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Original Research

Birth Preparedness and Complication Readiness among Mothers in Leka Dullacha District, Western Oromia, Ethiopia

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Abstract

Birth preparedness and complication readiness is a key component of safe motherhood programs, which helps receiving skilled care during labor. However, studies in different areas in Ethiopia show that there is low knowledge and practice of birth preparedness and complication readiness. The aim of this study was to assess birth preparedness and complication readiness among mothers in Leka Dullacha district, Oromia Regional state. A community-based cross sectional study design was conducted on a sample of 580 mothers who gave birth in the last 12 months preceding the survey. The women were asked whether they followed the desired five steps while pregnant: identified a trained birth attendant, identified a health facility for birth, arranged transport, identified blood donors and saved money for emergency. Taking at least three steps was considered as being well-prepared. Univariate, bivariate and multivariate analyses were done. The strength of statistical association was measured by adjusted odds ratios with 95% Confidence Interval. A statistical significance was considered at P<0.05. **F**ive hundred six, (88.8%), of the mothers planned place of delivery, 344 (60.4%), planned a means of transportation, 312 (54.7%), saved money, fifty (8.8%) prepared blood donors, 408 (71.6%), identified Companion to health facility, 223 (39.1%) identified skilled delivery care provider. But there is a big discrepancy between what was planned and actual place of birth. From multivariate analysis, being government employees (AOR= 9.50, 95% CI= 1.24- 7.24), education level (9-12$^{th)}$, (AOR=3.57, 95% =1.20-10.60), attended ANC four times (AOR=4.94, 95% CI=1.47-16.54), ever heard about birth preparedness (AOR=1.62, 95% CI=1.03-2.57), told about birth preparedness during their ANC visit (AOR=3.01, 95% CI=1.80-4.98), monthly income (AOR=2.89, 95% CI=1.62-5.15) were positively associated with birth preparedness and complication readiness. Though a good proportion of the respondents planned to give birth at health institutions, the actual practice was very low. Being public employee, having secondary education, attending ANC, information about birth preparedness and complication readiness during ANC visit and having monthly income were found to be positively associated with birth preparedness and complication readiness. It is recommended that health care providers should pay attention to educate mothers about the importance of institutional delivery and work more on attracting mothers.

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INTRODUCTION

Maternal mortality is one of the major public health problems challenging the medical community especially in developing countries. Every day, approximately 800

women die from preventable causes related to pregnancy and childbirth and about 99% of all maternal deaths occur in the developing countries. Skilled care before, during and after childbirth can save the lives of women and newborn babies (WHO,2012).

Birth Preparedness and Complication Readiness is a strategy to promote the timely use of skilled maternal and neonatal care, especially during childbirth, based on the theory that preparing for childbirth and being ready for complications reduces delays in obtaining this care. This strategy is equally useful in programs that focus on emergency and obstetric care and skilled care during childbirth (JHPIEGO, 20040). Birth Preparedness and Complication Readiness (BPACR) is the process of planning for normal birth and anticipating the actions needed in case of an emergency (Banza et al, 2004).

Key elements of birth preparedness include attending antenatal care at least four times during pregnancy; identifying a skilled provider and making a plan for reaching the facility during labor; setting aside personal funds to cover the costs of travelling to and delivering with a skilled provider and any required supplies; recognizing signs of complications; knowing what community resources ,emergency transport, funds, communications, are available in case of emergencies and identifying a blood donor. Because life-threatening complications can occur during the early postpartum period, birth preparedness also includes preparing/planning for accessing postpartum care during the first week after delivery and at six weeks after delivery (the White Ribbon Alliance for Safe Motherhood, 2002).

Woman Prepares for birth, values and seeks skilled care during pregnancy, childbirth and the postpartum period attends at least four antenatal visits, makes a birth plan with provider, husband and family decides and acts on where she wants to give birth with a skilled provider, identifies a skilled provider for birth and knows how to contact or reach the provider ,recognizes danger signs and implements the complication readiness plan , knows transportation systems, knows where to go in case of emergency, has personal savings and knows who the blood donor is (HIPEGO,2001).

Women die as a result of complications during and following pregnancy and childbirth. Most of these complications develop during pregnancy. Other complications may exist before pregnancy but are worsened during pregnancy. The major complications that account for 80% of all maternal deaths are: severe bleeding (mostly bleeding after childbirth), infections (usually after childbirth), and high blood pressure during pregnancy (pre-eclampsia and eclampsia) unsafe abortion.

All women need access to antenatal care in pregnancy, skilled care during child birth, and care and support in the weeks after child birth (WHO, 2014). Poor women in remote areas are the least likely to receive adequate health care. This is especially true for regions with low numbers of skilled health workers, such as sub-Saharan Africa and South Asia. While levels of antenatal care have increased in many parts of the world during the past decade, only 46% of women in low-income countries benefit from skilled care during childbirth. This means that millions of births are not assisted by a midwife, a doctor or a trained nurse (Patton, 2009).

In 2013, 289,000 women globally, died during and following pregnancy and childbirth. Almost all of these deaths occurred in low-resource settings, and most could have been prevented. The maternal mortality ratio in developing countries in 2013 is 230 per 100,000 live births versus 16 per 100,000 live births in developed countries. There are also large disparities within countries, between women with high and low

income and women living in rural and in urban areas (WHO, 2014).

Ethiopia is one of the ten countries account for about 60% of global maternal deaths. Currently, Ethiopia has MMR of 676 per 100,000 live births and NMR 37/1000 live births. The most important barrier to access to health services that women mention is taking transport to a facility (71%) followed by lack of money (68%) and distance to a health facility (66%) (EDHS, 2011). EDHS (2011) reports that only 34 % of women, who gave birth in the five years, preceding the survey, had received ANC from skilled provider, that is, from a doctor, nurse, and midwife for their most recent birth. Only 10% of births were attended by skilled providers. More than 61% stated that a health facility delivery was not necessary, and 30% stated that it was not customary. Only 10% of births in Ethiopia are delivered at a health facility. Nine women in every 10 (90%) deliver at home even though the percentage of deliveries in home slightly decreased from 94% to 90% from 2005 to 2011(EDHS, 2014).

Even though women's knowledge about obstetric danger signs has substantial importance for improving maternal and child health, low knowledge of obstetric danger signs is seen as a study done in different areas of Ethiopia showed. With this huge maternal and infant mortality, there is low practice of birth preparedness and complication readiness in the country. Therefore this study aims to assessing the current level of delivery plan and the actual practice as well as factors that affect birth preparedness among mothers in Leka Dullacha district.

METHODS AND MATERIALS

Study period and area

The study was conducted in Leka Dullacha district, East Wollega Zone. It is located at 27 km from Nekemte, capital of the zone, and at 358 km from Addis Ababa to west, the capital city of Ethiopia. The district has a population size of 81,191 and two urban and 21 rural 'kebeles (a small administrative Unite). Four public health Centers and 23 Health Posts are found in the district. There is also one for non-profit Catholic Church Health Center and other different Private health institutions in the district. The study was conducted from May, 2014 - May 2015.

Design: A community-based cross sectional study design was conducted to assess birth preparedness and complication readiness among mothers in Leka Dullacha district who gave birth in the last 12 months preceding the survey. All mothers who gave birth during the last 12 months and residing in the study area for at least six months were included in the study. Sample size was determined using a single population formula. Therefore, the total sample size required for the study was 580.regardign sampling technique, first, 23 villages of the district were stratified i.e. to two urban and twenty one rural villages. Then one urban and eleven rural villages were selected using simple random sampling. Census of all mothers who gave birth in the last 12 months was conducted in the selected villages prior to the actual data collection to prepare a sampling frame. In this regards, the census was done by the health extension workers. Then calculated sample size was proportionally allocated to randomly selected urban and rural villages according to their population size.

The study subjects were selected using computer generated random sampling from sampling frame. Data was collected using pretested structured questionnaire developed according to the objectives of the study from the manual prepared by JHPIEGO for Safe motherhood program and other literatures. The tools were translated from English to Afan Oromo, the regional language, and back translated to English for consistency

and for better clarity for the respondents. The data was collected using the Afan Oromo version.

Twelve diploma nurses were recruited from the local area for data collection. Data collection process was supervised by three nurses. Two days training was given for data collectors and supervisors by the principal investigators.

Data Processing and analysis

Coded quantitative data was entered into SPSS version 20 Statistical Software for analysis. Univariate analysis was done. Frequency distribution was presented by percent for categorical variables. In addition mean and standard deviation was done for continuous variables. Binary analysis was used to determine the association between different factors and the outcome variable. Multivariate analysis was done to control for possible confounding variables. Those variables found to be statistically significant in bivariate analysis were exported to second model with 95% CI for further analysis to control confounders and to estimate the level of the strength of the associations. A statistical significance was considered at $P<0.05$ which was taken as a cutoff point**.** Finally the result was summarized and presented using tables, charts and graphs

Data quality management

Representative sample size was taken by considering the design effect of two. Quantitative data was cleaned to check for completeness, consistency and missing values. Incomplete questionnaires and/or non responses were excluded. The supervisors made close supervision during data collection. The principal investigators randomly double-checked the completed questionnaires for completion, consistency and clarity every day after data collection.

Operational definitions

Birth preparedness and complication readiness: A woman is considered as prepared for birth and complication if she identified three components of birth preparedness and complication readiness: identified place of delivery, identified means of transport during emergency, identified blood donation, and saved money.

Skilled provider: Persons with midwifery skills (physicians, health officers, nurses/ midwives) who can manage normal deliveries and diagnose, manage or refer obstetric complications.

Saved money: Any money put aside by the woman or her family for childbirth

Identified place of delivery: A place for delivery planned ahead of childbirth reported by the woman.

Identified means of transport: Any kind of transport which is identified ahead by the women or her family for the purpose of transportation to place of childbirth or for the time of obstetric emergencies reported

Dependent variables

Birth preparedness and complication readiness and independent variables: were Socioeconomic and demographic factors: age, marital status, religion, ethnicity, Education, income, family size, locality/residence, Obstetric factors: Parity, history of still birth, husband's factors: age, occupation and education.

Ethical considerations: Ethical clearance was obtained from Wollega University, College of Medical and Health Science Research Committee and Institutional Review Board. Written permission was also obtained from Leka Dullacha Woreda Health Office. Respondents were provided with information sheet about the objective of the study. Data collectors read the information

sheet for the participants and then written informed consent was obtained from the participants of the study. The information obtained during the interview was kept confidential. The name of the participants was not written on the question papers and no third person accessed the data.

RESULTS

Out of the total sample, (580), five hundred seventy responded to the questions making the response rate of 98.2%. The rest (1.8%) was incomplete and discarded. Two hundred nineteen (38.4%) of the respondents were in the age range of 17-24, while, 312 (54%) were between 25-34 and 39 (6.8%) were above 35 years. The mean age of the respondents was 25.37 (± 4.78 SD) ranging from 17 to 40 years.

The majority, 507(88.9%), of the respondents were rural residents. Almost all, 567 (99.5%), of the respondents have ever married. By religious denomination, half, 286 (50.2%), were protestants. More than fifty percent, 322 (56.5%), were illiterate. The mean age of the respondents' husband was 30.02 (±6.14 SD). The mean family size of the participants of the study was 5.17 (±1.72 SD). One hundred twenty four (21.8%) of the respondents were primipara, while, 108(18.9%), have given birth twice, 100 (17.5%) have given birth three times, and the rest 238 (41.8%) for four and above times. Thirty seven (6.4%) had history of still birth.

Table 1: Socio-demographic characteristics of the respondents, Leka Dullacha district, Oromia region, 2015

Socio-demographic characteristics	Frequency	Percentage
Place of residency		
Urban	63	11.1
Rural	507	88.9
Marital status		
Single		
Married	567	99.5
Widowed	3	0.5
Religion		
Orthodox	226	39.7
Protestant	286	50.2
Catholic	7	1.2
Muslim	51	8.9
Educational status of the respondents		
Illiterate	322	56.5
Read & Read	25	4.4
Grade 1-6	113	19.8
Grade 7-8	45	7.9
Grade 9-12	28	4.9
College and above	37	6.5
Ethnicity		
Oromo	563	98.8
Amhara	7	1.2
Occupation of the mother		
House wife	128	22.4
Gov't employee	33	5.8
Private business	407	71.4
Others *	2	0.40
Age category of the mothers		
17-24	219	38.5
25-34	312	54.7
>=35	39	6.8
Number of parity		
One	124	21.8
>=2	446	78.2
Monthly income of the mothers		
<= 166	116	20.4
167-415	210	36.8
>= 416	244	42.8

*Students

Practices of birth preparedness and complication readiness

Two hundred forty six (43.2%) of the respondents ever heard the term birth preparedness while they were pregnant. Five hundred thirty four (93.7%) knew that delivery service is given at government health facilities free of charge.

Concerning practices of preparation for birth, five hundred six, (88.8%), have planned where to give birth, 344 (60.4%), planned means of transport for emergency and 312 (54.7%) saved money. Fifty (8.8%) prepared blood donor for emergency, 408 (71.6%) identified the person who accompany them to health facility, 223 (39.1%), identified skilled care provider during pregnancy and 508 (89.1%) prepared food items during pregnancy. The overall prevalence of birth preparedness and complication readiness among the study population was 38.4% (Table 2).

Table 2: Birth preparedness and complication readiness among mothers in Leka Dullacha district, Oromia region, 2015

Variable (N=570)	Frequency	Percent
Planned where to give birth	506	88.8
Identified a means of transport during emergency	344	60.4
Saved money	312	54.7
Prepared blood donor during emergency	50	8.8
Identified the person who accompany during labour	408	71.6
Identified skilled care provider during pregnancy	223	39.1
Prepared food items during pregnancy	508	89.1

NB: Percentage may not add 100% as multiple responses are possible

Four hundred ninety six, (87%), of the mothers attended ANC visit by a skilled provider at least once during the index pregnancy, but 74(13%) didn't attend ANC service at all. Of those who ever attended ANC visit, two hundred twenty nine, (46.2%), attended their first ANC visit before or at 16 weeks of gestational age; while 267(53.8 %) booked after 16 weeks. Of the respondents, twenty six, (4.6%), attended ANC visit only once, 88(15.4%) attended two times, 184(32.3%) three times and 198(34.7%) four times. Three hundred seventeen, (55.6%), of the mothers ever heard information about birth preparedness from health care providers during ANC visits (Figure 1).

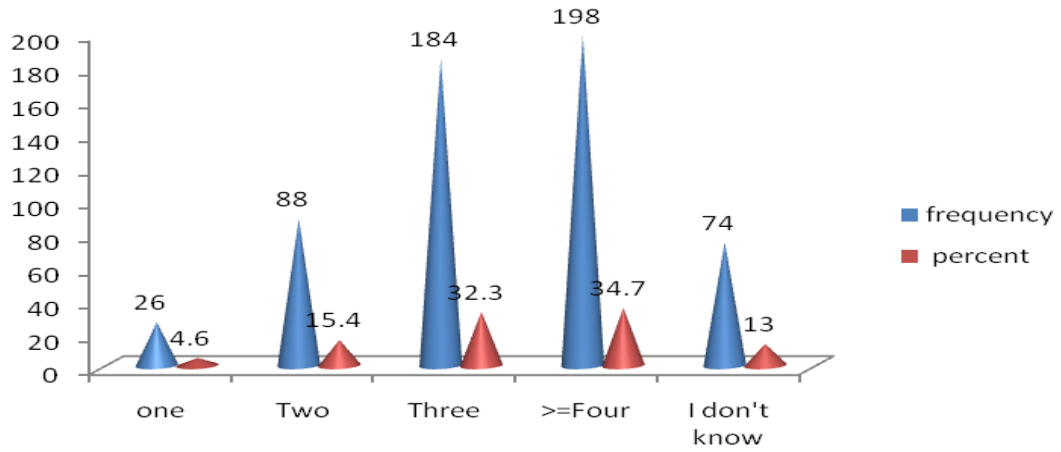

Figure1: Frequency distribution of ANC visits among mothers in Leka Dullacha district, Oromia region, 2015

Among mothers who planned to give birth at health institutions, 399 (70%), mothers planned to give birth at health center, 7 (1.2%) at hospital, 20(3.5%) at health post. But 80 (14.1%) reported they planned to deliver at home while 64 (11.2%) didn't have plan for place of delivery at all. However, there were discrepancies between the plan of place of delivery and the actual place of delivery. Two hundred eighty three, (49.6%), of the participants gave birth at home, two hundred thirty eight (41.8%) at health center, 41 (7.2%) at hospital, 7(1.2%) at health post. For those who gave birth at health facility, (286), the frequently used means of transport were on foot, 130 (45.5%), by the help of the community 88(30.7%), government car/ambulance, 56(19.6 %) and private care, 12(4.2%).

Concerning their plan and actual place of delivery, 70% of the mothers planned to deliver at health center but only 41.80 delivered at health center; while 14.1% of the mothers planned to deliver at home but 49.60% delivered at home (Figure 2).

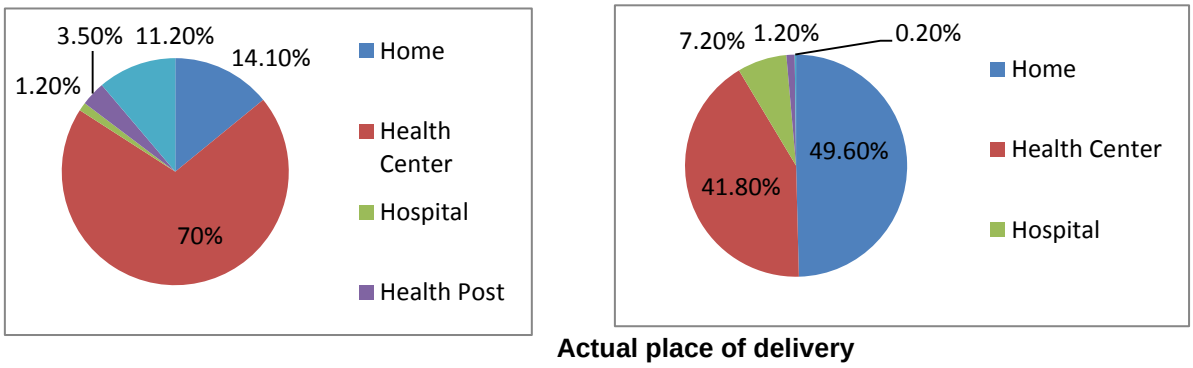

Figure2: Planned and actual place of delivery among in mothers in Leka Dullacha district, 2015

The reasons for home delivery were: traditional believes, 153(54%), distance from the health facility, 66(23.3%), unavailability of place to stay around the health facilities until delivery, 12(4.7%), no person to accompany them to health facility, 17(6%), lack of transport, 21(7.4%), and lack of money for transportation 8(2.8) (Fig.5). Mothers who gave birth at home were assisted by TBA, 59(20.8%), HEW, 4(1.50%), and assisted by mothers and neighbors, 208(73.5%) and self assisted, 12(4.2%) (Figure 3).

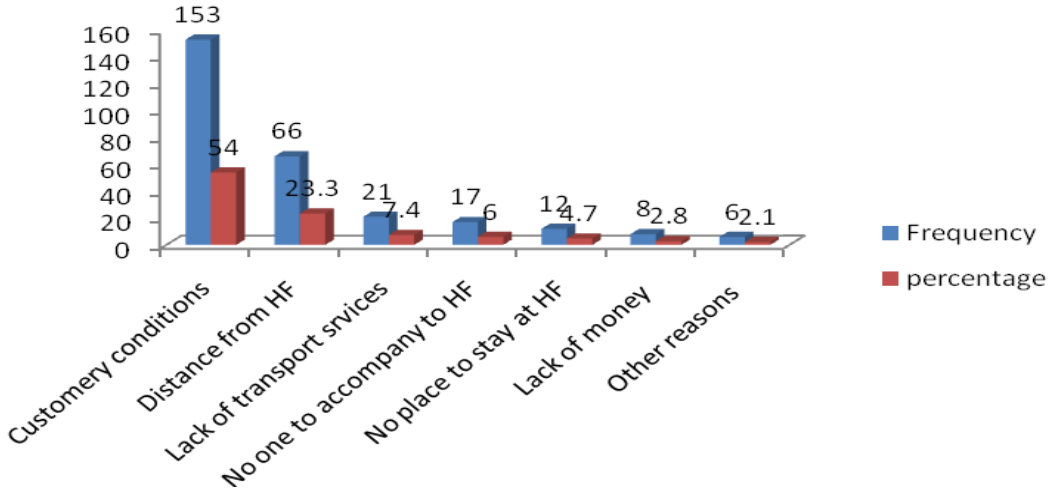

Figure 3: Frequency distribution of reasons for home delivery, Leka Dullacha district, 2015

Factors associated with Birth Preparedness and Complication Readiness

The result of multivariate analysis shows that those who were government employee were more likely to be prepared for birth and complication (AOR=9.50, 95% = 1.24,72.41), mothers with secondary level of educational (grade 9-12) were more likely to be prepared for birth (AOR=3.57,95% CI= 1.20-10.60), mothers who attended ANC four times were more likely to be prepared for birth and complication (AOR= 4.94,95% CI = 1.47-16.54), those who heard information about birth preparedness were more likely to be prepared (AOR= 1.62,95% CI=1.03-2.57). In addition, those who were told about birth preparedness during their ANC visit were more likely to be prepared for birth (AOR= 3.01,95% CI=1.80-4.98) , those mothers with monthly income of greater and equal to 15.2 US dollars monthly were more likely to be prepared for birth (AOR=2.89,95% CI=1.62-5.15)..

Table 3: Bivariate and Multivariate analysis, Leka Dullacha district, Oromia region, 2015

Variables (N=570)	BPCR Bivariate COR(95%CI)	Multivariate AOR(95%CI)
Place of residence		
Urban	1	1
Rural	0.45(0.26-0.77)	0.92(0.41-2.09)
Religion of the mother		
Orthodox	1	1
Protestant	1.04(0.72-1.49)	0.82(0.52,1.28)
Catholic	**10.14(1.20-85.70)**	5.85(0.60,56.30)
Muslim	1.091(0.585-2.035)	**2.38(1.0,5.63)**
Occupation of the mother		
House wife	1	1
Government employ	**7.25(2.79-18.82)**	**9.5(1.24-72.41)**
Private business	0.855(0.56-1.28)	0.80(0.46-1.37)
Other	E+(0.000)	E+(0.0000)
Educational status of the mother		
Illiterate	1	1
Read & write	0.55(0.20-1.52)	0.0000
Grade 1-6	1.41(0.90-2.21)	1.06(0.47-2.39)
Grade 7-8	3.33(1.75-6.32)	3.29(1.09-9.90)
Grade 9-12	**2.96(1.35-12.85)**	**3.57(1.2,10.60)**
College & above	5.99(2.79-12.85)	0.17(0.02-1.52)
Mothers attended ANC visit at least once		
No	1	1
Yes	**8.53(3.63-20.02)**	1.0(0.24-4.16)
Timing of the first ANC visit		
Before/at 16weeks	1	1
After 16 weeks	**1.62(1.13-2.32)**	1.02(0.64-1.62)
Didn't go at all	0.14(0.06-0.35)	0.000
Total ANC attended		
One	1	1
Two	1.33(0.50-3.53)	2.13(0.64-1.62)
Three	1.74(0.69-4.36)	**3.88(1.17-12.88)**
Four and above	**3.06(1.23-7.61)**	**4.94(1.47-16.54)**
Didn't go	0.23(0.07-0.79)	
Mothers heard the term BP&CR		
No	1	1
Yes	**2.86(2.02-4.06)**	**1.62(1.03-2.57)**
Told about BP during ANC visit		
Yes	**12.61(5.32-29.91)**	**3.01(1.80-4.98)**
No	3.92(1.59-9.63)	0.0000
Didn't know	1	1
Knew as delivery service in government health facility is free of fee		
No	1	1
Yes	**5.39(1.88-15.46)**	1.49(0.47-4.75)
Monthly income category in Birr		
<=166	1	1
167-415	1.25(0.76-2.07)	1.93(1.06-3.50)
>= 416	**2.49(1.54-4.03)**	**2.89(1.62-5.15)**

DISCUSSION

Birth plan is expected to assist women in making choices that would contribute to good pregnancy outcome. Our community based study shows that the overall prevalence of birth preparedness and complication readiness was 38.4%. This result is better than the result other studies in Ethiopia, Goba district, (29.9%) and Jimma 34.5% (Dessalegn, Daniel, 2014; Gurmessa, T. *et al,* 2014). But it is comparable with the result of the study done in Uganda (35%) (Jerome**, 2014)**.

Regarding the practice of preparedness for birth and complication, 506 (88.8%) of the respondents planned where to give birth which is far better than reports from both Jimma and Robe districts, 54.3% and 45.6%; respectively (Dessalegn, Daniel, Muhammedawel & Mesfin, 2014) and study report from southern Ethiopia (Wondo district) which was only 8% of the mothers planned to deliver at health facilities (Hailu et al, 2011). Three hundred forty four (60.4%) of the respondents identified a means of transport for emergency which was comparable with a study done in Jimma, (60.2%) but better than that of Robe district (28.5%) (Desalegn & Daniel, 2014; Muhammedawel, Mesfin, 2014) and that of Wondo district (7.7%) (Hailu, Gebremariam, Alemseged & Deribe, 2011). Mothers who saved money for emergency were three hundred twelve (54.7%) which is less than the study conducted in Robe district (76.3%) **(Jerome,** 2011). However, it is better than a study done at Wondo district (34.5%) and India (40.8%) (Hailu, Gebremariam, Alemseged & Deribe, 2011; Mukhopadhyay, 2013).

Regarding their plan where to give birth, 80(14%), of the respondents planned to give birth at home, which is much lower than the study conducted in Robe district (40.7%) (Muhammedawel, Mesfin, 2014). About 74.8% of the mothers planned to give birth at health facilities in the study area, however, only 50.2% actually gave birth at health facilities. This is lower than the study report from Adegrat (65%) but more butter than that of Robe (9.2%) (Mihret, Fantahun, 2007; Muhammedawel & Mesfin, 2014).

It was found that there was a significant discrepancy between plan of place for delivery and actual place of delivery. In this study, a plan to deliver at home was very low (14.1%), however, almost fifty percent, (49.6%), actually delivered at home; which is larger than that of study done in Adegrat (35%) and the study in Kenya (29%) but much lower than that of Robe district (90.8%) (**Jerome, 2011;** Muhammedawel, Mesfin, 2024). Delivering at home without a skilled health-care provider leaves women and babies at greater risk of complications (Nigeria Federal Ministry of Health, 2011). In this study, traditional believes (54%) distance from health facilities (23.3%), lack of transportation service, and lack of a person to accompany them to health facility (6%) were the contributing factors for home delivery. These findings were in agreement with the findings the study done elsewhere in the country (Economic Commission for Africa, 2013).

In factor analysis, mothers with primary education were more likely to be prepared for birth and complication (AOR=3.57, 95% = 1. 20-10.60) that was in agreement with the findings of the study from Tanzania, Uganda and Nigeria that women with primary education and above were twice more likely to be prepared and ready for birth and complications (Juley-Anne Bochaberi Mokua 2014; Othman Kakaire, Dan, Kaye, Michael sinde, 2011; John, 2014). Mothers who attended ANC visited four times were also more likely to be prepared for birth (AOR=4.94, 95% CI=1.47-16.54). This is comparable with other studies (**Jerome, 2011**; Carroli, Rooney, Villar, 2001). Mothers who were told about birth preparedness

during ANC visit were also more likely to be prepared for birth and complication (AOR=3.01, 95%CI=1.80-4.98) which was in agreement with the study done in Adigrat (Desalegn M., Daniel B.2014). (In this study preparation for birth and complication was higher for government employees (AOR=9.50, 95%CI= 1.24-72.41), which is in agreement with the study done in Uganda (20) and who ever heard about birth preparedness (AOR=1.62, 95%CI=1.03-2.57), and with monthly income greater or equal to 15.23 USD , (AOR=2.89, 95%CI=1.62-5.15). Education and health services provided during the antenatal period have the potential to reduce pregnancy and delivery complications and improve birth outcomes in resource-poor settings like Ethiopia.

CONCLUSIONS AND RECOMMENDATIONS

Birth preparedness and complication readiness practice was generally low in the study area. Moreover, there is a big discrepancy between planned place of delivery and actual place of delivery. Most of the mothers planned to deliver at health institutions but almost half of the participants gave birth at home. Education, attending ANC, being government employee, getting information about BPCR and level of income were found to be positively associated factors with birth preparedness and complication readiness. Education and health services provided during the antenatal period have the potential to reduce pregnancy and delivery complications and improve birth outcomes in resource-poor settings. A Traditional believes, distance from health facilities, lack of transportation service, lack of a person to accompany them to health facility were the contributing factors for home delivery.

There was seen low practice of components of birth preparedness and complication readiness in the study area. Therefore it is recommended that.

1. It needs to strengthening education about the importance of birth preparedness and complication readiness during ANC visits
2. The health institutions and other partners should design strategies to increase the mothers' utilization of institutional delivery service focusing on the berries

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Author Contributions

All conceived and designed the study:
All participated in data collection, analysis and write up of the manuscript.

Conflict of interest

The authors declare that they have no competing interests regarding this manuscript.

Ethical Approval was obtained from Institutional Review Board of College of Health Sciences, Wallaga University. And A written consent was obtained from each participants before data collection

Consent for publication: No image or photograph of the participants was taken

Data availability: please, contact author for any data request.

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