

**ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES**



**FEMALE YOUTH KNOWLEDGE AND ATTITUDE TOWARDS INDUCED
ABORTION IN BISHOFTU TOWN, OROMIA REGION**

BY: TSEGAYE MOSHE

June 2009

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
INSTITUTE OF POPULATION STUDIES



FEMALE YOUTH KNOWLEDGE AND ATTITUDE TOWARDS
INDUCED ABORTION IN BISHOFTU TOWN, OROMIA REGION

BY: TSEGAYE MOSHE

A thesis submitted to the School of Graduate Studies of Addis Ababa University in
partial fulfillment of the requirements for the Degree of Master of Science in
Population Studies

June 2009

**ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES**

***Female Youth Knowledge and Attitude Towards Induced
Abortion in Bishoftu Town, Oromia Region***

**By
Tsegaye Moshe Fireh**



**Institute of Population Studies
College of Development Studies**

Approved by the Examining Board

Dr. Eshetu Gurmu
Chairman, Department Graduate Committee


Signature

Dr. Amare G/Egziabher
Advisor


Signature

Dr. Eshetu Gurmu
Examiner


Signature

Acknowledgement

First and foremost, I would like to thank the almighty God for everything he has done to me. My special appreciation goes to my thesis advisors Dr. Amare Gebre Egziabher and W/ro Emebet Mahmoud who starting from the very inception of the idea to its realization, have given me their invaluable advice and comments. Their interest, encouragement, unreserved and timely support, in checking, commenting and giving constructive ideas all along my activities is most appreciated.

I owe an enormous debt to Addis Ababa University in general and all staff members of IPS (Institute of Population Studies) in particular for their contribution, in one way or another, in the process of my study.

I am grateful to acknowledge the municipality of Bishoftu and kebele leaders including the youth who devoted their precious time and shared information with us to complete the questionnaires and participate in group discussions, thereby contributing to the success of the data collection

My heartfelt thanks also go to my entire family members Emaye, Abaye, my sisters and my brother for your psychological, material and financial support along with your kindness and devoted motivation all the way throughout the completion of my study.

Table of contents

	PAGE
ACKNOWLEDGEMENT	I
TABLE OF CONTENTS.....	II
LIST OF TABLES.....	V
LIST OF FIGURES	VI
LIST OF APPENDICES.....	VII
LIST OF ACRONYMS	VIII
ABSTRACT.....	IX
CHAPTER ONE	1
1. INTRODUCTION	1
1.1 BACKGROUND OF THE STUDY	1
1.2 STATEMENT OF THE PROBLEM	4
1.3 JUSTIFICATION OF THE STUDY	6
1.4 OBJECTIVE THE STUDY	7
1.5 DEFINITION OF CONCEPTS	7
1.6 LIMITATION OF THE STUDY.....	8
1.7 ORGANIZATION OF THE STUDY	9
CHAPTER TWO	10
2. REVIEW OF RELATED LITERATURE.....	10
2.1 MAGNITUDE OF THE PROBLEM	10
2.2 SOCIO CULTURAL, DEMOGRAPHIC AND LEGAL ASPECTS OF ABORTION	12
2.2.1 Legal and human right dimensions.....	12
2.2.2 The Religious Dimension	14
2.2.3 The Socio- economic Dimensions.....	15
2.2.4 The Demographic and Educational Dimensions	16
2.3 CONTRACEPTION	16
2.3.1 Emergency contraception	18
2.4 ABORTION LAWS IN ETHIOPIA	19
2.5 CONCEPTUAL FRAMEWORK FOR THE STUDY	21
2.6 HYPOTHESIS	23



CHAPTER THREE	24
3. MATERIALS AND METHODS	24
3.1 STUDY AREA	24
3.2 STUDY POPULATION.....	24
3.3 SAMPLE SIZE DETERMINATION	25
3.4 SAMPLING PROCEDURE	26
3.5. STUDY VARIABLES.....	27
3.6 STUDY DESIGN	28
3.7 QUANTITATIVE DATA COLLECTION PROCESS	28
3.8 PRETEST.....	29
3.9 ETHICAL CONSIDERATION.....	29
3.10 QUALITATIVE DATA COLLECTION PROCESS	30
3.11 METHOD OF DATA PROCESSING	30
CHAPTER FOUR.....	32
4 DATA ANALYSIS AND INTERPRETATION OF RESULTS	32
4.1 CHARACTERISTICS OF RESPONDENTS	32
4.1.1 SOCIO DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS.....	32
4.1.2 RESPONDENTS' KNOWLEDGE, ATTITUDE AND PRACTICE ON CONTRACEPTIVES	35
4.1.3 PREGNANCY AND ABORTION RELATED HISTORY OF THE RESPONDENTS.....	36
4.1.4 CHARACTERISTICS OF RESPONDENTS WHO UNDERWENT AN INDUCED ABORTION	38
4.1.5. REASONS GIVEN BY RESPONDENTS WHO HAD AN INDUCED ABORTION.....	39
4.1.6. RESPONDENTS' KNOWLEDGE AND PREFERENCES OF INDUCED ABORTION.....	40
4.1.7. RESPONDENTS' KNOWLEDGE OF HEALTH RISKS OF UNSAFE ABORTION	42
4.1.8. RESPONDENTS' ATTITUDE OF INDUCED ABORTION ON SPECIFIC GROUNDS.....	43
4.2 FEMALE YOUTH KNOWLEDGE AND ATTITUDE OF INDUCED ABORTION AND CORRELATED VARIABLES	46
4.2.1 FEMALE YOUTH ATTITUDE OF INDUCED ABORTION AND SOME SELECTED VARIABLES	46
4.2.2 FEMALE YOUTH ATTITUDE OF HEALTH RISKS OF UNSAFE ABORTION AND SOME SELECTED VARIABLES.....	48
4.3 MULTIVARIATE ANALYSIS OF THE FEMALE YOUTH KNOWLEDGE AND ATTITUDE OF INDUCED ABORTION	50
4.3.1 MULTIVARIATE RESULTS ON FEMALE YOUTH ATTITUDE OF INDUCED ABORTION.....	51
4.3.2 MULTIVARIATE RESULTS ON FEMALE YOUTH KNOWLEDGE OF UNSAFE OF ABORTION.....	53
4.4 DISCUSSION ON THE KEY FINDINGS	55

CHAPTER FIVE	60
5. SUMMARY, CONCLUSION AND RECOMMENDATION	60
5.1 SUMMARY	60
5.2 CONCLUSION	62
5.3 RECOMMENDATION	63
REFERENCES	65
APPENDICES	XI

List of Tables

	Page
Table 1 Grounds on which abortion is permitted and percentage distribution between developed and developing countries.....	13
Table 2 Characteristic of Respondents and Their Parents Bishoftu, February 2009.....	33
Table 3 Respondents' Knowledge Attitude and Practice of Contraceptives Bishoftu, February 2009.....	36
Table 4 Respondents' Pregnancy and Abortion Related History Bishoftu, February 2009.....	37
Table 5 Characteristics of the Respondents Who Underwent an Induced Abortion at the Time of Abortion.....	38
Table 6 Respondents' Knowledge and Preference of Induced Abortion Bishoftu, February 2009.....	41
Table 7 Distribution of Respondents According To Their Attitude towards Induced Abortion on Different Conditions, Bishoftu 2009.....	44
Table 8 Bivariate Results of Respondents' Attitude of Induced Abortion by Some Selected Factors	47
Table 9 Bivariate Results of Respondents' Knowledge of Unsafe Abortion by Some Selected Factors.....	49
Table 10 Percentage Concentration of Age Reporting For Each Terminal Digit and Heaping Ratio.....	51
Table 11 Multivariate Analysis Results of Respondents' Attitude of Induced Abortion upon a Woman's Demand, Bishoftu February 2009.....	52
Table 12 Multivariate Analysis Results of Respondents' Knowledge of Unsafe Abortion, Bishoftu February 2009.....	54

List of Figures

	Page
Figure 1 Conceptual Framework for the Study of Female Youth Knowledge and Attitude towards Induced Abortion.....	21
Figure 2 Schematic Presentation of Sampling Procedure.....	25
Figure 3 Reasons of Respondents Who Had an Induced Abortion for Terminating the Pregnancy Bishoftu, February 2009.....	39
Figure 4 Respondents Attitude towards Induced Abortion upon a Woman Demand Bishoftu February 2009.....	41
Figure 5 Respondents Knowledge of Health Risks Of Unsafe Abortion Bishoftu February 2009.....	42
Figure 6 Female Youth Attitude of Induced Abortion Based On Religiosity.....	47
Figure 7 Female Youth Knowledge of Unsafe Abortion Based On Educational Level.....	47

List of Appendices

	Page
Appendix 1 survey instrument: Questionnaire.....	xi
Appendix 2 Survey instrument: Questions for FGDs.....	xx
Appendix 3 Table- A: Bivariate Results of Respondents Knowledge and Attitude of Induced Abortion by Different Factors Bishoftu, February 2009.....	xxi
Appendix 4 Figure 1a Female Youth Attitude of Induced Abortion Based on Their Educational Level.....	xxiv
Appendix 4 Figure 1b Female Youth Knowledge of Unsafe Abortion Based on Their Occupation.....	xxiv
Appendix 5 Legal Provisions for Safe Abortion Services and Guide Lines for Implementation in Ethiopia.....	xxv
Appendix 6 Some Articles Which May Give General Knowledge of the FDRE Criminal Code Of 2005.....	xxix
Appendix 7 Co- linearity Diagnostics Table for Female Youth Attitude of Induced Abortion upon a Woman’s Demand.....	xxxii
Appendix 8 Co- linearity Diagnostics Table for Female Youth Knowledge of Unsafe Abortion.....	xxxiii
Appendix 9 Figure 1c Data Quality for Age.....	xxxiv

List of Acronyms

AGI	Alan Guttmacher Institute
AAU	Addis Ababa University
CSA	Central Statistical Agency
EC	Emergency contraception
ECW	Emergency contraception website
EDHS	Ethiopia Demographic Health Survey
ESOG	Ethiopian Society of Obstetricians and Gynecology
FDRE	Federal Democratic Republic of Ethiopia
FMOH	Federal Ministry of Health
FGD	Focus Group Discussion
ICPD	International Conference on Population and Development
IPS	Institutes of Population Studies
IUD	Intra-Uterine Device
HIV	Human Immunodeficiency Virus
LNMP	Last Normal Menstrual Period
NFFS	National Family Fertility Survey
RH	Reproductive Health
RHM	Reproductive Health Matter
SPSS	Statistical Packages for Social Science
UN	United Nation
UNFPA	United Nations Population Fund
WHO	World Health Organization

Abstract

Unsafe abortion is a preventable tragedy and is one of the neglected problems of health care in developing countries. In February 2009 a cross-sectional study was conducted in Bishoftu town Oromia Regional state to assess the knowledge and attitude of female youth aged 15-24 years towards induced abortion. The study utilized both quantitative and qualitative (FGDs) methods. A total of 708 female youth were interviewed using pre-tested questionnaire. The data were edited, and entered into a computer and analyzed using SPSS WINDOW version 15. Odds ratios were calculated using logistic regression model to control confounders in the process of examining the effects of socio-economic and demographic predictor variables on knowledge and attitude of respondents towards induced abortion. Statistical tests were done at a level of significance of $p < 0.05$.

It is found that around one –third of sexually active respondents not use contraceptives to protect themselves from unwanted/unplanned pregnancy and STDs including HIV/Aids, whereas 91.9% of them were aware of contraceptives. About one-fifth (20%) of the respondents who ever experienced pregnancy reported induced abortion, of which students, unemployed youth, housemaids and daily laborers took the highest share.

Of the respondents 73% supported induced abortion upon a woman's demand. Around 87% of the respondents were aware of health risks of unsafe abortion but only one-fifth of the respondents knew that abortion is illegal but allowed under certain circumstances in the country, Ethiopia. The majority (60.6%) believed that abortion is illegal in the country.

The FGDs result made clear that most female youth believed that if Ethiopia's current abortion law is liberalized it will have a positive effect on maternal mortality and morbidity. Since the social and cultural factors continue to shape the opinion of the people, not all the participants who reflected the above idea support induced abortion on request. Prevalence of unsafe abortion was found to be higher in the study area. 67.7% of the respondents stated unsafe abortion as a major health problem and nearly half of the respondents (48.7%) knew some one suffer or die from unsafe abortion in the study area.

There was significant association between female youth knowledge and attitude of induced abortion and some socio-economic and demographic variables. The multivariate result revealed that having positive attitude towards induced abortion was higher for those female youth who were less religious, in their twenties (20-24), had secondary and above educational level(grade 9-12 and above),had no monthly income, never married, had positive attitude of contraceptive use and ever use of contraceptives.. Similarly as the multivariate result revealed female youth knowledge of unsafe abortion was higher for

CHAPTER ONE

1. INTRODUCTION

1.1 Background of the study

Although women in much of the world commonly have sexual intercourse at very early ages and before or outside marriage, childbearing is often considered undesirable in these circumstances. Moreover, married couples almost everywhere increasingly want small families (AGI, 1999). For instance as the EDHS (2005) indicates, there is a clear trend toward a smaller ideal family size among Ethiopians. The mean ideal family size has declined from 5.7 children among women age 45-49 at the time of the survey to 3.3 children among women age 15-19 and, in Kenya the desired number of children declined from 7.2 in 1970s to 4.7 in 1980s and 3.9 in 1990s (Bankole et al.,1995). Yet, for many reasons—inadequate access to contraceptive services, the poor quality of existing services, fear or distrust of methods, or conflict between partners about childbearing goals—many women who do not wish to become pregnant are not using an effective contraceptive. are not using a method correctly or are not using any method. And all contraceptive methods, even when used regularly and correctly, sometimes fail. Consequently, unplanned pregnancies occur in every society, and some proportion of women faced with an unplanned pregnancy decides to have an abortion. The reasons they give—primarily health, economic and relationship problems—are similar around the world (AGI, 1999).

The developing world has seen a revolution in contraceptive use—from a mere 9% of couples using any method in 1960–65 to 59% in 2003. Nevertheless, an estimated 27 million unintended pregnancies happen worldwide every year with the typical use of contraceptives. Six million would happen even with perfect (i.e., correct and consistent) use and an estimated 123 million women worldwide had an unmet need for family planning in 2003 (WHO, 2006).

Whether and in what circumstances abortion should be legal is highly debated in many parts of the world; with arguments based on religious, moral, political, human rights and public health grounds (Magone and Basu, 2003). Given the emotionality of the debate, it is crucial to shed light on why, how many and under what conditions women around the world have abortions. With the best available information, individuals' and countries can engage in a balanced discussion of how

to both reduce the levels of unintended pregnancy that lead to abortion and deal with the deadly consequences of unsafe abortion for women in many of the world's poorest countries. For instance more than one-third of the approximately 205 million pregnancies that occurs world wide annually are unintended and about 22% of all pregnancies end in induced abortion. From the total of induced abortion world wide 48% of it are unsafe (WHO, 2007).

According to UN (2007) World abortion policies for 2007, the overwhelming majority of countries globally, 97 %, permit abortion to save the woman's life. In five countries, abortion is generally not permitted. Abortion laws and policies are significantly more restrictive in the developing world. In developed countries, abortion is permitted for economic or social reasons in 78 % of countries and on request in 67 % of countries. In contrast 19 % of developing countries permit abortion for economic or social reasons, while only in 15 % of developing countries abortion is available on request. In addition to this the big problem lies in the fact that the majority of women in developing world are unaware of their legal rights.

Legal restriction on abortion has little effect on the latter. For example, the abortion rate¹ is 29 in Africa, where abortion is illegal in many circumstances in most countries, and it is 28 in Europe, where abortion is generally permitted on broad grounds. The lowest rates in the world are in western and northern Europe, where abortion is accessible with little restriction (WHO, 2007).

When abortion is made legal, safe, and easily accessible, women's health rapidly improves. By contrast, women's health deteriorates when access to safe abortion is made more difficult or illegal. For instance according to WHO (2006) abortion became legal and available on request in South Africa in 1997, Since then, the resulting favorable environment has increased women's access to family planning, abortion, and post-abortion care services in the country. After the law was passed, abortion-related deaths dropped 91% from 1994 to 2001.

The World Health Organization(2007) based on 2003 data estimates that unsafe abortion accounts for 13% of all maternal deaths globally each year; however, in Africa recent studies have found that mortality due to unsafe abortion was over 33% in Kenya in 1997 (Brookman-

¹ Abortion rate= Total number of abortions per 1,000 women of reproductive age (15-49years) in a given year.

Amissah and Moyo, 2004) and in Ethiopia as high as 50% of all maternal deaths in 2002 was attributed to unsafe abortions (Mekbib et al., 2002). Further more the Alan Guttmacher Institute (1999) indicates that in developing regions (excluding China), 330 deaths occur per 100,000 abortions and in Africa 680 deaths per 100,000 procedures that is hundreds of times higher than the rate in developed countries where only 0.2-1.2 deaths per 100,000 abortions.

In an environment where access to contraceptive knowledge and use by the youth is minimal and where knowledge of reproductive health is low, unintended pregnancies place the youth in a dilemma. Induced abortions in Ethiopia are legal only under extenuating circumstances. Most young women who do not want to carry a pregnancy to its full term resort to unsafe abortions (Aklilu et al., 2002). A study by Senbeto et al., (2003) in north western Ethiopia, Amhara region on the prevalence and risk factors of induced abortion revealed the main reasons given by the respondents for induced abortion; these were fear of the family and the community (31.3%), not to interrupt school (26.6%) and financial problem (14.1%). Even though Ethiopia revised the 1957 abortion law in May 2005 still abortion on socio economic grounds i.e. termination of pregnancy based on poverty (unable to raise the child economically), still in school and the like are not allowed according to the current criminal code of Ethiopia (FDRE Criminal code, 2005).

Considering the seriousness of the problem there is need of commitment to eliminate death and disability from unsafe abortion by respecting women's right to decide the number and spacing of children and by expanding family planning services as well. In line with this the investigator attempts to assess the knowledge of unsafe abortion and attitude towards induced abortion of the female youth, as well as contraceptive knowledge, attitude and use of young females in one of the urban centers of Ethiopia, Bishoftu town.

1.2 Statement of the Problem

In 2003 approximately 42 million induced abortions occur worldwide. About one in five pregnancies end in abortion, most of these abortions occur in developing countries, 35 million, compared with 7 million in developed countries and more importantly in developed regions nearly all abortions (92%) are safe where as in developing countries, more than half (55%) are unsafe (WHO, 2007).

Based on 2003 data WHO (2007) with the Allan Gutmacher Institute report that worldwide, an estimated five million women are hospitalized each year for treatment of abortion related complication such as hemorrhage and sepsis. An estimated 13% of maternal deaths worldwide or 67,000 per year occur due to complications of unsafe abortion and almost all abortion related deaths occur in developing countries. They are highest in Africa, where there were an estimated 650 deaths per 100,000 unsafe abortions, compared with 10 per 100,000 in developed regions in 2003. Approximately 220,000 children worldwide lose their mothers every year from abortion related deaths, in addition to this unsafe abortion create loss of productivity, economic burden on public health systems, stigma and long term health problems, such as infertility (WHO, 2007).

Given the illegality of abortion in most countries of Africa and Latin America, the procedure is often performed under unsafe, unsanitary and life threatening conditions, and according to WHO (2007) unsafe abortion methods includes

- Drinking turpentine, bleach or tea made with livestock manure.
- Inserting herbal preparations into the vagina or cervix.
- Placing foreign bodies, such as a stick, coat hanger or chicken bone, into the uterus.
- Jumping from the top of stairs or a roof.

A study by Senbeto et al., (2003) in north western Ethiopia, Amhara region on the prevalence and risk factors of induced abortion revealed that the methods used to induce the abortion were plastic tube (54.7%) and different oral drugs (35.9%). The induction was performed by the respondents themselves (48.4%), Nurses or Health assistants (14.1%) and traditional healers (12.5%). A nation wide hospital based survey by ESOG in 9 of the 11 administrative regions of

Ethiopia in the year 2000 showed that over 45% of all abortions occurred in adolescents and the younger age group that are more likely to have irregular, unplanned, hurried and clandestine sexual behavior and 58% of all cases terminated the current pregnancy either by seeking the help of untrained personnel or themselves with no assistance (ESOG, 2000).

More than 95% of abortions in African and Latin America are performed under unsafe circumstances and the world unsafe abortion rate² was essentially unchanged between 1995 and 2003 it was 15 and 14 abortions per 1,000 women aged 15-44, respectively (WHO, 2007). Each year, more than 4.2 million African women undergo unsafe abortion, and an estimated 38,000 of them die from the experience. These women represent over 50% of all women globally who die from abortion-related causes. Thousands of other women survive the intervention but experience short- and long-term morbidity. In addition; many women suffer stigma and isolation imposed by their families and communities (Charlotte et. al., 2006).

Unsafe abortion is a preventable tragedy and is one of the neglected problems of health care in developing countries. The moral and religious controversies about abortion have continued to obscure its scope as a serious public health problem. Although none of the 53 countries on the African continent totally forbid abortion only Cape Verde, Tunisia and Republic of South Africa permit abortion on the woman's demand until mid 2008. Since the 1994 International Conference on Population and Development (ICPD) at Cairo, during which the African countries made a commitments to respect women's reproductive rights 20 of them have made small improvements to the legal framework for abortion. However, in reality, the progress made is quite limited, pregnancy termination most often being allowed strictly for medical reasons (WHO, 2008).

A study conducted on abortion in 2000 at Jimma Hospital, southwestern Ethiopia showed that the problem of induced abortion is quite significant. Among the total patients with a diagnosis of induced abortion, 62.5% were admitted for bleeding and infections. Students account for 35% of

² Unsafe abortion= Total number of unsafe abortions per 1,000 women of reproductive age (15-49 years) in a given year.

the cases and 87.5% of the cases could read and write (Kebede et al., 2000). The same study revealed that 22.5% of the cases gave economic problem as the main reason for abortion. Aklilu et al, 2002 based on an in-depth analysis of the 2000 Ethiopia Demographic and Health Survey stated that the youth in Ethiopia are vulnerable to unintended pregnancies. Because they initiate sex at a relatively early age, are not knowledgeable about their sexuality, are unlikely to use contraception, have little access to family planning information and services, and often have little control over their reproductive health. When they add verify that a sizeable proportion of births to young women are unintended. More than half of all births to women under age 15, and more than one in three births to women age 19-24 are unintended. Pregnancy terminations are higher in urban (9 percent) than rural areas (5 percent). Women who have never been married are twice as likely to have terminated a pregnancy as currently married or formerly married women (Aklilu et al., 2002).

Considering the fact that the problem of induced abortion and termination of unwanted and unplanned pregnancy is high among youth in Ethiopia especially in urban centers, this study attempts to assess the female youth knowledge and attitude towards induced abortion. In addition to this their contraceptive knowledge, attitude and practice in one of the urban centers of Ethiopia, Bishoftu town.

1.3 Justification of the study

One of the Millennium Development Goals is to improve maternal health and the specific target of reducing the maternal mortality ratio by three-quarter between 1990 and 2015. On this regard unsafe abortion is one of the major causes of maternal mortality. Therefore it is important to know what currently is the public view regarding induced abortion. The concern and perception of the youth especially where abortion is legal only under certain circumstances but clandestine abortion is common need to be explored. The paucity of information on the behavioral dimensions of induced abortion makes the advancement of work on legal rights and on legalization very difficult, thus the knowledge, belief and attitude towards induced abortion of a the female youth who are victims of unsafe abortion needs to be assessed. In addition to this the study provides information on female youth's knowledge, attitude and use of contraceptive in the

study area. Bishoftu town. Thus, the study is expected to provide valuable information that would enrich policy makers understanding of the needs of female youth towards induced abortion.

1.4 Objective the study

General objective

- ⇒ To assess the knowledge and attitude of female youth towards induced abortion and to examine the prevalence of induced abortion and contraceptive use among the female youth in the study area.

Specific objectives

1. To assess the awareness and perception of respondents regarding the health consequence of unsafe abortion.
2. To assess the knowledge, attitude and practice of contraception among respondents.
3. To assess the knowledge of the respondents about the existing abortion laws of Ethiopia.
4. To identify the attitude of female youth towards induced abortion in the study area.
5. To investigate the prevalence of induced abortion in the study area.
6. To identify the socio-demographic factors that influences the attitude of female youth towards induced abortion.
7. To give recommendations based on the findings which may have policy implications.

1.5 Definition of Concepts

Abortion: Abortion is the termination of pregnancy before fetal viability, which is conventionally taken to be less than 28 weeks from the last normal menstrual period (LNMP). If the LNMP is not known, a birth weight of less than 1000gm is considered as abortion (FMOH, 2006).

Unsafe Abortion: Unsafe abortion is defined as a procedure for terminating unwanted pregnancy either by persons lacking the necessary skills or in an environment lacking the minimal standards or both (WHO, 2006).

Illegal abortion: an abortion performed contrary to the laws regulating abortion (Medical Dictionary, 2009).

Spontaneous Abortion: Spontaneous abortion (miscarriage) is an abortion that occurs unprovoked with extraneous interference often because of some maternal or fetal defect (Medical Dictionary, 2009).

Induced Abortion: Induced abortion is termination of pregnancy brought about intentionally/deliberately with or without legal sanctions (Medical Dictionary, 2009).

Incomplete Abortion: Incomplete abortion is a partial expulsion of the products of conception before 20 weeks of gestation (Medical Dictionary, 2009).

Incest: Incest is sexual intercourse between very closely related people (within one nucleated family) (Medical Dictionary, 2009).

Adolescent: Persons aged between 10 and 19 years (WHO, 1989).

Youth: Persons aged between 15 and 24 years (WHO, 1989).

Young: Persons aged between 10 and 24 years (WHO, 1989).

1.6 Limitation of the study

The study was undertaken in four kebeles of Bishoftu Town. It is a representative sample survey to address issues of young people. However, due to limited resources such as budget, time and other facilities, the study was restricted to female youth aged 15-24 years, male youth which may be significant for the study did not included.

1.7 Organization of the thesis

The study is classified into five chapters. The first chapter is an introductory part which incorporates background of the study, statement of the problem, objectives, significances and limitations of the study. The second chapter presents review of related literatures, conceptual framework and hypotheses of the study. The study area and research methodology is presented in the third chapter. In this part sample size determination, sampling procedure, study variables, study design, study instruments development and method of data processing and analysis are presented. In chapter four characteristics of the respondents, data analysis and interpretations of the results and discussion on the key findings are made. On the final part, chapter five, summaries of the study, conclusion and recommendations are presented.



CHAPTER TWO

2. REVIEW OF RELATED LITERATURE

2.1 Magnitude of the problem

In 2003 more than 95% of abortions in Africa and Latin America were performed under unsafe circumstances and each year as many as 20 million unsafe abortions are performed world wide, i.e. the procedure for terminating an unintended pregnancy is carried out either by person lacking the necessary skills or in an environment that does not conform to minimal medical standards or both (WHO, 2007).

World Health Organization (2007) based on 2003 report estimated that 3.7 million unsafe abortions are conducted every year in Latin America and the Caribbean, which comes down to nearly one abortion for every three live births. In Africa where 99% of these interventions are done illegally the number of unsafe abortion is estimated at 4.2 million, representing one abortion for seven live births. WHO further indicated that complication due to unsafe abortion procedures account for an estimated 13% of maternal deaths world wide or 67,000 per year.

WHO (2006) states that high proportions of women (20–50%) who have unsafe abortions are hospitalized for complication. And four factors along with the overall health of the woman determine the risk that a woman undergoing an abortion will experience medical complications or die from the procedure (1) the abortion method used (2) the provider skill (3) the length of gestation and (4) the accessibility and quality of medical facilities to treat complications if they occur.

Poor women and young women often suffer the most mortality and morbidity from unsafe abortions. Where abortion is restricted, they rarely have access to safe services. They also are more likely to have unintended pregnancies because they lack access to family planning. For example, in Latin America cities where abortions are increasingly performed by medical providers, poor women are more likely to be hospitalized for abortion complications than wealthy women, who seek safe abortions in private clinics. Poor women are likely to try to induce abortions themselves or go to untrained or poorly skilled providers because they cannot pay doctors' fee (Steele and Chiarotti, 2004).

As Mekbib et al., (2002) indicated in Ethiopia Unsafe abortions account for as high as 50% of maternal deaths. Furthermore a report by the Ministry of Health also showed that abortion was the second most frequent cause of death next to tuberculosis in 1994/95 (FMOH, 1998). These findings indicate that illegal and unsafe abortions are a serious public health problem in Ethiopia.

As the ESOG (2000) nation wide survey in nine of the eleven administrative regions in Ethiopia revealed, complications of induced abortions identified were; infection (28%), organ failure (13.1%) genital tract injuries (12%) and foreign bodies in the genital tract (1.6%). A total of 1075 abortion cases were included in the study and a total of 13 deaths were reported, which makes the overall procedure related death of 1,209 per 100,000 unsafe abortions .This is by far greater than Africa, where there were an estimated 650 deaths per 100,000 unsafe abortions (WHO, 2007). The study by ESOG (2000) also showed that women who presented with induced abortion were younger than those who presented with spontaneous abortion the mean age of women with induced abortion was 22.9 years with a standard deviation of 5 years whereas the mean age with spontaneous abortion was 26 years with a standard deviation of 6 years the difference was statistically significant ($P < 0.001$) (ESOG, 2000).

In addition to causing many deaths and much suffering abortion complications, consume a large proportion of health care budget and scarce medical resources. Treatment of abortion complications burdens public health systems in the developing world. Conversely, ensuring women's access to safe abortion services lowers medical costs for health systems. In some low-income and middle-income countries, up to 50% of hospital budgets for obstetrics and gynecology are spent treating complications of unsafe abortion. A review of medical records in 569 public hospitals in Egypt during 1 month noted that almost 20% of the 22, 656 admissions to obstetrics and gynecology departments were for treatment of an induced or reportedly spontaneous abortion (WHO, 2006). Statistical returns from health facilities across the country and from hospital-based studies in Ethiopia show that unsafe abortion is one of the top 10 causes of hospital admissions among women. Unsafe abortion accounts for nearly 60% of all gynecologic admissions and almost 30% of all obstetric and gynecologic admissions. Due to the clandestine nature of unsafe abortion services, however, these figures represent only the tip of the iceberg and not the full magnitude of the problem (FMOH, 2006).

As the survey conducted by ESOG from June to December 2000 in Ethiopia indicated, the average cost for the treatment of incomplete abortion per woman in government health facilities was estimated at birr 309.08 /three hundred nine birr and eight cents/ and the total cost for the treatment of incomplete abortion incurred by health facilities for the total of 1075 women presenting with abortion was Birr 332,259.90/three hundred thirty two thousand two hundred fifty nine birr and ninety cents/. This cost estimate showed the direct medical cost incurred without taking into account depreciation costs of facilities and medical equipments other opportunity costs like absence from work, school and time cost in providing household care etc were difficult to either measure or estimate (ESOG, 2000).

2.2 Socio cultural, Demographic and Legal aspects of Abortion

2.2.1 Legal and human right dimensions

Abortion can be spontaneous or induced resulting from a personal decision to interrupt a known pregnancy. The right to abortion is strongly controlled by governments (Mundigo, 2006). According to UN (2007) there are a total of seven grounds on which permission for abortion is identified: These are (1) to save the woman's life (2) to preserve physical health of the woman (3) to preserve mental health of the woman (4) incase of rape or incest (5) for fetal impairment (6) for economic and social reasons (7) on request.

The overwhelming majority of countries globally, (97%) permit abortion to save the woman's life. In five countries Chile, El Salvador, the Holy See, Malta and Nicaragua, abortion is not permitted. Abortion laws and policies are significantly more restrictive in developing world. In the more developed regions 88% of countries permit abortion to preserve physical health, compared to 60% of countries in less developed regions. Eighty six % of counties in the more developed regions allow abortion to protect the mental health of the woman; whereas fifty seven % of counties in less developed regions have adopted such laws. While 84% of counties in the more developed regions have laws that permit abortion incase of rape or incest, 37% of countries in less developed regions have such laws. In the more developed region, 84% of countries permit abortions because of fetal impairment; whereas 32% of counties in the less developed regions do so. While 78% of countries in the more developed regions have laws permitting abortion on economic or social grounds, 19% of countries in the less developed regions allow abortion on the

same grounds. Sixty seven % of countries in the more developed regions have adopted laws on request whereas fifteen % in the less developed regions made abortion available on request. For entire world regions, such as Latin America the option of safe abortion remain largely outside the law (with the exception of Cuba and Guyana). Similarly in Africa with the exception of cape Verde, Republic of south Africa, Tunisia and Zambia safe abortion is not an option for most women (UN, 2007).

Table 1 Grounds on which abortion is permitted and percentage distribution between developed and developing countries.

Conditions for abortion	Percentage allowed in	
	Developed countries	Developing countries
To save the woman's life	96%	97%
To preserve physical health the pregnant woman	88%	66%
To preserve mental health the pregnant woman	86%	57%
In cases of Rape or incest	84%	37%
For Fetal impairment	84%	32%
For Economic or social reasons	78%	19%
On request	67%	15%

Source UN, 2007

Restrictive abortion laws discriminate against women in the area of reproductive rights and also in the right of access to health services. As Cook (2006) has pointed out Reproductive and sexual equality will require that men and women have equal capacities for reproductive self determination at a most basic level, it means ensuring that women have equal access with men to reproductive health services. Following this legal argument which is widely held by advocacy groups working on reproductive rights Cook adds, reproductive equality would bring into question restrictive abortion laws, because these laws criminalize medical procedures that only women need. The point is then made that no medical procedures for men are subject to similar

criminal sanctions. It is also recognized that ethically sound policies should bring about positive balance between desirable and undesirable consequences.

2.2.2 The Religious Dimension

Among organized religions the most vocal in opposing abortion is the Roman Catholic Church. The Vatican's opposition to abortion at the 1994 International Conference on Population and Development made it one of the central topics in international media reporting of this event (Mundigo, 2006). As Cohen and Richards (1994) in their report of the Cairo conference commented press coverage, however, was dominated by an abortion debate that admittedly, occupied a disproportionate amount of time. The protracted negotiation over the final documents, abortion language was historic the Vatican argued that "reference to unsafe abortion should be deleted because all abortions are unsafe for the fetus". Scholars representing other religions also sided with some of the Vatican positions especially Muslim leaders supported by Islamic states. Christians like Orthodox, Mormon and Fundamental protestant are also against abortion (Cohen and Richared, 1994).

The Shinto religion, by contract, holds that a child becomes human being when " it has seen the light of day" therefore, the issue of abortion does not have major moral or ethical connotations Neither Hindus nor Buddhist theology contains scriptural prohibitions against abortion (Lader,1966 cited by Magone and Basu, 2003).

It is interesting to note that the official position of the Vatican and other religions is not shared equally by all of their respective followers. For instance Sandra et al., (2004) as they stated in their study of policy implication of a national public opinion survey on abortion in Mexico, where the predominant religion is the Roman Catholicism, the church not only proclaims its stance against abortion in church services, but has actively participated in public debate on abortion. Despite fervent efforts by the Catholic Church, 79% of people who identified as catholic felt that abortion should be legal in some cases. In addition, 80% of Catholics believed that all public health institutions and hospitals should have the capacity to provide legal abortion. When Sandra et al. add, Mexicans who attended religious services at least once a week had a

lower odds of having correct information about abortion laws and more likely to hold anti-choice view than less religious or non religious people.

As a study by Beza (2003) on female youth attitude towards legalization of abortion in Addis Ababa revealed, even though Ethiopian Orthodox Church and the Islamic religion in Ethiopia are against abortion, most of their respective followers support abortion. Out of the total 795 Orthodox religion followers 79.6% and out of the total 213 Islamic religion followers 79.8% support legalization of abortion on request.

2.2.3 The Socio- economic Dimensions

Some societies censure abortion based on traditional and religious values, and in others abortion is seen as a better option than carrying an unwanted pregnancy to term. Many Asian societies place a strong social stigma on single or unwed mother hood, for example Korea and china. In fact, abortion is much more acceptable from a societal perspective in Asia than it is in Latin America or United States (Chandrasekhar, 1994).

The same is true in Africa, a study in Tanzania which interviewed 455 women mostly adolescents, admitted to four public hospitals for abortion complications in Dares salaam revealed that sexual activity begins early, casual sex is common, and the social stigma that unwed mother experience is high. The study also revealed that one third of the younger adolescents in the study reported having male partner aged 45 years or more (sugar-daddies). These young women – if they become pregnant by their sugar-daddies – are more likely to seek an abortion as having a child with them would preclude their marrying, later on, someone of their own age and ethnic group (Mpangile et al., 1999).

Another socio-economic dilemma with moral overtone is that of rich women who able to get abortion services in standardize private clinics. As Brookman-Amisshah and Moyo (2004) remark although abortion is restricted in Kenya, rich women have a way of going round the law to have their pregnancy terminated safely.

A study conducted on abortion in 2000 at Jimma Hospital, southwestern Ethiopia showed that the problem of induced abortion is quite significant. Among the total patients with a diagnosis of induced abortion 22.5% of the cases gave economic problem as the main reason for abortion

(Kebede et al., 2000). As Abay, 2002 revealed in the study that was conducted in Mekelle non married pregnant girls face stigma, interruption of education, increased economic hardship, diminished opportunity to marry. For these reasons abortion is the most common solution to unwanted pregnancy for non married poor females, in relation to this they had a pro-choice stance towards abortion.

2.2.4 The Demographic and Educational Dimensions

In an environment where access to contraceptive knowledge and use by the youth is minimal and where knowledge of reproductive health is low, unintended pregnancies place young adults in a dilemma. Most young women who do not want to carry a pregnancy to its full term resort to unsafe abortions (Aklilu et al., 2003). A study conducted by Negggusie (1998) in southern Ethiopia indicated that the knowledge of young people on aspects of their sexuality is not sufficient. More than half of the adolescent believed that it is unacceptable to discuss growth changes and sexual matters including unwanted pregnancy with parents. As Shah and Ahman (2004) reported in their study of age patterns of unsafe abortions in developing county regions that was conducted in 2000 state that almost 60% of unsafe abortions in Africa are among women under age 25 and almost 80% are in women under age 30.

Empirical findings in Ethiopia indicate that positive attitude of induced abortion increased with age and advancement of educational level Lisanemariam et al., (1999), Abay (2002) and Beza (2003) they further state that with the advancement of educational level and age, female youths aware of the fact that access to safe and effective contraception can substantially reduce—but never eliminate—the need for abortion to regulate fertility therefore they have a pro-choice stance of induced abortion.

2.3 Contraception

The primary prevention of unsafe abortion is the avoidance of unintended pregnancy by use of contraception. It prevents maternal death by reducing the number of times women go through pregnancy and child birth. It also provides significant protection for women by preventing unintended pregnancies, which often end in unsafe abortions (Elizabeth and Nancy, 2002).

In 2003 approximately 205 million pregnancies occur worldwide; of this 180 million pregnancies occur in developing countries. More than one-third of all pregnancies in developing countries are unintended and 19% end in induced abortion (8% are safe procedures and 11% are unsafe) (WHO, 2007).

A survey by ESOG that was conducted in nine of the eleven administrative regions of Ethiopia from June to December 2000, indicate that for induced abortion cases the most common reason for termination of pregnancy could be attributed to contraceptive needs. Either the women decided to space or did not want a child at the time of abortion. This may point to certain important facts including the unmet need for contraceptive and possible use of abortion as a family planning method. In the survey about two-thirds of the respondents tried to terminate pregnancy for contraceptive reasons. It is important to note that the proportion of women who went through induced abortion is higher in women with adequate knowledge of contraceptive. Therefore, looking at the contraceptive knowledge and use profile of the women, one could observe the wide discrepancy in the knowledge and use rate of modern methods of contraception. Most women in this study who resorted to unsafe abortion did not use a method even when the pregnancy was unwanted and unplanned (ESOG, 2000).

Use of contraceptive methods tripled in the 15-year period between the 1990 NFFS and the 2005 EDHS from 5 percent to 15percent (EDHS, 2005). The increase is especially marked for modern methods in the five years between 2000 and 2005. This increase is attributed primarily to the rapid rise in the use of injectables from 3 percent in 2000 to 10 percent in 2005(EDHS, 2005). However, in Ethiopia, it is estimated that 34% of married women had unmet need, of which 20% for spacing and 14% for limiting (EDHS, 2005). The EDHS (2005) also showed that there is a great gap between knowledge and usage of contraceptive the knowledge of any method for currently married women was 87.5% but current use of any method was only 14.7%. The EDHS (2005) further indicates that 91.2% of sexually active unmarried women had knowledge of at least one modern method. The current use of modern contraception for sexually active unmarried women aged 15-24 was 48.9% and for sexually active un married women aged 25-49 was 36.9% but most of the women in the former group (36.1%) used condom while most of the women in the latter group (26.4%) used injectables. The survey(EDHS,2005) indicates that failure rate for

condom was 14.7% but for injectables it was only 2.2% so the women aged 15-24 had high probability of unintended pregnancy while they used contraception (EDHS, 2005).

With improved contraception use, however, there will be unintended pregnancies and abortions because of human error and contraceptive failure. Even couples that use highly effective methods are subject to failure over an extended period of time (AGI, 1999). For instance WHO (2006), based on 2003 data estimated that 27 million unintended pregnancies happen worldwide every year with the typical use of contraceptives. Six million would happen even with perfect (i.e., correct and consistent) use of contraceptives. Furthermore UN (1996) and WHO (2006) state that contraception alone may not be sufficient to prevent unwanted and unplanned pregnancies. The need for legal change continues to exist; whatever the contemporary public opinion and the political climate, as the incidence of unsafe abortion and maternal death remain high.

2.3.1 Emergency contraception

Emergency contraception, or emergency birth control, is used to help keep a woman from getting pregnant after she has had unprotected sex (sex without using birth control). But, emergency contraception should not be used as regular birth control. Other birth control methods are much better at keeping women from becoming pregnant (James, 2006). How much EC reduces the chance of getting pregnant depends on which kind of emergency contraceptive is used and how quickly take it after unprotected intercourse. In general, progestin-only emergency contraceptive pills are more effective than combined emergency contraceptive pills. Emergency contraceptive pills that contain only the hormone progestin reduces risk of pregnancy by 89% whereas Emergency contraceptive pills containing both progestin and estrogen (known as “combined” pills) reduce the risk of pregnancy by 75%. In addition emergency contraceptives appear to be more effective the sooner after intercourse (within 72 hours) they used (ECW, 2009).



2.4 Abortion laws in Ethiopia

The FDRE revised criminal code (2005) regarded abortion as a crime against life unborn except for cases allowed by the law.

Article 545 - The intentional termination of a pregnancy, at whatever stage or who ever affected, is punishable, except as otherwise provided under article 551.

Article 551,-Cases where Terminating Pregnancy is Allowed by Law.

Case 1 Termination of pregnancy by a recognized medical institution within the period permitted by the profession is not punishable where:

- a. the pregnancy is the result of rape or incest; or*
- b. the continuance of the pregnancy endangers the life of the child or the health of the mother or where the birth of the child is a risk to the life or health of the mother; or*
- c. where the child has an incurable and serious deformity; or*
- d. Where the pregnant woman, owing to a physical or mental deficiency she suffer from or her minority, is physically as well as mentally unfits to bring up the birth.*

Case 2 In the case of grave and imminent danger which can be averted only by an immediate intervention, an act of terminating pregnancy in accordance with the provision of Article 75 of this code is not punishable.

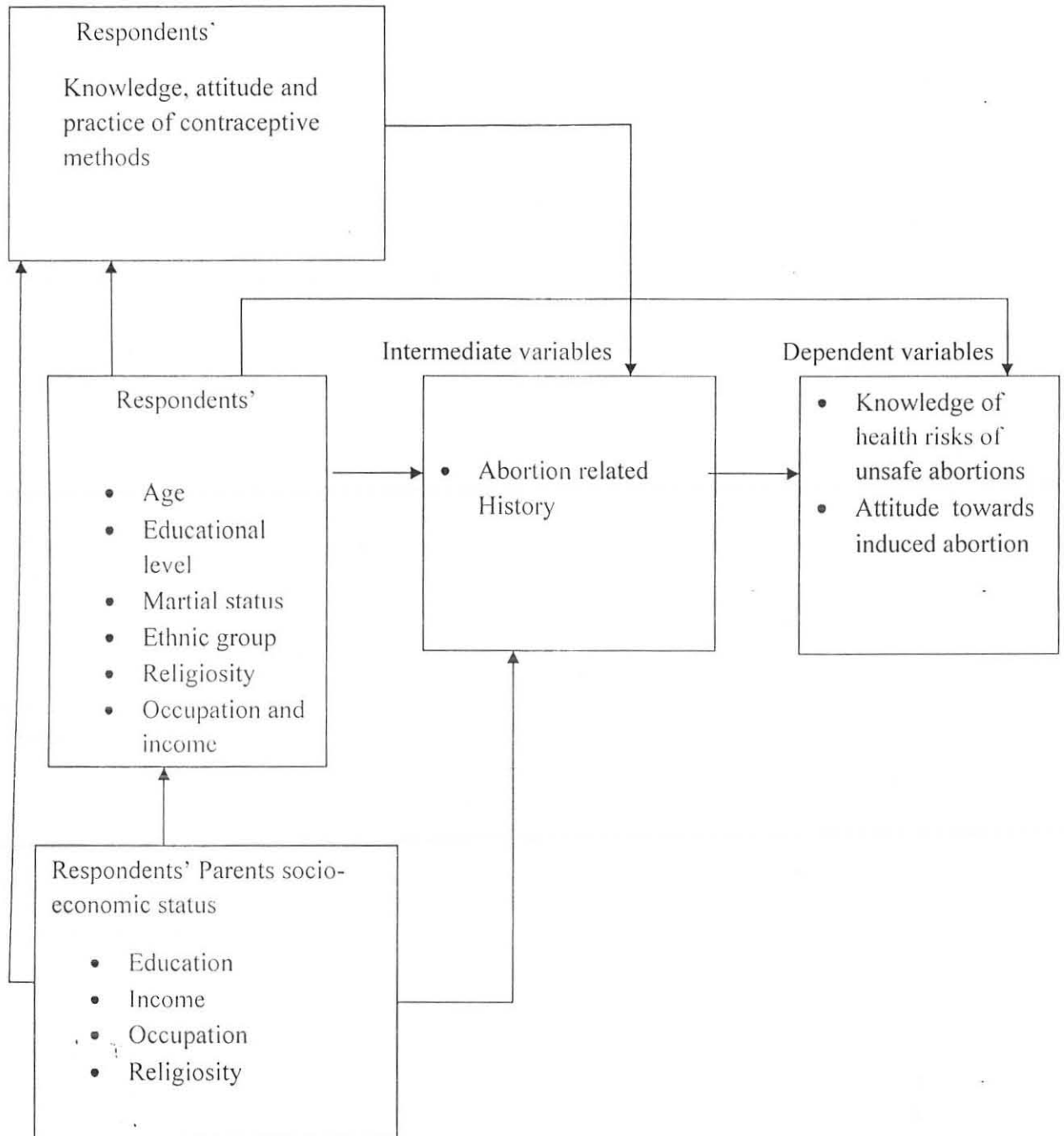
The intentional termination of a pregnancy, at whatever stage or however affected, is punishable except as other wise provided under Article 551. The nature and extent of the punishment given for intentional abortion shall be determined according to whether it is procured by the pregnant woman herself or by another and in the later case according to whether or not the pregnant woman gave her consent (Art 545). Abortion procured by the Pregnant Woman (Art 546) a pregnant woman who intentionally procures her own abortion is punishable with simple imprisonment. Any other person who procured for her the means of, or aids her in abortion, shall be punishable as principal criminal or on accomplice, with simple imprisonment (FDRE criminal code, 2005).

2.5 Conceptual Framework for the Study

In chapter one statement of the problem was discussed and in the second chapter above materials related with the problem were reviewed. Based on these the researcher developed and used the following conceptual framework. The framework presented the relationship of the independent variables i.e. the respondents' socio economic and demographic indicators and their knowledge, attitude and practice of contraceptives plus their parents' socio-economic status as affecting the attitude of respondents towards induced abortion and knowledge of unsafe abortion through the influence of intermediate variable history of unsafe abortion. In addition to this the respondents' socio economic and demographic indicators and their knowledge, attitude, practice of contraceptives directly affect the dependent variable i.e. attitude of respondents towards induced abortion and their knowledge of unsafe abortion. Here history of unsafe abortion is taken as knowing some one suffer/die from abortion. This is because it is assumed that female youth may not directly explain their experiences openly.

Figure 1 Conceptual Framework for the Study of Female Youth Knowledge and Attitude towards Induced Abortion

Independent variables



Source: Developed by the Researcher, 2009

2.6 Hypothesis

1. The higher the female's youth educational level, the better knowledge of unsafe abortion and a more liberal attitude towards induced abortion that they have.
2. Female youth who are in the twenties have better knowledge of unsafe abortion and a more positive attitude towards induced abortion than younger ones.
3. Female youth who frequently attend religious institutions have a negative attitude towards induced abortion.
4. Female youth who never married have a more positive attitude towards induced abortion than ever married female youth /currently married, divorced and widowed/.
5. Female youth who have positive attitude towards contraceptive use have better knowledge of abortion related complications.

CHAPTER THREE

3. MATERIALS AND METHODS

3.1 Study Area

The area selected for this study is Bishoftu Town; it is located at about 45 kilometers to the south of the capital city (Addis Ababa) on the main road to Adama. The town is located in East Shewa Zone of Oromia region, and has a latitude and longitude of 8° 45' N, 30° 39' E. Based on the 2007 population and housing census the town has a total population of 100,114 residents (CSA, 2008).

According to the information from the town municipality, the total number of population within the age range of 15-24 years in the town is 17,098 among which 8,100 are males and 8,998 are females (Bishoftu Municipality, 2007). Female youth aged 15-24 years make up 6.3% of the total population of the town. There is one government Hospital, two government health centers and more than ten private clinics in the town. The town of Bishoftu is heterogeneous in terms of socio-economic characteristics of its population and the town is organized in nine kebeles³.

3.2 Study Population

The population for the study is 8,998 female youth in the age range 15-24 years who are living in Bishoftu town. The reason for selecting this age range of urban dwellers was that, from other related studies for instance ESOG(2000), it found that youth who are living in urban areas have premarital sexual intercourse which is unplanned and without the necessary protection so, there is high incidence of unintended pregnancies and unsafe abortions. In addition to this Shah and Ahman (2004) indicate that almost 60% of unsafe abortions in Africa are among women under age 25. Therefore it's essential and timely to conduct this research in the age range stated above in one of the urban center of Ethiopia, Bishoftu town.

³ Kebele is the lowest administrative unit in administrative structure in Ethiopia

3.3 Sample Size Determination

In the absence of precise estimation of knowledge and positive attitude towards induced abortion, it is advisable to take the average of the percentage that showed having knowledge or positive attitude towards induced abortion in other similar studies. In three such studies positive attitude towards induced abortion is reported as; 79% (Beza, 2003), 56% (Konjit, 1998) and 76 % (Abay, 2002) so the average of the three 70% is taken.

As Julie, 2004 indicated
$$n = \frac{P(1-P)(z_{\alpha/2})^2}{e^2}$$

Where P=proportion of population with positive attitude towards induced abortion

n=sample size

E=error margin in estimating P which is 0.05

Z=the value of standard normal variate corresponding to the desired level of confidence of the estimation to be made.

$$Z=1.96 \text{ at } 95\% \text{ confidence}$$

$$P=0.70$$

$$1-P=0.30$$

$$n = \frac{P(1-P)(z_{\alpha/2})^2}{e^2}$$

$$n = 0.30(1-0.30)*(1.96)^2 / (0.05)^2$$

$$n = 0.30 (0.70)*(3.8416) / (0.0025)$$

$$n = (0.21)*(3.8416) / (0.0025)$$

$$n = 322$$

Design effect 2(n)

$$2(322)$$

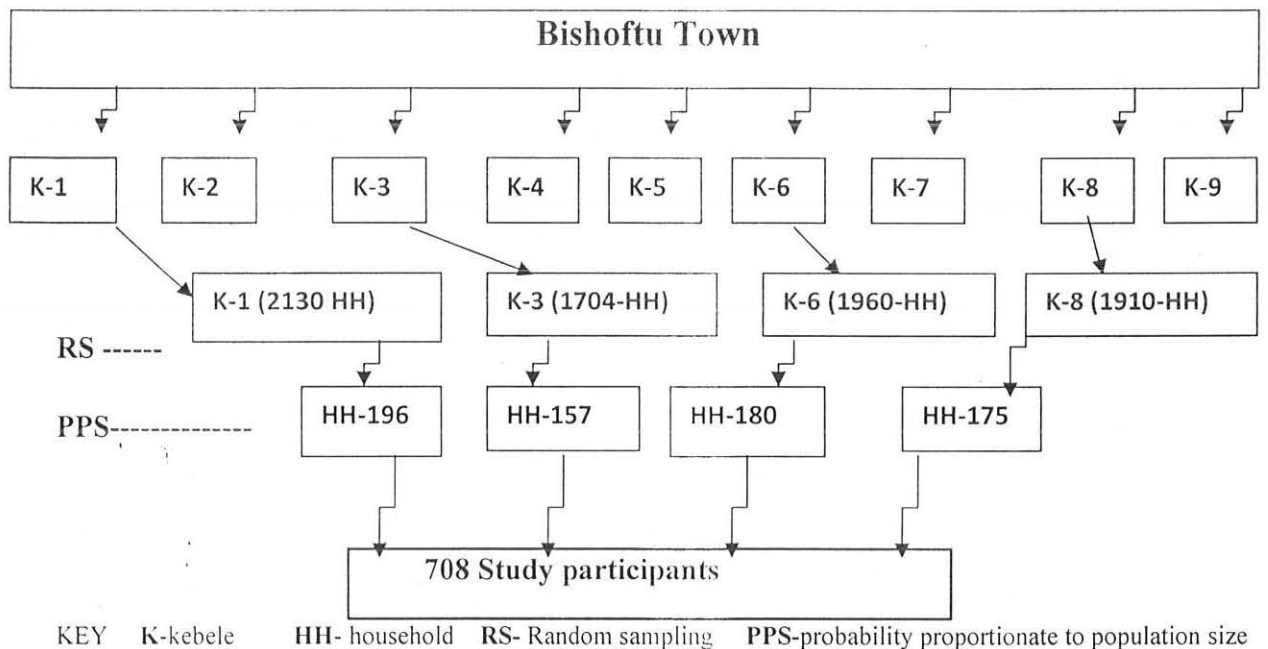
$$=644+10 \% \text{ (non response rate)}$$

$$=708 \text{ individuals}$$

3.4 Sampling Procedure

Three stage sampling technique was used to collect the data. Bishoftu town was divided administratively and geographically in nine kebeles, and four kebeles were selected randomly. The numbers of Households sampled from the selected kebeles were determined using proportionate to population size. By applying the systematic random sampling technique every 5th household was taken to select respondents. Only one female respondent from the age group 15-24 was selected from each household identified by the systematic sampling, interviewers were instructed to interview one female youth from one household. In the cases of more than one eligible respondent in the selected household, the interviewers used a lottery method to choose one. In cases where no eligible female youth found in any selected household, the immediate next household was selected to replace the household with a missing candidate. When the selected household was closed during data collection or no female youth was found, but it is known that there is female youth aged 15-24 years, the interviewers revisited the household three times at different time intervals if the interviewers failed to get female youth in the household, the household was excluded from the survey and the immediate next household taken as an eligible candidate.

Figure 2 Schematic presentation of sampling procedure, source Bishoftu Municipality



3.5. Study Variables

Dependent variables

- Attitude of female youth towards induced abortion, treated as a dichotomy (supported or opposed)
- Knowledge of health risks of unsafe abortion, treated as a dichotomy (yes or No)

Independent variables

- Age 15-19, 20-24
- Religiosity (attend religious institutions)
 - 2 or more times a week
 - Once a week
 - In religious festivals (occasionally)
 - Do not attend
- Marital status: Ever married and never married.
- Ethnic group: Oromo, Amhara, Gurage, Tigre and others
- Educational Attainment: No formal Schooling, grade 1-8, grade 9-12 and above grade 12
- Employment status: Student, unemployed, private employee, Housewife, Housemaid, Government employee Daily laborer and others
- Income status: Have income and Have no income
- **Parents Socio-economic status:**
- Mother's Educational attainment: No formal Schooling, grade 1-8, grade 9-12 and above grade 12
- Mother's employment status: Housewife, private worker, Government employee, Trader and others.
- Mother's monthly income (in birr): No income, 1-500, 501-1000 & 1000 +
- Father's educational attainment: No formal Schooling, grade 1-8, grade 9-12 and above grade 12
- Father's employment status: Unemployed, Government employee: Private worker, Daily laborer, Trader and others
- Father's monthly income (in birr): No income, 1-500, 501-1000, 1000+

- Knowledge, attitude and practice on family planning (contraception)
 - Knew any family planning method (contraception)
 - Ever used any family planning method (contraception)
 - Currently using family planning method (contraception)
 - Support use of family planning method (contraception)

Intermediate variables

- Abortion related history
 - Know some one who die or suffer from complication of unsafe abortion.

3.6 Study Design

An individual based cross-sectional study design that employed quantitative data collection methods and qualitative /focus group discussion/ were carried out to assess the female youth knowledge and attitude of induced abortion in Bishoftu town.

Instrument Development

After reviewing relevant literature and other similar studies the questionnaire and questions for FGD that could address the objective of the study were formulated. After extensive revision, the final version of the English questionnaire and questions for FGD were developed. An individual who has an excellent ability of English, Amharic and Oromiffa languages translated the English version into Amharic and Oromiffa languages with close assistance from a known medical doctor in Bishoftu town.

3.7 Quantitative Data Collection Process

Training of Data Collectors and Supervisors

Eight data collectors and two supervisors were hired based on the following criteria. Firstly, being female and able to communicate both in Amharic and oromiffa languages ,secondly, known to be honest and willing to face difficulties that might arise during the process of data collection and, thirdly, familiar with the social and administrative setting of the town. In addition to this data collectors were expected to be 12 grades (10+2) completed and the supervisors were expected to be diploma holders in any of health or social science fields.

Training of Data Collectors and Supervisors

A three day training was conducted by the investigator for data collectors and supervisors on the following points: Aim of the survey, Procedure for the survey, Problems that might arise during the survey, the questionnaire in detail, Art of interview (polite approaches, stating questions clearly, and avoiding leading opinion), Practicing the interview among themselves and comment on the process and reach on consensus and finally visit the selected kebeles for data collection.

Responsibilities of Data Collectors and Supervisors

The main responsibility of the data collectors was conducting the interview based on the training given with honesty and patience. The responsibility of the supervisors was co-ordinate and supervises the activity of data collection: Timely supply necessary materials for the interview and checking the questionnaire filled and bringing it to the investigator each day. In addition to this the investigator was conducting a short meeting with the data collectors and supervisors once in two days to discuss about the data collection process and problems if any and gave possible solution to problems that they faced.

3.8 pretest

The Questionnaire was pretested in two kebeles outside of the selected kebeles that has similar socio demographic characteristics with the people in the selected kebeles for conducting the survey. In the pretest clarity, understandability, completeness and arrangement of the questions and other things were checked and depending on the pretest result some modification on words and arrangement of the questions were made. The feedback obtained from the pretest was insightful and helped for the improvement of the questionnaire.

3.9 Ethical Consideration

The data collectors were instructed to explain the objective of the survey to the respondents. The respondents were included with their consent. Maximum effort was made to maintain privacy during interview and confidentiality of information was assured by omitting name of the respondents from the questionnaire.

3.10 Qualitative data collection process

In addition to the quantitative data in the study qualitative data was used. The researcher applied two FGDs in order to get, more information on female youth knowledge and attitude of induced abortion. Each FGD consists of 8 participants who were recruited to represent the socio economic and demographic composition of the target population i.e female youth from different religious groups, different educational level, different socio economic group(low, medium and high). In addition to this, in the first FGD only female youth who were single were represented and in the second FGD ever married female youth/currently married, widowed and divorced/ were represented. The FGDs were conducted by diploma holder female youth facilitators, note takers and supervisors who took training for three days.

3.11 Method of Data Processing

As it is stated in the sampling procedure maximum effort was made to get the entire planned sample, because of this it was possible to get the desired sample (708). After field work was completed and questions were coded, the data were edited and entered into computer and processed by using SPSS version 15 software. Data cleaning was executed by using frequencies and cross tabulations to check irregularities, accuracy, outliers, consistencies, and missing values. Accordingly, incorrect entries were identified and re-entered. With the help of this program descriptive analysis like means, standard deviations, percentages, etc were computed and the study population in relation to socio demographic and other variables were described .Bivariate analysis was used to assess the relationship of independent variables with the dependent variable by using chi-square test and calculating P-value. The chi-square test with the theories stated in the previous chapter helped to identify the independent variables which explain the dependent variables that would be used for further analysis at the multivariate stage.

Furthermore multivariate analysis was carried out to explore the net effects of each independent variable on the dependent variable by controlling possible intervening variables. To do multivariate analysis, the binary logistic regression model is used. The binary logistic regression is used when the dependent variable is dichotomous and the independent variables are of any type. The dependent variables for this study are dichotomous i.e. female youth attitude towards induced abortion which is treated as dichotomous as supporting or opposing attitude towards

induced abortion and, female youth knowledge of health risks of unsafe abortion is also treated as dichotomous able to mention at least one health risk of unsafe abortion (Have knowledge) and unable to do so (Have no knowledge). The model predicts the log of odds of the dependent variable as a linear function of the independent variables. The logistic model for n independent variables (x_1, x_2, x_3, \dots and x_n) is given as (Julie, 2004):

Logit $P(x) = \alpha + \sum \beta_i x_i$ where $\text{logit } P = \frac{1}{2} \ln (P/1-P)$ for a probability P

β_i = Regression coefficient of the i^{th} predictor

$\text{Exp}(\beta_i)$ = odds ratio for a person having characteristic i versus not having characteristic i

α = constant

CHAPTER FOUR

4 DATA ANALYSIS AND INTERPRETATION OF RESULTS

4.1 Characteristics of Respondents

4.1.1 Socio Demographic Characteristics of the Respondents

The total sample size of the study population was 708. All of the respondents were females in the age group 15-24. According the findings of the study, 47.5% of the respondents were within the age group 15-19 and 52.5% were in the age group 20-24 with a mean age 19.6 years and a standard deviation of 2.6 years. From the total respondents Orthodox religion adherents' account for 59.9%, Protestants 20.3%, Muslims 13.7% and the rest 5.1% represent Catholic, Jehovah's Witness and others. When we consider Ethnic group of the respondents, the majority, and 40.7% were Oromos, 31.4% were Amharas, 15.7% Gurage, 8.1% Tigre and the rest 4.1% represent Welita, Hadiya and Sidama (Table 2).

More than three fourth of the respondents (78%) were never married and the rest 22% were currently married, widowed and divorced (separated). Of the respondents, 6.8% had no formal education, around one quarter of the respondents (25.7 %) had educational level grade 1-8, more than half 54.9% of the respondents had educational level grade 9-12 and the rest 12.6% of the respondents had educational level above grade 12. The majorities (40.5%) were students, 25.3% were employees (private and government), 9.9% were housewives and the rest 24.3% were unemployed, housemaid, daily laborer and others. Of the respondents the majority (58.5%) had no monthly income and the rest 41.5% had their own monthly income. The mean number of people living in the respondents' household was 4.6 persons with a standard deviation of 1.8 persons. When we see religious attendance of the respondents 10.6% of them attend religious institutions two or more times a week, 34.5% of them attend such institutions once a week, nearly half 43.1% attend occasionally (only in religious festivals) and the rest 11.9% had no habit of attending religious institutions (Table 2).

Table 2 Characteristic of the Respondents & their Parents, Bishoftu, Feb. 2009

Characteristics	Number	Percentage
Respondents' Age		
15-19	336	47.5
20-24	372	52.5
Total	708	100
Respondents' Religion		
Orthodox	424	59.9
Protestant	144	20.3
Muslim	97	13.7
Catholics and Jehovah's witness	33	4.7
Total	708	100
Respondents' Religious Attendance		
Two more times a week	75	10.6
Once a week	244	34.5
In Religious Festivals (occasionally)	305	43.1
Never attend	84	11.9
Total number	708	100
Respondents' Ethnicity		
Oromo	288	40.7
Amhara	222	31.4
Gurage	121	17.1
Tigre	57	8.1
Welaita ,Hadiya and sidama	30	4.2
Total number	708	100
Respondents' Marital Status		
Never married	552	78
Ever married	156	22
Total	708	100
Respondents' Educational Attainment		
No formal schooling	48	6.8
Grade 1-8	182	25.7
Grade 9-12	389	54.9
Above grade 12	89	12.6
Total	708	100
Respondents' Occupational Status		
Student	287	40.5
Housewives	70	9.9
Private and government employee	179	25.3
Unemployed, daily laborers & others	172	24.3
Total	708	100
Respondents' Monthly Income		
Have income	284	41.5

...Continued

Have no income	424	58.5
Total	708	100
Respondents' Living Arrangement		
Alone	44	6.2
With both parents	313	44.2
With single parent	108	15.3
With partner(Husband)	125	17.7
Others	118	16.6
Total	708	100
Respondents' family size		
One to Three	197	27.8
Four to Six	430	60.7
Above Six	81	11.4
Total	708	100
Respondents' Mothers educational attainment		
No formal schooling	327	46.2
Grade 1-8	121	17.1
Grade 9-12	219	30.9
Above Grade 12	41	5.8
Total	708	100
Respondents' Mothers occupational status		
House wife	290	41
Private work	175	24.7
Govt Employee	120	16.9
Trader	77	10.9
Not alive	36	5.1
Others	10	1.4
Total	708	100
Respondents' Mothers monthly income		
No income	327	46.2
1-500 BIRR	150	21.2
501-1000 BIRR	201	28.4
More than 100 BIRR	30	4.2
Total	708	1000
Respondents' Fathers educational attainment		
No formal schooling	171	24.2
Grade 1-8	150	21.2
Grade 9-12	246	34.7
Above Grade 12	141	19.9
Total	708	100
Respondents' Fathers occupational status		

...Continued

Not alive	65	9.2
Govt employee	197	27.8
Private work	267	37.7
Daily laborer	45	6.4
Trader	110	15.5
Unemployed	24	3.4
Total	708	100
Respondents' Fathers monthly income		
No income	73	10.3
1-500 BIRR	157	22.2
501-1000 BIRR	341	48.2
More than 1000 BIRR	137	19.4
Total	708	100

4.1.2 Respondents' Knowledge, Attitude and Practice on Contraceptives

Table 3 below shows the distribution of respondents' knowledge, attitude and practice of contraceptives. Out of the total respondents 91.9% of them mentioned at least one contraceptive method while 8.1% of them were unable to do so. When we consider respondents attitude of contraceptive 83.9% of them were in favor of contraceptive use for those who need it and only 16.1% of them were disagree into using contraceptives. Of the respondents 79.8% used a method at some time. When we consider current contraceptive use, 67% of sexually active respondents were using a method and the rest 33% were not using a method at the time of the survey, the figure indicate that there is a great gap between knowledge and positive attitude of contraceptives. Almost all of these users were using modern methods. The most widely used method was condom (48%) followed by injectables (25.4%), pills (25.1%) and 1.5% of the respondents were using other methods. Of the respondents 41.9 % knew emergency contraceptive and the rest 58.1% were never heard of it.

Table 3 Respondents' Knowledge, Attitude and Practice of contraceptives Bishoftu, February 2009

Variables	Number	Percentage
Knew any contraceptive method		
Yes	651	91.9
No	57	8.1
Total	708	100
Support use of contraceptives		
Yes	594	83.9
No	114	16.1
Total	708	100
Ever use any contraceptive method		
Yes	380	79.8
No	96	21.2
Total	476	100
Currently use any contraceptive method		
Yes	319	67
No	157	33
Total	476	100
Type of contraceptive currently using		
Pills	80	25.1
Injectables	81	25.4
Condoms	153	48
Others	5	1.5
Total	319	100
Have you heard about emergency contraceptive method		
Yes	297	41.9
No	411	58.1
Total	708	100

4.1.3 Pregnancy and Abortion related History of the Respondents

Among the total respondents 30.1% were pregnant at some time, and a significant proportion of the total ever pregnant respondents (20.7%) were committed an induced abortion. More than a quarter of those who committed an induced abortion (27.3%) explain that they did the abortion with the help of Back street abortionist in addition to this 11.3% performed the induced abortion without help from any medical person whether professional or traditional. Nearly half of those who went through an induced abortion (45.5%) suffered/experienced complications of unsafe

abortion, the most common problems were hemorrhage (50%) and incomplete abortion (25%) followed by intra abdominal injury (15 %) and infection (10%) (Table 4).

Table 4 Pregnancy and Abortion related History of the Respondents Bishoftu, February 2009

Characteristics	Number	Percentage
Ever been pregnant		
Yes	213	30.1
No	495	69.9
Total	708	100
Ever went through induced abortion		
Yes	44	20.7
No	169	79.3
Total	213	100
Who did the induced abortion		
Health personnel	27	61.4
Back street abortionist	12	27.3
Friends	3	6.8
My self	2	4.5
Other	0	0
Total	44	100
Where did the induced abortion take place		
Private clinics	19	43.2
Govt hospital	4	9.1
Back-street abortionist home	12	27.3
Friends home	6	13.6
My home	3	6.8
Other	0	0
Total	44	100
Any complication after the abortion		
Yes	20	45.5
No	24	54.5
Total	44	100
Type of complication after the induced abortion as reported by the respondents		
Incomplete abortion	5	25
Hemorrhage	10	50
Intra abdominal injury	3	15
Infection	2	10
Total	20	100

4.1.4 Characteristics of Respondents who underwent an Induced Abortion

Table 5 below figure out the characteristics of the respondents who underwent an induced abortion at the time of termination of the pregnancy, the majority (81.8%) were in the age group 20-24 and 18.2% were within the age group 15-19years. When we consider marital status, three-fourth of the respondents 75% were never married and ever married female youth (currently married, widowed and divorced) account for 25% of the respondents who experienced an induced abortion.

When we examine the educational level of the respondents surprisingly, all of the respondents had attained some educational level, furthermore 84.1% of the respondents had attained secondary and above secondary educational level and the rest 15.9% of them had attained primary education. The majority of the respondents who underwent an induced abortion (45.5%) were unemployed youths, housemaid and daily laborers; Students also account considerable percent of the total (15.9%) and housewives make up 9 % (Table 5).

Table 5 Characteristics of Respondents who under went Induced Abortion, at the time of abortion

Characteristics	Went through an induced abortion	
	Number	Percentage
Age group		
15-19	8	18.2
20-24	36	81.8
Total	44	100
Religion		
Orthodox	27	61.4
Muslim	4	9
Protestant	12	27.3
Others	1	2.3
Total	44	100
Marital status		
Never married	33	75
Ever married	11	25
Total	44	100



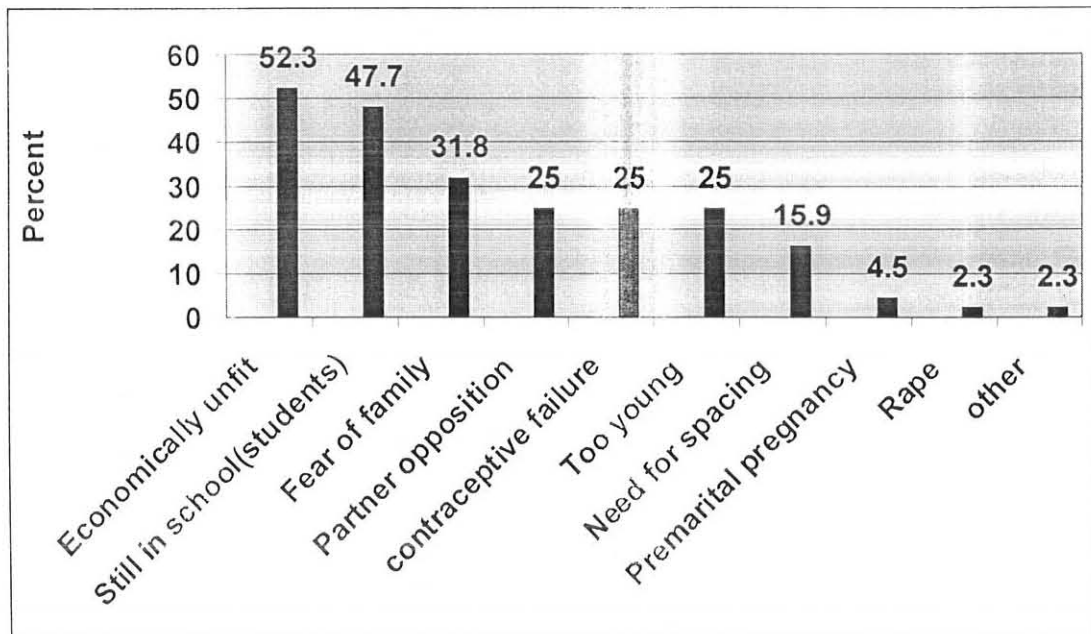
...Continued

Educational level		
No formal schooling	-	-
Grade 1-8	7	15.9
Grade 9-12	32	72.7
> grade 12	5	11.4
Total	44	100
Occupational status		
Students	7	15.9
House wives	4	9
Govt and private employee	13	29.5
Unemployed and others	20	45.5
Total	44	100
Religiosity		
Attend two or more times a week	1	2.3
Attend once a week	13	29.5
Attend occasionally(in religious festivals	21	47.7
Never attend	9	20.5
Total	44	100

4.1.5. Reasons given by respondents who had an Induced Abortion

Figure 3 below shows the reasons of the respondents who had an induced abortion for terminating the pregnancy. The main reason for induced abortion were found to be economic difficulty to bring up the child (52.3%), 47.7% because they were in school (conducting their education) i.e. not to drop out of school, 31.8% because of fear of family in addition contraceptive failure, partner opposition and too young to have a child account for 25% each. Other reasons given were need for spacing, premarital pregnancy and rape.

Figure 3 Reasons of Respondents, who had an Induced Abortion for terminating the pregnancy Bishoftu, February 2009



(N.B. Percentage was calculated based on multiple responses)

4.1.6. Respondents' knowledge and preferences of Induced Abortion

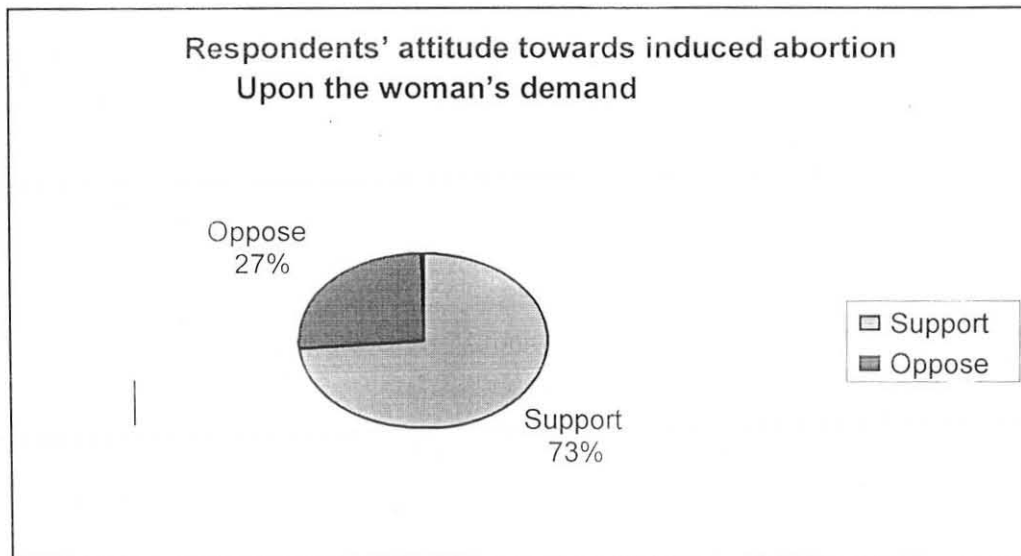
Respondents were asked about the current legal status of induced abortion in Ethiopia. It is found that only one-fifth of the respondents (20.5%) knew abortion is illegal but allowed under certain circumstances in the country. Of those with incorrect information, 60.6% believe that abortion was totally illegal, and 11.3% believe that it was legal, and the rest 7.6% state that they didn't have idea about the current legal status of abortion in the country. When we see respondents' knowledge of health risks of unsafe abortion the majority (86.7%) was able to mention at least one health risk of unsafe abortion and the rest 13.3% were not aware of the health risks of unsafe abortion. Around two-third of the respondents, 67.7% were state that unsafe/illegal abortion is a major health problem in the study area. And of the respondents nearly half of them (48.7%) knew some one suffer/die from unsafe abortion in their area of residence. These figures indicate that there is high prevalence of unsafe/illegal abortion in the study area (Table 6).

Table 6 Respondents knowledge and preferences of Induced Abortion Bishoftu, February 2009

Characteristics	NO	%
The current legal status of induced abortion in Ethiopia		
Legal	80	11.3
Illegal	429	60.6
Illegal but allowed under certain circumstances	145	20.5
Don't know/No idea	54	7.6
Total	708	100
Knew any health risk of unsafe abortion		
Yes	614	86.7
No	94	13.3
Total	708	100
Support induced abortion if it is allowed on the woman demand		
Yes	520	73.4
No	188	26.6
Total	708	100
What will be your action ,if you come across unintended pregnancy		
Give birth	181	25.6
Terminate the pregnancy	345	48.7
Simply wait what will happen	182	25.7
Total	708	100
Know some one suffer from or die from unsafe/illegal abortion		
Yes	345	48.7
No	363	51.3
Total	708	100
Unsafe/illegal abortion is major health problem in your surroundings		
Yes	479	67.7
No	85	12.0
I don't know	144	20.3
Total	708	100
Where do most female youth go for induced abortion		
Back street abortionists home	270	38.1
Private clinics	319	45.1
Govt hospitals	56	7.9
Other	63	8.9
Total	708	100

As figure 4 below shows most of the female youth who participated in the study have a pro-choice stand of induced abortion. Around three-fourth of the respondents (73.4%) support induced abortion upon the woman's demand and the rest 26.6% of them oppose induced abortion upon the woman's demand.

Figure 4

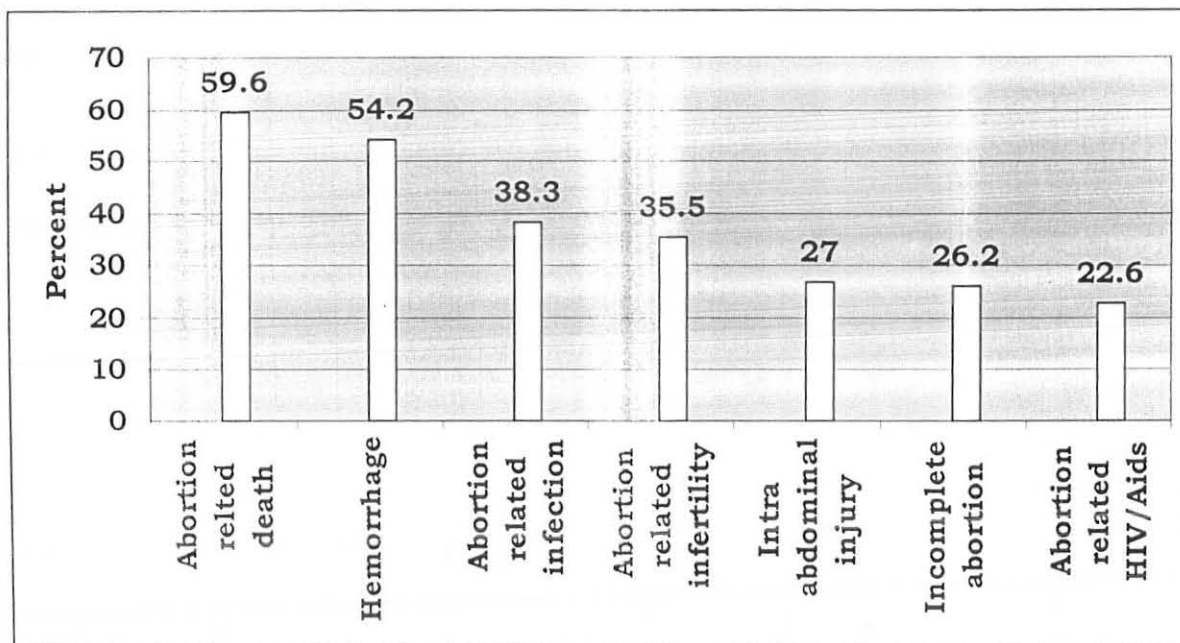


Bishoftu, February 2009

4.1.7. Respondents' knowledge of health risks of unsafe Abortion

Figure 5 below shows the distribution of the respondents according to their awareness and perception regarding the health consequences of unsafe abortion. Respondents were asked what health problems that they think could occur in a procedure for terminating unwanted pregnancy either by persons lacking the necessary skills or in an environment lacking the minimal standards or both. Of the respondents 59.6% suggest abortion related death, 54.2% state hemorrhage, 38.3% said infection, 35.5% of them mention infertility 26.2% describe incomplete abortion, 27% state intra abdominal injury and 22.6% of the respondents make clear that there will be abortion related HIV/Aids.

Figure 5 Respondents' knowledge of health risks of unsafe Abortion Bishoftu, February, 2009



(N.B. Percentage was calculated based on multiple responses)

4.1.8. Respondents' attitude of Induced Abortion on specific grounds

Table 7 below presents distribution of respondents according to their attitude towards induced abortion on specific grounds. The attitude of the respondents in each specific grounds categorized into five i.e. strongly agree, agree, neither agree nor disagree, disagree and strongly disagree. The majority of the respondents had a pro-choice stand for induced abortion on different specific grounds. For instance, respondents' attitude of induced abortion to save the mother's life indicates that 74.3% strongly agree, 19.5% agree, 1.7% neither agree nor disagree and it was only 4.5% of them were anti-choice on this specific ground, 3.5% disagree and 1% strongly disagree. Even respondents attitude of induced abortion on request indicates that 61.4% had pro-choice stand (40.4% strongly agree and 20% agree), 29% had anti-choice stand (18.5% disagree and 10.5% strongly disagree) and the rest 9.6% were neither agree nor disagree of induced abortion on request.

Table 7 Distribution of Respondents according to their Attitude towards Induced Abortion on different conditions, Bishoftu, February, 2009

Female youth Attitude induced abortion on specific grounds	Number	Percent
To save the mother's life		
Strongly agree	526	74.3
Agree	138	19.5
Neither agree nor disagree	12	1.7
Disagree	25	3.5
Strongly disagree	7	1.0
Total	708	100.0
To preserve physical health of the mother		
Strongly agree	485	68.5
Agree	143	20.2
Neither agree nor disagree	36	5.1
Disagree	36	5.1
Strongly disagree	8	1.1
Total	708	100.0
To preserve mental health of the mother		
Strongly agree	465	65.7
Agree	145	20.5
Neither agree nor disagree	48	6.8
Disagree	43	6.1
Strongly disagree	7	1.0
Total	708	100.0
Incase of rape or incest		
Strongly agree	451	63.7
Agree	110	15.5
Neither agree nor disagree	72	10.2
Disagree	68	9.6
Strongly disagree	7	1.0
Total	708	100.0
For fetal impairment		
Strongly agree	393	55.5
Agree	150	21.2
Neither agree nor disagree	65	9.2
Disagree	93	13.1
Strongly disagree	7	1.0
Total	708	100.0

...Continued

For economic and social reasons		
Strongly agree	304	42.9
Agree	157	22.2
Neither agree nor disagree	65	9.2
Disagree	150	21.2
Strongly disagree	32	4.5
Total	708	100.0
On request		
Strongly agree	286	40.4
Agree	149	21.0
Neither agree nor disagree	68	9.6
Disagree	131	18.5
Strongly disagree	74	10.5
Total	708	100.0

Table 8 Bivariate Results of Respondents Attitude of Induced Abortion by some selected Factors

Variables	Support induced abortion upon a woman's demand		P- Value	Chi-square x2
	Yes	No		
Age				
15-19	200(59.5)	136(40.50)		
20-24	320(86)	52(14)		
Total	520	188	P<0.001	63.558
Educational Attainments				
No schooling	11(22.9)	37(77.1)		
Grade 1-8	82(45)	100(55)		
Grade 9-12	342(87.9)	47(12.1)		
Above grade 12	85(95.5)	4(4.5)		
Total	520	188	P<0.001	202.041
Marital Status				
Never married	455(82.4)	97(17.6)		
Ever married	65(41.7)	91(58.3)		
Total	520	188	P<0.001	103.615
Religious attendance				
Two or more times a week	24(32)	51(68)		
Once a week	144(59)	100(41)		
Occasionally	272(89.2)	33(10.8)		
Never attend	80(95.2)	4(4.8)		
Total	520	188	P<0.001	151.280

❖ Figures in parentheses are percentages

Figure 6

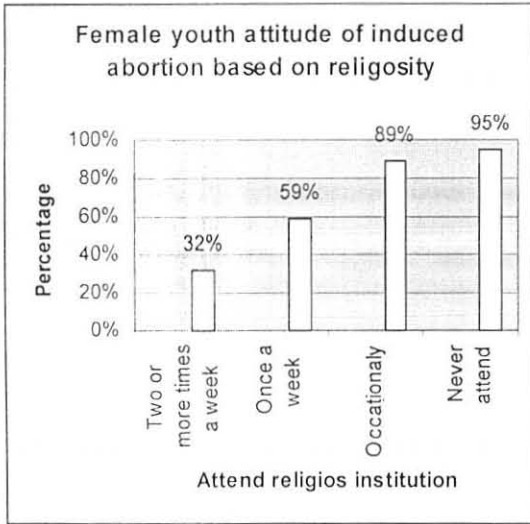
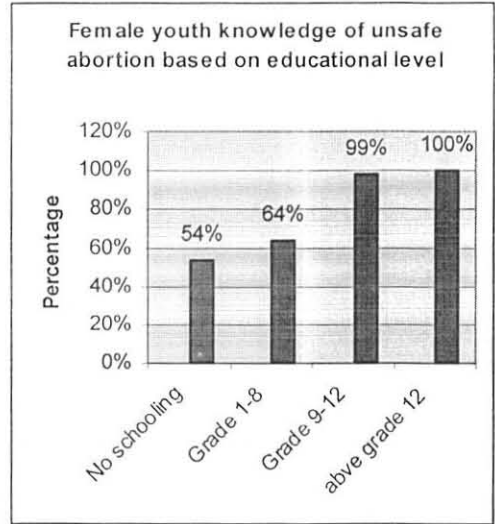


Figure 7



Bishoftu, Febraury 2009

Bishoftu, Febraury 2009

4.2.2 Female Youth Attitude of Health Risks of Unsafe abortion and some selected variables

Table 9 below revealed the relationship between female youth knowledge of health risks of unsafe abortion with some selected variables. As the table indicates the respondents age and their knowledge of health risks of unsafe abortion has significant association ($\chi^2=53.618$ $P<0.001$) and the pattern indicated that female youth knowledge of health risks of unsafe abortion increased with their age. The educational level of the respondents and their knowledge of health risks of unsafe abortion has significant association ($\chi^2=185.572$, $P<0.001$). The pattern indicated that as female youth educational level increased their knowledge of unsafe abortion also increased. Furthermore occupational status of the respondents and their knowledge of health risks of unsafe abortion has shown significant association ($\chi^2=30.229$, $P<0.001$). When we consider the pattern of the relation those female youth who were employed (government & private) had better knowledge of unsafe abortion than unemployed and others (others includes Housemaids, traders, daily laborers). Whereas marital status of the respondent has not shown significant association with knowledge of unsafe abortion.

Table 9 Bivariate Results of Respondents Knowledge of Unsafe Abortion by some selected Factor

Variables	Knowledge of Unsafe abortion		P- Value	Chi-square x2
	Yes	No		
Age				
15-19	259(77)	77(23)		
20-24	356(95.7)	16(43)		
Total	615	93	P< 0.001	53.618
Educational Attainments				
No schooling	26(54.2)	22(45.8)		
Grade 1-8	117(64.3)	65(33.7)		
Grade 9-12	383(98.5)	6(1.5)		
Above grade 12	89(100)	-		
Total	615	93	P<0.001	185.572
Marital Status				
Never married	474(85.7)	78(14.3)		
Ever married	141(90.3)	15(9.7)		
Total	615	93	P>0.05	2.173
Occupation				
Students	247(86.1)	40(13.9)		
Housewives	64(91.4)	6(8.6)		
Government & private employee	172(96.1)	7(3.9)		
Unemployed & others	132(76.7)	40(23.3)		
Total	615	93	P<0.001	30.229

❖ Figures in parentheses are percentages

4.3 Multivariate Analysis of the Female Youth Knowledge and Attitude of Induced Abortion

Multivariate analyses are used to examine the net effects of each independent variable on female youth attitude of induced abortion and knowledge of unsafe abortion by controlling the effects of all other intervening variables.

Logistic regression calculates changes in the log odds of the dependent. For the dichotomies case, if the logit for a given independent variable is Z , then a unit increase in the independent variable is associated with a Z change in the log odds of the dependent variable. A relative risk, $EXP(B)$, estimates greater than one signifies an increased likelihood for the given outcome, while a value less than one indicates a decreased likelihood for the given outcome. In addition, the sign of B (logistic coefficient) indicates the direction of the change.

To assess multicollinearity in multivariate analyses one uses tolerance or VIF (variance inflation factor), which build in the regressing of each independent on all others. The higher the intercorrelation of the independents, the more the tolerance will approach zero. As a rule of thumb, if tolerance is less than .20, a problem with multicollinearity is indicated. VIF is simply the reciprocal of tolerance. Therefore when VIF is high there is high multicollinearity. By the common rule of thumb $VIF > 4$ indicates a multicollinearity problem (David, 2009). Multicollinearity test was made in order to check the interaction of the independent variables in the multivariate analyses used here; female youth attitude towards induced abortion and female youth knowledge of unsafe abortions. In both cases the VIF is < 4 and the tolerance is above 0.20 (appendix 7 AND 8), which off course mean no multicollinearity problem.

The quality of data such as age is checked for possible preferences of digits while stating age. If there is no digit preference in a given data, about twenty percent of the observation have terminal digits either '0' or '5'. The measure which is used to show digit preferences is computed as the sum of the percentage of observations whose terminal digit is either '0' or '5' divided by twenty. If the result is one or nearly one it indicates no digit preference (Loaiza 1997).

As it is shown in table 10 the percentage of observation ending with terminal digit '0' or '5' for age data is relatively not large as compared to the percentage of observations ending with other



terminal digits. Moreover, the corresponding heaping ratio is 1.06 which is nearly one, this indicates that more or less there is no digit preference in reporting age.

Table 10 percentage of concentration of age reporting for each terminal digit and heaping ratio.

Terminal digit	0	1	2	3	4	5	6	7	8	9	Heaping ratio
Heaping for reporting age (%)	11.7	9.2	9.6	9.7	10.2	9.5	10.5	9.1	10.8	9.7	1.06

4.3.1 Multivariate Results on Female Youth Attitude of Induced Abortion

The multivariate analysis of female youth attitude towards induced abortion upon a woman's demand is presented in table 11. As the result revealed female youth in the age group 15-19 years were 66% less likely to support induced abortion upon a woman's demand compared with those aged 20-24 years. The educational level of the respondents also indicated that female youth who had no formal education 90% and grade 1-8/ primary education 71% less likely to support induced abortion upon a woman's demand when compared with those female youth had secondary and above secondary educational level.

Religiosity of the respondents is measured by how frequent they attend religious institutions. When religious attendance of the female youth increased their attitude towards induced abortion decreased. Table 11 revealed that female youth who attend religious institutions two or more times a week and once a week were 94% and 88% less likely to support induced abortion upon a woman's demand respectively when compared with those female youth who never attend religious institutions. The marital status of the respondents made clear that female youth who never married were around six and half times more likely to support induced abortion upon a woman's demand when compared with those who were ever married (currently married, widowed, and divorced/separated). When we see occupation of the respondents' female youth who were housewives were 93% less likely to support induced abortion upon a woman's demand when compared with those female youth who were unemployed, traders, housemaids and daily laborers.

Table 11 Multivariate Analysis results of Respondents' Attitude of Induced Abortion upon a woman's demand, Bishoftu, February, 2009

Variables	B	S.E.	Sig.	Exp(B)
Age			.001**	
15-19	-1.072	.325	.001	.340
20-24(RC)				1.000
Occupation			.005**	
Students	-1.175	.853	.168	.309
Housewives	-2.719	.930	.003	.066
Government & private employee	.087	.453	.848	1.091
Unemployed and others(RC)				1.000
Income			.032*	
Have monthly income	-1.733	.809	.032	.177
Have no monthly income(RC)				1.000
Respondents' mothers monthly income			.218	
No income	-.267	.678	.693	.766
≤500 birr	.421	.710	.553	1.523
501-1000 birr	.129	.666	.846	1.138
>1000 birr(RC)				1.000
Respondents' fathers monthly income			.093	
No income	-1.028	.590	.081	.358
≤500 birr	.311	.454	.494	1.365
501-1000 birr	-.128	.377	.735	.880
>1000 birr(RC)				1.000
Knowledge of any contraceptive			.274	
Yes	-.510	.467	.274	.600
No(RC)				1.000
Positive attitude of contraceptive use			.000***	
Yes	1.324	.342	.000	3.768
No(RC)				1.000
Ever use of contraceptives			.003**	
Yes	.1.255	.419	.003	3.508
No(RC)				1.000
Education			.000***	
No formal schooling	-2.323	.569	.000	.098
Grade 1-8(primary education)	-1.230	.286	.000	.292
Above grade 8(secondary & above)(RC)				1.000
Religiosity(religious attendance)			.000***	
Two or more times a week	-2.758	.716	.000	.063
Once a week	-2.131	.662	.001	.119
Occasionally(in religious festivals)	-.724	.666	.277	.485
Never attend (RC)				1.000

...Continued

Marital status			.000***	
Never married/single/	1.853	.433	.000	6.378
Ever married(RC)				1.000

-2LL = 428.523

HLT = .172

N = 708

RC = Reference Category

EXP (B) = Odds ratio

-2LL = -2 Log Likelihood

HLT = Hosmer and Lemeshow Test

S.E = Standard Error

B = Beta coefficient

Sig = Significance value: * p <.05, ** P<.01 and ***P<.001

The other factor is income, female youth who had monthly income were 82% less likely to support induced abortion upon a woman's demand when compared with those female who didn't have any monthly income. When we consider contraception female youths who had positive attitude towards contraceptive use and who ever use contraceptives were around four times and three and half times more likely to support induced abortion upon a woman's demand respectively when compared with those female youth who had negative attitude towards contraceptive use and never use any contraceptive method.

4.3.2 Multivariate Results on Female Youth knowledge of unsafe of Abortion

Table 12 revealed the multivariate analyses on female youth knowledge of unsafe abortion. Female youth who were aged 15-19 years were 77% less likely to have knowledge of unsafe abortion when compared with those female youths aged 20-24 years. In addition to this as the respondents' education progress the likelihood of having knowledge of unsafe abortion increased. According to table 12 female youth who had no formal education and only primary education (grade1-8) were 96% and 95% less likely to have knowledge of unsafe abortion respectively when compared with those female youth who had secondary and above education.

The result also revealed that female youth who were living alone was 90% less likely to have knowledge of unsafe abortion when compared with those female youth living with friends, relatives and those who were living in universities. Plus female youth who were living with husband (partner) were 72% less likely to have knowledge of unsafe abortion when compared with those female who were living with friends ,relatives and those living in universities.

Table 12 Multivariate Analysis results of Respondents' Knowledge of unsafe Abortion Bishoftu, February, 2009

Variables	B	S.E	Sig	Exp(B)
Age			0.002**	
15-19	-1.475	.472	0.002	.229
20-24(RC)				1.000
Living arrangement			.037*	
Alone	-2.287	.783	.003	.102
With both parents	-1.257	.723	.082	.284
With single parent	-1.195	.626	.056	.303
With husband(partner)	-1.195	.602	.035	.280
With friends and in university(RC)				1.000
Income			.856	
Have income	.086	.475	.856	1.090
Have no income				1.000
Respondents' Mothers education			.930	
No formal schooling	.462	.815	.571	1.588
Grade 1-8	.0.78	.793	.921	1.081
Grade 9-12	.321	.714	.653	1.378
Above grade 12(RC)				1.000
Respondents' fathers education			.062	
No formal schooling	-.441	.761	.562	.643
Grade 1-8	-1.089	.793	.169	2.978
Grade 9-12	-.508	.588	.387	.602
Above grade 12(RC)				1.000
Know any contraceptive			.000***	
Yes	3.179	.525	.000	24.019
No				1.000
Positive attitude towards contraceptive use			.000***	
Yes	1.614	.366	.000	5.025
No(RC)				1.000
Education			.000***	
NO formal schooling	-3.222	.667	.000	.040
Grade 1-8(primary)	-3.091	.515	.000	.045
Above grade 8(secondary and above)(RC)				1.000

-2LL = 249.118

HLT = .658

N = 708

RC = Reference Category

EXP (B) = Odds ratio

-2LL = -2 Log Likelihood

HLT = Hosmer and Lemeshow Test

B = Beta coefficient

S.E = Standard Error

Sig = Significance value: * p <.05, ** P<.01 and ***P<.001

When we refer to contraceptive knowledge and attitude, the multivariate analyses revealed that the likelihood of having knowledge of unsafe abortion increased with increased knowledge and positive attitude of contraceptive use. The result of the analyses also disclose that female youth who had knowledge of contraceptive and positive attitude of contraceptive use were around 24 and 5 times more likely to have knowledge of unsafe abortion respectively, when compared with those female youth who didn't have knowledge of contraceptive and had negative attitude of contraceptive use.

4.4 Discussion on the Key Findings

This study tried to assess the female youth knowledge and attitude of induced abortion in Bishoftu town Oromia Region by using both quantitative and qualitative data.

In this study 73% of the respondents (female youth aged 15-24years) support induced abortion upon a woman's demand (on request). The figure is almost alike with other similar studies 76% in Mekelle (Abay, 2002) and 71% in Addis Ababa (Beza, 2003). The study also revealed that 86.7% of female youth had knowledge of unsafe abortion. Of the respondents only one-fifth, 20.5% knew that abortion is legal under certain circumstances and the majority (60.6%) believed that abortion is illegal in all circumstances. The general low level of knowledge about Ethiopian abortion laws likely reflects the true inaccessibility of legal abortion. That is, many of the respondents may believe abortion is illegal in all circumstances because they have not had any prior experience, direct or indirect, with obtaining a legal abortion or because their information sources about legal abortion are unreliable.

As the FGDs result indicated, almost all of the participants believe that liberalizing the current abortion law or allowing abortion on request will decrease maternal mortality rate. Since the social and cultural factors continue to shape the opinion of the people not all the participants who reflected the above idea support induced abortion on request.

As the bivariate and multivariate results indicated female youth who were in the age group 20-24 had a more positive attitude towards induced abortion on demand and had better knowledge of unsafe abortion. These findings were consistent with the results of other similar studies in Jimma (LisaneMariam et al., 1999) and in Addis Ababa (Beza, 2003). The FGD participants of this age group (20-24years) also reflected a more liberalized view of induced abortion and better

knowledge of unsafe abortion. The possible explanation for this may be, as the age of female youth increase their interaction to the society also increase and they can get more information on what is happening in their surrounding. In one way or another as their information increase their knowledge of unsafe abortion also increase and they can easily understand how safe and easily accessible abortion services reduce maternal mortality and morbidity. In addition to this when the female youth age increase they can realize how safe and easily accessible abortion services support the country's health care system by reducing/avoiding expenditures for treatments of complications of unsafe abortion.

A significant difference was observed in female youth knowledge of unsafe abortion and attitude of induced abortion by their educational level. The bivariate and multivariate results revealed that when the female youth educational level increased their knowledge of unsafe abortion and attitude of induced abortion also increased. This is similar to what has been reported by other similar studies (Abay, 2002 and Beza 2003). This is perhaps educated people might be more aware that unsafe abortion is a major health problem and have more knowledge that problems related to unsafe abortion could be reduced by safe abortion services. Furthermore educated people might be aware that where legislation allows abortion on broad indications, there is a lower incidence of unsafe abortion and much lower mortality from unsafe abortions, as compared to legislation that greatly restricts abortion.

As shown in bivariate and multivariate analyses female youth who attended religious services at least two or more times a week had a negative attitude towards induced abortion than less religious and non religious ones. These findings were also supported by the FGDs. Most of the FGDs participants who frequently attend religious institutions were against induced abortion. They stated that

« Termination of pregnancy is a sinful act and prohibited in our respective religions. We are also against abortion because we accept and respect what our religious doctrine says. »

This result may be explained in part, by the religious institutions (church's, mosque's and the like) unequivocal anti choice stance and their role as a major influence in many people's lives especially in those who are more religious.

Differences according to marital status were also observed, respondents who were ever-married showed negative attitude towards induced abortion compared to those who were never married. This finding is also consistent with (Beza, 2003). In most studies induced abortion was found to be significantly higher among the singles than among the married females. A retrospective analysis of 484 abortion cases who were admitted to Gondar College of Medical Science Hospital from September 11, 1997 to September 10, 1998 indicated that induced abortion was found to be significantly higher among the single than among the married (Gizework and Solomon, 1999). Single youth usually abort if a pregnancy is the result of rape or if men deny accepting fatherhood or prefer abortion in fear of social stigma and being dropped out of school. As we can observe, the singles are more victims of unsafe abortion. This might be explained the positive attitude of single female youth towards induced abortion. In addition to this as the FGDs revealed single female youth had a more liberal attitude towards induced abortion. Most of the single females who participated in the FGDs state that:

« They came across many single young females who experienced unsafe abortion. But unintended pregnancy is not unique for single female youth many married female youth experienced unintended pregnancy, even out of extramarital relations but there is no an easy means to cross-check it and their life would not be at risk, they simply gave birth. Whereas when we came across unintended pregnancy we resort to unsafe/illegal abortion, because in our society there is a strong social stigma on single or unwed motherhood. Since we are the victims of illegal abortion we support legislation that allows abortion on a woman's demand. »

The FGDs participants indicate that unsafe abortion is a major health problem in the study area and a substantial number of respondents who underwent unsafe abortion suffer from complications of abortion. This may be because, safe abortion is not an option for most of these women. on one hand the cases that these female need for abortion are against the law or the female youth may not aware of their legal rights regarding abortion. On the other hand they can't afford to get the service in standardized private clinics. The Alan Guttmacher Institute (1999) further strengthen this idea that where abortion is generally against the law, well-off females in cities were frequently able to obtain safe abortions, but many of their poor and rural counter parts try to end their own pregnancies or turn to unskilled practitioners.

The multivariate result also indicate that female youth who didn't have income had a more positive attitude towards induced abortion compared with those who had their own monthly income plus female youth who had unemployed had a more liberalized attitude towards induced abortion in relation to those who were housewives. This may be because Poor females often suffer the most mortality and morbidity from unsafe abortions. Where abortion is restricted, they rarely have access to safe services whereas wealthy females can afford substantial amount of money for high quality clandestine abortion services in private clinics. Poor female youth also are more likely to have unintended pregnancies because they lack access to family planning. For instance in Argentina where unsafe abortion is the principal cause of maternal mortality (29% of MMR is the result of unsafe abortion in Argentina) data for 2002 showed as high as 166 maternal death per 100,000 live births in the poorest province, Formosa, in contrast to only 14 deaths per 100,000 live births in Buenos Aires and other more developed provinces (Steele and Chiarotti, 2004).

Regarding living arrangement the multivariate result indicated that Female youth who were living alone and with partner (husband) had less knowledge of unsafe abortion when compared with those living with friends, relatives and in universities. The possible explanation for this might be in Ethiopia it's uncommon for young females to discuss sexual and related issues with husbands or parents rather in Ethiopia its universal to have discussion on such issues with friends. Therefore female youth who are living with friends have better chance to discuss on sexual issues including abortion and by this they can acquire better knowledge of unsafe abortion. When we investigate parents socio economic variables, the bivariate analyses showed statistically significant association with the dependent variables but the multivariate analyses didn't depict these variables as a major factor this may be because currently the youth's knowledge and attitude most of the time influenced by friends i.e. the peer influence outshine over parents influence.

As the bivariate and multivariate analyses revealed female youth who have positive attitude of contraception have better knowledge of unsafe abortion and a more positive attitude of induced abortion. The possible explanation for this finding may be female youth who have positive attitude of contraceptives are aware of the fact that the most important factor for unintended pregnancy is unsafe sex in addition to this they know how to protect oneself from unsafe sex that

can result to unintended pregnancy by using contraceptives, but they are also aware that there may be contraceptive failure. This idea was also highly reflected in the FGDs, participants in the FGDs state that:

« We are aware of the fact that the primary prevention of unsafe/illegal abortion is the avoidance of unintended pregnancy by use of contraceptives. But with contraceptive use there may be unintended pregnancy because of human error or method failure. We know female youths who became pregnant even though they used a contraceptive while they had the intercourse. These female youths went to traditional healers/ backstreet abortionists/ and terminated the pregnancy but they experience short and long term morbidity from the process. We believe that safe abortion service should be allowed since contraceptives are not always confidential. »

As WHO (2006) indicated an estimated 27 million unintended pregnancies happen worldwide every year with the typical use of contraceptives. Six million pregnancies would happen even with perfect (i.e., correct and consistent) use of contraceptives and an estimated 123 million women worldwide had an unmet need for family planning in 2003. These conditions indicate an urge to reduce or avoid morbidity and mortality from unsafe/illegal abortions both by use of effective contraceptive methods and by having safe and legally supported abortion services in the country in general and in the study area in particular.

CHAPTER FIVE

5. SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

This study has provided an insight into knowledge of unsafe abortion and attitude of induced abortion of female youth aged 15-24 years in Bishoftu Town, Oromia Region. This population group was chosen as the target population of the study partly because the population groups are identified as high-risk group. For instance in 2000 in Africa almost 60% of unsafe abortions took place among the target population 15-24 years olds (Shah and Ahman, 2004).

In this study 708 eligible female youth aged 15-24 years were participated. Out of which, 336(47.5%) were in the age group 15-19 and 372(52.5%) were in the age group 20-24. Nearly all of the respondents (93.2%) had attended some level of formal schooling. Majority of the respondents (59.9%) were followers of Orthodox religion while 40.7% of the respondents were Oromo by ethnic group.

Out of the total respondents 91.9% of them had knowledge of contraceptive and 83.9% of the respondents were in favor of contraceptive use. From sexually active respondents 79.8% were used a method at some time and 67% of the respondents were using a method at the time of the survey. The most widely used methods were condoms (48%) followed by injectables (25.4%) and pills (25.1%).

From the total number of respondents 30.1% (213) were pregnant at some time; from this number 20.7% terminated the pregnancy and the reasons they gave include economic difficulty, still in school, fear of family and the like. From the total respondents who went through an induced abortion 27.3% did it in Back street abortionists home and 43.2% in private clinic and 20.4% of them did it in friends or their own home. Nearly half of those who went through an induced abortion (45.5%) suffered from complications of unsafe abortion. The most common problems mentioned by those who experienced complications of unsafe abortion were hemorrhage, incomplete abortion, intra abdominal injury, infection and the like. Of the respondents around two-third, 67.7% state unsafe abortion as a major problem in the study area

and nearly half of the respondents, 48.7% knew someone who suffers or dies from abortion in their area of residence.

Of the respondents only 20.5% were aware that abortion is illegal but allowed under certain circumstances in Ethiopia. Around 87% of the respondents had knowledge of unsafe abortion and mentioned abortion-related death, hemorrhage, infection, infertility, HIV/AIDS and others.

Nearly three-fourth of the respondents (73.4%) supported induced abortion upon a woman's demand and the rest (26.6%) opposed abortion upon a woman's demand. Most of the respondents had a positive attitude towards induced abortion on different specific grounds. Of the respondents 93.8% strongly agree and agree with legislation that allows abortion to save the mother's life. Again 65.1% of the respondents were strongly agree and agree with legislation that allows abortion for economic and social reasons in addition to this 61.4% were strongly agree and agree with legislation that allows abortion on request.

Female youth knowledge and attitude of induced abortion were cross-tabulated with the independent variables i.e. female youths' age, religion, ethnicity, religiosity, marital status, educational attainment, occupational status, living arrangement, family size, contraceptive knowledge, attitude, and use; in addition to these their parents' educational attainment, occupational status and monthly income were cross-tabulated with the dependent variables. The bivariate result showed that female youth attitude of induced abortion was significantly associated with these variables except for ethnicity, religion and monthly income of the respondents. The bivariate result showed significant association between these variables and female youth knowledge of unsafe abortion except for ethnicity, religion, monthly income and marital status of the respondents.

Multivariate analyses were employed to identify the net effect of each independent variable on the dependent variables, the result indicated that age, education, religiosity, marital status, occupation, income, attitude of contraceptive use and ever use of contraceptives were the most important factors that influence female youth attitude of induced abortion. Again the multivariate analyses depicted that age, education, living arrangement, contraceptive knowledge and attitude of contraceptive use were the most important factors that influence female youth knowledge of unsafe abortion.

the twenties years of age, ever married, living with friends & in universities, have knowledge & positive attitude of contraceptive use had better knowledge of health risks of unsafe abortion.

5.3 Recommendation

Based on the findings of the study the following recommendations are suggested.

- There is an urge to fill the gap between contraceptive knowledge and usage, in relation to this it is essential to increase access to contraceptive and promote contraceptive use in order to reduce the incidence of unintended pregnancy which is the root cause of unsafe abortion. In addition to this it is essential to advocate the use of emergency contraception for women who were forced to have sex, have experience contraceptive failure, missed two or more birth control pills in a row and the like.
- Greater efforts need to be made to ensure that all female youth know that they have a legal right to abortion in some circumstances in our country, and that they know the procedures necessary for obtaining a legal abortion if required.
- Even though Ethiopia revised the 1957 abortion law in 2005, it is important to recognize that Ethiopian current abortion law only allows for legal abortion in limited circumstances, and these are not the circumstances for which most Ethiopian females seek abortion. Therefore there is a need to revise the current abortion law further at least to make abortion legal on socio economic grounds.
- To improve access to abortion in Ethiopia , it will need to use a variety of strategies that acknowledge the beliefs of the Ethiopian population and at the same time, seek to reduce the stigma associated with sexuality and therefore of women's need for abortion through case studies, short dramas, public discussion and the like.
- In order to effectively discharge their responsibilities, abortion providers should acquire basic knowledge and skills during their pre-service training and get periodic updates through on-the-job training. Training content should address both technical and clinical skills as well as the attitudes and beliefs of service providers.

- Developing strategies to address both male and female youth needs for reproductive health information including knowledge of reproductive physiology: through schools, the media, and informal information networks. Besides taking measures to encourage young people to stay in school until the completion of their studies.
- In future studies should be conducted in the topic studied here by incorporating males; they may possibly have an influence on an intended pregnancy and unsafe/illegal abortion.

References

- Abay Hagos (2002) Assessment to the Attitude of 15-49 years old women and men towards legalization of Abortion in Mekelle town, Tigray, Faculty of Medicine Department of Community Health: A thesis Submitted to School of Graduate Studies, Addis Ababa University.
- Aklilu K Hailom B Pav G (2002) Youth reproductive Health in Ethiopia Miz- Hasab Research center Addis Ababa, Ethiopia and ORC Macro Calverton Maryland, USA.
- Alan Guttmacher Institute (1999) Sharing Responsibilities: women, Society and abortion worldwide. New York: The Alan Guttmacher Institute.
- Australian agency for international Development (2002) family planning and the Aid program: A comprehensive Guide, Commonwealth of Australia.
- Bankole A and Westoff CF (1995) Bangladesh, Egypt, Kenya, Morocco, Nigeria and Philippines DHS country reports: USA Macro system.
- Beza Hailu (2003) Female youth Attitude towards Legalization of Induced Abortion: the case of Addis Ababa, unpublished thesis Addis Ababa University.
- Bihshoftu Municipality (2007) Tourist sites in Bishoftu town, Bishoftu Ethiopia (Unpublished report)
- Brookman-Amisshah Eunice and Moyo B Josephine (2004): Abortion Law Reforms in Sub-Saharan Africa: No Turning Back: Reproductive health matters 12: 24: 227-233
- Central Statistics Agency (1993) The 1990 National family and fertility survey report, Addis Ababa, Transitional Government of Ethiopia.
- _____ [Ethiopia] and ORC Macro (2001) Ethiopian Demographic Health Survey 2000 Addis Ababa, Ethiopia and Calverton, Maryland, USA: Central Statistical Agency and ORC Macro.

- _____ [Ethiopia] and ORC Macro (2006) Ethiopian Demographic Health Survey 2005 Addis Ababa, Ethiopia and Calverton, Maryland, USA: Central Statistical Agency and ORC Macro.
- _____ (2008) The Federal Democratic Republic of Ethiopia the 2007 National population and Housing census first draft.
- Center for Reproduction Law and Policy (2000) Making Abortion Safe, Legal and Accessible: A tool Kit for action New York USA.
- Chandrasekhar S. (1994) India's abortion experience: Denton, University of North Texas
- Charlotte E. Hord, Janie Benson, Jennifer L. Potts & Deborah L. Billings (2006) Unsafe abortion in Africa: an overview and recommendations for action Allan Gutmacher Institute, New York.
- Cohen S. and C.L. Richards (1994) The Cairo consensus; population, development and women, International Family Planning Prospective
- Cook J Rebecca (2006) Abortion and Human rights and International conference on population and Development (ICPD): faculty of Law, University of Toronto, Toronto, Ontario M5S 2C5, Canada
- David G Garson (2009) Regression stat notes: North Carolina State University
- Dixon-Mueller, R (1993) Abortion as a family planning: essay on birth control needs and risks, New York international women's health coalition.
- Elizabeth I. Ranson and Nancy V. Yinger (2002) Making motherhood safer: overcoming obstacles on the path way to care, Population Reference bureau.
- Emergency Contraception Website (2009) Effectiveness of Emergency Contraception: Princeton University Office of Population Research & Association of Reproductive Health Professionals www.ec.Princeton.edu/questions/index.htm



- Ethiopian Society of Obstetrician and Gynecologists (ESOG) (2000): Survey of unsafe abortion in selected health facilities in Ethiopia: A data base on Abortion literature
- Federal Democratic Republic of Ethiopia Criminal Code (2005) The Federal Democratic Republic of Ethiopia Proclamation number 414/2004 section ii Crime against life unborn: Abortion Article 545-552.
- Federal Ministry of Health (1998) Health and health related indicators: Federal Democratic Republic of Ethiopia, Addis Ababa, Ethiopia.
- _____ (2006) Technical and procedural Guidelines for safe abortion services in Ethiopia: Federal Democratic Republic of Ethiopia, Addis Ababa, Ethiopia.
- Giziework R and Solomon K (1999): A one year analysis of abortion, in Gondare College of Medical Science Hospital, retrospective study.
- James Trussell(2006) Frequently asked questions about emergency contraception: Princeton university office of population research.
- John Bongarts (1978) A framework of analyzing the proximate determinants of fertility, Population and development Review, Volume 4 No 1 New York.
- Johnes Hopkins School of public Health (1997) Maternal death can be prevented, Mary land USA, The Johnes Hopkins School of Public Health.
- Julie P. (2004) Introduction to Statistics and Data Analysis: Open University, McGraw-Hill.
- Kebede S. Jiac and W/.Mariam D. (2000) A survey of Illegal Abortion in Jimma Hospital south western Ethiopia: Ethiopian Journal of Health Development Volume (1).
- Konjit Kifetew(1998) Some socio demographic determinants and consequences of female adolescents sexual Behavior in Addis Ababa: A thesis submitted to school of Graduate studies, Addis Ababa University.
- Kwast BE; Rochal RW, Widad Kidane Mariam (1986) Maternal Mortality in Addis Ababa, Ethiopia: Studies in Family Planning, 17(6): 288-301.

- Lisanemariam Tenkir, Ababa G/mariam and Alemseged Janka(1999) Induced abortion among Jimma comprehensive High school Students knowledge, attitude and Practice: Ethiopian health science journal 9(1): 25-31.
- Loaiza E, 1997. Maternal Nutrition Status. DHS Comparative Study No. 24. Calverton, MD. Armenia National Statistical Service and ORC Macro
- Magone M. Jose and Basu M.Alaka, (2003): Socio cultural and political aspects of abortion: Greenwood publishing group.
- Marge Berer (2004) National Laws and unsafe abortion: the parameter of change: Reproductive health matters 12: 24: 1-8
- Medical Dictionary (2009) Illegal Abortion: Dictionary Encyclopedia and Thesaurus- The Free Dictionary [http:// www.medical-dictionary .thefreedictionary.com/illegal+abortion](http://www.medical-dictionary.thefreedictionary.com/illegal+abortion)
- Mekbib T Hiwot YG, Fantahun M. (2002) Survey of unsafe abortion in health facilities in Ethiopia. Sponsered by the Ethiopian society of obestercina and gynecologistsb, UNFPA and NORAD
- Mesganaw F., Fekadu C. Mesfin L.(1995) Knowledge, Attitude and Practice among senior high school students in north Gondar: Ethiopian Medical Journal 33: 21-29.
- Michelle Hindin (2007) Eliminating Unsafe abortion worldwide, Department of family and reproductive health volume 370, Johns Hopkins School of Public Health, New York.
- Mpangile GS, Lesahabari MT, Kihhwele DJ. (1999) Induced abortion in Dar-es-Salaam, Tanzania: the plight of adolescents. New Delhi, Vistaar Publications, and London, Zed Books.
- Muia Esther, Charlotte Ellertson, Shelley Clark, Morse Lukhands,Batya Elul Joyce Olenja, and Elizabeth Wesley, (2000). What do family planning clients and university students in Nariobi, Kenya, know and think about Emergency contraception? African Journal of reproductive Health 4(1):77-87.

- Mundingo I. Axel (2006) Determinants of unsafe induced abortion in developing countries: Allan Guttmacher Institute 1301 Connecticut Avenue NW, Suite 700 Washington, DC 20036, USA
- Neggusie Taffa(1998) Sexuality of Out-of-School Youth, and Their Knowledge and Attitude about STDs and HIV/AIDS in Southern Ethiopia. *Ethiopian Journal of Health Development*, 12(1): 17-22.
- Rachael N. Pine (1993) Achieving Public health objectives through family planning services: *Reproductive Health Matters* 1:2 Making abortion safe and legal London, UK.
- Remez L. 2003. Three Differing Emergency contraceptive Regimens are Equally Effective; *International family planning perspectives* 29(2): 98-99.
- Remez L., Singh S., Bixby L. R., and Bankole A. (2008) Ensuring a Healthier Tomorrow in Central America: Protecting the Sexual and Reproductive Health of Today's Youth, New York: Guttmacher Institute.
- Sandra G, Carrie T, Davida B, Karen SA, Karin L and Charlotte E (2004) Policy implication of a national public opinion survey on abortion in Mexico: *Reproductive health matters* 12: 24: 65-74
- Sedge G., Hessian R., Bankole A., and Singh S. (2007) Women with an Unmet Needs for Contraceptives in Developing Countries and Their Reasons for Noot Using a Method Occasional Report No.37. New York: Guttmacher Institute.
- Senbeto E., Degu G., Anbeso N. and Yeneneh H.(2005) Prevalence and associated risk factors of induced abortion in north western Ethiopia: *Ethiopian Journal of health development* 19:9
- Shah IH., Sedge G., Henshaw S., Sighn S., and Ahman E. (2007) Induced abortion; rates and trends worldwide, *Lancet*
- Shah Iqbal and Ahman Elisabeth (2004) Age patterns of unsafe abortion in developing country regions: *Reproductive health matters* 12: 24: 9-17

- Singh S., Darroch JE., Vlassof M., Nadeau j. (2003) Adding It Up: The Benefit of Investing in Sexual and Reproductive Health Care. New York: Allan Guttmacher Institute.
- Steele Cynthia and Chiarotti Susan (2004) With Everything Exposed: Cruelty in Post Abortion care in Rosario, Argentina: Reproductive health matters 12: 24: 39-46
- United Nation (UN) (1996) Population and Women: proceeding of the United Nations Experts Group Meeting on Population and Women, New York.
- _____ (2007) World Abortion Policies: A Global Review, UN's Department of Economics and Social Affairs: Population Division, New York.
- World Health Organization (WHO) (1989) Approaches to adolescents: health of Young People
<http://www.un.org/jint/who>
- _____ (WHO) (2006) Unsafe Abortion: the preventable pandemic, sexual and reproductive health volume 14 Geneva Switzerland.
- _____ (2007) Facts of Induced Abortion Worldwide: Department of Reproductive Health and Research, Geneva Switzerland.
- _____ (2008) Access to Abortion in Africa and Latin America: Department of Reproductive Health and Research, Geneva Switzerland.
- Yoseph S. Gossa A. Tadesse E. (1993) A survey of illegal abortion in Addis Ababa (unpublished report).
- Yoseph S. and Kifle G. (1988) A six-year review of maternal mortality in a teaching hospital in Addis Ababa: Ethiopian Medical Journal.

Appendices

Appendix- 1

**ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
INSTITUTE OF POPULATION STUDIES**

Survey Instrument: Questionnaire

**TITLE: FEMALE YOUTH KNOWLEDGE AND ATTITUDE TOWARDS
INDUCED ABORTION IN BISHOFTU TOWN, OROMIA REGION**

Confidentiality and Consent

Dear respondent,

We are conducting a study to assess the attitude and knowledge of female youth age 15-24 towards induced abortion that would attempt to provide some hints and information that are necessary to help policy makers to develop measures for solving problems related to unsafe abortions.

Respected respondents your assistance is very important to attain the objective of the study you are kindly requested to give reliable and accurate information. You do not need to express your name and the information you give will be kept strictly confidential. You have also the right not to answer questions that you do not want to answer.

The study will take half an hour on average and the study has approved from Addis Ababa University. May I continue? If yes, thank and continue interviewing. If No, thank and stop interviewing.

Identification

1. Identification number of respondents
2. Date of interview
3. Interviews Name _____, signature _____
4. Supervisor who checked questionnaire for completeness and accuracy

Name _____, sign _____, date, _____

Section one

Characteristic of Respondents and Their Parents

101. How old are you? (In completed years) _____
102. What is your religion?
1. Orthodox 2. Muslim 3. Protestant 4. Catholic 5. Other
103. What is your ethnic group?
1. Oromo 2. Amhara 3. Tigre 4. Gurage 5. Other (specific _____)
104. What is your marital status?
1. Single 2. Married 3. Divorced/separated 4. Widowed
105. Have you attend permanent Education/ schooling?
1. No 2. Yes /specify the highest level of education you completed _____
106. What is your occupation?
1. Student 2. Housewife 3. Housemaid 4. Unemployed
5. Government employee 6. Trader 7. Daily laborer
8. Other (specify)
107. Do you have monthly income?
1. No 2. Yes/specify the amount in Birr _____
108. What is your family size? _____
109. What is your current living arrangement/ with whom are you living now?
1. Living alone 2. living with mother alone 3. Living with father alone
4. Living with both parents 5. living with relatives 6. living with friend/s
7. Living with partner/husband 8. Living in school/university
9. Other/specify _____
110. How frequent do you attend religious institutions
1. 2 or more times a week 2. Once a week
3. Only in religious festivals/occasionally 4. Do not attend

**ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
INSTITUTE OF POPULATION STUDIES**

**Survey Instrument: Questions for Focus Group Discussions
TITLE: FEMALE YOUTH KNOWLEDGE AND ATTITUDE TOWARDS
INDUCED ABORTION IN BISHOFTU TOWN, OROMIA REGION
Questions for Focus Group Discussions (FGDs):**

1. What is the legal status of induced abortion in our country (Ethiopia)?
 - Legal
 - Illegal
 - Illegal but allowed under certain circumstances
2. Does unsafe /illegal abortion affect (negatively) the health of the woman? If so what are these health risks?
3. Does unsafe/illegal abortion a major health problem in your area of residence (In and around Bishoftu town)? Or do you know some one suffer/die from complications of unsafe abortion?
4. Which of the following three statements most accurately reflect your view on an induced abortion?
 - A woman should have the right to an induced abortion, when she so choose.
 - An induced abortion should be permitted only under certain circumstances.
 - An induced abortion should be prohibited in all cases.
5. At times an induced abortion is the best option, in a difficult situation?
6. If Ethiopia liberalized more the abortion law, what will be its effect on maternal mortality?
 - Increase
 - Decrease
 - Stay at the same level

Thank for their cooperation

Appendix -3

Table1-A: Bivariate Results of Respondents Knowledge and Attitude of Induced Abortion by Different Factors Bishoftu, February 2009

Variables	Support induced abortion		p-Value	(X2)	Knowledge of Unsafe Abortion		P-value	(X2)
	Yes	No			Yes	No		
Age								
15-19	200 (59.5)	136 (40.5)	P<0.001	63.558	259 (77)	77 (23)	P<0.001	53.618
20-24	320 (86)	52 (14)			356 (95.7)	16(4.3)		
Total	520	188			615	93		
Ethnicity								
Oromo	209 (72.5)	79 (27.5)			250 (86.8)	38 (13.2)	.503	4.333
Amhara	163 (70.2)	59 (29.8)			196 (88.7)	25 (11.3)		
Gurage	81 (72.9)	30 (27.1)			94 (84.7)	17 (15.3)		
Tigre	47 (82.4)	10 (17.6)			51 (89.5)	6 (10.5)		
Others	20 (66.6)	10 (33.4)			23 (76.7)	7 (23.3)		
Total	520	188	.613	3.570	615	93		
Religion								
Orthodox	317 (74.7)	107 (23.3)	.534	3.144	370 (87)	55 (13)	.215	5.798
Protestant	101 (70.1)	43 (29.9)			123 (85.4)	21 (14.6)		
Muslims	70 (72.1)	27 (27.9)			83 (87.4)	12 (12.6)		
Catholic	32 (74.4)	11 (23.6)			39 (88.6)	5 (11.2)		
Others	520	188						
Total					615	93		
Educational level								
No schooling	11 (22.9)	37 (77.1)	P<0.001	202.041	26 (54.2)	22 (45.8)	P<0.001	185.572
Grade 1-8	82 (45)	100 (55)			117 (64.3)	65 (35.7)		
Grade 9-12	342 (87.9)	47(12.1)			383 (98.5)	6 (1.5)		
Above grade 12	85 (95.5)	4 (4.5)			89 (100)	-		
Total	520	188			615	93		
Marital status								
Never married (single)	455 (82.4)	97 (17.6)	P<0.001	103.615	474 (85.7)	78 (14.3)	.140	2.173
Ever married	65 (41.7)	91(58.3)			141 (90.3)	15 (9.7)		
Total	520	188						
Occupation								
Students	225 (78.4)	62 (21.6)	P<0.001	63.333	247 (86.1)	40 (13.9)	P<0.001	30.229
House wives	24 (34.3)	46 (65.7)			64 (91.4)	6 (8.6)		
Govt & private employec	150 (83.8)	29 (16.2)			172 (96.1)	7 (3.9)		
Unemployed &others	121 (70.3)	51 (29.7)			132 (76.7)	40 (23.3)		
Total	520	188			615	93		
Monthly income								
Have income	205 (72.2)	79 (27.8)	.523	0.388	240 (83.3)	44 (16.7)	.129	2.310
Have no income	315 (74.3)	109 (25.7)			375 (88.4)	49 (11.6)		

Total	520	188			615	93		
Family size								
1-3	128 (65)	69 (35)			180(91.3)	17 (8.7)		
4-6	324 (77)	96 (23)			369(85.8)	61 (14.2)		
>6	58 (71.6)	23 (28.4)			66(81.5)	15(18.5)		
Total	520	188	P<0.01	11.332	615	93	.050	5.979
Living arrangement								
With both parents	257 (82.1)	56 (17.9)			292(93.3)	21 (6.7)		
With single parent	97 (89.8)	11 (10.2)			98(90.7)	10 (9.3)		
Alone	33 (75)	11 (25)			40 (90.9)	4 (9.1)		
Husband (Partner)	58 (46.4)	67 (53.6)			113(90.4)	12 (9.6)		
Others	75 (63.6)	43 (36.4)			80(63.5)	38 (36.5)		
Total	520	188	P<0.001	79.733	615	93	P<0.001	47.866
Religiosity(attend religious institutions)								
Two/ more times a week	24 (32)	51(68)			619(81.3)	14 (18.70)		
Once a week	144 (59)	100 (41)			192(78.7)	52 (21.3)		
Occasionally	272 (89.2)	33 (10.8)			284(93.1)	21 (6.9)		
Never attend	80 (95.2)	4 (4.8)			78(92.8)	6 (7.2)		
Total	520	188	P<0.001	151.280	615	93	P<0.001	29.392
Knowledge of any contraceptive								
Yes	498 (76.5)	153 (23.5)			603(92.6)	48 (7.4)		
No	22 (38.6)	35 (61.4)			12(26.7)	43 (73.3)		
Total	520	188	P<0.001	38.604			P<0.001	x2
Attitude of contraceptives								
Yes	485 (81.6)	109 (18.2)			559(94.1)	35 (5.9)		
No	35 (30.7)	79 (69.3)			56(49.1)	58 (50.9)		
Total	520	188	P<0.001	127.297	615	93	P<0.001	169.629
Ever use of contraceptives								
Yes	323 (85)	57 (15)			374(98.4)	6 (1.6)		
No	197 (60)	131 (40)			241(73.5)	87 (16.5)		
Total	520	188	P<0.001	56.142	615	93	P<0.001	96.010
Current use of contraceptive								
Yes	270 (84.6)	49 (15.4)			313(98.1)	6 (1.9)		
No	250 (64.3)	139 (35.7)			302(77.6)	87 (22.4)		
Total	520	188	P<0.001	37.298	605	93	P<0.001	64.454
Know unsafe abortion history								
Yes	300 (87)	45 (13)			338(97.8)	7 (2.2)		
No	220 (60.6)	143 (39.4)			277(76.3)	86 (23.7)		
Total	520	188	P<0.001	62.976	615	93	P<0.001	72.747
Mothers education								

No schooling	190 (61.5)	119 (38.5)			251(81.2)	58 (18.8)		
Grade1-8	87 (77.7)	25 (22.3)			98(87.5)	14 (12.5)		
Grade 9-12	181 (86.1)	29 (13.9)			198(94.3)	12 (5.7)		
Above grade 12	31 (75.6)	10 (24.4)			36(87.8)	5 (12.2)		
Not alive	31 (86.1)	5 (13.9)			32(88.9)	4 (11.1)		
Total	520	180	P<0.001	44.231			P<0.01	18.935
Mothers occupation								
House wives	178 (61.4)	112 (38.6)			238(84.7)	52 (15.3)		
Govt employee	103 (85.8)	17(14.2)			112(93.3)	8 (6.7)		
Own work	142 (81.1)	33 (18.9)			157(89.7)	18 (10.3)		
Traders	61 (79.2)	16 (20.8)			68(88.3)	9 (11.7)		
Unemployed	31 (83.8)	6 (16.2)			8(80)	2 (20)		
Not alive	5 (50)	5 (50)			32(88.9)	4 (11.1)		
Total	520	188	P<0.001	44.017	615	93	P<0.05	15.681
Mothers monthly income								
No income	208 (63.6)	119 (36.4)			270(82.6)	57 (17.4)		
1-500 birr	116 (77.3)	34 (22.7)			129(86)	21 (14)		
501-1000 birr	171 (85)	30 (15)			11(5.5)	190 (94.5)		
Above 1000 birr	25 (83.3)	5 (16.7)			4(13)	26 (87)		
Total	520	188	P<0.001	32.829	615	93	P<0.01	15.732
Fathers education								
Not alive	52 (80)	13 (20)			56(86.2)	9 (13.8)		
No schooling	85 (57.4)	63 (42.6)			105(70.9)	43 (29.1)		
Grade 1-8	85 (66)	44 (44)			115(89.1)	14 (10.9)		
Grade 9- 12	179 (79.5)	46 (20.5)			206(91.5)	19 (8.5)		
Above grade 12	119 (84.4)	22 (15.6)			133(94.3)	8 (5.7)		
Total	520	188			615	93		
			P<0.001	37.643			P<0.001	44.328
Fathers occupation								
Not alive	52 (80)	13 (20)			56(86.2)	9 (13.8)		
Govt employee	162 (82.2)	35 (17.8)			188(95.4)	9 (4.6)		
Own work	188 (70.4)	79 (29.6)			219(82)	48 (18)		
Traders	84 (76.4)	26 (23.6)			100(90.9)	10 (9.1)		
Unemployed	5 (62.5)	3 (37.5)			8(100)	0		
Daily laborer	21 (48.8)	24 (51.2)			28(62.2)	17 (37.8)		
Other	8 (50)	8 (50)			16(100)	0		
Total	520	188			615	93		
			P<0.001	32.520			P<0.001	47.342
Fathers monthly income								
No income	56(76.7)	17 (23.3)			64(87.7)	9 (12.3)		
1-500 birr	96 (61.2)	61 (38.8)			111(70.7)	46 (29.3)		
501-1000 birr	256 (75.1)	85 (24.9)			313(91.8)	28 (8.2)		
Above 1000 birr	112 (81.8)	25 (18.2)			127(92.7)	10 (7.3)		
Total	520	188	P<0.001	17.887	615	93	P<0.001	47.328

(Figure in prentices is percentages)

2. Implementation guide for Article 551 sub-article 1B

► Where the continuation of the pregnancy endangers the life of the mother or the child or the health of the mother or where the birth of the child is a risk to the life or health of the mother

- The provider should, in all good faith, follow the knowledge of standard medical indications that necessitate termination of pregnancy to save the life or health of the mother.
- The woman should not necessarily be in a state of ill health at the time of requesting safe abortion services. It is therefore the responsibility of the health provider in charge to assess the woman's conditions and determine in good faith that the continuation of the pregnancy or the birth of the fetus poses a threat to her health or life.

3. Implementation guide for Article 551 sub-article 1C

► Where the fetus has an incurable and serious deformity

- If the physician after conducting the necessary tests makes the diagnosis of a physical or genetic abnormality that is incurable and/or serious, termination of pregnancy can be conducted.

4. Implementation guide for Article 551 sub-article 1D

► Where the pregnant woman, owing to a physical or mental deficiency she suffers from or her minority, is physically as well as mentally unfit to bring up the child

- The provider will use the stated age on the medical record for age determination to determine whether the person is under 18 or not. No additional proof of age is required.
- A disabled person is one who has a condition called disability that interferes with his or her ability to perform one or more activities of everyday living. Disability can be broadly categorized as mental or physical.
- It is therefore the responsibility of the health provider in charge to assess the woman's conditions and determine in good faith that the woman is disabled either mentally or physically.
- Termination of pregnancy under Article 551 sub-article 1D will be done after proper counseling and informed consent.

5. Implementation guide for Article 551 sub-article 2

- In the case of grave and imminent danger, which can be averted only by an immediate intervention, an act of terminating pregnancy in accordance with the provisions of Article 75 of this Code is not punishable
- Health providers responsible for the provision of comprehensive abortion care services are authorized to perform abortion procedures on women whose medical conditions warrant the immediate termination of pregnancy.

Applicable for all sub-articles:

- The provider has to secure an informed consent for the procedure using a standard consent form.
- The provider shall not be prosecuted if the information provided by the woman is subsequently found to be incorrect.
- Minors and mentally disabled women should not be required to sign a consent form to obtain an abortion procedure (FMOH, 2006).

Some Articles which may give general knowledge of the FDRE criminal code of 2005

Article 75- Necessity

As an act which is performed to protect from an imminent and serious danger a legal right belonging to the person who performed the act or a third party is not liable to punishment if the danger could not have been otherwise averted.

No exemption shall apply in the case of a similar act done by person having a special professional duty to protect life or health; however, the court may reduce the penalty without restriction (Art. 180).

Article 90- Fine; Principles to be Applied When Fine Imposed.

- (1) Fine is paid money, and is forfeited to the state: subject to any provision of the law to the country, it may extend from ten Birr to ten thousand Birr. However, in the case of a juridical person fine may extend from one hundred up to five hundred thousand Birr.
- (2) In fixing the amount of the fine, the court shall take into consideration the degree of guilt, the financial condition, the means, the occupation and earnings there from, the age and health of the criminal.
- (3) When the penalty provided for by the special part of this code is only imprisonment and the criminal is a juridical person, the punishment shall be a fine not exceeding ten thousand Birr for a crime punishable with simple imprisonment not exceeding five years, a fine of up to twenty thousand Birr for a crime punishable with rigorous imprisonment not exceeding five years, a fine of up to fifty thousand Birr for a crime punishable with rigorous imprisonment more than five years but not exceeding ten years, a fine of up to the general maximum laid down in sub-article(1) for a crime punishable with rigorous imprisonment Exceeding ten years.
- (4) Where only fine is provided for in the Special part of this code, and where the criminal is a juridical person, the fine shall be five fold.

Article 106- Simple Imprisonment

(1) Simple imprisonment is a sentence applicable to crimes of not very serious nature committed by person who are not a serious danger to society.

Without prejudice to conditional release, simple imprisonment may extend for a period of from ten days to three years. However, simple imprisonment may extend up to five years where, owing to the gravity of the crime, it is prescribed in the special part of this code, or where there are concurrent crimes punishable with simple imprisonment, or where the criminal has been punishable repeatedly.

The court shall fix the period of simple imprisonment in its judgment.

(2) The sentence of simple imprisonment shall be served in such prison or in such section thereof as is appointed for the purpose.

Article 108- Rigorous Imprisonment

(1) Rigorous Imprisonment is a sentence applicable only to crimes of a very grave nature committed by criminals who are particularly dangerous to society.

Besides providing for the punishment and for the rehabilitation of the criminal, this sentence is intended also to provide for a strict confinement of the criminal and for special protection to society.

Without prejudice to conditional release, the sentence of rigorous imprisonment is normally for a period of one to twenty-five years but where it is expressly so laid down by law it may be for life.

(2) The sentence of rigorous imprisonment shall be served in such prisons as are appointed for the purpose.

The conditions of enforcement of rigorous imprisonment are more sever than those of simple imprisonment.

Article 180- Free Mitigation.

In cases where the law provides the mitigation without restriction of the penalty under this Article, whether compulsorily or optionally, the court shall have power to determine it in accordance with the following principles:

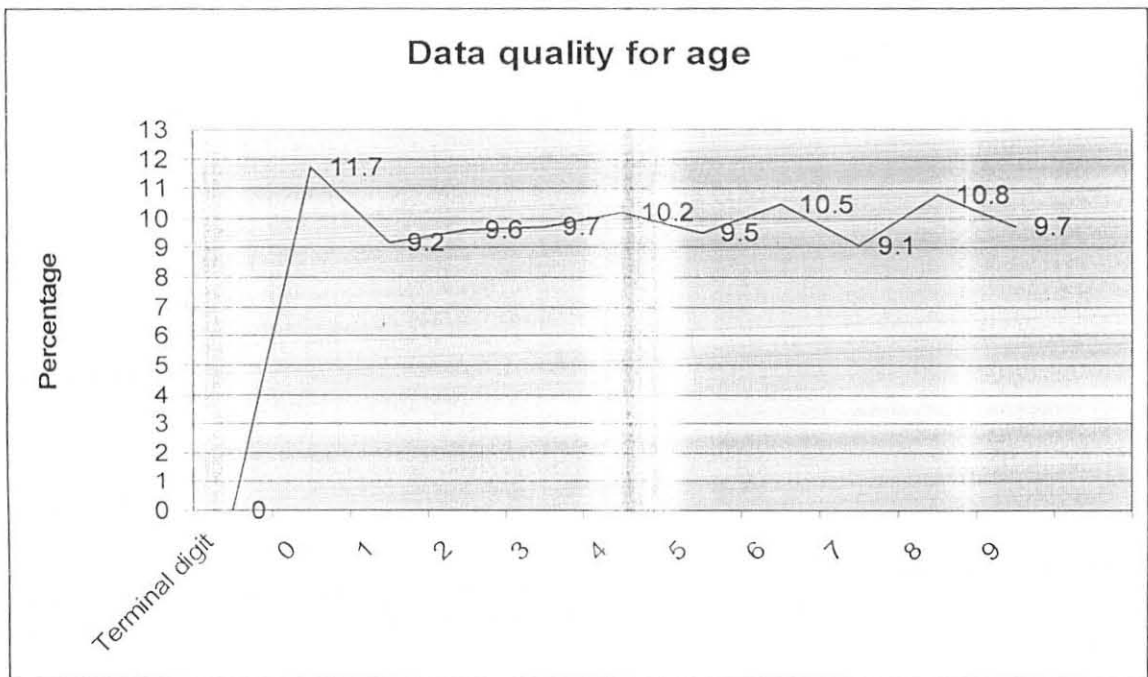
The court shall not be bound by the kind of penalty provided in the special part of this code for the crime to be tried, nor by the minimum which the provision provides; it may without restriction impose a sentence for a term shorter than the minimum period prescribed or substitute a less severe sentence for the sentence provided; however the court shall be bound solely by the general minimum provided in the General Part, (Arts. 90, 106 and 108) as regards the penalty it imposes, whatever its nature may be.

Appendix 7

Co-linearity diagnostics table for female youth support induced abortion upon a woman's demand

	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
Age of the respondents	.639	1.565
Occupation of the respondents	.417	2.401
Monthly income of the respondents	.505	1.979
Monthly income of the respondents mother	.864	1.158
Monthly income of the respondents fathers	.868	1.152
Respondents knowledge of any contraceptive	.653	1.532
Respondents attitude of contraceptive use in general	.634	1.578
Respondents ever use of contraceptive	.549	1.821
respondents educational level	.548	1.826
Religious attendans of the respondents	.758	1.320
Marital status of the respondents	.708	1.413

a Dependent Variable: Support an induced abortion on the woman demand



DECLARATION

I, the undersigned, declare that this thesis is my original work and has not been presented for a degree in this or another university, and that all sources of material used for the thesis have been duly acknowledged.

Name: Tsegaye Moshe

Signature: 

Place: Addis Ababa University

Date of Submission: June, 2009

This thesis work has been submitted for examination with my approval as university advisor.

Dr. Amare G/Egziabher

Advisor's Name

signature

Date

W/ro Emebet Mahmoud

Advisor's Name



signature

June 30/09
Date