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ASSESSMENT OF TIMING OF FIRST ANTENATAL CARE BOOKING AND ASSOCIATED FACTORS AMONG PREGNANT WOMEN WHO ATTEND ANTENATAL CARE AT HEALTH FACILITIES IN DILLA TOWN, GEDEO ZONE, SOUTHERN NATIONS, NATIONALITIES, AND PEOPLES REGION, ETHIOPIA, 2014

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Approval by the Board of Examiners

This thesis by **Abebe Alemu** is accepted in its present form by the Board of Examiners as Satisfying thesis requirements for Degree of Masters in Reproductive Health and Maternity Nursing.

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List of Acronyms

AAU	Addis Ababa University
ANC	Antenatal care
DURH	Dilla University Referral Hospital
EDHS	Ethiopia Demographic Health Survey
FMOH	Federal Ministry of Health
HEW	Health Extension Workers
MCH	Maternal and Child Health
MMR	Maternal Mortality Rate
OPD	Out patients Department
SNNPR	Southern Nation, Nationalities People Region
SPSS	Statistical Package for Social Science
WHO	World Health Organization

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Abstract

Introduction: Antenatal care is one of the interventions that can reduce maternal mortality and morbidity. Yet in developing regions overall, only half of all pregnant women receive the minimum recommended number of antenatal visits four and lately timing of ANC booking. Studies revealed that socio-demographic characteristics of pregnant women, past experience of Antenatal care service utilization, parity, knowledge on timing of ANC and pregnancy, and gender biased cultures had influence on timing of first ANC booking among pregnant women.

Objective: To assess timing of first ANC booking and associated factors among pregnant women in Dilla town, SNNPR, May 2014.

Methods: Facility based Cross-Sectional design study was conducted to assess the timing of first ANC booking and associated factors. Study subjects were selected using systematic random sampling. The data was collected using pre-tested structured questionnaires and data were entered onto a computer using Epi-info 3.5.1 statistical program then exported to SPSS version 20 for analysis. Descriptive were used to describe the characteristics of study subjects. Logistic regression model was used to predict timing of first ANC booking and associated factors and also OR & 95% CI was used to measure the associations.

Result: this study finding revealed that 35.4% respondents were booked first Antenatal care timely. The mean gestational age of timing of first ANC booking was 4 $\pm$ 1.4 months. Multivariate analysis revealed that respondents age(OR=0.2, 95%CI, 0.03-0.5, P=0.005), Education (OR=0.4, 95%CI, 0.2-0.9, P=0.04), Parity(OR=1.8, 95%CI, 1.1-3, P=0.01), knowledge on importance timely booking (OR=2, 95%CI, 1.3-3.3, P=0.003), those informed before to book ANC(OR=3, 95%CI, 1.1-9, P=0.03) and past ANC experience (OR=1.7, 95%CI, 1.1-2.8, P=0.022) were found as significant factors that influence timing of first Antenatal care booking.

Conclusion and Recommendation: The findings of this study indicated that 35.4 % were booked timely. Thus, women's educational status, knowledge of women on importance of timely booking, quality of ANC have to be considered when antenatal care programs are planned, implemented and evaluated to ensure timely booking of first ANC.

Chapter-One

1. Introduction

1.1 Back ground

About 800 women die from pregnancy complications around the world every day. An estimated 287,000 maternal deaths occurred in 2010 worldwide. A 56 percent of these deaths are in Sub-Saharan Africa and Southern Asia accounts 29 per cent and the both accounted for 85 per cent of the global burden in 2010 and globally MMR in 2010 was 201 maternal deaths per 100,000 live births (1,2).

The African region presents large intra-regional disparities in terms of coverage of basic maternal health interventions like antenatal care. Antenatal care is also among the interventions that can reduce maternal mortality and morbidity. In 2011, only 36 per cent of pregnant women in Southern Asia and 49 per cent in sub-Saharan Africa received at least four antenatal care visits during their latest pregnancy (1,2).

A quality antennal care during pregnancy is fundamental to the health, well-being and survival of mothers and their babies. Although ANC can save lives, yet in developing regions overall, only half of all pregnant women receive the minimum recommended number of antenatal visits (2,3).

Many health problems during pregnancy can be prevented, detected and treated by trained health workers during antenatal care visits. The World Health Organization recommends a minimum of four antenatal visits, comprising interventions such as tetanus toxoid vaccination, screening and treatment for infections, and identification of warning signs during pregnancy (2,3). Prevention and treatment of any complications; emergency preparedness; birth planning; satisfying any unmet nutritional, social, emotional and physical needs of pregnant woman; provision of patient education, including successful care and nutrition of the newborn; identification of high risk pregnancy; encouragement of partner (especially male) involvement in antenatal care are the main objectives of antenatal care (4). The first visit of such antenatal visits should be conducted before four months (with in first trimester). Identification of complications or risk factors for complications on timely visit enables early initiation of interventions to alleviate or mitigate the effects of such complications on the mothers and unborn babies (4,5).

From a systematic review of the literature on factors that affect utilization of antenatal care service, educated mothers and educated husbands are more likely to utilize antenatal care service. Availability and accessibility of health units where antenatal care is offered; culture; beliefs and attitude about pregnancy and its complications also have an influence on antenatal care utilization (5). Parity and quality of antenatal care also have an influence on utilization of antenatal care, leading to infrequent or late first visits to antenatal care (5).

In Ethiopia, Thirty four percent of pregnant mothers are received antenatal care from a skilled provider for their most recent birth, 28 percent from a Nurse or a Midwife and 5 percent from a Doctor. Another 9 percent of women received antenatal care from health extension workers. The percentage of receiving antenatal care from skilled provider has high gap among the regions. For instance, in Addis Ababa, Harari, Gambela, Tigray and Benshangul-Gumuz, 93.6 percent, 55.6 percent, 54.5 percent, 50.1 percent and 35.1 percent women received antenatal care from skilled provider respectively and 27.3 percent, in Southern Nation Nationalities Peoples Region (SNNPR) (6,7).

1.2 Statement of Problem

Pregnancy is one of the most important periods in the life of women, family and society. Antenatal care is one of the pillars of preventing adverse pregnancy outcome. The goal of ANC is to prevent health problems in both infant and mothers and also to ensure that each newborn has a good commencement (8). In developing countries, particularly in most sub-Saharan Africa has high maternal morbidity and mortality, but ANC are initiated more likely at the second and third trimester. Timely initiation of ANC is important in the countries that have high maternal morbidity and mortality among reproductive age women to reduce maternal morbidity and mortality (9).

Antenatal care is more beneficial in preventing adverse pregnancy outcomes when it is received early in the pregnancy and continued through delivery. Early detection of problems in pregnancy leads to more timely referrals for women in high-risk categories or with complications where three-quarters of the population live in rural areas and where physical barriers pose a challenge to providing health care. Under normal condition, World Health Organization recommends that a woman without complications should have at least four antenatal care visits, the first of which should take place during the first trimester (1,3,6,7).

Literatures demonstrates that timing of first ANC has been affected by different associated factors like maternal education, parity, past experience of health service, knowledge and attitude towards pregnancy and its complication(5).In Ethiopia, eleven percent of women made their first ANC visit before the fourth month of pregnancy(6,7).

Study in Metekel Zone, North West Ethiopia revealed that 49.8 percent of the respondents had at least one ANC visit during the pregnancy of their last delivery.

A 55.1 percent started their visit during their second trimester and only 48.0 percent had the recommended four visits (10). Study done in Hadiya Zone, SNNPR, Ethiopia, discloses concerning timing of initiating first antenatal care, only 8.7 percent of the ANC attendants initiated care during the first trimester of pregnancy as WHO recommendation(11).

1.3 Significances of Study

According to World Health Organization, at least four ANC visits are recommended for normal pregnancy (uncomplicated pregnancy). Of these four visits, the first visit is recommended to be carried out at first trimester (before four month of pregnancy). Despite of this assumption, the majority of pregnant women in developing countries including Ethiopia are booked late to ANC during their second and third trimesters. Timely booking has great importance in proving timely booking, awareness on risks and early seeking to care and birth preparedness.

Therefore, the result of the study will make public that timing of first antenatal care booking and associated factors among pregnant women who attends ANC at health facilities in Dilla town which will be used as input for planning and implementation of quality antenatal care service in Dilla town. The result of study will help as input for Health Bureau of Dilla City Administration; demonstrate quality of ANC and service given by health professionals at health facilities; for managers at different level who are concerned for and other organizations.

Chapter -Two

2. Literature Review

2.1 Timing of first ANC booking

World Health Organization (WHO) recommends a minimum of four visits for antenatal care, including, at a minimum, screening and treatment for infections and identification of warning signs during pregnancy. Across most developing regions, there has been stable progress in antenatal coverage(1,2).

In Indonesia, 80 percent of pregnant women attended first antenatal care visit before the fourth month of pregnancy(13). The median number of months pregnant at the first antenatal care visit is 2.4. Women in urban areas are more likely than those in rural areas to come for the first antenatal care visit before the fourth month which is 85 percent and 76 percent, respectively. The median number of months pregnant at first visit is 2.1 and 2.6 months, respectively, among urban and rural mothers (13). According to Uganda Demographic and Health survey 2011, only 21 percent of women made their first antenatal care visit before the fourth month of pregnancy (14) and in Tanzania, only 29 percent initiated ANC booking within the first four months of pregnancy as recommended by WHO and the Tanzanian FANC guidelines (15). In Nigeria, the study shown that 53.3 percent of the women booked late that means 17 weeks as national antenatal care guide line of the country due to number of associated factors (16). Early ANC initiation is highest for intended pregnancies but lowest for unwanted and mistimed pregnancies (17). In Uganda on average, 17 percent of mothers initiate the first antenatal visit in the first trimester and 47 percent attain at least four antenatal visits (18). According to EDHS 2011, only eleven percent of pregnant women made their first ANC visit before the fourth month of pregnancy (7).

2.2 Socio-demographic factors associated with timing of first Antenatal care booking

2.2.1 Maternal age

Literature revealed that Older multiparous pregnant women are at particular risk of delaying antenatal care booking (19). Antenatal care utilization difference by women's age at birth is not significant (6). In contrast, antenatal care utilization is more common in younger women age 20- 34 and which accounts around 36 percent but, women age 35 -49 received antenatal care utilization is 27 percent (7). Maternal age is found to be a factor in the utilization of ANC services. For instance, mothers who are in the age group of 25-29 years are less likely to utilize ANC service than those 35 years and older (11).

2.2.2 Marital status

Literatures indicated that marital status has an influence on timing of first ANC booking. Study that done in Ghana, kenya and Malawi illustrated that pregnancy disclosure influenced timing of ANC adolescents and unmarried younger women secreted their pregnancies and delay ANC to avoid the potential social implications of pregnancy: exclusion from school, expulsion from their natal home, partner abandonment and stigmatization(19). Unplanned pregnancy which means unmarried pregnancy is associated with late timing of ANC booking (20).

2.2.3 Occupation

Women have triple roles burden which has direct link to ANC attendance. Thus, they often have an exhausting experience for women and the journey to health facilities represented a physical burden. Delays in ANC initiation are not however merely due to the associated indirect and direct costs (19). A 75 percent of women who received ANC are among those in the highest wealth quintile that is related to their level of occupation and on the other hand, 17 percent among women in the lowest wealth quintile and those who have not good occupation (6). Study done in Hadiya Zone, SNNPR, Ethiopia shows that there is direct association between women occupation and timing ANC booking and number of visits (11).

2.2.4 Maternal Educational level

As literatures revealed mothers' education level is significantly related to the receiving of the various components of antenatal care during pregnancy. In Indonesia, study indicated that 64 percent of educated mothers are informed about signs of pregnancy complications but in contrast, 28 percent mothers are not educated (13). Study in Nigeria shown that late antenatal care booking is significantly influenced by the client's level of education (16). In Ethiopia, woman's education level has direct relationship to whether she is likely to receive ANC from a skilled provider or not. A 91 percent of women with more than secondary education received ANC from a skilled provider compared with 25 percent of women with no education (7).

2.2.5 Family Income

Family economic status greatly influences the utilization of the health care service. It also direct link with timing of first antennal care booking and indicated as one of challenging factor for initiation of the ANC in some literatures. In Nigeria, 9.2 percent of pregnant women could not attend antenatal care due to financial shortage. Attending ANC required direct or indirect costs (14,17,21). According to EDHS 2011, a 75 percent of women who received ANC are among those in the highest wealth quintile and on the other hand, 17 percent among women in the lowest wealth quintile.

2.2.6 Residence

Study in Indonesia shows that urban mothers reported receiving the various antenatal care services more often than rural mothers (12). In Nigeria, 2.2 percent of pregnant initiate ANC booking lately due to lack of transport to the healthcare facility (16) and also in Tanzania, 17 percent pregnant women lately started ANC booking because of the poor accessibility means the long distance from health facility and poor road conditions (15). On other side, the study in Zambia, revealed that there is no effect of distance on timing of ANC booking or number of ANC visits; meaning that there is no association on distance from health (residence) and timing of ANC booking (21).

In Ethiopia, Urban women are almost three times more likely than rural women to receive ANC from a skilled provider. Seventy-six percent of women residing in urban areas received ANC services from a skilled provider for their last birth compared with 26 percent of women in rural areas. The median duration of urban women made the first ANC visit earlier is 4.4 months, but the rural women is 5.5 months (7).

2.3 Factors associated with timing of first ANC

2.3.1 Past obstetric history (particularly parity)

The study done in Ghana, Kenya and Malawi pointed out that some primagravida are unfamiliar to the associated signs and symptoms of pregnancy as a result they are more likely to seek advice and assistance and initiate timing of ANC booking earlier and in contrast, older multiparous women were at particular risk of delaying ANC (19). In Nigeria, 53.3 percent of women were lately booked ANC and parity was indicated as influencing factor (16). But, in Indonesia, an 85 percent of mothers received antenatal care for a first pregnancy compared with 69 percent of mothers who were pregnant six and above pregnancy (13). According to EDHS 2011, 46 percent of Women were almost twice as likely to receive antenatal care from skilled provider first births but only 23 percent of women received ANC at birth sixth and above births.

2.3.2 Past experience of ANC service utilization

Literature revealed that the quality of health care provisions influence timing of ANC booking and member of visits as recommended by World Health Organization (22). Good interaction of care providers and pregnant women influences timing of ANC booking and number of visits (21). A 28.7 percent pregnant complained that waiting for a long time while antenatal care utilization which hinders to ANC service utilization (23). In Zambia, Only 8 percent of mothers received good ANC and attended ANC in the first trimester (21). Study done in Hadiya Zone, make known that one of the reasons for ANC non-attendance among mothers is waiting time to get the service and has significant association with timing of ANC booking (11).

2.3.3 Knowledge and awareness on timing first ANC

In Kham District, Japan a 73.9 percent of pregnant women lacked sufficient knowledge on antenatal care utilization (23). Among the most frequent reasons given for late attendance ANC where; women did not know that they are pregnant which accounts 21.7 percent and women have no time to follow up as recommended by WHO which accounts 20.8

percent from women included in the study (23). In Nigeria, 22.8 percent pregnant women lately initiated their ANC booking due to the lack of knowledge of booking time (16).

In Hadiya Zone, 19 percent of women did not attend ANC due to lack of awareness of pregnancy complications as pointed out in study (11).

2.3.4 Attitude towards ANC service utilization

In Kham District, Japan a negative attitude towards to ANC protected 61.9 percent of pregnant women not to utilize the service at right time (23). The study done in the tertiary health facilities in Nigeria, shown 3.9 percent of women lately initiated ANC booking due to negative attitude husbands toward health care. Also, mothers' attitude or fear toward frequency of the follow up affect 4.9 percent women not attend their ANC booking at recommended time (16). In Southeast Nigeria literature revealed that 3.5 percent of women had not started early antenatal care due to their own opinion (Perception) toward care and 1.5 percent perceiving the pregnancy is too early (25). A 65.6 percent of woman booked late due to ignorance or misconceptions of the purpose of, and right time to start antenatal care (26).

2.3.5 Cultural and Religious factors

The study done in Ghana, Kenya and Malawi publicized that decision making on timing of ANC booking by family and friends had impact on ANC attendance (19). Cultural and religious practices were reported as hindrance ANC utilization by Asian and Muslim women. Women initiated ANC booking lately because of shame about being undressed during consultations (21,26).

2.3.6 Husband involvement on decision making

In Kham District, Japan 7.3 percent of pregnant women were supported by their husbands to visit ANC by providing information (23).

In Pakistan, study discovered that lack of permission from husband hinders to use ANC service. Amongst the women who did not use antenatal care 60 percent did not have permission from their husbands (28). As study indicated, decision-making of wife only or husband only is associated with less antenatal care utilization as compared to joint decision-making (30).

Study done in Namibia, Kenya, Nepal, and India indicated that gender inequality within a family has significantly associated with access to reproductive health (30). The timing

and frequency of antenatal visits were significantly associated with mother's autonomy in taking health decision (18). In western Kenya, study indicated that assuming ANC as 'Female role' hinder husbands from accompanying their wives for ANC service utilization and also considered as the responsibility of mother-in-laws or co-wives rather than the male head of household and provider (31).

2.4 Conceptual frame work

A Frame work was developed based on major research findings in the literatures that were associated with timing of first Antenatal care booking. Thus, the dependant variable and independent variables were conceptualized as follows:

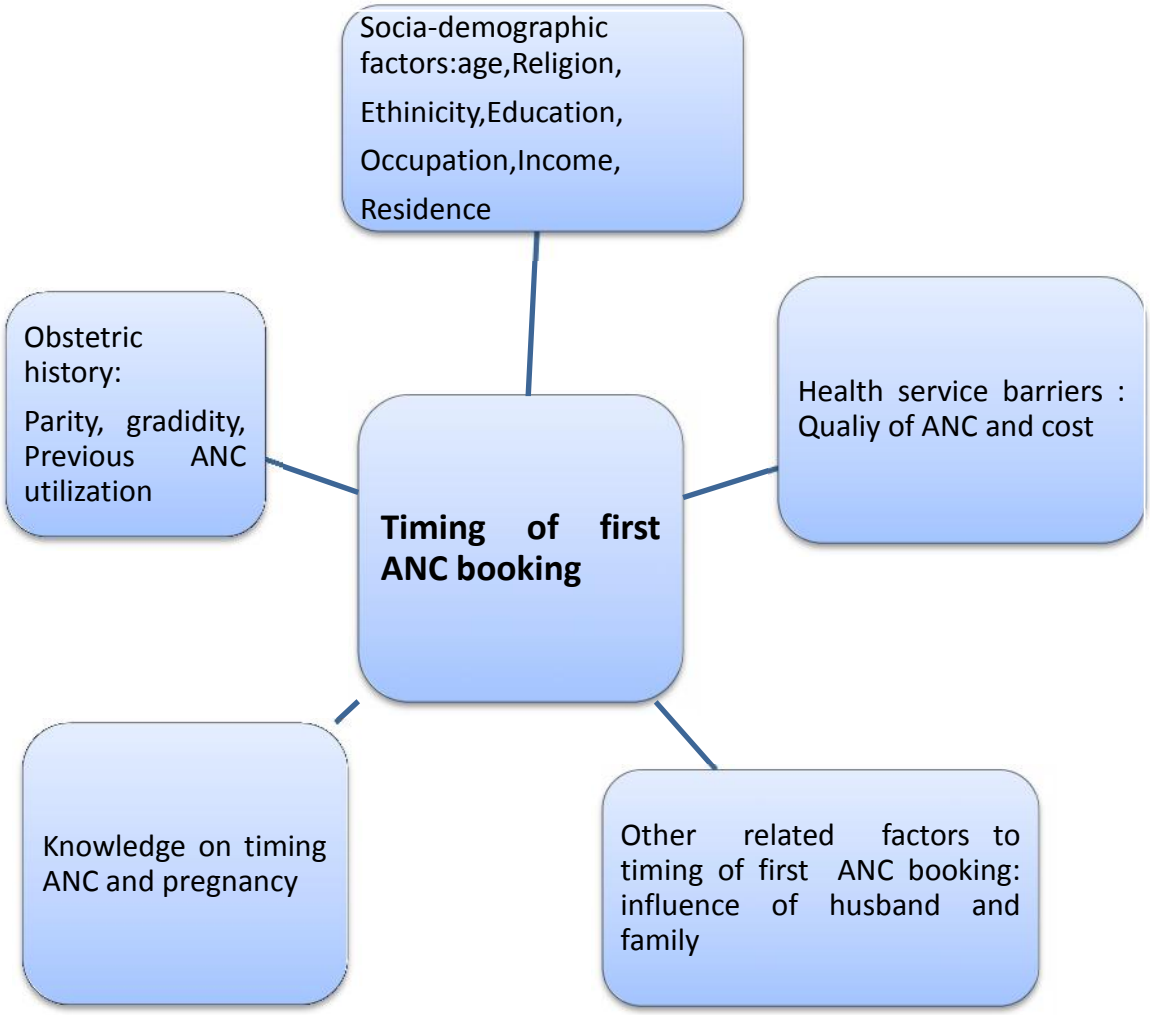

Fig. 1: The conceptual frame work on timing of first ANC booking and associated factors in Dilla town, SNNPR, May 2014.

Chapter -Three

3. Objective

3.1 General Objective

To assess timing of first antenatal care booking and associated factors among pregnant women who attend ANC at health facilities in Dilla town, Gedeo Zone, SNNPR, Ethiopia.

3.2 Specific Objectives

- ✓ To assess timing of first antenatal care among pregnant women who attend ANC at health facilities in Dilla town.
- ✓ To identify the effect of socio demographic characteristics on timing of first ANC booking among pregnant women who attend ANC at health facilities in Dilla town.
- ✓ To identify the associated factors with timing of first ANC booking among women who attend ANC at health facilities in Dilla town.

Chapter-Four

4. Methodology

4.1 Study area

The study area was Dilla town in Gedeo Zone, SNNPR, Ethiopia. It is located 356 km from Addis Ababa and 86 km from Hawassa. According to the new structural arrangement the town is divided into three sub cities and nine kebeles. According to data that Dilla town, Health Office, the total population of the town was 82,127 out of which 41,885 (51%) are males and 40,242 (48.9%) are females. Reproductive age women (meaning age 15- 49 years) are 19,136 (23.3% of Dilla town population). In Dilla town, there was one Hospital; two government health centers, private clinics and government and private pharmacies.

4.2 Study design and period

Institution based Cross-Sectional study was conducted among pregnant women who attended ANC at health facilities at Dilla town from April –May 2014.

4.3 Source of population

Source populations were all pregnant mothers living in Dilla town during study period.

4.4 Study population

The study populations were pregnant mothers visiting the health facilities during study period

4.5 Inclusion and Exclusion Criteria

The inclusion and exclusion criteria that were used to determine appropriate subjects for the study are as follows:

Inclusion criteria are:

- All pregnant women who were in the reproductive age group (15-49 years)
- Pregnant women who came to the health facility for ANC service.

Exclusion Criterion:

- Pregnant women who had hearing problems

- Pregnant women who were seriously sick and unable to respond
- Pregnant women who were not willing to respond

4.6 Sample size determination

The actual sample size for the study was determined using formula for single population proportion by assuming 5% marginal error and 95% confidence interval(σ =0.05) and prevalence of the timing of first Antenatal care booking 40% or P= 0.4 using the formula:

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

$$n = (1.96)^2\ 0.4\ (0.6) / (0.05)^2 = 369$$

Where:

n = the required Sample size

p = prevalence timing of first ANC booking (40 or P=0.4) (33).

Z = the value of the standard normal curve score corresponding to the given confidence interval 1.96

d = the permissible Margin of error (the required precision) = 5%

By adding 10% of non-response rate, total of **406** pregnant women was recruited as study units among pregnant women who attended ANC follow up at health facilities in Dilla town during study period.

4.7 Sampling techniques

In this study, all health facilities that had been giving ANC service in Dilla town (Dilla University Referral Hospital, Haroreso health Center (HC), Walamme HC, Dombosco Clinic, Selem Clinic and Fitsum Clinic) were included.

The sample size was distributed in proportion to average monthly load of previous year of pregnant women who made first ANC follow up at each health facility by using of formula population proportion sample **(n/N** x **sample size)**

Where: **n** = Average monthly load of previous year first ANC of each health facility

N = the total sum of average monthly load previous year first ANC of six health facilities **(N= 816)** and Sample size was number of study units **(406 pregnant women).**

Based on assessment of each health facility monthly load, by systematic random sampling technique (i.e. K^{th} = **N / sample size** => 816/406 ≈ 2 which means K^{th} = 2), thus every 2^{nd} pregnant women who attended first ANC booking was recruited as study units in each health facilities until the total sample size for this study is obtained.

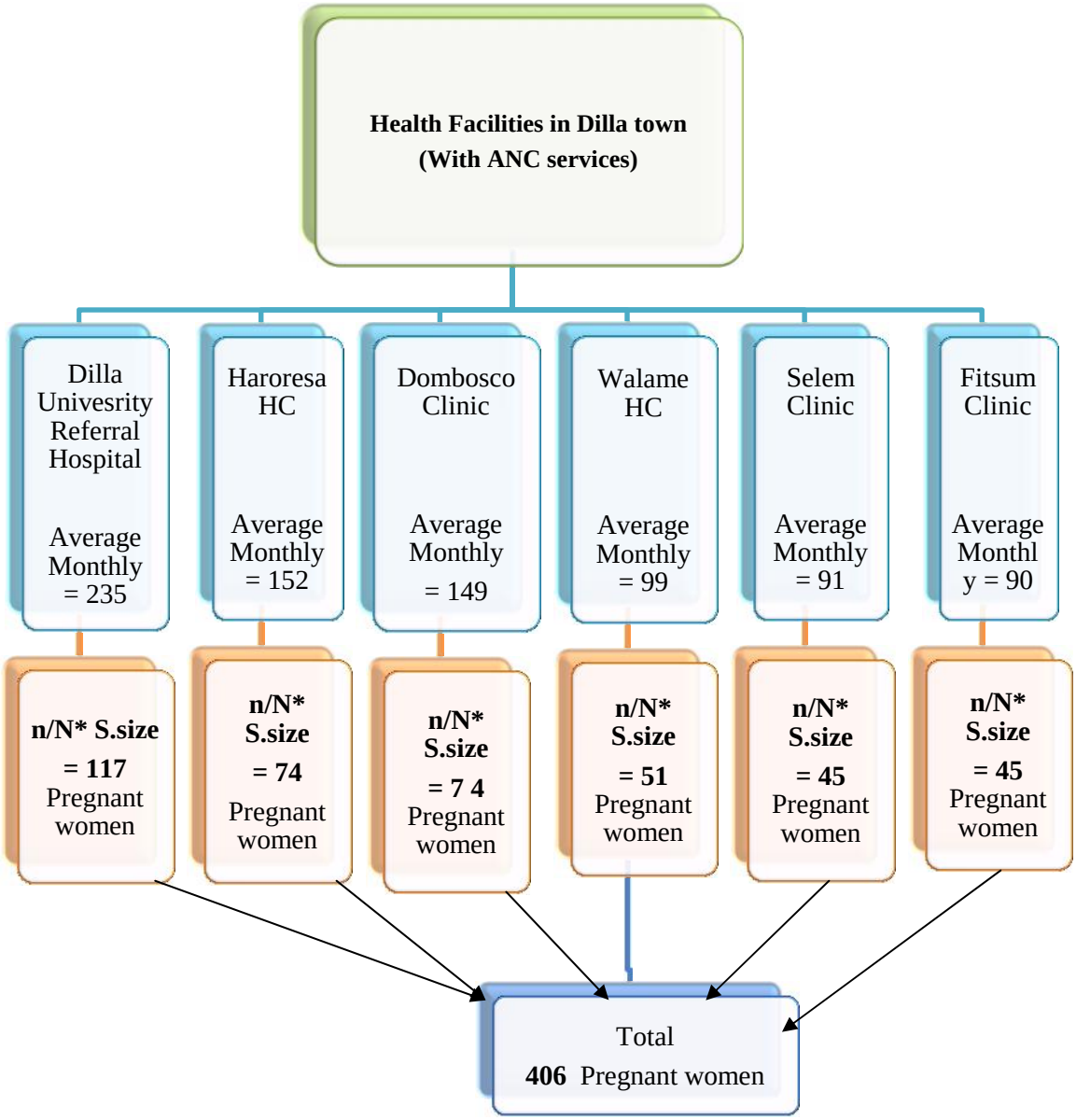

Fig. 2 Schematic representation of sampling techniques

4.8 Variables

Dependent variable

Timing of first visit of ANC booking

Independent variables

Independent variables were socio-demographic characteristics (maternal age, Educational status, occupation, marital status, income, and residence), parity, past experience of ANC utilization, Knowledge and awareness on importance of timing of first ANC, attitude towards ANC service and husband involvement.

4.9 Data collection instrument

The standardized questionnaire was adopted Safe Motherhood Initiative and previously done research and then was translated in to Amharic by Language expert and back by another expert. Edited and finalized questionnaire was used to collect data. The questionnaire contained questions on socio-demographic characteristics of respondents, timing of first ANC booking, past experiences services utilization and knowledge of women on importance of timing and pregnancy awareness.

4.10 Pre-test

Pretest was done at Chichu health center, Dilla Zuriya Woreda before conducting the major study on about 5 percent of the sample to check validity and reliability of questionnaire. After the questionnaire was pre tested, the questionnaire was revised and amended.

4.11 Data collection

Training was given for data collectors (BSC Midwifes) concerning the research objective, data collection tools and procedures, and interview methods that were supposed to be applied during data collection. Trained data collectors were conducted data collection at health facility using revised version of data collection tool from April-May 2014. Data collectors were interviewed pregnant women waiting after they completed their daily visits.

4.12 Operational definitions

Timely booking: booking first ANC within recommended time (before fourth month of pregnancy).

Lately ANC booking: booking first ANC within fourth to ninth month of pregnancy (after recommended time).

4.13 Data quality assurance

To assure the quality of data, the questionnaire was pre-tested. Training was given for the data collector (BSC Midwifes) how to interview and check the questionnaires for completeness during collecting data. The facilitators and principal investigator were checked and reviewed the completeness of questionnaires and were offered necessary feedback to data collectors.

4.14 Data entry and analysis

After data collection, the questionnaire was checked for completeness and data entry was made by the principal investigator. The collected data was entered in to Epi-info and translated Statistical Package for Social Science (SPSS) version 20 for analysis. A logistic regression was used to identify the association of the independent variables on the dependent variable and then multivariate logistic regression was used to control cofounders and statistically significant associations in between variables. And also descriptive statistics was applied to describe mean and SD.

4.15 Ethical considerations

The study proposal was reviewed and approved by Institutional Review Board of Nursing and Midwifery Department, College of Health Sciences, Addis Ababa University. Also authorization was obtained from Health Bureau of Dilla City Administration and Directors of all health facilities. The pregnant women were provided information by data collectors after they are asked for willingness and an informed verbal consent was obtained before data collection. The purpose of the study and significance of true information was given to the participants. Privacy and confidentiality was maintained throughout the data collection, analysis, and manuscript preparation and result dissemination.

4.16 Dissemination of the result

The result of research will be disseminated to Collage of Allied Health Science, post graduate program, Addis Ababa University. The research result will be disseminated and accessed to others to be employed as source of information to do further research and even to critique the findings and also the result will be provide to Health Bureau of Dilla City Administration. The findings may be presented in annual scientific meeting and conferences.

Chapter -Five

5. Result

5.1 Response coverage

Among pregnant women attending first antenatal care, 406 women were initiated to be included in this study. Three hundred eight seven (95 %) women were responded to the interview while 20 (5%) did not respond to the interview.

5.2 Socio demographic characteristics of respondents

Majority of women involved in the study were age in between 21 and 34 years, 265 (68.3%). The mean ages of the respondents were 25.0± 5.3. Three hundred seventy nine (97.9%) mothers were married and one hundred sixty eight (43.4) mothers were housewives.

The Ethnic composition of the respondents was Gedeo, Oromo, Amhara, Sidama, Gurage and Others (Woliyta, Silixe); one hundred thirty one (33.9%), fifty six (14.5 %), seventy three (18.9%), forty eight (12.4%), fifty seven (14.7%) and twenty two (5.7%) respectively. The majority of respondents' religion were Orthodox 158 (40.8%) followed by Muslim, Protestant, and Catholic (Table 1).

Regarding educational status of respondents, Sixty five (16.7%) couldn't read and write. One hundred Seventy Seven (45.5%) women were primary school education and one hundred forty five (37.3%) were secondary and above. Monthly family income of 244 (63.0%) respondents were 500 Birr and below, on the other hand 97 (25.1%) of respondents had monthly income of 1000 Birr and above. Three hundred eleven (80.4%) of study participants were from Dilla town and seven six (19.6%) were outside of Dilla town.

Table 1: Socio demographic characteristics of the respondents in Dilla town, SNNPR, May 2014

		Number	**Percentage**
Age in years n=387	Less than 20 years	93	24.0
	20 – 34 years	265	68.5
	35 years and above	29	7.5
Marital Status n=387	Single	2	0.5
	Married	379	97.9
	Separate (Divorce, widowed)	6	1.6
Religion n= 387	Orthodox	158	40.8
	Muslim	97	25.1
	Protestant	83	21.4
	Catholic	28	7.2
	Others*	21	5.4
Ethnicity n=387	Gedeo	131	33.9
	Oromo	56	14.5
	Amhara	73	18.9
	Sidama	48	12.4
	Gurage	57	14.7
	Others **	22	5.7
Education n= 387	Can't read and write	65	16.7
	Primary	177	45.5
	Above Secondary school	145	37.3
Occupation n=387	Employed	93	24.0
	Merchant	102	26.4
	House wife	168	43.4
	Other***	24	6.2
Family Income n=387	≤ 500 ETB	244	63.0
	501 -1000 ETB	46	11.9
	>1000 ETB	97	25.1
Residence n=387	Urban	311	80.4
	Rural	76	19.6

Apostle* * Wolayita, Silixe* **** students, waiter*

5.3 Obstetric history of respondents

Among total respondents, One hundred sixty (41.3%) were with parity zero, while the rest of respondents two hundred twenty seven (58.7%) were parity one and above (fig3).

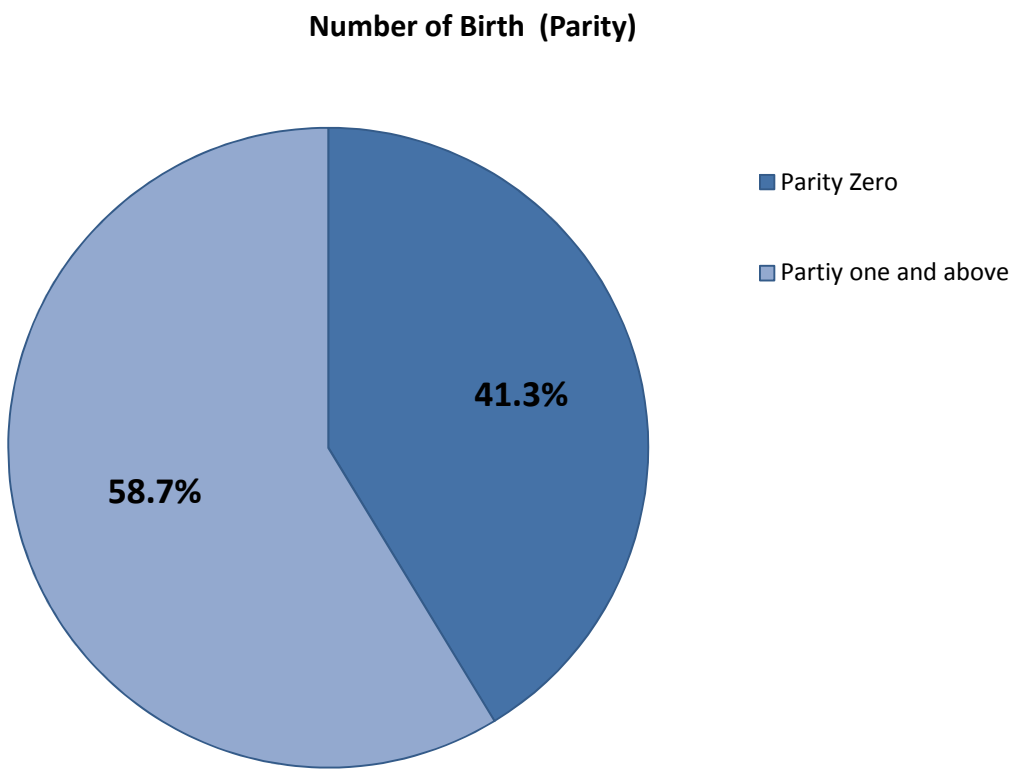

Fig3: number of birth (parity) of respondents in Dilla town, SNNPR, May 2014.

5.4 Knowledge of respondents on timing of first ANC booking

Out of total respondents, One hundred thirty Eight (35.7%) reported that timely booking of first ANC was highly important for both mother and fetus. But, two hundred forty nine (64.3%) reported that they didn't know the importance of the timely booking for mother as well as fetus.

The majority of respondents pregnancy was planned, three hundred forty six (89.4%); But, forty one (10.6%) of pregnancy was unplanned. One hundred eighty nine (48.8%) of respondents pregnancy was confirmed by doing laboratory urine pregnancy test. But others one hundred ninety eight (51.2%) of respondents reported that their pregnancy was confirmed by other methods (absence of menstruation, physiologic change).

Three hundred thirty (85.3%) of respondents were had information on Antenatal care booking, in contrast, fifty six (14.5%) were didn't informed (advised) timing of ANC booking. Two hundred thirty one, (70%) out of those who had informed about ANC booking were got from health Professionals and the rest get informed from others source (family, friends, media) (Table 2).

Table 2: Knowledge of respondents on timing of First ANC booking in Dilla town, SNNPR, May 2014.

Variable		Number	Percentage
Does timely ANC booking important n=387	Yes	138	35.7
	No	249	64.3
Is pregnancy Planned n=387	Yes	346	89.4
	No	41	10.6
Pregnancy confirmed by n=387	Urine test	189	48.8
	Other methods	198	51.2
Advised before to start ANC n=387	Yes	330	85.3
	No	56	14.5
Who informed (advised) you to book ANC n=330	Health professionals	231	70
	Other (family, friends, media)	99	30

5.5 Experience of Antenatal care service utilization

Out of the total respondents who had history of previous ANC, one hundred forty four (37.2%) reported that they have had experience of ANC service utilization prior to the current while the rest two hundred forty three (62.8%) did not have past ANC experiences.

Ninety three (24.0%) reported that the long waiting time in the health Institution affected the timing of first Antenatal care booking, but the majority of the respondents two hundred ninety four (76.0%) didn't complain it as hindering factor for timing of the first ANC booking (Table3).

From the total respondents, two hundred ninety one (75%) women were didn't satisfied on the quality of Antenatal care service provided (Client – Health Professionals Interaction, Privacy, respect of culture and service charge) during ANC follow up of previous and current pregnancy. In contrast, ninety six (24.8%) were satisfied on service provided (Table3).

Table3: Respondents past experience on Antenatal care service utilization in Dilla town, SNNPR, May 2014.

Variables		Number	Percentage
Ever attendee ANC before n=387	Yes	144	37.2
	No	243	62.8
Waiting time affect ANC booking n=387	Yes	93	24.0
	No	294	76.0
Do you satisfied on ANC service n=387	Yes	96	24.8
	No	291	75.2

5.6 Husband involvement on decision making of timing of first ANC booking

The proportion of respondents 87.1% were made decision for booking with their partners (husbands) while forty eight (12.3%) didn't made decision with their husbands (fig4).

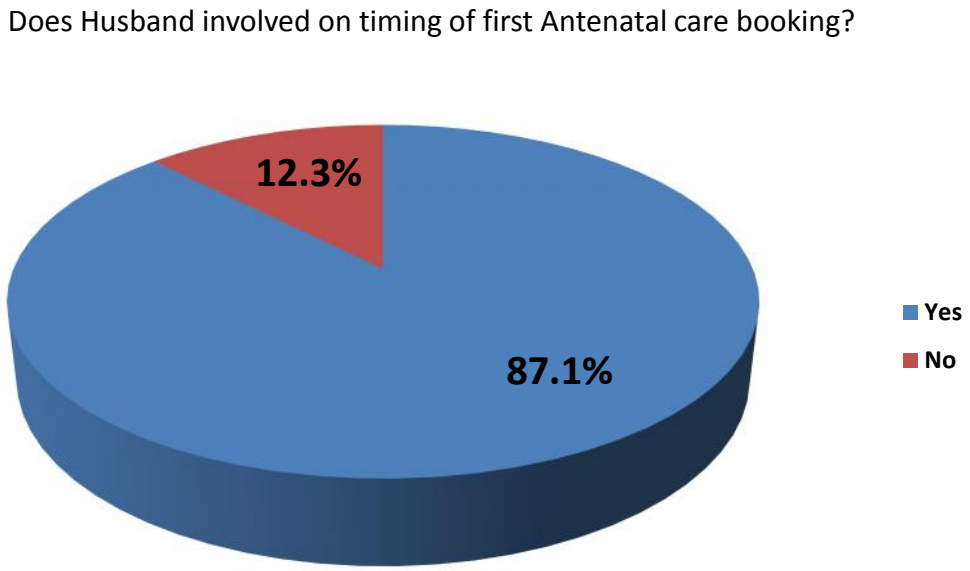

Fig4: Husband involvement on decision making of timing of first Antenatal care booking in Dilla town, SNNPR, May 2014.

5.7 Timing of first ANC visit

Out of 387 respondents, one hundred thirty seven (35.4 %) were booked timely (before the fourth months pregnancy) while those two hundred fifty (64.4%) were booked within fourth month of pregnancy and above (lately). Booking of first ANC ranged from first month to ninth months of pregnancy (Fig4). The mean gestational age the respondent booked was 4 months with standard Deviation of 1.4 months

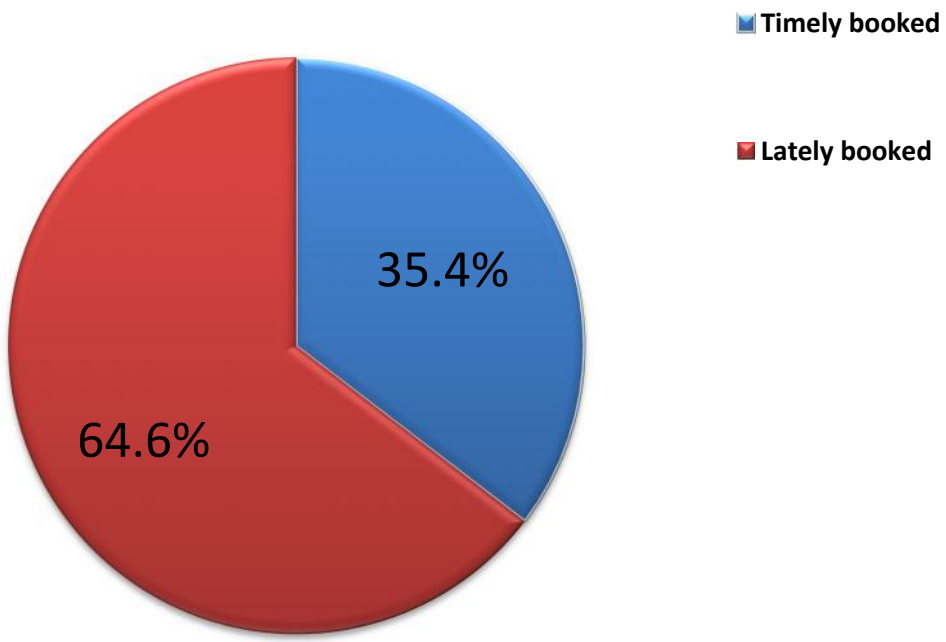

Fig5. Proportion of respondents that booked first ANC within recommended time in Dilla town, SNNPR, May 2014.

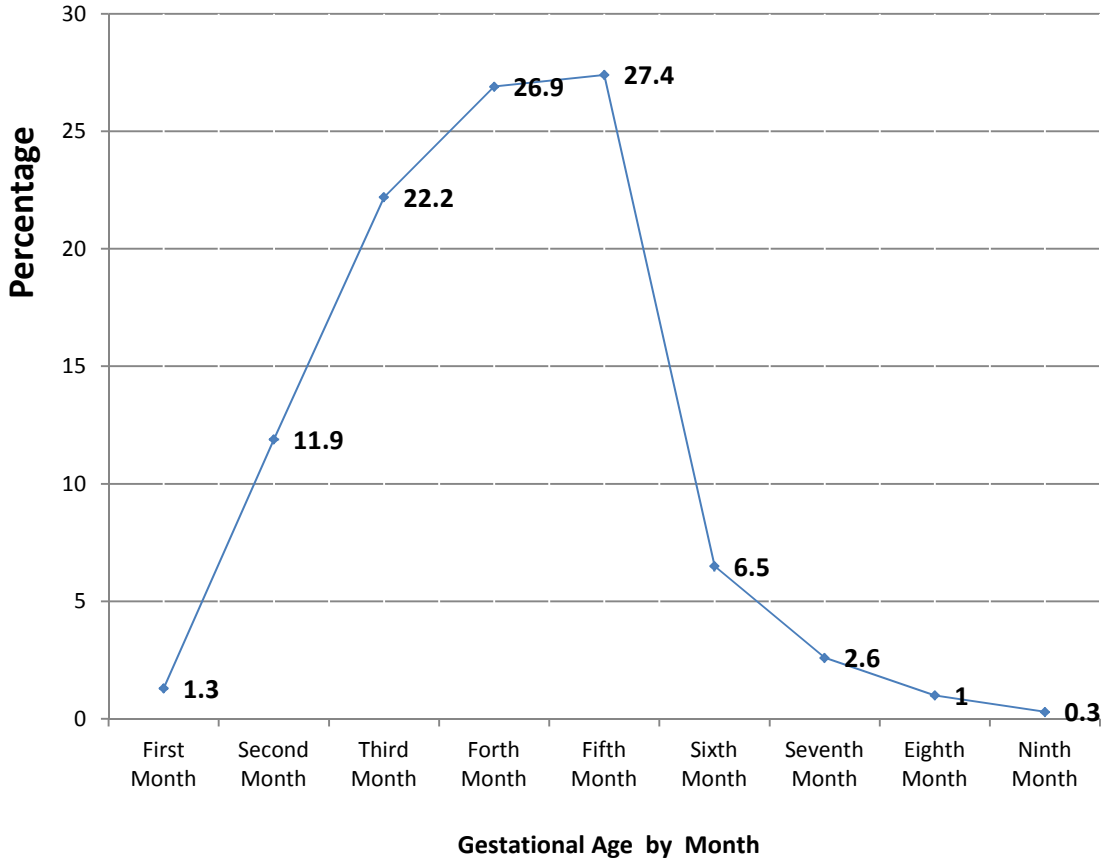

Fig6. The percentage of respondents booked first ANC from 1st month – 9th month of pregnancy Dilla town, SNNPR, May 2014.

5.8 Association of respondent's socio-demographic factors by timing of first ANC booking.

Analyses of socio-demographic variable on binary logistic regression showed that respondents age 35 and above were less likely to book timely as compared to the referents *(OR= 0.7,95% CI, 1.5- 30,* p<0.05*).*

The findings shown that those who can't read and write were less likely to initiate first ANC booking within recommend time as compared educated (*COR=0.3, 95% CI, 0.1-0.6,* p<0.05*) (Table 4).*

The bivariate analyses revealed respondents from urban area were more likely to start first ANC booking as compared those from rural area *(COR = 2.6, 95% CI, 1.4-4.8,* p<0.05*).*

Regarding family Income, those who had greater than five hundred (500ETB) per month were more likely to book first Antenatal care as compared to referents (OR= 2.4, 95% CI, 1.5-3.9, p<0.05)

On the other hand, the variables like marital status, religion, Ethnicity and Occupation did not show statistically significant association with timing of the first ANC booking (Table 4).

Table4: Association of socio-demographic factors by timing of first ANC booking in Dilla town, SNNPR, May 2014.

Variable		Timely booked	Lately booked	Crude OR 95 % CI	p-value
		Number	Number		
Age	< 20 years	31	62	1	
	21 -34 years	104	161	0.8(0.5-1.3)	0.3
	≥35 years	2	27	0.7 (1.5- 30)*	0.013
Marital status	Single	0	2	NA	
	Married	135	244		
	Separate	2	4		
Religion	Orthodox	55	103	1	
	Muslim	29	68	1.2(0.7-2.2)	
	Protestant	31	52	0.8(0.5-1.5)	
	Catholic	17	11	0.3(0.2-1.7)	
	Others*	5	16	1.7(0.5-5)	
Ethnicity	Gedeo	47	84	1	
	Oromo	20	36	1.0(0.5-1.9)	
	Amhara	38	45	0.8(0.4-1.6)	
	Sidama	16	32	1.1(0.5-2.2)	
	Gurage	19	38	1.2(0.6-2.3)	
	Others**	7	15	1.2(0.5-2)	
Education Level	Can't read and write	9	56	0.3(0.1-0.6)*	0.002
	Primary	67	110	0.2(0.1-0.5)*	0.04
	Above Secondary School	61	84	1	
Occupation	Employed	50	43	1	
	Merchant	34	68	2.3 (1.3-4)	
	House wife	46	122	2 (1.8 -5.2)	
	Others***	7	17	1(1.1 -7.5)	
Income per month	≤ 500ETB	74	170	1	
	501-1000ETB	17	29	1.2(1.2-2.3)*	0.02
	>1000 ETB	46	51	2.4(1.5-3.9)*	0.003
Residence	Urban	122	189	2.6(1.4-4.8)*	0.002
	Rural	15	61	1	

**Statistically significant at P< 0.05* *1=Reference category*

Apostle, None religion* * Wolayita, Silixe* **** students, waiter*

5.9 Association of respondents Obstetric history by timing of first Antenatal care booking

Bivariate analyses indicated that respondents with Parity Zero were 1.7 times more to book with in recommended as compared respondents with parity one and above (COR= 1.7, 95% CI, 1.2-2.7, p<0.05) (Table 5).

Table 5: Association of respondents' obstetric history by timing of first Antenatal care booking in Dilla town, SNNPR, May 2014

Variable		Timely booked	Lately Booked	Crude OR 95 % CI	p-value
		Number	Number		
Number of birth (Parity)	Zero	69	91	1.7(1.2-2.7)*	0.008
	One and above	68	159	1	

*Statistically significant at P< 0.05 1=Reference category

5.10 Association of respondents knowledge by timing of first ANC booking

Among the respondent those know the importance of timely booking were 2.9 times more to initiate first ANC booking as compared to referents (COR= 2.9, 95% CI, 1.8-4.5, p<0.05) (Table 6).

Out of respondents, those who with planned pregnancy were 3.6 times more book first ANC before four month of pregnancy as compared unplanned pregnancy (COR= 3.6, 95% CI, 1.5-8.7, p<0.05) (Table 6).

The proportion of the respondents, those advised or informed before on booking of ANC were 6.8 times more to initiate ANC timely as compared referents (COR= 6.8, 95% CI, 2.6-17, p<0.05) (Table6).

Also analysis shown that respondents those confirmed their pregnancy by laboratory urine test were 3 times more to book first ANC before four month of pregnancy as compared to referents (CRO= 2.4, 95% CI, 1.5-3.7, p<0.05) (Table6).

Table 6: Association of respondents' knowledge by timing of first ANC booking in Dilla Town, SNNRP, May 2014.

Variable		Timely booked	Lately Booked	Crude OR 95 % CI	p-value
		Number	Number		
Does timely ANC booking important	Yes	71	67	2.9(1.8-4.5)*	0.002
	No	66	183	1	
Pregnancy planned	Yes	131	215	3.6(1.5-8.7)*	0.005
	No	6	35	1	
Pregnancy confirmed by	Urine test	86	103	2.4(1.5-3.7)*	0.001
	Other method	51	147	1	
Informed to start ANC	Yes	132	198	6.8(2.6-17)*	0.005
	No	5	51	1	

*Statistically significant at P< 0.05 1=Reference category

5.11 Association of respondents past experience of Antenatal care service utilization by Timing of first ANC booking

The proportion of respondents those who had past experience on ANC service utilization were less likely to book first ANC within recommended time as compared others (COR = 0.4, 95% CI, 0.3-0.7, p<0.05) (Table7).

The respondents who had experience long waiting time for seeking service were less likely to initiate first Antenatal care booking before fourth month of pregnancy as compared to others (COR= 0.6, 95% CI, 0.4-0.9, , p<0.05) (Table 7).

The respondents who were not satisfied on service (Client-Professional interaction, privacy, respect, laboratory service, service charge) were less likely to book first Antenatal care timely as compared to referents (COR= 0.6, 95% CI, 0.3-0.9, , p<0.05) (Table7).

Table7: Association of respondents past experience of Antenatal care service utilization by timing of first ANC booking in Dilla town, SNNPR, May 2014.

Variable		Booked timely	Booked lately	Crude OR 95 % CI	p-value
		Number	Number		
Attended ANC before	Yes	67	77	0.4(0.3-0.7)*	0.001
	No	70	173	1	
Waiting time	Yes	41	52	0.6(0.4-0.9)*	0.045
	No	96	198	1	
Satisfaction	Yes	42	54	1	
	No	95	196	0.6(0.3-0.9)*	0.049

*Statistically significant at P< 0.05

1=Reference category

5.12 Husband involvement by timing of first Antenatal care booking

Among respondents which partners (husbands) hadn't participated on initiation of ANC were less likely to book first ANC with in recommended time as compared others and (COR= 0.4, 95% CI, 02-0.9, p<0.05) (Table8).

Table8: Husbands involvement by timing of first Antenatal care booking in Dilla town, SNNPR, May 2014.

Variable		Booked timely	Booked lately	Crude OR 95 % CI	p-value
		Number	Number		
Does Husband involved timing	Yes	127	212	1	
	No	10	38	0.4(02-0.9)*	0.027

*Statistically significant at P< 0.05

1=Reference category

5.13 Association of selected factors associated with timing of first ANC booking

A multivariate analysis was done to identify independent predictors of timing of first Antenatal care booking. As result, analysis revealed that respondents Age, education, parity, knowledge on timely booking and advised to book before were shown significant association with timing of first ANC booking even after controlling for confounding factors.

The study finding reveals that respondents age 35 and above were less likely to book timely as compared referents (AOR= 0.2, 95% CI, 0.03-0.5, p<0.05) and Also respondents who can't read and write were less likely to book first ANC within recommended time as compared others (AOR= 0.4, 95% CI, 0.2-0.9, p<0.05) (table9).

Analysis showed that respondents with parity zero were 1.8 times more to book first Antenatal care timely as compared respondents those who had parity one and above (AOR= 1.8, 95% CI, 1.1-2.8, p<0.05) (Table9).

Analysis revealed that respondents those know the importance of timely booking were two times more to book first Antenatal care within recommended time as compared to referents (AOR= 2.1, 95% CI, 1.3 - 3.4, p<0.05) (Table9).

The proportion of respondents who advised (informed) before to book ANC were three times more to book first ANC within recommended time compared to others (AOR= 3.0, 95% CI, 1.2-10, p<0.05) (Table9).

The proportion of respondents those didn't have experience of past Antenatal care service utilization were 1.7 times more to book first ANC timely when compared to the referents (AOR= 1.7, 95% CI, 1.1 -2.8, p<0.05) (Table9).

Table9: Association of selected factors by timing of First ANC booking in Dilla town, SNNPR, May 2014.

Variable		Timing of first ANC booking		Crude OR	Adj OR	p-value
		Booked Timely	Booked Lately	COR (CI)	AOR (CI)	
		Number (%)	Number (%)			
Age	<20 Years	31 (8)	62 (16)	1	1	
	21- 34 Years	104 (26.9)	161 (41.6)	0.8(0.5-1.3)	0.1(0.03- 0.6)*	0.01
	≥35 Years	2 (0.5)	27 (7)	6.7(1.5-30)*	0.2(0.03-0.5)*	.005
Education level	Can't read and write	9 (2.3)	56 (14.5)	0.3(0.1-0.6)*	0.4(0.2-0.9)*	0.04
	Primary	67 (17.3)	110 (28.4)	0.2(0.1-0.5)*	1.1 (0.6-1.7)	
	Above Secondary	61 (15.4)	84 (21.7)	1	1	
Income per month	≤ 500ETB	74 (19.1)	170 (43.9)	1	1	
	501-1000ETB	17 (4.4)	29 (7.5)	1.2(1.2-2.3)*	1.8(1-3)	
	>1000 ETB	46 (11.9)	51 (13.2)	2.4(1.5-3.9)*	1.6(0.7-3.4)	
Residence	Urban	122 (31.5)	189 (48.8)	2.6(1.4-4.8)*	1.6(0.8-3.2)	
	Rural	15 (3.9)	61 (15.8)	1	1	
Parity	Zero	69 (17.8)	91 (23.5)	1.7(1.2-2.7)*	1.8(1.1-3)*	0.01
	One and above	68 (17.6)	159 (41.1)	1	1	
Does timely ANC booking important	Yes	71 (18.2)	67 (17.3)	2.9(1.8-4.5)*	2 (1.3-3.3)*	0.003
	No	66 (17.1)	183 (47.3)	1	1	
Pregnancy planned	Yes	131 (33.9)	215 (55.6)	3.6(1.5 - 9)*	1.3(0.5-3.5)	
	No	6 (1.6)	35 (9)	1	1	
Pregnancy confirmed by	Urine test	86 (22.2)	103 (26.6)	2.4(1.5-3.7)*	1.3(0.7-2)	
	Other method	51 (13.2)	147 (38)	1	1	
Informed to start ANC before	Yes	132 (34.2)	198 (51.3)	6.8(2.6-17)*	3(1.1-9)*	0.03
	No	5 (1.5)	51 (13.2)	1	1	
Attended ANC before	Yes	67 (17.3)	77 (19.9)	0.4(0.3-0.7)*	1.7(1.1 -2.8)*	0.02
	No	70 (18.1)	173 (44.7)	1	1	
Waiting time affect ANC	Yes	41 (10.6)	52 (13.4	0.6(0.4-0.9)*	0.8(0.5-1.5)	
	No	96 (24.8)	198 (51.2)	1	1	
Satisfaction	Yes	42 (10.9)	54 (14)	1	1	
	No	95 (24.5)	196 (50.6)	0.6(0.3-0.9)*	0.6(0.4-1.2)	
Husband involved	Yes	127 (32.8)	212 (54.8)	1	1	
	No	10 (2.6)	38 (9.8)	0.4(02-0.9)	0.4(0.2-1.5)	

*Statistically significant at P< 0.05 1=Reference category

Chapter -Six

6. Discussion

This facility based cross sectional study endeavored to assess the timing of first Antenatal care booking and associated factors with timing. The findings of this study revealed that 35.4 % were booked timely while 64.4% were booked lately (within fourth month of pregnancy and above). Booking of first Antenatal care ranges from first month to ninth months of pregnancy. The mean gestational age the respondent booked was 4 months with standard Deviation of 1.4 months

According to this study finding , booking first ANC timely is lower when compared to study shown in Nigeria at higher health facilities (46.7%) and in Addis Ababa health facilities (40.2%) (16,33) respectively.

Also, finding of this study is higher when compared study done in Tanzania on women who attended ANC shown (29%) of women booked before four month of pregnancy (15) and only 17 percent of women initiated booking of first Antennal care with first trimester in Uganda(18).

This finding is higher when compared to EDHS 2011, which only 11% women booked timely(7). This inconsistency could be attributed to the fact that EDHS covered more remote areas where health institution could be a major predictor of ANC utilization. It is also significant to note down the time gap between the EDHS and this study.

By multivariate analysis, this study revealed there is statistically significant association in between maternal age and timing of first ANC booking within recommended time (AOR= 0.2, 95% CI, 0.03-0.5, $p<0.05$). This finding is similar with some Literatures shown maternal age was found as factor of booking of first ANC (11,13,18). But in contrast, EDHS 2011, that indicated as maternal age and ANC utilization has no significant association(7). This inconsistence of

findings might be due to difference socio-demographic characteristics of the study population and time gap of studies.

In this study, multivariate analysis revealed that women education has statistically significant association with timing of first ANC booking. Those women with no education were much less likely to book within recommended time as compared educated one(AOR= 0.4, 95% CI, 0.2-0.9, $p<0.05$. This finding is similar with the Study finding in Nigeria and in Metekel Zone, North West, Ethiopia that shown level of education significantly associated with timing of first ANC booking(16) (10) respectively.

According to EDHS 2011, 91 percent of women with more than secondary Education received ANC as compared with 25 percent of women with no Education (7). The possible justification for educated women's to book first ANC within recommended time could be the higher the educational status the better understanding of information and the better the knowledge about the importance of timely booking of first ANC.

Multivariate analysis in this study, parity was found as statistically significant factor influence timing of first Antenatal care. Respondents with parity Zero were 1.8 times more booked within the recommended as compared with that of women with parity one and above (AOR= 1.8, 95% CI, 1.1-2.8, $p<0.05$). Similarly, in Nigeria, 53.3 percent women were booked lately as parity increases and also in Indonesia 16% (16,13) respectively. This finding is consistent with EDHS 2011, women with high parity less likely to time first ANC booking before four month of pregnancy.

In this study, multivariate analysis revealed that past experience of ANC service utilization has significant association with timing of first ANC booking. The proportion of respondents those

didn't have experience of past Antenatal care service utilization were 1.7 times more to book first ANC timely when compared to the referents (AOR= 1.7, 95% CI, 1.1 -2.8, p<0.05).

Similarly, other study revealed that quality of previous service and satisfaction influence booking (22) and 28.7 percent of women complained long waiting time as hindering factors for booking of first ANC timely (23). In this study, finding was more or less similar that 24 percent of women reported that long waiting time as factor not to book timely.

Also study in Hadiya Zone, revealed that waiting time to get service has significant association with booking of first ANC(11).

By multivariate analysis, this study revealed that woman's' knowledge on importance of the timely booking has significant association with timing of first ANC booking within recommended time as compared to referents.

Analysis revealed that respondents those know the importance of timely booking were two times more to book first Antenatal care within recommended time as compared to referents (AOR= 2.1, 95% CI, 1.3 - 3.4, p<0.05). In the same manner, study shown that 74 percent of women who lacked sufficient knowledge on the importance of booking timely were booked first ANC lately as compared to others(24). Study shown that 22.8 percent women were booked lately due lack of knowledge on importance of timely booking(16). Knowledge of mothers on importance of timely booking was strong predictor of timing of first ANC booking before fourth month of pregnancy as recommended (12,11,26).

Chapter- Seven

7. Strength and Limitation

7.1 Limitation of study

- ✓ Study may not be generalized rural community.

7.2 Strength of study

- ✓ Governmental and private health facilities in the town were included in this study
- ✓ All pregnant women who attend first visit were included in the study as study units
- ✓ Questionnaire was pre-tested and necessary modification was made, the principal Investigator and Supervisors were supervising the daily data collection activities.
- ✓ Close supervision of data collectors were performed accordingly

Chapter – Eight

8 Conclusion and Recommendations

8.1 Conclusion

- ✓ Out total respondents 35.4 percent made their first ANC booking before fourth month's pregnancy where as 64.4 percent were booked within fourth month of pregnancy and above.
- ✓ Among respondents socio-demographic characteristics, age was found as independent determinant factor of timing of first Antenatal care booking.
- ✓ Respondents' education was found to affect timing of first ANC booking.
- ✓ Knowledge of respondents on importance of timely booking ANC for the health of mother and fetus were found low.
- ✓ Respondents' knowledge on importance of timely booking was revealed as significant factor of timing first ANC booking.
- ✓ Parity of respondents was indicated as one of factors that significantly associated with timing of first Antenatal care booking.
- ✓ Respondents awareness (being advised or informed) on timing of first Antenatal care booking was found as statistical significant factor for timing of first Antenatal care booking
- ✓ Pervious ANC utilization was a negative forecaster for timing of first Antenatal care booking.

Therefore, only 35.4 percent of respondents were booked with in recommended time. The respondents Age, educational status, parity, knowledge on importance timely booking, awareness ((being informed before to book) and past experience of Antenatal care service utilization was significantly associated with timing of first Antenatal care booking.

8.2 Recommendation

Based on the findings of this study the following recommendations were made:

- ✓ Future ANC activities of Health Bureau should be focusing on improving women's knowledge on timing Antenatal care.
- ✓ To assure quality ANC provision Focused ANC should be implemented in all health institutions in Dilla town and all concerned bodies should take part.
- ✓ Dilla town, Health office, should develop a detailed and clear guideline and structure that will advance knowledge of reproductive age women on timing of Antenatal care.
- ✓ HEW should provide clear information on booking ANC to the expectant mother should be established.
- ✓ Training on simple and effective way of providing ANC should be given to health care providers.
- ✓ All stack holder should focus on advancement of women Education
- ✓ Dilla City Administration should emphasis ever more on knowledge of women on timing and quality of ANC service when programs are planned, implemented and evaluated.
- ✓ There should be further quantitative and qualitative studies focusing on quality of ANC service.

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Annex-I: Respondents Information Sheet English Version

DEPARTMENT OF NURSING AND MIDWIFERRY, COLLEGE OF HEALTH SCIENCES ALLIED SCHOOL OF HEALTH, ADDIS ABABA UNIVERSITY.

Here, I the undersigned, at Addis Ababa University, School of Graduate Studies Program, and currently undertaking research on a topic entitled assessment of timing of first antenatal care booking and associated factors among pregnant women who attends first ANC follow up at health facilities in Dilla town, Gedeo Zone, SNNPR, Ethiopia. For this study, you will be selected as a participant and before getting permission of your participation, you need to know all necessary information related to the study. Thus, this information will be detailed as:

Purpose of the study:-The purpose of the study is to assess of timing of first antenatal care booking and associated factors among pregnant women who attends first ANC follow up at health facilities in Dilla town.

Participants to be included: - Pregnant Women who attend first ANC at health facility and voluntary to participate in the study are included.

Risks of the study: The study will be done out simply by asking you the already prepared and structured questions. The procedure doesn't have any physical or psychological trauma on you. Furthermore, you will not be forced to respond information that you do not know.

Benefits of the study: For your participation in the study, you will be granted any special advantage to you. But, participating in the study and giving your guanine information will have great input in quality of ANC service and further more in reducing maternal deaths.

Confidentiality: All information you give will be kept confidential and won't be accessible to any third party. Your name won't be registered on the original question sheet so that you will not be identified.

Annex-II: Respondents Information Sheet Amharic Version

በጥናቱ ተሳታፊዎች የመረጃ ቅጽ (ከእንግልዝኛዉ የተተረጎመ)

በአድስ አበባ የኒቨርሲቲ ጤና ሳይንስ ኮለጅ በድህረ ምረቃ ትምህርት ፕሮግራም የነርሲንግና ሚድ ዋይፈሪ ትምህርት ክፍል፡፡
ከዚህ በታች እንደተመለከተዉ በአድስ አበባ የኒቨርሲቲ በድህረ ምረቃ ትምህርት ፕሮግራም ነርሲንግና ሚድዋይፈሪ ትምህርት ክፍል፡ በአሁኑ ወቅት **የእናቶች የቅድሚያ ወሊድ ክትትል አጀማመርን በሚመለት** አነስተኛ ጥናት በዲላ ከተማ እያካሄድኩ ነዉ፡፡

የዚህ ጥናት ተሳታፊ ለመሆን እርስዎ ተጋብዘዋል፡፡ በጥናቱ ላይ ለመሳተፍ ፍቃደኝነትዎ ከመጠየቁ በፍት ጥናቱን በተመለከተ አስፈላጊ የሆኑ መረጃዎችን ማግኘት ያስፈልግዎታል፡፡ስለሆነም በጥናቱ ላይ ለመሳተፍም ሆነ ላለመሳተፍ መጀመሪያ ማወቅ የምገባዎትን መረጃ እንደምከተለዉ እናቀርብልዎታለን፡፡

1.የጥናቱ አላማ፡ የእናቶችን ቅድሚያ ወሊድ ክትትል አጀማመርና ተያየዥ ጉዳዮችን ለመዳሰስ፡፡

2.በጥናቱ የምካተቱ ተሳታፊዎች፡ ማንኛዉም ለመጀመሪያ ለቅድሚያ ወሊድ ክትትል የመጠች እናትና ለመረጃዉ ፍቃደኛ የሆነች፡፡

3. ከጥናቱ ጋር የተያያዘ ጉዳት፡ ጥናቱ የምካሄደዉ ቀደም ለዚህ ጥናት የተዘጋጀዉን ጥያቀ በመጠየቅ ነዉ፡፡ ሆኖም በጥናቱ ተሳታፊዎች አካል ላይም ሆነ አእምሮ ላይ ፈፅሞ ጉዳት የለዉም፡፡ያልገባዎትን መረጃ ለመመለስ አይገደዱም፡፡

4. ጥቅም፡ በጥናቱ በመሳተፍዎ የምከፈልዎት ክፍያ ወይም የተለየ ጥቅም የለዉም፡፡ በለላ በኩል በጥናትዎ መሳተፍዎና ለምጠየቁት ጥያቀዎች ተገቢዉን መረጃ መስጠትዎ የቅድሚያ ወሊድ ክትትል አገልግሎት ለይ ከፍተኛ እገዛ ይኖረዋል፡፡

5. ምስጥር የመጠበቅ ሁኔታ፡ እርስዎ የምሰጡት መረጃ በምስጥር የጠበቃል፡፡ ለሶስተኛ ሰዉ ተላልፎ አይሰጥም ወይም አይጋለጥም፡፡ማንነትዎ እንዳይታወቅ ስምዎ በዋናዉ ኮፒ አይመዘገብም፡፡

Annex -III: Participants Consent form English Version

Good morning /afternoon?

My name is _____ I come from Nursing and Midwifery Department, College of Health Science, **Addis Ababa University**. I am here to collect information on timing of first ANC booking and associated factors from Mothers who attend ANC follow up in this health facility. The purpose of the study is to assess the timing of the first ANC booking and associated factors among the pregnant women who attend ANC follow up in this health institution.

Your participation in the study will be totally based on your willingness. You have the right not to participate from the beginning, or stop any time after starting participation. You will not be forced to respond to the information you do not know. Your name will not be included in the information, I promise to keep the confidentiality of your response.

Your genuine response will play great role as input on timing of ANC service and will be used as input for researchers, managers and other concerned bodies.

So, I kindly request you to ask some questions. Would mind if I take some minutes with you? It may take about 30 minutes. Thus, I kindly request you to participate in genuinely answering the interview.

Thank you!

I agree to participate ☐ I don't agree to participate ☐

Sign: _____ Date: _____

NB: If you have any question regarding the study, contact with Principal Investigator.

Name: Abeb Alemu

Tel: 0913672730

Email: aalemu72@yahoo.com

Annex -IV: Participants Consent form Amharic Version

<u>የፈቃደኝነት ማረጋገጫ</u>

እንደምን አደሩ/ እንደምን ዋሉ? (እንደ አስፈላግነቱ)

እኔ ስሜ ---------- እበላለሁ:: የመጠሁት በአድስ አበባ የኒቨርሲቲ ጤና ሳይንስ ኮለጅ በድህረ ምረቃ ትምህርት ፕሮግራም የነርሲንግና ሚድዋይፈሪ ትምህርት ክፍል ነዉ::
የእናቶች የቅድሚያ ወሊድ ክትትል አጀማመር በሚመለከት አነስተኛ ጥናት ለማድረግ መረጃ የሰበሰብኩ ነዉ::
በጥናቱ ላይ መሳተፍዎ ሙሉ በሙሉ የምመሰረተዉ በራስዎ ፍላጎትና ፍቃደኝነት ላይ ነዉ:: ከመጀመሪያዉ በጥናቱ ላይ መሳተፍም ሆነ ላለመሳተፍ ይችላሉ:: ካልተስማማዎት በመሀል የማቋረጥ መብትዎ ሙሉ በሙሉ የተጠበቀ ነዉ:: ያልገባዎትን መረጃ ለመመለስ አይገደዱም:: ስምዎት ከመረጃዉ ጋር አይካታትም፡ የሰጡኝን መረጃ ሁሉ በሚስጥር እነደምጠብቅልዎ ቃል እገባለሁ::
ጥያቀዉ የምወስደዉ ግዜ በአማካይ 30 ደቅቃ ብቻ ነዉ:: ይህ ጊዜዎትን የሚይዝ ቢሆንም የእናቶች የቅድሚያ ወሊድ ክትትል አጀማመር በሚመለከት ከፍተኛ ሚና ያለዉ በመሆኑ እንድተባበሩኝ እጠይቅዎተለሁ:: የተወሰኑ ደቂቃዎች ባነጋግርዎ ፈቃደኛ ነዎት;

በመጨረሻም ስላዳመጡኝ ከልብ አመሰግናለሁ::

ፈቃደኛ ነኝ ☐ ፈቃደኛ አይደለሁም ☐

ፊርማ ---------- ቀን፡ ----------

አጥኚዉን መጠየቅ/ መግኘት ከፈለጉ፤

አጥኚዉ: ስም፡- አበበ አለሙ

ስልክ፡ 0913672730

ኢሜይል፡ aalemu72@yahoo.com

Annex- V: Q**uestionnaires in English Version**

Questionnaire number ☐ **Data:** ☐

No	Questions	Responses	Code
Socio-demographic variables			
1	Age	_____ Years	
2	Marital status	1. Single (never married) 2. Married 3. Separated (Divorced, Widowe)	
3	Religion	1. Orthodox 2. Muslim 3. Protestant 4. Catholic 5. Others [specify] --------	
4	Ethnicity	1. Gedeo 2. Oromo 3. Amhara 4. Sidama 5. Gurage 6. Others [specify]	
5	Your Educational level	1. Can't read and write 2. Primary [1-8] 3. Secondary and above	
6	Occupation	1. Employed 2. Merchant 3. House wife 4. Other (specify) -------	
7	Is there Transportation cost?	1. Yes 2. No	
8	If yes in above question, how much?	_____ ETB	
9	How far your home from health institution?	_____ in Km	
10	Family income per month	_____ in ETB	
	Knowledge of Timing of ANC booking		
11	Number of pregnancy including present pregnancy.	_____	
12	Number of births	_____	
13	How do you know importance of timely initiation ANC booking?	1. Yes 2. No	
14	How do you know importance of timely initiation ANC booking?	3. Yes 1. No	
15	When do you think it is appropriate time to begin ANC booking after conception?	1. _____ months 2. I don't know	
16	How many visit do you think a women need to go for ANC to health facility during pregnancy?	_____ visit	
Experience of heath service utilization			
17	Have you ever attend ANC	1. Yes 2. No	
18	If yes, for which pregnancy you attended ANC?	1. 1st pregnancy 2. 2nd pregnancy 3. 3rd pregnancy 4. 4th pregnancy 5. 5th pregnancy 6. Other (specify) ____	

19	If you attended ANC before this pregnancy, at what months you started the follow up?	1. _____ month 2. Don't remember	
20	Do you think waiting time is one of the problems that hinder ANC service utilization?	1. Yes 2. No	
21	Is there any payment you asked for cheek up?	1. Yes 2. No	
22	If yes, for what service you paid?	1. For consultation 2. For laboratory 3. For ultra sound 4. For drugs 5. Others [specify]	
23	Is there any missed investigation in the previously, due to shortage of money?	1. Yes 2. No	
24	If yes, what the service you missed before?	1. Consultation 2. Laboratory 3. Ultrasound 4. Drugs 5. Other [specify]	
25	Rate your satisfaction level on staff approach	1. Highly satisfied 2. Satisfied 3. Medium 4. Not satisfied 5. Highly not satisfied	
26	Rate your satisfaction level on laboratory service	1. Highly satisfied 2. Satisfied 3. Medium 4. Not satisfied 5. Highly not satisfied	
27	Rate your level of satisfaction level on waiting time to get service	1. Highly satisfied 2. Satisfied 3. Medium 4. Not satisfied 5. Highly not satisfied	
28	Rate your satisfaction level on privacy condition that is provided while checkup	1. Highly satisfied 2. Satisfied 3. Medium 4. Not satisfied 5. Highly not satisfied	
29	Rate your level of satisfaction on respect of cultural values and religion	1. Highly satisfied 2. Satisfied 3. Medium 4. Not satisfied 5. Highly not satisfied	
30	Rate your satisfaction level on service charge of ANC follow up	1. Highly satisfied 2. Satisfied 3. Medium 4. Not satisfied 5. Highly not satisfied	314
Awareness of the current pregnancy			
31	How do you know your pregnancy?	1. While menses missed 2. Physiological change 3. Urine test 4. Other [specify] ____	
32	Is pregnancy planned?	1. Yes 2. No	
33	If this pregnancy is not planned, is it wanted by you after conception?	1. Yes 2. No	

34	If this pregnancy is not planned, is it wanted by your husband after conception?	1. Yes 2. No	
35	To whom did you tell when you become pregnant for the first time?	1. Husband 2. Mother 3. Sister 4. Friends 5. Other [specify] ___	
36	Before your first attendance of the ANC, is there anyone who advises you to initiate it?	1. Yes 2. No	
37	If yes, from whom did you get an advice?	1. From Husband 2. From Mother 3. From my Friends 4. From Health Extension workers 5. From other [specify]	
38	If you are advised to attend ANC, are you informed when to start?	1. Yes 2. No	
39	If you are advised on the time to start ANC, when did you advised to start?	1. _____ months after cessation of menses	
40	Why did you decide to initiate the ANC follow up now?	1. I perceived it is appropriated time 2. From my previous experience 3. Because, I get Sick now 4. Because it is unplanned pregnancy 5. Other [specify] ----	
	Women Decision making		
41	Did you get permission from your husband to initiate ANC booking?	1. Yes 2. No	
42	With whom did you decide to initiate antenatal care visit for current pregnancy?	1. With my husband 2. Myself 3. Others	
43	Why do you think your husband did not participated ANC booking?	1 B/c pregnancy is normal 2 No good service at HC 3 Financial problem 4 I don't know the reason 5 Others (specify)	

This is about that I want to ask you. Thank you very much for spending your time and providing valuable information. Do you have any question that I can address for you?

Annex – VI: Questionnaires in Amharic Version

የመጠይቅ ቁጥር ——— **ቀን፡ ————————**

ተ.ቁ	ጥያቄ	መልስ	ኮድ
1	እድሜ	---------- ዓመት	
2	የጋብቻ ሁኔታ	1. ፈፅሞ ያላገባ 2. ያገባና አሁን አብሮ የሚኖር 3. ያገባና አብሮ የማይኖር /የፈ በሞት የተለየ/	
3	ሐይማኖት	1. ኦርቶዶክስ ክርስቲያን 2. ሙስሊም 3. ካቶሊክ ክርስቲያን 4. ኘሮቴስተንት ክርስቲያን 5. ሌላ /ይገለጽ/	
4	ብሔረሰብ	1. ጌዴኦ 2. ኦሮሞ 3. አማራ 4. ሲዳማ 5. ጉራጌ 6. ሌላ /ይገለጽ/	
5	የትምህርት ደረጃዎት	1. ያልተማረች/ማንበብና መፃፍ የማትችል 2. አንደኛ ደረጃ /1-8ክፍል/ 3. ሁለተኛ ደረ /9-12 ክፍል ና ሰርተፊኬት/ 4. ዲኘሎማ ና ከዚያ በላይ	
6	የሥራ ሁኔታ	1. ደመወዝተኛ /ተቀጣሪ/ 2.ነገዴ 3. የቤት እመቤት 4. ሌላ /ይገለጽ/	
7	ወደዚህ ጤና ድርጅት ለመድረስ ገንዘብ ከፍሎሉ?	1. አዎ 2. አይደለም	
8	የከፈሉት የብር መጠን በብር?	----------ብር	
9	ቤቶት ከጤና ተቋም ምን ያህል ይርቃል?	---------- ኪ.ሜ	
10	የቤት የወር ገቢ በገንዘብ ሲተመን ምን ያክል ነው	---------- ብር	
11	አርግዘናዎ ስንተኛ ነዉ /የአሁኑን ጨምሮ/	----------	
12	ስንት ልጆች አሎት?	----------	
13	የቅድመ ወሊድ /ነፍሰጡር/ ምርመራ ለጤናዎት አስፈላጊነቱን እንዴት ይገነዘቡሉ?	1. በጣም አስፈላጊ ነው 2. በመጠኑ አስፈላጊ ነው 3. በጣም አነስተኛ ነው፡፡	
14	የነፍሰ ጡር/የቅድመ ወሊድ/ ክትትል ለሸሉ /በማህፀንዎ ውስጥ ላለው ልጅ/ አስፈላጊነቱን እንዴት ይገነዘቡሉ?	1. በጣም አስፈላጊ ነው 2. በመጠኑ አስፈላጊ ነው 3. በጣም አነስተኛ ነው፡፡	
15	የነፍሰ ጡር /ቅድመ ወሊድ/ ክትትል ወር አበባዎ ቀርቶ መቼ ቢጀመር ጥሩ ነው ብለው ያስባሉ?	1. ---------- ወር 2. አላውቅም	
16	በአንድ የእርግዝና ወቅት ስንት ጊዜ ተመላልሰው ምርመራ ቢያደርጉ በቂ ነው ብለው ያስባሉ?	----------ጊዜ	
	የአገልግሎት አጠቃቀም መረጃዎች /ከዚህ ቀደም ለነበረው ርግዝና		
17	የቅድመ ወሊድ /የነፍሰጡር ምርመራ/ ተከተትለው ያውቃሉ?	1. አዎ 2. አላውቅም	
18	የነፍሰጡር ምርመራ ተከተትለው የሚያውቁ ከሆነ የትኛ ውን እርግዝና ነው?	1. የመጀመሪያ ርግዝና 2. ሁለተኛ ርግዝና 3. ሶስተኛ ርግዝና 4. አራተኛ ርግዝና 5. አምስተኛ ርግዝና	

19	ከዚህ እርግዝና በፊት የነበረውን እርግዝና የቅድመ ወሊድ ተከተትለዉ ከሆነ ክትትሉን የጀመሩት ወር አበባዎ ቀርቶ በስንት ጊዜ ነው።	1. ---------- ወር 2. አላስተውስም	
20	ለቅድመ ወሊድ ምርመራ መጥተው የምቆዩነት ጊዜ አገልግሎቱን እንዳያኙ እንቅፋት ይሆናል ብለው ያስባሉ?	1. አዎ 2. አይደለም	
21	ቅድመ ወሊድ ምርመራ የሚከፍሉት ገንዘብ ነበር	1. አዎ 2. የለም	
22	መልስዎ አዎ ከሆነ ለምን ጉዳይ ነበር የከፈሉት	1. ለካርድ 2. ለላብራቶሪ 2. አልትራሳውንድ 4. ለመድሐኒት 3. ሌላ /ይገለጽ/------	
23	ከገንዘብ እጥረት ምክንያት ያላደረገት ምርመራ አለ?	1. አዎ 2. የለም	
24	በገንዘብ ጥረት ምክንያት ያላደረጉት ምርመራ ካለ የትኛውን ነዉ ያላደረጉት?	1. ለካርድ 2. ለላብራቶሪ 3. አልትራሳውንድ 4. ለመድሐኒት 5. ሌላ /ይገለጽ/--------	
25	በባለሙያዎቹ አቀራረብ የእርስዎ እርካተ መጠን ይግለፁት	1. በጣም ረክቻለሁ 2. ረክቻለሁ 3. መካከለኛ 4. አልረካሁም 5. በጣም አልረካሁም	
26	በላብራቶሪ ምርመራ አገልግሎት የእርስዎ እርካተ መጠን ይግለፁት	1. በጣም ረክቻለሁ 2. ረክቻለሁ 3. መካከለኛ 4. አልረካሁም 5. በጣም አልረካሁም	
27	በምርመራው የሚፈጀዉ ጊዜ የእርስዎ እርካተ መጠን ይግለፁት	1. በጣም ረክቻለሁ 2. ረክቻለሁ 3. መካከለኛ 4. አልረካሁም 5. በጣም አልረካሁም	
28	በባለሙያዎቹ ገበና አጠባበቅ አገልግሎት የእርስዎ እርካተ መጠን ይግለፁት	1. በጣም ረክቻለሁ 2. ረክቻለሁ 3. መካከለኛ 4. አልረካሁም 5. በጣም አልረካሁም	
29	በባለሙያዎቹ ባህልናና ሐይማኖት መጠበቅ የእርስዎ እርካተ መጠን ይግለፁት	1. በጣም ረክቻለሁ 2. ረክቻለሁ 3. መካከለኛ 4. አልረካሁም 5. በጣም አልረካሁም	
30	በአገልግሎት ክፍያ ላይ የእርስዎ እርካተ መጠን ይግለፁት	1. በጣም ረክቻለሁ 2. ረክቻለሁ 3. መካከለኛ 4. አልረካሁም 5. በጣም አልረካሁም	
	በእርግዝናዉ ላይ ያለዉ ግንዛቤ		
31	ማርገዝዎን በምንድን ነው ያወቁት?	1. የወር አበባ መቅረት 2. የሰውነት ለውጥ 3. የሽንት ምርመራ በማድረግ 4. በሌላ መንገድ /ይገለጽ/	

32	**ይህ እርግዝና ያቀዱት ነበር?**	**1. አዎ** **2. አይደለም**	
33	**ይህ እርግዝና ያለ ዕቅድ ከሆነ ከተረገዘ በኋላ እርስዎ ይፈለግ ነበር?**	**1. አዎ** **2. አይደለም**	
34	**ይህ እርግዝና ያለ ዕቅድ ከሆነ ከተረገዘ በኋላ በባለቤትዎ ይፈለግ ነበር?**	**1. አዎ** **2. አይደለም**	
35	**በመጀመሪያ ማርገዝዎትን ያበሰሩት /የነገሩት/ ለማን ነው?**	**1. ለባለቤትዎ** **2. ለአናትዎ** **3. ላህትዎ** **4. ለጓደኛዎ** **5. ለሌላ /ይገለጽ**	
36	**የቅድመ ወሊድ /ነፍሰጡር/ ምርመራ አስፈላጊነት ለዚህ ምርመራ ወደ ጤና ድርጅት ከመምጣትዎ በፊት ስለ ጥቅሙ ምክር የሰጠዎት ነበር**	**1. አዎ** **2. የለም**	
37	**የቅድመ ወሊድ /ነፍሰ ጡር/ምርመራ አስፈላጊነትን ተመክረው ከሆነ ምክሩን የሰጠዎት ማነው**	**1. የህብረተሰብ ጤና ሰራተኞች** **2. በባለቤትዎ** **3. ለአናትዎ** **4. ላህትዎ** **5. ለጓደኛዎ** **6. ሌላ /ይገለጽ/----------**	
38	**ምክር የሰጠዎት ሰው መቼ ምርመራ ማድረግ /መጀመር/ እንዳለብዎት ነግረዎታል?**	**1. አዎ** **2. አልነገረኝም**	
39	**የነፍሰጡር ምርመራ መቼ ማድረግ እንዳለብዎት ነግሮዎት ከሆነ ወር አበባዎ ቀርቶ መቼ መጀር እንዳለብዎት ነው የነገረዎት?**	**ከ ---------- ወር በኋላ**	
40	**በዚህን ጊዜ ምርመራ ለማድረግ ለምን ፈለጉ?**	**1. ትክክለኛ የምርመራ ጊዜ በመሆኑ** **2. ከበፊቱ በዚህ ጊዜ ምርመራ ስለማደርግ** **3.** ጤንነቴ ጡሩ ስላልሆነ **4. እርግዝናው ያለ እቀድ በመሆኑ** **5. ሌላ /ይገለጽ/ ------**	
	ዉሳኔ ሰጭነት ሁኔታ		
41	**ባለቤትዎት ለቅድመ ወሊድ ምርመራ ፈቃደኛ ኖት?**	**1. አዎ 2. አይደለም**	
42	**የቅድመ ወሊድ ምርመራ የወሰኑ ከማን ጋር ነው?**	**1. ከባለቤትዎት ጋር** **2. ብቻዎትን** **3. ከሌላ /ይገለጽ/**	
43	**ባለቤትዎ ፈቀደኛ ያልሆነበት ምክንያት ምን ይሁን?**	**1. እርግዝናዉ ችግር ስለሌለው** **2. በህክምና ተቋም** ጥሩ አገልግሎት ስለማይሰጥ **3. የገንዘብ ችግር ስላለን** **4. አላውቅም** **5.** ሌላ /ይገለጽ/--	

ጊዜዎትን ሰውተው ይህንን ጠቃሚ መረጃ ስለሰጡኝ በጣም አመሰግናለሁ::

Annex-VII: Declaration

I **Abebe Alemu**, the undersigned declare that this is my original work and has not been presented in this or any other University for a similar or any other degree award, and any partial or full sources of materials used should be fully acknowledged.

Name: Abebe Alemu (BSc)

Signature: _____

Date: _____

This thesis has been submitted to:

Advisor: Mr. Balcha Birhanu (RN, BSc, MSc)

Signature: _____

Date: _____

This thesis has been submitted for certification to School of Allied Health Sciences

Department of Nursing and Midwifery head

Department Head: Daniel Mengistu (RN, BSc, MSc)

Signature: _____

Date: _____

Place: Addis Ababa University. College of Health Sciences,

School of Allied Health Sciences

Department of Nursing and Midwifery, Post Graduate program

Annex: VIII Principal Investigator – CV

CURRICULUM VITAE

I. Personal identification

- ✓ Name: Abebe Alemu Anshebo
- ✓ Date of birth: 7/1/1987.
- ✓ Birth Place: Angacha, SNNPR, Ethiopia.
- ✓ Nationality: Ethiopian
- ✓ Marital Status: single
- ✓ Address: E-mail aalemu72@yahoo.com or bbanshebo363@gmail.com

II. Educational qualification

- ✓ **I** completed primary school at Funamura primary school, KT Zone, SNNPR.
- ✓ I completed Secondary education at Wachamo High school, SNNPR.
- ✓ I graduated *BSC in Midwifery* from Hawassa University, *July 21, 2009.*
- ✓ Now, I'm Prospective graduate of *Master in Reproductive Health and Maternity Nursing specialty* in Addis Ababa University on *July 2014.*

III. Work experience

- ✓ I have been working in Dilla University Referral Hospital, at Gyn-Oby ward since, *September, 4/2009 to October 2012* parallel with Academic service.
- ✓ I have been working as Graduate Assistant, Assistant lecturer in Health Science School, Dilla University, Ethiopia since *September, 4/2009 till October 2012.*
- ✓ I was affirmative action and academic advisor of Midwifery program and Academic Council member in Health Science School, Dilla University, Ethiopia, since 3rd *December, 2010 to October 2012* and also I was focal person of Health Science School for BPR and HIV/AIDS prevention and control for two years duration.

IV. Certificates

- Certificates on ***TOT*** *on* ***Emergency Obstetrics and Neonatal care****,* organized by Southern Ethiopian GWENT Health care LINK U.K and Hawassa University College of Medicine and health Science; *7th Nov-12TH Nov, 2010.*
- Certificate ***on Basic Emergency Obstetrics &Newborn Care (BEmONC)*** Training held *August 21 – September 8, 2012* organized by Ethiopian Midwifes Association in collaboration with Federal Ministry of Health and UNFPA.
- Certificates on ***PMTCT training*** organized in collaboration with SNNPR Regional Health Bureau and Johns Hopkins University /TSEHAI/ held *on March 22nd -27th ,2010* at Hawassa University/Referral Hospital, Hawassa.
- Certificates on ***BPR training*** which was prepared for Dilla University, Health Science academic staffs that was organized by Dilla University in collaboration with SNNPR Bureau of Capacity Building from *October 12th -16th ,2009.*
- Certificates on ***effective teaching methodology training*** organized by Dilla University, School of Health Science in collaboration with federal ministry of Education and Jheipigo Ethiopia from *April 16-18, 2010.*
- I *had* ***Diploma in Application of Software*** from CPU Computer System, Dilla at 01/05/04 E.C.

V. Language

	Listening	Speaking	Reading	Writing
English	Very good	Good	Very good	Very good
Amharic	Very good	Very good	Very good	Very good
Kanbatagne	Excellent	Excellent	Excellent	Excellent

VI. Referees

1. Dr.Ezana Ayele (MD, Medical Director of Dilla Unversity Referral Hospital) Tel: 0911885396 Email: **ezooloogy@yahoo.com**
2. Henok Tedesse (MPH, Dean of Health Science collage, Dilla University fellow PHD) Tel: 0911317956, Emails: **hennypho@yahoo.com**
3. Dr. Getachewu Marga (Obstetrician and Gynecologist in Dilla University Referral Hospital) Tel: 0912702084