

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

**ASSESSMENT OF KNOWLEDGE AND PRACTICE ON BIRTH
PREPAREDNESS AND COMPLICATION READINESS AMONG
ANTENATAL CLIENTS IN SELECTED HEALTH CENTERS IN ADDIS
ABABA, ETHIOPIA**

BY: LUCHIA ARAYA

**A Thesis Submitted to the School of Graduate Studies of Addis Ababa
University in Partial fulfillment of the requirements for the Degree of
Masters of Science in Maternity Nursing and Reproductive Health**

June, 2011

Addis Ababa

**ASSESSMENT OF KNOWLEDGE AND PRACTICE ON BIRTH
PREPAREDNESS AND COMPLICATION READINESS AMONG
ANTENATAL CLIENTS IN SELECTED HEALTH CENTERS IN
ADDIS ABABA, ETHIOPIA**

BY: Luchia Araya (BSc)

ADVISOR: Erdaw Tachbele (M.Sc, PHD Fellow)

June, 2011

Addis Ababa

APPROVED BY THE BOARD OF EXAMINERS

This thesis by Luchia Araya is accepted in its present form by the board of examiners as satisfying thesis requirement for the degree of master in maternity and reproductive health nursing.

Internal examiner:

_____ / /

Full name

Rank

Signature

Date

Research advisor:

_____ / /

Full name

Rank

Signature

Date

May, 2011

Addis Ababa

Acknowledgment

My heartfelt thanks goes to my advisor Ato Erdaw Tachbele for his continuous help equipping me with the necessary knowledge, information and confidence to prepare this research thesis.

I would like to acknowledge centralized school of nursing for assigning and funding me to perform this research thesis.

I would like to acknowledge Ministry of Defense for sponsoring my studies.

My gratitude goes to my family for their all rounded support throughout the study period.

My acknowledgement goes to Ato Alemayoh Bayray and Sr Senait Kebret for reviewing both the proposal and the thesis and providing me their constructive comments.

I would like to appreciate the supervisors, data collectors who showed the greatest effort in acquiring appropriate information.

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

Table of contents

	page
Acknowledgment	I
List of tables.....	IV
List of figures	V
Acronyms.....	VI
Abstract.....	VII
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background	1
1.2 Problem Statement.....	3
CHAPTER TWO: LITERATURE REVIEW	5
CHAPTER THREE: OBJECTIVES	15
3.1 General Objective	15
3.2 Specific Objectives	15
CHAPTER FOUR: METHODOLOGIES	16
4.1 Study area.....	16
4.2 Study design	16
4.3 Source of population	16
4.4 Study population.....	16
4.5 Sample size determination:	17
4.6 Sampling procedure	17
4.7 Study period	19
4.8 Data collection instrument	19
4.9 Data collection procedure.....	19
4.10 Variables	21

4.11 Data quality assurance.....	21
4.12 Data analysis procedure	21
4.13 Ethical clearance.....	22
4.14 Dissemination and utilization of results	22
4.15 Operational definitions:.....	23
CHAPTER FIVE: RESULTS	24
CHAPTER SIX: DISCUSSION.....	38
CHAPTER SEVEN: CONCLUSION AND RECOMMENDATIONS	41
7.1 Conclusion.....	41
7.2 Recommendation	41
Reference	42
Annexes	45

List of tables

Table1: Distribution of socio-demographic and economic variables of respondents in selected Addis Ababa health centers, 2011-----	25
Table 2: Obstetric characteristics of respondents in selected Addis Ababa Health centers, 2011 -----	27
Table 3: Knowledge of respondents on danger signs during pregnancy, in selected Addis Ababa health centers, 2011-----	28
Table 4: Knowledge of respondents on danger signs during labor/childbirth in selected Addis Ababa health centers, 2011-----	29
Table 5: Knowledge of respondents on danger signs during postpartum period, in selected Addis Ababa Health centers 2011-----	30
Table 6: Knowledge of respondents about preparation for birth and its complication, in selected Addis Ababa health centers, 2011 -----	32
Table 7: Respondents considered knowledgeable and well prepared for birth and it s complication, in selected Addis Ababa health centers, 2011 -----	33
Table 8: Practices of respondents on preparation for birth, in selected Addis Ababa health center 2011-----	34
Table 9: Association of maternal socio-demographic variables with their knowledge of danger sign during pregnancy, in selected Addis Ababa health centers, 2011-----	36
Table 10: Association of selected socio-demographic & obstetric factors of respondents with the practice of birth preparedness in selected Addis Ababa, health center, 2011-----	37

List of figures

Figure 1: Conceptual framework on how BP/CR among mothers in selected Addis Ababa health centers, 2011-----	14
Figure 2: Framework of sampling procedure in selected Addis Ababa health centers, 2011 -----	18
Figure 3: Distribution of mothers by their source of information, in selected Addis Ababa health centers, 2011-----	31

Acronyms

ANC	Antenatal care
BMO	Basic management of obstetric
B/P	Birth preparedness
BP/CR	Birth preparedness and complication readiness
C/R	Complication readiness
EMOC	Emergency Management of Obstetric Care
ETB	Ethiopian Birr
JHPIEGO	Johns Hopkins Program for International Education in Gynecology and Obstetrics
MMR	Maternal Mortality Rate
NMR	Neonatal Mortality Rate
WHO	World Health Organization

Abstract

Background- 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. Lack of advance planning for use of a skilled birth attendant for normal births, and particularly inadequate preparation for rapid action in the event of obstetric complications, are well documented factors contributing to delay in receiving skilled obstetric care. Birth preparedness has been globally endorsed as an essential component of safe motherhood programs to reduce delays for care, so reduced maternal mortality rate and neonatal mortality rate.

Objective: To assess knowledge and practices with respect to birth preparedness and complication readiness among antenatal clients in selected Addis Ababa Health Centers.

Methods: A cross-sectional institution based study was conducted to examine knowledge and practice of birth preparedness and complication readiness among clients at five selected health centers by using pretested standard questioner in Addis Ababa. The sampling technique was systematic sampling and the sample size was 290.

Results: Data were obtained from 290 mothers, yielding a response rate 100%. Taking into account identifying danger sign during pregnancy, labor and during postnatal, and place of delivery identification, means of transportation and saving money. About 42%, 17.2%, 27.7% of the respondents were knowledgeable about danger sign during pregnancy, delivery, and postpartum period respectively. Regarding to knowledge to birth preparedness 46% of the respondents were knowledgeable and 68.0% stated that they were prepared for birth and its complication. In this study educational status of mothers and their knowledge about danger sign during pregnancy was associated. Illiterate mothers were 0.48 times less knowledgeable about

danger sign during pregnancy as compared to those who were secondary and above (OR=0.42(95%CI=0.21, 0.82).

Mothers with the income of 500-1000 Birr per month were 2.86 times more likely to have knowledge about danger sign during pregnancy as compared to those who were with no income(COR=2.86 (95% CI=1.41,5.78)) but the significant association between educational status, income and danger sign during pregnancy was not retained in the multivariate analysis.

Conclusion and recommendation-The study identified poor comprehensive knowledge and practices on preparation for birth and its complication in the study area. Community education about preparation for birth and its complication and empowerment of women through expansion of educational opportunities are recommended for improving birth preparedness and consequently the effects of pregnancy related complications. The individual woman, her family and the community as a whole should have to be well informed on birth preparedness and complication readiness.

CHAPTER ONE

INTRODUCTION

1.1 Background

Maternal mortality is a substantial burden in developing countries. World Health Organization (WHO) estimated that 529,000 women die annually from maternal causes. Ninety-nine percent of these deaths occur in the developing countries. The situation is most horrible for women in Sub-Saharan Africa, where one in every 16 women dies of pregnancy related causes during her lifetime, compared with only 1 in 2,800 women in developed country (1).

Every pregnant woman faces the risk of sudden, unpredictable complications that could end in death or injury to herself or to her infant. Pregnancy related complications cannot be reliably predicted, hence, it is necessary to employ strategies to overcome such problems as they arise. Maternal mortality and morbidity are complex problems that require interventions (2).

Improving maternal mortality has received recognition at a global level as evidenced by the inclusion of reducing maternal mortality in the Millennium Development Goals. Since it is not possible to predict which women will experience life -threatening obstetric complications that lead to maternal mortality, receiving care from a skilled provider (doctor, nurse or midwife) during childbirth has been identified as the single most important intervention in safe motherhood (3).

Birth preparedness and complication readiness (BP/CR) 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. Lack of advance planning for use of a skilled birth attendant for normal births, and particularly

inadequate preparation for rapid action in the event of obstetric complications, are well documented factors contributing to delay in receiving skilled obstetric care. In a skilled care approach, birth preparedness includes identifying a skilled provider and making the necessary plans to receive skilled care for all births. Complication readiness (emergency funds, transport, blood donor and designated decision-maker) receive greater emphasis in emergency obstetric care programs. Birth preparedness has been globally endorsed as an essential component of safe motherhood programs to reduce delays for care (3, 13).

In many societies in the world, cultural beliefs and lack of awareness inhibit preparation in advance for delivery and expected baby. Since no action is taken prior to the delivery, the family tries to act only when labor begins. The majority of pregnant women and their families do not know how to recognize the danger signs of complications. When complications occur, the unprepared family will waste a great deal of time in recognizing the problem, getting organized, getting money, finding transport and reaching the appropriate referral facility these delays can cause maternal death. (4).

For Some complications including; severe hemorrhage, a few hours matter to save life, while for others hours or even days may be tolerable but with the prognosis getting worse as time elapses. Complication readiness is vital to survival. Complications need quick action. The interval from onset to death for ante-partum and post partum hemorrhage can be approximately 12 hours and 2 hours respectively.

The hours required for making arrangements which should have been made prior to the emergency, may define the line between survival and mortality (3, 4)

If the woman and her family are well prepared for normal child birth as well as any possible maternal or new born complications, the woman or baby are more likely to receive the skilled

and timely care needed to preserve health and ensure survival. Although most of the time focuses on what the skilled provider, the woman, and her family can do to prepare for birth and possible complications, birth preparedness or complication readiness is actually a community-wide issue(4).

1.2 Problem Statement

According to the Ethiopian Federal Ministry of Health, only 18.4% of the deliveries are attended by health professionals. In one nation where the maternal mortality ratio is 673 per 100,000 live and IMR 77/1000 and NMR 39/1000 live births which are the highest in the world (7).

Studies conducted in Ethiopia, Tikur Anbesa hospital revealed that hemorrhage, hypertensive disorders and ruptured uterus were among the causes of maternal death (10).

Despite the great potential of Birth Preparedness and Complication Readiness in reducing the maternal and newborn deaths its status is not well known in most of Sub-Saharan Africa including Ethiopia.

A study conducted in Adigrat, Ethiopia showed 86.9% of the respondents mentioned identifying place of delivery, 83.7% mentioned saving money, 40.4% mentioned identifying skilled provider and 40.8% mentioned identifying a mode of transportation as elements of birth preparedness. One hundred eighteen (22.1%) of the respondents reported that they identified place of delivery, saved money and identified a mode of transport ahead of childbirth. The study identified poor comprehensive knowledge and practices of birth preparedness in general and very poor knowledge on danger signs in selected health particular (20).

Limited study was found in Ethiopia on BP/CR. Therefore, this research was designed to evaluate birth preparedness and complication readiness and factors associated with their practices among antenatal care clients, in selected health center Addis Ababa.

The study will provide basic data on the issue that may help health workers and policy makers to implement and scale up safe mother hood program in an attempt to reduce the highest maternal mortality rate and neonatal mortality rate of Ethiopia.

CHAPTER TWO

LITERATURE REVIEW

Birth-preparedness and complication readiness is a comprehensive strategy aimed at promoting the timely utilization of skilled maternal and neonatal health care. The key elements include: knowledge of danger signs; plan for where to give birth; plan for a birth attendant; plan for transportation and plan for saving money. In addition, a potential blood donor and a decision maker need to be identified. This is because every pregnant woman faces the risk of sudden, unpredictable complications that could end in death or injury to herself or to her infant (2)

The Tenth Anniversary Conference held in Colombo, Sri Lanka, in 1997, concluded that a skilled attendant to assist childbirth is the single most critical intervention to reduce maternal mortality. The term “skilled attendant,” according to a joint WHO/UNFPA/UNICEF/World Bank Statement (1999), refers exclusively to “people with midwifery skills (for example, midwives, doctors and nurses) who have been trained to proficiency in the skills necessary to manage normal births and diagnose or refer obstetric complications. However, the use of skilled providers in developing countries remains low. According to the demographic and health surveys, only 51% of women in developing countries were assisted by a skilled provider (3, 12.)

Current focus of the safe motherhood initiative is emergency obstetric care and skilled care during child birth. Birth preparedness and complication readiness (BP/CR) is a relatively common strategy employed by numerous groups implementing safe motherhood programs, however, the applications of the concept are varied and there is no single agreed-upon definition. For example, the Prevention of Maternal Mortality (PMM) Program (1987–1997) found that inadequate funds and transport were key causes of delay in deciding to seek care and in reaching

facilities. Interventions to address these problems included a community loan program and transportation. The Mother Care Project (1988–1998) included interventions to promote “birth planning “or “contingency planning. These interventions focused on planning for emergencies (3).

EMOC services are necessary if maternal mortality is to be reduced, they may not be sufficient. Even when EMOC service is functioning well, women with obstetric complication face a variety of barriers in using them. Anything that cause delay in getting treatment may cost women’s life. These delays can be prevented by BP/CR allows a pregnant woman and her family to plan ahead, so that they can have safe and healthy pregnancy and delivery.

Birth preparedness and complication readiness and safe motherhood program approaches

Thaddeus and Maine (1994) have provided the safe motherhood community with an explanatory model of maternal mortality that identifies delays in seeking, reaching and obtaining care as the key factors leading to maternal death. This explanatory model, known as the Three Delays Model, categorizes delays into three types: delays in seeking care, delays in reaching care, and delays in receiving adequate care once at the point of service (3).

Birth preparedness and complication readiness encourages women, households, and communities to make arrangements such as identifying or establishing available transport, setting aside money to pay for service fees and transport, and identifying a blood donor in order to facilitate fast decision-making and reduce delays in reaching care once a problem arises.

In sum, at the demand level, BP/CR promotes the use of a skilled provider at birth through increasing demand and improving access. Birth preparedness and complication readiness also

reduces delays in receiving appropriate care. It calls on providers and facilities to be prepared to attend births and ready to treat complications (4).

To have birth preparedness and complication readiness at the provider level, nurses, midwives, and doctors must have the knowledge and skills necessary to treat or stabilize and refer women with complications, and they must employ sound normal birth practices that reduce the likelihood of preventable complications (4, 12).

Awareness of the danger signs of obstetric complications among pregnant women and in their communities is the first step to accept appropriate and timely referral to essential obstetric and newborn care, thus, reducing the first and second phases of delay. The danger signs occurring during pregnancy are predictive of poor outcome rather than historic risk factors (4).

According to the survey tools developed by JHPIEGO Maternal and Neonatal Health Program

(3) birth preparedness and complication readiness plan includes:

Where does she plan to deliver her baby?

Who will accompany her in labor to her chosen center?

How will she get to the health center?

Does she have money and other needed items ready and accessible?

If she develops a complication before or during labor how will she reach the nearest health facility?

Where will she find money for any additional cost?

If she needs blood who will donate?

Is she or family able to identify danger sign?

The time required to make arrangements, which could have been made prior to the emergency, may define the line between survival and mortality. A key element of BP is identifying a skilled

provider who can support a woman during labor and childbirth, and manage complications that may arise or refer the woman for higher level care (4).

Awareness about obstetric complication and birth preparedness

When an emergency occurs, in most cases it takes a woman and her family time to realize the seriousness of the situation. The majority of pregnant women and their families do not know how to recognize the signs of complications, nor do they know what to do and where to get help(4)

Delay in decision to seek care: lack of information about problems/warning signs, social factors, and delay in reaching care: having transportation, road conditions delay in receiving care: lack of equipment or personnel at facility, lack of funding, poor attitude of personnel. These delays can be addressed by birth preparedness and complication readiness plan, as time of labor or time of emergency is not the time to decide what to do. Danger signs are not the actual obstetric complications, but symptoms that are easily identified by non-clinical personnel. Standard danger sign of pregnancy, labor and delivery are indicted below (4).

The key danger signs during pregnancy include: Severe vaginal bleeding, Swollen hands/face, blurred vision.

The key danger signs during labor and childbirth include: Severe vaginal bleeding, prolonged labor (> 12 hours), convulsions, retained placenta.

The key danger signs during the postpartum period include: Severe vaginal bleeding, foul-smelling vaginal discharge, high fever.

The key danger signs in the newborn include: Convulsions/spasms/rigidity, difficult/fast breathing, very small baby, lethargy/unconsciousness (4, 17).

Decision to seek care once the emergency is realized, the family who is unprepared wastes more valuable time deciding what to do or who to call for help, where to go, who should accompany the woman, as well as organizing transport and funds (4).

A Study conducted among Rural Tanzanian women on awareness of danger signs of obstetric showed that more than 98% of the women attended antenatal care at least once. In the study half of them knew at least one obstetric danger sign. The percentage of women who knew at least one danger sign during pregnancy was 26%, during delivery 23% and after delivery 40%. Few women knew three or more danger signs. The study indicated that having secondary education or more increased six folds the likelihood of awareness of obstetric danger signs in comparison to the illiterate ones. The likelihood to have more awareness increased significantly by increasing age of the mother, number of deliveries, number of antenatal visits, whether the delivery took place at a health institution or home. The study also indicated that women had low awareness of danger signs of obstetric complications (5).

Study conducted in Kenya (2006) among 394 women attending antenatal care on birth preparedness, knowledge of danger signs, preparations for delivery and emergencies indicated that over 60% of the respondents were counseled by health workers on various elements of birth preparedness, 87.3 % of the respondents were aware of their expected date of delivery, 84.3% had set aside funds for transport to hospital during labor while 62.9% had funds for emergencies. The study also showed that 67 % of the respondents knew at least one danger sign in pregnancy while only 6.9% knew of three or more danger signs. According to the study all respondents did not have a clear plan of what to do in case of an obstetric emergency. In this study, level of education positively influenced birth preparedness (16).

The 2003 Burkina Faso Demographic and Health Survey indicated that only 38.5% of women gave birth with the assistance of a skilled provider (17). In 2004, a cross-sectional survey with a random sample of respondents was conducted to measure the impact of birth-preparedness and complication readiness on the use of skilled providers at birth. Of the 180 women who had given birth within 12 months of the survey, 46.1% had a plan for transportation, and 83.3% had a plan to save money. Women with these plans were more likely to give birth with the assistance of a skilled provider and controlling for education, parity, average distance to health facility, and the number of antenatal care visits, planning to save money was associated with giving birth with the assistance of a skilled provider. Qualitative interviews with women who had given birth within 12 months of the survey support these findings. Most women saved money for delivery, but had less concrete plans for transportation. These findings highlight how birth-preparedness and complication readiness may be useful in increasing the use of skilled providers at birth, especially for women with a plan for saving money during pregnancy (19).

Similar study done in India to assess birth preparedness and complication readiness indicated that 47.8 % were identified a trained birth attendant, a health facility, arranged for transport, and saved money for emergency considered as well-prepared. In the study, factors associated with well-preparedness were maternal literacy and availing of antenatal services. Deliveries in the slum-home (India) were high (56.4%). Among these, skilled attendance was low (7.4%), 77.3% of them were assisted by traditional birth attendants. Skilled attendance during delivery was three times higher in well-prepared mothers compared to less-prepared mother (21).

Another prospective study was conducted at Nepal Medical College Teaching Hospital to find out the complications of home delivery. Among the 114 women who were brought to the hospital after home delivery, one was brought dead and one more died shortly after arrival.

Sixty five percent were housewives, 68.4% were illiterate. As the reasons to deliver at home stated to be due to financial limitations, ignorance and transport limitations were 32.5%, 30.7%, 16.7% respectively. The rest were due to 'other reasons' which were most commonly stated as to be lack of attendant at home, long distance to hospital or delivery occurring too quickly or too late at night to attend the facility of choice. Ninety four point seven percent delivered at home with no trained assistance. Majority of the women (72.8%) were brought with retained placenta or excessive bleeding per vagina. Twenty one point nine percent of the women were brought in shock needing active resuscitation, 27.2% had postpartum hemorrhage. It was found that antenatal services were well utilized, but mothers were less likely to access good quality delivery and postnatal care. Despite the availability of services women still went on to deliver at home without any trained assistance, and this effect was greatest for the less educated, poorer women. Financial and transport limitations appear to be some of the most important factors in women's inability to access skilled care. This important barrier to care will need to be addressed if we intend to improve delivery service to the most vulnerable women (22).

Globally, around 80% of all maternal death are the result of direct obstetric complications: hemorrhage 25%, sepsis 15%, unsafe abortion 13%, eclampsia 12%, and obstructed labour 8% (6, 9, 17).

In Ethiopian, maternal mortality ratio is estimated at 673/ 100 000 live births (7). Only 67.7% of mothers attended antenatal care and 18.4% assisted delivery by skilled professionals and 34.3 % postnatal care, this pointing to possible of a high maternal death ratio and disability (7).

In Addis Ababa ANC is 111% achieved, delivery coverage is 62.5%, and postnatal coverage is 48.3% (7).

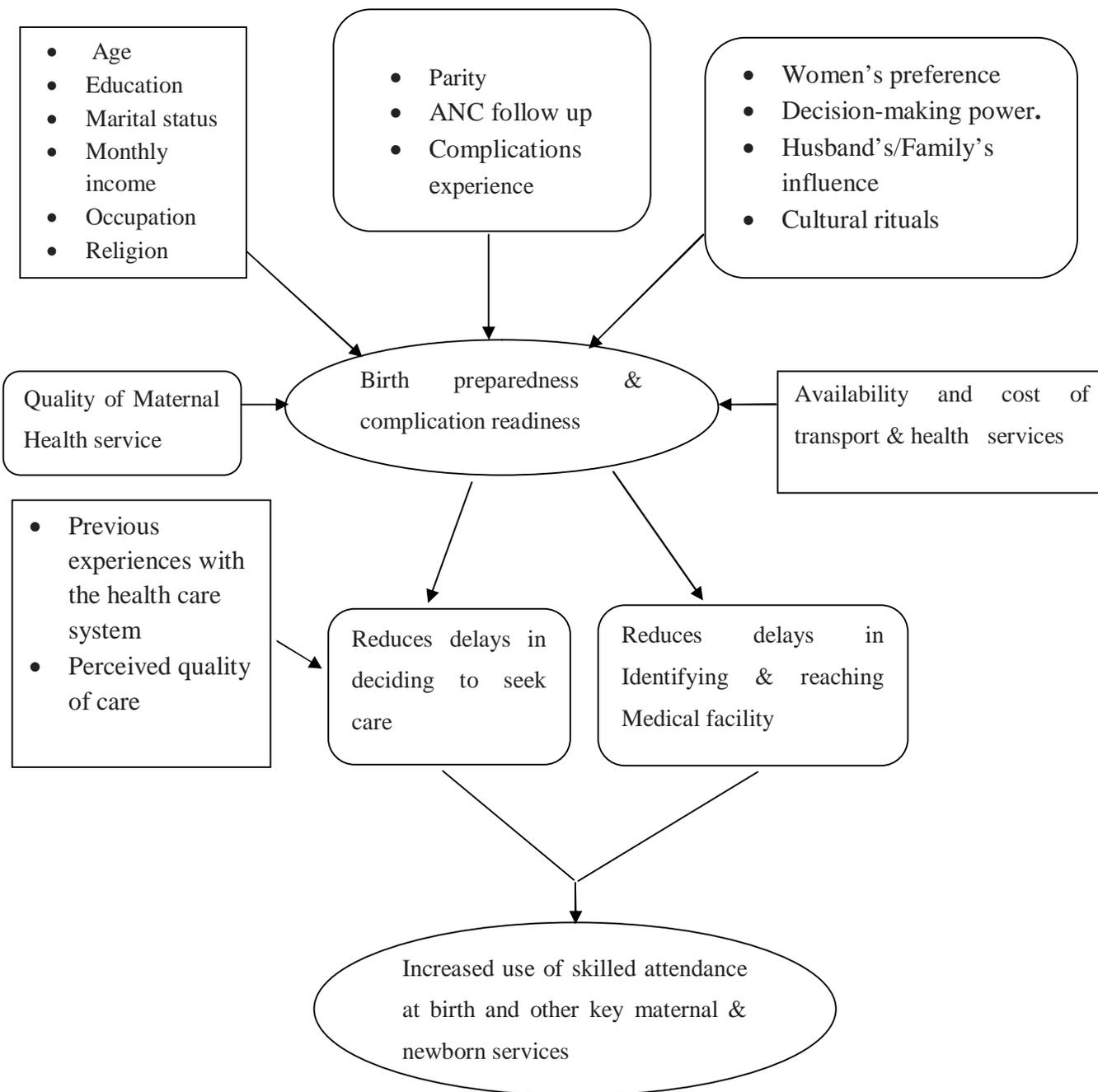
The quality of maternal care is particularly affected by mother's education, mother's wealth, residence and region, for example, women with secondary or high education, women in highest wealth quintile and urban women are twice as likely as women with no education, women in the lowest wealth quintile and rural women to be informed about pregnancy complication. Regional variation in the proportion of women which were informed about pregnancy complication during ANC visits are markedly ranging from a high of 63% among women in Addis Ababa to a low of 24% in Benishangule-Gumuz Region. Similar patterns are observed for the other routine tests and procedures. There has been a small increase in the percentage of women who have received the various components of antenatal care over the five years. For Example, 31% of women with birth in the five years preceding the survey in 2005 were informed of the sign of pregnancy complication compared with 27% in 2007 (8). Similarly another study in Tikur Anbesa Hospital, from September 2001 to August 2002, revealed a maternal mortality rate 1107.5 per 100 000 live birth with the top three implicated cause of post abortion complication (28.9%) eclampsia (21.1%) and rupture uterus (15.8%) (9).

A study done on maternal mortality in Addis Ababa 1983 showed MMR 566 per 100 000 live births and mortality has highest for nulipara; the un married women employed as maids/ janitors and students. Abortion, hemorrhages, hypertensive disease of pregnancy and rupture uterus were common among the direct obstetric causes (11).

Many more women and newborns would survive childbirth if they received the care they need when they need it. This issue is addressed by the Birth Preparedness and Complication Readiness (BP/CR) tool that has been developed by the Maternal and Neonatal Health Program (a partnership of JHPIEGO, JHUCCP, ,CEDPA) to facilitate the advance preparation and rapid

action that can reduce delays in deciding to seek care, reaching care and receiving care. The BP/CR tool is intended for use as both a programming and an advocacy tool by communities, health service providers, and health system administrators and planners. Structured as a matrix, it identifies respective responsibilities, actions, practices, and skills needed by the various stakeholders - policymakers, facility managers, providers, communities, families, and women - whose actions can help to ensure that women and newborns receive appropriate, effective, and timely care during pregnancy, labor, childbirth and the postpartum period.(2)

As to the researcher knowledge, no study was found in Ethiopia on B.P/C.R except the one conducted in Adigrat at community level. Therefore, this paper was designed to evaluate birth preparedness and complication readiness and factors associate with their practices among antenatal care clients, in selected health centers, Addis Ababa.



Adapted from Jhpiego monitoring of BP/CR

Figure 1: Conceptual framework on how BP/CR increases the use of skilled care (3)

CHAPTER THREE

OBJECTIVES

3.1 General Objective

To assess knowledge and practices with respect to birth preparedness and complication readiness among antenatal clients in selected health center in Addis Ababa.

3.2 Specific objectives

- To assess knowledge of birth preparedness and complication readiness among antenatal clients in selected Addis Ababa H.C.
- To identify practices related to birth preparedness and complication readiness among antenatal clients in selected Addis Ababa H.C.
- To determine factors associated with the knowledge and practice of birth preparation and complication readiness among antenatal clients in selected Addis Ababa H.C.

CHAPTER FOUR

METHODOLOGIES

4.1 Study area

The study was conducted in 5 randomly selected governmental health centers in Addis Ababa city Administration. Addis Ababa is the capital city of Ethiopia. There are 10 sub cities and 99 Kebeles, which are directly accountable to their Sub city administration. Estimated population of Addis Ababa is 2,854,462 (8) .Out of the total population 1,495,738 are females; there are 5 hospitals and 26 health centers. The reason for selecting Addis Ababa health centers is more clients are available from different kifle ketema than hospitals. Most mothers follow their antenatal check up at governmental health centers since the service is given free of charge.

4.2 Study design A quantitative cross-sectional institution based study was conducted to assess knowledge and practice of birth preparedness and complication readiness among antenatal clients in Addis Ababa health center.

4.3 Source population

All antenatal clients, attending selected governmental health centers in Addis Ababa.

4.4 Study population

Pregnant mothers who were attending in the antenatal clinic of each selected health centers Addis Ababa.

4.4.1 Inclusion criteria

Pregnant mothers who were attending 2nd ANC visit and above.

Women who were mentally and physically capable of being interviewed.

Those who are volunteer to participate in the study

4.4.2 Exclusion criteria

Those clients who are in their first Antenatal visit

Who are not volunteer

Who are not mentally and physically capable of being interviewed

4.5 Sample size determination:

Sample size was determined by using single population proportion based on the following assumptions: 95% confidence level, finding (22%) from previous study (20), and a 5% margin of error.

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

Where: - n= sample size

$z_{\alpha/2}$ = critical value = 1.96 for 95% CI

p = prevalence of BP/CR= 22%

d = precision (marginal error) = 0.05

$$n_i = (1.96)^2 \cdot 0.22(1-0.22) \cdot (0.05)^2$$

With the above inputs the minimum sample required was 264. Taking 10% contingency the final sample size is 290.

4.6 Sampling procedure

Systematic sampling method was used to identify the required health centers with the sampling interval of 5. After alphabetical ordering of 26 government health centers, the first health center is assigned randomly among the first 5 health centers and then the remaining health centers were selected with the sampling interval of 5. The desired number of clients for each health center was

determined based on the size of pregnant women in the individual selected health centers using proportionate sampling method. Individual study participants were selected using systematic sampling technique in which every third client was interviewed in each health center.

$$n_{\text{in health center}} = n_f * \frac{N_{\text{in a health center}}}{N_{\text{total}}}$$

Where

$n_{\text{in health center}}$ = proportion of pregnant women in a given health center

N_{total} = Total number of pregnant women in the selected health centers

n_f = Total sample size

$N_{\text{in a health center}}$ = Number of pregnant women in a given health center

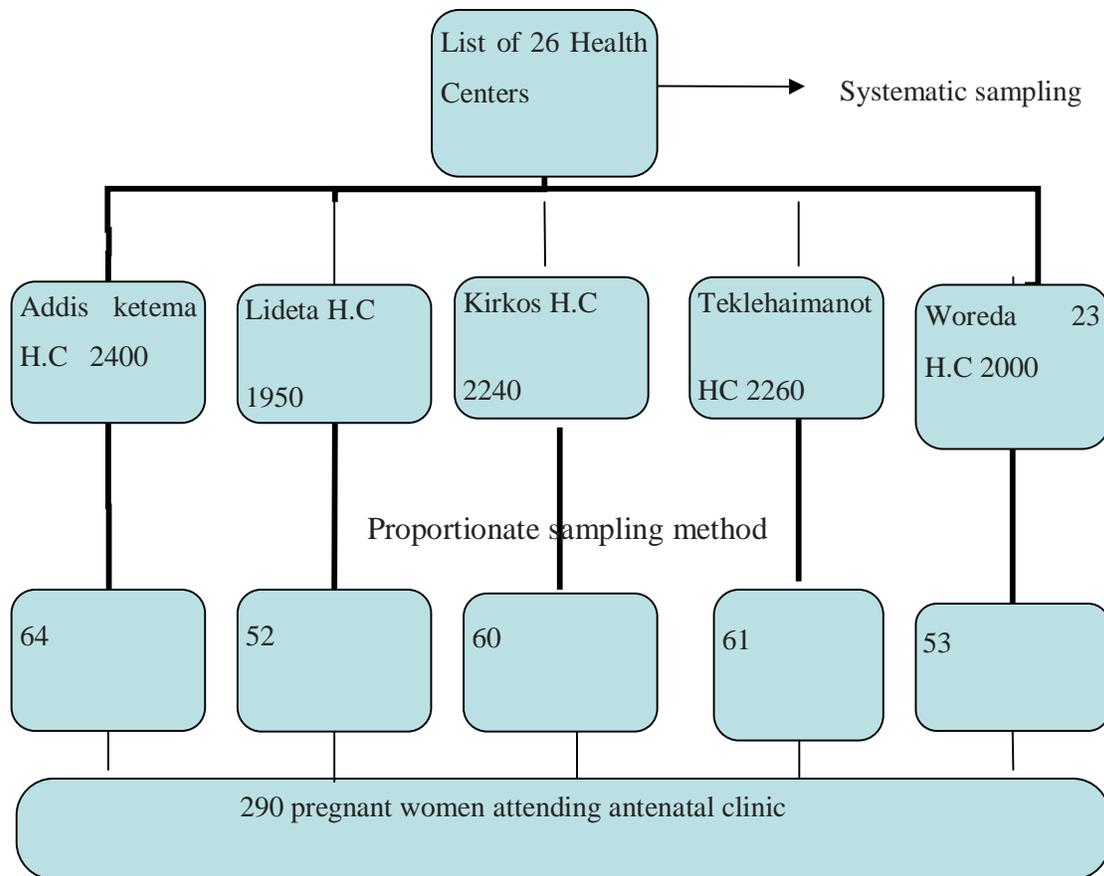


Figure 2: Framework of sampling procedure

4.7 Study period

The actual study was carried out from October 2010 - May 2011 using pretested interviewer administered questionnaire.

4.8 Data collection instrument

A structured questionnaire adapted from the survey tools developed by JHPIEGO Maternal Neonatal Health Program (3), developed in English in such a way that it includes all the relevant variables to meet the objectives, which were knowledge and practice. An individual who had very good knowledge of both English and Amharic languages translated the English version to Amharic for better understanding of the enumerators and respondents. Another individual of similar ability also translate the Amharic version back to English to check for it original meaning.

The data collection tool was pre-tested on 29 similar women in the town from the sub kebeles in Bole health center which were not included in the study before the initiation of the main study. Findings and experiences from the pre-test were utilized in modifying the interview

4.9 Data collection procedure

Five diploma graduate nurses who were not working in the antenatal clinic (one nurse for each health center) were recruited as data collectors, two BSc. graduate nurses were recruited as supervisors. All data collectors and supervisors were oriented for a day on data collection process based on the guide that was developed by principal investigator for data collectors and clarifying how to interview the questionnaire. They were allowed to fill the questionnaire and later discussion was made in all contents of the format and areas of difficulties were revised. Beside this, they were trained on their responsibilities for describing the purpose of the study, giving orientation, telling clients the importance of honest and sincere reply, on responding to

questions. At the time of the actual data collection, the data collectors arrived early in the morning and gave card with recorded time of arrival. Clients were interviewed after they got the A/N service. The principal investigator and the coordinator strictly followed the overall activities for each activity on daily base to ensure the completeness of questionnaire, to give further clarification and support for data collectors.

4.10 variables

Independent

Socioeconomic and demographic factors (age, marital status, religion, ethnicity, Education, income, family size).

Obstetric factors (Parity, complications experienced, history of still birth).

Husband's factors (age, occupation, education, income)

Dependent

Knowledge of birth preparedness and complication readiness

Practice of birth preparedness and complication readiness

4.11 Data quality assurance

Questionnaire was prepared in English version and translated in to Amharic and back to English.

It was pre-tested on 10% of the calculated sample size in health facility which was not selected in the study. Additional adjustment was made based on the results of the pre-test. Data collection was carried out by trained nurses who were from other department of the health facilities. Ten percent of the collected data was checked by the supervisor daily for completeness and finally the principal investigator had monitored the overall quality of data collection.

4.12 Data analysis procedure

Data was cleaned/entered in to computer and was analyzed using SPSS version 15 statistical Software's. Mother who identified at least 3 danger signs during pregnancy, delivery and postnatal period was considered as knowledgeable. Mothers were considered as well prepared if they practiced at least five components of birth preparedness. Binary logistic regression analysis was determined to assess association between variables. The strength of statistical association

was measured by adjusted odds ratios and 95% confidence intervals and statistical significance was considered at $P < 0.05$.

4.13 Ethical clearance

Ethical clearance was obtained from Addis Ababa university School of Nursing and Midwifery research committee and College of Health Sciences Institutional Review Board. Written permission was requested from Kifle Ketemas of the respected health centers. Clients were provided with information sheet about the objective of the study, client's privacy, confidentiality of the information obtained during interview and verbal informed consent was obtained from participants.

4.14 Dissemination and Utilization of results

Result of the study will be disseminated to Addis Ababa University School of Nursing as partial fulfillment of master's degree in nursing. And will be communicated to the Ministry of Health, Addis Ababa Health Bureau, and all government health services in Addis Ababa. The findings will be presented in different seminars, meetings and workshops and will be published in a scientific journal. Hard and soft copy will be available in the library of Addis Ababa University for graduate students as well as for other concerned readers.

4.15 Operational definitions:

Practice: A woman's activities or behavioral experience in relation to normal and complications of pregnancy, labor/childbirth and postpartum period.

Antenatal clients: Pregnant women attending the antenatal clinic in the health H.C.

Knowledge of obstetric complication(s): Any symptom of obstetric complication(s) reported by woman which may occur in women during pregnancy, delivery or within 6weeks after delivery.

Birth preparedness: A woman was considered as birth prepared if she identified more than five component of birth preparedness.

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

Knowledgeable on key danger signs of pregnancy: A woman is considered knowledgeable if she can mention at least three key danger signs for pregnancy.

Knowledgeable on key danger signs of labor/childbirth: A woman is considered knowledgeable if she can mention at least three key danger signs for Labor/childbirth.

Knowledgeable on key danger signs of post partum: A woman is considered Knowledgeable if she can mention at least the three key danger signs for post partum

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

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

Identified mode 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.

CHAPTER FIVE

RESULTS

Out Of 290 women identified for the study 290(100%) responded to the interview. About 50% of the respondents were between ages 21 and 26 years. The mean age was 25.6(\pm 4.2), sixty four point five percent of the participant were Orthodox in religion and 102 (35%) were Amhara. Majority 263 (90%) of the women were married and most 188(64.8%) of the respondents were housewives. Hundred twenty seven (43.8%) had completed secondary school and 183 (63.1%) of the respondents had no income during the survey. In regard to their husbands, hundred thirty five (46.6%) were private employee and 100(38.5%) had monthly income of 500-1000(**Table1**)

Table1: Distribution of socio-demographic and economic variables of respondents, of selected Addis Ababa health centers, 2011.

Variable	Frequency	Percent
Age in years		
15-20	47	16.2
21-26	145	50.0
27-32	90	31.0
33+	8	2.8
Total	290	100.0
Marital status		
Married		
single	263	90.7
widowed	23	7.9
divorced	2	.7
Total	290	100.0
Religion		
Orthodox	187	64.5
protestant	26	9.0
Muslim	75	25.9
others	1	.3
Total	100.0	100.0
Ethnicity		
Amahara	102	35.2
Oromo	68	23.4
Tigre	21	7.2
Gurage	81	27.9
others	18	6.2
Total	290	100.0

Table 1: Distribution of socio-demographic and economic variables cont'd...

Variables	Frequency	Percent
Occupation		
Housewife	188	64.8
Gov. employee	24	8.3
Pvt. employee	45	15.5
business	26	9.0
others	7	2.4
Total	290	100.0
Educational status		
Illiterate	45	15.5
read& write	16	5.5
primary	102	35.2
secondary &above	127	43.8
Total	290	100.0
Respondents income		
no income	183	63.1
100-300	20	6.9
301-500	32	11.0
501-1000	41	14.1
>1000	14	4.8
Total	290	100.0
Husband occupation		
Government employee	68	23.4
Private employee	135	46.6
Business man	73	25.2
Other	14	4.8
Total	290	100.0
Husband income		
100-300	21	8.1
301-500	41	15.8
501-1000	100	38.5
>1000	98	37.7
Total	260	100.0
Family size1-3		
4-6	214	73.8
>6	58	20.0
Total	18	6.2
	290	100.0

Obstetric characteristics of the respondents

One hundred forty eight (51%) of the women were primigravida (pregnant for the first time) and about 142 (49%) had more than 2 pregnancies and 17 (5.8%) of the respondent had history of stillbirth. Regarding to the gestational age 190 (65.5%) of them were between 5-8 months and 88 (30.3%) were greater than 8 months (**Table 2**).

Table 2: Obstetric characteristics of respondents, in selected Addis Ababa Health centers, 2011

Variable	Frequency	Percent
Gravida		
1	148	51.0
2-3	127	43.8
4 and above	15	5.2
Total	290	100.0
Para		
0	165	56.9
1-2	114	39.3
>3	11	3.8
Total	290	100.0
Live birth		
0	173	59.7
1	85	29.3
2 and above	32	11.0
Total	290	100.0
Still birth		
0	273	94.1
1	10	3.4
2+	7	2.4
Total	290	100.0
Gestationalage in(months)		
1-4	12	4.1
5-8	190	65.5
>8	88	30.3
Total	290	100.0

Knowledge on danger signs during pregnancy

Out of the 290 respondents, 204(70.3%) reported that they had the information about danger sign during pregnancy. From those who had the information 102(50%) identified severe headache as danger sign while vaginal bleeding was indicated as danger sign by 96(47.1%) of the respondents. Convulsion 69(33.8%), fever 67(32.8%), fainting 69(33.8%), weakness 56(27%) were also indicated by the study subjects as danger sign (**Table 3**)

Table 3: Knowledge of respondents on danger signs during pregnancy, in selected Addis Ababa health centers, 2011

Variable	Response	frequency	Percent
Mentioned vaginal bleeding as danger sing during pregnancy	Yes	96	47.1
	no	108	52.9
	Total	204	100.0
Mentioned severe head ace as danger sing during pregnancy	Yes	102	50.0
	no	102	50.0
	Total	204	100.0
Mentioned blurred vision as danger sing during pregnancy	Yes	46	22.5
	no	158	77.5
	Total	204	100.0
Mentioned convulsion as danger sing during pregnancy	Yes	69	33.8
	no	135	66.2
	Total	204	100.0
Mentioned edema as danger sign during pregnancy	Yes	96	47.1
	no	108	52.9
	Total	204	100.0
Mentioned fever as danger sign during pregnancy	Yes	67	32.8
	no	137	67.2
	Total	204	100.0
Mentioned fainting as danger sign during pregnancy	Yes	69	33.8
	no	135	66.2
	Total	204	100.0
Mentioned difficulty of breathing as danger sign during pregnancy	Yes	18	8.8
	no	186	91.2
	Total	204	100.0
Mentioned weakness as danger sign during pregnancy	Yes	56	27.5
	no	148	72.5
	Total	204	100.0
Mentioned abdominal pain as danger sign during pregnancy	Yes	41	20.1
	no	163	79.9
	Total	204	100.0
Accelerated/reduced fetal movement as danger sign during pregnancy	Yes	37	18.1
	no	167	81.9
	Total	204	100.0
Mentioned membrane rapture as danger sign during pregnancy	Yes	80	39.2
	no	124	60.8
	Total	204	100.0

Knowledge of Danger signs during labor/childbirth

Out of the total 290 respondents, one hundred fifty eight (54.5%) of them stated that they had the information about danger sign during labour and delivery. The reported symptoms were severe vaginal bleeding by 111(70.3%) and prolonged labour > 12 hrs by 66 (41.8 %) (**Table 4**)

Table 4: Knowledge of respondents on danger signs during labor/childbirth, in selected Addis Ababa health centers, 2011

Variable	Response	frequency	Percent
Mentioned vaginal bleeding as danger sing during lobour and delivery	Yes	111	70.3
	no	47	29.7
	Total	158	100.0
Mentioned severe head ache as danger sing during lobour and delivery	Yes	45	28.5
	no	113	71.5
	Total	158	100.0
Mentioned severe head ache as danger sing during lobour and delivery	Yes	45	28.5
	no	113	71.5
	Total	158	100.0
Mentioned fever as danger sign during lobour and delivery	Yes	27	17.1
	no	131	82.9
	Total	158	100.0
Mentioned loss of consciousness as danger sign during lobour and delivery	Yes	32	20.3
	no	126	79.7
	Total	158	100.0
Mentioned prolonged labour > 12 hrs as during lobour and delivery	Yes	66	41.8
	no	92	58.2
	Total	158	100.0
Mentioned Retained placenta as danger sign during lobour and delivery	Yes	36	22.8
	no	122	77.2
	Total	158	100.0

Knowledge on danger signs during post partum

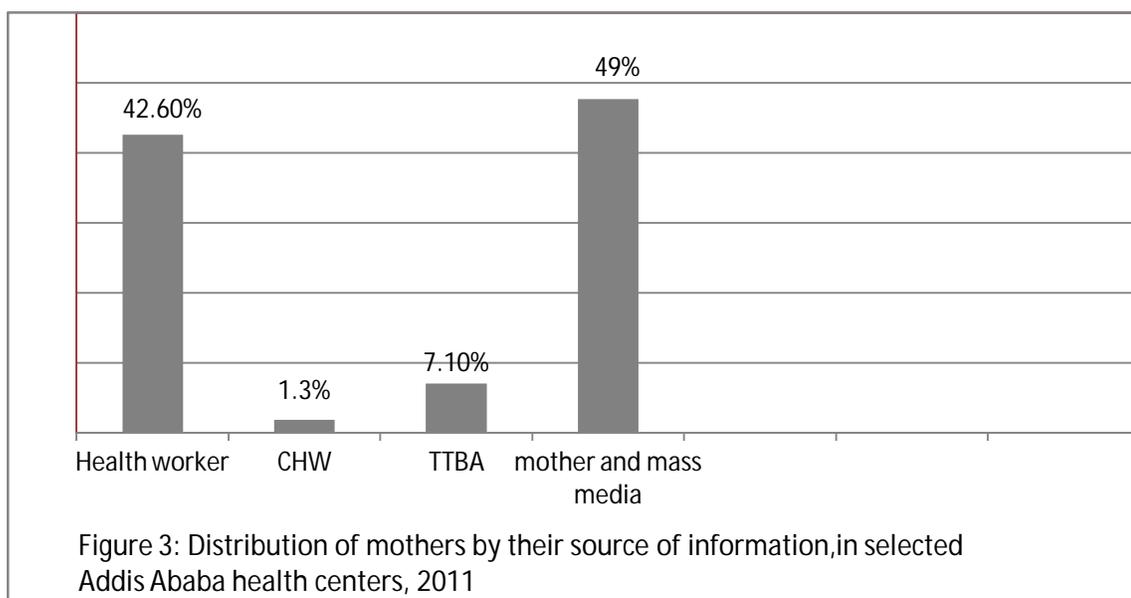
Out of the 290 respondents, 144(49.7%) stated that they know the information about danger sign during postpartum period. Out of those who had the information, 111(77.1%) reported vaginal bleeding and 44 (30.6%) sever head ache as a danger sign.

Table 5: Knowledge of respondents on danger signs during postpartum period, in selected Addis Ababa health centers, 2011

Variable	Category	frequency	Percent
Mentioned heavy vaginal bleeding as danger sing during postnatal period	Yes	111	77.1
	no	33	22.9
	Total	144	100.0
Mentioned severe head ache as danger sing during postnatal Period	Yes	44	30.6
	no	100	69.4
	Total	144	100.0
Mentioned Blurred vision as danger sing during postnatal period	Yes	22	15.3
	no	122	84.7
	Total	144	100.0
Mentioned convulsion as danger sing during postnatal period	Yes	29	20.1
	no	115	79.9
	Total	144	100.0
Mentioned edema as danger sing during postnatal period	Yes	37	25.7
	no	107	74.3
	Total	144	100.0
Mentioned fever as danger sign during postnatal period	Yes	46	31.9
	no	98	68.1
	Total	144	100.0
Mentioned fainting as danger sign during postnatal period	Yes	35	24.3
	no	109	75.7
	Total	144	100.0
Mentioned breathing problem as danger sign during postnatal period	Yes	7	4.9
	no	137	95.1
	Total	144	100.0
Mentioned weakness as danger sign during postnatal period	Yes	33	22.9
	no	111	77.1
	Total	144	100.0
Mentioned foul smelling vaginal discharge as danger sign during postnatal period	Yes	37	25.7
	no	107	74.3
	Total	144	100.0

Source of information about birth preparedness

From the total respondent (290), one hundred thirty-four (46.2%) of them were informed about birth preparedness. Mothers were also asked about the source of information of birth preparedness, they stated that they gained the information as it is displayed on the graph below (Figure 3)



Knowledge of respondents about preparation for birth and its complication

One hundred thirty four (46.2%) of the respondents reported that they heard the term birth preparedness. However, it seems that the respondents consider that anything which is done before child birth like preparing flour for porridge as birth preparedness. Regarding the recommended elements which have to be done as birth preparedness, 128(44.1%) of the respondents spontaneously mentioned identify place of delivery, 206(71%) mentioned saving money, and 49.7% were among others like Gonfo, cloth, and food materials (Table 6).

Table 6: Knowledge of respondents about preparation for birth and its complication, in selected Addis Ababa health centers, 2011(n=290).

Variable	Responses	frequency	Percent
Identify place of delivery	Yes	128	44.1
	no	162	55.9
	Total	290	100.0
Saving money	Yes	206	71.0
	No	84	29.0
	Total	290	100.0
Preparing materials for safe delivery	Yes	26	9.0
	no	264	91.0
	Total	290	100.0
Identify skilled health care provider	Yes	54	18.6
	no	236	81.4
	Total	290	100.0
Awareness on danger sign	Yes	111	38.3
	no	179	61.7
	Total	290	100.0
Designate decision maker	Yes	48	16.6
	no	242	83.4
	Total	290	100.0
Arranging a way to communicate with a source of help	Yes	74	25.5
	no	216	74.5
	Total	290	100.0
Emergency fund	Yes	106	36.6
	no	184	63.4
	Total	290	100.0
Means of transportation	Yes	103	35.5
	no	187	64.5
	Total	290	100.0
Prepare blood donors	Yes	15	5.2
	no	275	94.8
	Total	290	100.0
Identify health care facilities which are 24 hours on duty	Yes	101	34.8
	no	189	65.2
	Total	290	100.0

Out of the total respondents 31.3% are considered knowledgeable on danger sign during pregnancy, 17.2% were considered knowledgeable on danger sign during delivery, 21.7% considered knowledgeable on identifying danger sign during post partum period. Regarding birth preparedness 46.2% of the respondents considered knowledgeable (Table 8).

Table 7: respondents considered knowledge and well prepared for birth and its complication, in selected Addis Ababa health centers, 2011

Variables	Category	Frequency	Percentage
Knowledgeable about danger sign during pregnancy	Yes	123	42.4
	No	167	78.7
	Total	290	100
Knowledgeable about danger sign during labour and delivery	Yes	50	17.2
	No	240	82.8
	Total	290	100.0
Knowledgeable about danger sign during Postnatal	Yes	63	21.7
	No	227	78.0
	Total	290	100.0
Knowledge about birth preparedness	Yes	134	46.2
	No	156	53.8
	Total	290	100.0
Practice of birth preparedness	Yes	199	68.6
	No	91	31.4
	Total	290	100.0

Practice on birth preparedness

Majority of the respondents reported that they made some arrangement for the birth of their baby, of these 248(85.5%) answered that they identified place of delivery, 239(82.4%) saved money, 222(76.6%) prepared material for safe delivery,93 (32.1%) identified skilled provider,197(67.9%) identify danger sign,130(44.8%) delegate decision maker,225 (77.6%) saved emergency fund, 181(62.4%) arranged means of transportation,60(20.7%)prepared Blood donors,221(76.2%) identified facility which works 24 hours (Table 8).

Table 8: Practices of respondents on preparation for birth, in Addis Ababa 2011,n=290

Variable	Category	frequency	Percent
Identified place of delivery	Yes	248	85.5
	no	42	14.5
	Total	290	100.0
Saving money	Yes	239	82.4
	no	51	17.6
	Total	290	100.0
Preparing materials for safe delivery	Yes	222	76.6
	no	68	23.4
	Total	290	100.0
Have you Identified skilled health care provider	Yes	93	32.1
	no	197	67.9
	Total	290	100.0
Did you identify danger sign	Yes	197	67.9
	no	93	32.1
	Total	290	100.0
Designate decision maker	Yes	130	44.8
	no	160	55.2
	Total	290	100.0
Prepared emergency fund	Yes	225	77.6
	no	65	22.4
	Total	290	100.0
Means of transportation	Yes	181	62.4
	no	109	37.6
	Total	290	100.0
Prepared blood donors	Yes	60	20.7
	no	230	79.3
	Total	290	100.0
Identified health care facilities which are 24 hours on duty	Yes	221	76.2
	no	69	23.8
	Total	290	100.0

Maternal socio-demographic and obstetric factors associated with their knowledge of danger signs during pregnancy

In the bivariate analysis significant association was observed between the educational status of mothers and their knowledge about danger signs during pregnancy. Illiterate mothers were 0.42 times less knowledgeable about danger signs of pregnancy than those who were secondary and above (COR=0.42(95% CI=0.21, 0.82))

Maternal income was among the socio-economic factors which was significantly associated with the knowledge of danger signs during pregnancy. Mothers with the income of 500-1000 Birr per month were 2.86 times more likely to have knowledge about danger sign during pregnancy as compared to those who were with no income(COR=2.86 (95% CI=1.41,5.78)) but the significant association between educational status, income and danger sign during pregnancy was not retained in the multivariate analysis (**Table 9**)

Association between marital status, parity, gestational age and knowledge of danger signs during pregnancy was tested in the bivariate and multivariate analysis and found to be no association.

Table 9: Association of maternal socio-demographic variables with their knowledge of danger sign during pregnancy, in selected Addis Ababa health centers, 2011

Variable	Category	Knowledge of danger signs during pregnancy					
		Yes	No	COR(95%CI)	P value	AOR(95%CI)	P value
Marital status	Married	111(42.2%)	152(57.8%)	0.91(.41,2.02)	0.91	0.92(.36,2.30)	0.64
	Not Married	12(44.4%)	15(55.6%)	1.0			
Educational status	Illiterate	16(26.2%)	45(73.8%)	0.42(0.21, 0.82)	0.01	0.12(0, 33, 0.83)	0.15
	Primary	49(48%)	53(52%)	1.10(0.65, 1.86)			
	Secondary & above	58(45.7%)	69(54.3%)	1.00			
Occupation	House wife	70(37.2%)	118(62.8%)	0.63(0.30,1.32)	0.22	0.58(0.19,1.74)	0.33
	Govrnt.empl	16(66.7%)	8(33.3%)	2.1(.71,6.31)			
	Private empl	21(46.7%)	24(53.3%)	0.93(0.38,2.28)			
	Busines	16(48.5%)	17(51.5%)	.1.0			
Income	100-300	5(25%)	15(75%)	0.55(.19,1.58)	0.26	0.33(.08,1.33)	0.12
	3001-500	14(43.8%)	18(56.3%)	1.28(.60,2.74)			
	501-1000	26(63.4%)	15(36.6%)	2.86(1.41,5.78)			
	>1000	9(64.3%)	5(35.7%)	2.97(0.95,9.23)			
	No income	69(37.7%)	114(62.3%)	1.0			
Gravidity	1	69(46.6%)	79(53.4%)	1.74(.56,5.35)	0.32	2.25(0.25,19.87)	0.46
	2-3	49(38.6%)	78(61.4%)	1.25,.40,3.89)			
	4+	5(33.3%)	10(66.7%)	1.0			
Parity	0	79(46.1%)	89(53.9)	1.49(.42,5.30)	.534	.71(.04,12.05)	0.81
	1-2	43(37.7%)	71(62.3)	1.06(.29,3.83)			
	>3	4(36.4%)	7(63.6%)	1.0			
Live birth	0	70(45.7%)	94(54.3%)	.53(.64,3.04)3.04	.395	.95(.21,4.3)	0.95
	1-2	32(37.6%)	53(62.4%)	.39(.64,3.04)			
	>2	12(37.5%)	20(62.5%)	.1.0			
Stillbirth	0	116(42.5%)	157(57.5%)	.55(.12,2.52)	.445	.34(.04,2.53)	0.29
	1	3(30%)	7(70%)	.321(.043,2.41)			
	2+	4(57.1%)	3(42.9%)	1.0			
Gestational age	1-4	4(33.3%)	8(66.7%)	.722(.202,2.580)	.616	.48(.09,57)	0.39
	5-8	83(43.7%)	107(56.3%)	1.12(.671,1.87)			
	>8	36(40.9%)	52(59.1%)	1.0			

Maternal socio-demographic and obstetric factors associated with their birth preparedness

There was a statistically significant association between gestational age and preparation for birth and its complication. Women with the gestational age range of 5-8 months are 0.53 times less likely to prepare for birth and its complication when compared with the mothers greater than 8 months of pregnancy. (OR=0.53(95%CI=0.29, 0.98)(Table 10).

Table 10: Association of selected socio-demographic and obstetric factors of respondents with the Practice of birth preparedness Addis Ababa, in selected health center, n=290)2011.

Variable	Category	Practice of birth preparedness					
		Yes	No	COR(95%CI	P-value	AOR(95%CI)	P-value
Marital status	Married	182(69.2)	81(30.8%)	1.32(.58,3.01)	0.80	.921(.367,2.308)	0.86
	Unmarried	17(63%)	10(37.0%)	1.0			
Occupation	House wife	122(64.9%)	66(35.1%)	.592(.253,1.385)	0.22	1.01(.29,3.42)	0.98
	Government	19(79.2%)	5(20.8%)	1.216(.343,4.315)	0.72	.52(.12,2.29)	0.39
	Private empl	33(73.3%)	12(26.7%)	.880(.313,2.476)	0.80	.62(20,1.91)	0.41
	Business	25(75.8%)	8(24.2%)	1.0			
Education	Illiterate	39(63.9%)	22(36.1%)	648(.337,1246)	0.19	.594(.27,1.26)	0.17
	Primary	67(65.7%)	35(34.3%)	.700(.397,1214)	0.21	.708(.37,1.32)	0.28
	Secondary above	93(73.2%)	34(26.8%)	1.0			
Income	100-300	14(70.0%)	6(30.0%)	1.316(.483, 3.588)	0.59	2.122(.534,8.437)	0.28
	3001-500	24(75.0%)	8(25.0%)	1.692(.720, 3.980)	0.22	1.738(.5006,0.039)	0.38
	501-1000	32(78.0%)	9(22.0%)	2.006(.902, 4.458)	0.08	2.522(.741,8.576)	0.13
	>1000	12(85.7%)	2(14.3%)	3.385(.735, 15.58)	0.11	5.387(.708,40.999)	0.10
	No income	117(63.9%)	66(36.1%)	1.0			
Gravidity	1	95(64.2%)	53(35.8%)	.000 .000	0.99	.000 .000	0.99
	2-3	89(70.1%)	38(29.9%)	.000 .000	0.99	.000 .000	0.99
	4+	15(100%)	.0(0)				
Parity	0	106(64.2%)	59(35.8%)	.000 .000	0.99	0.54(.000,	1.00
	1-2	82(71.9%)	32(28.1%)	.000 .000	0.99	0.81(.000,	1.00
	>3	11(100.0%)	0(0%)	1.0			
Live birth	0	111(64.2%)	62(35.8%)	41(.16,1.05)	0.41	0.61(.10,3.46)	0.58
	1	62(72.9%)	23(27.1%)	.62 (.22,1.70)	0.62	1.70(.53,5.46)	0.36
	2+	26(81.3%)	6(18.8%)	1.0	0.43		
Stillbirth	0	162(66.7%)	91(33.3%)	.000 .000	1.00	.000(.000,..)	0.99
	1	10(100.0%)	0(0%)	1.000 .000	0.99	0.43(.000,	1.00
	2+	7(100.0%)	0(9%)	1.0		1.0	
Gestational age	1-4	9(75.0%)	3(25%)	1.10(.29,4.76)	0.80	0.28(.04,1.72)	0.17
	5-8	127(66.8%)	63(33.2%)	.80(.46,1.39)	0.42	0.53(.29,.98)	0.04
	>8	63(71.6%)	25(28.4%)	1.0		1.0	

CHAPTER SIX

DISCUSSION

The aim of this study was to assess knowledge and practice of birth preparedness and complication readiness among antenatal attendees in selected Addis Ababa health centers.

Current approach of decreasing the delay in taking action is birth preparedness and complication readiness. Knowledge of danger signs of obstetric complication is the first step in appropriate and timely referral for essential obstetric care. The spontaneous knowledge of respondent about key danger signs were indicative for the poor awareness of women and a possible high chance of poor outcome of pregnancy. This could be attributed to presence or absence of relevant intervention to promote birth preparedness and complication readiness as well as utilization of health care service (2, 3).

In this study when spontaneous knowledge of danger signs during pregnancy is considered, only 96(47.1%) mentioned vaginal bleeding ,this was high comparing with the study done in Adigrat 2006 (22), in which 59(10.9%)and 107(9.6%)in Tanzania,(5).

The proportion of respondent who reported that they have the information about danger signs of pregnancy was 204(70.7%). Out of these respondents, considered knowledgeable and well prepared for birth and its complication were 123(42.4%), 50(17.7%), 63(21.7%), during pregnancy, delivery, and postpartum respectively. This finding was higher than the finding from Kenya, 2006(16) in which only 67% of mothers knew at least one danger sign, but (6.9%) mothers knew at least 3 danger signs of pregnancy.

One hundred thirty four (46.2%) of the respondents reported that they heard the term birth preparedness. However, it seems that the respondents consider that anything which is done

before child birth like preparing flour for porridge as birth preparedness regarding the recommended elements which have to be done as birth preparedness.

In this study 106(36.6%) of mothers saved money in case of emergency during labour. This finding was lower than the finding from Kenya,2006(16) in which 62.9% of mothers set aside money for emergency, this could be due to lack of consideration of unpredicted event during the process of labour and delivery. But this finding was higher when compared with the finding from Adigrate, 2006(20) in which 154(28.8%) of mothers saved money for emergency. The reason could be that the study was conducted in the center of the city where better access of health care is available and is lower when compared with the finding in Burkinafaso (2004) which was 83.3%(19).

Even when money is available, it can be difficult to secure transportation at the last minute after a complication has arisen. Arranging transport ahead of time reduces the delay in seeking and reaching service (3). In this study 103(35.5%) of the respondents spontaneously mentioned identifying mode of transportation for childbirth which is higher when compared to a study in Nepal(22)which was (1.5% in base line study) and from Adigrat (20) which was 54(10.1%).

The reason could be that they may not use the WHO recommended antenatal card where the component of birth preparedness are in the cards.

One hundred twenty eight (44.1%) of the respondents spontaneously mentioned identifying place of delivery. About 78% of the respondents reported that they identified place of delivery ahead of childbirth which is high when compared with the result from Adigrat (20)which was 140(26.2%)and the result were almost similar with the finding from India which was 47.8%

There was a statistically significant association between gestational age and preparation for birth and its complication .

Women with the gestational age range of 5-8 months are 0.53 times less likely to prepare for birth and its complication when compared with the mothers greater than 8 months of pregnancy (OR=0.53(95%CI=0.29, 0.98).this could be justified as the mothers approaches to 9 month gestational age they have the opportunity of getting health education on birth preparedness which implies the health education starts later in the gestational age.

Strength and limitation of the study

Strength of the study

- The study has include all the illegible subjects in the selected health centers and has got 100% response rate
- The questioner was pretested on similar setting and a necessary modification was made to minimize the difficulty during the data collection.
- Recall bias was minimized since it focused on pregnant women who were in their 2nd visit and above

Limitation of the study

- Since the study is cross –sectional it may not be strong to demonstrate direct cause and effect between dependent and independent variables.
- Since the data collectors were Health professionals there may be some social desirable responses for some of the variables.
- Lack of adequate similar studies in our country to make comparative discussion.

CHAPTER SEVEN

CONCLUSION AND RECOMMENDATIONS

7.1 Conclusions

Education and counseling on different aspects of birth preparedness was not provided to all clients. Respondent's knowledge of danger signs in pregnancy was low. Many respondents did not know about birth preparedness and had no plans for emergencies. The present study identified poor comprehensive knowledge and practices of birth preparedness in the study area in general, and poor knowledge on danger sign of obstetrics complication in particular. The information given about danger signs and birth preparedness during the ANC follow up was not comprehensive.

7.2 Recommendations

- Strengthening of health services in promoting early ANC attendance and improving the information given during the follow up, with special emphasis given to birth preparedness in general and information on danger signs in particular is recommended.
- Empowerment of women by expanding education opportunity and increase women's autonomy within the family to enhance their ability to earn the control house hold saving and decide by themselves on their own health.
- Further studies on birth preparedness at individual, family and community level is suggested
- This study suggested that repeated capacity building workshops for skilled providers to enhance their capabilities for improving the efficiency of ante -natal services.

Reference

1. World Health organization (WHO), Analysis of causes of maternal deaths:
A systematic review.” The Lancet, vol. 367, April 1, 2006.accesed on November 10. 2010
2. JHIPEGO, Maternal and neonatal program. Birth preparedness and complication readiness: A Matrix of shared responsibilities. MNH; 2001.
3. JHIPEGO, Monitoring Birth preparedness and complication readiness, tools and indicators for maternal and newborn health. Johns Hopkins, Bloomberg school of Public Health, Center for communication programs, Family Care International; 2004. Available at:
Available at [http://pdf.dec.org/pdf_docs/ PNADA619.pdf](http://pdf.dec.org/pdf_docs/PNADA619.pdf), accessed on: 10/09/2010
4. The White Ribbon Alliance for Safe Motherhood/India. Saving Mothers’ Lives: What works, a field guide for implementing best practices in safe motherhood. Best practices Sub-committee, April 11, 2010.
5. Pembe AB , Urassa DP , Carlstedt A, Lindmark G,Nyström L and Darj E, Rural Tanzanian women's awareness of danger signs of obstetric complication.
BMC Pregnancy and Childbirth 2009, 9:12. Available from:
<http://www.biomedcentral.com/1471-2393/9/12>, accessed on Nov1/2010
6. WHO, Reduction of Maternal mortality joint WHO/UNFPA/UNICEF/World Bank Statement WHO, Geneva, 2010.Available [URL:htt//www.who.int/reproductive](http://www.who.int/reproductive)
7. Federal Democratic Republic of Ethiopia, Ministry of Health. Health and Health related indicators: Policy Plan and Finance General Directorates (FMOH) June 2010.

8. Central Statistical Authority (CSA, Ethiopia) and ORC Macro2006.Ethiopia
Demography and Health Survey, 2005. Addis Ababa, Ethiopia, & Calverton,
Maryland, USA: Central Statistical Authority (Ethiopia & ORC Macro.
9. Berhane Y, Abdela A. Emergency obstetric performance with emphasis on
operative delivery outcome: does it reflect the quality of care?
Ethiop.J. Health Deve 2004 18 (2):96-106
10. Kitilla T. Reasons for referrals and time spent from referring sites to arrival at Tikur
Anbessa Hospital in emergency obstetric: A prospective study. *Ethiop. J. Health Dev.*
2001; 15(1): 17-23.
11. Kwast BE, Rochat RW, Kidane mariam W. Maternal mortality in Addis Ababa,
Ethiopia. *Inter J.of Epid October 2010 V 39.N5,PP 115-121*
12. WHO: Mother-Baby Package: Implementing Safe Motherhood in Countries.
Practical Guide: Maternal Health and Safe Motherhood Programmed.
In *Division of Family Health* Geneva: World Health Organization; 2005
13. Maternal and Neonatal Health (MNH) Program. Birth Preparedness and Complication
Readiness: A Matrix of Shared Responsibilities (Original BP/CR Matrix poster
published in 2001. English introductory text revised in 2004.)
14. Barba Kinzie,Patricia Gomez, Basic Maternal and Newborn care:
A Guide for Skill Provider, 2004, Geneva.
15. JHPIEGO, Maternal and Neonatal Health Program. Birth preparedness and
Complication readiness: a matrix of shared responsibilities. Baltimore, MD: 2001. 12 p.

16. Mutiso SM, Qureshi Z, Kinuthia J., Birth preparedness among antenatal clients at Kenyatta National Hospital, Nairobi, Kenya. *East African Medical Journal* Vol. 85 (6) 2008: pp. 275-283(Abstract).
17. Sussan Scott Ricci, Essential of Maternity, Newborn, and Women's Health:
Publisher Hale, T.W. 2007
18. Barbara Kinzie, Patricia Gomez, Basic Maternal and Newborn Care: A Guide for Skilled provider year, Publisher Jhapigo, Geneva Edited: Rebca 2004
19. AC Moran, G Sangli, R Dineen, B,Rawlins, M,Yaméogo B Baya.
Birth-preparedness for maternal health: findings from Koupéla District, Burkina Faso. *Journal of Health, Population, and Nutrition*. 2006 Dec; 24(4): 489-497) Available at <http://www.icddrb.org/pub/publication.jsp>
20. Hiluf M, Fantahun M. Birth Preparedness and Complication Readiness among Women in Adigrat town, North Ethiopia. *Ethiop. J. Health Dev.* 7, 22(1): 14-20
21. Argomal S, Sethi V, Srivastava K, JhaPK, BaquiAH,
Birth preparedness and complication readiness, *Health Popul Nutr.*2010;28(4):383-910.
22. Tuladhar. H, Khanal. R, Kayastha S, Shrestha .P, and Giri.A. Complications of home delivery: Our experience at Nepal Medical College Teaching Hospital . *Nepal Med Coll* 2009, 11(3): 164-16923.
23. Thaddeus S and D Maine. Too far to walk: maternal mortality in context. *Soc Sci Med.*1994; 38(8): 1091-1110.

Annex I

Addis Ababa University
College of health sciences
Department of nursing and midwifery

Annex I: Information Sheet

Questionnaire on Assessment on birth preparedness and complication readiness in Addis Ababa health centers

Code of the health institution_____

Hello! My name is (Name of the data collector-) _____. We are conducting health research on Assessment knowledge and practice on Birth preparedness and complication readiness among antenatal clients. This is beneficial to identify areas of improvement in the pregnant birth preparedness and highlighting the need for corrective actions. By doing this we will provide sufficient information for policy makers, clinicians so that they could make informed decision. In order to attain this goal, you are kindly requested to provide your genuine response on the questions given below. I would like to confirm you that you have the right to stop the interview at any time or skip any question that you do not wish to answer. Because taking part in this survey is voluntary and your responses will be held in strict confidence. Your privacy will also be protected and no one will know your answer. If you do not wish to participate, it will not affect the services you receive at the clinic now or in the future. I also request you to answer it candidly because your answers are like one important piece of brick in the whole research and determine the outcome of this study. Thank you very much for your willingness to listen to me. In case if you have any question you can ask:

Luchia Araya Mobile phone: +251-911-172460

Are you willing to participate?

If the answer is, YES, - Please continue

NO _____ Thanks her

Signature: _____ Date: _____

**አዲስ አበባ ዩኒቨርሲቲ የጤና ሳይንስ ኮሌጅ
የነርቪንግና የሚድዊፈሪ ትምህርት ክፍል**

የጥናቱ መጠይቅ ቅጽ

በዚህ ሰነድ ላይ በመፈረም በአምስት ጤና ጣብያዎች የሚካሄደው እርጉዞች ለመውለድ ዝግጅትና ሊያጋጥምክ የሚችሉ ችግሮች ተዘጋጅቶ ስለመጠበቅ ያላቸው ዕውቀትና ተግባር እንዲሁም ከተግባር ጋር የተያያዘ ጉዳዮችን ለመፈተሽ የሚደረገው ጥናት ላይ ለመሳተፍ ፍቃደኛ መሆኔን እገልጻለሁ።

የጥናቱ ርዕስ

እርጉዞች ለመውለድ ዝግጅትና ሊያጋጥምክ የሚችሉ ችግሮች ተዘጋጅቶ ስለመጠበቅ

የጥናቱ አላማ

የጥናቱ አላማ በእርግዝና ውቅት፣ በመውለድ ጊዜ እና ከውሊድ በኋላ ለሚያጋጥሙ የጤና ችግሮች ለመፍታት ያለ መዘናጋት ለመቀነስ አስፈላጊ የሆነ እቅድ ለማውጣትና በተግባር ለማዋል የእናቶችና አዲስ ለሚወለዱ ህፃናት ህይወት ለማዳን የሚጠቅም ማስረጃ ለማግኘት መሆኑ ተነግሮኛል። በዚህ ጥናት ላይም በተራዬ እንድሳተፍ ተጠይቂያለሁ።

በጥናቱ ላይ መሳተፍ በፈቃደኝነት ላይ የተመረከዘ መሆኔንና የመሰጠው መረጃም ለጥናቱ አላማ ብቻ እንደሆነ ተነግሮኛል። በጥናቱ ላይ አለመሳተፍ ወይም መሳተፍ ጀምሮ ማቋረጥ ከፈለግሁ ማቆም እንደሚችል እንዲሁም መመለስ የማልፈልጋቸውን ጥያቄዎች አለመመለስ እንደምችል ተነግሮኛል። ነገር ግን በጥናቱ ላይ ባለመሳተፌ እኔም ሆነ ቤተሰቦቼ በምናገኘው አገልግሎት ላይ ምንም ዓይነት ተፅእኖ ወይም ጉዳት እንደሌለው ተረድቻለሁ።

በተጨማሪም የምሰጣቸው መልሶች ለማንም እንደማይሰጡና በሚስጥር እንደሚጠብቁ እንዲሁም በዚህ ጥናት ሪፖርትም ውስጥ የሰጠሁት የእኔ ለመሆኑ ማንም ሊያውቀው እንደማይችል ተገንዝቢያለሁ። በዚህ ጥናት በመሳተፍ የምሰጠው መረጃ ግን የጥናቱን አላማ ለማሳካት እና የእናቶች ለውሊድ ዝግጅትና ለሚመጣው ችግር ተዘጋጅቶ በመጠበቅ ላይ ለውጥ ለማምጣት ከፍተኛ ጠቀሜታ እንዳለው ተገንዝቢያለሁ።

ይህን ጥናት በተመለከተ ጥያቄ ካልዎት በ 0911 172460 ደውለው ይጠይቁ።

የተሳታፊ ፊርማ _____

ቀን _____

አመሰግናለሁ።

Annex – II

Addis Ababa University
College of health sciences
Department of nursing and midwifery

Consent Form

My name is. -----(Interviewer)

I temporarily represent Addis Ababa University, college of health science, Department of Nursing and midwifery. This is a study to be conducted with the objective of assessing knowledge and practices with respect to birth preparedness and complication readiness and factors associated with their practices among women who are antenatal clients. As the study is directly related to women who are antenatal clients, you are one of the women who have been selected randomly to participate in this study. Therefore, you are kindly requested to participate in this study and provide the information required from you. I would like to ask you a few questions if I may, but you can refuse to answer any question I ask. You may end the interview at any time. You can also refuse to participate in the study entirely. Your refusal will not restrict you from obtaining the required medical care when you need. The interview will last approximately 30 minutes. Your responses will be kept confidential and there will be no way of linking your individual responses to the final results of the study findings. We would like to inform you that the responses that you provide to the questions are very essential, not only, for the successful accomplishment of the study, but also for producing relevant information which will be helpful in the planning and implementation of intervention activities to prevent delays and improve maternal and neonatal survival. Are you voluntary to respond to the questions? Yes; ---proceed with the interview No; ---- thank her and End.

Name of interviewer who sought the consent: _____

Date Signature: _____

Name of supervisor: _____

**አዲስ አበባ ዩኒቨርሲቲ የጤና ሳይንስ ኮሌጅ
የነርቪንግና የሚድዊፊሪ ትምህርት ክፍል**

የስምምነት ማስገንዘቢያ ቅጽ

ጤና ይስጥልኝ፤ ስሜ _____

እኔ በአዲስ አበባ ዩኒቨርሲቲ የጤና ሳይንስ ኮሌጅ የነርቪንግና የሚድዊፊሪ ትምህርት ክፍል በጊዜያዊነት ወክዬ ነው ይህ የጥያቄና ምልስ ይገዢ የመጣሁት።

ይህ ጥናት የሚካሄደው እርጉዞች ለወሊድ ዝግጅትና ልዩጋጥሙ የሚችሉ ችግሮች ተዘጋጅቶ ስለመጥበቅ ያላቸው እውቀትና ተግባር እንዲሁም ከተግባር ጋር የተያያዙ ጉዳዮችን ለመፈተሽ ነው።

ይህ ጥናት ከነፍሰጡር እናቶች ጋር በቀጥታ የተያያዘ ስለሆነ በጥናቱ እንዲሳተፉ በእጣ ከተመረጡ ሴቶች አንዱ እርስዎ ነዎት። ስለዚህ እዚህ ጥናት ላይ እንዲሳተፉና አስፈላጊ መረጃ እንዲሰጡን በተህተና እንጠይቃለን። ይሁን እንጂ ማንኛውም ጥያቄ አለመመለስ ይችላሉ። እንዲሁም በማንኛውም ጊዜ ይያቁውን ማቋረጥና በጥናቱ አለመሳተፍ ይችላሉ።

በጥናቱ ባለመሳተፍዎ ማግኘት ከሚገባዎ አገልግሎት ከማግኘት አያግድዎትም።

ጥያቄና መልሱ 30 ደቂቃ ይወስዳል።

ይህ በግልጽ የሚሰጡት መልስም በሚስጥር የሚጠበቅ ስለሆነ ከጥናቱ ውጤት ጋር በምንም የሚያያዝ አይደለም። ላረጋግጥልዎ የምንፈልገው ግን ይህ የሚሰጡት መልስ በጣም አስፈላጊ የሚሆነው ጥናቱን ለማጥናት ብቻ ሳይሆን በእርግዝና ውቅት ፣ በወሊድ ጊዜ እና ከውሊድ በኋላ ለሚያጋጥሙ የጤና ችግሮች ለመፍታት ያለ መዘጋጀት ለመቀነስ አስፈላጊ የሆነ እቅድ ለማውጣትና በተግባር ለማዋል የእናቶች እና አዲስ ለሚወልዱ የህፃናትን ህይወት ለማዳን የሚጠቅም አስተያየት ለማግኘትም ነው።

ጥያቄ ካልዎት

ሎችያ አርአያ 0911172460 ይደውሉ።

Annex -III English version questionnaires for exit interview

Identification Information

001. Code No. _____

002. Kifle ketema _____ Keble _____ House no. _____

Section 1: Socio-demographic Information

101. Age in completed years in year: -----

102. Marital status:-

01. Single

02. Married/in union

03. Widowed

04. Divorced /Separation

103. Religion:

01. Orthodox

02. Catholic

03. Protestant

04. Muslim

97 Other (Specify)

104. Ethnicity:

01. Amhara

02. Oromo,

03. Tigray

04. Guragae,

97 Other (Specify) _____

105. Occupation:

01. Housewife,

02. Govt. employee

03. Private employee

04. Business

97 Other (Specify) _____

106. Educational status

- 01. Illiterate:
- 02. Read & write
- 03. 1-6 grade
- 04. 7-8 grade
- 05. Secondary +1
- 06. Diploma & above

107. Monthly income in Eth. Birr: -

- 01. 100 – 300
- 02. 301 – 500
- 03. 501 – 1000
- 04. > 1000

108. Husband's age in completed years-----

109. Husband's occupation:-

- 01. Govt. employee
- 02. Private employee
- 03. Business
- 97. Other (Specify)_____

110. Husband's educational status Illiterate

- 01. Read & write
- 02. Primary
- 03. Secondary and above,

111. Family size: -----

- 01. 1 – 3
- 02. 4 – 6
- 03. >6

Section 2: Gravidity and parity

201. How many times in total you became pregnant?

01. 1 02. 2 – 3

03. 4 and above

202 How many times in total you gave birth?

01. 0 02. 1 – 2

03. > 3

203 How many of your pregnancies resulted in a baby that was born Alive?

01. 0 02. 1

03. 2 and above

204 How many of your pregnancies resulted in a baby that was born Dead?

01. 0 02. 1

03. 2 +

Section 3: Knowledge

301. Do you know any/some serious health problem/s that can occur during pregnancy that could endanger the life of a pregnant woman?

01 Yes 02 No —————> 303

302. Can you mention them?

01. Vaginal bleeding

02. Severe headache

03. Blurred vision

04. Convulsions

- 05. Swollen hands/face.
- 06. High fever
- 07. Loss of consciousness
- 08. Difficulty breathing
- 09. Severe weakness
- 10. Severe abdominal pain
- 11. Accelerated/reduced fetal movement
- 12. Water breaks without labor
- 97. Other (Specify)-----

303. Do you know any/some serious health problem/s that can occur during labor and Child birth? that could endanger the life of a pregnant woman?

01 Yes 02 No  305

304. Can you mention them?

- 01. Severe vaginal bleeding
- 02. Severe headache
- 03. Convulsions
- 04. High fever
- 05. Loss of consciousness
- 06. Labor lasting >12hours
- 07. Placenta not delivered 30 minutes after delivery
- 97. Other (Specify)_____

305. Do you know any/some serious health problem/s that can occur during the first 42 days after birth that could endanger the life of the women?

01 Yes 02 No —————>307

306. Can you mention them?

- 01. Severe vaginal bleeding
- 02. Severe headache
- 03. Blurred vision.
- 04. Convulsions
- 05. Swollen hands/face
- 06. High fever
- 07. Loss of consciousness.
- 08. Difficulty breathing.
- 09. Severe weakness
- 10. Malodorous vaginal discharge
- 97. Others (specify)_____

307. Have you ever heard the term “birth preparedness?

01 Yes 02. No —————> 309

308. From whom did you get the information?

- 01. Health professional
- 02. TTBA
- 03 . CHW,
- 04. Mothers
- 05. Media
- 06 . Other(specify)_____

309. In your opinion, what are some things a woman can do to prepare for birth?

01. Identify place of delivery

02. Save money

03. Prepare essential items for clean delivery & post partum period

04. Identify skilled provider

05. Being aware of the signs of an emergency & the need to act immediately

06. Designating decision maker on her

07. Arranging a way to communicate with a source of help

08. Arranging emergency funds

09. Identify a mode of transportation

10. Arranging blood donors

11. Identifying the nearest institution that has 24 hours functioning EmOC services

97. Other . (specify) -----

Section 4 Practices of respondents on preparation for birth, in selected health center, Addis Ababa

401. Do you Identify place of delivery

01. Yes ___ 02. No ___

402. Are you saving money?

01. Yes ___ 02. No ___

403. Are you preparing essential items for clean delivery & pos partum

01. yes ___ 02. No ___

404. Have you identified skilled provider

01. *yes* ____ 02. *No* ____

405. Can you detect early signs of an Emergence?

01. *Yes* ____ 02. *No* ____

406. Have you Designated decision maker

01. *yes* ____ 02. *No* ____

407. Have you arranged for emergency funds?

01. *yes* ____ 02. *No* ____

408. Have you Identified mode of Transportation

01. *yes* ____ 02. *No* ____

409. Have you arranged blood donor

01. *yes* ____ 02. *No* ____

410. Have you Identified institution with 24 hr EmOC services

01. *yes* ____ 02. *No* ____

This is the end of the interview.

THANK YOU!

Date of data collection _____

Name of data collector _____

Signature _____

Name of supervisor _____

Signature _____

ቃለ መጠይቅ

መለያ መረጃ

001. የኮድ ቁጥር: _____

002. ክ/ከተማ: _____ ቀበሌ: _____ የቤ.ቁ: _____

ክፍል 1: ስነ ህዝብና ማህበረሰብ ጉዳዮች

101. እድሜ:- _____

102. የጋብቻ ሁኔታ:- 1. ያገቡ 2. ያላገቡ 3. ባል የሞተባቸው 4. የፈቱ

103. ሐይማኖት: 1. ኦርቶዶክስ 2. ካቶሊክ 3. ፕሮስቴስታንት 4. ሙስሊም

5. ሌላ ከሆነ ይጠቀስ _____

104. ብሄር:- 1. አማራ 2. አሮሞ 3. ትግሬ 4. ጉራጌ

5. ሌላ ከሆነ ይጠቀስ _____

105. ስራ:- 1. የቤት እመቤት 2. የመንግስት ሰራተኛ 3. የግል ተቀጣሪ

4. የግል ንግድ ሥራ 5. ሌላ ከሆነ ይጠቀስ _____

106. የትምህርት ደረጃ:- 1. ያልተማሩ 2. አንደኛ ደረጃ 3. ሁለተኛ ደረጃ ና ከዚያ

በላይ

107. ወረርሃዊ ክፍያ ቡብር:- 1. 100-300 2. 301-500 3. 501-1000 4. >1000

108. የባል እድሜ:- _____

109. የባል ስራ:- 1. የመንግስት ሰራተኛ 2. የግል ተቀጣሪ 3. የግል ንግድ

110. የባል የትምህርት ሁኔታ:- 1. ያልተማሩ:- 2. አንደኛ ደረጃ 3. ሁለተኛ ደረጃ

ና ከዚያ በላይ

111. የባል የወር ገቢ :- 1. 100-300 2. 301-500 3. 501-1000 4. >1000

112. የቤተሰብ ብዛት: _____

ክፍል 2. : የዕርግዝና እና የወሊድ ሁኔታ

201. በአጠቃላይ ምን ያህል ጊዜ እርጉዝ ሆነው ያውቃሉ?_

1. 1 2. 2 – 3 3. ከ 4 በላይ

202. በአጠቃላይ ምን ያህል ጊዜ ልጅ ወልደዋል?

1. 0 2. 1 – 2 3. ከ 3 በላይ

203. ከእርግዝና ጊዜዎት ውስጥ ምን ያህል ጊዜያት ህይወት ያለው ልጅ ወልደዋል?

1. 0 2. 1 3. ከ 2 በላይ

204. በእርግዝና ጊዜዎት ውስጥ ምን ያህል ጊዜያት ህይወቱ ያለፈ ልጅ ወልደዋል?

1. 0 2. 1 3. ከ 2 በላይ

205. የእርግዝና ወቅት _____

ክፍል 3. : እውቀት

301. በእርግዝና ወቅት ህይወት አደጋ ላይ ይጥላል ወይም ይጥላሉ የሚባሉ የጤና ችግሮች ያውቃሉ?

1. አዎ 2. አላውቅም

302. መልስዎ አዎ ከሆነ የጤና ችግሮችን መጥቀስ ይችላሉን?

- 1. የሴት ብልት መድማት
- 2. ከፍተኛ የራስ ምታት
- 3. የማየት ችግር
- 4. መንቀጥቀጥ
- 5. የፊት/የእጅ አብጠት
- 6. ከፍተኛ ትኩሳት
- 7. እራስን መሳት
- 8. የመተንፈስ ችግር

- 9. ክፍተኛ ድካም
- 10. ክፍተኛ የሆድ ህመም
- 11. የተፋጠነ/ወይም የዘገመ የሽል እንቅስቃሴ
- 12. የእንሽርት ውሃ መፍሰስ
- 97. ሌላ ካለ ይጥቀሱ _____

303. በምጥና በልጅ መውለጃ ጊዜ ሊከሰቱ የሚችሉ ለእናት አደጋ ላይ ሊጥሉ የሚችሉ የጤና ችግር ያውቃሉ?

- 1. አዎ
- 2. አላውቅም

304. መልስዎ አዎ ከሆነ መልስዎ ሊዘረዝሩት ይችላሉ?

- 1. የማህፀን መድማት
- 2. ክፍተኛ የራስ ምታት
- 3. መንቀጥቀጥ
- 4. ክፍተኛ ትኩሳት
- 5. እራስን መሳት
- 6 ምጥ ከ12 ሰዓት በላይ ሲቆይ
- 7. ከወለዱ በኋላ ለ30 ደቂቃ የእንግዶ ልጅ አለመውጣት

97. ሌላ ካለ ይጥቀሱ: _____

305. የወለደች ሴት ህይወት አደጋ ላይ ሊጥል የሚችሉ እና ከወለዱ በኋላ በመጀመሪያዎቹ 42 ቀናት ውስጥ ሊከሰቱ የሚችሉ ማንኛውም ወይም በጤና ላይ ክፍተኛ ችግር የሚያስከትሉ ነገሮችን ያውቃሉ?

- 1. አዎ
- 2. አላውቅም

306. መልስዎ አዎ ከሆነ ሊዘረዘሩቸው ይችላሉ?

- 1. ከባድ የማህፀን ደም መፍሰስ
- 2. ከፍተኛ የራስ ምታት
- 3. የማየት ችግር
- 4. መንቀጥቀጥ
- 5. የፊት/የእጅ እብጠት
- 6. ከፍተኛትኩሳት
- 7. እራስን መሳት
- 8. የመተንፈስ ችግር
- 9. ከፍተኛ ድካም
- 10. ሽታ ያለው ከሴት ብልት የሚወጣ ፈሳሽ

97 .ሌላ ካለ ይጥቀሱ:-----

307. የወሊድ ዝግጁነት የሚል ሀረግ ስምተው ያውቃሉ?

- 1. አዎ
- 2. አላውቅም

308. መልስዎ አዎን ከሆነ መረጃን ከማን አግኝተዋል?

- 1. ከጤና ባለሙያ
- 2. የሰለጠነ የልምድ አዋላጅ
- 3. የህብረተሰብ ጤናተቆጣጣሪ
- 4. እናቶች እና መገናኛ ብዙሃን

97.ሌላ ካለ ይጥቀሱ -----

309. በእርስዎ አስተያየት ሴቶች ለወሊድ ሲዘጋጁ የሚያደርጉት መሰናዶ ምንድን ነው?

- 1. የምትወልድበት ቦታን ለይቶ ማወቅ
- 2. ገንዘብ ማጠራቀም
- 3. ለንጽህና፣ ለወሊድ እና ከወሊድ በኋላ ላሉት ጊዜያት ጠቃሚ የሆኑትን ነገሮች ማዘጋጀት
- 4. የሰለጠነ ባለሙያ አዋላጅ ለይቶ ማወቅ
- 5. ስለ አደገኛ ምልክቶች ማወቅ እና ቶሎ እርምጃ መውሰድ
- 6. ውሳኔ ሰጪን መወከል
- 7. እርዳታ የምታገኝበትን መላ ለይቶ ማወቅ
- 8. የአደጋ ጊዜ ገንዘብ ማዘጋጀት
- 9. በአደጋ ጊዜ የትራንስፖርት አይነት ለይቶ ማወቅ

10. ደም ለጋሾችን ማዘጋጀት

11. በቅርብ ያለው እና ለ24 ሰዓት የድንገት ሕክምና አገልግሎት የሚሰጥ ተቋምን ለይቶ ማወቅ

97. ሌላ (ይግለፁት) -----

ክፍል 4 ለወሊድ ያለውን ዝግጅት አስመልክቶ የመልስ ሰጪዎች ተግባር

401. የወሊድ ቦታን ለይተው አውቀዋል

- 01. አዎ
- 02. አይደለም

402. ገንዘብን ያጠራቅማሉ?

- 0.1 አዎ
- 0.2. አይደለም

403. ለንጹሕ የወሊድ አገልግሎት እና ከወሊድ በኋላ ላሉት ጉዳዮች አስፈላጊ ነገሮችን እያዘጋጁ ነው?

- 01. አዎ
- 0.2. አይደለም

404. ልምድ ያለው አዋላጅ ለይተው አውቀዋል?

- 01. አዎ
- 02. አይደለም

405. አደጋን የሚጠቁሙ ምልክቶች ለይተው አውቀዋል?

- 01. አዎ
- 0.2. አይደለም

406. ውሣኔ ሰጪን ወክለዋል?

- 01. አዎ
- 02. አይደለም

407. የአስቸኳይ ጊዜ ገንዘብን አዘጋጅተዋል?

- 01. አዎ
- 02. አይደለም

408. የትራንስፖርት አይነትን ለይተው አውቀዋል?::

- 01. አዎ
- 02. አይደለም

409. ደም ለጋሾችን አዘጋጅተዋል?

01. አዎ

02. አይደለም

410. የ 24 ሰአት የድንገተኛ ሕክምና አገልግሎት የሚሰጥ ተቋምን ለይተው አውቀዋልን?

01. አዎ

02. አይደለም

ይህ የመጠይቁ ማብቂያ ነው እና መሰጠቱን

የቃለመጠይቁ መረጃ የተሰበሰበበት ቀን _____

መረጃውን የሰበሰበው ግለሰብ ስም _____

ፊርማ _____

የተቆጣጣሪ ስም _____

ፊርማ _____