willing to participate?

Yes ☐

No ☐

If they say yes say thanks and proceed to the consent form. If say no, say thanks, do not force or reinforce to participate in the study.

Consent form

I have read or it has been read to me in the language I understand about the above stated conditions therefore I am willing to participate in this study.

Date of interview----------signature of participant----------

Result of interview

1. completed 2.refuse 3.partially completed

Name of interviewer----------signature---------

Questionnaire no----------

Started hour ------minute--------, Time interview ended hour ---------minute-------

Name of supervisor ----------signature-----------

Date cheked----------

In case you need to contact:

Contact address of the investigator---Name Kebebush zepre

Mobile: 0922 73 29 73

Email: zeprekebebush @gmail.com

11.2. Questionnaire

English version questionnaire

Instruction: circle the response from the alternative and write the answer for open ended question on the space provided.

Section 1: Socio-demographic information

S.no	Questions	Choice of response	SKIP
101	What is your age in completed years?	----------years	
102	To which religion do you belong	1. Orthodox 4. Catholic 2. Muslim 5. Other 3.Protestant	
103	What is your current marital status	1.married 4.Divorced 2. cohabitation 5.wedowed 3.Separated 6.single	
104	Can you read and write?	1.Yes 2.No	If no go to Q no 106
105	What is the highest grade you completed?	1. Informal 2. Grade----------	
106	What is your occupation	1.House wife 5.Daily laborer 2.Farmer 6.student 3. merchant 7.others 4. government employee	
107	Ethnicity	1.Guraghe 3.Amhara 2.Oromo 4.Other	
108	Monthly income	----------ETB	
	If married /in union		
109	Did you get support from your husband during your recent pregnancy, delivery/postpartum?	1.Yes 2.No	If no go to Q no 111

110	If yes What support you got from your husband during your recent pregnancy?/ More than one answer possible/	1.prepared money for transport 2. Accompany me while I were going to health facility 3. Share responsibility of care of children at home 4.other /specify	
111	Did you get support from your relatives during your recent pregnancy, delivery/postpartum	1.Yes 2.No	If No go to Q no 113
112	If yes What support you got from your relatives during your recent pregnancy, delivery postpartum?/more than one answer possible/	1.prepared money for transport 2. Accompany me while I were going to health facility 3.Share responsibility of care of children and other work at home 4.other specify	
113	Family size	----------	
114	What time it take from your home to health center /hospital in minute	1.<15 min 2.15-30min 3.30min-60 min 4.> 1hour	
115	Who is the decision maker for health service seeking during pregnancy labor/delivery and postpartum period	1.Self 2.Husband 3.Self and husband jointly 4.other specify	

Section II: Gravidity and parity/obstetric information

S.no	Questions	Choices of response	Skip
201	How many times you became pregnant in your life	----------	
202	According to your birth order where did your recent child belong?	1.First 2.Second	

		3.Third 4.Fourth and above	
203	How old were you in your fist pregnancy	----------Yrs.	
204	How old were you in your recent pregnancy	----------yrs.	
205	What were the outcome of the pregnancy(ask for each item and put numbers on the space	1.Total live birth---------- 2.Abortion---------- 3.Still birth---------- 4.Other specify----------	

Section 3.Sevice use and planning action: intention and behavior/awareness

S.no	QUESTIONS	Choice of response/alternatives	Skip
301	Have you any information about birth preparedness and complication readiness?	1.yes 2.No.	If no go to Q no 304
302	If yes, from where did you hear about these preparations? more than one answer possible	1.Health workers 2.HEWs 3.comunity health volunteers 4.Radio 5.Television 6. Read from book 7.Others	
303	What are these preparations you hear? Moe than one answer possible	1.Identifying place of delivery 2.Identifying skilled provider 3.saving money for emergency 4.identifying transport for emergency 5.identifying blood donor 6.Grain for porage/other food item 7.Cloth for new born 8.Others(specify)	

304	Did you attend ANC before your recent pregnancy?	1.Yes 2.No	
305	Did you planned to attend ANC during your recent pregnancy	1.Yes 2.No	
306	Did you attend ANC during your recent pregnancy	1.Yes 2.No	If no go to Q308
307	If yes whom did you see during your recent ANC visit	1.Physician 4.HEWS 2.Health officer 5.other 3.Nurse	
308	At how many months you start ANC visit	----------months	
309	How many times you attend ANC in your recent pregnancy?	----------times	
310	Did you get any advice about BPCR During ANC visit of your recent pregnancy	1.Yes 2.No	
311	Did you think preparation for birth and its complication useful?	1.yes 2.No	
312	Did you prepared for your recent delivery and its complication?	1.Yes 2.No	If no go to Q 314
313	If yes what preparation you made? (More than one answer possible)	1.Identified place of delivery 2.Identified skilled provider 3.saved money for emergency 4.identified transport for emergency 5.identified blood donor 6.Grain for porage 7.Cloth for new born 8.Others(specify)	
314	Did you planned on place of delivery?	1.yes 2.No	If no go to 316
315	Where was the place of delivery you planned?	1.home 2. hospital 3.health center	

		4.Health post 5.Oters specify	
316	Where did you deliver your recent baby?	1.home 2. hospital 3.health center 4.Health post Others specify	
318	If HFs why?	1.Health facility was near to me 2.Need better service 3.Previous better outcome with delivering at health facility 4.Poor outcome from previous home delivery 5. I was told to deliver at HFs 6. Difficult labor 7.Others	
319	What was the mode of your delivery?	1.Spontaneous vaginal delivery 2.Instrumental delivery 3.Cesarean section 4.Idid not remember 5.other specify	
320	Have you ever given birth at HFs before recent delivery?	1.Yes 2.No	If no go to Q 322
321	If yes in how many pregnancies?	----------	
322	Did you think delivering at health facility useful for mother and newborn?	1.Yes 2.No	
323	Did you planed skilled assistant during delivery?	1.Yes 2.No	If no go to Q 325
324	If yes who were you planned to assist you?	1. Physician 4. HEW 2.Ho 5.TTB 3.Nurse 6.UTTBA 7.Others specify	
325	Who assisted you during your recent	1. Physician 4. HEW	

	delivery?	2.Ho 5.TTB 3.Nurse 6.UTTBA 7.Others specify	
326	What was the condition of your recent baby?	1.Live birth 2.Live birth but die soon after 3.Still birth 4.other specify	
327	Had you plan to save money for obstetric emergency?	1.Yes 2.No	
328	Did you saved money for obstetric emergency?	Yes No	
329	Had you planned a mode of transport to place of delivery during emergency?	1.Yes 2.No	
330	If yes what was the mode of transport?(ask those planned for emergency transport)	1.On foot 4.Carried by other people 2.By cart 5.By car 3. On horseback 6. motor bicycle 7.other specify	
331	Did you plane blood donor during obstetric emergency?	1.Yes 2.No	
332	Did you encounter any health problem during pregnancy, labor/delivery and immediately after birth during your recent pregnancy?	1.Yes 2.No	If no go to part iv
333	If yes what were the problem? (more than one answer possible)	1.Exessive vaginal bleeding 2.prolonged labor(>12hrs) 3.Retained placenta(>1hr) 4.malpresentation 5.Early rupture of membrane 6.Fetal death 7.other(loss of consciousness ,unable to control urine)	
334	Were you referred to HF further?(Ask those who faced the problem)	1.Yes 2.No	If no go to part iv

335	If yes who accompanied you to HF(ask referred)	1.Husband 2.Relative 3.community emergency committee 4.Alone 5.Other specify	
336	If you were referred to HF what mode of transport you used to reach to the HF	1.On foot 4.Carried by other people 2.By cart 5.By car 3.On horseback 6. motor bicycle 7.other specify	

Section iv:-instruction put S mark when respondents mentioned obstetric danger sign spontaneously put P mark when respondent mentioned obstetric danger sign promptly and put I when respondent say i don't know (for Q no 404-406).

S.no	Questions	Alternative/choice of response	Skip
401	Are there any obstetric danger sign that can occur during pregnancy, labor and postpartum?	1.yes 2.No 3.i don't know	
402	If yes, from where did you hear these danger sign?	1.Health workers 2.HEWs 3.comunity health volunteers 4.Radio 5.Television 6. Read from book Others	
403	Do you know any danger sign that can threat mother life during pregnancy?	1.yes 2.No	If no to 405
404	What danger sign occur during pregnancy?(first do not mention the option to identify whether they list spontaneously or not)	1.Sever vaginal bleeding 2.swollen hand /face 3.Blurred vision	

b405	Do you know any danger sign that can threaten mothers during labour	1.yes 2.No	If no go to 407
406	What are danger sign occur during labor/delivery?(do not mention first the option to identify whether they list	1.sever vaginal bleeding 2.prolonged labor (>12hrs) 3.Convultion 4.Retained placenta(>1hr	
407	Do you know any danger signs that can threaten mothers during postpartum	1.Yes 2.No	
408	What danger sign that can occur during postpartum(do not mention first the option to identify whether they list spontaneously or not)	1.sever vaginal bleeding 2.Foul-smelling vaginal discharge 3.High fever	

This is all what I want to ask you. Thank you for spending your time and valuable information you gave us. Do you have any question that I can address for you?

11.3. Consent form for FGDs

I the under signed have been informed that the discussion is conducted to gather information about effect of birth preparedness and complication readiness on safe delivery service utilization. The result of the study will help the individual women, the family, the community and the government to improve maternal health to reduce maternal death. I also agreed about confidentiality of the response to be at highest possible level. Therefore I am willing to participate in the study.

Code	Age	Income	education	occupation	marital status	signature	date
1……	…….....	…….....	……	……..	……..	……..	.....
2. ……	…….....	…….....	……	……..	……	……..	.....
3. ……	…….....	…….....	……	……..	……	……..	.....
4.……	…….....	…….....	……	……	……	……..	……...
5. ……	…….....	…….....	……	……..	……	……..	.....
6. . ……	…….....	…….....	……	……..	……	……..	……
7…….	……	……	…….....	……..	……	…….	…..
8……..	……	…….	……	……	…….	……	…..

Name of moderator……..signature……. Date……

Name of note taker……signature…….Date……

11.4. **Guide questions for FGDs and in-depth interview**

For mothers and fathers

1. What health problems would women encounter in this area in connection to a) pregnancy b) delivery and c) postpartum? .

2. In this community when is a woman recognized to have dangerous health problems in connection to pregnancy, labor and postpartum? What are the signs/symptoms for these (for all three separately)

3. What support /practice is available at family and community level (other than health facilities) to women during a) pregnancy b) delivery c) postpartum?

4. If a woman during pregnancy or child birth got a serious problem, and referred, can she readily go to the referred site without delay? what difficulties she would face? .

5.What preparations mothers made for their birth and its complication in your area?

6. What is the advantage of preparation for birth and its complication? Discuss on each item with history/example

7.what are the obstacle for mother when planning /using institutional delivery and skilled attendant? at the (individual women , family, community ,health facility/health care provider) level

8. Are you satisfied or dissatisfied with the maternal healthcare services given by HEWs/other health worker in the health posts or other health facility? What are their strength and limitation in the provision of maternal care? Explain some reasons.

9. How do you explain/propose about future health of women in the community in connection to pregnancy, delivery and postpartum? Who has what stake to improve current state (if change is proposed)

Thank them and ask them if they have any question for you

FOR HEWs

1.What Maternal health programs available in the community

2.Community response towards maternal health programs.

3.The implementation of delivery care services in the community

4.what are the obstacles when delivering health care services

5. What support /practice is available at family and community level (other than health facilities) to women during a) pregnancy b) delivery c) postpartum6.

6.If a woman during pregnancy or child birth got a serious problem, and referred, can she readily go to the referred site without delay? what difficulties she would face? .

7.What preparations mothers made for their birth and its complication in your area?

8. what are the obstacles for mother when planning /using institutional delivery and skilled attendant? at the (individual women , family, community ,health facility/health care provider) level?

9. How do you explain/propose about future health of women in this community in connection to pregnancy, delivery and postpartum? Who has what stake to improve current state (if change is proposed)

FOR TBA

1. What preparations mothers made for their birth and its complication in your area?

2. When is a woman recognized to have dangerous health problems in connection to pregnancy, labor and postpartum? What are the signs/symptoms for these (for all three separately)

3. What type of services you provide during pregnancy, labor and deliver

4. What about your partnership with HEWs and other HWs

5. Fee for services used/provided

6. What support /practice is available at family and community level (other than health facilities) to women during a) pregnancy b) delivery c) postpartum?

11.5. የግንዛቤና ፈቃደኝነት መጠየቂያ ቅፅ

በአዲስአበባ ዩኒቨርሲቲ የህብረተሰብ ጤናሳይንስ ትምህርትቤት ለጥናቱ ተሳታፊዎች በግንዛቤ ላይ የተመሰረተ ለወሊድ መዘጋጀትና ከፅርግዝናና ከወሊድ ጋር ተያያዘው ሊከሰቱ ለሚችሉ ችግሮች ቅድመ ዝግጅት ማድረግን በሚመለከት የገጠር ነዋሪ በሆኑና በመውለድ እድሜ ክልል ውስጥ በሚገኙ እናቶች ላይ ጥናት ለማካሄድ የተዘጋጀ የግለሰቦች ፈቃደኝነት መጠይቅያ ቅፅ።

እንደምን አደሩ? /እንደምን ዋሉ? እንደምንነዎት?

በመጀመሪያ ጊዜዎን ስጥተው ስላናገሩኝ ላመሰግንዎ እወዳለሁ::

እኔ ስሜ.....ይባላል የአዲስአበባ ዩኒቨርሲቲ የህብረተሰብ ጤና ሳይንስ ትምህርት ቤት የምርምር ቡድን ከነሃሴ 2014 አስከ ስኔ 2015 በአበሽጌ ወረዳ በመውለድ እድሜ ክልል በሚገኙ እናቶች ላይ በሚያደርገው የዳሰሳ ጥናት ላይ በመረጃ ሰብሳቢነትት እየሰራሁ ነው።

የዚህ ጥናት ዋና አላማ ገጠር ነዋሪ በሆኑና በመውለድ እድሜ ክልል በሚገኙ እናቶች ላይ ስለወሊድ ዝግጅት እና ከእርግዝና ከወሊድና ከድህረወሊድ ጋር ተያይዘው ሊከሰቱ ለሚችሉ ችግሮች ቅድመ ዝግጅት ማድረግን በሚመለከት የዳሰሳ ጥናት ለማድረግ ነው። እርሶዎ የሚሰጡት መረጃ የጥናቱን አላማ ለማሳካትና ውጤቱም ስለወሊድ ዝግጅት እና ከእርግዝናና ከወሊድ ጋር ተያይዘው ሊከሰቱ ለሚችሉ ችግሮች ቅድመዝግጅት ማድረግን በሚመለከት እናቶች ጠቀሜታ ያለው ዝግጅት እንዲያደርጉ ጤና ባለሙያዎች አግባብነት ያለው አገልግሎት እንዲሰጡ እና መንግስትም መረጃን መሰረት ያደረገ ፖሊሲ ቀረፃና ፕሮግራም አፈፃፀም ማሻሻያ ለማድረግ ጠቃሚ ነው። የተወሰነ መረጃ ከመውሰድ ውጭ ጥናቱ በተሳታፊዎች ላይ የሚያደርሰው ምንም አይነት ጉዳት የለም።

ጥናቱ የሚጋብዘው በመውለድ እድሜ ክልል የሚገኙና ባለፈው አንድ ዓመናት ጊዜ ውስጥ የወለዱ እናቶችን ነው። እርስዎ ለዚህ ቃለመጠይቅ የተጋበዙት በእጣ ነው። ከዚህም ሌላ ላረጋግጥልዎት የምፈልገው እርስዎ የሚሰጡት ማንኛውም መረጃ ሚስጥራዊነቱ የተጠበቀና ለዚህ ጥናት አላማ ብቻ የሚውል መሆኑን ነው። ስምዎም አይፃፍም። በጥናቱ የመሳተፍ አና ያለመሳተፍ ጀምረው የማቆረጥም ሆነ የማይፈልጉትን ጥያቄ ያለመመለስ መብትዎ የተጠበቀ ነው። መጠይቁ የሚወስደው 30 ደቂቃ ያህል ነው። ስለዚህ ከጥናቱ ጋር የተያያዙ የተወሰኑ ጥያቄዎችን ልጠይቅዎ እወዳለሁ። አሁን በጥናቱ ላይ ለመሳተፍ በቅድሚያ ፍቃደኝነትዎን ይግለፁልኝ።

ፍቃደኛ ነኝ ☐ ፍቃደኛ አይደለሁም ☐

ፈቃደኛ ከሆኑ አመስግኖ በስምምነታቸው እንዲፈርሙ ማድረግ ፈቃደኛ ካልሆኑ ማመስገን።

የስምምነት ማስፈረሚያ ቅፅ

ከላይ ያለው መረጃ ተነቦልኝና ተረድቼ በጥናቱ ላይ ለመሳተፍ ፈቃደኝነቴን በፊርማዬ አረጋግጣለሁ፡፡

መጠይቅ የተካሄደበት ቀን……የተሳታፊዋ ፊርማ……..

የጠያቂው ስም----------ፊርማ ----------

የጥያቄ ወረቀቱ ቁጥር……የቤት ቁጥር…….

መጠይቁ የተጀመረበት ሰዓት----------ያለቀበት ሰዓት----------

የተቆጣጣሪው ስም----------ፊርማ----------

የተረጋገጠበት ቀን----------

ምናልባት ማነጋግር ቢፈልጉ፡-

የተመራማሪዋ አድራሻ ፡-ስም ከበቡሽ ዘፕሬ

ስ.ቁ 0922732973

ኢሜይል zeprekebebush@gmail.com

11.6. መጠይቅ በአማርኛ

መመርያ፡- ከተሰጡት ምርጫዎች ውስጥ ትክክለኛውን መልስ ያክብቡ መልስ ለሚፃፍላቸው ደግሞ በተዘጋጀው ቦታ ላይ ይፃፉ።።

ክፍል1. ማህበራዊና ኢኮኖሚያዊ ሁኔታን የሚዳስሱ መጠይቆች

ተ.ቁ	ጥያቄ	መልስ	ይዝለሉ
101	እድሜዎት ስንት ነው?	----------ዓመት	
102	ሃይማኖትዎ ምንድን ነው?	1. ኦርቶዶክስ 4. ካቶሊክ 2. ሙስሊም 5. ሌላ ከሆነ ይጥቀሱ 3. ፕሮቴስታንት	
103	የጋብቻ ሁኔታዎ ምን ይመስላል?	1. ያገባች 4. የተፋቱ 2. ሳይጋቡ አብረው የሚኖሩ 5. ባል የሞተባት 3. የተለያዩ 6. ያላገባች	
104	ማንበብና መጻፍ ይችላሉ?	1. አዎ 2. የለም	የለም ከሆነ ወደጥያቄ 106
105	እስከ ስንተኛ ክፍል ተማሩ?	1. መደበኛ ያልሆነ 2. ----------ክፍል	
106	የሚተዳደሩበት የስራ አይነት?	1. የቤትእመቤት 4. የመንግስት ሰራተኛ 2. ገበሬ 5. የቀን ሰራተኛ 3. ነጋዴ 6. ተማሪ 7. ሌላ ከሆነ ይጥቀሱ	
107	ብሄርዎት?	1. ጉራጌ 3. አማራ 2. ኦሮሞ 4. ሌላ ከሆነ ይጥቀሱ	
109	በቅርቡ በነበረው እርግዝናዎ ወሊድዎ ወይም ድህረወሊድዎ ወቅት ከባለቤትዎ ድጋፍ አግተኝው ያውቃሉ? (ያገባች/አብረው የሚኖሩ ከሆኑ)	1. አዎ 2. የለም	የለም ከሆነ ወደ 111
110	አዎ ከሆነ ምን አይነት ድጋፍ ነው ያገኙት? /ከአንድ በላይ መልስ መስጠት ይቻላል/	1. ለትራንስፖርት ገንዘብ በማዘጋጅት 2. ወደ ጤና ጣቢያ/ሆስፒታል አብሮኝ በመሄድ 3. እቤት ውስጥ ልጆችን በመንከባከብ	

		4. ሌላም ካለ ይጥቀሱ	
111	በቅርቡ እርግዝናዎ በወሊድዎ ወይም ድህረወሊድዎ ወቅት ከቤተዘመድዎ ድጋፍ አገኝተው ያውቃሉ ?	1. አዎ 2. የለም	የለም ከሆነ ወደ 113
112	አዎ ከሆነ ምን አይነት ድጋፍ ነው ያገኙት? /ከአንድ በላይ መልስ መስጠት ይቻላል/	1. ለትራንስፖርት ገንዘብ በማዘጋጅት 2. ወደ ጤና ጣቢያ/ሆስፒታል አብሮኝ በመሄድ 3. እቤት ውስጥ ልጆችን በመንከባከብ 4. ሌላም ካለ ይጥቀሱ	
113	የቤተሰብ ብዛት?	----------	
114	ከቤትዎ እስከ ጤና ጣቢያ/ሆስፒታል በደቂቃ ምን ያህል ይወስዳል?	1. ከ15 ደቂቃ በታች 3. ከ30 ደቂቃ በላይ 2. ከ15-30 ደቂቃ	
115	በእርግዝና በወሊድ እንዲሁም ከወሊድ በኋላ የህክምና አገልግሎት ለማግኘት ውሳኔ የሚሰጠው ማን ነው?	1. እራሴ 3. እኔና ባለቤቴ በጋራ ሆነን 2. ባለቤቴ 4. ሌላ ከሆነ ይጥቀሱ	

ክፍል 2: እርግዝናና ወሊድን የሚመለከቱ ጥያቄዎች

ተ.ቁ	ጥያቄ	አማራጭ መልሶች	ዝለል
201	በህይወት ዘመኖት ስንት ጊዜ አርግዘው ያውቃሉ?	----------	
202	በቅርቡ የወለዱት ልጅ ስንተኛ ልጆት ነው?	1. አንደኛ 3. ሶስተኛ 2. ሁለተኛ 4. አራተኛ እና በላይ	
203	የመጀመርያ ልጆትን ሲያረግዙ እድሜዎ ስንት ነበር?	----------ዓመት	
204	በቅርቡ የወለዱት ልጆት ሲያረግዙ እድሜዎ ስንት ነበር?	----------ዓመት	

205	የእርግዝናዎት ውጤት ምን ነበር? /ስለ እያንዳንዱ ይጠይቁና ቁጥሩን ባዶው ቦታ ላይ ይፃፉ	1. በህይወት የተወለደ--------- 2. ውርጃ---------- 3. ሞቶ የተወለደ---------- 4.ከተወለደ በኃኋላ ወዲው የሞተ----	

ክፍል 3. ለአገልግሎት እቅድና አጠቃቀም ያላቸው ግንዛቤና ዝንባሌን የሚመለከቱ መጠይቆች

ተ.ቁ	ጥያቄ	አማራጭ፡መልሶች	ዝለል
301	ለወሊድ መዘጋጀትና ከእርግዝና ከወሊድና ከድህረወሊድ ጋር ተያይዞ ሊከሰቱ ለሚችሉ ችግሮች ቅድመ ዝግጅት ማድረግን በሚመለከት የሚያውቁት ነገር አለ?	1. አዎ 2. የለም	የለም ከሆነ ወደ 304
302	አዎ ከሆነ ከማን ሰሙ?(ከአንድ በላይ መልስ መጥቀስ፡ይቻላል)	1. ከጤናባለሙያ 2. ከጤና ኤክስቴንሽን ሰራተኛ 3. ከአካባቢ በጎ ጤና መልክተኛ 4. ከሬድዮ 5. ከቴሌቪዥን 6. ከመፅሃፍ አንብቤ 7. ከሌላ ከሆነ ይጥቀሱ	
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331	በቅርብ እርግዝናዎ ወቅት ድንገት ደም ቢያስፈልግ የሚለግስ ሰው አቅደው ነበር?	1. አዎ 2. የለም	
332	በቅርብ በነበረው እርግዝና/በወሊድ ወይም ከወሊድ በኃላ የገጠሞት የጤና ችግር ነበር?	1.አዎ 2.የለም	ካልነበረ ወደ ክፍል 4
333	ምን አይነት የጤና ችግር ነበር ያጋጠሞት? ከአንድ በላይ መልስ መስጠት ይቻላል	1. ከማህፀን ከባድ የደም መፍሰስ 2. የምጥ ጊዜ መርዘም(ከ12 ሰዓት በላይ) 3. የእንግዴ ልጅ መዘግየት(ከ1 ሰዓትበላይ) 4. የልጁ አመጣጥ ትክክል አለመሆን 5. ሽንት ውሃ ያለጊዜው መፍሰስ 6. የልጅ መሞት 7. ሌላ ከሆነ ይጥቀሱ	
334	ወደ ሌላ ጤና ድርጅት ሪፈር ተደርገው ነበር? (ችግር ገጥሞአቸው ከነበረ)	1.አዎ 2.የለም	ካልተደረጉ ወደክፍል 4
335	ከማን ጋር ሄዱ?(ሪፈር ለተደረጉ)	1. ባል 4. ብቻዬ 2. ዘመድ 5. ሌላ ከሆነ ይጥቀሱ 3. የአካባቢ የድንገተኛ ጊዜ ኮሚቴ	
336	ሪፈር ከተደረጉ ምን አይነት ትራንስፖርት ተጠቀሙ?	1. በእግር 4. በሰው ሸክም 2. በጋሪ 5. በመኪና 3. በፈረስ 6. በሞተር ሳይክል 7. ሌላ ከሆነ ይጥቀሱ	

ክፍል 4:-በእርግዝናና በወሊድ እና ጊዜ ሊከሰቱ የሚችሉ አደገኛ ምልክቶችን የሚመለከት መጠይቅ

መመርያ፡- ዝርዝርሩ ሳይነበብላቸው ለጠቀሱ (S) ምልክት ከጎኑ ይፃፉ ዝርዝሩ ተነቦላቸው ምልክቱን ለመለሱ (P) ምልክት ከጎኑ ይፃፉ መልሱ አላውቅም ካሉ (I) ምለክት ከጎኑ ይፃፉ (ከጥያቄ 404-406)

ተ.ቁ	ጥያቄ	አማራጭ መልሶች	ዝለል
401	በእርግዝናና በወሊድ ወይም በድህረወሊድ ወቅት ከዚህ በተያያዘ ሊከሰት የሚችል የጤና ችግር/አደገኛ ምልክት አለ?	1. አዎ 2. የለም 3.አላውቅም	የለም ከሆነ ስንብት
402	አዎ ከሆነ ከየት ሰሙ?	1. ከጤና ባለሙያ 2. ከጤና ኤክስቴንሽን ሰራተኛ 3. ከአካባቢ በጎ ጤና መልክተኛ 4. ከሬድዮ 5. ከቴሌቪዥን 6. ከመፅሃፍ አንብቤ 7. ከሌላ ከሆነ ይጥቀሱ	
403	በእርግዝና ወቅት የሚከሰት የእናትን ህይወት ለአደጋ ሊያጋልጡ የሚችሉ ችግሮች አሉ?	1. አዎ 2. የለም 3. አላወቅም	
404	ምን አይነት አደገኛ ምልክት ነው በእርግዝና ጊዜ ሊከሰት የሚችለው?(ምርጫዎቹ መጀመርያ አያንብቡላቸው ምናልባት በራሳቸው መዘርዘር ይችሉ እንደሆን)	1. ከማህፀን ከባድ ደም መፍሰስ 2. የእጅ/ፊት ማበጥ 3. የእይታ መደብዘዝ	
405	በወሊድ ወቅት የሚከሰት የእናትን ህይወት ለአደጋ ሊያጋልጡ የሚችሉ ችግሮች አሉ?	አዎ 2. የለም 3. አላወቅም	
406	ምን አይነት አደገኛ ምልክት ነው በምጥ ወይም በወሊድ ወቅት ሊከሰት የሚችለው? (ምርጫዎቹ መጀመርያ አያንብቡላቸው ምናልባት በራሳቸው መዘርዘር ይችሉ እንደሆን)	1. ከማህፀን ከባድ ደም መፍሰስ 2. የምጥ ሰአት መርዘም (ከ12 ሰዓት በላይ) 3. ያልተለመደ የሰውነት መንቀጥቀጥ 4. የእንግዴ ልጅ መዘግየት(ከ1 ሰዓት በላይ)	
407	በድህረ ወሊድ ወቅት የሚከሰቱ የእናትን ህይወት ለአደጋ ሊያጋልጡ የሚችሉ ችግሮች አሉ?	አዎ 2. የለም 3. አላወቅም	
408	ምን አይነት አደገኛ ምልክት ነው ከወሊድ በኃላ ሊከሰት የሚችለው? (ምርጫዎቹ መጀመርያ አያንብቡላቸው ምናልባት በራሳቸው መዘርዘር ይችሉ እንደሆን)	1. ከማህፀን ከባድ ደም መፍሰስ 2.ጥሩ ያልሆነ ሽታ ያለው ፈሳሽ ከማህፀን 3. ከፍተኛ ትኩሳት	

ስለሰጡኝ ጊዜና መረጃ አመሰግናለሁ !! ጥያቄ፡ካሎት!

በመጨረሻም ጉዳዩን በሚመለከት ጠቃሚ መልዕክቶችን ማስተላለፍ_____

የቃለ መጠይቁ ውጤት 1. አጠናቀዋል 2. አልፈቀዱም 3. በከፊል አጠናቀዋል

11.7. **ለቡድን:ውይይት:የፈቃደኝነት:መጠየቂያ:ቅፅ**

ይህን:ውይይት:የሚደረገው:በመውለድ:እድሜ:ክልል:ባሉ:እናቶች:ላይ:ስለ:ወሊድ:ዝግጅትና:ከእርግዝናና:ከወሊድ ጋር:ተያየዘው:ሊከሰቱ:ለሚችሉ:ችግሮች:ቅድመ:ዝግጅት:ማድረግን:በሚመለከት:ለሚደረገው:ጥናት:መረጃ:ለመስጠት: መሆኑን:እና:የጥናቱም:ውጤት:ለእናቶች:ለቤተሰብ:ለህ/ሰብ:አስፈላጊውን:ዝግጅት:ማድረግ:እንዲችሉ:እነዲሁም:ለመንግስት መረጃን:መሰረት:ያድረገ:ፖሊሲ:ቀረፃና:ፕሮግራም:አፈፃፀም:ማሻሻያ:ለማድረግ:ጠቃሚ:መሆኑን:በሚገባን/ኝ:ቻንቻ:ተነቦልን /ኝ:ተረድተናል/ቻለሁ::የምንሰጠውም:መረጃ:ሚስጢራዊነቱ:የሚጠበቅ:መሆኑን:ተገልፆልናል::ስለዚህ:በጥናቱ:ለመሳተፍ ተስማመተናል/ቻለሁ::

ኮድ	እድሜ	የወር ገቢ	የት/ት ደረጃ	ስራ	የጋብቻ ሁኔታ	ፊርማ	date
1……..	…….....	…….....	……..	……..	……..	……..	……...
2……..	…….....	…….....	……..	……..	……..	……..	……...
3……..	…….....	…….....	……..	……..	……..	……..	……...
4……..	…….....	…….....	……..	……..	……..	……..	……...
5……..	…….....	…….....	……..	……..	……..	……..	……...
6……..	…….....	…….....	……..	……..	……..	……..	……...
7……..	…….....	…….....	……..	……..	……..	……..	……...
8……..	…….....	…….....	……..	……..	……..	……..	……...

Name of moderator……..signature……date……

Name of note taker……..signature…… Date……

11.8. የቡድንውይይትጥያቄዎች

ለእናቶችና ለአባቶች

1.በእናነት አካባቢ እናቶች ከእርግዝና ከወሊድና ከድህረ ወሊድ ጋር በተያያዘ የሚገጥማቸው የጤና ችግሮች ምንድን ናቸው ?

2. በዚህ ህ/ሰብ አንድ እናት ከእርግዝና ከወሊድ ወይም ከድህረ ወሊድ ጋር በተያያዘ አደገኛ የጤና ችግር እንደገጠማት የሚታስበው መቼ ነው?/ምን ሲከሰት ነው? /ምልከቶቹን

3. በቤተሰብ እና በህ/ሰብ ደረጃ ምን አይነት ድጋፍ/ የተለምዶ ድርጊት አለ ለእናቶች

4. በአካባቢያችሁ አንድ እናት በእርግዝና በወሊድ ወቅት ወይም ከወለደች በኃላ አደገኛ የጤና ችግር ቢገጥማትና ሪፈር ብትደረግ ሳትዘገይ በፍትነት ወደተላከችበት መሄድ ትችላለች? ወይስ ምን ችግር ይገጥማታል?በምሳሌ በማስደገፍ ይወያዩ

5. በእናንተ አካባቢ እናቶች ለወሊድ እንዲሁም ከእርግዝና ከወሊድና ከድህረ ወሊድ ጋር ተያይዘው ሊፈጠሩ ለሚችሉ ችግሮች ብለው የሚያደጋቸው ዝግጅቶች ምንድን ናቸው?

6. ለወሊድና ከእርግዝናና ከወሊድ ጋር ተያይዘው ሊከሰቱ ለሚችሉ ችግሮች ቅድመ ዝግጅት ማድረግ ተቀሜታው ምንድን ነው ? እያንዳንዱን በማንሳትና የሚያውቁትን ታሪክ በምሳሌነት በመጠቀም ይወያዩ

7. እናቶች በጤና ድርጅትና በጤና ባለሙያ እርዳታ ለመውለድ እንዳይዘጋጁና አንዳይወልዱ የሚደርጋቸው እንቅፋቶች/ችገሮች ምንድን ናቸው

8. እዚህ አካባቢ ጤናኤከሰቴንሽን ወይም ሌሎች ጤና ባለሙያዎች ጤና ኬላ ውስጥ ወይም ሌሎች ጤና ድርጅቶች ውስጥ በሚሰጡት የእናቶች ጤና አገልግሎት ይረካሉ? ጠንካራና ደካማ ጎናቸው ምንድን ነው? እስቲ የተወሰኑ ምሳሌዎች በመጥቀስ ይወያዩ! .

9. የወደፊቱ የዚህ አካባቢ እናቶች ጤና ከእርግዝና ፣ከወሊድና ከድህረ ወሊድ ጋር በተያያዘ እንዴት ይገልፁታል/ምን ያስባሉ?

- አሁን ያለው ሁኔታ ለማሻሻል ባለድርሻዎቹ እነማን ናቸው?

2.**ለግለሰብ ትልቅ ውይይት ፍንጭ ጥያቄዎች**

<u>ለጤና ኤክስቴንሽን</u>

1. እዚህ አካባቢ/ዚህ ህ/ሰብ ምን አይነት የእናቶች ጤና አገልግሎት ፕሮገራም አለ ?

2. ህ/ሰቡ ለዚህ የእናቶች ጤና አገልግሎት ፕሮግራም ያለው ምላሽ ምን ይመስላል?

3. የህ/ሰቡ የወሊድ አገልግሎት ተጠቃሚነት ተግባራዊነቱ ምን ይመስላል?

4.ከእናቶች ጤና አገልግሎት በተያያዘ የእናናንተ ሚና ምንድን ነው;

4. እናነተስ የጤና አገልገሎት ለመስጠት እንቅፋት የሚሆኑባችሁ ነገሮች ምንድን ናቸው? -

-በመንግስት ደረጃ

5. በቤተሰብ እና በህ/ሰብ ደረጃ ምን አይነት ድጋፍ/ የተለምዶ ድርጊት አለ ለእናቶች ህ/ በእርግዝና ለ/ በወሊድ ሐ/ በድህረ ወሊድ ወቅት የሚደረግ?

2. ለልምድ አዋላጆች

1. በእናንተ አካባቢ እናቶች ለወሊድ እንዲሁም ከእርግዝና ከወሊድና ከድህረ ወሊድ ጋር ተያይዘው ሊፈጠሩ ለሚችሉ ችግሮች ብለው የሚያደጋቸው ዝግጅቶች ምንድን ናቸው?

2. በዚህ ህ/ሰብ አንድ እናት ከእርግዝና ከወሊድ ወይም ከድህረ ወሊድ ጋር በተያያዘ አደገኛ የጤና ችግር እንደገጠማት የሚታስበው መቼ ነው?/ምን ሲከሰት ነው? /ምልከቶቹን

3. እርስዎ ለእቶች በእርግዝና በወሊድና በድህረ ወሊድ ወቀት የሚሰጡት አገልግሎት ምንድን ነው

4.ከቴና ኤክስቴንሽን አንዲሁም ከሌሎች ጤና ባለሙዎች ጋር ተቀናጅተው የመስራት ልምደዎ ምን ይመስላል

5. ለሚሰጡት አገልግሎት ክፍያውስ

6. እዚህ አካባቢ በቤተሰብ እና በህ/ሰብ ደረጃ ምን አይነት ድጋፍ/የተለምዶ ድርጊት አለ ለእናቶች ህ/ በእርግዝና ለ/ በወሊድ ሐ/ በድህረ ወሊድ ወቅት የሚደረግ?

8.10. CURRICULIM VITAE(CV) OF PRINCIPAL INVESTIGATOR

I. PERSONAL INFORMATION

Full name kebebush zepre Guni

Date of birth Nov28/ 1978 G.C

Place of birth SNNPR Gurage zone edza woreda zigbaboto kebele

Sex Female

Nationality Ethiopian

Marital status married

Current address Addis Ababa (AAU)

Mobile 0922-73-29-73

II. EDUCATIONAL BACK GROUND

- 1995 GC High school completion in Emdibir com.ss
- Oct 1999 G.C AAUMF centralized school of nursing
  Diploma in senior clinical nursing
- Feb 2010 G.C Hawassa University health science college
  Bachelor degree in public health
- From oct.2013 to now I am attending post graduate (MPH) program in Addis Ababa university school of public health

III. WORK EXPERIENCE

- Nov 1999-oct 2005 G.c I was working in SNNPR Gurage Zone edza woreda agena H/C

  Main duties & responsiblities
- Technical staff head (coordinate all technical activities of the health center in each department
- OPD service provider
- EPI coordinator
- MCH TB/Leprosy focal person
- VCT councilor

March 2010 – oct.2013 I was working in SNNPR Gurage zone Abeshige woreda health office as curative & rehabilitative core process coordinator

Major duties & responsibilities

- Coordinating the whole activities of CRCP
- IMNC /ICCM focal person
- PMTCT focal person
- TB/ leprosy focal person

- ♣ Prepare annual biannual quarterly & monthly plan of the woreda & health organization
- ♣ Compile and submit monthly quarterly biannual & annual reports
- ♣ Conduct supporting supervision
- ♣ monitoring & evaluation of activity performance of the organization
- ♣ Facilitated about 18 rounds of ICCM & 6 round of IMMCI training for HEW & health professionals which is organized by save the children with SNNPR HB
- ♣ Participating in woreda & zonal review meeting

TRAININGS

- ♣ SPECIAL TRAINIGS WITH CERTIFICATE

Name of certificate	Date of conduct G.C	Organized by	City/town
Regional TOT on integrated refresher training (IRT)	Dec. 10-15,2012 G.C	SNNPR HB NASTAD save international	Butajira
District health mgt system on MNCH	October 16-2012 G.C	SNNRHB with WHO & Hawassa school of public health	Hawassa
Regional TOT on IMNCI and supervisory skill	Aug. 04-10,2012 GC	SC/USA & SNNPR RHB	Hawassa
Comprehensive maternal and child health MNCH/PMTCT	April. 11-22,2011G.c	CHIA and SNNPR	Hawassa
Regional TOT on integrated community case mgt(ICCM)	November 20-26,2010 G.C	Save the children IFHP,LI0K and SNNPR RHB	Butajira
TB/HIV and leprosy	Augu. 24-30/2010 G.C	SNNPR RHB	Butajira
VCT	Oct. 11-29,2004 G.C	SNNP,RHB& FHIE	Adama
IRT	Jun. 16-21,2003 G.C	SNNP RHB & SSL/ESHE	Wolkite
Application soft ware	Oct. 2009-feb 10/2010	Butajira ICT telecom	Butajira
Reproductive health commodity security	September 20-21/2014	AAU and UNFPA	AddisAbaba

SKILL

- ♣ I have excellent skill on training facilitation
- ♣ MS-word MS-Excel Ms-power point MS-access & internet service
- ♣ Good interpersonal and communication skill

LANGUAGE PROFICIENCY

	Reading	writing	listening	speaking
♣ Amharic	excellent	excellent	excellent	excellent
♣ English	excellent	excellent	excellent	excellent
♣ Guragigna	excellent	excellent	excellent	excellent

HOBBY

- ♣ Reading books
- ♣ Watching movies
- ♣ Listening spiritual songs

8. 11. Assurance of principal investigator

The undersigned agrees to accept responsibility for the scientific ethical and technical Conduct of the research project and for provision of required progress reports as Per terms and conditions of the Research Publications Office in effect at the time of Grant is forwarded as the result of this application.

Name of the student: Kebebush zepre

Date._____ Signature _____

Approval of the primary Advisor

Name of the primary advisor: Dr. Mirgissa Kaba_____

Date._____ Signature _____