Causes of unintended pregnancy among adolescents in Addis abeba, Ethiopia

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Dedication

To my late parents Mr. Biteza Mpova Nalenga Gabriel and Mrs Cirezi Mwa Machara Césarine who gave me life and decided to send me at school, without school I could not reach to this level.

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Abstract

Introduction

Unintended pregnancy among adolescents represents an important public health challenge in many countries, especially in developing countries. Numerous prevention strategies have been employed by countries across the world, in an effort to address this problem. However, the adolescent unwanted pregnancy still increasing in Africa, particularly in Ethiopia. It is why the researcher would like to assess the risk factors influencing the raise of this issue.

The aim of the study was to identify the causes of unintended pregnancy among adolescent girls in Addis Ababa, Ethiopia.

Methods

Selection criteria

The samples were selected purposely being: pregnant adolescent girls attending antenatal clinic or adolescents at secondary school aged between 15 and 19 years old, and willing to participate in the study.

Data collection and Analysis

It was 2 groups of totally 20 people. One interviews group of 10 pregnant adolescent girls at hospital and one focus group of 10 adolescents at secondary school. Participants are coming from different areas and the focus group is mixed with boys and girls. The study was conducted from September 2009 to April 2010. Information was obtained using an interview guide with in-depth interview.

Findings

Survey results show that socio-economic factors and lack of reproductive health services are contributing to the increase of unintended pregnancy among adolescents in Ethiopia, such as economic status, education, religion, place of residence, peers and partners' behaviors, family and community attitudes, gender and age, and mass media. Furthermore, lack of access to contraceptive methods and reproductive health education.

Some girls started their first sexual intercourse as early as 13 years old, but the mean of the first sexual activity both in interviews and focus groups was 15 (14, 7) years old for girls, while boys start it between 16 and 17years old.

7 of 10 girls could not write or read, or interrupted their study at primary school. 4 out of 10 adolescents had sex because of lack of money or sex exchange for gifts, while 2 out of 10 did it for love, affection for partner and curiosity. Some participants, both female and male admitted to have more than 1 partner. Half of girls were willing to use contraceptive methods but they were facing some obstacles such as lack of awareness, partner's objection and lack of money to purchase them. Most of boys did not use condoms. Results from the study also indicate that Christian adolescents are more open to talk about sex publically than Muslim adolescents and those living in urban area have more knowledge on contraceptive methods than urban adolescents. And most of participants both girls and boys were reluctant to VCT services.

The study also finds that the harmful traditional practices were contributing to unintended pregnancy; Half of interviewees were victims of FGC, 3 out of 10 girls were suffered an early marriage before the legal age of 18, and 1 out 10 was victim of sexual abuse or child labor. The main source of information on RHE were school and/or health centre. Most of pregnant adolescents experienced major stressors leading to health and psychosocial problems, most importantly school and job termination, partner's negative attitude, and religious sanction, verbal abuse from family members, discrimination and stigmatization as result of the unintended pregnancy.

Conclusion

In view of our findings, empowering adolescents in education combined with access to contraceptive methods, reproductive health education, micro-credits and improved health services may contribute in preventing unintended pregnancy among adolescents. Parents, teachers, religious groups and health care providers, NGOs and government as stakeholders in adolescent reproductive health, should advocate to provide these services to youth.

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Abbreviations and Acronyms

ARH	Adolescent Reproductive Health
AYRH	Adolescent Youth Reproductive Health
BIDS	Bangladesh Institute of Development Studies
CIA	Central Intelligence Agency (US)
CORHA	Comprehensive Sexual and Reproductive Health Programs for Adolescents
CSA	Central Statistics Agency (ET)
DFID	Department for International Development (UK)
DHS	Demographic Health Survey
EDHS	Ethiopia Demographic Health Survey
EPRDF	Ethiopian People's Revolutionary democratic Front
FDRE	Federal Democratic Republic of Ethiopia
FGD	Focus Group Discussion
FGC	Female Genital Cutting
FGM	Female Genital mutilation
FIH	Family International Health
GBV	Gender Based Violence
HTP	Harmful Traditional Practice
ICPD	International Conference on Population and Development
INGO	International Non-governmental organization
MDG	Millennium development Goal
MEDaC	Ministry of Economic Development and Cooperation
MOE	Ministry of Education
MOH	Ministry of Health
NCTEP	National Committee on Traditional Practices of Ethiopia
NFFS	National family and Fertility Survey
NGOS	Non Governement Organisations
PAI	Population Action International
RA	Research assistant
RHE	Reproductive Health Education
SNNPR	Southern Nations, Nationalities and Peoples Region
SEL	Social and Emotional Learning

UDHR	Universal Declaration of Human Rights
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children Fund
UNDP	United Nations Development Programs
USAID	United States Agency for International Development
WHO	World Health Organization

1.0. Introduction

Unwanted pregnancy among adolescents is a worldwide health problem that affects girls, their families and society. Unwanted pregnancy can result from unprotected sex, contraceptive failure or from sexual violence (rape).

Ethiopia where the present study is taking part is one of the African countries where unwanted adolescent pregnancy is a health challenge. Population under 18 is about 39 millions (UNICEF 2006), of the total population estimated to 85, 2 million (MOH 2002a) and 24 % of girls are giving birth before the age of 18 (UNFPA 2005). Several studies have shown that mean age of adolescents to become pregnant in Ethiopia rural area is 16 years.

The fertility of Ethiopia women is among the highest in sub-Saharan Africa. Ethiopian woman have an average of 5.9 children each. The high total fertility rate for women has led to high population growth rate of 3.2 percent per year.

Gillam,Yates and Badranath (2007) argue that fertility in developing countries is most influenced by universality of marriage, lower age at marriage, low level of literacy, poor standard of living, limited use of contraceptives and traditional ways of life.

Teenage pregnancies are of concern because they have negative health and socioeconomic consequences for parents, children and for the community as a whole. Because of physiological immaturity, it can cause pregnancy complications to young mothers. Teen mothers are at greater risk of maternal morbidity (e.g. premature labor, anemia, Eclampsia, high blood pressure…) and maternal mortality. 25 000 women and girls die each year in Ethiopia due to pregnancy related-complications (USAID 2008). Adolescent mother are also inexperienced with child care practices including maternal and infant health. Some pregnant girls turn to induced abortion to avoid unintended or unplanned births, and this may result to maternal death. Infants who are born to very young mother experience greater risk of prematurity, low birth weight, birth injuries and mortality (Zabin and Kiragu 1992). The child and maternal mortality rates is among the highest in Africa; approximately 870 mothers die out of every 100,000 live births (DHS 2000), and 123 children under-5 die per 1000 live births in Ethiopia (UNICEF 2006). Moreover, regarding the socioeconomic consequences, adolescent girls leave home and begin conjugal life depending economically on men and adult work; and an early start to childbearing greatly reduces the educational and employment opportunities of women which is again associated with higher level of fertility.

The youth reproductive health problems in Ethiopia are multifaceted and interrelated. The Ethiopian Demographic Health Survey (EDHS 2005) showed that traditional harmful practices such as abduction and early marriages still persistent. This practice was common, especially in Oromia and southern regional states, and young women in rural areas were twice as likely to be abducted. Nationwide, many married women reported having been abducted for marriage, even beaten. Over 40 % of girls were mothers before they turn 19. And repeated pregnancies undermined their health and families for years.

According to the Ethiopian ministry of health, abortion accounts for 60 % of gynecological and almost 30 % of all obstetric and gynecological admissions. And over half of 19 million women who annually seek abortions in Ethiopia are under 18 (AYRH 2007). Deaths from pregnancy and abortion related causes are 1 in 7 women (population action international 2006). As most African countries, abortion is still illegal in Ethiopia.

It was noted that early childbearing, short birth intervals and having more than 6 children greatly increase her likelihood of childbirth complications and death. Another widespread issue was female genital mutilation; with more than half of 15- to 19-year-old girls had been circumcised.

According to UN report (2005) Ethiopia is one of the seven countries (Bangladesh, Brazil, the Democratic Republic of the Congo, Ethiopia, India, Nigeria and the United States), expected to account for half of the world's projected population increase by 2005-2050. The access to reproductive health services that could contribute to address those issues are limited, particularly in rural area, as evidenced by the female contraceptive rate of only 14, 7 percent (UNFPA 2006). Furthermore the situation is aggravated by the overall poor socioeconomic environment. Because of the complex nature of the problems, youth reproductive health strategies demand a multisectoral and integrated approach.

In 2007 Ethiopia (the Ministry of Health 2007) in collaboration with United Nations agencies launched a national strategy on adolescent and reproductive health that aims to tackle the problems of early marriages and teen pregnancies, female circumcision, abduction and rape, and poor access to healthcare for 10 to 24 year old. The strategy planned to address also the problems of polygamy, poor use of contraception and abortions. The Adolescent and Youth Reproductive Health Strategy (AYRH) were planned to be implemented over 8 years as government's commitment to improving the reproductive health status of young Ethiopians.

In the meantime, unwanted pregnancy is still a nightmare for young Ethiopians as it is confirmed by the health ministry statement that youth reproductive health is still one of the major problems in Ethiopia. Unmarried pregnant girl is considered as a shame in Ethiopia society (culture or tradition). She may be thrown out of home, drop out of school, and then being exposed to commercial sex work with possible HIV contamination (www.ppgg.org).

However, up to date, only few studies have researched on the topic of unintended pregnancy among adolescents in Ethiopia, while unwanted pregnancy is among the main youth reproductive health problems in Ethiopia (UNFPA 2007). This is why i would like to investigate the causes of unwanted pregnancy among adolescents in Ethiopia. By identifying the causes of unwanted pregnancy among adolescents, I am hoping to contribute to increase the knowledge and make recommendations in how to empower youth in order to reduce unwanted pregnancy and sexually transmitted infections (STI) including HIV/AIDS in the community. The following are the aim of the study.

1.1. The aim of the study is:

To identify the causes of unintended pregnancy among Ethiopian adolescents? And these are the questions I attempted to answer in this study:

- Are socio-economical risk factors influencing unwanted pregnancy among adolescents?
- Are adolescents provided all the information and services needed to engage in a free and safe sexual intercourse?
- Do adolescents have free access to contraceptive methods and reproductive health services available in the community?
- How can unintended pregnancy be prevented among adolescents?

The results of the present study can hopefully be used to improving adolescent reproductive health programs in Ethiopia.

2.0. Background and theory

2.1. Back ground information on Ethiopia

The federal democratic republic of Ethiopia is situated on the horn of Africa, in eastern Africa. It has boundary with Sudan in west, Eritrea and Djibouti in the north, Kenya in south and Somali in east. Ethiopia is one of the biggest countries in sub Sahara, with a total area of 1 127 127 square kilometers. The country is described as a piece of mosaic with regards to its geography, history and people. Ethiopia has a rich history with its own language and alphabets. The population of Ethiopia is estimated at 85, 2 millions (CIA 2009) of these 84 % are found in rural areas (CSA 2008). The estimated population growth rate is 3, 2. On average a women in Ethiopia give birth to 6 children. Life expectancy at birth is 53 for men and 58 years for women (CIA 2009). It has about 80 ethnic groups but the main ethnic groups are: Oromo 40 %, Amhara 25 %, Sidama 9 %, Tigre 7 %, Somali 6 %, Wolaita 4 %, Afar 4 %, Gurage 2 % and other nationalities 3 % (UN report 2008). Religions are: Ethiopian Orthodox Christian 40 %, Sunni Muslim 45-50 %, Protestant 5 %, remainder indigenous beliefs. Languages: Amharic (official), Tigrinya, Arabic, Guaragigna, Oromifa, English and Somali. The literacy rate is according to the ministry of education (MOE 2005) 41, 5 % (33, 8 % for women and 49, 2 % for men).

The capital city is Addis Ababa with about 3 million inhabitants (3 384 569 people, central statistic agency (CSA 2007) of Ethiopia). Other main cities are: Nazareth, Dire Dawa, Asela, Gondar, Jimma and Axum.Addis Ababa is the headquarters of the African Union (AU) and the United Nations Economic Commission for Africa (UNECA).

Major health challenge are for example malaria, HIV/AIDS, infant mortality (97 per 1000), under 5 mortality 140.1 per 1000 and maternal mortality (871 per 100 000). Ethiopia is among the eight countries (Bangladesh, Pakistan, India, Indonesia, Nepal, Nigeria and Uganda) where the maternal and child deaths are higher worldwide (UNFPA 2007). In 2007 it was estimated that the adult HIV prevalence was 2, 1 % but there are large differences between the regions and between urban and rural areas (CIA 2009). In 2008, only 33 % of the population had access to safe drinking water (DFID 2009). Health problems associated with infection diseases and nutritional deficiencies amenable to preventive measures. Widespread poverty, high unemployment, low education level, inadequate access to safe water, sanitation facilities and health services contributes to the poor health situation. Young girls throughout the

country face additional problems related to harmful traditional practices such as female genital mutilation, early marriage and abduction.

Ethiopia is unique among African countries; the ancient Ethiopian monarchy maintained its freedom from colonial rule, with the exception of the 1936-41 Italian occupation during World War II. In 1974 a military junta, the Derg, deposed Emperor Haile SELASSIE (who had ruled since 1930) and established a socialist state. Torn by bloody coups, uprisings, wide-scale drought, and massive refugee problems, the regime was finally toppled in 1991 by a coalition of rebel forces, the Ethiopian People's Revolutionary Democratic Front (EPRDF) and the new regime made Ethiopia a federal republic. Ethiopia is composed of nine regions based on ethnicity and linguistic affiliation: Afar, Somali, Ahmara, Oromia, Gambella, Benishangul Gumuz, Tigray, Hara and the south nations, nationalities and peoples region (SNNPR), and 3 city charters; Addis Ababa, Dire Dawa and Hara. The regions are divided into zones and further into woredas (municipalities).

2.2. What is adolescence?

Adolescence (in Latino: *adolescere* = to grow) is defined by World Health Organization (WHO 2003) as the period between 10-19 years. It is the transitional stage from childhood to adulthood. This is a period where physical, biological, emotional and cognitive change occurs. According to Dania and Jacques (1991), adolescence period is divided in 3 groups: early adolescence (10-13 years of age) middle adolescence (14-16 years of age) and late adolescence (17-19 years of age).

The period between childhood and adulthood is a time of profound biological, social, and psychological changes accompanied by increased interest in sex. And adolescents today are growing up in a culture in which peers, TV and movies, music, news papers and magazines transmit subtle and obvious messages that influences unmarried sexual relationship. Specifically those involving teenagers are common, accepted, and even expected. This interest places young people at risk of unintended pregnancy, with consequences that present difficulties for the individual, family, and community. There are negative associations between early childbearing and numerous economic, social, and health outcomes. In society, unintended early childbearing has tremendous social and financial costs.

2.3. Puberty

Puberty is a period of several years in which rapid physical growth and psychological changes occur, culminating in sexual maturity. The average onset of puberty is at 10 for girls and age 12 for boys. Every person's individual timetable for puberty is influenced primarily by heredity, although environmental factors, such as diet and exercise, also exert some influence. These factors can also contribute to delayed puberty (Chumlea 1982 and Tanner 1990).

Puberty begins with a surge in hormone production, which in turn, causes a number of physical changes. It is also the stage of life in which a child develops secondary sex characteristics (for example, a deeper voice and larger adam's apple in boys, and development of breasts and more curved and prominent hips in girls) as his or her hormonal balance shifts strongly towards an adult state (Chumlea 1982).

The major landmark of puberty for males is the first ejaculation, which occurs, on average, at age 13 (Jorgensen & Keiding 1991). For females, it is menarche the onset of menstruation, which occurs, on average, between ages 12 and 13. The age of menarche is influenced by heredity, but a girl's diet and lifestyle contribute as well (Tanner 1990).

Early maturing boys are usually taller and stronger than their friends. Early puberty is not always positive for boys, as they appear older than their peers, pubescent boys may face increased social pressure to conform to adult norms; society may view them as more emotionally advanced. Studies have shown that early maturing boys are more likely to be sexually active and are more likely to participate in risky behaviors (Susman, Dorn and Schiefelbein 2003).

For girls that reach sexual maturation early are more likely than their peers to develop eating disorders (Teenage growth and development: 15 to 17 years old, pamf.org, 2009). In addition, girls may have to deal with sexual advances from older boys before they are emotionally and mentally mature. In addition to having earlier sexual experiences and more unwanted pregnancies than late maturing girls, early maturing girls are more exposed to alcohol and drug abuse; and those who have had such experiences tend to perform less well in school (Peterson 1987, Lanza and Collins 2002 and Stattin and Magnussion 1990).

By ages 15-17, girls have usually reached full physical development. By age 16, boys are close to completing puberty which is usually achieved by ages 17 or 18. Teenage and early adult males may continue to gain natural muscle growth even after puberty (Marshall 1986).

2.4. Adolescent psychology

Adolescent psychology is associated with notable changes in mood sometimes known as mood swings. Cognitive, emotional and attitudinal changes which are characteristic of adolescence, often take place during this period, and this can be a cause of conflict on one hand and positive personality development on the other. Because the adolescents are experiencing various strong cognitive and physical changes, for the first time in their lives they may start to view their friends, their peer group as more important and influential than their parents/guardians. Because of peer pressure, they may sometimes indulge in activities not deemed socially acceptable, although this may be more of a social phenomenon than a psychological one (Peer groups 2008).

The home is an important aspect of adolescent psychology: home environment and family have a substantial impact on the developing minds of teenagers, and these developments may reach a climax during adolescence. For example, abusive parents may lead a child to “poke fun” at other classmates when he/she is seven years old or so, but during adolescence it may become progressively worse. If the concepts and theory behind right or wrong were not established early on in a child’s life, the lack of this knowledge may impair a teenager’s ability to make beneficial decisions as well as allowing his/her impulses to control his/her decisions (Christie 2008).

In the search for a unique social identity for themselves, adolescents are frequently confused about what is ‘right’ and what is ‘wrong. ‘’ G Stanley Hall denoted this period as one of “Storm and Stress” and, according to him, conflict at this developmental stage is normal and not unusual (Hall 1904). Margaret Mead on the other hand, attributed the behavior of adolescents to their culture and upbringing (Mead, 1925). The thoughts, ideas and concepts developed at this period of life greatly influence one's future life, playing a major role in character and personality formation (Christie 2008).

According to Thomas Kelly, positive psychology towards adolescents refers to providing them with motivation to become socially acceptable and notable individuals, since many adolescents find themselves bored, indecisive and/or unmotivated (Kelly, 2004) Adolescents

may be subject to peer pressure within their adolescent time span, consisting of the need to have sex, consume alcoholic beverages, use drugs, defy their parental figures, or commit any activity in which the person who is subjected to may not deem appropriate, among other things. Peer pressure is a common experience between adolescents and may result briefly or on a larger scale. The most important loss in their lives is the changing relationship between the adolescent and their parents. Adolescents may also experience strife in their relationships with friends. This may be due to the activities their friends take part in, such as smoking, which causes adolescents to feel as though participating in such activities themselves is likely essential to maintaining these friendships.

2.5. Sexuality among adolescents

Adolescent sexuality refers to sexual feelings, behavior and development in adolescents and is a stage of human sexuality (WHO 2003). Sexuality and sexual desire usually begins to intensify along with the onset of puberty. The expression of sexual desire among adolescents (or anyone, for that matter), might be influenced by family values and the culture and religion they have grown up in (or as a backlash to such), social engineering, social control, taboos and other kinds of social mores.

In contemporary society, adolescents also face some risks as their sexuality begins to transform. Whilst some of these such as emotional distress (fear of abuse or exploitation) and sexually transmitted diseases (including HIV/AIDS) may not necessarily be inherent to adolescence, others such as pregnancy (through failure or non-use of contraceptives) are seen as social problems in most western societies. In terms of sexual identity, all sexual orientations found in adults are also represented among adolescents.

According to anthropologist Margaret Mead and the psychologist Albert Bandura, the turmoil found in adolescence in Western society has a cultural rather than a physical cause; they reported that societies where young women engaged in free sexual activity had no such adolescent turmoil (Mead 1925. In a 2008 study conducted by YouGov for Channel 4, 20% of 14−17-years old surveyed revealed that they had their first sexual experience at 13 or under (Teen sex survey, Channel 4, 2008). The age of consent to sexual activity varies widely between international jurisdictions, ranging from 12 to 21 years. (Mead, 1925.

2.6. Reproductive health and family planning

Health is defined by WHO (1946) as a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity.

The 1994 International Conference on Population and Development (ICPD) adopts a definition of reproductive health that emphasizes every person's right to decide whether, when and how often s/he will have children. Endorsement of this definition underscores individual decision -making rights regarding family planning and all pregnancy-related care (UNFPA 1995). Reproductive health addresses the reproductive processes, functions and system at all stages of life. Reproductive health, therefore, implies that people are able to have a responsible, satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so (WHO 2001). Implicit in this are the right of men and women to be informed of and to have access to safe, effective, affordable and acceptable methods of fertility regulation of their choice, and the right of access to appropriate health care services that will enable women to go safely through pregnancy and childbirth and provide couples with the best chance of having a healthy infant (WHO 2001)

Family planning is the planning of when to have children, and the use of birth control and other techniques to implement such plans. Other techniques commonly used include sexuality education, prevention and management of sexually transmitted infections, pre-conception counseling and management, and infertility management (UNFPA 2005). Reproductive health care is a comprehensive reproductive health program that might include the following elements as part of primary health care (with appropriate referrals) (UNFPA 2005): Family planning information and services, including counseling and follow-up, aimed at all couples and individuals;

- Prenatal, delivery (including assisted delivery) and post-natal care, with referral for the management of obstetric complications;
- Prevention of abortion, management of the consequences of abortion and post-abortion counseling and family planning;
- Prevention of reproductive tract infections including sexually transmitted diseases, and treatment of systemic infections;
- Prevention of HIV/AIDS;
- Prevention of infertility and sub-fecundity;

- Routine screening for urinary tract infections, cervical infections, cervical and breast cancer and other women's reproductive health conditions; Active discouragement of harmful practices such as female genital mutilation.

2.6.1. Global adolescent reproductive health

Adolescents aged 10-19 years comprise about one-fifth of the world's population, which is equivalent to 1.2 billion young persons (UNFPA 2003). About 87 % of these young people live in developing countries and less than 5% of them worldwide use modern contraceptive methods (UNFPA 2003).

Adolescent pregnancy occurs in all societies, with considerable variation in magnitude and consequences among different countries. For example in some societies, girls are forced into early marriage and are expected to begin their families during adolescence. Even adolescent childbearing is considered as a social norm for marriage or as proof of fertility.

The worldwide average rate of births per 1000 young women aged 15-19 years is 65, with average rates of 25 in Europe, 56 in the Middle East and North Africa, 59 in Central Asia, 78 in Latin America, and 143 in Sub-Saharan Africa (Treffers 2003). About 14 million women 15–19 years old give birth each year, about 11 % of all births worldwide (WHO 2009). 95 % of these births occur in low- and middle-income countries. As a result of this and other factors including lack of education on sexual and reproductive health, poverty, contraceptive failure, and sexual assault (Akande 2008), an estimated 10-14 % of young unmarried women around the world experience unwanted pregnancies.

Every year, as many as 4.4 million adolescent girls and young women undergo abortions, the majority of which are unsafe. In addition rates of STIs among adolescents are high and their risks of contracting HIV are growing rapidly. Since the start of the pandemic, at least 12 millions young people have become infected with the HIV (UNFPA 2005). In many countries women aged 15-24 account for 40 % of all new HIV infection (Scommegna 1996).

"Most of these unintended pregnancies and needless deaths could have been prevented had basic reproductive health services been made available to these women. Failure to provide women with the means to plan, prevent or appropriately space their next pregnancy poses an extraordinary public health threat, one that can readily be addressed with modest resources"

(Daulaire 2002). Thus, adolescent reproductive health (RH) is an increasingly important component of global health.

2.6.2 Sexual and adolescent reproductive health in Africa

The highest rate of teenage pregnancy in the world is in Africa, where women tend to marry at an early age (Treffers 2003). Speaking on the health consequences of teenage pregnancy in sub-Saharan Africa, at the 19th annual World Congress on Fertility and Sterility in Durban, South Africa, Nigerian professor of gynecology E. Oluwole Akande said that the average rate of birth per 1000 females aged 15 to 19 is 143 in sub-Sahara.

This is well above the world average of 65 out of every 1000 adolescents, and is a sure indication that teenage pregnancy - along with maternal (or ante-natal) health complications - is one of the more pressing medical problems faced by the African continent, where about 40 % of women will experience motherhood by the age of 18 (Akande 2008).

In Niger for example, 87 % of women surveyed were married and 53 % had given birth to a child before the age of 18 (Locoh 2000).

Taking the examples of Mauritius, which has an average teenage pregnancy rate of 45 out of every 1000 adolescents, the lowest in sub-Saharan Africa; and Guinea, which, have an average rate of 229 out of every 1000 adolescents, is the highest in the region, we can understand how simple interventions could be made to reduce the average rate (Akande 2008). "Mauritius has an excellent healthcare system along with excellent provision of adolescent family-planning services, which is a major reason for the country experiencing such a low rate. Guinea, on the other hand, does not, and this is reflected in their average rate" Akande (2008). In Burkina Faso, where only 4 % of women use family planning methods, one in 14 will die of maternal causes over the course of her lifetime (Daulaire 2002).

While the researcher recognize that other females experienced similar health risks in pregnancy as their older counterparts, researcher is focusing on adolescents as these risks are more pronounced in younger girls due to their physical and psychological immaturity, coupled with a severe lack of decent antenatal and postnatal care. The risk of maternal mortality is high for women under 18. Other risks are the high average of secondary school female drop-out rate for pregnancy which is 56 %, the problem of unsafe induced abortion, and suicide! This is not good for future employment prospects and lasting economic results.

In Africa, there are many challenges in promoting adolescent reproductive health. According to Akande (2008), the reasons for such a high rate of teenage pregnancies are multiple and include such factors as poor or non-existent sexual education, sub-standard healthcare systems, and the inadequate supply to teenagers of contraception and family planning services.

Praising South Africa as it is currently the only country in Africa where abortion is legal. Following the South Africa's example could may be contribute improve the reproductive health situation in other African countries.

The cultural, religious and political leaders across the region should take note of what is best for the majority of their people. A recent study showed that abstinence as preached by cultural, religious and conservative political leaders, alone does not work, but it needs to be combined with other interventions such as contraception made freely available, provision of comprehensive sexual education and ensuring that reproductive health services are teenage-friendly. There are many for whom abstinence is not an option, and we need to take heed of that fact. If sex education is done properly, it should put youngsters off having sex, not turn them on to it. Unwanted pregnancy in adolescence is a major issue with many negative consequences that need to be tackled in the society (Akande 2008). Let us see how Ethiopia where this study is conducted is facing this challenge.

2.6.3. Adolescent reproductive health in Ethiopia

Unintended pregnancy is a serious problem among teenagers in Ethiopia. Several studies in Ethiopia have documented the prevalence of unintended pregnancies among young women. A household study of adolescents in Addis Ababa found that the median age at first pregnancy was 16 years, with 2 in 3 women becoming mothers before the age of twenty. 50 % of the 957 female respondents had been pregnant in the past and 74 % of these pregnancies resulted in abortions (Tadesse et al 1996). The most comprehensive study on abortion in Ethiopia was conducted in 1993. The study collected data from 5 hospitals in Addis Ababa during a period of six months. Findings revealed that there were a total of 1,603 induced abortion cases, of which 15 % occurred among women under the age of 15; 31 % occurred among women age 16-20; and 62 % occurred among women 16-25. 45 % of the abortions were among single women, and 42 % were among women with only a primary school education or less (Yoseph, 1993).

Harmful traditional practices (HTP) such as early marriage, female genital cutting (FGC), and marriage by abduction affect the health of young women. FGC is widely practiced in Ethiopia (NCPTE 1998). Early marriage is one of the cultural traditions that expose young women to reproductive health problems. The 1990 National Family and Fertility Survey (NFFS) revealed that 34 % of women were married before age 15 (CSA 1993).

Another study conducted among adolescents from six peri-urban centers in Ethiopia, 9 % of sexually active young women and 6 % of sexually active young men reported having been raped; 74 % of women reported sexual harassment (OSSA and DSW, 1999). The prevalence of sexually transmitted diseases (STDs) like HIV/AIDS is relatively high among young people in Ethiopia. According to the HIV sentinel surveillance of mothers seeking antenatal care, HIV/AIDS prevalence is 11 % among women age 15-19 and 15 % among those age 20-24 (MOH, 2000a).

The two major risk factors for the spread of STDs among youth in Ethiopia are the practice of having multiple sexual partners and the limited use of condoms (MOH 1998 and 2000a). A study conducted in high schools in Addis Ababa indicated that 54 % of sexually active youth have experienced sex with more than one partner; 43 % of sexually active students reported knowing about condoms at the time of their first sexual experience, but only 18 % said they had ever used condoms (Eshetu et al. 1997).

In a survey of adolescents conducted in Awassa, Nazareth, and Addis Ababa, 64 % of the respondents knew of a girl whose schooling was interrupted due to an unwanted pregnancy (Mekonnen and Alemu 1995). Lack of family support and limited educational opportunities have led many youth to turn to life on the streets. In 1995 more than 100 000 street children mostly boys between 14 and 17 were registered, among them 40 000 in Addis Ababa alone (CYAO 1995). They face a miserable and violent life. In-depth discussions with 32 of the young girls living on the streets indicated that 12 had been raped, 9 others were sexually attacked, 21 were beaten, all of them were robbed, and 7 had had at least one pregnancy. The major problems faced by the boys were frequent beatings and theft. Addiction was a problem among groups, and included chewing *chat* (leaves from a locally grown plant), sniffing benzene, and consuming alcohol and hashish (the latter mostly among older teens) (MOLSA 1993).

This situation is exacerbated by lack of employment opportunities and general feelings of hopelessness. 45 % of the population lives in poverty with 47% of the rural population and 33 % of the urban population falling below the poverty line (MEDAC 1999). The economic, political, and social situation in Ethiopia has seriously affected this group. Access to education and health services remains limited, particularly for young rural women and men, and unemployment is a problem, particularly among young people living in urban areas.

Poor living conditions often lead young people to engage in sex at an early age. In a survey conducted among high school students in Addis Ababa, 38 % reported that they were sexually active (Gebre, 1990). Of these sexually active students, 71 % experienced first sex between the ages of 14 and 16. Many young women were forced to practice sex for money. Another study, conducted in Addis Ababa among commercial sex workers age 9-18 years found that 82 % of these girls had their first sexual contact before age 16 and 50 % of these contacts had been coerced, including rape. Financial need was cited by 85 % of respondents as the reason for resorting to prostitution (Fisseha 1997). The consequences of childhood prostitution include health problems resulting from physical abuse, early and unwanted pregnancy, STDs, HIV/AIDS, and abortion, as well as psychological problems, low self-esteem, hopelessness, and stigma.

2.7. What is unwanted pregnancy?

Pregnancy can be a beautiful thing when it is wanted. But it can also be an inconvenient thing, a financially burdensome thing, a physically dangerous thing, an emotionally and politically charged thing, or a scandalous thing when it is unwanted. This is why most women prefer to control their fertility. But a category of people including adolescents especially in developing countries, don’t have possibility to control their fertility and they become pregnancy without wishing. This is an unintended pregnancy for adolescents. An unintended pregnancy is a pregnancy that is either unwanted or mistimed at the time of conception. Unwanted pregnancy is a pregnancy that has occurred without the wish of woman, or after a woman has reached her desired family size and does not want any more children. Mistimed pregnancy is a pregnancy which has occurred without the wish of the woman at the specific time of occurrence of pregnancy, but she has a desire to be pregnant and have children sometime in the future. The term teenage pregnancy refers to women who are underage (under 19 years old), not reached legal adulthood who become pregnant. Worldwide, 38 % of pregnancies are unintended (WHO 2009). It is a core concept in understanding the fertility of populations and

the unmet need for contraception. Women of all ages may have unintended pregnancies, but some groups, such as teens, are at a higher risk.

The common symptoms of early pregnancy are including nausea, vomiting, swollen or painful breasts, fatigue, headaches, mood swings, and even a light or missed period. But these signs can also be caused by other things that have nothing to do with pregnancy (Amber Luck 2002).

2.8. Contraceptive methods

From hormonal contraceptives to barrier methods and natural methods, the types of birth control available today can be divided into several categories. There are so many different types of contraception available on the Ethiopian market but we have to notice that some contraceptive methods are more effective in preventing pregnancy than others. So, it is nice to choose the effective method of birth control.

Table 1. List of contraceptive methods known and /or used in Ethiopia:

Type of contraceptives	Mode of use	Level of effectiveness
1. Modern methods		
Pill (oral contraceptives)	Contains the hormones estrogen and progestin. Taken at the same time each day. Not indicated to women older than 35 years, smoker or had history blood clots or breast cancer	92-99 %
Intrauterine devices (IUD)	Small device shaped in form of T. It is placed inside the uterus to prevent pregnancy. It can stay for up to 10 years.	99 %
Injectables or ‘’shot’’	Women get shots of hormone progestin in the buttocks or arm every 3 months.	97-99 %
Implants	Thin rod that is inserted under the skin of women’s upper arm. It contains progestin that released into body over 3 years.	99 %
Condoms for male	Worn by the man, it keeps sperm from getting into a	85-98 %

	women's body.	
Condoms for female	Worn by the women. It helps keep sperm from getting into women body. It can be inserted up to 8 hours before sexual intercourse.	79-95 %
Diaphragm/foam/jelly/cream (spermicides)	The products work by killing sperm. They are placed in the vagina 1hour before intercourse and you leave them in place 6-8 hours after intercourse.	71-82 %
Standard days methods		
Lactational amenorrhea methods (LAM)		
Female sterilization (tubal ligation or tying tubes).	The tubes are tied (or closed) so that sperm and eggs cannot meet for fertilization.	100 %
Male sterilization (vasectomy)	The operation is done so that the man ejaculation never has any sperm.	
Emergency contraceptive pills	Not a regular method of birth control. Pills are taken within 72 hours after having unprotected sex.	75 %
2. Traditional method		
Periodic abstinence	Not having vaginal intercourse at fertile period.	75-99 %
Withdrawal (''coitus interruptus'')	The man is coming out when he is ready to ejaculate and then ejaculating out of vagina.	Risky
Folk method(ex: douching the vagina after sexual intercourse)	The vagina is washed immediately after the unprotected sex (ejaculation).	Risky

Source: EDHS 2005

2.9. Abortion

Abortion is defined as a termination of a pregnancy by the removal or expulsion from the uterus of fetus or embryo, resulting in or caused by its death. (Sedgh 2007). There are many types of abortion as listed below.

A. Spontaneous abortion: it is an abortion that can occur spontaneously due to complications during pregnancy. It is usually called miscarriages.

B. Induced abortion: is a deliberate termination of pregnancy without medical reason(s) at gestational age of less than seven months or 28 weeks. When the abortion is provoked to preserve the health of the pregnant female, it is called therapeutic abortion. While an abortion induced for any other reason is called elective abortion. Many girls turn to induced abortions to avoid unintended or unplanned births. This is the case not only in countries where abortion is legal and safe (developed countries) but also where it is illegal and therefore often unsafe (developing countries). Unsafe abortion can result serious negative health effects such as infertility and maternal death. Regardless of the cause, unwanted pregnancy and its negative consequences can be prevented by sex abstinence, access to contraceptive services or legal abortion in the respect of women rights.

Abortion methods:

- *Medical abortion*: is a non surgical abortion that use pharmaceutical drugs and are only effective in the first trimester (Strauss and Hamdan 2007).
- *Surgical abortion*: In the first 12 weeks, suction aspiration or *manual vacuum aspiration* is the most common method (healthwise 2004). The manual vacuum aspiration consists of removing the fetus or embryo, placenta by suction, using manual syringe, while *electric vacuum aspiration* uses an electric pump. *Dilation and curettage* is the second most common method of abortion. It refers to cleaning the walls of the uterus with curette. The WHO recommends this procedure also called *Sharp curettage* only when manual vacuum aspiration is unavailable. *Hysterotomy abortion* similar to caesarean is performed under general anesthesia. It requires a smaller incision than caesarean and it is used during later stage of pregnancy (Glenn and Merz 2008).
- *Other methods*: historically a number of herbs reputed to possess abortifacient properties have been used in folk medicine in many countries/cultures since the world

exists. But the use of herbs in such a manner can cause serious, even lethal side effects and are not recommended by physicians.

Unsafe abortion is where and when access to legal abortion is being barred. The world health organization (WHO 2004) defines an unsafe abortion as being a procedure carried out by persons lacking the necessary skills or in an environment that does not conform to minimal standards or both.

Unsafe abortion remains a public health concern today due to the higher incidence and severity of its associated complications, such as incomplete abortion, sepsis, hemorrhage, damage to internal organs, mental health...

World Health Organization (WHO 2004) estimates that 9 millions unsafe abortions occur around the world annually and that 68 000 of these result in the woman's death. 13 % of complications of unsafe abortion are said to account for maternal mortalities in sub-Sahara (Salter and Hengen 1997).

International status of abortion law:

Abortion is legal in all most western countries. It is generally illegal in all Africa countries, except South Africa where it is legal. But, it can also be legal in some countries (some cases) when it is about to save maternal health, health or mental health. Generally, abortion is still a controversial subject in politics of many countries. Supporters of abortion rights argue that the embryo or fetus is not a person, or at least that government has no right to ban abortion, unless it can prove that an embryo or fetus is a person.

Opponents of abortion rights argue that the embryo or fetus is a person or at least that government has a responsibility to ban abortion until it can prove that an embryo or fetus is not a person. Opponents of abortion often frame their objections in religious terms.

2.10. Empowerment

In the past few years, the term ''empowerment'' has captured the imagination of people in different fields. Empowerment concept is explained and defined by various disciplines such as social work, psychological, education, nursing, medicine, organizational development…It is used in different phenomenon such as student empowerment, youth empowerment, women empowerment, patients empowerment…. Researchers agree that it is difficult to find a specific definition because empowerment concept is changeable and vary depending on the researcher and the situation.

World health organization (WHO position paper 1991) recognized that despite this increased attention to empowerment, there is still unfortunately great disparity in the prevailing definitions and equal lack of clarity on how to measure its impact on a population's health.

The concept empowerment derives from the latin word: ''potere'' meaning'' to be able (Mc Leod 1987). The new world dictionary defines the verb empower as: to give power or authority to, authorize, to give the ability to, enable, and permit.

Empowerment concept emphasized by world health organization through the definition of health promotion as a process of enabling people to increase control over and to improve their own health (Maglacas 1988).

Youth empowerment is an attitudinal, structural, and cultural process whereby young people gain the ability, authority, and agency to make decisions and implement change in their own lives and the lives of other people, including youth and adults (Vavrus and Fletcher (2006). Source: Guide to social change led by and with youth people).

Empowerment is a process of increasing the capacity of individuals or groups to make choices and to transform those choices into desired actions and outcomes; it refers to increasing the spiritual, political, social or economic strength of individuals and communities. It often involves the empowered developing confidence in its own capacities. (Green and Kreuter 1999 and Naidoo et. al 2000)

Gibson (1991) defined empowerment as: a process of helping people to assert control over the factors which affect their lives. Individual and societal responsibilities in enabling people to achieve their own requirements solve their own problems and mobilize resources to control their own lives by helping them to build a critical awareness of the situation and ease the proposition of a plan of action.

2.10.1. Educational empowerment

Empowerment education is a process of encouraging communities to take control of: -its own education, -assess its own needs, -set its own priorities, -develop its own self help programs, and sometimes challenge power structures to provide resources (Green and Kreuter 1999).

Paulo Freire's (1998) ideas propose education as an effective health education and prevention model that promotes health in all personal and social arenas. The model suggests that

participation of people in group action and dialogue efforts directed at community targets enhances control and beliefs in ability to change people own lives.

Education is the key to improved livelihoods, healthcare, nutrition and the exercise of civil and political rights (UNFPA 2007). Education that includes engages young people in discussions about sexuality, reproduction, relationships and gender issues can promote healthier behavior, foster a demand for services and promote gender equality. Girls who have been educated are likely to marry later and to have smaller and healthier family. Educated women can recognize the importance of health care and know how to seek it for themselves and their children (UNFPA 2007).

Education helps girls and women to know their rights and to gain confidence to claim them. At their best, schools can be safe spaces where young people can forge identities, clarify values and develop critical thinking skills, while also learning to exercise their rights, including reproductive rights. Equal treatment of boys and girls in the classroom should be emphasized, as such experiences will empower girls to stay in school and give them a model of gender equity in action. The 1994 Cairo consensus recognized education, especially for women as a force for social and economic development.

Paulo Freire's social change theory can be integrated with a cognitive and behavior change theory to develop a comprehensive health education program directed at both individual and community level change. Other researchers have found the Paulo Freire's emancipation theory contributing in conscientization helpful in stimulating the self-reflexivity.

Many studies have shown that higher levels of women's education are strongly associated with both lower infant mortality and lower fertility, as well as with higher levels of education and economic opportunity for their children.

2.10.2. Health education empowerment

Simmons and Persons (1983) stated that empowerment is a method that makes the individual able to control his environment and achieve self determination. This may happen by adopting an individual change, interpersonal change, interactional change or changing the social structure to that have an impact on the person.

Simmonds (1976) recognized health education as" bringing out behavioral changes in individuals, groups, and larger populations from behaviors that are presumed to be detrimental to health, to behaviors that are conducive to present and future health."

Green and Kreuter (1999) argued that health education is" planned learning experiences to facilitate voluntary change in behavior thereby bringing about change in consciously health-directed behavior."

World health organization (WHO 1991) position paper on health education directly linked community participation to empowerment as a means of promoting healthier individuals and environments.

While health education is defined by Nadoo and Wills (2000) as planned opportunities for people to learn about health and make change in their behavior. It includes: raising awareness of health issues and factors contributing to ill health; providing information; motivating and persuading people to make changes in their lifestyle for their health; and equipping people with the skills and confidence to make those changes."*Health Education is a Vehicle to Health Promotion" (Nadoo 2000).*

Health promotion involves public policies change and community action to enable people to make changes in their lives. Health promotion may involve lobbying and political advocacy, but it may as easily involve working with individuals and groups to enhance their knowledge and understanding of the factors affecting their health (Nadoo and Wills 2000).

World Health Organization (WHO 1995) describes the process of promoting health as not only involving political change and interagency collaboration, but also enabling people to take more control over their own health and equipping them with the means for well-being.

A key feature which distinguishes health promotion from health education is that it involves environmental and political action. Health promotion can be seen as an umbrella term incorporating aspects of health education; it is much broader in conception (Nadoo and Wills 2000).

To overcome the adolescent reproductive health issues, life skills education approach, including sexual and reproductive health, was endorsed by several UN agencies (WHO, UNFPA, UNICEF, UNESCO) in 2003 for better health outcomes. Broadly, this encompasses social skills, thinking skills and negotiation skills.

Life skills training help adolescents achieve their personal best in life. It promotes self-responsibility and motivates adolescents to maintain positive relationship and respect for others. Jeanne (1986) an American teacher recognized that life skills lessons help children develop a broad range of personal, social, cognitive and environmental skills. It promotes the principles of social and emotional learning (SEL). Life skills include specific health and assertiveness skills inspire children to protect themselves from cigarettes, alcohol, drugs, violence, unsafe sex and other threats.

According to UNFPA (2003), the life-skills approach employs participatory and interactive methodologies including role-playing and other theatre techniques, exploration of feelings, analysis of gender stereotyping, training in negotiation skills, and question and answer sessions. It helps foster critical thinking, problem-solving and interpersonal communications skills that can lead to informed, responsible and voluntary decisions. A life skills-based curriculum can enable young people to challenge harmful gender norms, resist peer pressure and critically assess mass media stereotypes. The aim is to help adolescents navigate a safe passage to adulthood.

This approach helps young people understand sexual changes as positive and natural aspects of their development. When young people are equipped with accurate and relevant information and education, when they have developed skills in decision-making and communication and have access to counseling and services that are non-judgmental and affordable, they are better able to take advantage of educational and other opportunities that will affect their lifelong well-being, avoid unwanted pregnancies and unsafe abortion, protect themselves against sexually transmitted diseases including HIV and improve their reproductive and sexual health, self-esteem and social participation (UNFPA 2003).

Barnett and Schueller (2000) suggest that when you are providing reproductive health education to youth, these are the targeted messages for youth and they are divided in 3 categories of youth:

Not sexually active: abstinence, delay of sexual initiation; information about fertility, risks of pregnancy and sexually transmitted infections (STIs), and future contraceptive use; self-protection skills.

Sexually active, unmarried: secondary abstinence, delay of further sexual activity; information about fertility, risks of pregnancy and STIs; contraceptive services, prevention of HIV and other STIs, condom-negotiation skills.

Sexually active, married: delay of first pregnancy, child spacing; contraceptive services, risk factors for HIV and other STIs, condom-negotiation skills.

2.10.3. Economic empowerment

Zimmerman (1988) in community psychology argues that empowerment is the ability of individuals to gain control socially, politically, economically and psychologically through access to information, knowledge and skills, decision making, individual self-efficacy, community participation and perceived control.

Youth economic empowerment is to give youth opportunity to manage, control or drive entrepreneurship through the income generating activities (self-employment) such as the small and medium business in order to maintain their survival.

In developing countries access to health care is generally dependent on the ability to pay for it. But many households are poor and consequently youth cannot afford it as they are highly unemployed and their governments have limited or mismanaged resources to promote health care access.

Dr Mohammad Yunus from Bangladesh launched the microfinance movement when as an economics professor he began visiting poor villagers to see what he could do to help them, and soon discovered that small loans, initially only 27 dollars made a big difference in the lives of the poor women. He went on to develop Grameen bank in the 1970s which became the first for-profit to win a Nobel peace prize.

In a community dominated by gender inequality, I can argue that microcredit can give woman independence and autonomy from men such as economic security, health care, ability to make various purchases on her own, freedom from domination and violence within her family and participation in political and legal awareness.

The Nobel Prize committee (2006) affirmed that microcredit is playing major part in empowering women and then eliminating poverty in the community.

But the World Bank in study conducted in 1991/1992 insisted that only about 1% of Bangladesh population can lift themselves out of poverty each year with the Grameen bank loans.

The Bangladesh Institute of development studies (BIDS 1988) claimed that Grameen bank loans are contributing to promote child schooling and to increasing awareness on reproductive health (such as the use of contraceptives) among poor families in Bangladesh.

In the following chapter, we will see how different methods were explored in line of this study.

3.0. Method

According to Silverman (2005), there is no right or wrong methods. There are only methods that are appropriate to your research topic and the model with which you are working. Thus, it will be a qualitative and explorative study. One of the reasons why I chose the qualitative study is that it is a method that allows a researcher to get in depth views or opinions of respondents which will help me to answer my research questions. Further, Silverman (2005) argues that a qualitative approach is a case study where data collected are usually more detailed varied and intensive. In view of the complexity of the youth reproductive health issues in Ethiopia, I hope this approach will generate reliable information for the benefice of health stakeholders.

3.1. Qualitative research

Qualitative research uses a naturalistic approach that seeks to understand phenomena in context-specific settings, such as "real world setting where the researcher does not attempt to manipulate the phenomenon of interest" (Patton 2001). A qualitative research approach is characterized by its descriptive nature that takes the form of text, in-depth interviews or the use of focus groups (Yin 1994).

The present study used in depth interviews with a population of hospitalized girls recruited from a hospital and focus group interviews with girls and boys recruited from a school.

3.2. Field research assistant and interpreter

I was dependent on a field research assistant (FRA) and an interpreter due to the language barriers and their experience on the study design used.

One Ethiopian nurse was used as interviewer/interpreter of the pregnant girls. Due to the limitations of time and administrative constraints, it was not possible for me to go through the whole procedure of recruiting a nurse; she was therefore chosen by her supervisor (doctor). She was recruited as she worked at hospital with many years of experience. And it was also difficult as a male in a strange culture to conduct a face to face interview related to reproductive health with girls. The nurse received from the researcher one day training in how to conduct face to face interview using interview guide. I explained the purpose of the study, how to ask questions and avoiding questions which can harm the participants, and how to transcribe answers. I also explained how she could pose follow up questions. She got further information on the principle of beneficence, autonomy and confidentiality. She was also informed that the respondents have the right for not answering to some questions or right to withdraw and about the right to privacy. The nurse was paid about 2000 Birr as incentive.

The second person, a medical doctor was used as field research assistant and as assistant facilitator for the focus group discussions, while the researcher has the role of facilitator. The doctor was not trained by the researcher to conducting this study as he was working many years as research coordinator at University with previous experience of moderating a FGD. He was also a friend to the researcher.

Both field support staffs worked also as interpreter as they spoke the native language and understood the culture of the participants; even if Patton (2001) points out that there is always risk for misunderstandings when translation is involved, as interpreter often want to summarize and explain what is being said, which may contaminate the data.

3.3. Sources of data

3.3.1. The hospital population

The first population study was all adolescent girls aged between 15 and 19 attending prenatal/antenatal and under 5 children clinics at Lions hospital in Addis Ababa. Adolescents with second pregnancy were excluded, as it is contrary to the definition of unintended teenage pregnancy. Wanted pregnancy was also logically excluded. After every consultation at hospital, the pregnant girl who met the criteria above was asked to participate in the interview and the briefing on the topic was given; if she was willing to participate, she was directly taken in nurse's room for interview. The nurse stopped to call other participants for interview when the number of 10 interviewees was reached.

3.3.2. School population

The second population study was all adolescent students at the black lion's secondary school. All adolescents were supposed to participate in the study but I chose a sample of 10 students, 5 male and 5 female coming from different areas, aged between 15 and 19, only those who were interested could join the discussion. This school was chosen as it is one of the prestigious public secondary schools in Addis Ababa and it was near the place i lived and I had some contacts at schools. The researcher took contact with the school's personal and presented the topic and research's aim to them. After, teachers were asked to select participants as teachers were well placed to know students who would contribute more during the focus group discussions. Teachers explained the topic to students in their respective classes, and students expressed their interested to the topic by raising their hands. All interested students from different classes were grouped together in one class. As many students as 30 were interested, to reduce the number of participants to a sample of 10 participants, students attending grade 9 and 10 were given more chance to participate in the focus groups discussion as they were more mature; then we reached the number of 20 participants. Easy communication criteria meant that participants could speak easily Amharic and English. This criteria was also used, retaining only 15 students who could speak or understand both English and Amharic (Ethiopian language); and at last, gender balance was applied to have 5 girls and 5 boys. With this group I conducted the focus group discussion (FGD) which will be further discussed in the methods used to collect data.

3.4. Methods of data collection

3.4.1. Interview with adolescent pregnant girls

My teacher of research methods used to defined interview as: '' a conversation between two or more people (the interviewer and the interviewee) where questions are asked by the interviewer to obtain information from the interviewee''. Interviews are particularly useful for getting the story behind a participant's experiences. Kvale (1983) defines the qualitative research interview as 'an interview, whose purpose is to gather descriptions of the life-world of the interviewee with respect to interpretation of the meaning of the described phenomena".

I administrated a standardized, open-ended interview guide which means the same open-ended questions are asked to all interviewees. An open-ended question is where respondents are free to choose how to answer the question, i.e., they don't select "yes" or "no" or provide a

numeric rating, etc. The open-ended interview is based on the research questions but follow up questions were also asked wherever appropriate.

The content of the interview guide was questions related to adolescent reproductive health. The main questions were: knowledge about fertility; sexual activity/behavior; socioeconomic factors (age, education, income, religion, area of living, employment); knowledge and access to contraceptive methods; availability of reproductive health services; Knowledge of sexual transmitted infection (STIs, including HIV/AIDS) and voluntary counseling and testing (VCT); Participants' suggestions in prevention of adolescent unwanted pregnancy. Also, demographic questions were included; example questions about the areas of living, rural or urban. Some operational definitions were used in this study such as:

Rural area was defined as an area outside of the cities, about 1 hour driving away from the town; while urban area was a place where we have a high population density and there are all services.

Rich: We agreed to call a person is rich when he/she own a car, income of at least 500$/month and has house with durable material. A poor person as someone who does not have income to cover basic needs (eating, wearing, health, schooling, transport, housing…)

After consultation, the interested respondent was called in the nurse's room to attend the interview. The interview was conducted face to face on daily basis through normal conversation while the participant drinking the coffee/tea with the nurse. Participant was asked if she had any concerns before starting the interview/discussion to make sure that she is comfortable. The purpose and the format of interview were explained to the participant and the terms of confidentiality were addressed. It specified that she is free to ask questions before or until the end of the interview and indication was given how long the interview usually takes. It was explained to the informant that the researcher is the only person who would get access to her response and how the data will be analyzed. Permission was sought and given to use the informant's comments as quotes in the research results and discussion, but her name or identity was not mentioned. No remunerations were promised in exchange for her willingness to participate. And at the last, she was informed how to get in touch with the researcher later if she wanted for example to get a copy of the research.

During the interviews, the nurse was interviewing pregnant girls, reading and asking question by question in Amharic and the girl would respond in the same language. The respondent had

also the opportunity to ask the question in case she didn't well understand. The nurse noted the answers in English using pen and paper on the spaces provided under the questions on the same interview guide.

All the interviews were conducted in the nurse's consultation room, where there were only the respondents and the nurse who conducted the interview. The nurse and respondents were sitting face to face. The interviews were noted down on pen and paper on the questions sheet. The research was around in another room occupied by other things, and the nurse was facing unclear questions, she had the opportunity to ask further explanation from the researcher. It was not possible to record the interview by tape recorder or video recorder due to financial constraints of purchasing necessary equipments required for this purpose. The interview lasted as average of 30 minutes each.

3.4.2. Focus group discussion

A focus group discussion (FGD) is a form of data collection method commonly used in qualitative research in which a group of people are asked about their perceptions, opinions, beliefs and attitudes towards a product, service, concept, advertisement, idea, or packaging (www.idrc.ca/eng/ev)

A focus group discussion is a group discussion of approximately 6 - 12 persons guided by a facilitator, during which group members talk freely and spontaneously about a certain topic. Its purpose is to obtain in-depth information on concepts, perceptions and ideas of a group. A FGD aims to be more than a question-answer but demands interaction among group members who discuss freely. The idea is that group members discuss the topic among themselves, with guidance from the facilitator (Novelli 1986 and Henderson and Naomi 2009).

In this study, the main purpose of the focus group discussion was to complement the data that was generated by the interviews and then brings issues that may not be clearly reflected in the interviews. The respondents were divided in 2 groups by sex, 5 girls and 5 boys, and later both groups were mixed and interviewed together. We divided them in 2 groups as sexual behavior is a controversial topic in the sense that males and females in this culture judge sexual relations and sexuality often from very different perspectives, especially as they were teenagers, who seemed to have many stereotypes about the other sex or were reluctant to discuss the topic openly (particularly girls).

The content of interview guide used for the 3 focus groups discussions was the same used for interviewing pregnant girls. The interview guide was being prepared in English and translated in Amharic by the interpreter.

The FGD were conducted in the classroom at their school, a quiet place and familiar environment to them in order to feel comfortable and talk freely without being affected by the surrounding. The FGD lasted one hour for each group. First we conducted the FGD with females. Before the discussion started the researcher and assistant facilitator presented themselves, followed by the participants. The participants were sitting in circle around table with the moderator and researcher. The purpose of the discussion was explained to the participants and their right to withdraw or not answering questions for which they don't feel comfortable. They were asked to feel free to contribute to the discussion and the respect of the opinion of other participants. They were also informed that the discussion will last for one hour. Before starting the discussion they were asked if they are ready or if they have any questions. Then the researcher started reading the question in English and the translator translated the question into Amharic to the audience. The respondents were putting hands up when they want to answer the question and then they were picked up one by one. The translator thereafter translated the answers into English to the researcher. The researcher was writing down the answers in the spaces provided on the interview guide under each question.

We did the same procedure for the second FGD with the boys. And then, we mixed the 2 groups together to cross-check information received from girls and boys groups but we did not produce the data as there was any difference in answers provided in a mixed group compared to the previous FGDs.

3.5. Data analysis:

According to Hatch (2002) data analysis is a systematic search for meaning. It is a way to process qualitative data so that what has been learned can be communicated to others. Analysis means organizing and interrogating data in ways that allow researchers to see patterns, identify themes, discover relationships, develop explanations, make interpretations, mount critiques or generate theories.

It means that data analysis is a task that the researcher has to continuously do throughout the entire research process systematically from data collection to the writing the final report. I first read all notes i took in my notebook during the field research, then interview guide and

focus groups discussions for completeness as I didn't use tape recorder. The transcripts from 10 interviews and 3 focus groups discussions were transcribed into words on computer by researcher. The transcripts from interviews and FGDs were analyzed using simple meaning condensation (Brinkmann and Kvale 2009) and categorized according to the themes which emerged from the data. And the use of participant's quotes helped me to present a precise description, which in turn added to the quality of the research. The emerged issues and the relationship between opinions and experiences expressed by participants and the present status of unwanted pregnancy among adolescents helped me to organize the condensed data in tables, as it facilitated comparison, identification of eventual patterns and deviations from patterns which emerged. Data is presented in tables for the purpose of summarizing collected data and not for any statistical analysis or inferences. Data is analyzed according to research objectives, research questions and emerging themes from the data itself. These merged issues helped me to identify the theoretical concepts that I used for analyzing the findings. I will now turn to assess the quality of this research.

3.6. Validity

The question of validity of a piece of qualitative research, also often called trustworthiness, primarily concerns the integrity of the conclusions drawn from the research (Bryman 2004 and Patton 1991). Hammersley (1992) also defines validity as the truth, interpreted as the extent to which an account accurately represents the social phenomena to which it refers. Holmarsdottir (2005) describes validity as a concern with the ability of the researcher to produce true knowledge about the phenomenon under investigation. To promote validity in qualitative research, Creswell and Miller (2000) recommend the use of triangulation which is defined as "a validity procedure where researchers search for convergence among multiple and different sources of information to form themes or categories in a study. Triangulation can be achieved by using several data sources, different theories and methods.

In this study, the application of various study designs such as interviews and focus groups discussions has provided triangulation which enhanced the validity of this research. These have given me confidence in my findings as argued by Webb et al. (1996 cited in Bryman 2004) that the use of more than one data collection method called triangulation will result into greater confidence in the findings collected. Also, as participants were those concerned by this study, they knew better the issue than anyone and then they might provide right answers to increase the quality of data. In additional the research assistants were family to the culture

and could speak the same language than participants and having many years working on this topic contributed to the validity of the data too.

However the methods used had some weakness too. First the interview used a small number of people; the result cannot be representative but having a general view of the situation. The interview could affect the data as the interviewees were children who could not be consistent. And as the interviewer was working with this issue for many years, she might be biased and asking closed or leading questions.

The main advantage of face-to-face or direct interviews is that the researcher can adapt the questions as necessary, clarify doubt and ensure that the responses are properly understood, by repeating or rephrasing the questions. Other advantages are: -if the respondent lacks reading skills to answer a questionnaire; -Are useful for untangling complex topics; -the interviewer can probe deeper into a response given by an interviewee; -interviews produce a higher response rate. But face to face interview has also some disadvantages. It may geographically impose some limitations on a study and it demands a lot of resources if the researcher needs to conduct national or international interviews. The interviewer can affect the data if the interviewee is not consistent. It is very time consuming. It is not used for a large number of people.

The focus group discussions (FGD) were objective, informative and very interesting, but reactions of some participants were influenced by the comments of other members of the group. And some participants were shy or passive to talk. Other participants brought issues not relevant to the topic that lost time. The FGD also was not a large number to be a representative sample, even if participants were coming different areas and background. In case the interpreter was misunderstanding the question during the discussion, the facilitator had to rephrase the question; and to avoid losing the information on the way, some participants were repeating answers when the interpreter was writing down.

However, focus groups also have disadvantages: the researcher has less control over a group than a one-on-one interview, and thus time can be lost on issues irrelevant to the topic; the data is tough to analyze because the talking is in reaction to the comments of other group members; observers/moderators need to be highly trained, and groups are quite variable and can be tough to get together, (Ibid.) Moreover, the number of members of a focus group is not

large enough to be a representative sample of a population; thus, the data obtained from the groups is not necessarily representative of the whole population.

In this study, my database consisted of the field notes taken throughout the interviews which include more details than simply the recorded information. The field notes and detailed information from interview guide and FGDs were later re-written using condensation of meaning... Moreover, the study database included all documents which I had accessed and analyzed to produce this thesis. The field research was conducted in Addis Ababa, Ethiopia, at Black Lions Hospital and at Black lion's secondary school in Addis Ababa. The data was collected from February to September 2010, on the interval of 7 months. The sample from the population studied was small and selected purposefully for this study. The research findings are therefore not representative of all the Ethiopian population. The selected institutions and participants had however a general view of the problem of unwanted pregnancy among adolescents. Hence this research may not be generalized to the whole region, but the findings contribute to shading light on the problem of unwanted pregnancies among adolescents and it can be used for further studies in a similar context.

I had encountered difficulties to find participants who were interested in participating in the study and those who met the criteria for the interviews; as a result, the whole process of recruiting participants was time consuming. Some adolescents felt reluctant to answers some questions related to the privacy in their lives, e.g. why often you do sex? Despite these limitations I believe that I managed to produce a thesis that contributes to identifying the major causes of unintended pregnancy among Ethiopian adolescents.

3.7. Ethical considerations

According to Sieber (1992), there are 3 general principles that must guide human research. The first principle concerns beneficence or reciprocity, that the research ought to maximize the good outcomes for science, humanity and the individual research participants, and at the same time avoid risk, harm or wrong. The second principle is that research should respect the autonomy of the persons, including the non-autonomous such as for example infants or senile persons. The third principle concerns justice, that reasonable, non-exploitative and carefully considered procedures should be applied for the research.

These principles allow the researcher to carry out a valid research design, with voluntary informed consent of participants in the study, adjustment of procedures to respect privacy of

participants, ensure confidentiality, minimize risks and maximize benefits and that the researcher is responsible for the consequences of the research (Ibid).

First all a written ethical clearance was obtained from the University of Addis Ababa, School of public health in Ethiopia. I also sought ethical approval from the Norwegian ethical regional committee, but they replied that I didn't need it, as they considered that my study represented social sciences and not a medical- or health-based research (see Annex 4).

With regards to the beneficence or reciprocity, findings from study would be important in the provision of youth reproductive health, with the hope that stakeholders will take into consideration the recommendations issued by the study for improving adolescent reproductive health. To avoid harm to participants, in asking sensitive questions that could remind bad experiences to participants, like rape, some questions were sometimes rephrased. The information given and opinions expressed by participants have been handled with care in order to avoid causing harm to the informants if the information would be sensitive. Considering the time and energy spent by participants to volunteer in this research, pens and exercise books were given to each focus group participant and one kilo sugar was given to each interviewee as a token of appreciation. This token was not revealed at the beginning of the study, participants participated without knowing that they would receive those things.

Maintaining the balance between wanting to know and the right to privacy, a consent form was administered, as suggested by Bryman (2008), that a consent form should be submitted to participants, outlining the purposes of the research and its background; it also clarifies that participation is voluntary and that the interviewee has the right to withdraw from the study at anytime, especially if the participants felt uncomfortable during interviews. None of the participants withdrew from this study. But, as my research population were considered as minors (underage), legal capacity to give informed consent, and as it might be an asymmetric power-relation between children and researcher, the informed consent from participants were co-signed by the nurse for all the interviewed pregnant girls and by the teacher for the focus group participants.

I promised to keep anonymity and confidentiality for all the participants. It was not easy for third person to listen from the interview as it was conducted in a secured room usually used for consultations, this ensured confidentiality. The names or other features that would identify the respondents were not used in the report, anonymous transcribing was assured and the draft

of final report was given to those who wanted to read it before the publication. Furthermore, they were guaranteed that the thesis will not be used for any lucrative but only for scientific purpose. However, whatever information included in this research without references or source, I am solely responsible for it.

4.0. Findings

This chapter presents the emerging issues from the findings of the study on factors influencing unwanted adolescent pregnancies in Ethiopia. First, the results from interviews with the hospitalized pregnant girls will be presented, followed by the results from the focus group discussion and finally a figure summarizing the factors influencing the adolescent reproductive health.

4.1. Interview with pregnant girls aged 15-19 years old

4.1.1. Demographic characteristics of interviewees

The information on the basic characteristics of the population is essential for interpretation of survey findings.

Table 2. Demographic characteristics of the pregnant girls (n=10)

Background Characteristics	Number of informants per age:					Total:
Number of interviewees	2	3	3	1	1	10
Age	15	16	17	18	19	
Education						
No education	1	1	1	0	0	3
Primary education	1	1	1	1	0	4
Secondary education	0	1	1	0	0	2
College/university	0	0	0	0	1	1

Residence						
Urban	0	1	2	1	0	4
Rural	2	2	1	0	1	6
Wealth						
Poor	2	3	2	1	0	8
Middle	0	0	1	0	1	2
Rich	0	0	0	0	0	0
Religion						
Christians	1	1	2	1	1	6
Muslims	1	2	1	0	0	4
Others	0	0	0	0	0	0
Marital status						
Not married	2	2	1	1	1	7
Living with boyfriend (married)	0	1	2	0	0	3

In this study I wanted to investigate the socioeconomics, educational backgrounds of the pregnant adolescent girls as presented in the table 2.The data shows that about half of girls didn't finish primary school while 3 girls had no formal education and 2 of 10 girls interrupted study at secondary school level. The data shows that 6 of 10 pregnant girls were living in rural area and 3out of 10 were married. The majority of pregnant girls were poor, and about half of participants were Muslim while the rest were Christians.

During the interview, one girl from rural area said: ‘’we as Ethiopian girls are dominated by boys because they are more educated than us, families send boys to school while they send us to farming’’.

4.1.2. Knowledge on menstrual cycle/fertility pattern/physiology of reproductive organs

Table 3. Knowledge on menstrual cycle

	Number of participants	Yes	No	Not sure
Girls	10	3	5	2

The question of menstrual cycle was asked to find out the girls knowledge on thisand physiology of reproductive organs. It is observed in this table 3, that more than 5 out 10 girls interviewed don't know their menstrual cycle/ fertility pattern and the physiology of their reproductive organs. 3 of 10 participants knew their menstrual cycle, while 2 of 10 girls were not sure.

One girl declared that: ''… I don't know the date of my period, I find it out when I go to toilet that my underwear have blood. I tried to ask my best friend but she was not able to give me a satisfactory explanation''. Another pregnant girl stated during the interview with the nurse that:''… Before I was thinking that I can get pregnancy if I have sex during the red period, but from your explanation now, I know that it is not possible''. This situation of ignorance exposes girls to get unwanted pregnancy especially when they engage in unprotected sex.

4.1.3. Age of first sexual intercourse experience

Table 4. Age of first sexual intercourse experience

Age	12	13	14	15	16	17	18	19	Total
Respondents	0	1	3	4	2	0	0	0	10

The data in Table 4 show that some girls in this study started sexual intercourse as early as 13 years old. But the majority of girls had their first sexual activity between the age of 14 and 15, the mean was 14,7.

One girl during the face to face interview stated that: ‘’...I was forced to have sex by one male neighbor who was an adult. He cheated me to go and pick a CD film from his room. When I reached there around the evening he closed the door and started to touch me. I was afraid to scream as it could alert the public and that they could blame me and then I would lose my reputation’’

4.1.4. Reasons for having sex

Table 5. Reasons for having sex among pregnant girls (n=10)

Number of participants	Love/feelings	Money/materials (poverty)	Forced or coercion sex	Peer pressure	Use of drugs/ smoking/ alcohol or chat
(n=10	2	4	1	2	1

The question of reasons for having sex was asked to investigate why girls were having sex. As it is observed in the Table 5, out of the 10 adolescents asked on the reasons for having engaged in sex, 4 of adolescents had sexual activities due to poverty (lack of money). Twoout of 10 girls had sex for love or affection for a partner and curiosity. And 2 out of 10 girls had sex due to peer pressure, while 1 out of 10 participants was forced or drunk when she had sex.

A 16 years old participant living with her mother and 5 siblings affirmed that: ‘’... I wanted to pay school fees and my mother told me that she can’t afford it as she is poor. She said to me that i should cater for myself. So , I didn’t have another option than looking for a man who could pay school fees for me, and then he asked me something in return’’. Another 17 years old informant girl stated: ‘’ I decided to get marriage last year as I didn’t have another option. My father passed away and my mum was old to provide means of surviving. I was all the time at home without a job, after the interruption of my study due to lack of financial support’’. Sometime it was difficult to get something to eat at home for me and my 3 sisters. As I was the eldest, I opted for marriage in order to support them’’. A number of participants recognized having sex for love or affection for a partner. One girl said: ‘’…I had sex to show the love to my boyfriend as he promised to marry me’’. Love or affection for partner was the

second reason expressed by adolescents for having sex, peer pressure was also stated as a common reason for engaging in sex.

4.1.5. Use of contraceptive methods

Table 6. Use of contraceptive methods in the last 6 months

Type of contraceptives	Used	Not used	Total of respondents
Pills	2	8	10
Intrauterine devices (IUD)	-	-	-
Injectables or shot	1	9	10
Implants	-	-	-
Condoms	3	7	10
Diaphragma/jelly/foam	-	-	-
Emergency contraceptive pills	-	-	-
Withdrawal	-	-	-

This question was asked to know if the adolescents were protected every time they were having sexual intercourse. The findings in table 6 show that most of adolescents did not use or used contraceptives irregularly in the last 6 months. 3 out of 10 girls used condoms while 2 out of 10 used pills and 1 out of 10 used injectable. Most of the contraceptives were not known by participants, except condoms and pills that were the most used.

During the interviews, one informant girl, was advised to use contraceptives all the time, she answered: ‘’…I cannot afford to buy simple sanitary pads for my periods, how will I be able to buy pills which are more expensive and even difficult to use’’. Another girl stated that: ‘’…I asked my partner to use a condom but he refused and I couldn’t say anything as I could lose his financial support if he did not have unprotected sex with me’’. The main reasons given for not using contraceptives were lack of money to purchase them, and most of the contraceptives were not known by girls, and many partners did not like to use them.

4.1.6. Harmful traditional practices (HTP)

Table 7. Number of girls who suffered from Harmful traditional practices (HTP)

	Number of participants	Female genital mutilation (FGM)	Sexual abuse	Early marriage	Trafficking	Child labor
Nr. of girls	10	5	1	3	0	1

Question on harmful traditional practices were asked to find out if the HTP contributed to adolescent’s unintended pregnancy. As illustrated in table 7, half of girls who participated in this study were victims of female genital mutilation (FGM). . 3 out of 10 girls were married early, and 1 out 10 girls was facing sexual abuse or child labor.

One informant girl said: ‘’…I asked my mum when and why they did it to me. She said that I was too young and they did it due to traditional rituals. If I was able to say no I would not have accepted to do it, as I feel ashamed to tell my friends that my clitoris is cut’’. Another respondent who was a girl aged 17 years old claimed during the interview that: ‘’…I was not ready for marriage but I was forced to by my family members. Today when I see other peers who are still in school, I am quite jealous and I now hate my family as they didn’t give me this chance’’.

A 16 years old girl said in an interview:'' …my father chased me from home when he knew that I was pregnant, I lived in critical conditions at my neighbor's house. She was so kind and accommodated me for more than 2 months. She tried to negotiate with my parents for my return home, but my father didn't change his decision. Thus, I was obliged to go and live with my partner who had another wife''. Other problems observed in the table 6 are sexual abuse and child labor.. A pregnant girl declared: ''…I was raped when I went to fetch water in the evening. It was about 3km away from my home. One boy approached me on my way and wanted to talk to me. I stopped and tried to listen to him but he caught me down. I tried to fight with him but he was too strong than me ''. As regards to harmful traditional practices (HTP) the main result show that half of the girls had FGM and 3 out of 10 adolescent girls were involved in early marriage.

4.1.7. Sources of reproductive health education (RHE).

Table 8: Sources of getting information on reproductive health education (RHE).

	Number of respondents	Family	Friends	School	Healthcentre	Mass media	Not received
Girls	10	0	1	2	2	0	5

The question was asked to adolescents to know their main sources of getting information on the reproductive health education. As shown in the table 8, half of participants didn't receive the reproduction health information before their pregnancies. 2 out of 10 girls received the RHE during the schooling time and 2 out of 10 received the RHE at the health centre when they went to consult the health personal for other sicknesses. 1 out of 10 received the RHE from friends. None of the participants received the RHE from a family member or the mass media.

One girl declared that: '' I was discussing about sex with my friends in my room and when my father heard that he came to warn me that I should discuss about sex only when I will get married with my husband''.

4.1.8. Willingness for voluntary counseling and testing (VCT)

Table 9: pregnant girls interested to take VCT

	Nr. of interviewees	VCT	Not VCT	Not sure
Girls	10	2	6	2

The question was asked to adolescents to see if they are interested to know their health status regards to prevention of sexual transmitted diseases, including HIV. The table 9 reveals that more than 6 out of 10 participants were not willing to take voluntary counseling and testing (VCT) in order to know their health status and prevent the STIs and HIV transmission. Only 2 out of 10 were willing to take VCT, while 2 others were not sure.

One interviewee said:''… I don't want to be tested with the fear of being stigmatized and discriminated by my community. I had one neighbor who had AIDS; she was chased from her work, even rejected by her family and friends. She was abandoned without care and support until she died''.

4.1.9. Availability of youth friendly reproductive health services

Table 10. Youth friendly reproductive health services available in the community

Population	Number	Poor services	Not available
Girls	10	5	5

Participants were asked to give their opinions on availability of youth friendly reproductive health services in their areas. Table 10 shows that 5 out of 10 participants admitted that there were reproductive health services in their area, but the services provided were poor, not interesting, not accessible and not friendly designed to youth. And half of participants declared not having access to these services in their community.

One girl who was attending secondary school stated that: ‘’… I was sick and I have to spend more than 3 weeks at home without treatment, and finally my mum got financial support from church when I was about to die’’.

Another interviewee said that: ‘’I went to consult a doctor and when he asked me to explain my sickness I couldn’t explain everything because I was not comfortable, people could listen to what i was saying as the consulting room was separated from with the waiting room by curtain’’. Another participant said: ‘’… I went to ask for a female condom but the health agent told me that they never have such commodities, as the cost maybe too expensive that people will not buy it ’’.

4.1.10. Priority options suggested by pregnant girls for women empowerment

Table 11. Interviewee’s priorities in terms of women empowerment

	Nr. of respondents	Formal Education	Contraceptives and reproductive health education	Microcredits and vocational training	Health personal training and modern facilities	Others
Girls	10	5	2	2	1	0

Participants were asked to list suggested solutions by priority order in order to empower women in preventing teenage pregnancy. As it is observed in the table 11, when participants were asked to classify their priorities linked to women empowerment in prevention of unintended pregnancy, they gave the priorities as follows: Education was chosen by half of adolescents as first priority. 2 out of 10 participants opted for contraceptives methods and/or reproductive health education, followed by financial support (microcredits for small business), and 1 out of 10 interviewees prioritized the training of health personal and modern health facilities. One girl said:’’… *an educated girl does not go to collect firewood, far away*

as I do. They are sitting in offices administrating and managing organizations. They earn a good salary and have well equipped houses and their children go to better schools''.

Reproductive health education and contraceptives were chosen as second priorities by 2 out of 10 participants. One 18 years old girl informant had this to say during an interview with the nurse:*''… If I could listen my friend's advice of using contraceptives maybe I could not be pregnant…''.* 2 out of 10 interviewees suggested the idea of self employment trough micro-finance and vocational trainings to promote women independence as one of the ways to prevent unwanted adolescent pregnancy. A 17 years girl said: *'' I interrupted school when I was 10 years old and I am too old to return to school, if I get some money I can open a small shop and the profit would help me every time to buy hygienic stuff such as sanitary pads, body lotion, perfume and toilet soap… ''.*

4.2. Focus group discussion (FGD) with adolescents aged 15-19 years old

4.2.1. Focus group discussion (FGD) for boys aged 15-19 years old

Table 12. Demographic characteristics of boys who participated in FGD (n=5)

Background Characteristic	Number of participants per age:				Total:
Number of participants	1	2	1	1	5
Age	15	16	17	18	
Secondary school					
Grade 9	1	2	0	0	3
Grade 10	0	0	1	1	2
Residence					
Urban	1	1	1	0	3
Rural	0	1	0	1	2
Wealth					

Poor	0	2	1	1	4
Middle	1	0	0	0	1
Rich	0	0	0	0	0
Religion					
Christians	0	1	1	0	2
Muslims	1	1	0	1	3
Others	0	0	0	0	0

The participants in FGD for boys were 5 aged between 15 and 18 years old, 3 attending grade 9 and 2 were in grade 10 at secondary school. 3 out of 5 participants were living in town, and 2 out of 5 lived in the countryside. The majority was poor and half of participants were Muslims and the rest were Christians.

Asked about the knowledge of physiology of reproductive organs, 3 out of 5 boys did not know when they are fertile or explain properly when a girl can get pregnancy. One 15 years old boy participant asked this: *‘’… I really don’t know when a man can make a girl pregnant, is it when I am 18 years old? ‘’.*

Another boy said that:’’… I asked my biology teacher in class to explain deeper about when a girl can get pregnant but she was ashamed to give deeper details and then she answered me that I am still at an age where I should not know everything about sex, despite that she knew that I had a classmate who was my girlfriend’’.

When asked about what age they started having sex, few participants started at the age of 15, but the majority of participants had their first sexual activity between 16 and 17 years old. The reason given by most of the participants for engaging in sexual intercourse was to satisfy sexual needs and peer pressure or being drunk. One 17 years old boy recalled that:*’’… my classmate came home and told me that he had sex with his girlfriend, I felt jealous and went directly to my girlfriend, trying to convince her using my friend as an example in order to have sex with her ‘’*. The association of smoking, alcohol, chat-chewing or drugs were mentioned by few participants as a factor that leads to having sex. One boy from the FGD

declared that: ‘’… *When I was chewing chat I felt some exciting feelings and I liked to smoke and drink until I got drunk and finally i lose control’’.*

Most of participants justified the non use of condoms by saying that they don't feel comfortable to by use them. The majority of participants received the reproductive health education either at school or at the health centres. As regards to attitudes towards sexual behavior, there was no difference between Christians and Muslim participants. The Muslim parents are however more open to polygamy than Christian parents. One 15 years old boy participant declared that:’’ *my father has 3 wives and we are 13 children at the moment but my last step mother is still having children. I asked my father why he wanted to have many children as only half of them are in school due to limited income, he answered me that it is nice to have children’’.* Another participant said: *‘’it is not a problem of having many children, but the problem lies on how you are going to raise them up’’.* The majority of the boys were opposed to the liberalization of abortion, using religious arguments as the reason.

Asked about child labor, one participant had this to say: ‘’… I was working as shepherd for my neighbor at 13 years old in the village, after the death of my parents who were paying the school fees. My salary was just in form of food and a place to sleep at the home where I worked. During the rain season, I got wet from the rain which it was raining on me because I did not have shelter in the bush. Today I am happy as I am back at school, thanks to my uncle ‘’. According to the culture, participants said that girls are supposed to participate in household activities while boys are expected to do activities outside the home such as farming, looking after animals, digging of irrigation canals, milking cows, mechanic works, building house, roads et, especially in rural areas. The majority of participants recognized that health services were still inaccessible to many people due to lack of financial support, lack of trained health personnel and the health facilities were unequally distributed and not improved. Given the large and poor country like Ethiopia, accessibility to health services was still a big problem to many participants. One boy said: ‘’… I was not interested in visiting the health centre because i had to walk more than 2 hours to reach the nearest health centre in my area; and as my family was poor it was expensive for me to consult a doctor’’.

Lack of trained health agents was also mentioned by participants to preventing youths to benefit from the RH services. One participant boy aged 16 years old reported that:’’…*I went to a health center to ask for a condom from a nurse who is from my area, instead of serving me she started asking me questions such whom I was going to have sex with. Due to the fear*

that she may reveal it to my family, I didn't tell her the name of the girl and I left without collecting the condoms''.

4.2.2. Focus group discussion (FGD) for girls aged 15-19 years old

Table 13. Demographic characteristics of girls who participated in FGD (n=5)

Background Characteristic	Number of participants per age:				Total:
Number of participants	1	1	2	1	5
Age	15	16	17	18	
Secondary school					
Grade 9	1	1	0	0	2
Grade 10	0	0	2	1	3
Residence					
Urban	1	1	1	1	4
Rural	0	0	1	0	1
Wealth					
Poor	1	1	2	1	5
Middle	0	0	0	0	0
Rich	0	0	0	0	0
Religion					
Christians	1	0	1	1	3
Muslims	0	1	1	0	2
Others	0	0	0	0	0

Table 13 shows that 5 girls aged between 15 and 18 years old participated in the FGD for girls. More than half of the participants were attending grade 10 and the rest attended grade 9. 4 out of 5 participants were living in the city. All participants were poor; half of them were Muslims and half Christians.

During the FGD, 3 out of 5 girls said that they could not calculate their menstrual cycle. The mean age first intercourse was 15. Asked about the reasons for having sex, the majority of the girls were engaging in sex mainly for materials need and a few participants had sex due to love or affection for a partner and curiosity. One girl declared this: *‘’I was living alone as the head of the house with my siblings and I was obliged to look for a boyfriend whom could cover our primary needs’’.* Another participant said that: *‘’ … I just wanted to experience what it was like’’.*

About the use of contraceptives, most of the participants knew only pills and condoms but half of the participants said that they obliged their partners to use condoms during sexual intercourse. One 17 years old girl indicated that: *‘’ I had a boyfriend but I never became pregnant because I was using contraceptives sometimes’’.* Reasons given of not using contraceptives were lack of money to purchase them, lack of awareness and disapproval of partner, poor access to contraceptives, and other reasons like rape, religious believe…. Religion seemed not to have a big influence on attitudes towards sexual behavior, but it had an impact on family planning (size). Both Muslims and Christian’s participants had had sex but Muslims were less open to talk about sex publicly and wanted a larger family size than Christians. Many girls did not support the idea of the liberalization of abortion, giving religious beliefs as the main reason.

3 out of 5 participants informed that they had attended the traditional ritual of female genital mutilation (FGM), and 2 out of 5 suffered a temptation of early marriage organized by their family. There was no case of sexual abuse mentioned but one case could be considered as child labor. One 16 years old girl complained that:*’’… I failed at school last year because of the work load assigned to me at home to assist my aunt before and after school, could not allow me to revise my lessons’’.* She said also that:*’’… before going to school in the mornings I had to wake up early as the only girl among 3 boys. I had to clean the house and the compound, prepare tea before I went to school. After school, I had to help my aunt to cook food, wash dishes, fetching water… ‘’.*

The majority of participants reported receiving the reproductive health education (RHE) at school or at the hospital whenever they were sick. A few number received the RHE from their peers or friends. Most of the informants were not willing to take voluntary counseling and testing (VCT), only 1 out of 5 participants were interested in VCT. They were afraid to test positive due to stigmatization and discrimination in their community. One participant stated:'' *people are more afraid of AIDS as there is no hope to recover from this sickness; they are unwilling to be tested for HIV to disclose their status and to seek care, as they are more afraid to die''.*

Some participants during the FGDs focused on the importance of having trained health personnel and improved health facilities that could contribute in improving the adolescent's reproductive health. They said that they did not have enough trained health professionals to cover the whole country; and the health facilities were not modern to cater for the needs of 85, 2 million inhabitants. One participant said: *''… my father was sick and he had to wait for the operation for 2 months at the hospital, as they were waiting for a surgeon who was to come from another place. He was sleeping on a small mattress on the flow without a bed''.*

During the FGD, many girls acknowledged that they were facing many problems due to unwanted pregnancies. They said that some of the girls dropped out of school after getting pregnant, because according to Ethiopian school rules, pregnant girls cannot attend primary or secondary school. Even after giving birth, some schools could not enroll them based on religious beliefs. Other girls were out of work or excluded from family or friends because of unwanted pregnancy. Other participants informed that some pregnant girls contracted gynecological or psychological problems; or were obliged to do unsafe abortion or were committed to suicide. One 15 years old girl participant said that: *''... I am afraid to have sex because I have a colleague who died from complications of pregnancy''.*

4.2.3. Mixed focus group discussion (FGD) adolescents aged 15-19 years old

I also conducted a mixed focus group discussion (FGD) with adolescents aged 15-19 but did not generate any new information. Results from this discussion were similar to those from the separate FGD with girls and boys reported in the tables 12 and 13. All participants saw the need for being empowered through formal education, reproductive health education or microcredit in order to tackle the adolescent unwanted pregnancies.

4.3. Factors contributing to influence adolescent reproductive health and their outcomes

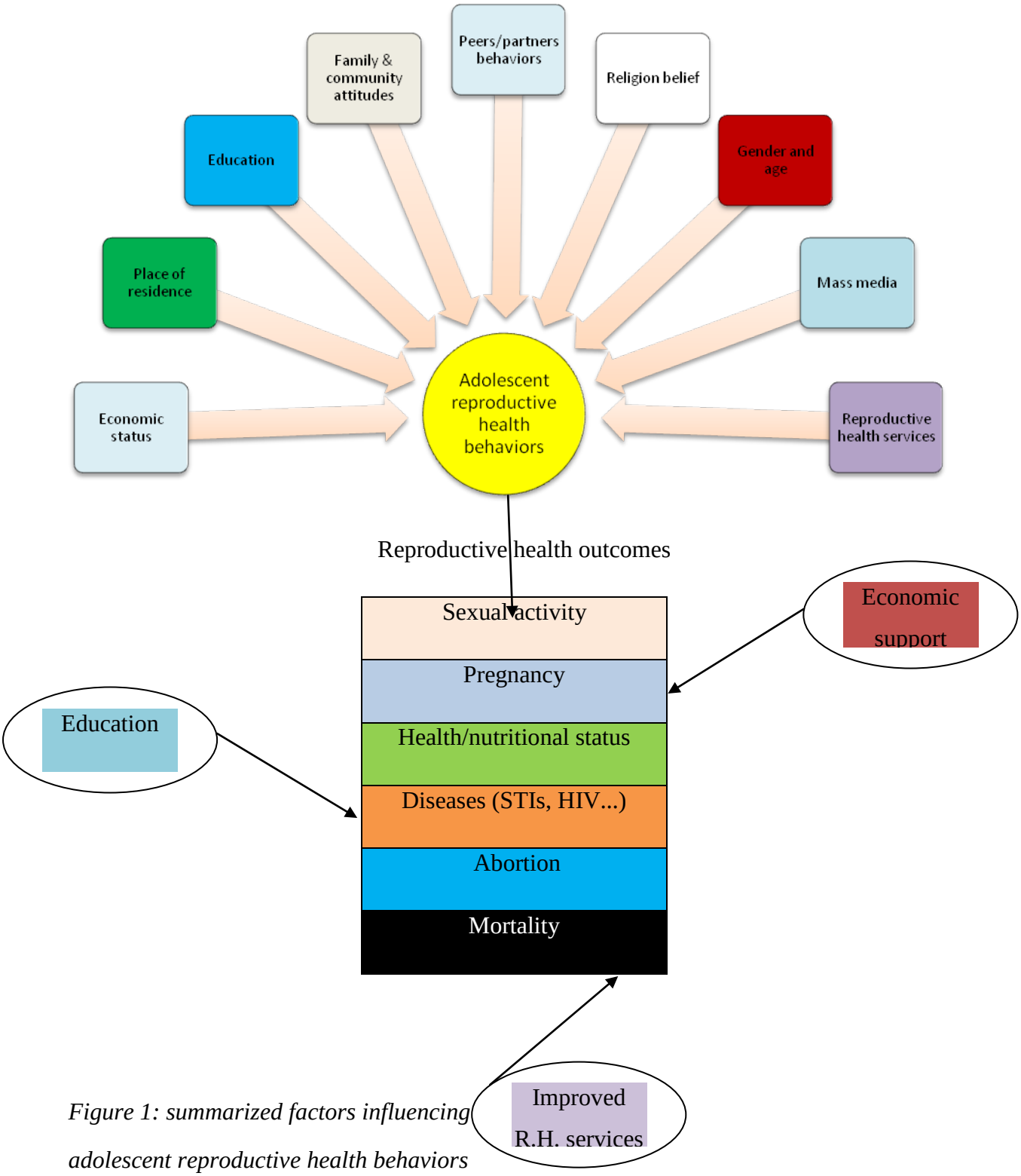

Figure 1: summarized factors influencing adolescent reproductive health behaviors and their health outcomes

The figure 1. Shows the summarized factors that contribute to influence the adolescent reproductive health behaviors, their health outcomes and the proposed actions to prevent them.

5.0. Discussion

The findings show that there are some major factors that influence adolescents' decision making in their reproductive health behaviors. Those factors are deeply discussed in this chapter and grouped in 2 subtitles, the socioeconomic and reproductive health services that play a pivotal role in youth reproductive health. The subtitle 3 present the different opportunities suggested by participants for empowering youth to prevent unintended teenage pregnancy.

5.1. *Socio-economic factors*

5.1.1. Wealth/standard of living

In the present study a poor person was defined as someone who does not have income to cover basic needs (eating, wearing, health, schooling, transport, housing…). In this study 13 out of 15 girl participants were poor and among them 10 out of 13 girls aged between 15-19 years old were pregnant. Many studies have shown that poor women are exposed to earlier marriage than women with a high standard of living (UNFPA 2007). They also start their childbearing earlier and they have less ability to negotiate or delay sexual activities and reproduction (UNFPA 2007). Poverty affects fertility and sexual activity of young people (Mufune 2003). African women bear the higher brunt of poverty because they have low access to capital (Jegede 2003). In the rural areas, they did not have access to cattle and land, while in urban areas they were discouraged from higher education and the labor market. They also face unequal opportunities in access to household resources (Aina 1995). Consequently, participants who were not educated did not have access to the few available jobs and sufficient income-earning. Since they had to survive, some women depended on marriage and sex to access resources. As cited earlier in the previous chapter, one participant girl declared: *''... I wanted to pay school fees and my parents told me that they could not afford it as they were poor. They said to me that I should cater for myself. Then, I didn't have another option than looking for a man who could pay for me and male generosity always asks for something in return''.*

The study reveals that 4 out of 10 adolescent's girls were engaging in sex for money in order to survive. Some of them were getting married or having older male partners due to economic reasons. One 17 years old informant girl stated: *'' I decided to get marriage last year as I didn't have another option. My father passed away and my mum was old to provide means of surviving. I was at home all the time without a job, after the interruption of my study due to lack of financial support''. Sometime it was difficult to get something to eat for me and my 3 sisters. As I was the eldest, I opted for marriage in order to support them''.* In this capitalist world, ''poverty has been universally affirmed as a key obstacle to the enjoyment of human rights'' (United Nations 1998).

In the situation of no access to income, where many adolescents were unemployed and out of school, participants said that adolescents were developing some personal risk behaviors, seen as another challenge hampering adolescent reproductive health. For instance in this study participants reported the phenomena of ''street children'', or frequent chat-chewing among adolescents that often lead to increased smoking and alcohol use, which ultimately lead young people to having unprotected sex after they became drunk and lost control. Many informants in FGD for boys recommended that job opportunities, youth centers and youth-focused programs were needed to better address this problem by teaching young people about the consequences and dangers of drugs and alcohol use and their effects on the lives of young men and women.

5.1.2. Place of residence

Place of residence is considered as one of the most important indirect determinants of fertility (Naidoo and Jane 2000). The data show that 6 out of 10 pregnant girls were living in rural area. Asked about the preferences on where to reside, most participants preferred to live in cities than in remote area. They justified their answer by saying that urban places offer better educational, job opportunities, and health facilities; then more access to contraceptives information and supplies. The girl's focus group argued that urban women have lower fertility because they desire smaller families, many later and are likely to use family planning and was more known to use contraceptive more effectively. Adolescents living in urbanized area tend to have lower fertility when compared to their counterparts living in rural area (United Nations 1987).

Data from the demographic and health surveys (1995) show that 24 % of rural women in developing countries begin childbearing in their teenage years versus 16 % of urban resident women.

5.1.3. Education

Education is considered as a human right. It leads to individual creativity, improved participation in the economic, social and cultural roles in society and hence more effective contribution to human development (UNDP 1990). According to the universal declaration of human rights (UDHR 1948), everybody has the right to free and compulsory primary education. As a minimum: countries must ensure that basic education is available, accessible, acceptable and adaptable for all (4A scheme), which has been recognized by the Ethiopia government.

Many Ethiopian girls in this study were however not provided with schooling or drop out from school due to lack of financial support. It has been revealed in this study that the majority (7out of 10) pregnant girls couldn't read or write or achieve their primary education in Ethiopia, mainly due to poverty. This finding shows how lack of education could be associated with unintended pregnancy. I can argue that ignorance contribute to unwanted pregnancy as the number of pregnant girls among analphabet or with primary schooling is higher than those who have attended secondary school. Educated girls have a better knowledge about the physiology of their bodies and reproductive health and acquire informed skills on safe and responsible sex. However, as it has been mentioned in the literature review, only 33, 8% of Ethiopian women are educated (MOE 2005).

Basic education provides girls and women with an understanding of basic health, nutrition and family planning, giving them the choices and the power to decide over their own lives and bodies. Women's education leads directly to better reproductive health, improved family health, economic growth for the family and society, as well as lower rates of child mortality and malnutrition. It is also a key in the fight against the spread of HIV & AIDS (UNICEF 2008). Participants agreed that formal education was a key to development as it provides knowledge and skills to people who have it, and it can delay marriage of adolescents.

Education empowers women's financial status. Educated women in gainful employment become economically independent from man. They can boost the income of the family and community which contribute to poverty reduction as they do not only support the

health/nutrition and wellbeing of their family, but also the education of their children. In addition to economic benefits, women with higher education and those in employment obtain a social status and their opinions are valued in the community. As other social benefit it can be argued that educated girls are likely to be married to educated men because men also prefer to marry educated women as they saw it as a privilege to make a prosperous good family. During the interview, one girl declared: '' I *wanted to get married to an educated man but all my boyfriends were rejecting me when they knew that i could not speak English''*.

Education is among the socioeconomic factors that affect fertility. Female education influences fertility in many ways. Educated women are emancipated in order to use modern contraceptives properly; and education increase the adolescent's awareness and willingness to adopt family planning (United Nations 1987). Education also reduces the risk of teenage pregnancy. Education can as well rise the age at marriage and hence leads to delayed start of child bearing (MOH, division of family health 1988).

Despite the positive values associated with educated girls, many girls in this study were not enrolled in school as stated in the literature review. This is the area where government, NGOs and other reproductive health stakeholders need to improve policy on education, for instance, allowing pregnant adolescents to continue with education or after having a child.. According to UNICEF (2007), education is one of the most critical of all the rights because education plays an important role in enabling girls and women to secure other human rights.

5.1.4. Family and community attitudes

The circle of influence on sexual decision making extends beyond the individual. Family and community can play an influential role in sexual behavior. Many respondents attested that community barrier to receiving and gaining access to right information on sex topics was a challenge and difficult issue for both youth and adult to discuss. It was noted that some families were supporting early marriage, childbearing, FGM and discouraging adolescent sex education. 8 out 10 adolescent indicated that they sought sexual information from their friends as they could not get it from their parents. This attitude prevent youth to right information on reproductive health education. It was also observed that youth coming from a community where there are lack of employment, education, stability (war, migration) and other opportunities were more exposed to high risk behavior. The study shows that 4 out of 10 girls engaged in sex were motivated by looking for money or goods. Adolescents from big size

family or with one single parent were more exposed, while adolescent from family with strong religious believes/values were engaged later in sexual activity than others. Weak legal measures to promote legal abortion, age of legal marriage and punishment of sexual violence were also contributing to bad behavior among youth. Then, I can strongly argue that family/community attitudes have an impact on youth sexual behavior.

5.1.5. Peers and partners behaviors

Peer/partner group is an important factor in adolescent development and has some bearing on teenager's decision about sex. This study show that peers and partners pressure influenced the behavioral attitudes of other adolescents. 6 out of 20 adolescents reported that they were influenced by their peer/partners to engage in sex, drink and smoke. The majority said that they sought advices on sex from their peers/partners. It was also observed that youth who was sexually active had also a friend who was sexually active as well.

5.1.6. Religion belief

Religion as belief in supernatural power that control human destiny, it can influence the personal behavior. This study found out that 6 out of 10 girls pregnant were Christians while 4 out of 10 were Muslims. I can argue that religion does not have a big influence on the incidence of unwanted pregnancy among adolescents in this study, but Christians seemed to start sexual activity earlier and were more open to talk about sex than Muslims and during the FGD, Muslims expressed the needs of having more children than Christians. Approximately 45 % of the Ethiopia population is Muslim (www.state.gov/ethiopia population). This could be explained by the fact that Islam clearly values procreation within marriage and fertility is highly prized. Children are a gift of God, the ''decoration of life'' says the Quran. (The Guttmacher report 2001). It is known that Islam commands man to marry even until 4 wives, which is first and foremost an act of piety. Marriage further brings benefit of emotional and sexual gratification, cohesion between families and social stability (ibid).

5.1.7. Gender equality and age

Gender equality and women's empowerment are human rights that lie at the heart of development and the achievement of the millennium development goals (UNDP 2009). The Cairo Consensus, the Beijing Platform of Action and the Millennium Development Goals, were the three development platforms strongly reinforcing each other in the human rights of

women and the recognition that solving the world's most pressing problems demands the full participation and empowerment of women.

The study revealed that the teenage who were pregnant were also victims of one of the harmful traditional practices such as female genital cutting or mutilation (FGC/M), early marriage, sexual abuse or child labor. Half of informants admitted of being victims of Female genital cutting, mostly living in the rural area. This finding is confirmed by the demography and health survey (DHS 2005/2008) that found that FGM/C is still practiced in Ethiopia especially in rural areas and the prevalence of FGM/C was 62 % among girls aged 15-19 years old Ethiopia. According to UNFPA (2010), the Ethiopian government regulation reaffirming the penal code of Ethiopia (ratified in 2005) which criminalized the practice of FGM/C was passed in 2005, in collaboration with UNFPA-UNICEF joint program. The study shows that gender and age influence reproductive health. Girls started sexual intercourse at 13 years old, early than boys who begun 3 years later at 16 years old. Adolescents with early puberty started sex activity earlier than their colleagues with delay puberty. Girls with precocious puberty were often treated as sexual active and were targeted by adult men than girls with slower development.

Three out of 10 girls between the age of 16 and 17, were victims of early marriage, the majority were poor and did not finish primary school, while the legal age of marriage in Ethiopia is 18. The Ethiopian demography health survey (EDHS 2005) also reported that over 40% of the girls were mothers before they turned 19 years old. Most of these marriages especially in rural areas were arranged or influenced by family members who focused on wealth (dowry) that they would get by marrying their girls to rich men (Aspen and Mekonnen 2007). The participants in the FGDs stated that African men were allowed to practice polygamy, which was becoming common in the Ethiopia population where about 45 % are Muslims and may have 4 wives. Childbearing was considered as a social norm to prove of fertility, ensure the stability of the marriage and acquire status in the community.

Two out of 10 pregnant girls were victims of sexual abuse or forced child labor in this study. CYAO (1995), conducted in-depth discussions with 32 of the young girls living on the streets and found that 12 had been raped, and 9 others were sexually attacked''

In additional to those harmful traditional practices, participants during FGDs revealed that there were other bad culturally belief in the community that contributed to the gender

inequality such as, a pregnant girl without a husband was considered as a prostitute in the community and faced stigma and discrimination. Pregnant girls were also not admitted to primary or secondary schools. Some religious leaders were against the use of condoms, while there were many who recommend abstinence as an option. Moreover abortion is illegal in most African countries including Ethiopia, except South Africa. According to professor Akande (2008) *''…South Africa is currently the only country in Africa where abortion is legal; following the South Africa's example could contribute in improving the reproductive health situation in other African countries…''*

Other societal inequalities between males and females enumerated by participants were the inequities within the families, young girls tended to marry older men because of material gains: Some women were not allowed to use contraceptives by their husband because the women were not socio-economically independent. Cultural norms also encouraged young men to prove their masculinity by having multiple sexual partners among young adults, thus exposing themselves and their partners to STIs and HIV, as well as unwanted pregnancies. When it comes to education, boys were prioritized to be sent to school while girls were left home to carry out domestic activities. All these were mentioned by respondents as specific concerns and challenges to promote adolescent reproductive health. In the focus group discussions mentioned in the findings chapter 4, one girl from the rural area said: *''We as Ethiopian girls are dominated by boys because they are more educated than us, the families send boys to school while they send us for farming''*. Then, I can argue that reproductive health programs for the youth may not succeed unless it addresses gender inequity.

UNFPA (2005) recognized that discrimination and violence against women remains common, even though most countries now have policies in place to address these inequalities. Researchers agree that education is the best way to empower women in the fight against gender inequality. However this study demonstrated that 2/3 of girls who participated in the study could not read or write or did not finish primary school. According to the ministry of education (MOE 2008), the rate of education among Ethiopian women was 33,8%, while it was 49% for men. I can argue that this is a challenge that the Ethiopian government and NGOs should get more involvement to overcome gender inequality.

5.1.8. Mass Media

Mass media play an important role in making health information available to youth. It also has a considerable influence in shaping values and ideas in youth minds. This study indicates that most of adolescents had limited exposure to mass media. The few numbers who access to mass media had stated that it was not providing health education services as role models and examples of responsible behavior. But they were exposed to programs such as news, movies, music, internet, publicity… that stimulating bad behaviors (sex, violent…). There was no big difference in media exposure between boys and girls, but the exposure was more related to level of education.

5.2. Reproductive health services

5.2.1. Reproductive health education (RHE)

During the focus group discussions, it became evident that many adolescents were less informed, less experienced, and less comfortable in accessing health services for reproductive health (RH). They claimed that parents, health care workers, and educators are frequently unwilling or unable to provide complete, accurate, age-appropriate RH information to young people. Participants said that this attitude was common due to the adults own discomfort about the subject or the false belief that providing the information would encourage sexual activity. As cited in FGD for boys, one participant had this to say:*''… I asked my biology teacher in class to explain deeper about when a girl can get pregnant but she was ashamed to give deeper details and then she answered me that it is not my age to know everything about sex, despite that she knew that I had a classmate who was my girlfriend''.* As mentioned in the literature review, professor Akande (2008) stated that: *''…If sex education is done properly, it should put youngsters off having sex, not turn them on to it…''.*

In this study, most informants (8 out of 10) did not receive RHE before they got pregnant, and a small number (2 out of 10) of participants, who received RH information, did so at School during lessons in class for those who attended school; or at health centres only for those who went to consult for issues related to RH. The majority of FGD participants reported that they received the RHE at school.

Asked about the possibility of receiving RHE at home, the participants claimed that some of them experienced resistance or even hostility and negative attitudes from adults when they

tried to obtain the RH information and services they needed. This cultural unwillingness and embarrassment to discuss such issues present a great barrier to youth and youth reproductive health programs to reduce the number of unintended pregnancies and STIs/HIV among the participants. They therefore may be at increased risk of sexually transmitted infections (STIs), HIV, unintended pregnancy, and other health consequences. The UNFPA (2007) stated that educating young people about reproductive health and HIV/AIDS and teaching them life skills in negotiation, conflict resolution, critical thinking, decision-making, and good communication improves their self-confidence and ability to make informed and responsible choices on reproductive health issues. RHE programs should focus not only on children at primary and secondary school, but also on those out of school.

Some participants in FGDs explained that the media (radio, television, posters, leaflets and newspapers) that could support to reach a large number of adolescents in raising awareness and education on RH is not covering some areas of the country and RH topics are not discussed on media. The data from this study shows that the majority of both interviewees and participants confirmed never to have seen any RHE through the media. The mass media has a policy that does not allow public sex discussions in a nation dominated by religious belief. Among the informants interviewed attested that adolescents often lack basic reproductive health information, knowledge, and access to affordable contraceptives due to lack of friendly-health services. Most of them acknowledged that they did not feel comfortable in discussing RH with parents. Given its conservative culture and religion, Ethiopia is faced with an overwhelming challenge of assisting its young people to openly discuss issues related to sex, such as sexuality, family planning, reproductive health, STIs, and HIV/AIDS. One boy participant declared: *''it is a shame and it is not allowed culturally to ask my father questions related to sex; he will consider it like I don't respect him''*. As a result, most youths lack basic knowledge regarding reproductive health and these situation are explaining how RH information is poorly provided to adolescents in the community

5.2.2. Contraceptives supply and other health services

Contraceptives are the key determinants in preventing unintended pregnancy and STDS. But more than two third of informants who were interviewed in this study did not use any contraceptive methods in the last 6 months, while three out of the ten girls interviewed used contraceptives mostly condoms. Half of the participants in FGD for girls were willing to use contraceptives while many of boys were not interested in using condoms. The reason given of

not using contraceptives varied according to sex. Boys said that they did not feel comfortable in using condoms, whereas the main reasons given by girls were: lack of money to purchase them, lack of awareness and opposition from some partners. Many contraceptives were not known by participants, pills and condoms were the most known, ones even though there was a huge gap between knowing and using contraceptives. The Ethiopia national rate on the use of contraceptive methods is 14, 7 % (UNFPA 2007). Half of participants recognized that there were health services in their area but that they were not designed to be youth friendly as regards to reproductive health services. The characteristics of youth friendly RH services as defined by UNFPA (2007) are: convenient open hours, waiting time not excessive, privacy and confidentiality assured, competent staff, respect for the youth, contraceptives offered and affordable, separate space and/or hours for youth, accessible location/comfortable setting, life skills training, personal and education materials available, youth input/feedback to operations and publicity that informs and reassures young people. As mentioned in the literature review, many NGOs in collaboration with the Ethiopia government are working to establish youth friendly health services, but most of these are still on a small scale, due to limited resources; while they offer innovative and excellent services, the programs are not implemented at the scale that is needed; vast needs remain unmet (WHO-Ethiopia 2005).

Voluntary counseling and testing (VCT) is important as help people to know their health status in preventing STDs including HIV/AIDS. Many of participants were not willing to take VCT due to the fear to be stigmatized and discriminated if they would test positive for HIV.

Basic drugs, supplies, and trained personnel are in short supply, which is often exacerbated by an inefficient use of resources, poor management systems, and limited capacity to deliver quality services (fih 2010). Some participants expressed concern about the possibility of the ministry of youth or health to implement large-scale RHE programs, especially in rural areas, given their limited budget and inadequate numbers of staff. One participant in FGD for girls said: *‘’… my father was sick and he had to wait for the operation for 2 months at the hospital, as they were waiting for a surgeon from another place. He was sleeping on a small mattress on the flow without bed’’.*

The distribution of health facilities remains concentrated to urban areas, which is of great concern since Ethiopia is 85 % rural (youthnet, 2004). One male participant stated: *‘’ When I was at primary school, I used to live rural area, and when I was sick I had to walk for more than 2 hours to reach a health centre’’.* Although there was a growing demand for family

planning methods due to the increasing population (85,2 million), a major problem was that of irregular and inadequate contraceptive supplies (fih, 2010). One girl claimed that:'' I *went to ask for a female condom at the health centre as my boyfriend did not like using the male condom, but the health agent said that they had never had it''*.

According to CSA, (2006/7) the numbers of health facilities and trained personnel are increasing in Ethiopia: 1936 physicians 14270 nurses in 2003. Despite an increase in the number of health facilities in a society dominated by religious believe where many health workers are still conservative with regards to adolescent sexuality, adolescents claimed that there had been little improvement in the quality of reproductive health services in Ethiopia.

Programs to increase access to contraceptives could be enhanced through greater social marketing, NGO and private-sector delivery of services. There is need to prove the quality of reproductive health services through systems strengthening, e.g., management, logistics, supervision and personal training, which would also help to meet the demand for family planning for the youth and adults (CORHA 2007).

5.3. Youth (Adolescents) empowerment

The findings shows that the majority of participants listed 3 priority actions such as education, reproductive health education and economic support, which they thought could contribute in empowering them to prevent adolescent unwanted pregnancy.

According to UNFPA (2005), interventions related to RH need to target females as well as males, and they need to promote mutually respectful relationships between young women and men in the society. Those interventions must also empower the youth to feel comfortable in discussing sexual matters and negotiating for their own safety and protection.

Paulo Freire's (1988) ideas proposed education as an effective health education and prevention model that promotes health in all personal and social arenas.

UNICEF (2006) insists that these actions must be combined by the education of girls, as education is an intrinsic part of any strategy to address the gender-based discrimination against women and girls that remains prevalent in many societies. Education helps men and women to claim their rights and realize their potentials in the economy, politics and social arenas. It is also the single most powerful way to lift people out of poverty (UNICEF 2006).

Many adolescents in this study claimed that they did not get enough information and experience related to reproductive health; to an extent where even most of them did not even know how their reproductive organs functioned. The study showed that the majority of the adolescents did not have access to RH education and services mainly due to socio-cultural norms and/or lack of money. Simmonds (1976) recognized health education as" bringing out behavioral changes in individuals, groups, and larger populations from behaviors that are presumed to be detrimental to health, to behaviors that are conducive to present and future health."

I can therefore argue that receiving reproductive health education through innovative programs could also empower young people in preventing unwanted pregnancy, STIs and HIV/AIDS and reducing the harmful traditional practices in the communities. Even if most of the adolescents interviewed mentioned that*: ...'' it is not enough to provide us with information on what we should or should not do with regard to reproductive health issue when some of our basic needs like, food, water, shelter, clothing, health care and education, are not being met…''*

Moreover, during the FGDs, the adolescents expressed the need of youth centers and spaces for recreational activities, indoors and outdoors, including sports facilities and libraries. Such facilities could help to keep the young people active, provide them with alternatives to sexual activity, and give them a place where they can gather and talk, vent, brainstorm, learn, and share their experiences with each other. Therefore I think that more funding should be allocated to implement youth programs.

Most girl participants claimed that in an Ethiopian community dominated by men and the widespread lack of economic opportunities, women have low access to capital and they don't have access to the few available jobs and sufficient income earning. Since women are in desperate need of ways to survive economically, some women depend on marriage or sex to access resources. Thus, if I refer to Dr Muhammad Yunus (2006) who stated that small loans made a difference in the lives of the poor women. Then I can argue that microcredits by initiating revenue-generating activities, individually or collectively could give women independence and autonomy from men such as economic security, health care, ability to make various purchases on her own, freedom from domination and violence within her family and participation in political and legal awareness. The Bangladesh Institute of development studies (BIDS 1988) also declared that Grameen bank loans are contributing to promoting

child schooling and to increasing awareness on reproductive health (such as the use of contraceptives) among poor families in Bangladesh.

Young people need skills and competencies that equip them to make positive choices, to build relationships, and to succeed in life. They need to be valued by their community and have opportunities to contribute to others. For this to occur they must be safe and feel secure. They are assets and bring creative ideas to programming. As youth wanting their voice to be heard, I think it is therefore crucial to advance youth empowerment and involvement in programs that are targeted specifically for them. But the majority of participants in this study could not list more than one organization working with the youth in Ethiopia, whereas as mentioned in the literature review, they were several organizations working for the youth in Ethiopia. Based to participant's statement, I can argue that there were only few organizations that included the youth in their decision-making processes. However, I think youth representation in decision-making could be enhanced through the creation of youth councils in all organizations or by including youth representatives on boards; by sharing power between youth and adults, the youth themselves would become empowered to tackle the reproductive health issues. Finally I can infer that if the factors that influencing youth reproductive health behaviors are addressed, then it could prevent the bad reproductive health outcomes that youth are facing, such as unintended pregnancy, bad health/nutritional status, diseases (STIs, HIV, Anemia…), abortion, mortality…

6.0. Conclusion

The Focus of this study was on identifying the factors that contributed to the increasing rate of unintended pregnancy among adolescents in Addis Ababa, a capital city which has about 4 million inhabitants in Ethiopia. The study was conducted at general hospital and secondary school in Addis Ababa.

The study indicates that socio-economic factors and lack of reproductive health services designed to youth play an important role in the high prevalence of adolescent unintended pregnancy.

As socio-economic factors, the study reveal that lack of income, illiteracy, place of residence, peers/partners behaviors, family and community attitudes, religion belief, mass media and gender inequality including traditional harmful practices (especially forced early marriage and

sexual abuse), were found to be some of the major contributing factors to unintended pregnancy among adolescents in Addis Ababa, Ethiopia.

The study indicates that the majority of the girls who were pregnant engaged in sex due to economic reasons. Women did not have access to the few available jobs and sufficient income- earnings. Since women have to live in a capitalist society dominated by men, some women depended on marriage and sex to be able to support them.

A major factor contributing to unintended pregnancy of adolescent revealed in this study was illiteracy. The study revealed that 2 out of 3 pregnant girls could not read or write or interrupted school at primary school, without life skills of negotiating safe and responsible sex with boys. Women's education contributes to better reproductive health. It enables people, especially girls to gain knowledge and skills on having a responsible, satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so (UNFPA 2007).

Another major factor found contributing to unwanted pregnancy in this study was harmful traditional practices such as early marriage and sexual abuse. Ethiopia is one of the countries where UNICEF is working to address early marriage. According to UNICEF, early marriage can have harmful consequences to children, including health problems, spousal abuse, and the denial of education. Once married, girls often do not go back to school (UNICEF 2007).

The study also reveals that lack of reproductive health services designed to youth is contributing to increase teenage pregnancy. Among the most important factors influencing unintended adolescent pregnancy found in this study, lack of access to contraceptives was pointed out by most participants. Many unmarried adolescents who were sexually active recognized that they did not use contraceptives due to lack of awareness, financial means or/and partner objection; and only small number of participants were using contraceptive irregularly. This unsecure situation put adolescents in danger of unwanted pregnancy, childbearing or STIs including HIV. The study has also shown that there was lack of reproductive health education for adolescents and livelihood skills that lead to unintended pregnancy among adolescents. Data shows that communities are in general reluctant to provide sex education to adolescents as they culturally believe that it would increase sexual activity among adolescents. The poor health facilities and few and untrained health personnel in a large country with extreme poverty given the big country of Ethiopia (Population action

international 2007), were also mentioned in the study as reasons that discouraged adolescents in consulting and seeking advice from the health services. Some health providers lack the skills necessary to effectively communicate with diverse adolescent patients regarding sex and sexuality, pregnancy, and STI prevention. According to central statistical office (CSA 2006/7), 61% of birth delivery is assisted by a relative or some other untrained person.

It is obvious that health systems need to be able to respond to the special sexual and reproductive health needs of adolescents. Skilled health workers need to be able to provide a range of youth friendly services in outpatient and other clinical settings that could help preventing adolescent unintended pregnancy within the community.

Asked to propose solution reducing the socioeconomic factors and inadequate reproductive health services that contribute to the increase of teenage pregnancy, participants suggested educational and economic empowerment of youth. The researcher also believes that girls would have been able to bring about positive changes in their lives if they were personally empowered through education, economic self-sufficiency, and had access to quality reproductive health services.

Unless they are addressed, those major causes (factors) of unintended pregnancy among adolescents would threaten the adolescent reproductive health programs, thus delay that youth development in Addis Ababa. Consequently the development of the country would be adversely affected in a country already suffering from high levels of unemployment, food insecurity, and widespread extreme poverty. Even if, there already existed a consensus among the government, civil society, and international donors that youth reproductive health needs were a pressing issue and deserved greater attention and resources (youthnet 2003), there was however no clear agreement on what strategies would to be pursued nor how they would be financed.

The Ethiopian government in collaboration with numbers of non-governments organizations as well as UN agencies such as WHO, UNICEF and UNFPA etc, are striving to establish the comprehensive sexual and reproductive health programs for adolescents (CORHA 2009). NGOs both international and Ethiopian, are at the forefront of youth reproductive health programs in Ethiopia and provide a wide variety of services to the youths. There is a strong support of Ethiopian government to youth reproductive health. For example, in 2003, Ethiopian policy makers passed the law to understand and enforce the national penal code that

criminalizes harmful traditional practices against adolescents (UNICEF 2007). But most of these reproductive health programs are still on a small scale and many are run by NGOs like in most developing countries. Due to limited resources in this country, with a population of 85,2 million inhabitants, they are offering innovative and excellent services, but the programs are not yet implemented at the scale that is needed; vast needs of adolescent reproductive health services remain unmet (CORHA 2009).

The study has contributed to the affirmation that strategies in preventing adolescent's unintended pregnancy require a combination of reproductive health education, life skills-building and improving accessibility to contraceptive methods and other health services, supported by formal education and socio-economic programs to girls and the law enforcement may play an important role in an effort to address the harmful traditional practices.

Although results from this study cannot be generalized to the whole population in Ethiopia; but the results could be useful in understanding the factors contributing to unintended pregnancies among adolescents in Addis Abeba.

The study is however important as it investigated some of the major factors that contributing to unwanted pregnancy among adolescents in one document. During my field work I did not find studies on measures preventing the factors that contribute to unintended pregnancy among adolescents. Therefore research analyzing deeply the proposed sustainable programs to prevent those factors among adolescents would be useful involving a representative sample of both pregnant and non pregnant adolescents.

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Annex 1:

Interview guide on sexual and reproductive health activities among adolescents aged 15-19 years old in Addis Abeba, Ethiopia

1. Socio-economic characteristics of interviewees/participants

a. Gender: male, female

b. Age: 13, 14, 15, 16, 17, 18, 19, 20

c. Level of study: primary, secondary, college/university

d. Occupation: student, employee, none

e. Religion: Christian, Muslims, Others

f. Social class (status)/standard of living: poor, middle, rich

g. Place of residence: - urban, - rural

h. Marital status: unmarried, fiancée, married, divorced, widow…

2. Knowledge on physiology of reproductive organs and sexual activity

a. Do you know how to calculate the ovulation cycle?

b. When girl/women can get pregnancy (fertile period)?

c. Where do you get money to buy sanitary pads for your menstrual period?

d. What are the reasons of having sex?

e. Whom do you have sexual intercourse with?

f. How many sex partners do you have?

g. What was your age at the first sexual intercourse?

h. Have you ever been forced/coerced to have sex against your will?

i. What do you think about using condom during coitus or sexual intercourse?

j. How do you control pregnancy after unprotected sex?

k. What is your opinion about waiting for sex (abstinence) until marriage?

l. What is your experience about harmful traditional practice or gender based violence such as female genital mutilation, forced early marriage, child labor, rape…?

3. Reproductive health education and access to contraceptive methods

a. Where do you learn about sex education lessons?

b. What are the contraceptive methods do you know and which ones do you use?

c. Where do you get contraceptives in your area?

d. What is your opinion on the cost of contraceptives?

e. What is your opinion about adolescents who get married before the age of 18 and according to you what is the appropriate age for marriage?

f. What is your opinion about having a child before marriage?

g. How many kids would like to have/rise in your family?

h. What is the ideal time in birth spacing?

i. How long does it take you to walk to the nearest health facility in your area?

j. What kind of things would you like to see in a youth-friendly clinic?

k. What do you think about health personnel and services provided in your health facility?

4. Pregnancy status and family/community support

a. What is your opinion about getting pregnancy as an adolescent?

b. With whom would you like discuss issues regarding pregnancy?

c. How is unwanted pregnancy viewed in your family and community?

d. Please explain why pregnant girl should continue or interrupt with her schooling?

e. What is your opinion on family/community support for pregnancy adolescent?

f. Have you ever heard of emergency contraception? Is it available /authorized in your community?

g. What do you think about girls who commit abortion/suicide after they discover that they are pregnant?

h. Do you have any suggestions on how women could be empowered in order to:

- Prevent unwanted pregnancies among adolescents?

- Care for adolescent girls after child birth?

5. Knowledge on HIV/AIDS and others STIs and their prevention

a. What are STIs and can you tell us one of the STIs which you have contracted?

b. What is HIV/AIDS and the 4 main modes of HIV transmission?

c. How would you avoid contracting a sexually transmitted disease, including HIV/AIDS?

d. What is VCT and where can you get it free of charge?

Annex 2.

Names of collaborative persons in master's research thesis

All data collected regarding the question they are studying will be made available to the entire collaborative as soon as the graduate student most directly involved/responsible in gathering the data set has completed his dissertation.

Ruth Kjaersti Raanaas, Post doc. PHD, MA, Professor at Norwegian University of life sciences (UMB). Department of plante and environmental sciences. P.O.Box 5003, 1432 Ås, Norway. Tel.0047 64965655, email: ruth.raanaas@umb.no

Rosah Malambo, BSc N. Mphil CIE, Dr.polit (PHD), Associates professor, Oslo University College , Faculty of Nursing, Pilestredet Parket 33/6-026. Tel.0047 22453833, Fax 0047 22453906 Email: rosah.malambo@su.hio.no

Dr Fikre Enquselassie, University of Addis Ababa, Community health department. Tel. 00251 115507945, mobile: 00251 911233131. Email: fikreens@yahoo.com

Annex 3

Invitation letter and consent form

Norwegian University of life sciences (UMB)

Department of plant and environmental sciences

10 February 2009

Object: information letter

Dear participant,

This letter is an invitation to consider participating in a study I am conducting as part of my Master's degree in public health at the Norwegian University under the supervision of Professor Ruth Kjærsti Raanaas and associate professor Rosah Malambo. I would like to provide you with more information about this project and what your involvement would entail if you decide to take part.

This study will focus on adolescent reproductive health in Addis Ababa, Ethiopia. According to UNICEF (2006), young people constitute the one-third of the total population (85,2 million) in Ethiopia and 24 % of girls are giving birth before the age of 18 (UNFPA 2005). The fertility of Ethiopian women is among the highest in Africa, an average of 5, 9 children each (UNFPA 2005). Ethiopia is also among the ten countries with the highest numbers of child and maternal deaths. 123 children under 5 die per 1000 live births (UNICEF 2006) and approximately 870 mothers die out of every 100 000 live births (DHS 2000). Furthermore, over half of 19 million who annually seek abortion in Ethiopia are under 18 (AYRH 2007). The purpose of this study, therefore, is to investigate the causes of unwanted pregnancy among adolescents in Addis Ababa, Ethiopia.

The Ethiopian government, international organizations and community based organizations are doing remarkable efforts to improve the youth reproductive health but Ethiopian

adolescents are still facing many problems related to reproductive health, including unwanted pregnancy (ARH 2005). This has pulled me to conduct this social research to investigate the major factors contributing to unintended pregnancy among Ethiopian adolescents.

I would like to include you in this study as you are one of those concerned by the situation described above and I believe you are one of the best suited to know the causes of unwanted pregnancy among youth.

Participation in this study is voluntary. It will involve an interview of approximately 30 minutes in the office of the nurse for each pregnant girl. And the focus group discussion (FGD) will concern young people attending the Black Lions high school, lasting about 1 hour. You may decline to answer any of the interview questions or FGD if you so wish. Further, you may decide to withdraw from this study at any time without any negative consequences by advising the researcher. With your permission, the interview will be transcribed on computer to facilitate collection of information for later analysis. Shortly after the interview has been completed, I will send you a copy of the transcript to give you an opportunity to confirm the accuracy of our conversation and to add or clarify any points that you wish. All information you provide is considered completely confidential. Your name will not appear in any thesis or report resulting from this study, however, with your permission anonymous quotations may be used. Data collected during this study will be retained for about 2 years on my computer. Only people associated with this project will have access. There are no known or anticipated risks to you as a participant in this study.

If you have any questions regarding this study, or would like additional information to assist you in reaching a decision about participation, please contact me at Tel.nr. 0047 95097730 or email: georgnale@umb.student.no .You can also contact my supervisors, Professor Ruth K. Raanaas at Tel. Tel.nr. 0047 64965655, email: ruth.raanaas@umb.no or Associate Professor Rosah Malambo at Tel.nr: 0047 22453833, Email: rosah.malambo@su.hio.no. or the field assistant Dr. Fikre Enquselassie, Tel.nr. 00251 1 5157701, Email: fikreens@yahoo.com

I would like to assure you that this study has been reviewed and received ethics clearance through the University of Addis Ababa, department of community health. Please contact Dr Fikre if you need more information. However, the final decision about participation is yours.

I hope that the results of my study will be of benefit to youth reproductive health stakeholders for improving the situation for a better life.

I very much look forward to speaking with you and thank you in advance for your assistance in this project.

Yours Sincerely,

Student researcher,

Georges Z. Nalenga

Master in Public health

CONSENT FORM

By signing this consent form, you are not waiving your legal rights or releasing the investigator(s) or involved institution(s) from their legal and professional responsibilities.

_____

I have read the information presented in the information (invitation) letter about a study being conducted by Georges Z. Nalenga, student of master's programme in public health at the Norwegian University of Life Sciences (UMB). I have had the opportunity to ask any questions related to this study, to receive satisfactory answers to my questions and any additional details I wanted. I am aware that I have the option of allowing my interview to be transcribed to ensure an accurate recording of my responses.

I am also aware that excerpts from the interview may be included in the thesis and/or publications to come from this research, with the understanding that the quotations will be anonymous.

I was informed that I may withdraw my consent at any time without penalty by advising the researcher.

This project has been reviewed by, and received ethics clearance through, the University of Addis Ababa, department of community health. I was informed that if I have any comments or concerns resulting from my participation in this study, I may contact the references listed above.

With full knowledge of all foregoing, I agree, of my own free will, to participate in this study and to have my interview transcribed.

I also agree to the use of anonymous quotations in any thesis or publication that comes of this research.

Participant Name: _____

Participant Signature: _____

Witness Name: _____

Witness Signature: _____

Date: _____

N.B. The invitation and consent letter were translated in local language (Amharic) but the document is not available.

ADDIS ABABA UNIVERSITY
SCHOOL OF PUBLIC HEALTH

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September 04, 2010
SPH/4556/02

To Mr Georges Z. Nalenga

This is to certify that the School of Public Health, Addis Ababa University has allowed you to conduct the qualitative study you have proposed namely "The causes of unwanted pregnancy among adolescents in Addis Ababa, Ethiopia''; (1) among pregnant adolescents attending antenatal and under five clinics, maternity at Black lions hospital and reproductive health centers in Addis Ababa and (2) among girls and. boys between 15-19 attending secondary school at a high school in Addis Ababa.

Sincerely,

Fikre Enqueselassie (PhD)
Associate Professor, and Research Coordinator

✉ 9086
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Annex 4

Research approval letter

Annex 5

Map of Ethiopia