

**DELAY FOR INSTITUTIONAL DELIVERY SERVICE UTILIZATION
AND ASSOCIATED FACTORS AMONG MOTHERS ATTENDING
JIMMA UNIVERSITY MEDICAL CENTER, JIMMA TOWN,
SOUTHWEST ETHIOPIA.**

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INSTITUTE OF HEALTH SCIENCE
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DELAY FOR INSTITUTIONAL DELIVERY SERVICE UTILIZATION AND ASSOCIATED FACTORS AMONG MOTHERS ATTENDING JIMMA UNIVERSITY MEDICAL CENTER, JIMMA TOWN SOUTH WEST ETHIOPIA.

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Abstract

Back ground: *Pregnancy and child birth related complications are unpredictable; however it is preventable by timely referrals to obstetric care service. The difference between life and death in obstetrics might be a matter of timely arrival and management.*

Objective: *To asses delay for institutional delivery service utilization and associated factors among mothers attending Jimma university medical center, Jimma town south west Ethiopia.*

Method: *Facility based cross sectional study design was employed. Sample size was determined by single population proportion formula. Data were collected from 405 mothers by face to face interview using a pretested structured questionnaire and entered using epi-data version 3.1, exported to SPSS version 23 for analysis. The data was presented using texts, graphs and tables. A multivariable logistic regression analyses was done to identify independent predictors of delay for institutional delivery service utilization.*

Result: *A total of 405 mothers were participated in this study. The prevalence of delay for institutional delivery service utilization was 289(71.4%). The odds of mothers with illiterate husbands to have delay was more than five folds compared to those who do have literate husband (AOR: 5.56[2.64-11.71]). Similarly, mothers with low financial decision making power, those who purchase medical supply for getting service had shown higher odds delay (AOR: 2.59[1.23-5.44]), (AOR:1.86[1.03-3.34]) respectively. Moreover, poor knowledge of mothers on danger sign and birth preparedness, those who travelled longer distance to access health care, those who face problem in accessing health facility and in receiving were found to have higher but varying odds of delay.*

Conclusion and recommendation: *Majority of study participants were delayed for institutional delivery service utilization. Typical factors such as husbands educational status, decision making power on money expense, knowledge of mothers on danger sign and birth preparedness, distance, purchasing medical supply for getting service, encounter problem for the accessibility of health facility, encounter problem in receiving care at health facility still remained predictors of delay. Therefore it is important reducing delay for institutional delivery service utilization by working on the predictors of maternal delay.*

Key words: *Maternal delay; delivery service.*

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Acronyms and abbreviations

ANC - Ante Natal Care

BEmoc -Basic Obstetric Care

CEMOC-Comprehensive Emergency Obstetric Care

CI - Confidence Interval

EDHS - Ethiopian Demographic Health Survey

EmOC-Emergency Obstetric Care

JUMC-Jimma University Medical Center

Km - Kilo Meter

MMR - Maternal Mortality Rate

MOH-Ministry Of Health

OR - Odd Ratio

SDG-Sustainable Development Goal

SNNPR - South Nation Nationality Peoples Region

SPSS - Statistical Package for Social Science

WHO - World Health Organization

CHAPTER ONE INTRODUCTION

1.1 Background

Maternal mortality which is an over whelming event with bad consequences for the family, society as well as for the country. Burden of maternal mortality is high in developing countries(1).Maternal health outcome can be determined by the time of service utilization. Delay in service utilization is an imperative thing in defining maternal wellbeing. Because, majority of pregnancy and child birth related complications are unpredictable, but it is preventable by timely referrals to obstetric care service(2).There are three delay model proposes that maternal mortality and morbidity is associated with delay in decision to seek care, delay in reaching the appropriate facility and delay in receiving adequate care in the facility(3).

The reasons for the first delay may be fear of the hospital or the costs or lack of an available decision maker, late recognition of the problem, financial implications more over delay for decision making can be affected by her partner or family or relatives, and by local health beliefs(4).

The second delay refers to after decision is made at home to seek medical care in one of the accessible health facilities, several other barriers may impede access to health facilities these barriers can be lack of transport, long distance from functioning health facility it is usually caused by trouble in transportation. The third delay is a delay which occurs once they have reached at health facility. Third delay is due to factors like unavailability of health professionals or demotivated staffs, and burnout health professionals, inadequately trained and skill incapacitated health facility ,lack of medical equipment, for example: drugs, supplies, reagents, blood , oxygen ,uncooperative patient or relatives and Poor management(5).

Some literatures on maternal health suggest that as maternal deaths can be minimized by using known effective interventions, such as skilled birth attendance and delivery of comprehensive emergency obstetrical care. However only giving care by skilled birth attendants could not prevent maternal mortality, until the care is given timely(6).

Pregnant mothers need to get frequent and timely care, especially during labor and delivery. Because, delivery is the shortest and most severe period. It is also known that the time between beginning of an obstetric emergency and ultimate care is critical for the survival of the mother and her baby never the less, developing countries had lower chance for accessing emergency obstetric care due to social, cultural, socio-economic, distance, transportation, political constraints, ignorance and female decision making power which may result to maternal delay(7).

Generally maternal delay for institutional delivery has a great impact on maternal health outcome, despite current increased efforts in Ethiopia, much more need to be accomplished for the reduction of maternal mortality rates. If mothers have early health care seeking behavior and factors which cause delay are reduced, mothers can be saved from preventable deaths as the majority of maternal deaths are preventable. In response to this the aim of this study was to asses maternal delay for delivery service utilization and associated factors among mothers attending JUMC delivery unit.

1.2 Statement of the problem

Worldwide 800 women die every day from these over 99% i.e.287,000 annual deaths occur in developing countries(8).Every pregnant woman is at risk of obstetric complications(9).Though maternal deaths have been declining over the past decades, they remain a concern particularly in the less developed regions. The maternal mortality ratio in the more developed regions is very less when we compare to developing countries this might be due to they have addressed the issue of maternal delay(10).

Maternal mortality reduction remains a priority and WHO issued strategies toward termination of preventable maternal mortality under the sustainable development goal(SDG).It is well-known that all of the major causes of maternal death can be treated with effective and timely clinical interventions. However achieving the SDG require continual venture in maternal health research ,programs and policy at the global level and very attentive action in countries .The government can't achieve reduction on maternal mortality rate unless work on issues such as maternal delay(11).

High maternal mortality ratio is due to lack of access of women to quality health care facilities and majority of these women suffered first and second delays in their management, which could be due to their poor socio demographic factors. In Pakistan, over all delay were found in 94% women and second delay was the most frequent, present in 74% women. The first delay was found in 71%women and the third delay in 48% women which indicate that maternal delay is highly prevalent in those area(12).

Two third of maternal deaths occurred in sub-Saharan Africa. Even if the majority of maternal mortalities can be prevented, by early recognition and treatment, different factors can hinder women's access to emergency obstetric services. A number of factors were found to delay access to and utilization of emergency obstetric care among women in sub-Saharan Africa. These barriers are inter-dependent and occurred at multiple levels either at home, on the way to health facilities, or at the facilities(13).

The difference between life and death in obstetrics might be a matter of timely arrival and management(14).According to EDHS report, maternal deaths account for 25 % of all deaths to

women age 15 - 49 and maternal mortality ratio was estimated to 412 maternal deaths per 100,000 live birth(15).

In Ethiopia, where the religious impact, cultural fences, gender in equality in household decision making and bad experiences, in available health facilities are quite common and also as the majority women lives in rural areas are likely illiterate, had no approval from their husbands and families and had poor knowledge of the danger signs of pregnancy. As the result, they are less likely to use maternal health services early, they have poor access for transportation and also for using telephones. Pregnant women usually come to health facilities with obstetric complications due to their delay for the appropriate care(16).

The government in Ethiopia has made efforts to increase quality of work and capacity at health institution and improving referrals to hospital through the work of health extension worker and health center. The health care system also has strengthening intervention which aims to reduce maternal mortality and morbidity. The strategy contribute in improving an effective comprehensive emergency obstetric care (CEMOC) and Basic obstetric care (BEmoc) to improve essential skills of midwives and nurses(17).

Even if different efforts have been made for the reduction of maternal morbidity, maternal delay is still a common problem and also it continued affecting the health of mothers. In north western Ethiopia Bahir Dar city delay in health care seeking was found in 37.6% of participants. Their major reasons for the delay were lack of money, poor awareness and low decision making power(18).Consequently, it is stated that as maternal delay were one of the major cause for severe maternal out come in Jimma referral hospital(19).

Even though delay in obtaining access to appropriate health care is fairly common in developing countries including Ethiopia, there is limited study conducted on delay for institutional delivery service utilization and associated factors. Therefore the aim of this study was to asses delay for institutional delivery service utilization and associated factors among mothers attending JUMC, Jimma town south west Ethiopia.

1.3 Significance of the study

Maternal mortality is high in developing countries including Ethiopia. Majority of maternal deaths are occurring due to lack of early recognition and treatment. Hence maternal delay take the lion share for major obstetrical complications as well as maternal mortality, which has a great impact for the women as well as for the society wellbeing(20). Timing in utilizing institutional delivery during all births is critical in preventing maternal death and disability and also a key intervention for ensuring safe motherhood.

Assessing determinants of delay helps to identify the points at which delay can occur in the management of obstetric complications. Knowing delay and factors associated with delay for institutional delivery service utilization among mothers are important for policy makers, MOH and for health bureaus to aid the planning of action to reduce and control the mortality and morbidity rate. It is hoped that the provision of such vital information would inform better strategy in the bridging and/or elimination of the barriers that stand in the way of accessing institutional delivery. Furthermore this study will be used for patients as well as health care provider to take precaution by showing the level of maternal delay for delivery service utilization and its associated factors at JUMC.

Given the higher prevalence of delay in obtaining access to appropriate health care in developing world and variability in drivers of obstetric care utilization, studying context specific predictors in each setting is critical undertaking. Therefore the aim of this study was to asses delay for institutional delivery service utilization and associated factors among mothers attending JUMC, Jimma town south west Ethiopia.

CHAPTER TWO

LITRATURE REVIEW

This chapter includes the review of literatures on maternal delay with its associated factors, the following studies were reviewed and finding of the summaries were presented accordingly.

2.1 Delay for institutional delivery service utilization

Delay for obstetric care or delivery service will result in poorer out comes. Maternal delay is a determinant for the burden of maternal and perinatal deaths in delivery service settings(21). A retrospective observational study conducted in Pakistan states 94% of women had delay. Among delayed mothers 48% were due to health facility factor. The most frequent reasons for maternal delay were lack of awareness in 88.5% mothers, long distance in 39.7% women and difficulty in getting blood were in 49% women respectively(12).

According to cross sectional study conducted by Yarinbab and Balcha,in Yem special woreda, maternal delay in utilizing institutional delivery was 76.3%.As to respondents on this study, 43.4% of them met pregnancy related complication during their previous pregnancy and 36.5% of mothers met complication during their current pregnancy. Delay for utilization of institutional delivery were 7 times higher among mothers not being prepared for institutional delivery than mothers who have prepared(22).

2.1.1 Delay in seeking care

One of the study conducted in Pakistan reveals that delay in seeking was found in 70 (71%) of participants. Among them 68% of the women had received no formal education and 86 (82.7%) belonged to a lower socioeconomic class with less monthly income and also 58 % of the women received no antenatal care throughout the index pregnancy(12).

Similarly study conducted in Kenya on barriers to emergency obstetric care service reveals that among total or 30 mothers interviewed the majority or 16 mothers mention that they met problem in decision making to seek care which is categorized under delay one .Among mothers participated on this study majority or 9 of them live in rural area(23)

2.1.2 Delay in reaching

A cross sectional survey conducted on delays in travelling in Afghanistan states that only 20% of participants had no delay. The median modeled travel time, reported travel time, and delay were 1.0 hour, 3.6 hours, and 2.0 hours, respectively. Study Participants with one referral were more delayed than those who are self-referral. Difficulties obtaining transportation explained some delay compared to no difficulty .(24)

The other cross sectional study conducted on selected 16 referral hospitals in Ethiopia, about 67% of women took more than an hour to reach health facilities. A 25% of mothers indicated that there were challenges during travel to a health facility (20).

2.1.3 Delay in receiving care

As to national multicenter cross sectional study conducted in Brazil on delay in receiving obstetric care and poor maternal outcome states that there was a total of 53.8% delay. 34.6% of delays were due to health facility service. Delay at health service was more common among mothers poor ANC follow up, from those mothers 30% had inadequate ante natal care and 8.2% of women had no ANC follow up(14).

On the other hand the study on delay in accessing in emergency obstetric care, Mozambique states that 13.9% had both delay in reaching and in receiving care , delay in receiving care was 14.2% (25)

2.2 Factors associated with delay for institutional delivery service utilization

There are different causes of maternal delay majorly barriers like socio economic status, maternal knowledge, obstetric history , accessibility of healthy facility, and health care service factors are mentioned. The study in Ghana also identified factors including transportation difficulty 43%, high cost of care 27.7% and high cost of transportation 25.3%.Family involvement in decision making and poor attitude about health care service were less cited problems on this study(26).

2.2.1 Socio economic and individual factors

According to descriptive observational study on barriers to obstetric care in Biko academic hospital of Pretorian South Africa, the most important causes of delay was lack of knowledge of pregnancy related problem which was 40% and inadequate antenatal care were 37%(27).

On the other hand, one of the study on the access to comprehensive emergency in Ethiopia stated that 66% of mothers seek care instantly after recognition of complications. Less than half of respondents use an ambulance to seek care(20).

A cross sectional study conducted in Bahir Dar city north western Ethiopia reveals that 37.8% of participants reported that they faced problem on making decision to seek emergency obstetric care from health facilities and mean delay time mentioned by mothers were 8 hours with a sort of 1hour to 48. In addition to this maternal delay were high among mothers with poor awareness about ANC, unemployed mothers ,their monthly income <1000ETB and mother with less decision making power (18).

Likewise the finding of facility based cross sectional study in Hadiya hospital southern Ethiopia indicated that 40.1% of the respondents have delayed. Among respondents 41.2% of them delayed due to normal pregnancy out come on the prior delivery, 10.5% of them due to lack of money, the other reason 4.4% were complained no person at home to care for their children remained and 30.7% of them mentioned as their labour started at night. Delay in decision to seek obstetric care was 2.5 times higher amongst unemployed mother than employed ones. This study also mentioned that mothers with illiterate husbands are at higher risk of delay than those mothers who have literate husband. Mothers who have 4 ANC visits were less likely to delay than those attended less than four visits(28).

2.2.2 Accessibility of health facility factor

A cross sectional study conducted in Ethiopia, on selected referral hospitals mentioned one fourth of mothers indicated as there were challenges during travel to a health facility. The challenges were 14% ambulance absent/non-functional, 9% poor/inaccessible road and 9% were ambulance delay. A common problem mentioned for delays in reaching proper medical facilities in obstetric emergencies was distance (20).

According to the 2011 Ethiopian demographic and health survey study participants, the major barriers for pregnant women to access health services were lack of transport to a facility which is 71%, lack of money were 68% and distance to a health facility 66%. The most significant reason why delay in attainment of access to health facilities had been a challenge in Ethiopia was because of the very limited number of health facilities and medical personnel availability in the rural area. The limited hospitals nationally existing were built around the city while more than 85% of the people were living in the rural area(29).

Additionally a cross sectional study on maternal delay in utilization of institutional delivery, in Bahir Dar mentioned that 31.7% mothers challenged by transportation problem for getting obstetric services. They spend a minimum three hours for walking to reach the health care facilities. The means of transportation used were 18% of mothers were carried by wooden stretcher, 53.5% of mothers were traveled by care, and the left 28.5% were travel on foot (18).

Similarly the findings in Hadiya revealed that 29.7% of mothers were delayed, they were not reached the place of delivery within 1hour after the commencement of labor. On this study mothers who live longer distance away from health facility were 14 times more likely to delay in reaching to health care facility than those living within less distance, illiterate mothers were at 3 times delayed to reach than those literate mothers and also mothers who use other way of transportation were delayed by 40% more than those used ambulance(28).

2.2.3 Health care facility factor

One of the cohort study conducted in Ghana reveals that much referrals made mothers to delay. The third delay were 24.3% , 9.2 % respectively for fetal pelvic disproportion and hypertensive mothers .Those mothers were evaluated averagely within 32 minutes, mothers with hypertension were evaluated within 37 minutes. On this study factors which contribute for longer wait times include being in labour during the night shift(30).

The other study done by Soma Pillay and etal , in Pretoria South Africa reveals that lack of intensive care beds and lack of blood and blood products were difficulties detected in 17% of circumstances. Delay in recognizing the problem of bleeding, delay in initiating steps to stop over bleeding and delay in patient allocation were the difficulties identified in 75% of cases(27).

One of the study done in Ethiopia show that 7% of women complained as they wait too long to get obstetric care at hospital and also 34% of respondents at health center and 21% at hospital have delayed to receive care respectively. The major reasons for delayed health care service were absence and negligence of care givers, late referral from the health center and insufficient number of staff (20).

According to study conducted by Awoke and etal, 30.7% of mothers mentioned that, they did not get obstetric care timely. The delay was due to barriers faced at health facility .12% of women's stated as there was long time admission process, 10.3% lack of medical supplies and 7.8% care provider work load (18).

Likewise, on similar study done in southern Ethiopia 32.6% have delayed for receiving care due to obstetric care. Mothers who met problem during admission process and those who didn't get appropriate care provider were more delayed for receiving EMOC(28).

Conceptual framework

The conceptual frame work was adapted from Thaddeus and Manie too far to walk. The independent variable classified to socio-economic/demographic, individual factors, accessibility of the health facility and health facility factor. While the dependent variable was delay to utilize institutional delivery.

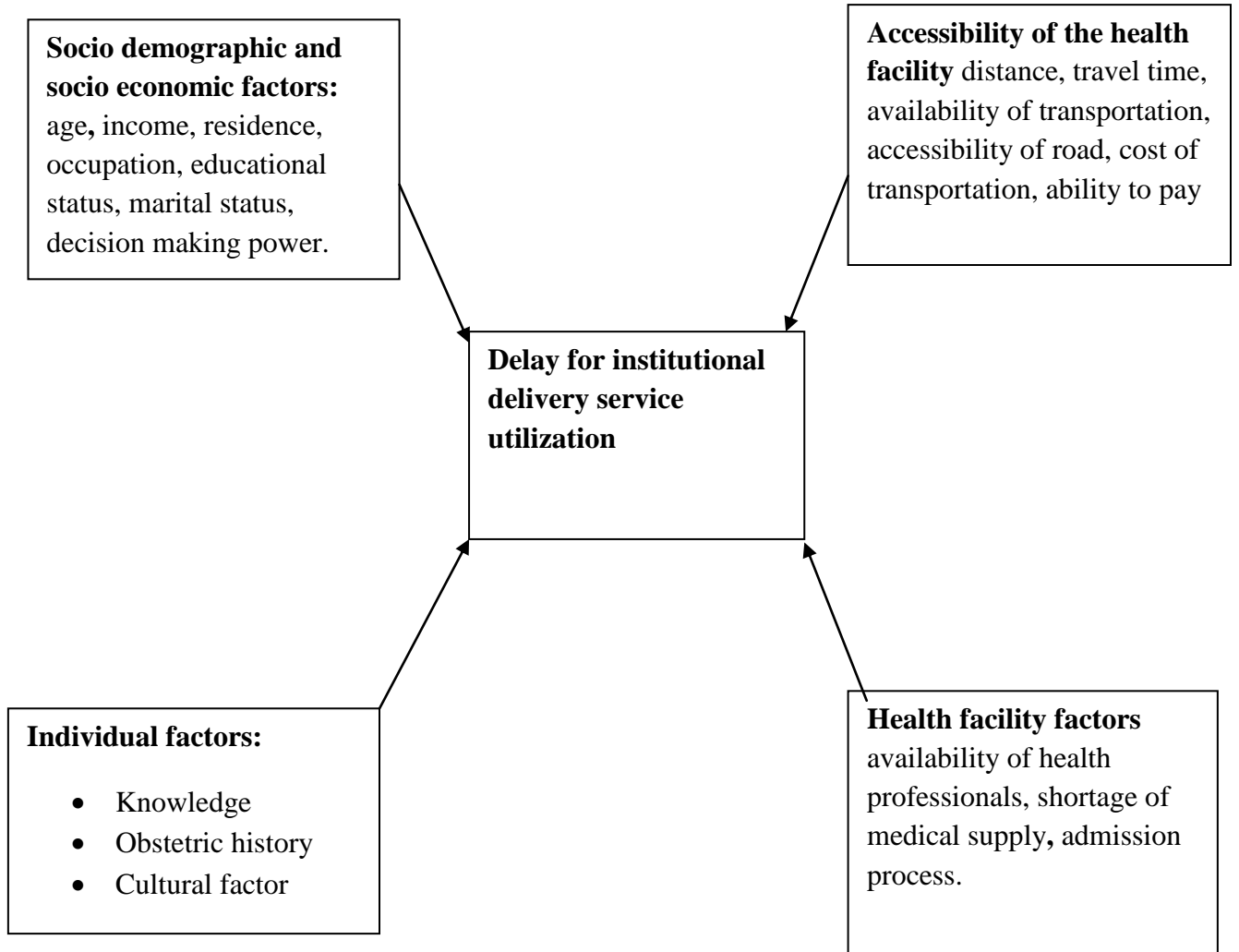


Figure 1: Conceptual framework, adapted after reviewing relevant literatures.

Source: Thaddeus S. and D. Maine. Too far to walk (31)

CHAPTER THREE

OBJECTIVES

3.1 General objective

- To assess delay for institutional delivery service utilization and associated factors among mothers attending Jimma university medical center, Jimma town south west Ethiopia 2019.

3.2 Specific objectives

- ✓ To determine prevalence of delay for institutional delivery service utilization among mothers who gave birth ,in Jimma university medical center, Jimma town south west Ethiopia 2019.
- ✓ To identify factors associated with delay for institutional delivery service utilization among mothers who gave birth, in Jimma university medical center, Jimma town south west Ethiopia 2019.

CHAPTER FOUR

METHODS AND MATERIAL

4.1 Study area and period

Jimma University medical center (JUMC) is one of the oldest public hospitals in the country. It was established by the Italian invaders for the service of their soldiers and used to be named as St.Mary Hospital. It is located in Jimma town 352 km southwest of Addis Ababa. Currently named as Jimma University medical center and it is the only teaching and referral hospital in the south western part of the country. Now a days Jimma University had launched new hospital of a global standard with art of the day with world class equipment's including oxygen production plant in the country. It serves as referral hospital for the whole south-western part of Ethiopia for nearly 15 million populations from Oromia, Gambella, SNNPR and Benshangul. It contains with a total of nearly 1000 hospital staffs , 662 nurses and midwives and also there are 28 midwives are working at delivery unit(32). The study was conducted from April 1 to April 30,2019.

4.2 Study design

Facility based cross sectional study was used.

4.3. Population

4.3.1. Source population

All mothers delivered at JUMC.

4.3.2. Study population

Mothers available to utilize delivery service at JUMC within data collection period were considered.

4.3.3. Inclusion criteria

Mothers who present at JUMC for delivery service during the data collection time and giving consent to participate.

4.3.4. Exclusion criteria

- Mothers who were on severe medical condition and unable to respond.
- Mothers who were admitted in the ward prior to labour and stayed until delivery.

4.4 Sample size determination and sampling technique

4.4.1 Sample size determination

The sample size was determined by using the single population proportion formula. Considering the prevalence of maternal delay for utilizing institutional delivery that is taken from facility based cross sectional study conducted in southern Ethiopia. The sample size was calculated as follows:

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

Where,

✓ n_o - initial Sample size

Z $\alpha/2$ -Standard normal value at 95% CI which is 1.96

p- Estimated population proportion is 0.401 which is the prevalence of first delay and taken from facility based cross sectional study conduct at Hadiya zone, southern Ethiopia(28).

d- Possible margin of error tolerated which is 5%.

$$n_o = \frac{(1.96)^2 0.401(1-0.401)}{(0.05)^2}$$

$$n_o = 369$$

By adding non-respondents rate 10% of sample size the final sample size was

$$n_f = 369 + 369 * 0.1$$

$$406$$

4.4.2 Sampling technique

All mothers who present to receive the services of delivery at JUMC during data collection period were included consecutively, until the required sample size obtained.

4.5 study variables

4.5.1 Dependent variable

✓ Delay for institutional delivery service utilization.

4.5.3 Independent variables

❖ **Socio economic and socio demographic.**

- ✓ Educational level, age, marital status, decision making power, place of residence, monthly income, mothers and husbands occupation.

❖ **Individual factors**

✓ **Obstetrical characteristics:**

Parity, ANC follow up, history of chronic illness during pregnancy, history of abortion

- ✓ **Knowledge;** knowledge of danger sign during pregnancy and birth preparedness.

✓ **Cultural factor**

❖ **Accessibility of the health facility:**

- ✓ distance
- ✓ travel time
- ✓ cost of transportation
- ✓ ability to pay
- ✓ transportation
- ✓ accessibility of road

❖ **Institutional factors:**

- ✓ Admission process, absence of care provider, type of delivery, shortage of medical supplies.

4.6 operational definitions

Delay: refers to a mother didn't make decision to seek obstetric care from health facilities within one hour of the commencement of labour or a mother unable to arrive to delivery unit within one hour of travelling or a mother did not get an emergency obstetric care within the first five minutes of arrival to health facility(18)(22).

Delay in seeking: refers to a mother didn't make decision to seek emergency obstetric care from health facilities within one hour of the commencement of labour(18)(28).

Delay in reaching: refers to a mother unable to arrive to delivery unit within one hour of travelling by foot or local transportation(18).

Delay in receiving care: refers to a mother did not get an emergency obstetric care within the first five minutes of arrival to health facility(18)(28).

Knowledge about maternal health care service: (28).

- ✓ **Good knowledge:** The correct answers for knowledge questions ≥ 0.75 , when 1 is given for correct answer and 0 is given for incorrect answer.
- ✓ **Poor knowledge:** the correct answers for knowledge questions < 0.75 , when 1 is given for correct answer and 0 is given for incorrect answer.

4.7 Data collection instrument and procedure

Questionnaire was adapted from similar study conducted in Hadiya, southern Ethiopia(28).The reliability was checked by cronbach's Alpha(0.893). The adapted English questionnaire was translated into local language Afaan Oromo and Amharic and then it was retranslated back into English by two independent experts, to check its consistency. The tools was mainly addressing on: socio-economic characteristics (15 items), obstetric history (7 items), delay (25 items), and knowledge about pregnancy danger sign and birth preparedness (5 items). Data were collected by using a pretested structured questionnaire by face to face interview. Four diploma midwives and one BSC nurse were recruited for data collection and supervision respectively.

4.8 Data analysis and presentation

Following data collection data were interred, cleaned, and coded in to Epi-Data version 3.1 statistical software and then exported to SPSS windows version 23 for further analysis. Descriptive statistics and binary logistic regressions analyses were performed. In descriptive part, summary statistics were used to describe and summarize the results. Both binary and multiple logistic regression analyses were carried out. All the variables were entered into binary logistic regression and those explanatory variables with a p value ≤ 0.25 were considered as a candidate for multivariable logistic regression and odds ratios with 95% CI were computed and variables having p- value less than 0.05 in the multivariable logistic regression model were considered as significantly associated with the dependent variable. Goodness of fit of the model was checked by Hosmer and Lemshow model of fitness. Finally the result of the analyses was presented in texts, tables and graphs accordingly.

4.9 Data quality assurance

Before the actual data collection, the questionnaire was tested on 5% of the total sample size that is on 20 women to check clarity of the tool. The pretest was done at Agaro general hospital .After collecting the pretest data, each questionnaire was checked for any Potential problem related to the tool, such as difficult question which is not understandable or unclear question to reply. Finally corrective measures were taken. Both data collectors and a supervisor were trained for two days on objective of the study, data collection procedures, and handling ethical issues (privacy, confidentiality, cultural sensitivity, etc.). For consistency and completeness of the collected data, daily cross-checking was undertaken by supervisors and main investigator.

4.10 Ethical consideration

Ethical clearance was obtained from the institutional review board (IRB) of Jimma University, institute of health science. Official letter was written from school of nursing and midwifery. Other necessary permissions was obtained from JUMC. Verbal consent was obtained from each participant after thorough explanation of the purpose and the procedures of the study. Participation in the study were on a voluntary base. All interviewers were instructed on how to comply with confidentiality practices for all clients both during and after data collection by using coded questionnaire. Participants were informed the option to stay out of the study at any point during the interview. All responses were kept confidential and anonymous.

4.11 Dissemination plan

The findings of this study will be disseminated to Jimma University, institute of health science and school of Nursing and Midwifery and JUMC. The findings will be also disseminated to different stakeholders those who have a contribution to improve maternal health services. Finally an effort will be made to present in various seminars and workshops and for publication in national or international reputable journals.

CHAPTER FIVE RESULT

A total of 405 of mothers gave their oral consents and interviewed, yielding a response rate 99.7%.The results presented under subheadings as follows.

5.1 Socio demographic characteristics of the study participants

Out of 405 of mothers who were interviewed 234(57.8%) lives in urban. 129(31.9%) of them were in the age range of 25 to 29 and the mean age (\pm SD) was 25.58 (\pm 5.34). Majority, 321(79.3%) of them were Oromo in ethnicity and 258(63.7%) were Muslim in religion. 381(94.1%) of mothers were married. From total respondents 206(50.9%) of mothers were literate. The median (\pm interquartile range) of family income was calculated to be 2000(\pm 3300) Ethiopian birr per month. Majority 287(70.9%) were their husbands who decide on money expense (**Table1**).

Table 1 socio demographic characteristics of respondents at JUMC,2019.(n=405)

Variables	Categories	Frequencies n=405	Percentage
Residency	Urban	234	57.8
	Rural	171	42.2
Age of mothers	15-19	50	12.3
	20-24	116	28.6
	25-29	129	31.9
	30-34	75	18.5
	35-39	31	7.7
	\geq 40	4	1
Ethnicity	Oromo	321	79.3
	Amhara	38	9.4
	Keffa	10	2.5
	Tigre	10	2.5
	Others ¹	26	6.3
Religion	Muslim	258	63.7
	Orthodox	100	24.7
	Protestant	47	11.6
Marital status	Married	381	94.1
	Unmarried	24	5.9
Education of mothers	Illiterate	199	49.1
	Literate	206	50.9
Education of husbands	Illiterate	166	41.0
	Literate	239	59.0

Variables	Categories	Frequencies n=405	Percentage
Occupation of mothers	Non-governmental Employer	350	86.4
	governmental employer	55	13.6
Occupation of husbands	Non-governmental Employer	306	75.6
	governmental employer	99	24.4
Monthly income(18)	<1000	199	49.2
	1000-1999	26	6.4
	≥2000	180	44.4
Head of house hold	Husband	349	86.2
	Self	27	6.7
	Father	3	0.7
	Others ²	26	6.4
Decision maker on money expense	Husband	287	70.9
	Self	68	16.8
	Family	50	12.3
Information about maternal health and birth	Yes	314	77.5
	No	91	22.5
Sources of information(n=314)	Radio	84	26.8
	TV	82	26.1
	Written sources	20	6.3
	Interpersonal sources	115	36.6
	Not remember	3	1
	Others ³	10	3.2

Note; others¹ -, Dawro, Yem others²-relatives, living in the mission others³-health extension workers, health professionals.

5.2 Obstetric characteristics of mothers.

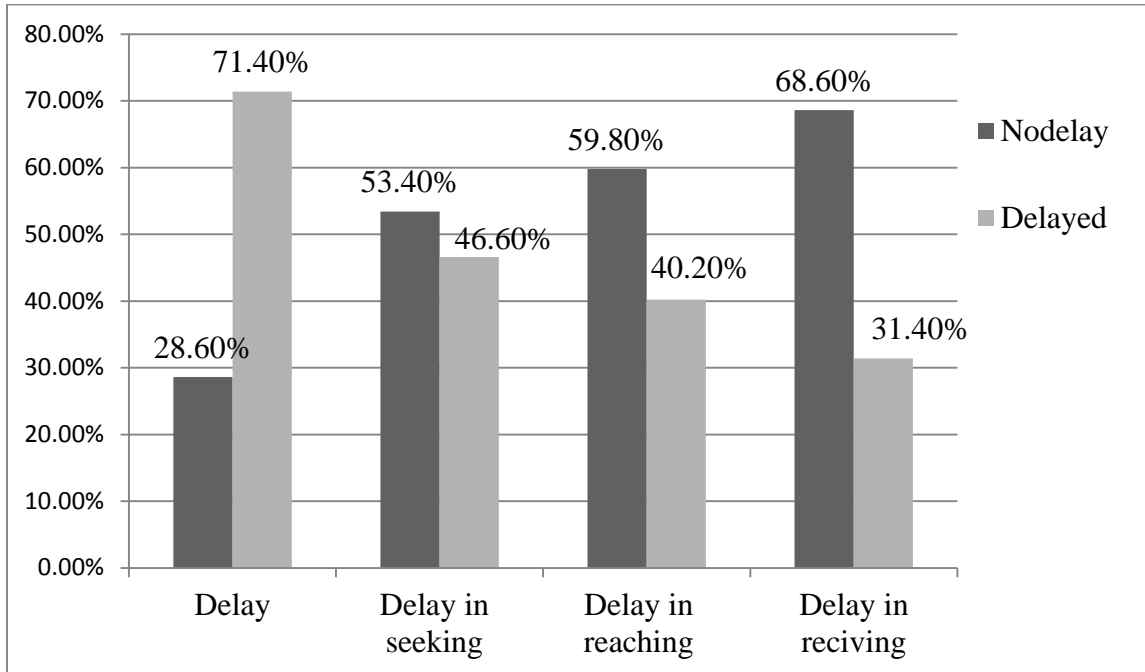
From 405 mothers who were interviewed, 264(65.3) were multi-para. Of all study participants 355 (87.4%) of them had ANC follow up and majority 260(56.8%) of mothers made ANC follow up at health center and 220(62%) of them had four and above visit. Majority, 291(71.9%) of them were did not report chronic illness during current pregnancy.288 (71.1%) of respondents were planned in their current pregnancy.

Table 2 obstetric characteristics of respondents at JUMC, April 2019.

Variables	Category	Frequency(n=405)	Percent
Parity	Primipara	141	34.7
	Multipara	264	65.3
History of Abortion	No	351	86.7
	Yes	54	13.3
ANC follow up	Yes	355	87.4
	No	50	12.6
Place of ANC follow up n=355	Hospital	111	31.2
	Health center	230	64.8
	Health post	6	1.7
	Private clinic	8	2.3
Number of ANC visit n=355	>=4 visit	220	62.0
	<4 visit	135	38.0
History of Chronic illness during pregnancy	Yes	114	28.1
	No	291	71.9
Current pregnancy planned	Yes	288	71.1
	No	117	28.9

5.3 Prevalence of delay for institutional delivery service utilization.

The prevalence of delay for utilization of institutional delivery was 289(71.4%). Among the three delays delay in seeking was high 187(46.6%).(figure 2)



N.B The overall delay was higher (71.4%) than individual delays this was due to having at least one delay was considered as a delay.

Figure 2: prevalence of delay among respondents at JUMC, April 2019 (n=405).

The major reason for not deciding early mentioned was, not recognizing the labour 101(51.3%), good outcome of previous labour 31(16.1%),lack of money 29(15.1%),less trust on health facility 8(4.5%),cultural factor 6(3.0%) and other un common problems (need to stay at home) were 12(6.5%).(figure 3)

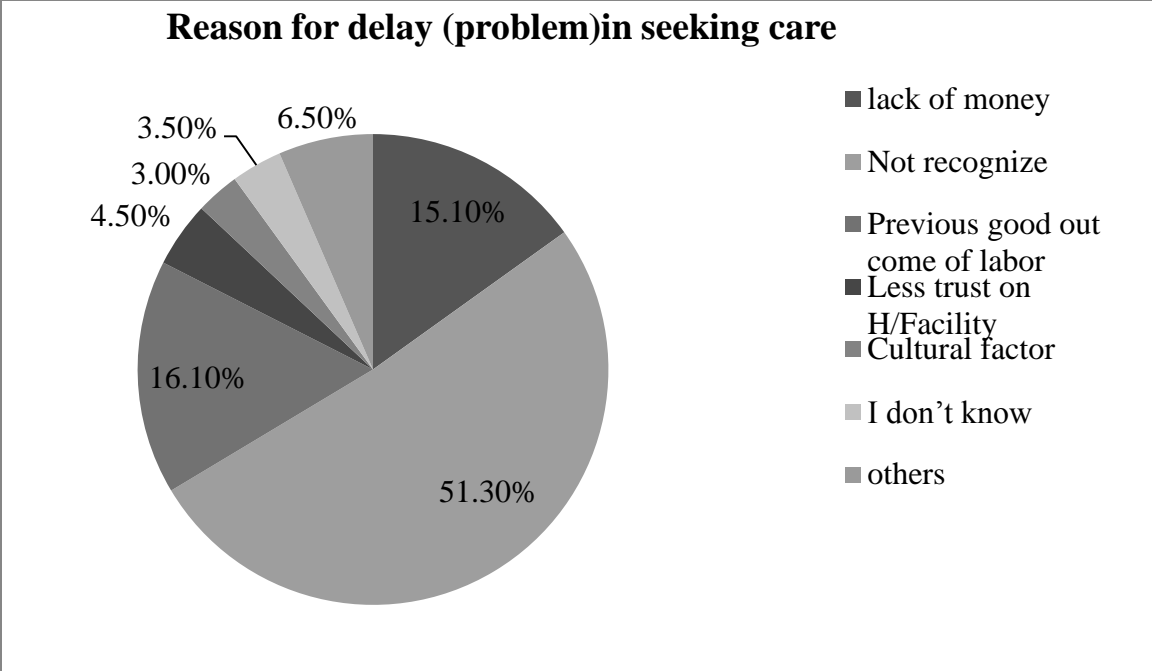


Figure 3: Reasons for delay (problems) in seeking care among study participants at JUMC, April 2019.(n=187)

Of all study participants who reported as they faced problem in accessibility of health facility (127). The major problem in the accessibility complained by those mothers were being far to reach which is 49(38.1%), followed by lack of transportation 34(26.8%) . **(Figure 4).**

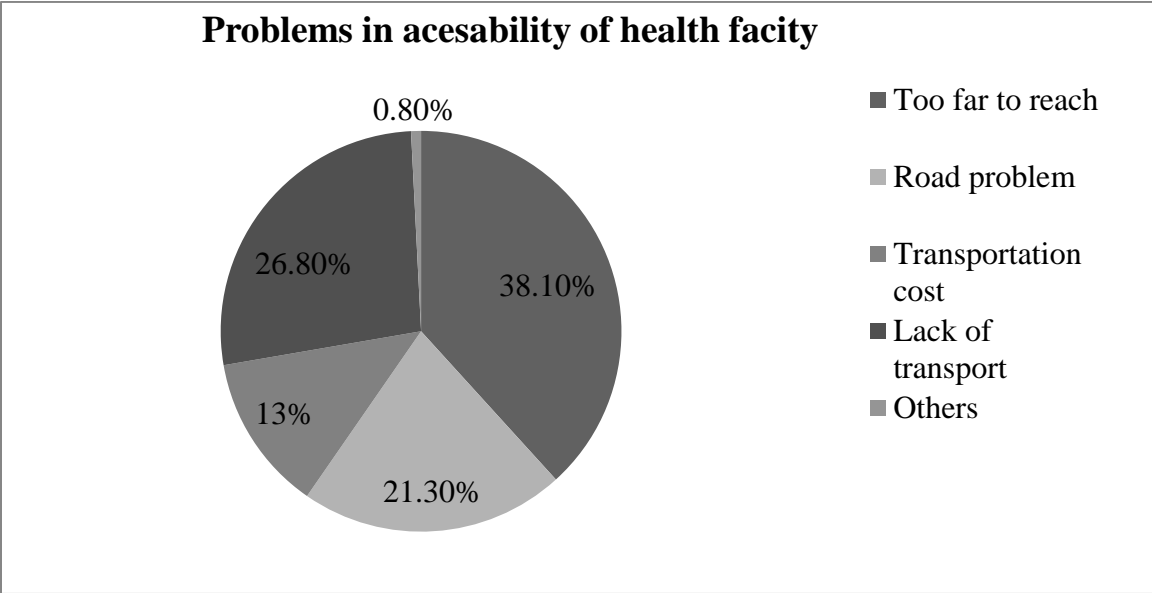


Figure 4: problems in accessibility health facility among study participants at JUMC.April2019.

As to means of transportation, 236(58.3%) mothers were travelled by ambulance 126(31.10%) by taxi/bus rent,19(4.7%) by private car ,14(3.5%) on foot, 7(1.7%) of mothers were carried by stretcher and the remaining 3(0.7%) were traveled by cart.(figure5)

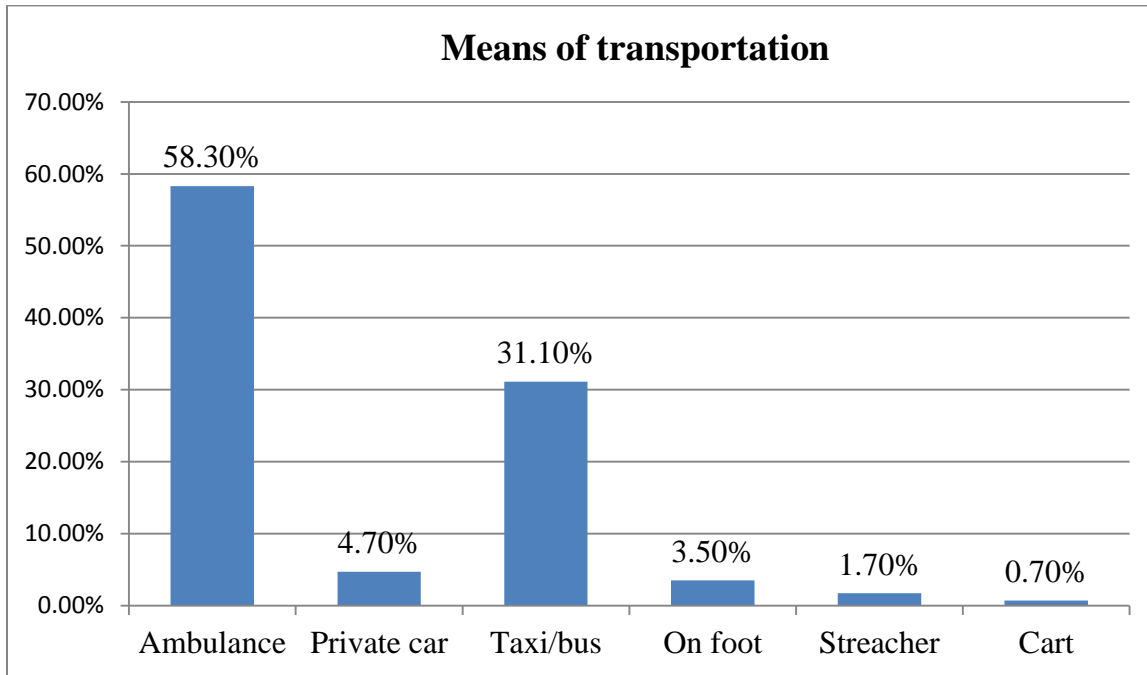


Figure 5: means of transportation used by respondents at JUMC, April 2019 (n=405).

Amongst respondents who report as they encounter problem in receiving care at health facility(98), 38(38.8%) of the problem reported was shortage of medical supply followed by long waiting time, absence of appropriate care, absence of care provider, lack of bed were 37(37.7%), 14(14.3%) ,6(6.1%) and 3(3.1%) respectively.(**Figure 6**)

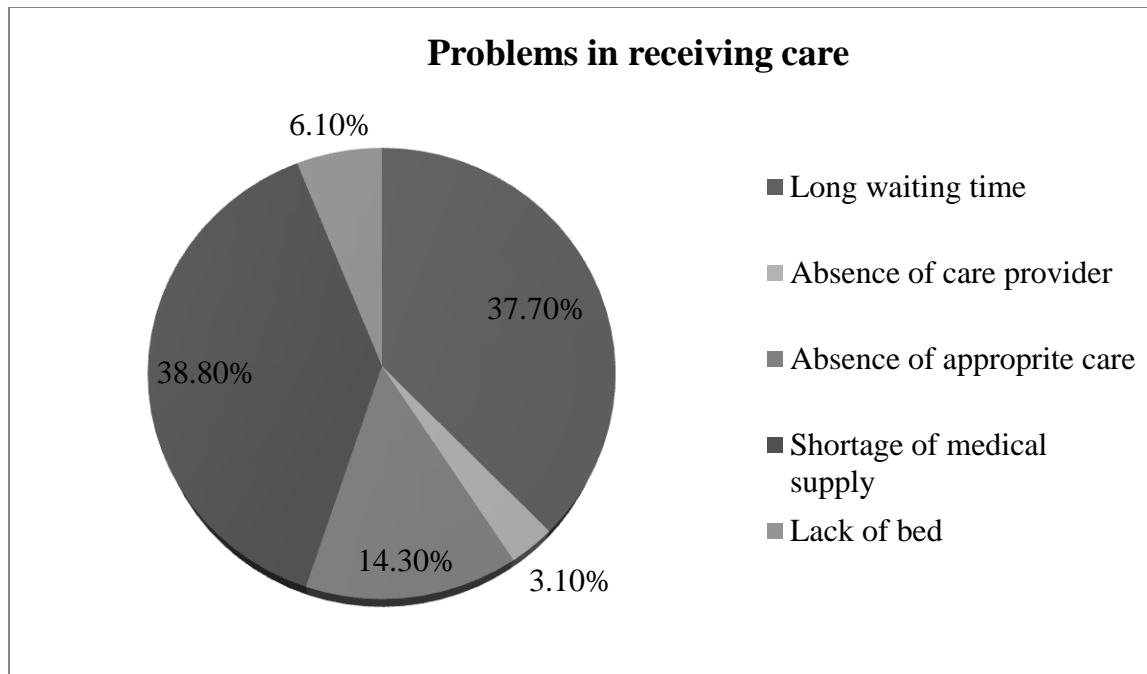


Figure 6 problems during receiving care among mothers at JUMC April 2019.(n=98)

5.4 Factors associated with delay for institutional delivery service utilization among mothers at JUMC

Binary logistic regression was done accordingly and those variables with p value ≤ 0.25 were taken to multivariable logistic regression. residence, age group, education of mother, education of husband, occupation of mother, occupation of husband, monthly income, decision maker on money expense, parity, ANC, labour start time, decision maker on obstetric care, Chronic illness during pregnancy, status of pregnancy plan, distance, purchase any supply during care, knowledge of danger sign and birth preparedness, any problem to reach health facility, any problem to get service at hospital /health center and type of delivery were variables candidate for multivariable logistic regression analysis.

Multivariable logistic regression was done after identifying those candidate variables with P-value ≤ 0.25 . Decision maker on money expense, purchase medical supply, Educational status of husband, knowledge of danger sign and birth preparedness, distance, any problem encountered in reaching health facility, any problem encountered in getting service at health facility become statically significant variables with P-value < 0.05 . The goodness of fit was checked by Hosmer and Lemeshow model fitness (0.75).

Delay to utilize institutional delivery was about 3 times higher among mothers who could not make decision on money expense than those who decide by themselves (AOR:2.59[1.23-5.44]), respondents who purchase medical supply during delivery service have delayed about 2 times than those did not purchase any medical supply during delivery service (AOR:1.86[1.03-3.34]), mothers whose husband illiterate have delayed more than 5 folds than mothers whose husbands literate (AOR:5.56[2.64-11.71]), mothers with poor knowledge of danger sign and birth preparedness during pregnancy have delayed 2 times than mothers with good knowledge (AOR:2.33[1.19-4.55]), mothers who live with distance of >10 km from the health facility have delayed about 5 times than mothers who live ≤10km (AOR:4.88[2.15-11.06]), mothers who encounter problem during travel to health facility have delayed about 3 folds than those did not encounter problem,(AOR:2.66[1.11-6.35]) and mothers who encounter problem during delivery service at health facility have delayed 4 times than those mothers with no problem encounter on service at health facility(AOR:3.908[1.81-8.43]).

Table 3 Delay for institutional delivery service utilization and associated factors among mothers at JUMC, April 2019.

Variables	Category	Delay for institution		COR(95%CI)	AOR(95%CI)	P-value
		Del- -y	NO Del- ay			
Decision maker on money expense	My husband	229	58	4.19[2.40-7.30]	2.59[1.23-5.44]	0.012*
	My self	33	35	1	1	
	Family	27	23	1.25[0.60-2.59]	0.91[0.35-2.33]	0.836
Purchase medical supply	Yes	223	66	2.56[1.618-4.05]	1.86[1.03-3.34]	0.041*
	No	66	50	1	1	
Educational	Illiterate	155	11	11.04[5.69-21.42]	5.56[2.64-11.71]	<0.001*



status of Husband	Literate	134	105	1	1	
Knowledge of mothers on danger sign and birth preparedness	Poor knowledge	258	77	4.22[2.48-7.20]	2.33[1.19-4.55]	0.014*
	Good knowledge	31	39	1	1	
Distance of health facility.	>10Km	106	141	11.86[5.78-24.35]	4.88[2.15-11.06]	<0.001*
	≤10Km	9	142	1	1	
Any problem encounter to reach health facility	Yes	119	8	9.45[4.44-20.11]	2.655[1.11-6.35]	0.028*
	No	170	108	1	1	
Any problem encounter to get service at hospital /health center	Yes	86	12	3.67[1.92-7.02]	3.908[1.81-8.43]	0.001*
	No	203	104	1	1	

Note: * P-value<0.05 AOR: adjusted odds ratio, CI: confidence interval, COR: crude odds ratio

CHAPTER SIX DISCUSSION

Delay in service utilization is an imperative thing in defining maternal wellbeing(2).This facility based cross-sectional study tried to assess factors affecting delay in utilization of institutional delivery at Jimma university medical center Jmma town. In addition the study tried to investigate prevalence of delay in utilization of institutional delivery.

In this study finding prevalence of delay in utilization of institutional delivery was 71.4% (95%CI: 67%, 76%). This study finding was slightly less than with across sectional study conducted by Yirnabeb and Balcha in southern Ethiopia delay for institutional delivery which was 76.3%(22). This study finding was less than the retrospective observational study conducted in Pakistan 94%(12).

The possible reason for the discrepancy might be due to the geographical location difference. Majority of this study participants were live in urban. Whereas majority of study participants in Pakistan were live in rural area with low socio economic class, mothers who live in rural area have poor access for institutional delivery service utilization(12).

The other finding on this study was, poor knowledge on danger sign and birth preparedness appear to be directly associated with delay for institutional delivery service utilization. This finding was consistent with descriptive observation study conducted at Biko academic hospital of Pretoria in South Africa as poor knowledge was predictor to delay mothers on the study(27).

This study show that delay in utilization of institutional delivery was higher among mothers who has illiterate husband than mothers with literate husband. This result was in line with the finding on similar study conducted in Hadiya as maternal delay was high among mothers who has illiterate husband(28). This might be due to illiterate husbands may have poor awareness in delivery care importance; thus affect maternal delivery service utilization.

Decision making power on money expense appears to be significant contributory factors for delay. This result was consistent with cross sectional study conducted in Ghana as well as Bahir-Dar northern Ethiopia as decision making power was identified predictor to maternal delay and delay was higher among women low decision making power (26)(18).The possible reason for consistency with Bahir-Dar's finding might be cultural similarity as husband's are more autonomous in Ethiopia(16).

Mothers who live with distance of greater than ten kilometer far away from health facility have been delayed more than mothers who live with distance less than or equal to ten kilometer from health facility. This finding was in line with a cross sectional study conducted at Hadiya southern Ethiopia as reported distance was one of the major factor in delaying mothers for institutional delivery service utilization(28).The reason behind might be women who travelled the shortest distance had a high chance of attending and coming early to utilize delivery where as women who were travelling long distances had little chance to seek treatment as early as possible.

This study also identified purchase medical supply due to lack of medical supply were significant. This finding is consistent with cross sectional study done by Awoke and etal, as reported lack of medical supply to get obstetric care were one of the factor which delay mothers for delivery service utilization(18).

Maternal delay for institutional delivery service utilization was higher among mothers who encounter problem on the accessibility of health facility or in reaching health facility than those mothers who were not faced problems at the accessibility of health facility. This result was in line with the finding of cross sectional study conducted at referral hospitals in Ethiopia. As mentioned problem encounter in reaching was one of the predictor to delay mothers for obstetric care(20).

Similarly mothers who encounter problem in receiving delivery service at JUMC have been delayed more than those mothers did not faced any challenges in receiving care at the hospital. This finding is consistent with cross sectional study conducted in southern Ethiopia as stated problem encounter in receiving care was one of the predictor for deliver service utilization delay.

Limitation of the study

As the study was a cross-sectional study some limitations were unavoidable. Data were collected through self-report of mothers so a recall bias could not be avoided.

CHAPTER SEVEN CONCLUSION AND RECOMMENDATION

7.1. Conclusion

The study have identified as majority of mothers were delayed for institutional delivery service utilization. A number of factors which have impact on delay for institutional delivery service utilization at JUMC were identified. These factors include husbands educational status, decision making power on money expense, knowledge of mothers on danger sign and birth preparedness, distance, purchasing medical supply for getting service, problem encounter for the accessibility of health facility, problem encounter in receiving care at health facility.

7.2. Recommendations

Based on this study finding the following recommendation is made.

For Jimma university medical center

- ✓ As purchasing medical supplies to receive obstetric care were significant in delaying mothers, Jimma university medical center need to avail the necessary supplies.

For policy makers and MOH

- ✓ Efforts should be made to build health facility with full set up within less distance of the home of mothers.
- ✓ Promote health education, by using health extension workers and giving emphasis on maternal knowledge on danger sign and birth preparedness as it was predictor for maternal delay.
- ✓ Need to promote empowerment of women to increase women's autonomy on money expense through integrated activities including girls education will be helpful to enable them decide by themselves.

- ✓ Adult education should be promoted as husbands educational status were one of the predictor for maternal delay.

For researchers

This study did not include the outcome of delay it will be more sound full if outcome is included and community based study is recommended to asses maternal delay in the society.

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Annexes

Annex 1 Data collection tool English version

Information Sheet and consent form

Introduction: This information sheet is prepared for mothers coming for delivery service at Jimma university medical center. The aim of this form is to make the above concerned mothers clear about the purpose of research, data collection procedures and get permission to conduct the research

Title of the Research Project: Delays for institutional delivery service utilization and associated factors among mothers attending Jimma university medical center, Jimma town south west Ethiopia.2019.

Purpose of the Research Project: :To asses delays for delivery service utilization and associated factors among mothers attending Jimma university medical center, Jimma town south west Ethiopia,2019.

Procedure: In order to achieve the above objective, information which is necessary for the study will be extracted from mothers coming for delivery at JUMC.

Risk and /or Discomfort: Since the study will be conducted by taking appropriate information from patients verbally, it will not inflict any harm on the patients. The name or any other identifying information will not be recorded on the questionnaire and all information taken from the mothers will be kept strictly confidentially.

Benefits: The research has no direct benefit for mothers included in this research. But the indirect benefit of the research for the participant and other clients in the program is clear. This is because if program planners are preparing predicted plan there is a benefit for clients in the program of getting appropriate access for health care and in reducing factors for maternal delays.

Confidentiality: The information collected will be kept confidential and it will not be revealed to anyone, except the investigator and it will be kept in key and locked system with computer pass ward.

Name of Investigator: Samira Awel (Bsc).

Name of the Organization: Jimma University Medical center.

Name of the Sponsor: Jimma university College of Health Science department of Nursing and Midwifery.

Person to contact: This research project will be reviewed and approved by the institutional review board of Jimma University, Faculty of Health Science, School of Nursing and Midwifery department. If you have any question you can contact the investigator with the following address.

Name: Samira Awel (Bsc)

Institution: Jimma University, Faculty of Health Science, School of Nursing and midwifery

Cell phone: +251- 921918489

E-mail: sawel791@gmail.com

Consent Form

Hello, my name is _____. I come here just to collect a data for a thesis title named “ Delays in institutional delivery service utilization among mothers attending JUMC delivery unit 2019 .This is going to be carried out by Sr. ----- who is a postgraduate student of Jimma University, faculty of Health Science, school of Nursing and Midwifery. The aim of this study is to asses maternal delays in institutional delivery service and association factors among mothers attending JUMC delivery unit. You have the right to refuse or withdraw from the study. I can assure you that your current or future medical services will not be affected if you refused to participate or with draw from the study. The inquiry is confidential and the information provided by you will not identify with any third person and it will only be used for the aim of the study.

Can you spare me 15-20 minutes to answer my question? Can we begin?

1. Yes -----
2. No -----

If yes proceed the question

Address of principal investigator sr Samira Awel

Tel: +251-921918489 E-mail: sawel781@gmail.com

SECTION 1: socio-Economic information

Instruction: First, I would like to ask you some questions about background information of you and your family had. Please fill the necessary answers for each item properly by circling or written in a given space.

Q.#	Question	Response	Skip
101	Woreda/ Kebele		
102	Place of residence	1.Urban 2. Rural	
103	What is your age?	_____in years	
104	What is your ethnicity?	1.Oromo 2.Amhara 3.Keffa 4.Tigre 99.Others_____	
105	What is your religion?	1.Muslim 2.Orthodox 3.Protestant 4.Catholic 99. Others specify_____	
106	What is your marital status?	1.Married 2.Divorced 3.Widowed 4.Unmarried 99.other	
107	What is your educational status?	1.Cannot read & write	

		<ul style="list-style-type: none"> 2.Can read and write 3.Primary 4.Secondary 5. 10+and above 	
108	What is your husband's educational status?	<ul style="list-style-type: none"> 1.Cannot read & write 2.Can read and write 3.Primary 4.Secondary 5. 10+and above 	
109	What is your occupation?	<ul style="list-style-type: none"> 1.House wife 2.Civil servant 3.Merchant 4.Servant 5.Student 6.Daily laborer 99. other specify 	
110	What is your husbands occupation?	<ul style="list-style-type: none"> 1.Farmer 2.Civil servant 3.Merchant 4.Student 5.Daily laborer 99.other 	
111	What is your monthly income?	<ul style="list-style-type: none"> 1. _____ETB 2. No any income 98. I don't know 	
112	Who is the head of the Household?	<ul style="list-style-type: none"> 1.My husband 2.My self 3.My father 	

		4.My mother 99.Other, specify_____	
113	Who is decision maker on money expense?	1.My husband 2.My self 3.My father 4.My mother 99.Other, specify_____	
114	Do you have information about maternal health and birth?	1.yes 2.no	
115	If yes, From which source(s) did you see, hear, or read about institutional birth? PROBE: Any other sources?	1.Radio .2TV 3.Written sources 4.Interpersonal sources 99.Other specify_____ 98.Don't remember	

Part II. Obstetric history

Instructions: Now, I would like to ask you some more questions about the pregnancies you have had in the past of your life focusing on pregnancies and childbirths including place of delivery.

Q#	Question	Response	Skip
201	How many pregnancies have you ever had?	1.Number of gravid----- 2.Number of parity_____ 3.is there any abortion yes.---- ----no ,number of abortion 4.Number of live birth_____	
202	Have you attended ANC for last pregnancy?	1. Yes 2.No	If „No“, skip to Q. 206
203	If yes where did you attend ANC follow up?	1.hospital 2.health center 3.health post 4.private clinic	
204	If yes, how many number of visits you have made?	-----	
205	Do you have any chronic illness during pregnancy?(like DM,HPTN etc)?	1.yes 2.no	
206	Where was the place of first child delivery?	1. Home 2. Health post 3. HCs / hosp. 4. On road/referral_____	
207	Was the current pregnancy planned?	1.yes 2.no	

Part III: DELAY

Instruction: In the next three sets of questions, I am going to be asking about your experiences related to

the three phases women go through when having a child that we discussed earlier: **deciding** to seek care, **reaching** to health facilities and **receiving** appropriate care/treatment.

Q#	Question	Response	Skip
300	When was the labour start?	1.night 2.day	
301	From the early beginning when was the labour start (time)?	_____ in hour	
302	When you leave from home after you decide to go to health facility?	_____ in hour	
303	Who is decision maker to get obstetric or delivery service for you?	1.family 2.husband 3.self 99.mention if any other	
304	Who made the final decision about you would go to health facility for childbirth assistance?	1.No one 2.my self 3.me & my husband 4.Husband 5. my family 6.Friend/neighbor 7.Health professional 8.TBA 99.Other (specify)_____	
305	How long did it take reach on the decision about to go health facility for assistance? (If less than 1hours, record in minutes)	_____ in minute _____ in hour 98.Don't know	Less than one hourskipto Q307
306	If the answer is not within one hour what was the reason for not deciding early?	1.lack of money 2.not recognize the labour. 3 .previous good outcome of	

		labour 4.less trust on health facility 5..cultural factor 98 don't know 99.any other	
Delay in reaching			
307	Who accompanied you to the place where you gave birth?	1.No one 2.Respondent 3.Husband 4. Her family 5.Friend/neighbor 6.Health professional 7.TBA 99.Other (specify)_____	
308	How long did it take to find transport once a decision was made to seek care? (If less than 1 hours, record in minutes. Otherwise, record in hours).	1._____Hours 2._____Minutes 98.Don't know	
309	Do you have referral from other health facility?	1.yes 2.no	If no skip to 311
310	If yes how many times you have referred?	-----	
311	What is the distance of health facility from your home?	-----km	

312	How long would it take to reach this health facility? (If less than 1 hours, record in minutes. Otherwise, record in hours)	1. ____ minutes 2. ____ hours 98. Don't know	
313	To reach to the health facility, were there any challenges which tackle you to get here?	1. Yes 2. No	If „No“, go to Q. 315
314	If „YES“, what problems were happened?	1. Too far to reach 2. Lack of road 3. Cost of transportation 4. lack of transportation 99. Other specify _____	
315	What type of transportation would you use to get to this health facility?	1. Ambulance 2. Private car 3. Taxi/bus rent 4. Cart 5. On foot 6. Stretcher 99. Other (specify) _____ 98. Don't know	
316	If your answer is number „1“ or „AMBULANCE“, was there any paid?	1. Yes 2. No	If „No“, skip to Q. 316
317	If „YES“, how much?	_____ ETB.	

318	If on STRETCHER, what favors did you do for them?	1. Paid money 2. Cover food and drinking cost 3. If night, bed services 99. Other specify	
Delay in receiving care			
319	How long after reaching the HC/Hosp. did it take for you to get services from the health personnel?	_____ Minute Hour	
320	After arrived first HC/Hosp., did you experience any challenges to get service?	1. Yes 2. No	If „NO“, go to Q.321
321	If „YES“ what was it?	1. Long waiting time 2. absence of care provider 3. absence of appropriate care Provider 4. shortage of bed 99. Other specify_____	
322	What is the type of delivery?	1.SVD 2.instrumental delivery 3.c/s	
323	Did you have to purchase any supplies to get birth services?	1. Yes 2. No 98. Don't know	
324	If ye s“, what items did you purchase	1. Gloves 2. Iv solutions	

		3. Suture materials 4. Soap 5. Medications/medicines 6. Sanitary pads 7. Antiseptic solutions 8. Blood 9. Powder 10. Gauze/cotton 99. Other (specify)_____ 98. Don't know	
--	--	---	--

Knowledge part

Instructions: Now I would like to ask you some questions about pregnancy and childbirth. Specifically, I am going to be asking you questions about three different phases that make women delay in institutional delivery utilization.

401	Do you know any danger signs which may appear during pregnancy/childbirth?	1. Yes 0. No 0. I don't know	If „no“, skip to Q 404
	If „yes“, what did you know/experience?	Yes	no
401.1	1 Bleeding	1	0
401.2	2 Severe headache	1	0
401.3	3 Blurred vision	1	0
401.4	4 Swollen hands/face	1	0
401.5	5 High fever	1	0
401.6	6 Loss of consciousness	1	0
401.7	7 Difficulty breathing	1	0
401.8	8 Severe weakness	1	0
401.9	9 Severe abdominal pain	1	0
			Circle the answer yes=1 no=0

401.10	10 Accelerated/ reduced fetal Movement	1	0	
401.11	11 Water breaks without labor	1	0	
402	In your opinion, could a woman die from [this problem] any of these problems?	1. Yes 0. No 0. Don't know		
403	Do you know that above problems and their outcome are manageable by institutional delivery?	1. Yes 0. No 0. Don't know		
404	Have you ever heard the term "birth preparedness"?	1. Yes 0. No		
405	If ya woman can do to prepare for birth? Probe any other	Yes	No	Circle 1 if yes ,,0' if no
	1. Identify mode of transport	1	0	
	2. Save money	1	0	
	3. Identify blood donor	1	0	
	4. Identify skilled provideres, what are some things	1	0	

Note : **SVD**= spontaneous vaginal delivery; **NSVD**= non spontaneous vaginal delivery

Thank you for spending your time and valuable information you gave us. Do you have any question that I can address for you?

Annex 2 data collection tool Amharic version

ስምምነት ፍቃድ

መግቢያ ሰሊምታ፤ ስሜ -...ይባላል። እኔ የምሰራው በጅም ዩኒቨርሲቲ የድህረ ምረቃ የጥናት ጽሑፍ ነው። በመቀጠልም በሶስቱ የወሌድ ማዘገያዎች ሊይ የተወሰነ ጥያቄዎችን መጠየቅ ፈላጊ ነበር። የዚህ ጥናት ዓላማ እናቶች በጤና ተቋማት እንዲያወሉ የሚከለክ ማናቆዎችን ለመለየት የሚደረግ ጥናት ነው።

በመጠይቁ ላይ የእርሶን ስም ወይም ማንነትዎን የሚገልፅ ማንኛውም ነገር አይጠቀስም እንዲሁም እርሶ የሚሰጡት መረጃዎች ሚስጥራዊነት ይጠበቃል። መጠይቁ የሚከናወነው በእርሶናቃደኝነት ብቻ ተመሠረተ ሲሆን በመጠይቁ ወቅት መመለስ የማይፈልጉትን ማንኛውም አይነት ጥያቄ ይለፈኝ ማለት ይችላሉ። በተጨማሪም በማንኛውም ሰዓት ማቋረጥ ይችላሉ። ይሁን እንጂ እርሶ የሚሰጡት ትክክለኛ መረጃዎች የተቋም ወሊድ አገራዊትን የሚያስተጓጎል ችግሮችን በመለየት መስተካከል እና መሻሻል ስሊገባቸው ነገሮች ከፍተኛ ጠቀሜታ አለው።

በመጥይቁ ላይ ለመሳተፍ ፍቃድ ነዎት?-----

መሌሱ አዎ ከሆነ በማመስገን መጠይቁን ይቀጥሉ
ክፍል አንድ፡- ነባራዊ መረጃዎች መመሪያ፣ ከዚህ በታች የቀረቡትን ጥያቄዎች ምርጫ ያላቸውን በመክበብ፣ ባዶ ቦታ የተሰጡትን ደግሞ አጭር ሀሳብ በመጻፍ ቅጹን ይሞሉ። ማሳሰቢያ፡- ከአንዴ በላይ መልስ ያላቸው ስለሚኖሩ ሁለንተኛው መልስ ይምረጡ።

ተ.ቁ	ጥያቄ	መልስ	
101	ወረዳ/ክ/ቀበሌ	-----	
102	የመኖሪያ ቦታዎት ነው?	1. ከተማ 2. ገጠር	
103	ዕድሜዎ ስንት ነው?	_____ ሙሉ ዓመት	
104	ብሔር?	1. ኦሮሞ 2. አማራ 3. ከፋ 4. ትግሬ	

		99.ሌላከሆነይግለጹ	
105	ሃይማኖት ?	1. ኦርቶዶክስ 2. ሙስሊም 3. ፔንጤ/ፕሮትስታንት 4. ካቶሊክ 99. ላሊይግለጹ _____	
106	የትዲርሁኔታ?	1.ያገቡ. 2.ያላገቡ 3.የታፋቱ 4. ባልየሞተባት 99.ሌላ	
107	የእርሶትምህርትደረጃ/ሁኔታ?	.1. ማንብብእናመጻፍየማይችል 2. ማንብብናመጻፍየሚችል 3. አንደኛደረጃ 4. ሁለተኛ 5. 10 + እናከዚያበላይ	
108	የባህሪትምህርትደረጃ?	1. ማንብብእናመጻፍየማይችል 2. ማንብብናመጻፍየሚችል 3. አንደኛደረጃ 4. ሁለተኛ 5. 10 + እናከዚያበላይ	
109	የእርሶስራ?	1. የቤትእመቤት 2. የመንግስትሠራተኛ 3.ነጋዴ 4. ተማሪ 5. በሰውቤትአገሌጋይ	

		6.የቀንሠራተኛ 99. ሌላከሆነይገለጽ _____	
110	የባለቤትዎ ሥራ?	1.አርሶአደር 2. ነጋዴ 3. መንግስት-ሠራተኛ 4. ተማሪ 5.የቀንሠራተኛ 99.ሌላ -----	
111	የወርገቢዎን ያህሌነው?	_____ኢት. ብር 2. -----ኩንታል (በዓመት) 98. መገመት አሌችሉም	
112	የቤት አባወራ/አስተዳዳሪ ማነው?	1. ባለቤቱ 2. እኔ 3. አባቴ 4. እናቴ 99. ሌላካለይገለጽ _____	
113	በገንዘብ ላይ የሚወስነው ማነው	1. ባለቤቱ 2. እኔ 3. አባቴ 4. እናቴ 99. ሌላካለይገለጽ _____	
114	ስለወሊድና እናቶች ጤና መረጃ አለሽ	1.አዎ 2.አይ	
115	ስለ ጤና መረጃ የሚያገኙበት ከየት ነው?	1. ከራዱዮ 2. ከቴሌቪዥን 3. ከተጻፉ ሐሮች 4. እርስበርስ ስናወራ 99. ሌላካለይገለጽ _____ 98. አሊስታወስም	

ክፍልሁለት.

የወሊድ ታሪክ መመሪያዎች አሁን በህይወት ያሏቸውን እርግዝናዎች እርግዝና እና ልጅ መውለድን የመሳሰሉትን ያካትታል.

ተ. ቁ	ጥያቄ	መሌስ	ምርመራ
20 1	ምን ያህል እርግዝናዎች አሉኝ	1. የእርግዝና ብዛት----- 2. እስከ ወሊድ የተረሰ እርግዝና ብዛት _____ 3. ፊንዳው ለረዳት አለአዎ አይደለም, ካለ ውርጃ ቁጥር የወርጃ ብዛት _____ 4. በህይወት ያለ ሌጆች ብዛት _____	
20 2	በባለፈው እርግዝና ወቅት የቅዴ መውለድ ምርመራ ክትትል አደርገዋል?	1. አላረኩም 2.. አዎ	አላረኩም ከሆነ ወደ ጥያቄ ቁ. 205 ይሻገሩ
20 3	አዎን ከሆነ የትኩረት?	1. ሆስፒታል 2. ጤና ማእከል 3. የጤና ችግር 4. የግል ክሊኒክ	
20 4	አዎ ከሆነ የክትትል ብዛት ይግለጹ::	-----	
20	በእርግዝና ወቅት እንደ ስካር፣ ደም ግፊት ዓይነት በሽታ	1. አዎ	

5	ይዘትነበር	2.አይ-----	
20 6	የመጀመሪያ ሌጅዎን የወለደበት ይዘትነበር?	1.ቤት 2.ጤናኬሊ 3.ሆስፒታል/ጤናጣቢያ 99. ሌላ ካለ ይገባቸው _____	
20 7	አሁን የእርግዝና እርግዝና ታቅዶነበር?	1.አዎ 2.አይ-----	

ክፍሌ 3፣ ሦስቱ የመዘገየት ሁኔታዎችን ለመለየት የታሰቡ ጥያቄዎች መመሪያ፣ ከዚህ ቀጥል ባለው ክፍሌ ሦስቱን የመዘገየት መንስኤዎች ለመጠየቅ ነውና አስፈላጊውን ምላሽ በመስጠት እንዴተባበሩ እጠይቃለሁኝ።

ተ. ቁ	ጥያቄ	መልስ	ምርመራ
30 0	ምጥመቶችን በርዕይ መረጃ	1.ማታ 2.ቀን	
30 1	ምጥ በስንት ሰዓት ጀመርዎት ?	-----	
30 2	ከቤት ወደ ሆስፒታል/ጤናጣቢያ ለመምጣት በስንት ሰዓት ተነሱ?	----- ደቅቃ/ሰዓት	
30 3	የመወለዳቸውን የሚወስነው ማንነው?	1.ቤተሰብ 2.ባለቤቱ 3.እኔ 99. ሌላ ካለ ይገባቸው ----	
30 4	ማንኛውም ጨረሻ ወደ ጤና ተቋም መሄድ ዕንዳለብሽ የወሰነው	1.ማንም 2.እኔ	

		<p>3.እኔናባለቤቴ</p> <p>4.ባለቤቴ</p> <p>5.ቤተሰብ</p> <p>6.ጋደኛ</p> <p>7.የልምድዐዋላጅ</p> <p>99. ሌላካለይጥቀሱ</p> <p>----</p>	
30 5	ወላጅወንለመወሰንምን ያህል ጊዜ ፈጀ?	<p>1. -----ደቅቃ</p> <p>2. -----ሰዓት</p> <p>98. አሊወቅም</p>	
30 6	ከአንድ ሰዓት በላይ ቆይተዉ ከሆነለምን?	<p>1.ብርስሌለኝ</p> <p>2.ምጥእንደሆነአላወኩም</p> <p>3.በለለፈወእርግዝናችግር ስላልገጠመኝ</p> <p>4.በጤናተቁምላይእምነትስሌለኝ</p> <p>5..በባህልያለወዕምነት</p> <p>99. ሌላካለይገለጽ--</p> <p>----- 98. አላወቅም</p>	
መዘገየትሁለት			
30 7	ወደ ጤናተቋምየመጡትከማንጋርነበር?	<p>1. ማንም</p> <p>2. እኔ</p> <p>3. ከባለቤቴ ጋር</p> <p>4. ከቤተሰብ</p> <p>5. ከጎረቤት/ጓዳኛ</p>	

		6. ከጤና ባለሙያጋር 7.ከልምድ አዋላጅ 99. ሌላ ካለ ይጠቀስ____ 98. አላውቅም	
30 8	ከቤት እስከሆስፒታል/ጤናጣቢያ ለመድረስ በመንገድ ሊይዩቆዩበት ሰዓት?	-----	
30 9	ከሌላጤናተቋም ወደዚህተመርተኝ ነው የመጣኸው	1.አዎ 2.አይ	
31 0	አዎከሆስፒታልተመራኸ	-----	
31 1	ከቤት ሽጤናተቋም ምን ያህል ርቀት ላይ ይገኛል	-----ኪሜ	
31 2	ከቤት እስከሆስፒታል/ጤናጣቢያ ለመድረስ በመንገድ ላይ የቆዩበት ሰዓት?	-----	
31 3	ከወሳኔ በኋላ ለጉዞ እንቅፋት የሆነ ነገር ነበር?	1.አዎ 2.የለም	"አይደለም" ከሆነ, ሂድ ወደቁጥር 315
31 4	አዎ ካለ፤ ምን ዓይነት ችግር ነበር ያጋጠምዎት?	1. የተቋሙ ሩቅ 2. መሆን መንገድ ያለመኖር 3. የትራንስፖርት ትዋጋ ወደነት 4. የትራንስፖርት ማጣት-99	

		99. ሌላ -----	
31 5	ወደጤና ተቋም ሲመጡ በምን ታግዘዋል መጡ?	1. በአምቡሊን ስ 2. በግሌ መኪና 3. በታክሲ/በመኪና ኮንተኔር ት 4. በፈረስ ጋሪ 5. በእግር 6. በቃሬዛ 99. ላሊ ካህን ይገባሉ----- 98. አሊ.ወ.ቅም	
31 6	በአምቡሊን ስከሆን፣ ለአምቡሊን ሰው ይከፍላሉ?	1. አይከፈልም 2. አዎ	
31 7	አዎ ከሆነ፣ የገንዘብ መጠንን ይጥቀሱ?	-----አ.ት. ብር	
31 8	ወደዚህ የሚመጡት በቃሬዛ ከሆነ ለሚሸከሙት ምን ያደርጋሉ?	1. ጥሬ ገንዘብ ይከፈላሉ 2. የሚበለበትና የሚጠጡበት ወጪ ይሸፈናሉ 3. ማታ ከሆነ የማደሪያ ወጪ ይሸፈናል 99. ሌላ ካለ ይገለጽ--- ---	
መዘገብ ትኩረት			
31 9	ሆስፒታል ከደረሱ በኋላ አገራዊ ስራዎች እስኪ ያገኙ ድረስ ምን ያህል ጊዜ ቆዩ?	----- ደቂቃ	

32 0	ሆስፒታል ከ ከደረሱ በኋላ ያጋጠምዎት ችግር ነበር?	1. አዎ 2. የለም 98. አሊጠቅም	
32 1	አዎ ካለ፣ምን ነበር?	1. ብዙ ጊዜ መጠበቅ 2. በለ ሙያዎች አለመኖር 3. ትክክለኛ አገልግሎት አለማገኘት 99. ላሊካህይዳገህጽ	
32 2	የወሊድ ሁኔታ እንዴት ነበር?	1. ያለምንም መሣሪያ እገዛ 2. በመሣሪያ የታገዘ 3. በቀዶ ጥገና	
32 3	ተቋም ከደረሱ በኋላ የወሊድ አገልግሎት መስጫ ቁሳቁስን ይሸምታለ?	1. አዎ 2. አይደለም	
32 4	አዎ ካለ፣ምን ዓይነት ቁሳቁስ?	1. ግሊቭ 2. ግለኮስ 3. የቀድጥገናቁሳቁስ 4. ሳሙና 5. መደጋገት 6. የንጽህናቁሳቁስ/ፓዴ/ፓ 7. ጀርምማጥፊያ 8. ደም	

		9. ደቁት/ፖዳር	
		10. ጥጥ/ማሸጊያ	
		99. ሌላካህይወታዊ	
		98. አሊ.ወ.ቅም	

ተ.ቁ	ዕውቀት መለኪያዎች				
401	በእርግዝና ና በወሉድ ወቅት የሚከሰቱ የአደጋ ምልክቶችን ያውቃለ?	1	አዎ	0.አላወቅም	አሊ.ወ.ቅም ካለው ቶተ.ቁ . 404 ይሻገሩ
	አዎ ከሆነ፣ ምን ዓይነት ምልክቶችን ያውቃለ?	አዎ	አ	አላወቅም	
401.1	የደም መፍሰስ	1	0		
401.2	ከባድ የራስ ምታት	1	0		
401.3	የማየት ችግር	1	0		
401.4	ከአፍ አረፋ መድፈቅ	1	0		
401.5	የእጅ/የፊት እብጠት	1	0		
401.6	ከፍተኛ ትኩሳት	1	0		
401.7	ራስን መሳት	1	0		
401.8	የመተንፈስ ችግር	1	0		
401.9	ከፍተኛ ዴካም	1	0		
401.1	የሆዴ ቁርጠት	1	0		

0 401.1 1	የጽንሰ እንቅስቃሴ ችግር ከማህፃን ፈሳሽ መኖር	1	0	
402	እነዚህን ችግሮች አንዴን እና ትለሞት ይዲ.ር.ጋልብለው ያስባሉ?	1 አ ዎ	0 አይደለም	
403	እነዚህን ችግር/ሮች በተቋም ፍረጃ መከላከል/መቆጣጠር እንዲቻሉ ያወቃል?	1 አ ዎ	0 አይቻለም 0. አላወቅም	
404	የመውለጃ ቅድመ-ዝግጅት የሚለውን ቃል ሰምቶ ያወቃል?	አ ዎ 1	.አሊወቅም 0	
405	በቅድመ-ዝግጅት ወቅት ምንምን ያፍርጋለ? 1. የመንገድ ግድግዳነትን መለየት 2. ገንዘብ ማስቀመጥ 3. ደም ለጋሾችን መለየት 4. ሐኪም መለየት 99. ሌላ ካለ ይገለጽ--- -	አ ዎ 1 1 1 1 1	አላወቅም 0 0 0 0	

ተጨማሪ ማረጋገጫ ካለዎት-----

Annex 3 data collection tool Afaan-Oromo version

Hiika Afaan oromoo

Unka eeyyemaa

Ani maqaan kiyya -----jedhama. Ani Jimma Yuunivarsiitiitti barnoota koo Digirii 2^{ffaa}xumuruu dhaaf Qorannoo Mata dureen isaa wantoota haadholeen dahumasaaf gaafa mana yaalaa dhufan gufuu tahuun barfachiisanii fi barfannaa sadeen irrattin gaggeessaa jira. Qorranon kunis kan adeemsifamu guutuumaan guutuutti fedhii keessan irratti hunda'eeti akkasumas wanti isin deebifanis ta'e maqaan keessan icciitiidhaan qabama. Deebin isin deebistanis tajajila dahumsa haadholiif kennamu fooyyeessuu irratti faayidaa ni qaba. Gaaffii yeroo barbaadanitti addaan kutuu ni dandessu.

Gaaffi eegaluun danda'aa eeyyee-----

Lakki-----

Yoo deebiin keessan eeyyee tahe gaaffiiwwan eegaluu ni dandessu.

Kutaa I: gaaffiiwwaan haala hawaasummaa wajjin wal qabatan

Lakk.	Gaaffiiwwan	Deebii	Gara itti aanuti darbii
101	Ganda/Magaala/Aanaa	-----	
102	Bakka jireenyaa	1.Baadiyyaa 2.Magaala	
103	Umuriin kessan meqa?	----- (waggaan)	
104	Sabni keessan maali?	1.Oromoo 2.Amaaraa 3.tigiree 4.Kafaa 99.kan biro yoo tahe ibsi-----	
105	Amantaan keesan maali?	1.musliima 2.ortodooksii	

		3.proteestantii 4.kaatolikii 99.kan biroo ibsi-----	
106	Haala Gaa'elaa	1.kan heerumte 2.kan adda baate ykn hiikte 3.kan abbaan manaa ishii jalaa du'e 4.kan hin heerumne 99.kan biro	
107	Haalli barnoota keessanii akkami?	1.kan dubbisuufi barreessuu hin dandeenye 2.dubbisuu fi barreesuu kan dandeessu 3.sadarkaa tokkoffaa 4. sadarkaa lammaffaa 5.10+ fi isaa ol.	
108	Haalli barnoota abbaa manaa keessanii akkami?	1.kan dubbisuufi barreessuu hin dandeenye 2.dubbisuu fi barreesuu kan danda'u 3.sadarkaa tokkoffaa 4. sadarkaa lammaffaa 5.10 +fi isaa ol.	
109	Hojiin keessan maali?	1.haadha warraa 2.hojjettuu mootummaa 3.daldaltuu 4.hojjettuu manaa 5.barattuu 6.hojjetuu guyyaa 99.kan biro ibsi-----	
110	Hojiin abbaa mana kee maali?	1.qotee bulaa 2.Hojjetaa mootummaa 3.Daldalaa 4.Barataa 5.Hojjetaa guyyaa 99.kan biro ibsi-----	

111	Galiin keessan ji'atti meeqa?	1. _____(Qarshiin) 2.galii hin qabnu 98.hin beeku	
112	Eenyutu mana hoggana?	1.abbaa manaa kiyya 2 .ana 3.abbaa kiyya 4.Haadha kiyya 99.kan biroo ibsi-----	
113	Eenyutu baasii qarshii irrati murteessa?	1.abbaa manaa kiyya 2 .ana 3.abbaa kiyya 4.Haadha kiyya 99.kan biroo ibsi	
114	Waa'ee fayyaa haadholii fi dhabbata fayyatti dahuu odeeffanno qabdu?	1.eyye 2.lakki	
115	Oddeffanoo waa'ee dhaabbata fayyaatti dahuu essarraa ilaaltan, dhageessan ykn essaa dubbifattani? Qoroqqorii gaafadhu	1.Raadiyoo 2.Televiziyoona 3.barreeffamoota irraa 4.namoota irraa 98.hin yaadadhu 99.kan biroo ibsi-----	

Kutaa II:Gaaffii haala dahumsaa wajjin walqabate.

Aammammoo waa'ee dahumsa kanaan dura yoo jiraatee fi haala fayyaa ulfa keessanii ittiin hordoftanii akkasumas gaaffilee ulfaan walqabatani sin gaafadha.

Lakk.	Gaaffii	Deebii	darbii
201	Ulfa yeroo meeqa ulfoofte?	1. Baay'inaa ulfaa---- 2.baay'ina dahumsaa----- 3.baay'ina ulfa isin irraa bahee jira? ___yoo jirate meeqa isiin irra bahe 4.baay'ina ijoollee lubbuun jiranii	
202	Ulfa isa ammaf qoranoo ulfaa hordoftee turtanii?	1.eeyyee 2.lakki	Yoo lakki tahe gara lakk 205 tti darbi
203	Yoo eeyyee jette ,essatti hordofte?	1.hospitala 2.buffata fayya 3.kella fayya 4.klinika dhunfaa	

204	Yoo eeyyee jette yeroo meeqa ihordoffii taasifte?	-----	
205	Yeroo ulfaa turte dhukkuboota akka sukkaaraa,dhiibbaa dhiigaa fi.kkf qabamtee turte?	1.eyye 2.lakki	
206	Mucaa isa jalqabaa eessatti deessee?	1.mana 2.keella fayyaa 3.mana yaalaa 4.karaa irratti	
207	Ulfi inni amma kan karoorfame ture?	1.eeyyee 2.lakki	

Kutaa III Gaaffiiwwan barfaannaa haadholii yeroo dahumsaa irratti si mudatan ilaallata.

Lakk.	gaaffii	Deebii	darbi
300	Ciniinsuun yoom si jalqabe?	1.galgala 2.guyyaa	
301	Cininsuun jalqaba sa'aatii meeqa irrati si jalqabe?	----- (sa'aatiin)	
302	Sa'aatii meeqaan manaa gara mana yaalaa deemuuf baatani?	-----	
303	Eenyutu akka tajaajila dahumsaa argattu siif murteessa?	1.maatii 2.abbaa manaa kiyya 3.ofii kiyya 99.kan biro ibsi-----	
304	Ulfa isa ammaaf eenyutu akka mana yaalaa deemuu qabdu murteesse?	1.eenyumtuu hin murteessine 2.ofii kiyya 3.anaa fi abbaa manaa kiyya 4.abbaa manaa 5 maatii 6 .hiriyyoota/ollaa 7.hojjetoota fayyaa 8.deessistuu aadaa 99.kanbiroo-----	
305	Gara mana yaalaa deemuuf murteessuudhaaf sa'aatii meeqa isiinitti fudhate?	Daqiiqa----- Sa'aati-----	
306	Deebiin keessan yoo sa'aatii tokko kessatti ykn gadii ta'uu baate maaliif daftanii hin murteessine?	1.qarshii hin qabnu 2.ciniinsuu ta'uu isaa hin barre 3.ulfa kanaan dura nagaan dahe 4.mana yaalaa irratti	

		amantaa hin qabu 5.aadaa 98.hin beeku 99.kan biro ibsi	
Barfannaa gara mana yaalaatti osoo deemaa jiranii mudatan			
307	Eenyu waliin gara mana yaalaa deemte?	1.tokkollee 2.ofii kiyya 3.abbaa manaa kiyya 4.maatii kiyya 5.hiriyyoota/ollaa 6.ogeessota fayyaa 7.deessiftuu aadaa 99.kan biro	
308	Geejiba argachuuf sa'aatii meeqa sitti fudhate?	------(sa'aatii) ------(daqiiqaa)	
309	Tajaajila fayyaa biroo irraa gara kana ergamte?	1.eeyyee 2.lakki	
310	Yoo eeye tahee yeroo meeqa refferii taate ykn ergamtee?	-----	
311	Tajaajilli fayyaa mana kee irra hagam fagaata?	-----km	
312	Tajaajiila fayyaa kana bira gahuuf hammam sitti fudhate?	-----daqiiqaa -----sa'aatii 98 hin beeku	
313	Gaafa gara tajaajila fayyaa sana deemtan wanti isin rakkise jira ?	1.eeyye 2.hin jiru	Yoo hin jiru tahe gara 314 itti darbi
314	Yoo deebiin keessan eeyye tahe rakkoon isin mudate maali?	1.fageenya mana yaalaa 2. karaa/daandiin hin jiru 3.gatii geejibaa 4.geejiba dhabuu dhaan 99.kan biro ibsi-----	
315	Gara tajaajila fayyaa kana gaafa dhuftan geejiba akkami fayyadamtan ?	1.ambuulaansii .2.konkolaata dhuunfaa 3.taaksii 4.gaarii 5.miilaan 6.ba'aanykn qaarezaan 98.hin beeku 99.kan biro ibsi-----	
316	Gaafii kanan duraaf deebiin yoo ambulansii tahee.ambuulaansiif	1.eeyyee 2.lakki	Yoo lakki tahe gara gaaffii 317 itti darbi

	kaffaltii kennitu?		
317	Yoo eeyyee tahe hagam kaffaltu?	-----Qarshii	
318	Yoo namootaan baatamtani dhufatan namoota sanaaf maal kaffaltu?	1.qarshii 2.nyaataafi dhugaatii 3.yoo galgala tahe siree cisiicha 99.kan biro ibsi	
Barfannaa haadholii tajaajila mana yaalaa waliin kan wal qabate.			
319	Hospitaala erga geessanii booda tajaajila argachuuf sa'aati meeqa isinitti fudhate?	-----daqiiqa -----sa'aatii	
320	Erga hospital geessanii booda tajaajila argachuuf rakkooleen isin mudatan ni jiru?	1.eeyyee 2.hin jiru 98.hin beeku	Yoo deebiin hinjiru tahe gara 320 tti darbi
321	Yoo deebiin keessan eeyyee tahe rakkoon isin mudate maal ture?	1.yeroo dheeraaf eeguu 2.gara buufata biroo itti ergamuu 3.ogeessonni fayyaa dhabamuu 4.sireen hanqachuu 99.kan biro ibsi-----	
322	Yeroo dahumsaa maaliin deessee?	1.gargaarsa meeshaa malee 2.gargarsa meeshaa dhaan 3.baaqqsanii yaaluu dhan	
323	Tajaajila dahumsa argachuuf meeshaaleen bittan ni jira?	1.eeyyee 2.lakki 98.hin beeku	
324	Yoo deebiin keessan eeyyee tahe maal bitani?	1.gilaavii 2.dhangala'oo karaa hidda dhiigaa kennaman 3.meshalee hodhaaf gargaaran 4.saamunaa 5.qoricha 6.moodeesii 7.dhangala'oo jarmii ajjeesan 8.dhiiga 9.Daakuu 10.jirbii 99.kan biro ibsi	

		98.hin beeku	
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**Gaaffiiwwan aramaan gadii beekumsa hadholiin ulfaa fi dahumsa irratti qaban ilaallata .
Beekumsi kunis haadhooliin dafanii gara mana yaalaa dhufuu keessatti shoora ni qaba.**

401	Mallatoowwan sodaachisoo ykn Mallattolee haadhoolii irrattii yeroo ulfa fi dahumsa miidhaa geessisan ni beekta?	1.eeyyee 0.hin beeku		Yoo deebiin hin beeku tahe gara gaaffii 404 itti darbi
401.1	Yoo deebiin kee eeyyee tahe mallatoowwan sun maali? dhiiguu	Eeyyee	lakki	Deebii itti mari Eyye=1 Lakkii=0
401.2	Mataa bowoo cimaa	1	0	
401.3	Ijjatti maruu	1	0	
401.4	Dhiita'uu fuulaa fi harkaa	1	0	
401.5	Ho'insa qaamaa cimaa	1	0	
401.6	Of wallaaluu	1	0	
401.7	Haafura baasuu dadhabuu	1	0	
401.8	Dadhabiinsa qaamaa cimaa	1	0	
401.9	Dhukkuba garaa cimaa	1	0	
401.10	Sochiin daa'ima garaa keessa	1	0	
401.11	dabaluu ykn hir'isuu Ciniinsuun osoo hin jalqabiin bishaan mul'achuu	1	0	
402	Wantoota armaan olitti ibsaman keessaa yoo dubartii mudatan du'aaf saaxila jettee yaadda?	1.eeyyee 0.lakki 0.hin beeku		
403	Rakkoleen armaan olitti ibsaman yeroodhaan yoo mana yaalaa geffaman ni yaalamu ykn ni furamu jettee yaadda?	1.eeyyee 0.lakii 0.hin beeku		
404	Waae'ee qophii dahumsaa dhageessee beekta?	1.eeyyee 2.lakki		
405	Yoo deebin kee eeyyee tahe wantooni qophaa'insa dahumsaa jedhaman maal faa dha? Kan biroo yoo jiraate himi 1.geejibaaf qophaa'uu 2.qarshii qusachuu 3.nama dhiiga kennu addaan baasuu 4.nama ogeessa tahe addaan	Eyyye	Miti(lakki)	Yoo eeyyee tahe deebiin 1 irratti marii yoo deebiin miti(lakki) tahe 0 irratti mari
		1	0	
		1	0	
		1	0	
		1	0	

	baasuu			
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