Addis Ababa University

School of Graduate Studies

Levels and Determinant of Unintended Pregnancy among Selected Married Women in Damote Gale Woreda

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ABBREVIATIONS

AAU: Addis Ababa University

AGI: Alan Guttmacher Institute

CSA: Central Statistical Agency

EDHS: Ethiopia Demographic and Health Survey

FGD: Focus Group Discussion

HHs: House holds

IPS: Institution of Population Studies

IUD: Intra Uterine Device

MoH : Ministry of Health

MDGS: Millennium Development Goals

PRB: Population Reference Bureau

UNICEF: United Nations Children's Fund

WHO: World Health Organization

WCDR: World Conference on Disaster Reduction

ABSTRACTS

Unintended pregnancy is a worldwide problem that affects women, their families and societies at large. Recently it appeared as an important public health concerns for both developed and developing countries because it is not only distressing for the affected women and children, but also has a far reaching health, social and economic consequences. To prevent unintended pregnancy and its associated problems it is important to understand the determinant factors.

The objective of the study was to examine the level and the underling determinants of unintended pregnancy among selected married women in Damote Gale woreda. A cross-sectional study was conducted in this woreda and the study was carried out in eight kebeles (smallest administrative units).

A multistage sampling technique was used to select females in the reproductive age group15-49 years for interview. Quantitative as well as qualitative data were obtained using structured questionnaires, focus group discussion and key informants interview. Demographic, socio-cultural, and service related characteristics were used as explanatory variables while the dependent variable is unintended pregnancy.

A total of 713 females aged 15-49 years were interviewed out of whom, 302(42 .4 %) women reported that their most recent pregnancies were unintended. Most of the women (89%) knew at least one modern FP methods.84% of the women have never discussed with husbands about issues concerning FP. It is also indicated that 80% of women have never been visited by health workers.Only33% of women made decision on their health care by themselves. Major reasons mentioned for failure to avoid unintended pregnancy were lack of knowledge, disapproval by husband, difficulty to get method and method failure. Predicted probability has shown that women in delayed age at marriage, with lower parity, women exposed to radio, women who discus about FP issues with husband; those who have autonomy on their health care and those visited by FP workers had less exposed to unintended pregnancy.

Unintended pregnancy was found to be a major reproductive health problem in the study area. Results suggested that FP strategies need to focus in early twenties and older women, and address the role of men. Besides, women's decision making power should be given a special attention. Furthermore, in addition to expanding access to family planning an effective IEC and counseling and quality of care is needed in the study area.

and the decision to carry a pregnancy to term or to abort is affected by life circumstances and social influences (Johns, 2006).

The level of unintended pregnancy also can serve as an indicator of the state of women's reproductive health, and of the degree of autonomy women have in determining whether and when to bear children (Mazharuarul and Rashid, 2004). Therefore, unintended pregnancy is an issue not to be ignored. Many pregnant women will need to end a pregnancy to avoid risks to their lives and health psychological trauma, and socio economic turmoil (Ipas, 2004).

Issues related to unintended pregnancy has been studied by few researchers in Ethiopia and little has been discussed about its cause especially in the rural parts of the county. Moreover, efforts to reduce the incidence of unintended pregnancy were relatively unsuccessful. Hence, there is a continued need for research, information sharing and documentation of efforts aimed at reducing unintended pregnancy. Therefore, this research was carried out to determine the level and determinants of unintended pregnancy among selected married women in one of the rural setting of Ethiopia, Damote Gale woreda. It is hoped that the results of this study can be used as inputs for family planning implementation, and there by increases the chance of health outcomes for both mothers and their infants.

1.2 Statement of the Problem

In Ethiopia, the few surveys conducted on issues related to unintended pregnancy suggested that unintended pregnancy is among the main causes of maternal mortality (Solomon and Mesganaw, 2006). Even if the fertility declined steadily from 6.8 life birth per women in 1981 to 5.4 in 2005 and there is an increase in contraceptive prevalence, many women in Ethiopia are experiencing unintended pregnancy. For example, Ethiopian demographic and health 2005 survey reported 35% pregnancies among all reproductive age were unintended (CSA and ORC macro, 2006). As a result, significant proportion of married women turned to induced abortion to avoid unintended pregnancy. According to MOH, 2006 report approximately half a million pregnancies annually end in induced

abortion among 3.7 million pregnancies, which is a reflection of the high rate of unintended pregnancy.

Despite the increasing concern for maternal health and grave consequences related to unintended pregnancy such as unsafe induced abortion inducing death of mothers, unintended births, and potential preventability of unintended pregnancy, very few studies addressed the factors associated with the extent of unintended pregnancy.

So far, few scholars conducted research on unintended pregnancy in Ethiopia with a special attention in urban part and the result indicates the existence of high rate of unintended pregnancy. For instance, a research conducted by Solomon and Mesganaw (2006) showed that 33% of the pregnancies among reproductive age were unintended. Similar study conducted in Gonder by Haile in 1992 reported a high rate of unintended pregnancy. Therefore, these studies have made unintended pregnancy remains to be very common in Ethiopia posing a great challenge to maternal health.

Hence the underlying cause of high prevalence of unintended pregnancy needs further investigation and exploration in order to understand and appropriately address the reproductive health problems. It is essential to identify those who are at risk of unintended pregnancy and provide the service they require. Also, to develop effective strategies for prevention of unintended pregnancies, it is necessary to understand the factors affecting unintended pregnancies and its consequences.

1.3 Objectives of the Study

1.3.1 General Objective

The major objective of the study is to examine the levels and determinants of unintended pregnancy in Damot Gale woreda.

1.3.2 Specific Objective

- To measure the magnitude of unintended pregnancy among selected married women in Damot Gale woreda.

- To assess the socio-demographic factors affecting unintended pregnancy among the respondents of women.
- To assess the consequences of unintended pregnancy among women in Damote Gale woreda.

1.4 Hypothesis of the Study

- Unintended pregnancy is positively associated with the number of living children in the house hold.
- Health extension workers visit to a women decrease the likelihood of unintended pregnancy.
- Unintended pregnancy is negatively associated with women's level of education.
- Spousal communication is inversely related with unintended pregnancy.
- Late age at first marriage decrease the probability of experiencing unintended pregnancy.
- Exposure to mass media decreases the chance of unintended pregnancy.

1.5 Significance of the Study

This study was mainly carried out to investigate the level and magnitude associated with unintended pregnancy among selected women of reproductive age group residing in demote Gale wereda .It has importance in detecting and targeting relevance variables of interest for interventions and consequently increases the chance of good health out come for women as mother and their family as well. The prevalence of unintended pregnancy is valuable and need as a major input for family planning programs implementation and evaluation and this study also assists through that. Moreover, the study explores not just the proportion of women who ever had unintended, pregnancy but reasons that underline them and the barrier women face to controlling the number and timing of their pregnancies which this research more significant . Besides, due to the direct role of reducing unintended pregnancy on millennium development goals (MDGS):i.e., improving maternal health and reducing infant mortality, this research can be considered as timely.

1.6 Limitation of the Study

Since the research is across sectional retrospective measure of women's pregnancy intention, the probability of recall bias and miss reporting of events likely to happen. Besides, concept of pregnancy intention may not be meaning full to some women.

Data analyzed will not provide a national estimate of unintended pregnancy it is generalized to the study area-Damote Gale woreda.

However, data were collected by trained female interviewers using a pretested questionnaire most recent pregnancy was conceded to control multiple pregnancies out comes to the same women. By this the reliability of the data was maintained.

CHAPTER TWO

Review of the Related Literature

2.1 Definition of Unintended Pregnancy

Pregnancy unintended ness is a complex concept, and has been the subject of recent conceptual and methodological critiques. Pregnancy intentions are increasingly viewed as encompassing affective, cognitive, cultural and contextual dimensions. Developing a more complete understanding of pregnancy intentions should advance efforts to increase contraceptive use, to prevent unintended pregnancies and to improve the health of women and their children (John et'al, 2003).

Conventional measures of unintended pregnancy are designed to reflect a woman's intentions before she became pregnant. Unintended pregnancies are pregnancies that are reported to have been either unwanted (i.e., they occurred when no children, or no more children, were desired) or mistimed (i.e., they occurred earlier than desired). In contrast, pregnancies are described as intended if they are reported to have happened at the "right time" or later than desired (because of infertility or difficulties in conceiving). A concept related to unintended pregnancy is unplanned pregnancy-one that occurred when the woman used a contraceptive method or when she did not desire to become pregnant but did not use a method. Intentions are often measured or reported only for pregnancies ending in live births; pregnancies ending in abortion are generally assumed to have been unintended.

2.2 Determinant of Unintended Pregnancy

2.2.1 Demographic Factors

2.2.1.1 Age of Women

Studies have shown that women's age is significantly associated with pregnancy intention. For example in Nepal as age increases the percentage of women reporting unintended pregnancies increased 31 percent of the women aged less than 25 to 77

percent of the women aged 35 and above (Ramesh, 2005). Similarly study conducted in Egypt showed that women aged ≥35 years were more likely to have unintended pregnancy compared with those aged <18 years were less likely to report unintended pregnancy (Shaheen et'al, 2007).

Also in Bangladesh older women (40 percent) 30 and above years of age, were more likely than younger women (12 percent) to have had an unintended pregnancy, however, adolescents (25 percent) were more likely than older women (8–19 percent) to have had mistimed pregnancy (Mazharu and Manunur,2004).

2.2.1.2 Age at First Marriage

The study conducted in Adama showed that women who got married at early age (before 19 years) had significantly higher rate of unintended pregnancy (45.4%) compared to those who got Married at 19 years or later (25.8%) (Biniyam, 2009) also the study conducted in Hawassa town shows that women with age at first marriage is the age group 10-14 or 15 – 19 years experienced pregnancy twice more than those women with higher age at first marriage (25 or above years) (Akalework, 2008).

Similarly, study conducted in shanghai, china showed that strong relationship between the desired timing of the first birth and wife's age at marriage. For example, 23% of wives who married before age 24 wished to post pone conception for more than one year, compared with 2% of wives who married at age 30 or older (Che and Cleland, 2004).

2.2.1.3 Ideal Family Size

In societies where large families are desired, the potential unintended pregnancy rate tends to be low. If the desired number of children declines, the numbers of years during which women are potentially at risk of experiencing an intended pregnancy increases (Mazharuarul and Rashid, 2004). The study conducted in Nepal Showed that those women who had three and more ideal number of children have higher level of unintended pregnancy (44%) compared to those who reported fewer children (39%) as an ideal number (Ramesh, 2005). Those women might have already completed their ideal number of children.

2.2.1.4 Parity

The more children a woman already had, the more likely she was to report that her current/ last pregnancy was unintended. For example in Ecuador women with unwanted pregnancies had an average of 3.7 previous births, while women with mistimed or planned pregnancies had 1.9 and 1.7 previous births, respectively (Elizabeth, 1999).

According to a study done in Ethiopia, as sizeable proportion of births to young women are reported to be unintended. The study reveals, more than half of all births to women under age 15, and more than half of all births to women age 15-19 and 20-24, at the time of birth, are unintended, one in three births to women at a very young age (less than 15 years) is reported to be unwanted, in contrast to one in ten birth to women age 15-24. About one in five birth to young women is also reported as mistimed. Unplanned pregnancies among youths also increase with party. For example one third of first births are unwanted or mistimed, where as one in two births of parity four and above is unwanted or mistimed (Govjndasamn etal, 2002).

2.2.2 Socio Cultural Factors

2.2.2 .1 Education

Education is one of the most pervasive impacts on married women's pregnancy intention. It empowers women with knowledge, skill and self – confidence, and there by addressing the practical need of women in their reproductive health including practice of contraception use (Yonas, 2005). Since education reduces the chance of discontinuity of contraceptive, educated women are much more likely to have planned pregnancies (Bongaart, 1997).

Some studies have shown that there is a positive relationship between mother's education and unintended pregnancies. For example, in Bangladesh women with no formal education (17 percent) or who had primary education (13 percent) were more likely to have had an unintended pregnancy than women with secondary (83 percent) or higher (37 percent) level of education (Mazharu and Manunur, 2004).

Study conducted in Ethiopia in 2002 revealed, three in four sexually experienced women with little or no education are mothers or pregnant with their first child at a young age compared with two in three women with secondary education or higher (Govjndasamn etal, 2002).

2.2.2 .3 Spousal Communication

Inter–spousal communication is an effective means which enables couple to know each other ideas and attitudes in all areas including the desire about when and how many number of children they want or contraceptive method choice. Research in Sub Sahara Africa suggests that communication between spouses is necessary in order for them to initiate discussion of an intimate topic, for them to research agreement on desired family size and for achievement of their reproductive goals. (Ramesh, 2005) .Misperceptions by women of their husband's views on contraception and lack of spousal communication about family planning are obstacles that can be overcome. While some husbands oppose contraception, others support family planning or may be encouraged to support it through programs that involve men in couples counseling, and programs that promote the health benefits of child spacing for mothers and infants. According to a recent WHO review of reproductive health programs involving men, the evidence is significant that even a single individual or couple counseling session with men can lead to increased support for contraceptive use (WHO, 2007).

2.2.2.4 Women's Autonomy

Unintended pregnancy is a symbol of the pervasive the inequalities in women's rights and status throughout the world (Kima, 1998). The level of unintended pregnancy can serve as an indicator of the state of women's reproductive health, and of the degree of autonomy women have in determining whether and when to bear children (Mazharu and Manunur, 2004).

The study by Kritz and Gurak (1991) showed that women who controlled a greater amount of household expenditure were significantly less likely than others to desire more children. Similarly, the other study showed that living in a municipality with high rates of

male patriarchal control significantly increased women's odds of having an unintended pregnancy by almost four times (Pallitto and Campoo, 2005)

Most DHS measure women's autonomy by their decision on healthcare, HH purchases and decision to visit their family. According to EDHS 2005 survey report the more empowered a woman; the more likely she is to receive antenatal care, postnatal care, and delivery assistance from a health professional. For example, nearly one-third of women who participate in making three or four decisions received antenatal care from health professionals, compared with 18 percent of women who are not involved in any decision making. Almost one in ten women who participate in three or four decisions utilized postnatal and delivery care, compared with 2 percent of women who had no say in any decision making.

2.2.3 Access to Health Information

2.3.3.1 Mass Media Exposure

Mass media have an important effect on reproductive behavior. The study in Ilorin, Nigeria, noted that the mass media such as radio, Television and news paper were the greatest single role in providing knowledge on family planning to women and increasing current use of contraception (Oni and MC Cathy, 1990).

Similarly in Nepal about one third of respondents who were exposed to radio and TV reported that their current pregnancies were unintended (33 – 35%) while the proportion was more than two fifths (43 – 45%) for those who were not exposed to any media (Ramesh, 2005).

2.2.3.2 Travel Time /Distance

Access to quality family planning information and service are important factors for healthy pregnancies as well as preventing unintended pregnancies, it the travel time is less, people feel more comfortable to visit the health facility leading to increase the utilization of services and decrease the unintended pregnancy. Study conducted in Nepal

showed that access to health services is negatively associated with the proportion of unintended pregnancy. Those respondents who resided near the family planning sources (less than 30 minutes travel distance) reported significantly much lower (38%) experienced unintended pregnancy compared to those who reside far (more than 1 hour travel distance) from the family planning sources (54%) (Pramote et'al, 2009).

2.2.3.3 Family Planning Workers Visit

In many studies it is indicated that FP worker's visit increases the use of modern contraceptive since family planning outreach workers in the community provide information on family planning matters as well as some services on family planning methods. The study conducted in Bangladesh found that women who have been visited by a family planning outreach workers are more likely to use modern contraceptive methods (Philips et'al, 1998)

There for, family planning worker's visit can increase the use and contraception of modern family planning method and the chance of experiencing unintended pregnancy becomes low in those areas.

2.3 Contraception and Unintended Pregnancy

Contraception information and services are supplied and utilized for planning reproduction. It has tremendous impact on women health. Contraception is saving the lives of millions of women around the world from hazards of unwanted pregnancy. From its relative importance, world wide access to FP is crucial with current high rate of unintended pregnancy, unsafe abortion, and unprecedented population growth (Bongarte, 1997).The problem of unintended pregnancy in any region especially in developing countries is not easily solved since the majority of un intended pregnancies occur because of lack of access or avoidance of birth control practice (WHO, 2007).

Based on the intentions to space or limit births on their use of contraception, married women are grouped in to two: women who are using some method of FP and they want to have another child or undecided whether to have another child and women who are using and who want no more children(CSA and ORC macro,2006).

In most developing countries aside from sub-Saharan Africa, contraception is used much for limiting than spacing in many African traditions (Setty, 2002).However, if a women is aware that she can regulate her fertility (space or limit births), but does not know how to do so, or unable to obtain services, she is incapable of avoiding unintended pregnancy (Brown and Eisenberg, 1995).

Knowledge and practice of contraceptive methods are overriding factors affecting fertility, and thus the likelihood of unintended pregnancy. However, knowledge about and access to contraceptive by no means guarantees its use and efficiency. A study conducted in Ecuador shows that past users of modern method are more likely than nonusers to report that it was unintended. Prior contraceptive users who had used modern method were 59 percent more likely than the nonusers to report that their most recent pregnancy had been unintended rather than planned (Elizabeth, 1999).

Contraceptive non use is the main reason for unintended pregnancy. In most DHS surveys women who did not wish to become pregnant were asked to identify the main reasons for not using contraception. Based on the data from 13 countries, John Bongaarts and Judith have found that the most important reasons for nonuse overall are lack of knowledge(25%),health concern(20%),and husband disapproval(9%).The next three reasons were infrequent sex, religion, and low access(Bongart and Bruce,1995).

2.4 Conceptual Framework of the Study

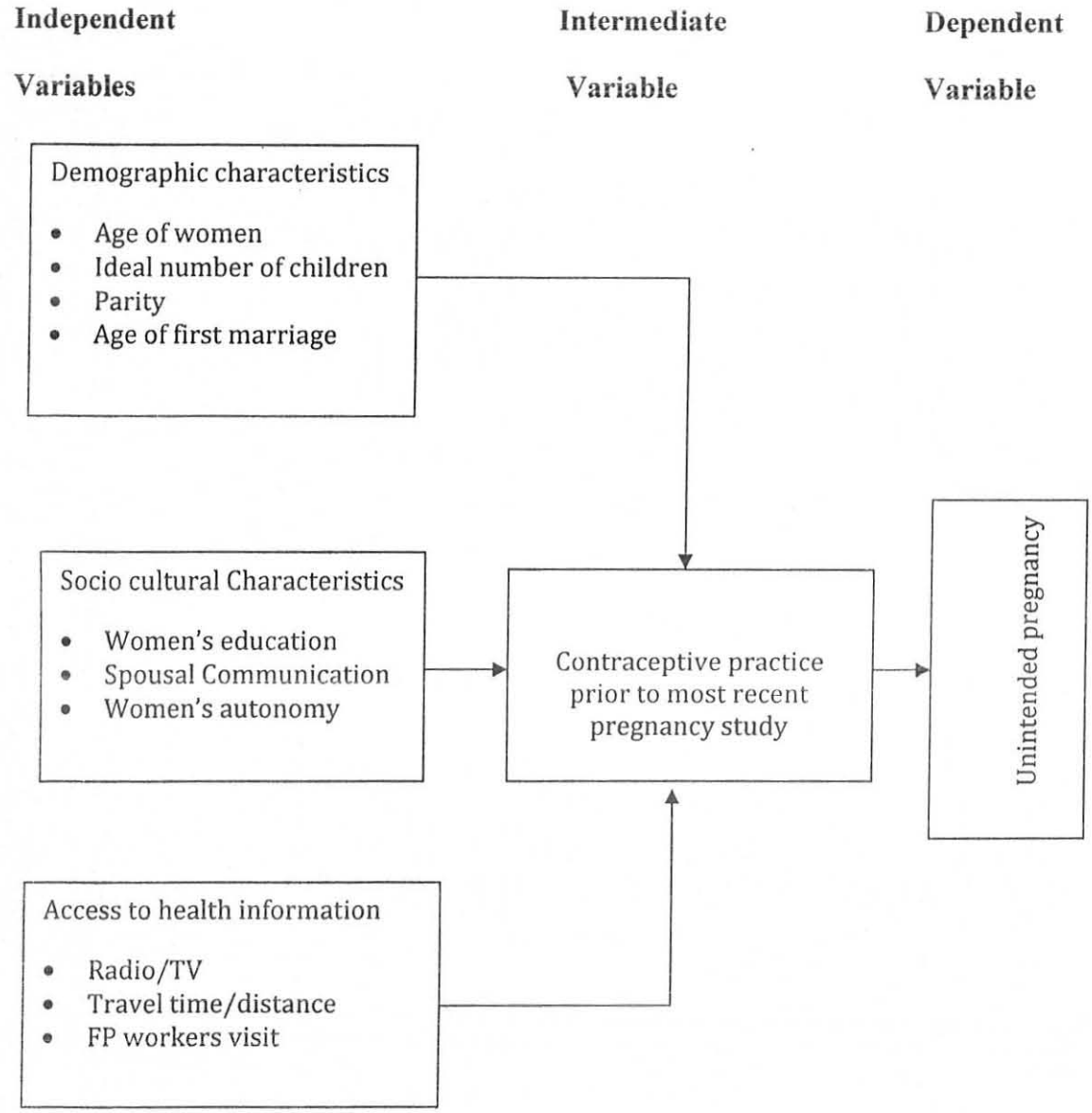


Fig.1 Conceptual Framework

Source: Developed by the Author based on literature, 2009/2010.

2.5 Research variable of the study

Dependant variable – The dependent variable for the study is un intended pregnancy.

It is a measure of women's reproductive intentions and was measured by asking the respondents to recall their feeling when their last pregnancy occurred. In this study the data were collected by asking questions like: "Right before you become pregnant with your last pregnancy, did you want to become pregnant then, did you want to wait, or did you not want to have any more children at all?" The answer might be wanted then-planed, wanted to wait later (mistimed) or did not want at all.

From this response those who said mistimed and did not want at all are classified under unintended pregnancy.

Independent variables- In the base of revision of literatures: demographic, socio cultural and service related characters are:

Age of respondents (15-19, 20-24, 25-29, 30-34, 35-39, 40-44, and 45-49),

Age at the time of marriage (10-14, 15-19, 20-24),

Parity or Number of children given by respondent (0, 1-2, 3-4, 5 and above)

Ideal number of children, (1-3, 4-6, 7 and above)

Highest grade completed, (illiterate, 1-4, 5-8, 9-12)

Women autonomy, (no autonomy, some autonomy)

Spousal communication, (ever discussed, never discussed)

Family planning workers visit, (visited, not visited)

Travel time to family planning services (less 30 minutes, 30-60 minutes, above an hours, DK)

Exposure to mass media, (have no exposure, have expos

CHAPTER THREE

Methodology of the study

3.1 Profile of the Study Area

Damote Gale woreda is located in Southern Nations Nationalities and Peoples Region (SNNPR) to south direction of Addis Ababa along the road taking from Addis to Arba Minch town.

According to 2007 Ethiopian Population and Housing Census the woreda is the 3rd most populated woreda in Wolayta zone with a total population of 154, 610 and among which 51% are women.

The woreda has estimated population density of 726.1 people per square km which is greater than the zonal average 156.5 and one of the highest density in Ethiopia (WBSDP 2005). Mixed agriculture is the main economic activity of the woreda. Moreover, recurrent drought is a major problem markedly reducing food production and also income and assets .Limited availability of land among a growing number of households is resulting in a decline in the size of land holdings (Elias ,2006).The woreda is also subdivided into 31 kebeles administration in which in each kebele's there are one health post. The woreda also has 3 health centers which provide services.

3.2 Data Sources

This study was base on primary and secondary data. For primary data collection, interviews and focus group discussion was used. Also secondary data from different source that comprises published and unpublished sources and also governmental or nongovernmental organization source according to their relevance to the purpose of the study were used.

The survey focus on the unintended pregnancy among selected married women whose most recent pregnancy occurred five years back to the survey date were the main

participants of the study. All pregnancies regardless to the outcome were considered in the study.

3.3 Sample Size Determination

The sample size was determined based on the estimates of proportion of unintended pregnancy by the Ethiopian Demographic and Health Survey 2005 which is 35% (CSA and ORC macro, 2006). The underlying assumption here is that the population proportion of currently married women who had encountered unintended pregnancy in the study area is the same as the country's result.

By fixing the level of confidence at 95% and the error to be tolerated at 5% (Lenth, 2001), the sample size was determined by the following formula (Woodward, 1992)

Sampling size (n) = $\frac{P(1-P)\,Z^2}{e^2} + 5\%$ Where $P = 0.35$, $Z = 1.96$, $e = 0.05$

$$n = \frac{0.35(0.65)\,(1.96)^2}{(0.05)^2} = 350$$

This formula assumes that HHS is selected with simple random sample design procedure. But for the above case since eligible HHS are not directly selected, the calculated sample size should be adjusted for design effect (D).The design effect is generally assumed to be 2 (Geneshack,2001).As a result the required sample size can be obtained by $n \times D$. There for, adjusting for the design effect by 2 and considering non response error to be 5% the complete sample size is taken as: 350(2) =700

700(5%) =35

Sample size total=700=35=735

3.4 Sampling Technique

A multi-stage sampling technique was applied to select the study subjects. The Damote Gale woreda has 31 kebeles and out of which eight kebeles were selected by using simple random sampling methods. Each kebeles has 3-4 gotes. One kebele(sefer) from each selected kebeles was selected by the same method.

The number of households to be included in each gote was determined in proportion with the total number of households found in each gote. Finally, based on the sampling frame of HHS in each gote, currently married women with in reproductive age were selected from the selected eight gotes by using systematic random sampling method. A systematic selection was conducted across every i^{th} house hold with a random start, where i was calculated by dividing number of households of the selected gote by the sample size allocated to the gote. The list of the HHS in each kebele was obtained from the kebele administrations. Whenever more than one eligible respondent was found in the same selected household, only the recent pregnancy was preferred. Incase if no eligible candidate was identified in a selected household, the interviewer would go to the next household in the clockwise direction until she gets an eligible woman

3.5 Data Collection

Questionnaires were administered to currently married women in the reproductive age. DHS questionnaire were considered as a source to set the questions and after pre testing it restructuring the questionnaire was done .For the study, eight female data collectors who completed grade ten and one supervisor who had a similar experience earlier were selected for quantitative parts. Both interviewers and supervisors were trained about the aim of the study, study procedures, and data collection by going through each question, art of interviewing, ways of collecting the data and provision of clarification on each doubt for a day. Practical exercises were also made through peer interviewer. For qualitative study two focus group discussions were conducted after the collection of quantitative data and were utilized to generate more information. Discussion were managed and moderated by the researcher, two note taker. For in-depth interview four selected service providers from different health center were interviewed. Primary data

were collected using structured questionnaires and checklists w re prepared to guide the focus group discussion..

3.6 Data Processing and Method of Analysis

For this study unintended pregnancy of women is used as a dependent variable whereas the socio-cultural, demographic and service related characteristics were used as independent variables.

The data was processed and analyzed using SPSS version 15. In order to test the effect of each predictor variable on the dependent variable both bivariate and multivariate analysis techniques were employed. At the bivariate stage, cross tabulation and Chi-square test was used and also at the multi variate stage, logistic regression technique was used.

3.7 Ethical Issues

The present study has got official approval from institution of population studies, Addis Ababa University and concerned administrative bodies in the woreda. Prior to data collection in addition to taking ethical clearance, ethical issues were addressed as an important component of the research. An appropriate informed consent was taken from respondents and by this they were informed that they can skip questions as they do not want to answer fully or partially.

3.8 Data Quality Assurance

The quality of data was ensured through proper training of data collectors, pretesting of questioner and checking each of the filled questioners daily by data collectors. Close supervision was done by the principal investigator during the course of data collection. All collected data were checked for completeness, accuracy and consistency by the principal investigator every day. Anything which was unclear was corrected and communicated to the data collectors on the next day.

CHAPTER FOUR

Result and Discussion

4.1 Background Character

The study of Levels and Determinant of un intended pregnancy a. ,ng currently married women: in Damote Gale Woreda was done from Feb27/2010-M.arch23/2010 for ever pregnant women who gave birth within the past five years prior to the survey. In the survey 735 women were identified for the study. Out of which 713 were interviewed with the response rate of 97%.

In the uni variate analysis back ground characteristics of the study population are described. Association of independent variables and dependent variable was described in the bivariate analysis by using chi- square test. In the multi- variate analysis binary logistic regression was done to estimate the net effect of variables on the likelihood of a pregnancy to be unintended.

4.1.1 Socio-demographic Characteristic of Respondents

Table 4.1 shows the distribution of respondents by selected demographic characteristic .Although the age of respondents who have been pregnant in the past five years ranges from 15-49, 52.2 percent were in the age group 20-29 and, mean age of ·spondent was 27years with standard deviation of 7.8.Less than one out of ten respondent 9.5%) were comprised in the age group 40 and above.

Concerning age at first marriage, above fifty eight percent of respondents got married at age18 with the median age at first marriage 17.8years.

Among the surveyed married woman, less than one in ten respondents (7.3%) were currently pregnant at the time of survey and More than 3/4 of the women had had three and above birth. While looking at the ideal number of children more than half of the respondents (58.3%) reported that their ideal number of children is between four and six.

Table 4.1 Percentage distribution of respondent by selected demographic characteristic, Damote Gale woreda, March 2010.

Name	Character	Frequency	Percent	
Age of respondent	15-19	67	9.4	**Mean of respondents 27 years with SD7.8**
	20-24	149	20.9	
	25-29	223	31.3	
	30-34	94	13.2	
	35-39	112	15.7	
	40-44	60	8.4	
	45-49	8	1.1	
	Total	713	100.0	
Age at first marriage	10and less	6	0.9	**Median age at first marriage 17.8 years**
	11-14	153	23.4	
	15-18	224	34.3	
	19-22	259	39.7	
	23 and above	11	1.7	
	Total	653	100	
Children ever born	0	52	7.3	
	1-2	102	14.3	
	3-4	318	44.6	
	5 and more	241	33.8	
	Total	713	100.0	
Ideal number of children	1-3	144	29.5	
	4-6	284	58.3	
	7 and more	59	12.1	
	Total	487	100.0	

Table4.2and4.3 shows the percentage distribution of respondents by religion and Ethnicity respectively. Among the respondents the majority (88.7%) was Protestants next to them orthodox and catholic respondents' together share almost 10% when look at the ethnicity of respondents almost 95% are wolita and the other 4% comprises Amhara, Oromo and Tigre.

Table 4.2 Distribution of respondents by religion Damote Gale woreda, March 2010

Religion	Frequency	Percent
Orthodox	56	7.8
Muslim	8	1.1
Catholic	14	1.9
Protestant	633	88.7
Others	2	0.2
Total	**713**	**100**

Table 4.3 Distribution of respondents by ethnicity Damote Gale woreda, March 2010.

Ethnicity	Frequency	Percent
Amhara	16	2.2
Oromo	7	0.98
Wolita	677	94.9
Tigri	5	0.7
Other	8	1.1
Total	**713**	**100**

4.1.2 Socio Cultural Characteristics

Table 4.4 shows the percentage distribution of the same population by socio-cultural characteristics. About one –fourth of women (28.5%) were illiterate, where as nearly

seven out of ten women (69.7%) attended some primary education. Also only less than one out of ten respondents attained secondary schools.

Looking at women's autonomy, a higher proportion of respondents (79.7) had somewhat autonomy on their own health care, daily and large HH purchase or visiting family while 21.3% depend on others.

Concerning the spousal communication, a majority of the respondents (84%) had not discussed about family planning with their husbands.

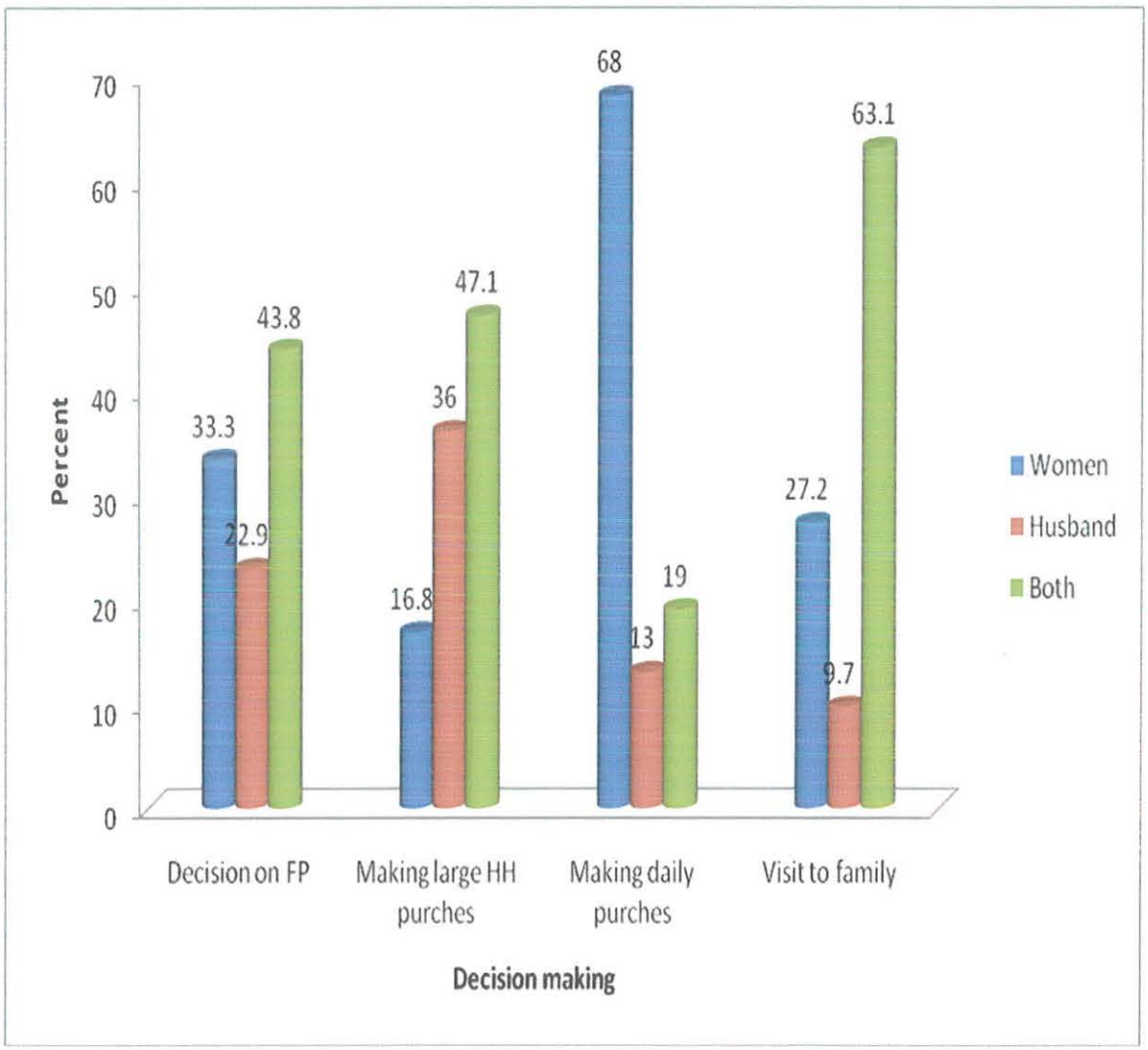
Table 4.4 Distribution of respondents by selected socio cultural characteristics, Damote Gale woreda, March 2010.

Character	Group	Frequency	Percent
Highest grade completed	illiterate	203	28.5
	1-4	279	39.1
	5-8	218	30.6
	9-12	13	1.8
	Total	**713**	**100.0**
women's autonomy	no autonomy	145	20.3
	some autonomy	568	79.7
	Total	**713**	**100.0**
spousal communication	ever discussed	114	16.0
	never discussed	599	84.0
	Total	**713**	**100.0**

The strength of the role of women in decision making varies with the type of decision. Almost 63 percent of currently married women reported that they alone made the final decision about daily household purchases. Although 33 percent of currently married woman make sole decisions on their own health care, above one-fifth say that their husband makes such decisions without consulting them.

Figure 2 shows decision on health care, daily and large house hold purchase or visiting family. Decisions on large household purchases are most likely to be made by the husband or partner alone (36 percent) or jointly with the wife or partner (47 percent). More than three-fifth of women say that decisions to visit family or relatives are made jointly with their husband or partner.

Figure 2 Percentage of women who report that they alone or jointly have the final say in specific household decisions (on own health care, daily and large HH purchase or visiting family)



4.1.3 Service related characteristic

Regarding travel time to family planning source, more than three-fifth of the respondents 59.6% reported that distance between nearest family planning services and their houses is between half an hour and an hour while about one out of ten (6.2%) respondents were not aware about any family planning source at all. Very few respondents (19.8%) reported that the family planning workers visited them in the last 12 months. Also the majority (78.8%) of the respondents have no exposure to Mass media like radio as shown in table 4.5 below.

4.5 Percentage distribution of respondents by selected service related characteristics, March 2010

Factors	Group	Frequency	Percent
Travel time to FP source	Less 30 minutes	89	13.5
	30-60	392	59.6
	Above an hours	136	20.7
	DK	41	6.2
	Total	**658**	**100.0**
Exposure to mass media	have no exposure	562	78.8
	have exposure	151	21.2
	Total	**713**	**100.0**
women visited by FP workers	visited	141	19.8
	not visited	572	80.2
	Total	**713**	**100.0**

4.2 Reproductive History

As shown on fig3 below, 89% of the respondents said they know at least one method of contraceptives.

Although approximately nine out of ten respondents know at least one method of contraceptive ,as fig4presents ,among the surveyed married woman almost less than two fifth of the respondents (38.6%) had used some type of contraceptive method some times in the past while 21.3% are current users of contraceptive method.

Fig. 3 Percentage distribution of contraceptive use by knowledge of respondents: Damote Gale woreda, March 2010

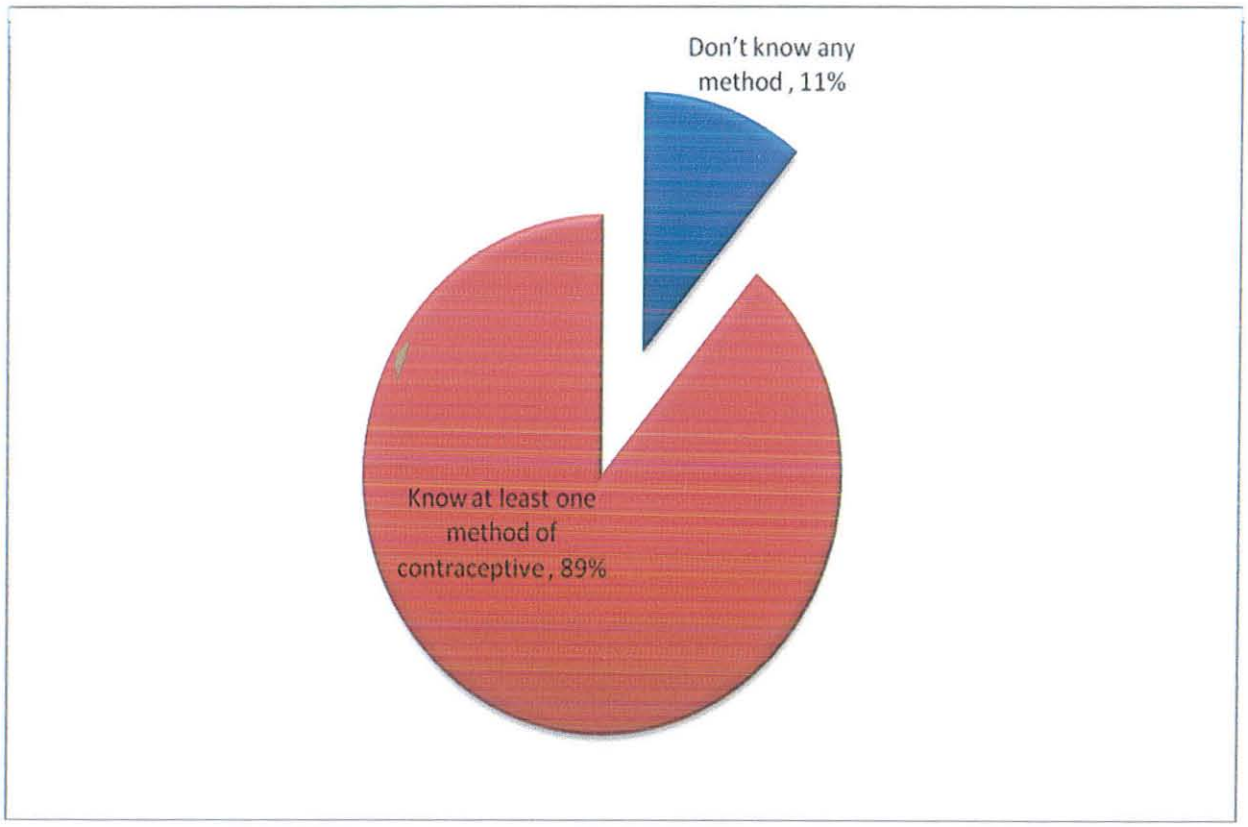


Figure: 4 Distribution of respondents by contraceptive use, Damote Gale woreda, March 2010

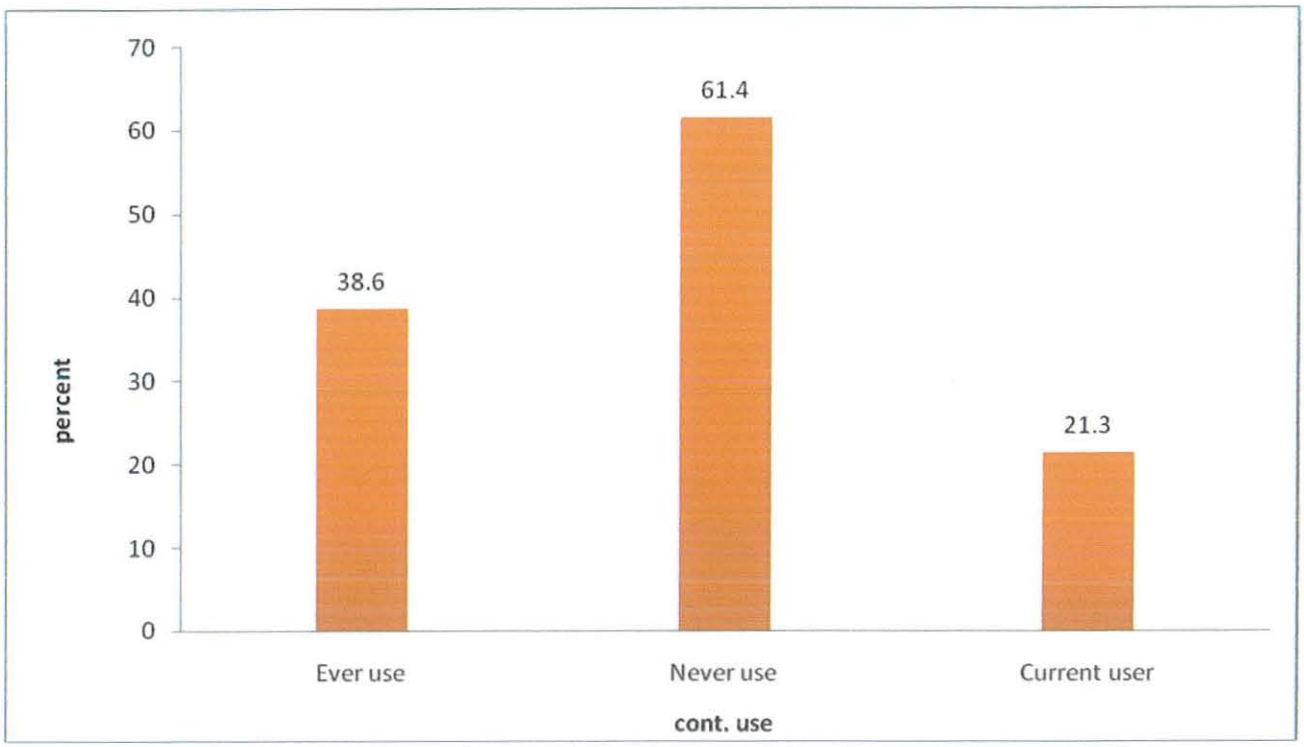


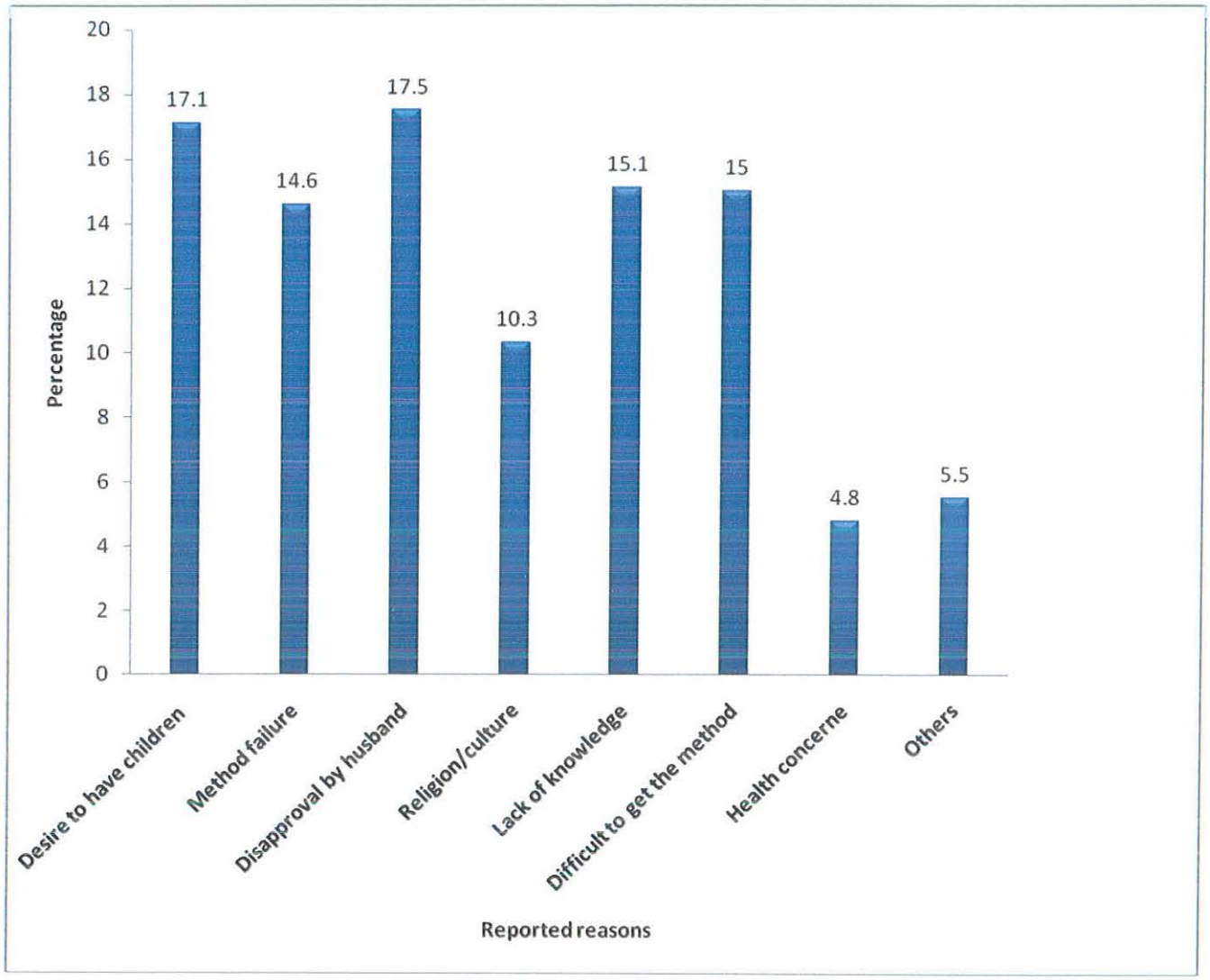
Table 4.6 shows the intensions of the respondents about their pregnancies. About one-tenth of the respondents mentioned that they wanted their current pregnancies later (mistimed = 10.5%) and the other three –tenth reported that they did not want at all their current pregnancies (unwanted = 31.8%).When summing up these two, more than two – fifth of respondents (42.4%) reported their current pregnancies were unintended (i.e. mistimed and unwanted pregnancy)

Major reasons for failure to avoid unintended pregnancy were: above two-fifth were by desire to have children and disapproval by husband all together (34.6%), next to that lack of knowledge and difficulty to get the method shares (30.1%). The least important reasons identified in this study were health concern which is 4.8 percent as shown on fig.5 below.

Table 4.6 Distribution of respondents by pregnancy outcome, Damote Gale woreda, March 2010

Pregnancy out come	Frequency	Percents
Unintended	302	42.4
Mistimed	75	10.5
Un wanted	227	31.8
Planned	411	57.6
Total	**713**	**100**

Fig. 5 Major Reasons given by respondents not to avoid unintended pregnancy, Damote Gale woreda, March 2010



Respondents of the study reported health workers as a major source of information (55.8%). Next to it above twenty-three percent of women heard about family planning on the radio. The others like husband and school share the least percent as a source of information as shown on table4.7below.

Table 4.8 shows the percentage distribution of respondents by contraceptive use and method failure before laser pregnancy. Of the respondents who replied method failure as

a reason for unintended pregnancy, majority used pills (69.1%) followed by injection (20.5%).

As shown in fig.6 concerning the respondent's end of the pregnancy outcome, among those who encountered unintended pregnancy and responded the questioner 89% of the respondents didn't take action on their pregnancy while nearly 7% end in induced abortion.

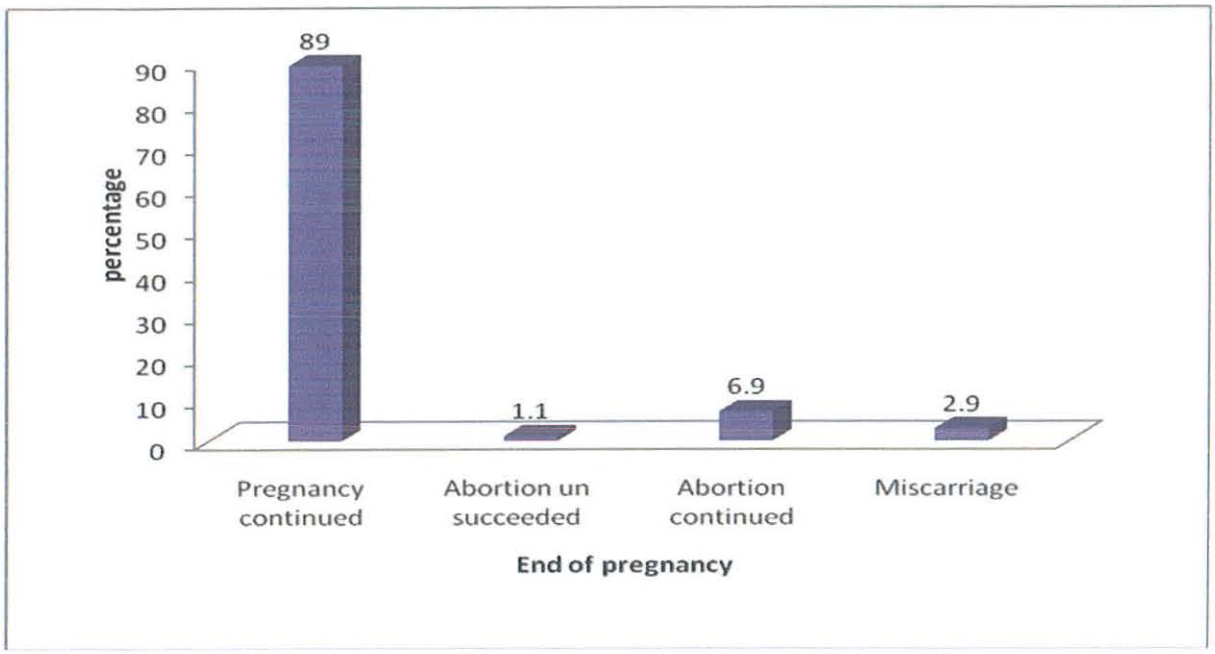
Table 4.7 Distribution of respondents by major Source of information about FP, Damote Gale woreda, March 2010

Source of information	Frequency	Percent
Health workers	356	55.8
Radio	151	23.7
School	32	5
Friend	47	7.3
Husband	12	1.8
Others	39	6.1
Total	**637**	**100**

Table 4.8 Distribution of respondents by method failure and type of current use before last pregnancy in Damote Gale woreda, March 2010

Method	Frequency	percent
Pills	47	69.1
Injection	14	20.5
Implant	1	1.5
Calendar	5	7.4
Diaphragm	0	0
IUD	1	1.5
Total	**68**	**100**

Fig.6 Distribution of respondents by end of pregnancy outcomes, Damote Gale woreda, March 2010



4.3 Model Specification

In order to test the effect of each predictor variable on the dependent variable both bivariate and multivariate analysis techniques were employed. At the bivariate stage, cross tabulation and Chi-square test was used and also at the multivariate stage, logistic regression technique was used. The underlying principle of selecting the model is that the logistic regression analysis can be applied for condition that the research needs to predict the presence or absence of characteristic of outcome based on the scores (values) of independent variable (predictors). Logistic regression is the most widely applied model when the dependent variable is dichotomous taking the values 0 or 1.Using the binary logistic regression model, it is possible to estimate the probability(likelihood) of an event occurring. When a number of predictors are taken into consideration to estimate the likely hood of the occurrence of an outcome variable (for this study, unintended pregnancy of married women) the relation is built using the question as follows.

Logistic regression is based on the concept to odd ratio: $p/(1-p)$, where p is the probability that the event y occurs $p(y=1)$ and $(1-p)$ is the probability that the event y does not occur $p(y=0)$. Based on this the probability of the outcome variable not occurring can be estimated as: $prob(no\ event)=1-prob(event)$.

$$p/(1-p)=exp(a+Bx\ +c)$$

Where: P is the probability that the event y occurs, at $p(y=1)$;

$p/(1-p)$ is the "*odds ratio*";

For example, in this case p would be the probability of unintended pregnancy, where as $1-p$ would be probability of planned pregnancy, a is the constant term, and B is logistic coefficient. $exp(B)$ is the factor by which the odds change when the independent variable increased by one unite(Gujarti,1988).

4.3.1 Bivariate Analysis

Previously it was observed that more than two – fifth of respondents (42.4%) reported their current pregnancies as unintended (i.e. either mistimed or unwanted pregnancy). Bivariate analysis indicated the percentage of women who have experienced current pregnancies as unintended varied by different back grounds characteristics.

Regarding the demographic determinants of unintended pregnancy, as age of respondents increase the percentage of women reporting unintended pregnancy decreased until age group 30-34 which is unexpected. However, the Percentage of unintended pregnancy increased from 35 years on wards which are expected. On the first age group (15-19) above half of the respondents (64%) had reported their current pregnancy as unintended. This might be because of their early age at marriage the respondents want to post pone their pregnancies. Those respondents with age group 40 and above had high percentage of unintended pregnancy with significant level of association ($P< 0.001$).

Age at the time of marriage also had a strong association with an intended pregnancy. As women get married as later age as possible the percentage the pregnancy to be unintended decreases. So, women who got married in the early ages (before 15 years) have higher

rate of unintended pregnancy compared to those who got married in the age 15 and later. In this survey those who get married at 25 and above year reported their pregnancy to be totally planned.

Ideal number of children had relatively significant association with unintended pregnancy, with $P < 0.01$ in the study.

As expected, as the birth order of respondents increase the likelihood the pregnancy to be unintended increases in this survey too. In the past birth order those respondents who had five and more children reported that above half of their pregnancy (51%) were unplanned. Among currently pregnant women with no child at the time of survey, about three tenth had unintended pregnancy. This might be because of respondents early age at the time of marriage, they want the pregnancy to be one time later.

Considering ideal number of children, against expectation, those women who has more ideal number of children have higher level of unintended pregnancy (70.2%) compared to those who reported fewer children (48%) as an ideal number.

This is because those women who have higher ideal number of children may not use any continuative method and exceeded their desired number of children.

Table 5.1 presents also the association of socio cultural characteristics and unintended pregnancy. The result showed that income of the household and women's autonomy were strongly associated with unintended pregnancy at $P< 0.001$ where as education and spousal communications were relatively associated with $P < 0.01$ and $P< 0.05$ values respectively.

Regarding education as expected the level of education is inversely related to the percentage of unintended pregnancy. More than half of the illiterate women (53.5%) had unintended pregnancy while the proportion of literate woman was nearly 30%.

As expected a marked differences were observed with those women who had some type of decision on their health care ,daily and large HH purchase or visiting family (69%) had

unintended pregnancy at the time of survey compared with 35.6% of those who had some type of decision on their health care and how to spend own earn money.

Almost half of currently married women who had no discussion about FP with their husband experienced unintended pregnancy while only three-tenth of respondents (33.3%) who had discussed about FP with their husband had unintended pregnancy.

The survey also showed effects of access to health information and services on unintended pregnancy. Regarding the association, women visited by FP workers had strong association with pregnancy intention ($P< 0.001$) where as exposure to mass media and travel time to FP source had a relative association with $P<0.01$ and $P< 0.05$ respectively.

The table shows that also increase in exposure to mass media decreases the level of unintended pregnancy. About three-tenth of the respondents who were exposed to radio reported that their current pregnancies were unintended (30.5%) while the proportion was more than two-fifths (45.6%) for those who were not exposed to radio. Similarly, access to health service decreases the proportion of unintended pregnancy. As expected those respondents who resided near the family planning source (less than half an hour travel distance) reported much lower (36%) un intended pregnancy compared to those who reside far (more than one hour travel distance) from FP sources (52.9%).

Table5.1Results of bivariate Analysis, March 2010

Name	Class	Unintended	Total	percent	χ2
Age of respondent	15-19	43	67	64.2	30.063***
	20-24	61	149	40.9	
	25-29	95	223	42.6	
	30-34	27	94	28.7	
	35-39	38	112	33.9	
	40-44	32	60	53.3	
	45-49	6	8	75	
	Total	302	713	42.4	
Age at the time of marriage	10-14	87	155	56.1	30.09***
	15-19	178	428	41.6	
	20-24	10	66	15.2	
	25and more	0	4	0	
	Total	275	653	42.1	
Number of children given by respondent	0	16	52	30.8	12.817**
	1-2	37	102	36.3	
	3-4	126	318	39.6	
	5 and more	123	241	51	
	Total	302	713	42.4	
Ideal number of children	1-3	66	137	48.2	1.37
	4-6	164	304	53.9	
	7 and more	59	84	70.2	
	Total	289	525	57	
Highest grade completed	illiterate	109	203	53.7	19.054**
	1-4	116	279	41.6	
	5-8	74	218	33.9	
	9-12	3	13	23.1	
	Total	302	713	42.4	
women's autonomy	no autonomy	100	145	69	52.784***
	some autonomy	202	568	35.6	
	Total	302	713	42.4	
spousal communication	ever discussed	38	114	33.3	4.525*
	never discussed	264	599	44.1	
	Total	302	713	42.4	
Travel time to FP source	<30	32	89	36	6.654*
	30-60	192	392	49	
	>60	72	136	52.9	
	Total	296	617	48	
Exposure to mass media	have no exposure	256	562	45.6	11.097**
	have exposure	46	151	30.5	
	Total	302	713	42.4	
women visited by FP workers	visited	34	141	24.1	23.957***
	not visited	268	572	46.9	
	Total	302	713	42.4	

NB: *=p<0.05, **=p<0.01, ***=p<0.001

4.3.2 Multivariate Analysis

At the earlier section of the chapter, the study has selected whether the various types of independent variables were associated with unintended pregnancy. As it is shown, all variables except ideal number children have significant association at 5% and 1% significant level. However, the bi-variate analysis didn't show the confined effect of the independent variables in explaining the variation in the dependent variable. A multi-variate statistical analysis was employed in the form of logistic regression to determine the independent effects of each predictor variable on unintended pregnancy controlling the effect of other variables.

In multivariate analysis, binary logistic repression model was used because the response to a set of explanatory variable is binary form, which in case of this study is unintended pregnancy.

The categories were given cod and for reference category the coefficient is zero which makes exp (β) value or odd ratio value to be one.

The reference Category (RC) is used to measure the extent to which the respondent has the possibility to possess the outcome variable as a change in the status from reference to the next category.

Concerning with the goodness of fit the model, Hosmer and Lomshow test was included in the study. This Hosmer and Lomshow test shows 0.609 which indicates that the model well fits the data since it is greater than 0.05.

The result of the logistic regression model for demographic, socio-cultural and also for service related characteristics are presented in table 5.2. In the model, as identified in table, nine variables were identified as significant variable that had influenced unintended pregnancy. Travel time to near FP source was found to be insignificant in multivariate analysis.

Respondents of age group 20-24 are one and a half times more likely to have unintended pregnancy then those who were at age 25-29 (RC).

The analysis indicates that as age of respondent increases the likelihood of the women to have unintended pregnancy decreases until age 39 and then for the last age groups i.e. 40-45 and 45-49 the likelihood of the women placing the pregnancy unintended increased by 1.2 and 1.3 times than the reference category respectively.

Parity

Like age of respondents partly is significantly related with unintended pregnancy. The result of the study revealed that those respondents having no children and one to two children were nearly three and four times more likely to label their recent pregnancy unintended than those women with three to four children.

Those women with children above five were five or more times experiencing unintended pregnancy than RC groups.

Age at first marriage

Age at the time of marriage was also found to be a significant predictor of unintended pregnancy. The risk of experiencing unintended pregnancy among women who got married in early fifteen's is 1.3 times higher than those women who got married between ages 15 to 19.

Over all, the probability of an experience of unintended pregnancy decrease as the age at first Marriage of women increases.

Highest grade completed

The results indicate that for increase in educational level the likelihood that the pregnancy was unintended declines.

Model 1 further explained that women who were illiterate were 1.2 times more likely to have unintended pregnancy compared to those who attended first cycle primary school. Similarly currently pregnant women who attended secondary schools were 52% less likely to have unintended pregnancy compared to those who were at first cycle primary schools.

Autonomy

In this model, women's autonomy has statistically significant impact on unintended pregnancy.

Women who had no autonomy on their health care ,daily or large house hold purchase or visit to family were 4.3 times more likely to have unintended pregnancy compared to those who had somewhat autonomy on their health care ,daily or large house hold purchase or visit to family.

Communication on FP

Communication on family planning with husband was significantly associated with unintended pregnancy. Women who discussed family planning matter to their husbands were 57% less likely to have unintended pregnancy compared to those who were not discussed the issue with their husband.

Exposure

Exposure to mass media was also found to be a significant predictor of unintended pregnancy .The result of the study revealed that those respondents who were ever exposed to radio are 59% percent less likely to have unintended pregnancy compared to those who were not exposed.

Visit

Like exposure to mass media women visited by FP workers were strongly associated with unintended pregnancy. In the study it was found that many women who were vested by FP workers are 70% less likely to have in intended pregnancy then women who were not.

Table 5.2 Results of logistic Regression for socio-demographic variables, Damote Gale woreda,march 2010.

Variables	Group	B	S.E.	Sig.	Exp(B)
Age of respondents	15-19	**-.407**	**.290**	**.000**	**.965**
	20-24	**.415**	**.460**	**.036**	**1.52**
	30-34	**-2.313**	**.454**	**.000**	**.099**
	35-39	**-2.067**	**.435**	**.000**	**.127**
	40-44	**.209**	**.477**	**.001**	**1.20**
	45-49	**.393**	**.998**	**.032**	**1.37**
	25-29(RC)				
Children ever born	0	**1.220**	**.388**	**.002**	**3.388**
	1-2	**1.316**	**.622**	**.034**	**3.728**
	>=5	**1.748**	**.476**	**.000**	**5.605**
	3-4(RC)				
Age at first marriage	10-14	**.281**	**.251**	**.026**	**1.342**
	20-24	**-1.817**	**.440**	**.000**	**.163**
	15-19(RC)				
Highest grade completed	Illiterate	**.139**	**.249**	**.004**	**1.149**
	5-8	**-.230**	**.245**	**.034**	**.794**
	9-12	**-.740**	**.817**	**.036**	**.483**
	1-4(RC)				
Autonomy	No autonomy	**1.451**	**.267**	**.000**	**4.269**
	Some autonomy(RC)				
Spousal communication	Ever discussed	**-.850**	**.281**	**.002**	**.428**
	Never discussed(RC)				
Travel time to FP source	<30	**-.530**	**.316**	**.093**	**.589**
	>60	**.102**	**.248**	**.680**	**1.108**
	30-60(RC)				
Exposure to mass media	Have exposure	**-.889**	**.269**	**.001**	**.411**
	Have no exposure(RC)				
Visiting to FP	Visited	**-1.199**	**.275**	**.000**	**.301**
	Not visited(RC)				
Constant	Constant	**-.491**	**.431**	**.255**	**.612**

NB: RC-Reference category, Nagelkerke R Square=0.761

Source: Field survey, 2010

4. 4 Discussion on the key findings

In the previous chapter the results of some of the predictor variables with their linkage with respondents' unintended pregnancy were assessed.

Based on these results, the impacts of some demographic, socio cultural and also access/service related characteristics are discussed below.

4.4.1 Discussions on determinants of unintended pregnancy

The bivariate analysis showed that the variables such as age of respondents, AFM, total children ever born, highest grade completed, spousal communication, travel time to the nearest FP source, exposure to mass media, woman autonomy and FP workers' visit are important to explain unintended pregnancy. The multivariate analysis supported pregnancy. The multivariate analysis supported most of them like age of women, AFM, total children ever born, highest grade completed, spousal communication, exposure to mass media, women's autonomy and FP workers' visit were found to have statistically significant influence on un intended pregnancy.

In this study among respondents it was found that the risk of unintended pregnancy is high for age group 20-29years and for late reproductive ages (40-49). The result is supported by both bivariate and multivariate analysis.

This might be because the 20-29 age groups already experienced higher number of children due to AFM and are potential age to bear babies .Similarly the study revealed that women above age 40 experienced higher level of unintended pregnancy and this might be since women who are above 40 usually have already attained their preference number of children and less likely to use any method of contraception to prevented the pregnancy from happening. Some pre menopausal women may erroneously assume that they are no longer fertile and be surprised by unintended pregnancy. Another reason worth mentioning here might be the high likely hood of menstrual irregularity during this age group which makes it difficult for them to use contraceptives

A similar result was found specially for the last age groups in a study conducted in currently married pregnant women in Indonesia (Jaeni,2007) which shows the higher the

age of women, the higher the probability of having current pregnancy as an intended and study conducted in Egypt (Shaheen et'al, 2007) confirmed the same result. Also during the focus group discussions the health extension workers said that old married women are not volunteer to take contraceptive by the above reasons.

From the predicted probability it is clearly seen that women in delayed age at marriage have low probabilities of unintended pregnancy. For example, respondents whose age at first marriage in the age group 10-14 years experienced unintended pregnancy nearly twice more than those women with higher age at first marriage (20-24). Most of the focus group discussants agreed that those women who have married early are more likely to be influenced by their husband, family and culture not to decide on their pregnancy intension. And also at the beginning they experienced difficulty in practicing.

A study conducted in Harar revealed women with age at first marriage less than 20years had a higher chance of experiencing unintended pregnancy (Solomon and Mesagnaw 2006). Also study conducted in Adma-Ethiopia by Biniyam (2009) reveals that women who got married below age nineteen are three times more likely to categorize the pregnancy as unintended.

Like the study in Hawassa (Akalework, 2008), significant relationship between education and unintended pregnancy in Damote Gale woreda is observed. In this study the multivariate analysis indicated that the risk of unintended pregnancy is high among illiterates than those respondents having some type of education.

Yonas (2005) indicated education as having the pervasive impacts on married women's pregnancy intention since it empowers women with knowledge and practice of contraceptive. Bongaart (1997) also revealed that education reduces the chance of discontinuity of contraceptive. This is also supported by bivariate analysis in the study.

Women's autonomy was measured from the final say on their own health Care, making large HH daily purchase and visit to family. This is because in a patriarchal society, women are often given less opportunity to self-supporting and have to depend on the

male relatives for their survival (Mason and Taj, 1987). In this study women's autonomy is significantly associated both in multivariate and bivariate analysis.

Those women who cannot decide on their health care, daily and large HH purchase and visiting their family were 4.2 times more likely to have unintended pregnancy than those who can decide at least on one of the cases.

Women's perception that their husbands oppose FP is a dominant factor for discouraging contraceptive practice in a wide Varity of settings as discussed by some studies. For instance, a research conducted in Togo suggests that communication between spousal is necessary in order for them to indicate discussion of intimate, topic for them to reach agreement on desired family size and for achievement of their reproductive goals (Gage, 1995).From this study it was also found that those who discussed about FP issues were 57% less likely to have unintended pregnancy than those who were not.

In this study those respondents who were exposed to radio had nearly 69% less likely to report unintended pregnancy compared with those who were not exposed. As many literatures indicated that mass media have an important effect on reproductive behavior (Odimegwa, 1999). This is related with the role in providing knowledge on family planning to women and increasing current use of contraceptive which results low percentage of unintended pregnancy.

Phillips and others (1998) in Kenya found that women who have been visited by FP outreach workers are more likely to use modern contraceptive methods. By this, the chance of experiencing unintended pregnancy is very low in those areas. Similarly in this study also those who are visited were 70% less likely to have unintended pregnancy compared with those who were not.

4.4.2 Discussion on level and Major Reasons for Unintended Pregnancy

One of the discussants who use modern methods said that "My husband does not know as I use contraceptive ....and I hide this even from my friends". If he knows it, I might lose my marriage.

ICPD declared that advancing gender and empowerment of women and elimination of all kinds of violence against women, and ensuring women's ability to control their own fertility are corner stone's of population and development related program (UNFPA, 1998)

In the study fertility related problems and method related problems (difficulty to get the method and health concern) were the most frequent reasons mentioned for unintended pregnancy.

During focus group discussion some women argued choice of method they have. Even the discussants said they feel discomfort when they use pills and injection. In one way they said there were method failures related with pills and injection besides they had health concern and most of the respondents said they hide the pills they use and cards from their husbands.

In this regard, the majority of the focus group discussants stress the need for awareness rising on methods that are more effective like sterilization, Norplant and intrauterine device.

According to this study, about 42% of conception among respondents is unintended. This makes the study comparable to the national average which is 35%. The difference could be since the study is mainly focused on a rural area: a relative low awareness, access and other factors influenced the percentage of the pregnancy in tension. Besides those independent variables which were discussed above in this particular study area contributes for the difference.

Women's involvement in domestic decision making is recognized as affection their reproductive desires and preferences (Mason, 1996). As it was indicated, among major reasons for failure to avoid unintended pregnancy above half of the contributors were from fertility related reasons (31.7%) and opposition to use (27.8%). In this study the bivariate and multivariate analysis had shown a strong association between women's autonomy and pregnancy intention. Women who cannot decide on their health care were above four times more likely to have unintended pregnancy compared with those who

decides. Regarding to this, only 33% of the women decide on their FP issues by themselves alone. This shows how much these women's were far behind to decide mainly on their issues- reproductive health.

During the focus group discussion it was explained that the tendency of women to use modern contraceptive methods were mainly in flounced by their husband's decision.

Also among women who responded to the end of their pregnancy outcome, 7% end in induced abortion while 89% of the respondents didn't take action on their pregnancy. In this case besides medical consequence, both mother and father may suffer economic hardship and may fail to achieve their educational and career goals. Such consequences undoubtedly impede the formation and maintenance of strong families.

CHAPTER FIVE

Summary, Conclusions and Recommendations

5.1 Summary

In chapter one through six, review and analysis of level and determinants of unintended pregnancy have been made in relation to demographic, socio-cultural, and service related variable that have influence untended pregnancy of married women.

The study was based on as sample of 713 selected married women, whose recent most pregnancy occurred five years back to the survey date. The data collection period was between Feb27/2010-March23/2010.The results indicated that above half of the respondents were sexually active women with mean age of respondents 27 year. Among the surveyed women above fifty eight percent of respondents got married at age 18 and below. The median age at first marriage among currently married women is 17.8 years. Regarding parity, one in ten respondents (7.3%) were pregnant at the time of survey and more than three-fourth of the women had had three and above birth. Nearly seven out of ten women (69.7%) attended some primary education. Although above 79% of respondents have somewhat autonomy on their own health care, daily and large HH purchase or visiting family, only 33% of currently pregnant women decide on FP. Also, very few respondents (19.8%) reported they are visited by FP workers in the last 12 months and the majority of the respondents (78.8%) have no exposure to mass media. Regarding respondents reproductive history, knowledge of contraceptive is high and above 89% of the respondents know at least one method of contraceptive where as less than two fifth (38.6%) respondents had used some types of contraceptive method some times in the past and 21.3% are current users. Majority of the respondents (55.8%) used health workers as a major source of information about FP.

When we see women's status and utilization of health service in the study, the majority of women have little or no education. Those who discus about FP issues with their husbands and who decide on their health care alone share very small proportions. This indicates majority of respondents who mentioned failure for unintended pregnancy use less

effective methods like pills and injection. This shows that there is lack of awareness on type of contraceptive used. During the two groups discussion it was explained that the tendency of women to use methods that are less effective like injection and pills had contributed to the risk of un intended pregnancy. Participants of focus group discussion stressed the need for awareness rising to methods that are more effective like sterilization, Norplant and Intrauterine Device (IUD).

About one–tenth of the respondents wanted their current pregnancies later (10.5%) and the other three-tenth did not want their current pregnancies at all (31.8%). Overall, 42.4% of respondents reported they encountered pregnancies unintended. Major reasons for failure to avoid these unintended pregnancies were methods and fertility related problems.

The variables that were considered in multivariate analysis as determinants of unintended pregnancy statistically significant were age of respondents, AFM, party, highest grade completed, women's autonomy, spouse communication, exposure to mass media and FP workers visit. And predicted probability has shown that women in delayed age at marriage, lower parity, women who are exposed to radio, women who discus about FP issues with husband, those who have autonomy on their health care and those visited by FP workers had less likely unintended pregnancy.

5.2 Conclusions

Despite the decline in overall fertility and increase in contraceptive prevalence, many married women in Ethiopia are not met with unintended pregnancy. The result of this study reveals that 42. 4% of respondents classified their most recent pregnancy as unintended. Among these above 31% did not want the pregnancy at all. This result is a little higher than national average which is 35% according to EDHS 2005 Survey.

In Ethiopia, the relationship between family planning and improvement of birth outcomes has been amply demonstrated. Even if the contraceptive prevalence rate increased, the availability as a choice and use of contraception methods, as well as effectiveness, leave much to desire. As a result, among the major reasons for failure to avoid unintended pregnancy disapproval by husband, which might contribute to the method faille in this particular study, lack of knowledge and difficulty to get different method choice were mentioned. Similarly one out of ten currently pregnant women mentioned methods failure as a reason for their unintended pregnancy.

Even though the strength of the role of women in decision making varies with the type of decisions, almost 33% of currently married women reported that they made the final decision on their own health care alone, about two – third say that their husband make such decisions without consulting them. The 1994 world 4th conference on women have emphasized women empowerment as a basic tool for country's overall development and improvement in quality of life of people (Senanayake, 2001). EDHS (2005) data also indicated a positive relationship between women's status and contraceptive use.

In conclusion, unintended pregnancy was found to be a major reproductive health problem in the study area. And no single factor accounted for the high rates of unintended pregnancy rather many factor were associated in this regard. Among them the study has found that age of women, women's age at first marriage, radio exposure, spousal communication, women's autonomy and those who were visit by FP workers were the strong predictors of unintended pregnancy. It can be concluded that to reduce the unintended pregnancy, family planning and reproductive health services need to provide wide spread information on effective contraceptive use and their access.

5.3 Recommendations

On the basis of the findings and conclusions with regard to unintended pregnancy of respondents, the following recommendations are for warded.

- The estimate of the magnitude of unintended pregnancy indicates that it is one of the major reproductive health problems among participants of the study. Thus, interventions must be made to reduce the apparently high level of unintended pregnancy.

- The result of this research further showed that particular group respondents are at increased risk of unintended pregnancy. Therefore, family planning programs, which have been targeting to reduce unintended pregnancy, should focus not only on repenting similar kind of program execution rather the identified specific context of areas should be taken in to account. In this regard, respondents, with low age at first marriage, those with large number of living children, older women who have already completed their fertility desire particularly need family planning services that are adored to their needs.

- More emphasis is needed on mass media messages, especially through local radio addressing the advantage of small family size and family planning message

- It was found that also those who were not visited by FP workers had higher level of unintended pregnancy. So even if the woreda is trying to increase the number of health extension workers in each kebele's, there should be a better follow up system on FP workers.

- As it was indicated very few women had a decision power on their health care and small percent of women discussed about FP issues with their husbands. This show most women's issue is on the hand of their partner and it deserves priority attention. So, the program should emphasize the improvement of male involvement in FP, so that misconception of husband towards FP methods can be changed. Improving inter- spousal communication as well as women empowerment

to persuade the husbands to use FP method and small family norm could be another strategy to influence unintended pregnancy

- Major reasons that given to method failure to avoid unintended pregnancy were: husband disapproval, lack of knowledge, difficulty to get the method and method failure respectively. For this, besides improving women status through special programs like micro finance availability and accessibility of FP methods and quality of FP program should be focused.

- In addition to expanding access to family planning, it is recommended that policy makers, health professionals and health authorities should give due attention to the improvement in the provision of effective IEC and counseling and quality of care. IEC and related activities should also target men.

Generally all findings under this study are potential area for under taking further research. However, as a matter of priority, researches on spousal communication and women's autonomy is needed to determine the exact nature and pattern of this relationship, in addition if assessment on method choice and age preferences in relation with unintended pregnancy is done it is also advisable.

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Annex: I

Survey Questioner

Part I Demographic and socio economic characteristics

Number	Questions	Choice of answer	Skip to Question
101	How old are you? (at your last birth day)	----- Years (in completed years)	
102	Can you read and write?	1.yes 2.no	if "No" skip to Question 106
103	Have you every attend school?	1.yes 2.No	
1o4	What is the highest grade you have completed?	1. 1_8 2. 9_12 3. 12 and above	
105	Do you have any job?	1.yes 2.No	
106	What type of occupation you are currently engaged in?	1.house wife 2. farmer 3. merchant 4. daily laborer 5. house maid 6. government employee 7. other (specify)	
107	What is your monthly income?	1. --- Birr 2. I don't exactly know	
108	If you compare your monthly income with your neighbors where do you put your economic status?	1.very poor 2. poor 3.medium 4. rich 5. I don't know	
109	Who decides how the money that you bring in to the house hold is used?	1. Respondent 2. Husband 3. Respondent and	

		husband jointly 4. Other (specify)	
110	Who decides how the money that your husband brings in to the house hold is used?	1. Respondent 2. Husband 3. Respondent and husband jointly 4. Other (specify)	
111	Who decides on family or relative visit?	1. Respondent 2. Husband 3. Respondent and husband jointly Other (specify	
112	Who usually makes decisions about making major house hold purchases?	1. Respondent 2. Husband 3. Respondent and husband jointly 4. Other (specify)	
113	Who usually makes decisions for daily house hold needs?	1.respondent 2. husband 3.Respondent and husband jointly 4. other (specify)	
114	What is you religion?	1. Muslim 2. Orthodox 3. Catholic 4. Protestant 5. Other (specify)	
115	What is you ethnicity	1. Amhara 2. Oromo 3. Welaita 4. Other (specify)	

Part II knowledge and attitude of modern contraceptives

Number	Questions	Choice of answers	Skip to Questions
201	Have you ever heard of family planning methods that women or men can use to avoid pregnancy?	1. Yes 2. No	
202	What is your source of information about family planning? (more than one answer is possible)	1. Health extension workers 2. Radio 3. TV 4. News paper 5. Fiends 6. Husband 7. School 8. Public places 9. Other/ specify	
203	Have you ever heard about contraceptive?	1. Yes 2. No	
204	Do you know the place where modern contraceptives methods could be obtained?	1. Yes 2. No	If "No" skip to question 206
205	Where is the main place that you or others are able to get modern contraceptive?	1. Hospital 2. Health center 3. Health post 4. Shop /kiosks/ 5. Others (specify)	
206	What time does it take to reach the nearest family planning sources from your residence?	1. Less than 30 minutes 2. 30_60 minutes 3. More than 1hourse 4. I don't know	
207	Do you approve or disapprove of women who contact with the health extension workers	1. Approve 2. Disapprove	
208	Have you ever contracted and discussed about	1. Yes 2. No	If 'No' pass to question 210

	contraception with the health extension worker in the last three years?		
209	If you have contacted, how many times did you contact them in a month in a person?	1. Once 2. Twice 3. More than twice	
210	Does your husband know that you are using a method of family planning?	1. Yes 2. No 3. Don't know	
211	Have you discussed about family planning with your husband in the last three years?	1. Yes 2. No 3. I am not sure	If 'No' skip to question 301
212	If so, how many times have you discussed?	1. Once 2. At least once a month 3. More than once a month 4. I am not sure	

Part III Reproductive history of the respondent

Number	Question	Choice of answer	Skip to question
301	How old were you when you get married?	—— (incomplete years)	
302	How old were you when your first child was born?	1) —— Years 2) I don't know exactly	
303	How many children have you ever born during your life?	1) Son —— 2) Daughter —— 3) Total ——	

304	How many living children do you have?	1) Son —— 2) Daughter —— 3) Total ——	
305	Do you want to have a child in the future?	1) Yes 2) No 3) Don't know	If "No" pass to question 307
306	How many children would you like to have in your life?	————	
307	How much longer have you between the previous birth and last birth?	———	
308	How much longer have you waited since the last birth?	----------	
309	At the time of you become pregnant of the child did you want to become pregnant then, wait until later or not want to have any more children at all?	1. Wanted now 2. Wanted latter 3. Not wanted at all	
310	How did the pregnancy happen?	1. Sex without the respondent consent 2. Sex with the respondent consent 3. Un planned sexual intercourse 4. Rape (forced sex) 5. Other (specify)	
311	If your pregnancy was un wanted or what is the reason you could not void becoming		

	pregnant? A) Lack of awareness B) Poor access to contraceptive C) Husband disapproves D) Religion/cultural prohibitions E) Methods failure F) Other (specify)	Yes 1 1 1 1 1 1	No 2 2 2 2 2 2	
312	Have you ever had a pregnancy that was aborted (inducted abortion)?	1. Yes 2. No		If 'no' pass to question 401
313	How many times did you perform it?	————		
314	Through what way the induced abortion was ended up?	1. Medical person 2. Traditional method 3. Other (specify)		

Part IV practice modern family planning methods

Number	Questions	Choices of answers	Skip to questions
401	Have you ever used modern family planning method?	1. Yes 2. No	
402	Are you currently using modern family planning methods?	1. Yes 2. No	

403	Which method are you using now? (more than one answer is possible)	1. Pills 2. IUD 3. Injection 4. Implant/Norplant/ 5. Female sterilization 6. Natural method (abstinence, withdrawal) 7. Other (Specify)	
404	For what purpose are you using the method	1. For spacing 2. For limiting	
405	What is the availability of method if you want to change other methods form the source you belong to?	1. Easily available 2. Not easily available 3. Don't know	
406	Would you say that using contraception is mainly your decision or did you both decide together?	1. Mainly respondents decision 2. Mainly husbands decision 3. It is joint decision 4. Other (Specify)	

Part V. Focus group discussion

1. What do you know about family planning methods?
2. What do you think about the advantage and disadvantage of using family planning methods?
3. Who can tell us about unintended pregnancy?
4. What about the supply of the method in this area?

5. Some couples have more number of children than they ever wanted. What would be the reason do you think?

6. What do you think the contribution of health extension workers for family planning use?

7. What is the attitude of husbands towards family planning? What about the communication between husband and wife on issues related to family planning and decision to use contraceptive?

Part VI Interview questions (For key informants/FP workers)

1. What are the types of contraceptive methods provided in your center?

2. What do you think is better to increase contraceptive use in your locality?

3. What are the most common challenges that women face or experienced using family planning at home or outside of home? What measures should be taken?

4. Why women do have more children in your locality?

5. What are the main reasons given by women who experience unintended pregnancies? What do they do if they experience it?

6. Do you have any additional comments or measures to say for improving family planning in general?

Declaration

The thesis is my original work, has not been presented for a degree in any other university and that all sources of material used for the thesis have been duly acknowledged.

Tadele Kebede		28/10/2002
Student	Signature	Date

I confirm that this thesis has been submitted with my approval as the supervisor of the same.

Digafu Regassa		2/10/02
Advisor	Signature	Date