

**UNINTENDED PREGNANCY AND ASSOCIATED FACTORS AMONG
EVER PREGNANT WOMEN IN BITA WOREDA, KAFA ZONE,
SOUTHWEST ETHIOPIA**

BY: SHAREW MULUGETA (BSc)

**A THESIS SUBMITTED TO JIMMA UNIVERSITY COLLEGE OF
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(MPH/RH).**

June, 2015

Jimma, Ethiopia.

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By: - SHAREW MULUGETA (B.Sc.)

ADVISORES: 1st. TIZTA TILAHUN (PhD. Assistant Professor)

2nd.BITIYA ADMASU (MPH/RH, Assistant Professor)

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Abstract:

BACKGROUND: - Unintended pregnancy is an important public health problem of women of child bearing age, because of their negative outcomes on health and of social for both mothers and children. Unintended pregnancy contributes to high maternal mortality and morbidity in Ethiopia, a country striving to reduce Maternal Mortality.

OBJECTIVES: The purpose of this study is to determine the magnitude of unintended pregnancy and identify associated factors among ever pregnant women in Bitta woreda, Southwest Ethiopia.

METHODS: A community based cross sectional study was conducted among 770 randomly selected women of reproductive age group (15-49 years) who had been ever pregnant. A multistage sampling technique was used to select study participants. Data were checked for completeness, consistency, coded and entered into Epidata (version 3.1) and exported to SPSS version 20 for analysis. Univariate, bivariate and multivariate logistic regression analyses were used to analyze the data.

RESULT: The overall prevalence of unintended pregnancy was 36.5 % (26% for mistimed and 10.5% for unwanted).

Unintended pregnancy was associated with travel time to family planning service area (AOR=2.23(1.37-3.63)), modern contraceptive practice (AOR=2.43(1.22-4.86)), perceived women's autonomy (AOR=0.47(0.31-0.72)), parity (AOR=5.52(2.50-12.20)) and with ideal number of children (AOR=0.15(0.08-0.31)).

CONCLUSION: A significant prevalence of unintended pregnancy was observed in the study population. Factors that found to have association with unintended pregnancy were travel time to family planning service area, modern contraceptive practice, perceived women's autonomy, parity and ideal number of children.

Key words; *unintended, ever pregnant, Ethiopia*

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List of abbreviations and acronyms

AOR	Adjusted odds ratio
CI	Confidence interval
EDHS	Ethiopian Demographic and Health Surveys
IUDS	Intra Uterine Contraceptive devices
JU	Jimma University
LAM	Long Acting Contraceptive Method
LARCS	Long Acting Reversible Contraceptives
OR	Odds Ratio
PI	Principal Investigator
RRR	Relative Risk Ratio
WHO	World Health Organizations
UN	United Nations
UNFPA	United Nation Population Fund Agency
UNICEF	United Nation Infant and Children Emergency Fund
X ²	Chi-squares
SNNPR	Southern nations and nationalities and peoples region

Chapter 1 Introduction

1.1 Background

An unintended pregnancy is a pregnancy that is either mistimed (i.e., they occurred earlier than desired) or unwanted (i.e. they occurred when no children, or no more children were desired) at the time of conception [1]. Unintended pregnancy can result from contraceptive failure, non-use of contraceptives, and less commonly, rape and it can create serious health consequences for women, children and family. Unintended pregnancy is not just a problem of unmarried women or teenagers or of poor women or minorities; it affects all segments of society [2, 3].

Unintended pregnancy leading to unsafe abortion is one most important cause of maternal mortality and morbidity. In 2012, Eighty-five million pregnancies worldwide, representing 40 percent of all pregnancies were unintended. Throughout the world, child bearing age women cope with the heavy burden of unintended pregnancy. In those countries, their particular, economic, legal, cultural and health-services context influences women's success in avoiding unintended pregnancy and mediates their response when they encounter one [4, 5, 6].

In Ethiopia the prevalence of unintended pregnancy is 29% as measured in EDHS 2011 and as high as 42.4% as reported in some other studies. Over all, the total fertility rate (TFR) in Ethiopia is 1.8 greater than the total wanted fertility rate (TWFR) suggesting that the TFR is 60 percent higher than it would be if unwanted births were avoided and Ethiopian women have not been very successful in achieving their reproductive intentions [7,8].

The amount of time a woman typically spends avoiding unwanted or mistimed pregnancies has increased in recent decades, because urbanization and social and economic development have lead many couples to want fewer children. The concept of unintended pregnancy has been essential to demographers in seeking to understand fertility, to public health practitioners in preventing unwanted childbearing and to both groups in promoting a woman's ability to determine whether and when to have children [9].

The level of pregnancy planning can also serve as an indicator of the degree of autonomy women have and thus the reflection of the state of women's reproductive health and the success over the fertility control.

1.2 Statement of the problem

From eighty-five million pregnancies documented in 2012 worldwide, 40 percent were unintended. Of these, 50 percent ended in abortion, 13 percent ended in miscarriage, and 38 percent resulted in an unplanned birth [5]. The worldwide rate of unintended pregnancy in 2012 was 53 per 1,000 women aged 15–44. The highest regional rate was in Africa (80) and the lowest were in Europe (43) and Oceania (43). The highest sub regional rates were in Eastern and Middle Africa (108 each), and the lowest were in Northern, Southern, and Western Europe (35, 35, and 27, respectively) [5].

Unintended pregnancy is an important public health issue in developed and developing countries because serious consequences for women and their families, including the possibility of maternal death, unsafe abortion, delayed prenatal care, low birth weight baby, poor maternal mental health and poor child health outcomes. Each year, an estimated 80 million unintended pregnancies, both mistimed and unwanted, occur globally [4].

Globally, about 42 million women with unintended pregnancies, both mistimed and unwanted, choose abortion every year. And nearly half of these procedures, 20 million, are unsafe. An unsafe abortion is defined as a procedure for terminating an unintended pregnancy carried out either by person lacking the necessary skills or in an environment that does not conform to minimal medical standards or both [10]. Some 47,000 Women around the world die each year due to unsafe abortions, making it one of the leading causes of maternal mortality (13%) [11]. Of the women who survive unsafe abortion, multiple potential complications such as, acute trauma, shock, organ failure, infections, and future reproductive problems are known to happen [12, 13].

In sub-Saharan Africa, approximately 14 million unintended pregnancies occurs every year. The low contraceptive prevalence, with only 22% of married women currently using modern contraceptive methods, and the highest level of unmet need for contraception of all world regions has contributed to the high rate of unintended pregnancy in the region [14,15].

The estimated annual number of unsafe abortions in Sub-Saharan Africa is 5.5 million. Over 40% of the total deaths due to unsafe abortion have occurred in Africa making it the leading cause of maternal mortality in the region [16].

The risk of abortion-related death is four times greater for an African woman than for an Asian woman, and 650 times greater than for a North American woman [17].

When effective contraceptives are available and used consistently and correctly, unplanned pregnancies are preventable [18]. An estimated 222 million women in the developing world have an unmet need for modern contraceptives, meaning they want to avoid or delay a pregnancy but can't access contraception [19]. Of the 222 million married and unmarried women who lack access, 59 per cent live in Sub-Saharan Africa and South Central Asia [20]. About 82% of unplanned pregnancies in developing countries occur among these women [21]. The major contribution of contraception to reducing maternal death and disability is through its potential to decrease unsafe abortions [15].

Evidence demonstrates that liberalizing abortion laws to allow services to be provided openly by skilled practitioners can reduce the rate of abortion -related morbidity and mortality. In South Africa, the annual number of abortion-related deaths fell by 91 % after the liberalization of the abortion law in 1996 [22].

In Ethiopia the prevalence of unintended pregnancy is 29% as EDHS 2011 and as high as 42.4% as reported in some other studies [7, 8]. The overall maternal mortality ratio in Ethiopia is 676 deaths per 100,000 live births [7]. A large proportion of these deaths result from unsafe abortion from unwanted pregnancies. A nationally representative survey conducted in Ethiopia in 2008 revealed that an estimated 382,000 induced abortions were performed and 52,600 women were treated for complications of abortion [23].

In this country, the majority of unintended pregnancy 95% occurs among the women who do not practice contraception at all [24]. Moreover, when they are using contraception, many people do not use the most effective methods Long -acting reversible contraception (LARCs), which include implants and IUDs, that have very low failure rates (<1 percent), lower by far than the two most commonly used forms of contraception, condoms (18 percent) and the Pill (9 percent). The reason for these high failure rates is not the efficacy of these methods when used as intended; instead, it reflects the ability of the users to use them consistently and correctly [7].

In Ethiopia by far the most popular modern method, used by 21 percent of currently married women, is injectables followed by male condom (10.8 percent) and pills (5.4 percent). LAM is

the least known modern method few women have heard of this method and, only 3.6 percent used it with a 12-month contraceptive discontinuation rate for all methods being 37 percent in this country [7].

In 2005, Ethiopia expanded its abortion law, which had previously allowed the procedure only to save the life of a Woman or protect her physical health. Currently abortion is legal in Ethiopia under certain preconditions that include cases of rape, incest or fetal impairment. Despite the implementation of the new law, almost 60% of abortions in Ethiopia are unsafe [25].

Considering it's devastating outcome, it's important to prevent unintended pregnancies by clearly differentiating those factors contributing to it.

Provision of access to contraceptives, safe abortion services and empowering women to determine their reproductive choices are also among the ways to its reduction [26].

Studies conducted in different part of the world have revealed several demographic and socio-economic factors associated with unintended pregnancies. In Ethiopia, where the situation is critical with overall maternal mortality ratio 676 deaths per 100,000 live births and abortion one most outcome of unintended pregnancy contributing for 14% of the maternal deaths, few studies have been undertaken on unintended pregnancies and listed factors such as, younger age, less level of education, unmarried, rural residence, and lower income, distance from the nearest health facility, higher parity, previous history of unintended pregnancy, family planning method failure, partner's desire for child, domestic violence and less autonomy as predictors of unintended pregnancy [7, 8, 27, 28, 29, 30].

The three most recent Demographic and Health Surveys conducted nationwide revealed a decreasing trend in the percentage of unwanted pregnancies: 17 %, 16% and 9% in 2000, 2005 and 2011 respectively. However, the percentage of births that were wanted later (mistimed) remained stable over the years in the range of 19-20% [7, 31, 32]. This calls for the investigation of factors for unintended pregnancies to reduce its occurrence and act for prevention. The objective of this study is to identify factors associated to unintended pregnancy in the study area.

Chapter 2 Literature review

2.1 Magnitude of unintended pregnancy

Globally, many Pregnancies are still unintended among all pregnancies (million) 208. worldwide, 41% are unintended the proportion of unintended pregnancies among all pregnancies in 2008 were, 44% for Europe, 48% for North America, 58% for Latin America/Caribbean, 38% for Asia and 39% for Africa [33]

Studies also have shown that women who experience an unintended pregnancy are more likely to seek an abortion, and nearly half of all unintended pregnancies end in induced abortion, which in many cases will be illegal and unsafe in sub-Saharan Africa including Ethiopia [34].

And those women who decide to carry their pregnancy to term tend to place less value on their pregnancy, as reflected in their lower tendency to seek antenatal care. Late ANC initiation is a significant maternal and child health consequence of mistimed and unwanted pregnancies in, Tanzania for example, Late ANC initiation of 81.5% is observed. And half of the women sought their first ANC after the 5th month of pregnancy gestation [35].

A study from Ecuador has shown that Infants from unwanted pregnancies were significantly more likely than infants from planned pregnancies to be of low birth weight [36].

The breast feeding rate among women whose pregnancies were mistimed was 52.0%, and the rate among women who did not want to be pregnant at all was 44.2% as compared with 63.2% of the women whose pregnancies were planned indicated they would breast -feed their infants [37].

As indicated in a study by Dibaba et al. Women reporting that their pregnancy was unwanted were almost twice as likely to experience depressive symptoms compared with women with a wanted pregnancy [29].

In some parts of sub-Saharan Africa (SSA) pregnancies amongst single women result in stigma, and physical and mental abuse. Women with unintended pregnancies were more likely to report severe or moderate forms of prenatal depression symptoms, compared to women with intended pregnancies.

Those women with prenatal depression had also 13 % greater incidence of premature delivery and 15 % greater incidence of low birth weight than non-depressed women [38].

Health system and societal costs can also arise from UPs that do not end in abortion and are carried to parturition. In the United States For example, the public health costs attributed to unintended births in a single year cost taxpayers \$11.1 billion [39].

2.2 Factors associated with unintended pregnancy.

Studies conducted in different part of the world and Ethiopia has revealed several factors associated with unintended pregnancies among them:

Socio-economic and Demographic factors

Study from West Africa, Senegal, 5769 women who have ever been pregnant or were pregnant at the time of the survey showed that 14.3% of ever pregnant women reported having a recent unintended pregnancy, those women whose last pregnancy found to be unintended were more likely to be poor, and from a young age (< 25 years) [41].

According to a study from Kenya where 24 percent of all the women had unintended pregnancy age and marital status had statistically significantly effects on unintended pregnancy. Young women aged 15–19 were significantly more likely than older women to experience unintended pregnancy. Similarly, unmarried women showed elevated risk for unintended pregnancy than ever-married women. In this study, education and household wealth were not strongly associated with unintended pregnancy. This is contrary to a study from Nigeria that documented older age of women and higher educational achievement as strong predictors of unintended pregnancy in addition to employment in the formal sector. Women in formal employment were also 55% less likely to experience unintended pregnancy compared to unemployed women or students [42].

A recent study from Ganji woreda west Wollega zone also revealed, age of respondents , household economic status, educational highest grade completed, were among the factors that significantly associated with unintended pregnancy[28].

study from Tanzania, among few studies that have examined mistimed and unwanted pregnancies separately documented factors that predict mistimed pregnancy differently from those which predict unwanted ones and has revealed, a prevalence of 45.9 among women of

reproductive age group (15-49years) and factors like, young age (<20 years) and single marital status as factors that significant associated with both mistimed and unwanted pregnancies [43].

In multivariate analysis age was significantly associated with mistimed pregnancy not with unwanted pregnancy. Participants aged 20–34 experienced a lower risk of mistimed pregnancy compared to those in age group <20 years .Participants over 34 years of age experienced a 65% lower risk of mistimed pregnancy compared to those <20 years old .Marital status found to affect both mistimed and unwanted pregnancies. Unmarried were 2.24 times more likely than married women to have experienced mistimed pregnancy and 4.63 times more likely than married to have had an unwanted pregnancy [43].

Socio-cultural factors

In a West African study, Senegal appears that low participation of married women in decision-making within the couple on issues of financial resources and the lack of discussion on family planning issues were associated with more experience of unintended pregnancy [41].

Different studies conducted in different parts of Ethiopia at different time showed women's autonomy were among the factors that significantly associated with unintended pregnancy [28, 29, 30, 31].A study by Exavery et al., from Tanzania, revealed Lack of inter partner communication about family planning increased the risk of mistimed pregnancies [43].

Reproductive factors

A study conducted in Ghana collected data from 1,914 pregnant women and found Seventy percent (70%) of the pregnancies they were carrying were unintended and showed High parity to be significantly associated with unintended pregnancy. In another study from West Africa, Senegal pregnancy found to be unintended were more likely among multi-parous women [40].

A study done at Hossana, southern Ethiopia among 385 pregnant married women randomly selected from the census found 34% of the pregnancy unintended and documented a desire for at least two children, and parity of 5 to be significantly associated with unintended pregnancy [30]. A recent study from Ganji woreda, West Wollega also revealed ideal number of children to be strongly associated with unintended pregnancy [28].

Factors related to availability/Access to health information/services

Study from Ethiopia, Ganji woreda with 623 subjects with 98.8% response rate revealed a 36.5% of unintended pregnancy and showed family planning health worker visit, travel time to the nearest family planning service area, exposure to mass media were among the factors that significantly associated with unintended pregnancy. Different studies conducted in different parts of Ethiopia at different time also showed this. [28, 29, 30, 31]

Factors related to knowledge and practice of any modern family planning methods

Nigerian study documented knowledge of family planning and current use of a family planning method as factors that strongly contributed for unintended pregnancy. This is also revealed by a study from Ganji woreda, knowledge level of respondents were among the factors significantly contributing to unintended pregnancy [28].

2.2 Significance of the study

Though there are few studies about unintended pregnancy in Ethiopia, there is no study found in the study area and there is often no information on the magnitude of unintended pregnancy and associated factors in the target area which will help health planners and health professionals to understand various factors influencing unintended pregnancy and assist in implementation of the reproductive health program that will decrease unintended pregnancy as well as reduce the risk of maternal and infant morbidity and mortality. Moreover program planners can focus in some particular aspects of the program and improve the effectiveness of health services in terms of information on contraceptive methods and access to the services. Therefore, this study was aimed to assess the magnitude of unintended pregnancy and associated factors among ever pregnant women in Bitta woreda.

Chapter 3:-Objectives

General objective:

- To assess the magnitude of unintended pregnancy and associated factors among ever pregnant women in Bitta woreda, Southwest, Ethiopia 2015 G.C.

Specific objectives:

- To determine the magnitude of unintended pregnancy among ever pregnant women
- To identify factors associated with unintended pregnancy among ever pregnant women

Chapter 4: Methods and materials

4.1. Study area and period

The study was conducted in Kafa zone, Bitta district from February 10-24, 2015. Kafa zone is located 465 Kilometers away from Addis Ababa to the Southwest of Ethiopia. Bitta district is one of the ten districts in the zone located 70 Kms from the zonal capital Bonga. According to information obtained from the district health office, the district is divided into 26 kebeles (24 rural and 2 urban kebeles). The total population of the district projected for the year 2007 is estimated to be 93,585 and females accounted 50.5% (47,260) of the total population. And females in reproductive age group accounts 21,637 as the information by woreda health office. There are 4 health centers, 22 health posts and 4 small private clinics that provide health services to the residents.

4.2. Study Design

A community based cross sectional study design was used.

4.3. Population

4.3.1. Source population

The source population consists of all women who had ever been pregnant or currently pregnant from the selected kebeles.

4.3.2. Study population

The study population was all randomly selected women who had ever been pregnant or currently pregnant from the selected kebeles.

4.4. Inclusion and exclusion criteria

4.4.1 Inclusion criteria

The inclusion criteria was being female of reproductive age (15-49 years) who had ever been pregnant for at least five years preceding the survey or currently pregnant and who lived in Bitta woreda for at least six months prior to the day of the survey.

4.4.2 Exclusion criteria

Those who are seriously ill and unable to communicate at the time of data collection were excluded.

4.5. Sample size determination and sampling technique

4.5.1 Sample size determination

Sample size was determined by using single population proportion formula by considering the following assumptions:

Where: p is the prevalence of unintended pregnancy from a study in South West Ethiopia, 35% (44)

$D = 5\%$ the margin of error

$Z_{\alpha/2}$ = critical value at 95% confidence level of certainty (1.96).

$$n = \frac{(z_{\alpha/2})^2 * p(1-p)}{(d)^2} = \frac{(1.96)^2 * 0.35(1-0.35)}{(0.05)^2} = 350$$

The calculated sample size = 350

10% non-response rate = 35 and design effect of = 2

The total sample size become = 770

4.5.2 Sampling procedure

Bitta woreda has 2 urban and 24 rural kebeles. For this study one urban kebele selected from the two by simple random sampling (lottery method) and eight rural kebeles were selected among the 24 kebeles by simple random sampling, a total of 9 kebeles were included in the study. Census was conducted based on the inclusion criteria in selected kebeles, the number of women was allocated in to kebeles by proportionally allocating to their population size based on the sample size, women from census in each kebele were registered and given codes using the list of the census, then required numbers of women included in the study was selected by SPSS V.20 for random selection.

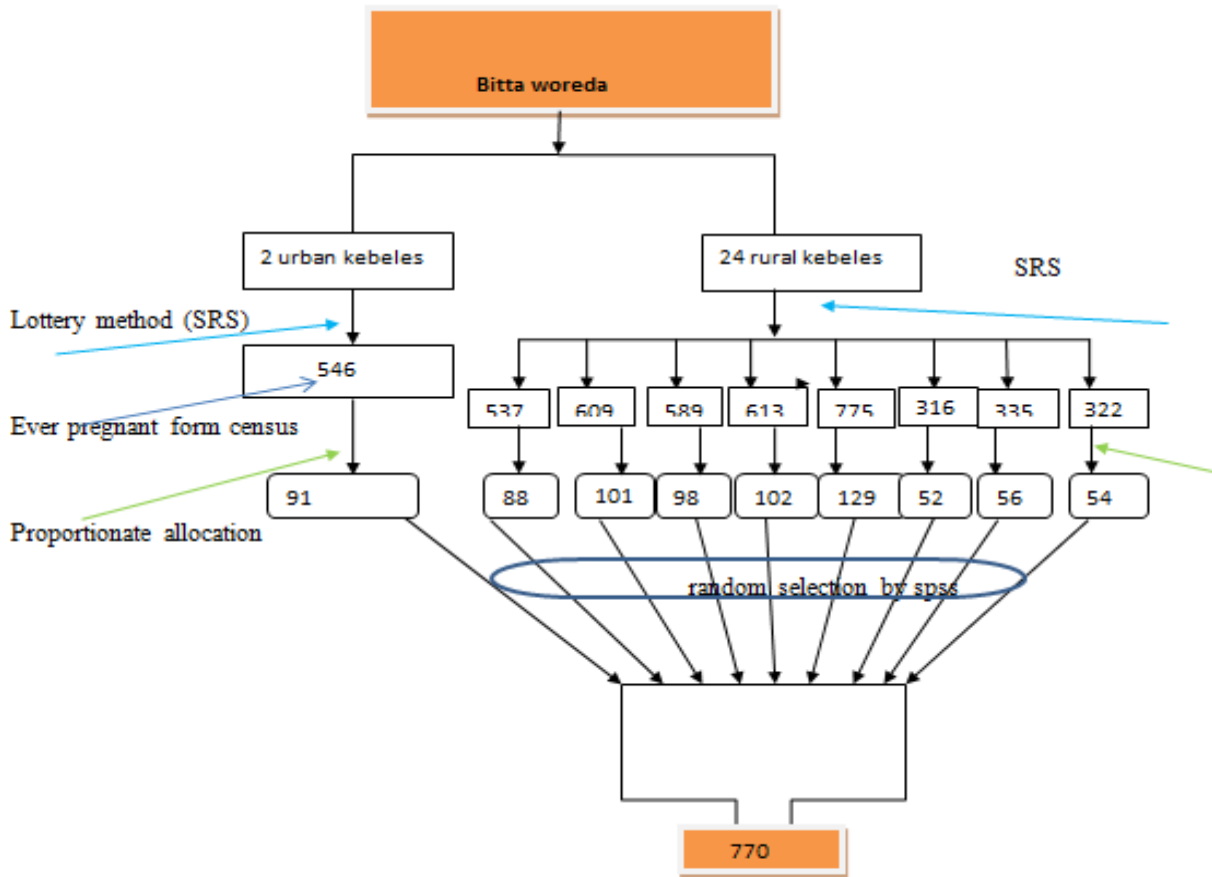


Figure 2 schematic representation of sampling procedure

Figure 2 Schematic representation of sampling procedure

Kebeles included were:

Bitu, Amesha, Dacha, Gawoti, Sheda, Tuga, Yewra, Ganity and Shunity

4.6 Data collection procedure

4.6.1 Data collection tool& personnel

Data were collected using a structured interview questionnaire which was developed using a tool that was applied in different studies related to unintended pregnancy previously.

4.6.2. Recruitment and training of data collectors

Eight data collectors and two supervisors who are qualified with Diploma in nursing and BSc. in public health were recruited and retained based on qualification and previous data collection experiences.

The data collectors and the supervisors were trained for one day on questions included in the questionnaire, approach to the interviewees, details of interviewing techniques, respect and maintaining privacy and confidentiality of the respondents. Objectives and importance of the study was also briefed.

4.6.3. Pretesting and data collection

The questionnaire was pre tested in “*Yeda*” kebele which is different from the study area on 5% (39) respondents for modifications and some modifications were made accordingly.

Data collection method

Interviews were conducted face to face after obtaining informed consent.

4.7 Data quality assurance

The questionnaire was developed using a tool that was applied in different studies related to unintended pregnancy previously.

It was translated from English to “*kafinoono*” and back to English to assure consistency.

The principal investigator supervised the performance of the data collectors on daily basis.

The collected data were checked for completeness, accuracy, clarity and consistency by the principal investigator.

4.8. Operational definition and definition of terms

4.8.1 Operational definitions

Ever pregnant women include a woman who has at least one pregnancy in five years duration prior to the survey including the present pregnancy.

Spousal communication: this variable was measured by respondent's discussion with their husband regarding family planning matters.

Ever used of family planning: a woman who had used any of contraceptive method previously.

Never contraceptive user: a woman who was not using any of the contraceptive methods any time.

Women's autonomy: in this study, variables categorized in to some autonomy and no autonomy.

Some autonomy those who have decision on health care seeking and decision to visit family or making household purchase

No autonomy was only decision to health care seeking or visit family or major household purchase or no decision at all.

4.8.2 Definition of terms

Mistimed pregnancy is a pregnancy that has occurred earlier than desired at the time of conception.

Unwanted pregnancy is a pregnancy that has occurred when no children or no more children were desired at the time of conception.

Wanted or Intended pregnancy when the respondent reported that she wanted to become pregnant at the time of conception.

Unintended pregnancy includes mistimed pregnancy or unwanted pregnancy.

Pregnant women is a women who is amenorrhic for at list two months and has minor signs of pregnancy as well as the women believes to be pregnant or a women who claims that she was told to be pregnant by health worker on her visit to health institution and believes to be pregnant.

Induced abortion is a deliberate termination of pregnancy without medical reason (s) at gestational age of less than seven months or 28 weeks.

Ethiopia is administratively divided into regions/city administrations, zones, woredas and Kebeles. While regions/city administrations are the biggest divisions, kebeles are the smallest ones. In this document, ‘zone’, ‘woreda’ and ‘kebele’ can be equated to province, district and village, respectively.

4.9 Study variables and measurements

4.9.1 Study variables

4.9.1.1 Dependent variable

Unintended pregnancy:

4.9.1.2 Independent variables

On the basis of literature review, the following demographic, socio cultural, Reproductive and service related characters are used:

Socio-economic and demographic characteristics

- Women’s education
- Age
- Marital status
- Economic status
- Place of residence

Socio-cultural characteristics

- Partner communication about f/p
- Women’s autonomy
- Religion

Reproductive characteristics

- Parity
- Ideal number of children

Availability/Access to health information/services

- Exposure to media
- Travel time to f/p service

Intermediate factors

- Knowledge of any modern f/p method
- Family planning use status.

4.9.2 Measurements

The outcome of interest for these analyses, pregnancy intention status prior to conception, is a retrospective measure of a woman's feelings about her pregnancy at the time that she learned she was pregnant. This is studied in to mistimed and unwanted pregnancies women who were pregnant at the time of the survey were asked, "At the time you became pregnant did you want to become pregnant then, did you want to wait until later, or did you not want to have any (more) children at all?" Women who were not pregnant at the time of the survey, but had had a birth in the five years preceding the survey, were asked almost the same question: "At the time you became pregnant with (NAME), did you want to become pregnant then, did you want to wait until later, or did you not want to have any (more) children at all?"

4.10 Data processing and analysis

After data collection completed, data entry and cleaning was done using Epidata3.1 and exported to SPSS version 20 statistical packages for analysis. During analysis frequencies of the different variables were determined; Cross-tabulations and bivariate analysis were performed to select variables for multivariate analysis. Hence variables with p-value < 0.25 in the bivariate analysis were taken as candidates for multivariable analysis. Finally, multivariable logistic regression analysis was performed to control for possible confounding effect of the selected variables and variables with p-value of less than 0.05 was taken as statistically significant factors for mistimed or unwanted pregnancy and OR with its 95% CI was used to show the degree of association between the independent and the outcome variable.

4.11 Ethical consideration

Ethical clearance was obtained from ethical review committee of Jimma University; Collage of Public health science. Support letter was obtained from department of population and family health. The necessary permission was obtained from Kafa zone health department, Bitta town health office and kebele administrative office.

All the study participants were informed about the purpose of the study, their right to refuse and assured confidentiality and informed verbal consent was obtained prior to the interview.

4.12 Dissemination plan

The study is a requirement for partial fulfillment of the degree of masters of public health, the thesis will be presented to the Jimma University, advisors and examiners, submitted to the department of population and family health and Copies will be given to the SNNP Regional Health Bureau, Kafa Zonal Health Department, and Bitta woreda health office so that it can be used as a source of information for possible planning and implementation of health intervention. Additionally, information will be provided as necessary to other relevant bodies, and effort will be made for possible publications.

Chapter 5: Results

5.1 Socio-Demographic and Economic Characteristics

Seven hundred fifty five of the participants responded yielding a response rate of 98%. The age of respondents ranged from 15-48years with the mean (\pm SD) of 25.8(\pm 5.3) years two third (66.8%) of them were in the age group of 20–34 years. Eighty six point five percent (86.5%) of the participants lived in a rural setting and the majority of the women (80.3%) were currently married with mean ages at marriage of 28.09 (SD \pm 5.96) years.

Slightly greater than one half (56.4%) were none educated with the occupation of more than one half (58.8%) housewives and (8.7%) of them were Government employee. About (68.3%) of them had monthly income of less than 788 Ethiopian birr. Majority of respondents 624 (82.6) were Kafa in Ethnicity and Christians by religion 736(97.5%). (Table 1)

Table 1: Socio-demographic and economic characteristics of the respondents in Bita woreda, March, 2015.

Variables		Frequency (%)
Age, year	< 20	115 (15.2)
	20-34	504 (66.8)
	>= 35	136 (18.0)
Marital status	Married	606 (80.3)
	Single	53 (7.0)
	ever married*	96 (12.7)
Ethnicity	Kafa	624 (82.6)
	Oromo	56 (7.4)
	Amhara	64 (8.5)
	Tigrie	6 (0.8)
	others	5 (0.7)
Religion	Orthodox	504(66.8)
	Protestant	222(29.4)
	Muslim	19(2.5)
	Catholic	10(1.3)
Residence	Urban	102 (13.5)
	Rural	653 (86.5)
Educational status	No formal education	426 (56.4)
	primary education	198 (26.2)
	secondary education or higher	131 (17.4)
Occupation	Farmer	166 (22.0)
	Government Employee	66 (8.7)
	Student	55 (7.3)
	House wife	444 (58.8)
	Jobless(dependent)	15 (2.0)
	Self-Employ	9 (1.2)
Income, birr	greater than or equal to 788	239 (31.7)
	less than 788	516 (68.3)

Ever married*includes: divorced, separated, and widowed.

5.2. Reproductive characteristics.

Four hundred fifty five (64.8%) of the sample first married in the age group of 15-19 years and 52.5% of them also mentioned this age group as their age of first pregnancy. One hundred fifty seven (20.8%) of the women in the study sample were pregnant at the time of the survey. 404(53.5%) of the respondents were gravida two-four and more than half 439 (58.1%) of these women had also given birth to two-four.

A little more than one half (55.0%) of the women reported their desired number of children to be three-four.(Table 2).

Table 2 Reproductive related characteristics of respondents in Bita Woreda, 2015

variables		Frequency (%)
Age at first marriage, <u>year</u>	10-14	17 (2.3)
	15-19	455 (60.3)
	20-24	203 (26.9)
	25-34	24 (3.2)
	>=35	3 (0.4)
Age at first pregnancy, <u>year</u>	15-19	396 (52.5)
	20-24	324 (42.9)
	25-34	32 (4.2)
	>=35	30 (0.4)
Gravida	One	132 (17.5)
	two-four	404 (53.5)
	five or more	219 (29.0)
Parity	One	131 (17.4)
	two-four	439 (58.1)
	five and above	185 (24.5)
Ideal number of children	zero-two	85 (11.7)
	three-four	399 (55.0)
	five or more	241 (33.2)

5.3. Classification of pregnancy

About 480(63.5%) of women reported that their most recent pregnancy was wanted at the time, One hundred ninety six (26.0%) of the study participant mentioned that the index pregnancy was mistimed, and 79(10.5%) reported that it was unwanted at the time of conception (Figure 3).

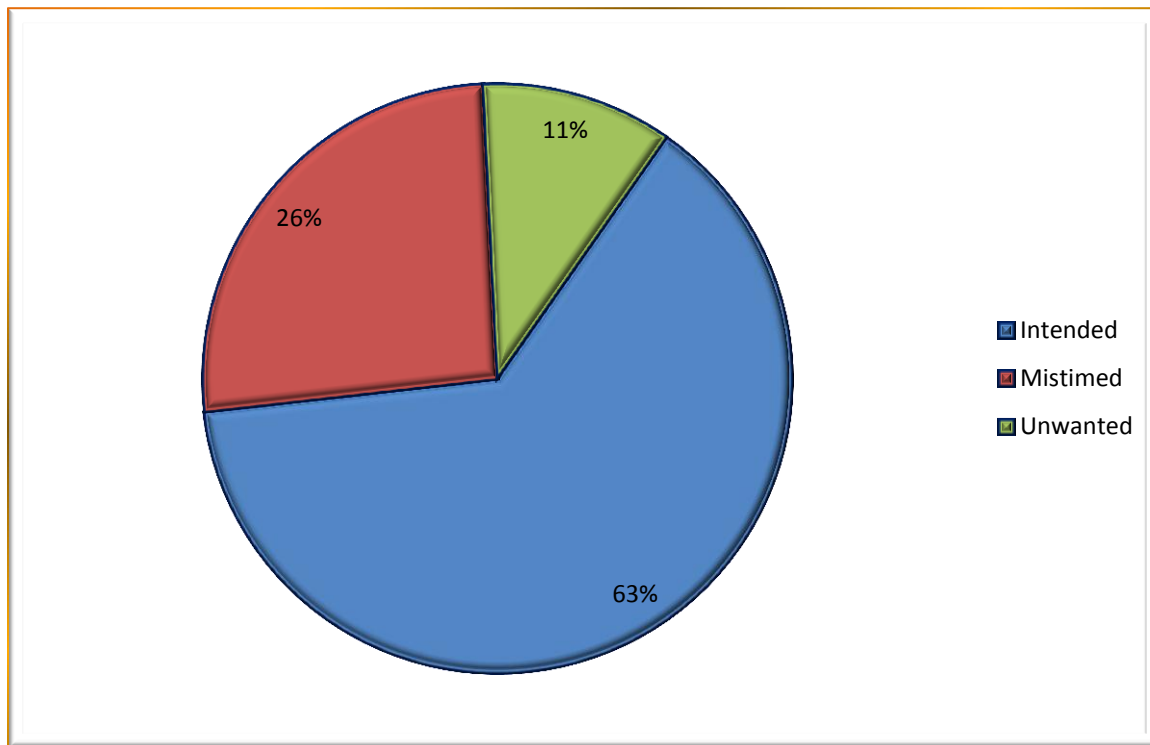


Figure 3 Pregnancy intentions among ever pregnant women in Bitu Woreda, Kafa Zone, SNNPR

5.4. Knowledge on family planning methods and practice.

Almost all 753(99.79) of the respondents have heard about family planning and 585(77.9%) knew more than one method of family planning. Majority (69%) are currently using modern family planning and among the methods used injectables accounts 439(81.5%) followed by implants 44(8.2) and pills 28(5.2%). Among the study samples six hundred ninety three (93.9) responded that it is possible for them to obtain and use the methods they have chosen.

Majority (91.3%) of the participants knew how oral contraceptive pill should be used but six hundred fifty seven (87.0%) of them had believed using pill for contraception is more harmful than the unintended pregnancy.

More than nine in ten (95.2%) expressed using contraception is not against their religious belief. More than half (55.7%) those who are not currently using family planning methods reported intention to get pregnancy. Almost a little less to all (96.6%) of the interviewed mothers responded they approve couples using modern family planning methods to prevent unintended pregnancy. (Table 3)

Table 2 Selected characteristics of respondents on family planning knowledge and practice, Socio-Cultural, Access to Health Information/Services in Bita woreda, 2015

Variables		Frequency (%)
Knowledge on family planning methods	knew more than one method	585 (77.9)
	knew one method	166 (22.1)
Contraceptive practice	Using now (currently)	521 (69.0)
	Ever used	162 (21.5)
	Never Used	72 (9.5)
F/P methods currently used	Pills	25 (4.8)
	Injectables	439 (84.3)
	Implants	44 (8.5)
	Others	13(2.4)
Was able to obtain methods chosen	Yes	693 (93.9)
	No	45 (6.1)
Usage of oral contraceptive pills	One pill daily from one menstrual cycle to next	689 (91.3)
	One pill every other day	14 (1.9)
	One pill following sexual intercourse	25 (3.3)
	Other	27 (3.6)
Compare between Using the pill and unintended pregnancy.	Using Pill is more harmful	17 (2.3)
	Equally harmful	74 (9.8)
	pill is less harmful	657(87.0)
	Neither harmful	70 (0.9)
Modern contraceptive against Your religion	Yes	36 (4.8)
	No	719 (95.2)
Perceived women's autonomy	no autonomy	207 (27.4)
	some autonomy	548 (72.6)
Discussion with husband/partner on family planning issues	had no discussion	231 (30.6)
	had discussion	524 (69.4)
Discussion with husband /partner on number of children	Yes	482 (63.8)
	No	224 (29.7)
	no husband or partner	49 (6.5)
Exposure to mass media such (TV/Radio)	have no exposure	339 (44.9)
	Have exposure	416 (55.1)
Travel time to F/P service	Less than 30 minute	297 (39.3)
	30-60 minute	285 (37.7)
	Greater than 1hour	173 (22.9)

5.5. Socio-Cultural and Access to Health Information/Services related characteristics

Four hundred sixteen (55.1%) of the participants had listened radio or watched television regarding access to health services .One hundred seventy three (22.9%) of the women had to walk greater than 1hour to get family planning service from their neighborhood but two hundred ninety seven (39.3%) of them walk less than 30 minute.

Majority of the study participants (72.6%) had some autonomy regarding to making decision for their health care, visit family and house hold purchase. Five hundred twenty four (69.4%) of the study sample had discussed about contraception with their husbands and also 63.8% of them reported discussion about the number of children they want to have.

5.6. Factors associated with unintended pregnancy among ever pregnant women.

Factors that are associated with unintended pregnancy on bivariate analysis using enter method at the level of P value of 0.25 and less were fit in to multiple logistic regression model. Accordingly, variables such as place of residence, exposure to media, travel time to F/p service area, modern contraceptive practice, Age, marital status, educational status perceived woman's autonomy, parity, ideal number of children, were exported in to the final model, other variables like knowledge on F/P methods, average monthly income were not significant on bivariate.

Women who travel more than 60 minutes to family planning service area were more than two times more likely to have unintended pregnancy than those who travel for less than 30 minutes (AOR=2.23(1.37-3.63)). Women who ever used modern contraceptive were about two times more likely to have unintended pregnancy than those who are currently using modern contraceptive (AOR=1.77(1.18-2.67)). Similarly, women didn't ever use modern contraceptive were more than two times more likely to have unintended pregnancy than those who are currently using modern contraceptive AOR=2.43(1.22-4.86). Women with some autonomy were 43% less likely to have unintended pregnancy than those with no autonomy (AOR=0.47(0.31-0.72)). Women with parity of two to four were more than two times more likely to have unintended pregnancy than those with parity of one (AOR=2.27(1.21-4.23)) and those with parity of five and above were more than five times more likely to have unintended pregnancy than those with parity of one (AOR=5.52(2.50-12.20)). Women with ideal number of children of three to four were 72 % less likely to have unintended pregnancy than those with ideal number of children of less than three (AOR=0.28(0.15-0.51)) and also those with ideal number of children of greater than or equal to five were 85% less likely to have unintended pregnancy than those with ideal number of children of less than three (AOR=0.15(0.08-0.31)).(Table 4).

Table 3: Factors associated with unintended pregnancy on multiple logistic regression analysis among ever pregnant women in Bita Woreda, Kafa Zone, SNNPR, March, 2015.

Variables	Categories	unintended pregnancy			
		yes	no	COR (95% CI)	AOR (95% CI)
Place of residence	Urban	27	75	1	1
	Rural	248	405	1.70(1.07, 2.71)	1.31(0.70-2.44)
Exposure to media	No	148	191	1	1
	Yes	127	289	0.57(0.42-0.77)	0.90(0.59-1.35)
Travel time to f/p service, minute	<30	78	219	1	1
	30-60	100	185	1.518(1.06-2.16)	1.04(0.68-1.60)
	>60	97	76	3.58(2.41-5.33)	2.23(1.37-3.63)*
Modern contraceptive practice	Current use	157	364	1	1
	Ever use	64	98	1.51(1.05-2.18)	1.77(1.18-2.67)*
	Never used	54	18	6.96(3.95-12.24)	2.43(1.22-4.86)*
Age, years	<20	52	63	1	1
	20-34	167	337	0.60(0.40-0.91)	0.92(0.48-1.74)
	>=35	56	80	0.85(0.51-1.40)	1.03(0.49-2.17)
Marital status	In Marital union	190	416	1	1
	Not in marital union	85	64	2.91(2.02-4.20)	1.39(0.89-2.16)
Educational status	No formal education	166	260	1	1
	Primary	73	125	0.92(0.65-1.30)	0.89(0.56-1.40)
	Secondary and above	36	95	0.59(0.39-0.91)	0.91(0.48-1.70)
Perceived woman's autonomy	No	122	85	1	1
	Some autonomy	153	395	0.27(0.19-0.38)	0.47(0.31-0.72)*
Parity	One	37	94	1	1
	Two -four	152	287	1.35(0.88-2.07)	2.27(1.21-4.23)*
	Five and above	86	99	2.21(1.37-3.56)	5.52(2.50-12.20)*
Ideal no. children	0-2	45	40	1	1
	3-4	117	282	0.37(0.23-0.60)	0.28(0.15-0.51)*
	>=5	85	156	0.48(0.29-0.80)	0.15(0.08-0.31)*

*=**p<0.05**

Chapter 6: DISCUSSION

The current study found out the magnitude of unintended pregnancy 36.5% among the study population, which is 26% for mistimed and 10.5% for unwanted. This finding is lower than finding from study conducted in Damote Gale Woreda, Southern Ethiopia which is 42.4% (10.5% mistimed and 31.8% unwanted) (8). This observed difference could be due to the latter study considered all pregnancies regardless of the outcomes but this study considers pregnancies which resulted only in live birth though both generated data primarily through interviews from most recent pregnancy occurred five years back from the survey. This finding is also in line with a study from Ganji Woreda, Oromia Region, Ethiopia which is 32% (21% mistimed and 11% unwanted) (28). The current finding is also lower than a study from Tanzania, 45.9% (32.5% mistimed and 13.4% unwanted) (43). The difference could be because of difference in socio-cultural factors.

The current study found out women who travel more than 60 minutes to family planning service area were more than two times more likely to have unintended pregnancy than those who travel for less than 30 minutes. This lacks significant association in other study from Oromia, Ethiopia (28). This may be due to more distance interferes with better access to family planning and hence leading to increased occurrence of unintended pregnancy.

Women who ever used modern contraceptive were about two times more likely to have unintended pregnancy than those who are currently using modern contraceptive. Similarly, women who never used modern contraceptive were more than two times more likely to have unintended pregnancy than those who are currently using modern contraceptive. This is in line with a study from South West Ethiopia (29). This abides to the reality that unintended pregnancies can be prevented with effective use of contraception, but a study from Jordan contradict to this, modern contraceptive users were more likely to report unintended pregnancy than non-users (21 percent compared with 15 percent) (36). This variation may be due to those who use contraceptives might have higher expectations about control over their fertility and timing as a result more likely to view a pregnancy unintended.

The current study found that women with some autonomy were 43% less likely to have unintended pregnancy than those with no autonomy. This is in line with a study from Southern

Ethiopia (8). This could be due to those autonomous women can decide on their health care including family planning issues.

Women with parity of two to four were more than two times more likely to have unintended pregnancy than those with parity of one and those with parity of five and above were more than five times more likely to have unintended pregnancy than those with parity of one. This is in line with findings from Tanzania and rural Gahanna (40, 43). These may be explained by the fact that every additional birth increase the risk of unintended pregnancy and also such women are likely to reach their desired fertility and regarded any additional birth coming to them as unintended.

In the current study Ideal number of children is negatively associated with mistimed pregnancy, women with ideal number of children of three to four were also found to have 72 % less likely to have unintended pregnancy than those with ideal number of children of less than three and also those with ideal number of children of greater than or equal to five were 85% less likely to have unintended pregnancy than those with ideal number of children of less than three. This is in line with the finding from Hossana town, Southern Ethiopia (30), and from Oromia region, Ethiopia (28). This could be due to with increased desire to children those pregnancies are less classified as unintended in the rural community children are taken as asset and treasure of the family, (86.5%) of the current participant are from rural community.

Chapter 7: Strength and Limitations of study

7.1. Strength of the study

7.2. Limitation of the study

As respondents were retrospectively asked about their pregnancy intentions, this may cause recall bias.

In this study pregnancies not resulting in a live birth were not taken into account constitutes a source of bias. Those pregnancies that end up in abortion are likely to be unwanted /mistimed and thus the true prevalence of unintended pregnancy is likely to be higher than shown here.

The study was also cross-sectional, a design which limits causal inferences because of their snapshot nature

Chapter 8: CONCLUSION

- ❖ The overall magnitude of unintended pregnancy among ever pregnant women in the study area was high.
- ❖ Factors that found to have association with unintended pregnancy were travel time to family planning service area, modern contraceptive practice, perceived women's autonomy, parity and Ideal number of children.

Chapter 9: RECOMMENDATION

Based on the findings, the following recommendations were forwarded:

Health workers

- ❖ HEWs should strengthen the service to women with emphasis on creation of awareness, on misconceptions, knowledge and practice of family planning methods.
- ❖ Health professionals working in the woreda should provide health education on the disadvantages of unintended pregnancy particularly targeting women who travel more than sixty minute to family planning service area, those who are not practicing family planning, those who don't have autonomy, and those who are multiparous.
- ❖ The woreda health office should strengthen its work with governmental and nongovernmental organizations towards women empowerment on their health care issues.

Governmental organizations in the woreda

- ❖ Women's affair & child office and administration in the woreda should strengthen its work towards women empowerment in their health care issues

Researchers

- ❖ Further research should be done including qualitative study as well longitudinal data for better prediction of factors associated with unintended pregnancies.

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ANNEXES

1. ENGLISH VERSION QUESTIONNAIRE

Jimma University

College of Public Health and Medical Sciences

Department of Population and Family Health

My name is _____

We are working in a research team (project) which is conducted by Jimma University, college of public health and medical sciences, Department of population and family Health student of MPH/RH in collaboration with the ministry of health .We would like to ask you a few questions related to unintended pregnancies and family planning knowledge and practices.

The purpose of this study is to identify factors associated with mistimed and unwanted pregnancies among ever pregnant women in Bitta woreda, Kafa Zone, SNNPR, South west Ethiopia.

Your name will not be written on this questioner, and will never be used in connection with any of the information you delivered. You are selected for this study only by chance, not intentionally, so we would be thankful if you spend some time answering questions.

Your correct answers to these questions will help us for better findings. We would greatly appreciate your help in responding to this survey. You have the right not to respond any question you don't want to. May we get your permission to continue?

YES

NO

Thank you!

: Date -----

Data collector signature: -----

General Information

Visiting table

Kebele _____, House number _____, house hold code _____,

	Visit one	Visit two
Date		
Result		

Result code: 1. Complete 2.Incomplete 3.Other (specify)

1. Date of interview _____ 2.Starting time for interview _____

Section I: Questions on Socio-economic and Demographic characteristics of the respondent

No.	Questions	Response categories	Go to/Remarks
101	What is your age?	In competed years -----	
102	What is your ethnicity?	1.Kafa 2.Oromo 3.Amhara 4.Tigre 5.Other(specify)	
103	Educational status of the respondent	1. Can't read or write 2.Can read and write 3.Attended primary school 4.Jonior or senior high school 5.Attended higher education	
104	Employment Status	1.Farmer	

		2.Government Employee 3.Student 4.House wife 5.Jobless(dependent) 6.Self Employ 7.Other (specify)	
105	What is your family's monthly income in birr	1.-----birr per month(estimate of the respondent) 2.No response	
106	How many live births have you had?	Enter the number-----	

Section II: Questions on Socio-Cultural characteristics

No.	Questions	Respondent Categories	Go to/Remarks
201	Marital Status	1. Married, monogamous 2. Married polygamous 3.Never married 4.Divorced 5.Widowed 6 Separated	
202	If you are married, at what age were you married for the first time?	Age in completed years-----	
203	What is your Religion?	1.Orthodox Christian 2.Muslim 3.Protestant 4.Catholic 5.Other (specify)	
204	Do you discuss about family planning with your husband or partner?	1.Yes 2.No	

		3.No husband or Regular partner	
205	Do you discuss about the number of children you want to have with your husband or partner?	1.Yes 2.No 3.No husband or Regular partner	
206	Do you have a decision making by your own or Jointly with your husband/partner? when you are sick and Seek health care.	1.yes 2.No	
207	Do you have a decision making by your own or Jointly with your husband/partner when you are planning to visit you families?	1.Yes 2.No	
208	Do you have a decision making by your own or Jointly with your husband/partner when major household purchase is done?	1.Yes 2.No	

Section III: Questions on Access to Health information/services

No.	Questions	Respondent Categories	Go to/Remarks
301	Do you have exposure to mass media such as TV/Radio	1.Have exposure 2.have no exposure	
302	Travel time to the f/p service area	1.Less than 30 minute 2.30-60 minute 3. Greater than 1hour (distance in km.)	

Section IV: Questions on Knowledge and Practice of Modern Contraception Methods

No.	Questions	Respondent Categories	Go to/Remarks
401	Have you ever heard of family planning services?	1.Yes 2.No	
402	To which group are you belonging regarding modern contraceptive practice?	1. Using now (currently) 2.Not now but used some time in the past 3.Not used any time 4.Other (specify)	
403	Which of the following modern f/p methods do you know? (Multiple answers are possible)	1.pill 2.Injectable 3.Implants 4.IUCD 5.comdom 6.surgical methods 7.Other (specify)	
404	If yes for Q401, is it possible to obtain these methods?	1.Yes 2.No	
405	Which advantage(s) of modern contraceptive methods do you know?	1.To avoid unwanted pregnancy 2. To delay pregnancies coming sooner than intended time. 3. Regulation of periods	

		4.Prevention of STDs	
406	It is not possible to prevent unintended pregnancy. If you are going to be pregnant you will be pregnant.	1.Agree 2.Disagree 3.No response	
407	IS it possible to prevent Un intended pregnancy following un protected sexual intercourse?	1.Yes 2. No 3. I don't know	
408	How do you think oral contraceptive pills should be used to prevent unintended pregnancy?	1. One pill daily from one menstrual cycle to the next. 2. One pill every other day. 3. One pill following sexual intercourse. 4.Other (specify)	
409	Suppose we compare using the pill and pregnancy, do you think using the pill is more harmful to women's health than pregnancy, equally harmful, or less harmful?	1.Using Pill is more harmful 2.Equally harmful 3.pill is less harmful 4.Neiher harmful	
410	Is the use of modern contraceptive methods against your Religious belief?	1.Yes 2. No	
411	If you are not currently using f/p methods what is your reason for not using it?	1.Not aware of contraceptive 2.Use traditional methods 3.Un acceptable in my culture 4.Fear of side effect 5.Fear of infertility 6.Other (specify)	
412	What do you think about couples using methods of family planning to prevent unintended pregnancy?	1. I approve their use 2. I disapprove their use 3. I don't know (no opinion)	

Section V: Questions on Reproductive Related Characteristics

No.	Questions	Respondents Categories	Go to/Remarks
501	At the time you became pregnant: (for currently pregnant women)	1. Did you want to become pregnant then? 2. Did you want to wait until later? or 3. Did you not want to have any (more) children at all?	
502	At the time you became pregnant with (NAME), (for women who were not pregnant at the time of the survey, but had had a birth in the five years preceding the survey)	1. Did you want to become pregnant then? 2. Did you want to wait until later ?or 3. Did you not want to have any (more) children at all?	
503	How many children do you want to have?	Enter number_____	
504	How old were you when you first got pregnant?	Age in years-----	
505	How many pregnancies have you had till now?	Enter number-----	
506	Have you ever been pregnant when you didn't want to be? If no	1.Yes 2.No	
507	If yes, what was the reason you don't want it?	1.It com earlier than you intended to be pregnant 2. You don't want it at all	
508	If yes to Q505, How many pregnancies were unintended?	Enter number-----	
509	If you had been pregnant when you did not want to, what is the reason you could not avoid becoming pregnant?	1.Lack of awareness of contraception method 2. Poor access to contraception.	

		<ul style="list-style-type: none"> 3. Husband or partner disapproval 4. Contraceptive failure 5. I have never been pregnant 6. Other (specify) 	
510	When did the last unintended pregnancy, you had occurred?	<ul style="list-style-type: none"> 1. With in the last 3 years 2. More than 3 years ago 	
511	How many unintended pregnancies have you had within the last 3 years?	<ul style="list-style-type: none"> 1. One 2. Two 3. None 	
512	What did you do for the unintended pregnancy or pregnancies that you had?	<ul style="list-style-type: none"> 1. Nothing pregnancy continued and I gave birth 2. Attempted to stop the pregnancy but failed 3. Attempted to stop the pregnancy and succeeded 4. Had ended in still birth(seven or more months of pregnancy) 	

Thank you!

2. KAFFINNINO VERSION QUESTIONNAIRE

Echo

Jimmi Yunversty Maccee Iiwee Doyee beeree Collejo, Macconaa kechi Iiwee Kuxo

(Questioner, Jimma University College of Public Health and Medical Sciences, Department of Population and Family Health)

Ta Shigo _____

Ta Shunaabeeto Jimmi universti macce iwittinonee saayinsee collejooch Maccoona kechi ashi Iwittine kuxo MPH/RH Doyechi reserche guphoona ministere iwee beerona toka. Tunetoch and itton ta echemi echo, ebiyoo gabiyaani yekefona shimi gooregabichooch beeti ittoshi ariyoona itto hallibeeti moyoon tunehe.

Hini mirimiree gaaco D/SH/SH/Y/M/W kafi guude bixxi dubiyooch beeti shiyi beeti Indena’o eboshiyoo boono eeno 15-49natooch bedaha beetina’o daggooch beeti Goraalona qaweeyani yeqefonon bari’i ariyooch gacciye.

Hini echoon itti wochibeeti goorooch itti shigon kooro qawiyaaache.dakkona itti wochemi wocho itti wayetooche woyee itti shemmetoche tuneyanibeeta itti gabon tunemmoch Oogiyaabe echo.

Itti wocho tatoona wocheto tuno qawiihe.itti wochoch qawaani echo beegata besho hakkihit.Ebin ggibenoona dabbo hakkehona?

Iberoo

Kooto

Galleteho!

Kechi yaaree mallete haddo : _____

Wochee kicechi dukko: _____Deco_____

Kicee qiho

Kechi Haddoo _____ .Xuggoo _____

Kechi yaare mallete haddoo _____

Cicheyemi kiraakiro

	Batibati ciino	Guttine ciino
Deco		
Wocho		

Wochee malleto: 1.Ciyito 2.Ciyaano 3.Wochecho daniyaano 4.Baroo (bireba)

1.Echo gideti deco _____ 2.Echo koteti gooro _____

KuxoI: Echo Tokki beemi qocoona ikkonomi mooshe tommoch

(Questions on Socio-economic and Demographic characteristics of the respondent)

Y/H	Echo	Woche guupho	shalligicho
101	Itti Eeno ambichone?	Natona _____	
102	Itti yaro amoone?	1.Kafacho 2.Oromo 3.Amharo 4.Tigro 5.Baroo(bireba)	
103	Doyee dakkoo	1.Cira doyaano 2.Shemmonaa koronon hakko 3.Ikkine daqqoch beddaha 4.Hulle kimochee tiji guttine daqoch beddaha 5.Ooge doyee daqoch beddito	

104	Shuune dakko	1.Goyecho 2.Taate shunecho 3.Doyecho 4.Kechi inde 5.Shunalle 6.Bi qelli shuuno	
105	Agenooch itto danebeeti gijjo	1._____Agene gijjo 2 Wocho alle.	
106	Itti gannee dakkoon abichi cinnete? Itti giyoona itti tachimmona amshaahiye?	1.Wodde ganecho 2. Ganecho 3.Daggi tato 4.Girecho 5.Ooge girecho	
107	Ambiche bushoo kashoona ittich beete?	Haddoon koribit_____	

Kuxo II:Echo Tokki beemi qoce moshee tommoch

(Questions on Socio-Cultural characteristics)

Y/H	Echo	Woche guupho	Shalligicho
201	Shaaggee dakko	1.Nutaalleu 2.Nutechi 3.Halla shagaane 4.Shagga gawukiti 5.Xuume	
202	Shageti itti tunemona itti eeno ambicho beeta	Eeno natona_____	
203	Itti Gibeno	1.Orthodox Christiano 2.Muslimo 3.Protestanto 4.Catoliko	

		5.Baro (bireba)	
204	Itti keno ittina tokki beehe	1.Tokki beehe 2.Tokki betache	
205	Kechi yame tommoch itti kenona tokki yibate arihit	1.Ibeero 2.Kooto 3.keno alle	

Kuxo III: Echo liwee quyee qihee/gaacee mooshe tommoch

(Questions on Access to Health information/services)

Y/H	Echo	Woche gupho	Shalligicho
301	Televisiono woyee Radiyoono begga woyee ella aritte	1.Begaa/Ella ariho 2.Begaa/Ella ariyach	
302	liwee gamichechi itti kexoch waa'a ittin dabbi danebeetan	1. Dabbi dane beetan 2. Dabbi ariiyachan	
303	Kechi yamee gaaco itti dana beeti xaa'oo amoomo wokkibeete	1. 30daqiqoye dech 2. 30-60 daqiqochbeddah 3. 1saatoye damba	

Kuxo IV: Echo Kehi yamee gaace ariyoona gache mooshee tommoch

(Questions on Knowledge and Practice of Modern Contraception Methods)

No.	Echo	Woche gopho	Shalligicho
401	Kechi yame quyee hinoon waaye arit	1.Waaye ariho 2.Waaye ariiyach	
402	Andi gooree kechi yame gaacena'on cinnimona itti ame dakkooch danete	1.Andi beddaha gacheho 2.Ebiyee aaf gache ariiho(andi	

		gachiyaaach) 3.Halla gacha ariiyachNon user 4.Baro (bireba)	
403	Ebiye deshi dabimina'оче aabin arite	1.Qoxabeeti atto 2.Shimi neche nappo 3.Goqe dechich duqebeeton 4.Shimi kelloona giyibeeto 5.Kondomo 6.Bashoona ichebeeto gaaco 7.Baro (bireba)	
404	Damba geteti gaaena'on danooch ittich hakkehe ?	1.Hakkehe 2.Hakkeyache	
405	Kechi yaamo bi immibeeti gaacoche aabin arite?	1.Qaweeyani yeqefoon bajjiye 2.Kati kati wabeeti shimi goroon gamichiye. 3.Tatiyaane kechon tachiye 4.Machaname danitinona wabeeti biyeena'on wushiye	
406	Wodde goroon dageyaani yeqefoon wushooch haketache (yekefo biich dageto tunemona bi yeqefo amomoga echetache).	1.Deggoo 2.Deggachi 3.Wocho alle	
407	Qocali anaama maache danitinoona wabeeti goraali yeqefoon wushoo hakehe?	1.Hakkehe 2. Hakketache 3. Ariyaach	
408	Shimmi neche gaacon immibeeti qoxe beeti atto bi gaache beeto abichenaaniye?	1.Ikke atte afoon qemi qemona qecho wati decoche tijji illechoch beddaha. 2.Ikke atte afoon ikke kemo beshibe. 3.Ikke atte afoon macha anaame dan danooye gub .	

		4.baroo (bireba)	
409	Qaweezano waati yeqefooona shimi neche atto qoxon no ciniimona aabi shiyeemi inde tommoch beshe mixoon debiye ?	1.Geteti attoon gaacho besho mixiye 2.Gutto bulla tato mixaaiye 3.Atte gacho mixaache. 4.Abiyoona mixaacheNeiher harmful	
410	Andi gooree kechi yamee gaacoon gachoon itti gibenoo deggiye ?	1.Deggiye 2. Deggache	
411	Andi goore kechi yame gacoon itti gaachiyaano gaato naboo amoone?	1.Kechi yame gaco bemoon arimi qaayo 2.Wonne doyeetina'on gaachona 3.No qocoo deggaan qodooch 4.Bi deebibeeti mixoon shatoona 5.Shimo dokkemone immi shatoch 6.baroo (bireba)	
412	Ishi kechi yame gacoon gachaabeeti kena mechon deggete?	1.Deggoo 2.Degaach 3.Ariiyach	

Kuxo V:Echo Shimmona yesheti mooshe tommoch

(Questions on Reproductive Related Characteristics)

Y/H	Echo	Woche gupho	Shalligicho
501	Yekefechi ne tunoon netunoon ne ariihoba :(ande yekefechi tunet ende naooch)	1.Yeqefooch aree goroba yamitin? 2.Are goroba gubi yagiqi yefooch yamitin? Woyee 3.Cira yeqefooch qawachin ?	
502	Yeqefechi ne tunoon ne arihooba: (bushooshigoon ceegona ande yekefechi tunetanene ende naooch)	1. Arooba yeqefooch yamitin? 2.Arooba yagi yeqefoon yammitin?woyee 3. Arooba tuneba arooye gub ciri	

		yeqefoon qawaachin?	
503	Bati bati ne yeqefehoba ne eeno ambichi beddiye?	Eeno natona_____	
504	Andi beddah ambihe kaalloon yeqefetin?	Haddoon kotibit_____	
505	Yamali yeqefoon yeqefa arihin? Ne yeqefiyaanegaato,	1.Yeqefeti 2.Yeqefa ariyaach	512Y/H hamb
506	Ne yeqefeti tunemmono aree yeqefoon ne yammani qayi naboo amoone?	1.Yeqefooch ta yamiti gooroye shichi'i bi watooch 2. Ciri yeqefoon ta qawani qodooch	
507	Andi yeqefoo beete?	1.Beete 2.Alle	
508	Yamali yeqefoon neyeqefeto gaato ,mbihe kalloon yeqefetin?	Haddoo koteba_____`	
509	Yamali yeqefoon ne yeqefeeto tunemmono wushooch ne hakkane amoone?	1.Ariiyi shappoo 2. Kechi yame gaacon danemi xaa'ee mucu. 3.Kenene kechi yme gachon deggoo bo qayooch. 4.Gache tommoch ta beeta atte shuune qayona. 5. Yeqefa'a ariyaach 6.baroo (bireba)	
510	Yamali yeqefoon ne daneti ciree goroo atoobane?	1.3nati daggooch 2. 3natooye aafi	
511	Kejje nati goore daggooch ambiche yamali yeqefoon yekefetin?	1.Ikko 2. Gutto 3.Alle	

512	yamali ne yeqefeti yeqefoo abichite?	1.Amoonona tuniyaanon shijete 2.Yobiriyooch ta qawiita wommii shijete 3.Nechoch ta gaba wommi shijete 4.Qitti shijete(7-9agenoch beddaha)	
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Galatahoo!

Declaration

I the under signed, declare that this thesis proposal is my original work and has not been presented for a degree in his or any other University ,and all sources of materials used for this proposal have been fully acknowledged.

Name_____

Signature_____Date_____

Place: Jimma University

Date of Submission_____

This thesis proposal has been submitted with my approval as the University Advisor.

Name of the first advisor_____

Date_____Signature_____

Name of second advisor: _____

Date_____Signature_____