

RISK FACTORS FOR ADOLESCENT PREMARITAL
PREGNANCY IN AWASSA

By

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Risk Factors for Adolescent Premarital
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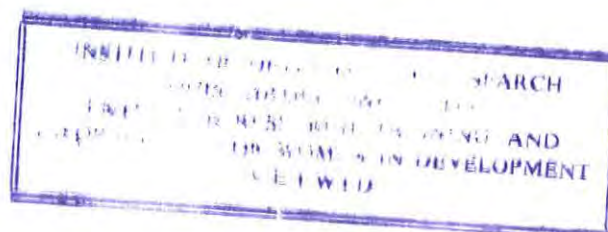
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Abstract

Premarital sexual behavior, pregnancy and childbearing are recently reputed as serious social problems of teenagers in the developed and developing countries. Although results of the very limited surveys conducted in some of the Sub-Saharan Africa countries reveal that the pregnancy and fertility of unmarried adolescents have been increasing recently; the risk factors are not clearly examined and need to be further identified.

In Ethiopia lack of adequate survey data on premarital pregnancy and fertility have restrained the specific patterns from being seen clearly. However, there are some other indirect evidences that show their increasing tendencies. Thus, this research attempts to assess the extent to which adolescent premarital pregnancy has pervaded in the urban setting (Awassa). It also examines the relationship between adolescent premarital pregnancy and the socio-economic, biological, behavioral, and family characteristics.

In order to analyze and discuss the relationship between the risk of having premarital pregnancy and its determinants, cross-sectional survey was conducted in Awassa. Once the data have been collected, the univariate, bivariate and multivariate relationships were investigated. The major statistical tool applied at different stages of the analysis is the logistic regression model.

The results of the multivariate analysis suggest that use of contraception at initiation of premarital intercourse, communication with close friends and relatives, current marital status, parents' schooling, agreement to have been engaged in first premarital sex, educational achievement, knowledge of the pregnancy risk period of the menstrual cycle and family religion at age 14 are the important predictors of the risk of having premarital pregnancy among sexually active adolescents in Awassa town.

Finally, the findings disclose that family life education and access to modern methods of contraception are the key strategic components for programmatic intervention; and secondary and beyond school girls are the main target groups in programs aim at reducing the present high incidence of premarital pregnancy and fertility in urban setting of Ethiopia (Awassa).

CHAPTER I

INTRODUCTION

About two decades have elapsed since changes in teens' premarital sexual behavior, pregnancy and childbearing were reputed to be serious social problems in both the developed and developing countries. Several researches have been documented in the United States of America which confirm that the premarital pregnancy and fertility of teenagers have been increasing and constitute considerable proportion of the total pregnancy and fertility. Furthermore, the researches also reveal the various socio-economic, biological and behavioral risk factors that have contributed to the problems.

Although surveys conducted so far in the developing countries are very scarce the results show that premarital sex, pregnancy and fertility among adolescents have been increasing recently (Wulf and Sing 1991; Roser-Bixby 1991; Kiragu and Zabin 1993; Garge-Brandon and Meekers 1993; Bledsoe and Cohen 1993). For example, surveys in Sub-Saharan Africa indicate that pregnancy and childbearing among unmarried adolescents to be a common phenomena in countries like Kenya, Botswana and Liberia (Garge-Brandon and Meekers 1993; Bledsoe and Cohen 1993).

In the report presented by Garge-Brandon and Meekers (1993), the estimates of premarital fertility for Botswana and Liberia were 42% and 32% respectively. These fertility percentages were net of the total pregnancies terminated by illicit abortion. Moreover, in nine of the surveyed eleven Sub-Saharan countries premarital birth before age 20 was found to

be greater in urban than in rural areas (Bledsoe and Cohen 1993).

1:1 Significance and Justification

In Ethiopia due to lack of survey and available data, it is very difficult to depict the specific pattern and prevalence of premarital sex, pregnancy and fertility. However, some indirect measures have been made which indicate the increasing trends of premarital sex, pregnancy and fertility among urban adolescents. The following indirect evidences prove these rising tendencies.

(a) Rate of Contraception

According to The 1990 National Family and Fertility Survey Report, the percentage of women who had ever used contraceptives among those aged between 15 and 19 was 2.7 (CSA 1993). This is the lowest percentage reported by the five years reproductive age of women.

(b) Marriage Pattern

In the survey cited above, about 90% of the women aged between 15 and 19 have never been married. On the other hand, the average age at first marriage for those women who married in 1976 and onwards rose by five years than for those who married before 1966 (CSA 1993). Therefore, in urban areas particularly, it is unlikely that a woman currently aged 20 or

below to have had a chance of being married; whereas, Meekers (1993); Gage-Brandon and Meekers (1993); Kiragu and Zabin (1993); and Rosero-Bixby (1991) showed the positive relationship between age and premarital sexual experience.

It is specifically worth-mentioning that teenage premarital sexual activity has been high in Africa; albeit it varies by socio-economic classes and among countries (Meekers 1993; and

Gage-Brandon and Meekers 1993). Similarly, results of the sample survey in urban Ethiopia confirmed that sexual experience among urban unmarried adolescents has been increasing recently (MLSA 1991; and Zubeida 1992).

Therefore, the increasing premarital sexual activity due to rise in age at first marriage coupled with the very low prevalence of contraceptive use strengthen the common belief for sizable proportion of teenage premarital pregnancies and births especially in urban areas of the country.

The above stated facts and the emphasis of researchers on the deleterious consequences of out of wedlock pregnancy and birth in the life of the teenage mothers and their children have drawn the researcher's attention. Among the socio-economic problems associated with unmarried mothers such as school drop out, obscure future employment opportunity, burden of fostering a child which utterly falls only upon a mother and her family, and bleak marriage opportunity are just a few among others.

It is not only the socio-economic aspect of premarital conception and birth which calls for research attention, but

also health problem and risk of dying due to illicit abortion. For example, community and hospital based studies in Addis Ababa respectively showed that 54.2% and 32.2% of the maternal deaths were attributed to abortion (Seyoum 1989). Most striking of the findings is that about 25% of the deaths that occurred to teenagers were due to abortion. Even if unwanted pregnancy and illegitimate birth jeopardize the health and socio-economic prospects of unmarried teenage mothers and their children, these problems have not yet given due consideration by researchers and policy makers of developing countries in general and of Ethiopia in particular.

Thus, this study concerns itself on adolescent female problems. Taking the afore-mentioned points into account, this research has two main purposes:

1. To assess the extent to which adolescent premarital pregnancy has pervaded in an urban setting, Awassa.
2. To examine and understand the risk factors, which have been identified by prior researchers in the context of Ethiopia; and also which the researcher of this study intends to investigate in the town surveyed.

1:2 Review of Literature

Since 1970 researches have been made on the relationship between teenage premarital pregnancy/fertility and socio-

economic, cultural, behavioral and family characteristics. Although, researchers who have conducted studies on this grave social concern have adopted different approaches, most of them have frequently focused on the following variables to explain the relationship.

(a) Contraceptive Use

The degree of contraception is a major 'proximate determinant' of fertility (Bongaarts 1978). Adolescent's motivation towards the use of contraceptives affects the risk of premarital pregnancy and childbearing (Mensch and Kandel 1992; Kahn and Anderson 1992; Pollack 1992; Mellanby, et al 1993; Qui and Hayward 1993). Kahn and Anderson (1992), and Qui and Hayward (1993) show that non-users of contraceptives at first intercourse are more likely to have had teenage premarital pregnancy and birth. Moreover, Pollack (1992) and Mellanby and et al (1993) depict the association between the onset of first sexual initiation and motivation to the use of contraceptions. It means that teens delay to practice family planning services after they are engaged in sexual intercourse. For instance, in the United State about 70% of the teens who had first sexual intercourse, in 1982, have delayed for two years before seeking contraceptives; and also 20 % of these had been pregnant after six months of becoming sexually active (Pollack 1992).

(b) Family Environment

Many researchers have emphasized on the determination of impacts of family structure, income and education on a forthcoming premarital pregnancy and fertility behavior of adolescents.

(b.1) Parental Structure

The relative likelihood of having premarital conception and birth depends upon the parental structure in which a teenage girl is raised (Cooksey 1990; Kahn and Anderson 1992; Haveman and et al 1993; Mensch and Kandel 1992). As Cooksey (1990); Kahn and Anderson (1992); and Haveman and et al (1993) indicate that parental disruption at age fourteen substantially increases the risk of premarital conception and childbearing; in other words, teens who grow up in non-intact family are more likely to have had premarital pregnancy and birth than those intact family counterparts.

(b.2) Parental Education

Parental education also contributes to rise in the risk of premarital conception and childbearing. The results of Cooksey (1990); Kahn and Anderson (1992); and Haveman and et al (1993) studies strongly support the hypothesis that a rise in parental education reduces premarital pregnancy and childbearing risks. For example, daughters of more educated parents, especially mothers, are less likely to give birth outside of marriage. This means a girl who has an educated mother would have an

inspiration to continue her education on a higher level and would be aware that giving birth would handicap her education.

(b.3) Family Income

The family income at age fourteen significantly affects the risk of having teenage premarital birth (Duncan and Hoffman 1990). The findings of these researchers reveal that teenagers who have been raised in lower income families are highly exposed to give premarital pregnancy and birth.

In general, the results of most of the researchers mentioned above suggest that, the risk of having premarital pregnancy/birth is found in the highest extent in poor families.

(c) Education and Economic opportunity

In the reports of Bumpass and McLanahan (1989); and South and Lloyd (1992) the risk of premarital pregnancy and childbearing vary by educational status of never-married woman. For instance, Bumpass and McLanahan (1989) indicated that the large racial difference in premarital birth among blacks and whites, as categorized in high risk group, has substantially dropped in high school completion. In other words, among high school incomplete whites risks were almost the same with that of the blacks. However, the effect of education in premarital pregnancy and childbearing should be interpreted cautiously because such pregnancy and fertility have sometimes significant

causal consequence on high school completion (Hoffman et al 1993).

The marital and economic options that teenagers anticipate in future courses of life also have substantial influence on the decision to have pregnancy and birth outside marriage (Duncan and Hoffman 1990). As the results of these scholars show a slight improvement in future economic advantage of teen has resulted in a substantial reduction in the probability of having out of wedlock birth.

(d) Marriage Opportunity

South and Lloyd (1992) suggest the inverse relationship between out of wedlock childbearing and the quantity and quality of marriageable men. They further pointed out the increase in the ratio of available men to a woman decreases the likelihood to have had pregnancy and birth outside of marriage; in a similar way, a rise in the number of non-employed males within a woman's marriage pool decreases the probability of giving birth out of wedlock.

Although South and Lloyd estimate negative effects of a number of available mates on such pregnancy and fertility, they have also stated its possible impact in the opposite direction as follows: "[it may have] a positive effect through [the increase] exposure to intercourse" (South and Lloyd 1992:259). Thus, in developing countries, where prevalence of contraception is at low level, it is more reasonable to hypothesize that an increase in a quantity of available sexual

partners affects premarital pregnancy and childbearing positively.

In this study the investigator hypothesizes and examines the risk factors of premarital pregnancy as viewed and summarized in the literature and also from the observed facts which are presupposed to work in the context of urban Ethiopia.

1.3 OBJECTIVES

These days premarital pregnancy and childbearing of teenagers have become a major political and social concern of researchers and policy makers.

Since most teenagers encounter such kind of problems before completing their schooling; they are more likely to be dropouts, and this results in losing the chance of participating in higher political, social, and economic options. Thus, based on the following objectives the study attempts to assess and interpret the extent of the problem and the direct and/or indirect factors responsible for such risks in Ethiopia, by considering the cases of Awassa town.

The specific objectives of this study are the following:

To estimate the prevalence rate of premarital pregnancy among adolescents aged between 15 and 24, and who have experienced premarital sexual activity (i.e. exclusively those who are non-virgin and if entered into first marriage, those who had prior sexual relationship before marriage).

To identify the socio-economic, demographic, biological, and behavioral factors which have influence the risk of premarital pregnancy.

To indicate specific areas which call for an immediate policy intervention and strategy to lessen this pervasive problem of adolescents; and consequently enhancing the active social, economic and political involvement of females in the foreseeable future.

1.4 Hypotheses

It is believed that some of the important factors which significantly influence premarital pregnancy and birth risk differ with an overall cultural and socio-economic conditions of a country. In this study, the following hypotheses are tested on the basis of the cross-sectional data which had been collected from the representative sample of female adolescents in Awassa:

1. Premarital pregnancy substantially reduces by use of contraception at the inception of premarital intercourse.
2. Knowledge of fecundity risk period of a monthly menstrual cycle brings about significant difference in a risk of pregnancy among adolescents.
3. An increase in educational attainment raises the risk of having pregnancy before marriage.
4. The risk of premarital pregnancy significantly differs by the permanent residence of a respondent at age 14.

5. The parental structure at age 14 has an impact on the risk of premarital pregnancy.
6. The parental education exerts an influence on the likelihood of having premarital conception.
7. A rate of communication with close friends and relatives substantially affects the risk of having pregnancy before wedlock among urban adolescents.
8. Family's income at age 14 has an effect on the likelihood of getting premarital pregnancy.

CHAPTER II

DATA AND METHODOLOGY

2.1 The Study Area

The scarcity and inadequacy of available survey data on adolescent premarital pregnancy and birth behaviors have compelled the present research to rely on collected cross-sectional data. Thus, a survey was conducted in Awassa, between October - November, 1995, to obtain relevant information. There are two main reasons to select Awassa as the study area.

First, Awassa is the administrative center for Southern Ethiopian Region. It is a new booming town and industries are beginning to mushroom in the area. As a result, the population is growing fast. Since studies conducted on the demographic and socio-economic conditions of the town are limited, this study helps as an additional input to contribute in alleviating the social ills of the town.

Second, the samples are expected to fairly represent the major socio-economic categories which would enable comparative analysis in the research that aimed at investigating urban adolescent female problems.

Awassa, which is the capital town of Southern Nation, Nationalities and People's State since 1995, is located 270 kms away to the south of the capital city (Addis Ababa). Awassa is administered by two Upper Urban Dwellers' Association (Kefetegnas) and fourteen Urban Dwellers' Associations (Kebeles), (see map). According to the 1994 estimate the total population of the town was 71,156. The distribution of the people by sex was 35,622 males and 35,534 females (RPEDB 1995).

2.2 Scope and Coverage

The sample survey of adolescent's premarital pregnancy and fertility behavior is a representative sample to address issues of female adolescents in Awassa. In the survey the four kebeles determined by the sample design and all the eligible adolescents within respective kebeles were covered.

In order to identify the eligible female adolescents the house to house listing was done within the selected kebeles. The listing did not include tenures such as hotels and commercial houses (if there were no occupant families as a main residences); offices; houses long left locked and so on. During this time some demographic characteristics of the studied population were collected (such as age, sex, religion, marital status and so on).

Pertinent issues to this research which were obtained through interrogation by the main survey included household backgrounds, demographic and socio-economic characteristics, contraceptives' knowledge and practice, pregnancy and fertility related inquiries.

2.3 Data Collection

2.3.1 Sample Design

Contemplation to the present research's output and resources expected to be disposed resulted in fixation at six

kebeles and six hundred eligible respondents to be respectively covered and interviewed. But, limitations of fund and time allocated to the survey have restricted the coverage to four kebeles (29%) and the number of identified eligible respondents to be 574 . In order to decide the four kebeles a scientific sampling procedure was applied. In the process of simple random sampling, four kebeles were randomly determined by using the table of random numbers.

The selection of the sampled kebeles was followed by house to house listing of all households within the representative kebeles. The listing was designed for dual purpose. First, to gather some demographic information on the study population. Second, to identify eligible females to the main survey. Eligibles were those females who were aged between 15 and 24 at the time of listing and who had entered into premarital sexual intercourse three month prior to their first marriage or the listing date. On the basis of these eligibility criteria 574 female adolescents were identified from the listed four kebeles. Therefore, the sample size of the ultimate sampling units that should be covered by the main survey was decided to be 574.

2.3.2 Questionnaire

Information to the present research was collected by using the usual medium of collecting survey data called questionnaire. For the survey conducted two separate

questionnaires were formulated. The first questionnaire was used to list all households within the sample kebeles and identify the eligible adolescent females. The second main survey questionnaire was posed to all identified eligible adolescents and it consists of parts in the family background, the demographic and socio-economic characteristics, contraceptive method and pregnancy/ birth related questions, and miscellaneous questions (for details see annex).

The Amharic version of the survey questionnaire, in which questions were pre-coded, was employed to obtain the data. Moreover, the questionnaire, which was managed by means of personal interview, was anonymous and confidential. In order to test the cost plausibility and responsiveness of the developed questionnaire the pilot study was undertaken. Based on the experience gained from the pilot survey some of the questions were modified. Besides, enumerators' manuals (hand-books) were prepared.

2.3.3 Field Work

The primary task of the survey conducted between October and November 1995 was recruitment and training of enumerators. The enumerators of the survey were selected according to certain criteria, namely, female aged between 20 and 25, better accomplishment of secondary school, previous census or survey experience. In addition to the given intensive training, manuals were handed over to the selected enumerators. Before

the inception of the main enumeration the interviewers' field proficiency was examined; and as a result for those who were found less competent extended training was rendered and a close follow up was made during the field supervision.

During the field enumeration eligibles were identified; individual questionnaires were filled; interviewers were frequently visited and spot checked; and also the completed questionnaires were edited and inconsistencies were thoroughly inspected.

2.3.4 Response Rate and Data Quality

The total number of eligible female adolescents who were identified from the four kebeles covered by the listing was 574. The final individual questionnaires were disposed to all identified eligible adolescents, but only 506 (88%) of the respondents were found during the survey period and successfully responded to the interview. The two major reasons for non-response were the deliberate absence or concealment of respondents at the time of the interview and refusal. In this case, seventy three percent and twenty seven percent of the total non-responses were respectively owed to non-availability and refusal.

Before the final use of the completely filled questionnaires the overall reporting quality of the 506 respondents was thoroughly examined. On this basis, eighteen questionnaires were presumed to be doubtful quality and

excluded from the analysis. So that, the ultimate refined sample size of respondents upon which this research depended is 488.

2.4 Data Processing and Method of Analysis

2.4.1 Data Processing

Before processing the data with the help of computer the final manual work was done. That is, coding of the open ended questions and verification of the edited questionnaires.

The SPSSPC+ package was employed to enter and analyze the survey data. During the data entry values out of range and consistency of values for inter-related fields were checked and edited. At last cleaning of the entered data was undertaken.

2.4. Method of Analysis

A univariate, bivariate and multivariate methods of analysis are applied to examine and understand which factors affect out of wed-lock adolescent pregnancy and to measure the degree of risk attributes to each factor.

At the bivariate stage a chi-square test and univariate logistic regression are employed in order to identify the important explanatory variables which should be retained in the multivariate analysis for further investigation. In the

multivariate analysis the logistic regression provides net effect of each predictor, holding other predictors constant.

The general form of the logistic regression model¹ used is:

$$\ln(P_i/1-P_i) = B_0 + B_1X_{i1} + B_2X_{i2} + \dots + B_kX_{ik}$$

Where,

P_i is the probability of experiencing premarital pregnancy for an i^{th} individual.

B_i is the parameter coefficient.

2.5 Constraints and Limitations of the Study

The limitation of fund had been the major constraint to the research. The two aspects, among others, by which it affected the research are hinderance to involve highly qualified interviewers who could collect high quality data, and also restriction to the number of respondents who were successfully interviewed to that of five hundred six. However, every endeavor had been made to obtain reliable and valid data which would enable to highlight on this very timely important and non-researched issue of adolescents.

The lack of standard items for measurement of some characteristics such as self-esteem, involvement in delinquent activities and so on, which may be presumed to predict adolescent reproductive behavior, has compelled to exclude from the analysis from the beginning. On the other hand, educational

¹ Logistic Regression Model adapted from Halli and Rao (1992).

expectation and work status aspiration data are excluded from the analysis because of contradiction with the actual performance at the survey time.

The scarce distribution of respondents belonged to religious groups such as protestant, catholic and moslem has compelled to lump these groups together under the category 'other religion' in the analysis. Regardless of these limitations, the survey data provided best information for addressing the issue of interest.

CHAPTER III

SOME CHARACTERISTICS OF THE STUDY POPULATION

In the next sub-sections some of the socio-economic and demographic characteristics of the study population are presented.

3.1 Age-Sex Composition

The age-sex composition and sex-ratio for the surveyed population are depicted in Table 3.1. A total of 13,172 people were counted to be the usual resident of the sample covered kebeles. The male and female population constituted 6344 (47.6%) and 6928 (52.4%) respectively of the total. The reported ages indicate that 40.3% of the population were children (under the age of 15), 34.1% were youths (between the age of 15 and 29), and the remaining 25.6% of the population were adults and old.

The sex-ratio, which is a paramount indicator of the sex-composition, was calculated for the population as a whole and for the population sub-groups in particular. The sex-ratio for the total population was 90.8. This describes the out numbering of females in the total population; i.e, in every 100 females only 91 males are expected to be there at the time of the survey. As a result of massive inflow of female migrants low sex-ratio prevails in a town/city (Shryock et al 1976).

The values of the sex-ratio when the population classified by the five years age sub-groups disclose the deficit of males

in all the groups below forty. Contrary to the theoretical expectation of the sex-ratio at birth, the low sex-ratio for the first age group (0-4) may be suspected of errors. The errors may be reporting or sampling. The other possible explanation to this figure which seems dubious is that the hypothetical expectation of excess males at birth may not operate in this particular population. The 1984 census data which exhibited a sex ratio 95.4 for infants (aged between 0 and 1) strengthen this explanation (CSA, 1989). Since newly mushrooming towns like Awassa are more attractive to young females than male peers the excess of females among the youth population is inevitable.

Table 3.1 Age and Sex Distribution of the Sampled Population, Awassa, 1995.

Age Group	Male		Female		Total		Sex Ratio
	Count	%	Count	%	Count	%	
0-4	617	49.3	634	50.7	1251	9.5	97.3
5-9	873	49.1	905	50.9	1778	13.5	96.5
10-14	1003	44	1276	56.0	2279	17.3	78.6
15-19	903	46.0	1060	54.0	1963	14.9	85.2
20-24	603	45.7	715	54.3	1317	10.0	84.2
25-29	526	43.4	686	56.6	1212	9.2	76.7
30-34	306	43.1	405	56.9	711	5.4	75.5
35-39	440	48.4	469	51.6	909	6.9	93.8
40-44	287	55.9	227	44.1	514	3.9	126.4
45-49	251	57.7	184	42.3	435	3.3	136.4
50-54	169	53.6	147	46.4	316	2.4	115.0
55-59	88	56.0	70	44.0	158	1.2	125.7
60-64	65	49.1	67	50.9	132	1.0	97.0
65+	114	58.0	83	42.0	197	1.5	137.3
Total	6244	47.6	6928	52.4	13172	100	90.8

Source: Survey conducted in Awassa, 1995

3.2 Marital Structure

The result of the marital status data for people aged 15 and over shows that 43.5% of the sampled population were married, 45.3% were never-married (single), and the rest 11.2% were those with broken marriage.

Further investigation of the data by sex reveals the sex difference in marital career. Among the married population the males and the females were estimated to be 50.2% and 49.8% respectively. The percentage proportions of the males and the females for the single population were 53.8% and 46.2% respectively. On the other hand, among the people whose marriage dissolved the males and their female counterparts respectively accounted 18.3% and 81.7%.

The observed sex variation in marital status deserves possible explanation. The slight increase in the proportion of males who were married at the time of the survey may be attributed to the relative better opportunity for males than female counterparts to remarry if once entered into first marriage. The large proportion for males than females in the population single seems to have come from excess influx of unmarried male migrants than their female counterparts from the neighboring rural areas to explore education and work opportunity in the town. Beside this the criteria usually set to be proposed as eligible spouse in a town are too tough for men than women; and hence these may enforce a substantial proportion of men to remain single. The very high proportion of

women accumulation than men companions in the marriage dissolved pool may have been resulted from the overwhelming inflow of females whose marriage ended up in rural and other urban areas into Awassa. Women with disrupted marriage usually move from their former residential places to strange towns/cities to conceal themselves from the close supervision of ex-husbands, and not to remarry the old lineage member of the first husband if he dies. And also to experience new independent urban mode of life. The common activities which they usually engage are sex selling, child nursing, housekeeping, household female business and so on.

**Table 3.2 Marital Status Distribution of Sampled Population
Who Were Aged 15 and Over by Sex, Awassa, 1995.**

Marital Status	Male		Female		Total	
	Count	(%)	Count	(%)	Count	(%)
Married	1717	50.2	1708	49.8	3425	43.5
Single	1921	53.8	1650	46.2	3571	45.3
Divorced	46	13.5	293	86.5	339	4.3
Widowed	73	16.2	376	83.8	449	5.7
Separate	23	25.6	67	74.4	90	1.1
Total	1780	48.0	4094	52.0	7874	100

Source: Survey conducted in Awassa, 1995

3.3 Ethnic and Religious Background

Table 3.3 describes the ethnic background of the sampled population of Awassa. The town consists of people belonging to more than fifteen different ethnic groups. Amhara, the leading ethnic group, comprised 35.8 percent of the total sampled population. Wolaitita, Oromo, Guraghe and Sidamo were 25.3%, 16.1%, 7.6% and 4.9% respectively. The remaining 10.3% was accounted for more than 10 small distinct ethnic groups (such as Tigrawai, Kenbata, Hadia, etc.).

**Table 3.3 Ethnic Background of the Sampled Population,
Awassa, 1995.**

Ethnicity	Count	Percent (%)
Amhara	4710	35.8
Wolaita	3329	25.3
Oromo	2118	16.1
Guraghe	1000	7.6
Sidamo	645	4.9
Others	1355	10.3
Total	13157	100

Source: Survey conducted in Awassa, 1995.

The religious composition of the sampled population is presented in Table 3.4. The very large percentage proportion of the population ,74.8%, were found to be Orthodox. The next

major religious group which consists 21.0% of the population was Protestant. The other two religious groups (Islam and Catholic) together included 4.2% of the population.

Table 3.4 Distribution of the Studied Population by Religious Background, Awassa, 1995.

Religion	Count	Percent (%)
Orthodox	9843	74.8
Protestant	2764	21.0
Others	553	4.2
Total	13160	100.0

Source: Survey conducted in Awassa, 1995

3.4. Selected Characteristics of Eligibles

In the sampled population adolescents (those aged between 15 and 24) were found to be 3280; out of the total adolescents, females were counted to be 1775. Out of the females who were asked if they had experienced premarital sex in their life 574 (32%) had answered affirmatively. Among identified 574 eligibles 488 respondents had reported correctly during the main survey. The relevant information used to attain the stated objectives of this research were obtained from 488 respondents. Some of the selected backgrounds of the eligible respondents are summarized in table 3.5.

Out of wed-lock conception at least once had occurred to 46.1% of premarital sexually experienced adolescents while to the remaining 53.9% premarital pregnancy had not occurred at all.

Adolescents who grew up within intact and non-intact families respectively constitute 84.2% and 15.8%. In other words, about 84% of the respondents were grown up under the supervision of both biological parents; while the rest 16% were raised in families where either one of the parents or non-parents had been responsible.

Around 56% of the respondents were raised at age 14 in families whose monthly incomes estimated below 200. Families whose estimated monthly incomes at age 14 between 201 and 500 brought up 37% of the respondents. Whereas, for the rest 7% the estimated monthly incomes of the families in which they grew up at age 14 were beyond 500 birr.

The percentage distributions of respondents whose parents were illiterate and literate are 28.1% and 71.9% respectively. This means about 28% of the adolescents were those neither of their parents had ever attended any type of education; while 72% were those either of their parents had ever attended education (i.e, formal, informal or national literacy program).

Adolescents who had passed their childhood age within Orthodox affiliated families are 86.7%; while within non-Orthodox (protestant, Moslem or Catholic) are 13.3%. In other words, the great majority of the respondents at age 14 belonged

to Orthodox religion while the minority to other religion (such as protestant, Moslem and Catholic).

At the time of the survey 35.2% of the respondents were teenagers (under 20), 41.6% were between the age of 20 and 22, and the remaining 23.2% were in the last adolescents age group (23-24).

The data on age at the first onset of menses reveal that for 4.5% of respondents menstruation has begun before the celebration of the thirteenth birth date; at the time of the first discharge of menses 66.4% of the respondents were between the age of 13 and 14 years; and the last 29.1% were aged between 15 and 16 when menstruation first commenced.

The percentage proportion of respondents who have entered into premarital sex at age 16 and below is 30.9%; the proportion rockets to 62.5% for those who have engaged in premarital intercourse at age between 17 and 19; while for those who have experienced premarital sex after teenage (20-22) this proportion falls to 6.6%. This indicates that more than 90% of the female adolescents are exposed to premarital intercourse as teenagers.

The current marital status data suggest that the percentage distribution of respondents who were single, within wed-lock and those whose marriage dissolved to be 73.2%, 18.6% and 8.2% respectively.

The distribution of respondents by current religious background depicts that 80.1% were affiliated to Orthodox

religion; while 19.9% belonged to other religion (such as Protestant, Catholic and Moslem).

The distribution of respondents by ethnic background shows that adolescents who belonged to Amhara, Wolaita, Oromo and Other ethnic groups respectively comprised 38.5% 22.5% 16.0% and 23.0% of the total.

Fifty seven percent of the respondents were those who were born in Awassa or those who had lived in Awassa for most of their childhood ages; while forty three percent of them were those who had lived for most of their childhood ages (under 15) in other places and migrated into Awassa as adolescent (15-24 years of age).

The collected school grade completion data show that 22.7% of the respondents had never attended any schooling or at most had completed primary school grades; 50.4% of the respondents had completed the school grades between 7 and 11; while 26.8% were those who had completed school grade 12 or those who had completed above 12 grade.

The percentage distribution of respondents by current career status reveals that 28.7% of the adolescents were currently students; 15.8% were government or private sector employees; 37.7% were school dropouts or unemployed adolescents; and the remaining 17.8% were found to be housewives at the time of the survey.

Fifty two percent of the respondents had correctly reported the period at which pregnancy is most likely to occur in a woman's monthly menstruation cycle; while forty eight

percent of them had failed to report correctly the pregnancy risk period.

The data on contraceptive practice depict that forty nine percent of the respondents had currently used any method of avoiding pregnancy; while the rest fifty one percent had never practiced contraceptive methods.

Further investigation of the contraceptive practice data reveals that 19.5% of the respondents had practiced contraception when they engaged in premarital intercourse for the first time; while 80.5% of the respondents were not initiated to use contraception at their first sexual contact. This very low figure for contraception at the inception of premarital intercourse discloses that the great majority of adolescents were delayed to seek any method of avoiding pregnancy once they had entered into premarital sexual relationship.

The data on discussion with close friends and relatives about methods of avoiding pregnancy and deleterious consequences of unintended unmarried conception show that 31.3% of the sexually active adolescents had never discussed about; 48.8% had discussed few times a year; while the remaining 20.1% had frequently discussed about family life with their close peers and relatives. This percentage distribution suggests that less than one quarter of the adolescents in Awassa are more concerned about family life and who usually hold discussion on such critical issue of their own.

Table 3.5 Distribution of Eligible Adolescents by Selected Background Characteristics, Awassa, 1995.

Background Variables	Count	Percent (%)
Premarital Pregnancy		
Yes	225	46.1
No	263	53.9
Parental Structure		
Intact	411	84.2
Non-intact	77	15.8
Family Income(at age 14)		
< 201	270	56.1
201-500	180	37.4
>500	31	6.4
Parents Education		
Illiterate	137	28.1
Literate	351	71.9
Family Religion(at age 14)		
Orthodox	423	86.7
Other	65	13.3
Current Age		
15-19	172	35.2
20-22	203	41.6
23-24	113	23.2
Age at First Menses		
<13	22	4.5
13-14	324	66.4
15-16	142	29.1
Age at First Intercourse		
<17	151	30.9
17-19	305	62.5
20-22	32	6.6
Current Marital Status		
Single	357	73.2
Married	91	18.6
Marriage Broken up	40	8.2
Religion		
Orthodox	391	80.1
Other	97	19.9
Ethnicity		
Amhara	188	38.5
Wolaita	110	22.5
Oromo	78	16.0
Other	112	23.0
Childhood Residence		
Awassa	278	57.0
Non-Awassa	210	43.0

Continued

Background Variables	Count	Percent (%)
Completed School Grade		
0-6	111	22.7
7-11	246	50.4
12 and above	131	26.8
Career Status:		
Student	140	28.7
Employed	77	15.8
Non-Employed	184	37.7
Housewife	87	17.8
Knowledge About Fecundity Per.		
Correct	254	52.48
Not Correct	234	48.0
Current Use of Contraceptives		
Yes	240	49.2
No	248	50.8
Used Contraceptives at First Sex		
Yes	95	19.5
No	393	80.5
Discussion With Friends/Relatives		
Not at all	152	31.1
Few Times	238	48.8
Frequently	98	20.1

Source: Survey conducted in Awassa, 1995.

CHAPTER IV

Differentials of Premarital Pregnancy Among Adolescents

This section deals with the examination of related factors which are expected to have association with the incidence of premarital pregnancy among adolescents. Table 4.1 presents the Chi-Square results which test the relationship between premarital pregnancy and the selected factors.

The statement that premarital pregnancy among adolescent women is independent of the family structure in which an adolescent grew up during the childhood age is accepted at $P < 0.05$. This means, there is no statistically significant association between the adolescents premarital pregnancy exposure and their families structure in which they raised in at age fourteen. In other words, it is not the family structure which strictly affects the risk of exposure to premarital pregnancy among adolescent population.

The Chi-Square test reveals that there is a relationship between premarital pregnancy and parental literacy. That is, the likelihood of having premarital pregnancy among adolescent women varies with the parents literacy status. This difference in the occurrence of before marriage conception which attributes to educational background of parents is statistically significant at $P < 0.005$.

The proposition which states that the estimated monthly earnings of a family during the girl's formative ages does not result in a difference in the chance of being unmarried pregnant among the sexually active adolescent population is

rejected. It implies that the risk of premarital pregnancy is substantially influenced by the estimated monthly income that a family attained during the childhood period of an adolescent who is currently aged between 15 and 24. This association between family income and the event of out-of-wedlock pregnancy is found to be statistically considerable, at $P < 0.001$.

The Chi-Square result supports the statement that the proportion of before marriage pregnancy is the same for all girls belong to families that are affiliated to different religious groups (such as orthodox and other religion). This discloses that the risk of exposure to premarital conception does not change by family's religious affiliation. It means that a difference in family's religious background during the formative years of a child behavior is not expected to exhibit a variation in the proportion of being unmarried pregnant among urban adolescent population.

The Chi-Square statistics confirms the statement that the proportion of premarital pregnancy among adolescent women is identical to all who reach puberty at different age. That is, the hypothesis that the proportion of before marriage pregnancy is not linearly associated with the age of a girl at the first onset of menses is true. It indicates that a risk of premarital pregnancy among an urban adolescents does not depend upon an early or late biological maturity.

The test result reveals that premarital pregnancy distribution is independent of the age of the adolescent at the commencement of premarital sexual relationship. This implies

that precocious sexual relationship or its postponement does not bring about a change in the proportion of premarital pregnancy among an urban adolescent female population.

The hypothesis that the proportion of before marriage pregnancy does not change by the current religious background of adolescent females is accepted since the Chi-Square result is not statistically significant at $P < 0.05$. This means that premarital pregnancy distribution is not linearly associated with the current religious affiliation of an urban adolescent women. It is not only religious background but also frequency of past religious attendance which does not result significant variation in the proportion of unmarried pregnancy among the adolescent population.

The Chi-Square test result supports the statement that the proportion of before wedlock conception is identical to both non-migrant and migrant adolescents. That is, whether a girl lived in Awassa for most of the childhood period or migrated into as an adolescent, there is no difference in the proportion of premarital pregnancy.

The hypothesis which states that premarital pregnancy is independent of the educational accomplishment of an adolescent women is rejected; while the alternative statement, i.e, premarital pregnancy among adolescents is related to the educational achievement of a woman is accepted, at $P < 0.0001$. This statistically significant result describes the linear association between unmarried pregnancy and the school grades completed by an urban adolescent females. This finding enables

to draw the conclusion that adolescent's educational achievement strongly affects the proportion of before marriage conception among urban women who are aged between 15 and 24.

The statement that the proportion of premarital pregnancy is the same for both groups of respondents who could correctly identify the period at which pregnancy is most likely to occur in the monthly menstrual cycle and who could not do so is rejected, at $P < 0.0001$. This imposes to accept the proposition that the proportion of premarital pregnancy among urban adolescent women differs by their knowledge of the most risk period in the monthly menstrual cycle. Thus, one concludes that an adolescent girl's knowledge about menstrual cycle has significant effect on the chance of being unmarried pregnant.

The hypothesis that the proportion of before marriage conception is identical between adolescent females who are currently using modern contraception and who are not using is found to be true. It means, premarital pregnancy among urban adolescent women is not associated with their current contraceptive practice. Thus, it is hardly that adolescent's current contraception affects the risk of premarital pregnancy among urban adolescent women (aged between 15 and 24).

The proposition that premarital pregnancy is equally distributed between contraceptive adolescents and non-contraceptive counterparts at the inception of premarital sex is rejected; while the statement that premarital pregnancy differs by use of contraception at initiation of premarital intercourse is accepted, at $P < 0.0001$. The result confirms the statistically

significant impact of contraception at first premarital sexual engagement or the proportion of premarital conception among urban adolescent women.

The Chi-Square test shows that there is no linear relationship between pregnancy before marriage and girl's agreement to have been engaged in first premarital sexual relationship. That is, the proportion of premarital pregnancy among adolescent women is not affected by their agreement to have been engaged in first premarital sexual relationship.

The hypothesis that the proportion of unmarried conception is independent of the degree of adolescents' discussion with close friends and relatives on issues such as contraceptive methods and deleterious consequences of unmarried pregnancy is rejected; while the alternative hypothesis which states that the proportion of pregnancy is associated with the degree of communication on these issues is accepted, at $p < 0.0001$. Thus, it is possible to conclude that the degree of discussion with close friends and relatives on methods of avoiding un-wanted pregnancy and its detrimental effects exerts significant influence on the proportion of premarital pregnancy among the urban adolescent females.

In general, the Chi-Square results suggest that variables such as parents' educational status, family's estimated monthly income at age fourteen, adolescent's educational achievement, knowledge of pregnancy risk period, use of contraception at first premarital sex, and communication with close friends and relatives significantly affect the proportion of premarital

pregnancy, while family's religion, age at first onset of menses, age at the beginning of premarital sex, religious affiliation, migration status, current use of contraception and agreement to have been entered into premarital intercourse hardly affect the incidence of premarital pregnancy among the urban adolescent female population. The direction of relationship and the magnitude of effects owed to each of the stated factors are assessed in the next section.

Table 4.1 Chi-Square Results for Relationship Between Premarital Pregnancy and Selected Variables (N=488), Awassa, 1995.

Variables	Premarital Pregnancy (%)		X ²
	Yes	No	
Parental Structure	46.1	53.9	2.62
Intact	44.5	55.5	-
Non-intact	54.5	45.5	-
Parents' Educational Status	46.1	53.9	8.99*
Illiterate	56.9	43.1	-
Literate	41.9	58.1	-
Family's Income at Age 14	46.1	53.9	12.87*
< 200	51.5	48.5	-
201-500	42.8	57.2	-
> 500	19.4	80.6	-
Family's Religion at Age 14	46.1	53.9	0.076
Orthodox	45.9	54.1	-
Other religion	47.7	52.3	-
Age at Onset of Menses	46.1	53.9	0.56
< 13	50.0	50.0	-
13-14	46.9	53.1	-
15-16	43.7	56.3	-
Age at First Sex	46.1	53.9	4.63
< 17	49.0	51.0	-
17-18	47.8	52.2	-
19-22	35.4	64.6	-
Current Religion	46.1	53.9	0.039
Orthodox	46.3	53.7	-
Other religion	45.2	54.8	-

Continued

Variables	Premarital Pregnancy (%)		X ²
	Yes	No	
Past Religiosity	46.1	53.9	1.58
Not at all	49.2	50.8	-
Few times	41.7	58.3	-
Frequently	53.4	46.6	-
Lived in Awassa at Age 14	46.1	53.9	0.00
Awassa	46.0	54.0	-
Non-Awassa	46.2	53.8	-
Educational Achievement	46.1	53.9	16.3**
0-6	59.5	40.5	-
7-11	46.7	53.3	-
12 and Above	33.6	66.4	-
Fecundity Risk Period	46.1	53.9	50.5**
Correct	30.7	69.3	-
Not-correct	62.8	37.2	-
Current Contraception	46.1	53.9	0.37
Yes	47.5	52.5	-
No	44.8	55.2	-
Contraception at First Sex	46.1	53.9	96.4**
Yes	1.1	98.9	-
No	57.0	43.0	-
Agreement to have had Sex	46.1	53.9	0.47
Yes	45.5	54.5	-
No	50.0	50.0	-
Communication	46.1	53.9	50.3**
Not at all	66.4	33.6	-
Few times	45.4	54.6	-
Frequently	16.3	83.7	-

p<0.005

**p<0.001

***p<0.0001

CHAPTER V

Results and Discussion

5.1. Univariate Logistic Results.

X. Multivariate

In order to examine the effect of each of the explanatory variables which are presupposed to reveal a risk of premarital pregnancy among sexually active adolescents, a univariate logistic regression is applied. In turn, variables which are relevant to the prediction of incidence of premarital pregnancy among adolescent females are further examined by controlling confounding effects. Table 5.1 summarizes results of the bivariate association between incidence of premarital pregnancy and each factor which is presupposed to have an impact.

Although the association is not statistically appreciable, at $p < 0.05$, the risk of premarital pregnancy is affected by the parental (family) structure in which the adolescent girl lived on at age fourteen. The odds of premarital pregnancy increases by a factor of 1.50 for adolescents who were raised in non-intact families than their peers who were grown up in intact families. This indicates that adolescents who are raised in non-intact families are more likely to have premarital pregnancy than their counterparts in intact families.

The odds of premarital pregnancy falls by a factor of 0.81 for adolescents whose family monthly incomes, at age 14, were estimated to be between 200 and 500 in contrast to those whose family incomes were found to be less than 200 birr. This effect

of the change in family income on the likelihood of premarital pregnancy among female adolescents is not significant at 5% level.

The odds of pregnancy reduces by a factor of 0.26 for female adolescents whose family estimated monthly earnings exceeded 500 birr than for those girls whose family income distribution was estimated below 200 birr at age fourteen. The result is also statistically significant, at $p < 0.005$. This implies that the family income earned during the formative years of a child considerably downthrows a risk of before wedlock conception among a female adolescent population if it has been raised beyond 500 birr.

The odds of before marriage pregnancy is 0.545 times lower among female adolescents whose parents have ever attended any type of education (formal or nonformal) than among their peers who have not had such parents. That is, a daughter of educated family imposes upon 45 percent reduced risk of adolescent premarital pregnancy than the one who has come from non-educated family. The impact of parental education on a likelihood of unmarried pregnancy among adolescent female population is statistically significant, at $p < 0.005$. Furthermore, parental educational status data exhibit variations in effect for different school grade completions by parents. Though the effect is statistically insignificant, parents' primary school achievement seems to result a worth reduction in odds of premarital conception among adolescents. That is, the odds of pregnancy decreases by a factor of 0.748

for those girls whose parents had completed primary school grade level than their counterparts whose parents had attained no schooling. The risk of premarital pregnancy is 0.496 times lower for those adolescents whose parents' completed school grade levels were above primary than their peers from no schooling families. The likelihood impact of parents' above primary school accomplishment on a child, adolescent period, exposure to unmarried pregnancy is statistically relevant, at $p < 0.001$.

Although a delay of the first onset of menses up to fifteen and over years of age results in depression on odds of having unmarried pregnancy among adolescent girls, the effect is not statistically pronounced. The degree by which the commencement of menstruation at age of 15 and above reduces premarital conception is 0.87 times that of the influence when it began before the celebration of the thirteenth birth date.

The risk of pregnancy for those girls who have entered into premarital intercourse at age between 17 and 18 years old is 1.158 times the risk for those who are engaged in before being 17 years old; and the effect is statistically insignificant. While on the other hand, the postponement of first sexual relationship up to age 19 and above results reduction in a probability of being unmarried pregnant by a factor of 0.586 than initiation under age seventeen; and this impact of late teenage entry into first intercourse is statistically useful, at $p < 0.05$.

The incidence of premarital pregnancy for those adolescents who are currently married is 2.285 times that of their peers who are currently never-married (single); while, the likelihood occurrence of before marriage pregnancy rises by a factor of 3.386 for those adolescents whose marriage currently ended up than their never-married counterparts. These results are also found to be statistically significant, at $p < 0.001$.

The difference in permanent childhood residence does not bring accountable effect on the chance of getting unmarried pregnancy among female adolescents who are currently residing in Awassa. Nevertheless, the odds of pregnancy increases by a factor of 1.006 for those adolescents who had not lived in Awassa as children under fifteen than for those girls who were in the town during the same age.

The orthodox affiliated adolescents have 1.046 (1/.956) times higher odds of unmarried pregnancy than their counterparts who currently belonged to religious groups other than orthodox (protestant, moslem and catholic). Though the odds of premarital pregnancy is not statistically affected by either religious background or past religiosity of a girl, relatively substantive important effect is attributed to past religious attendance among adolescent females. The odds of pregnancy for those adolescents who attended religious teaching few times a year and one or more than one times a month (frequently) are respectively 0.799 and 0.90 times the odds for those never attended.

There is no substantial difference in the odds of premarital pregnancy among adolescents who had completed school grade level below primary and grade level between 7 and 11. However, female adolescents who had completed school grades between 7 and 11 have odds of unmarried conception that is 1.053 times the odds for their peers who had attended primary school grades (0-6). While on the other hand, the odds of pregnancy falls by a factor of 0.492 for those adolescent girls who had completed school grades between 12 and above than their counterparts who had accomplished school grades at primary level (0-6). This result is statistically significant, at $p < 0.001$. Educational achievement, when other factors are not controlled, plays a paramount role on the reduction of adolescent before marriage risk of pregnancy if it has been encouraged up to the completion of grade 12 among adolescent girls.

The likelihood of premarital pregnancy among adolescent girls who have failed to identify the period at which pregnancy is most likely to occur is 3.813 times the risk among peers that have correctly reported a fecund period of the ovulatory cycle. The influence of knowledge of a fecundity risk period on the chance of being unmarried pregnant among adolescent women is statistically great important, at $p < 0.0001$.

The odds of pregnancy for those females who are currently using contraception is 0.896 times the odds for those adolescents who are not using any method of contraception. The statistically unrecognized effect of current use of

contraception on odds of premarital pregnancy entails possible explanation. That is, since most adolescents had no regular access to effective modern contraceptive methods, they would erratically use effective methods, or otherwise they would use methods such as periodic abstinence and withdrawals which are less efficient, unless one is very well acquainted with a fecund period of a woman's monthly menstrual cycle.

The odds of premarital pregnancy for those females who used any method of avoiding pregnancy when they engaged in the first intercourse is lower by a factor of 0.008 than the odds for those adolescents who experienced unprotected first sexual relationship. In other words, the risk of before marriage conception rockets by a factor of 122 among adolescents who were non-contraceptors at the initiation of premarital sexual contact. Results for contraception variables suggest that use of contraception has utmost importance in the reduction of premarital pregnancy among the adolescent female population if it has been practiced since the commencement of premarital sexual relationship.

The average length of time that the adolescent women practice contraception brings substantial effect on the odds of before wed-lock pregnancy among urban adolescent female population. Every additional year of contraception reduces the odds of premarital pregnancy by a factor of 0.422. This statistically significant, at $p < 0.0001$, result emphasizes the advantage of protracted contraception to suppress the

prevalence of premarital conception among urban adolescent women.

Adolescents who were not volunteer to have been engaged in premarital intercourse have odds of pregnancy that is 1.198 times the odds for those females who were agreed to have been engaged in. Although this finding does not exert statistically sound influence, it reveals that the risk of premarital pregnancy among females who entered into unintentional unmarried intercourse increases by 20%.

Communication with close friends and relatives on methods of avoiding pregnancy and deleterious consequences of unmarried conception brings about a decline in the risk of pregnancy among adolescent female population. The odds of premarital pregnancy among female adolescents who occasionally communicated with close friends and relatives is 0.944 times the odds among those adolescent female who did not communicate at all. While on the other hand, for those adolescents who frequently discussed about contraception and negative consequences of premarital pregnancy the odds reduces by a factor of 0.169 than the odds for those who never involved in such a discussion. A frequent discussion accounts for a remarkable reduction in the likelihood of getting unmarried pregnancy among adolescent population; which is statistically confirmed, at $p < 0.0001$.

Based on these univariate results, variables which include parental structure, family income, parents' schooling, family religion, age at onset of menses, age at first sex, marital

status, past religiosity, lived in Awassa at age 14, completed school grade, knowledge about fecundity risk period, use of contraception at first sex, duration of contraception, agreement to have had first sex, and communication with friends and relatives have remained to the multivariate logistic regression analysis.

Continued

Predictor Variables	Coefficients		Signif .
	b	exp(b)	
Past Religiosity (vs Not at all)			
Few Times	-0.224	0.799	0.3182
Frequently	-0.105	0.900	0.5947
Completed School Grade (vs 0-6)			
7-11	0.052	1.053	0.7744
12 and Above	-0.710	0.492**	0.0009
Knowledge of Risk Period Not Correct (vs Correct)	1.338	3.813***	0.0000
Current Use of Contracept. Yes (vs No)	-0.110	0.896	0.5436
Contraception at First Sex Yes (vs No)	-4.806	0.008***	0.0000
Agree to Have Had First Sex	0.181	1.198	0.4954
No (vs Yes)			
Communication (vs None)	-0.057	0.944	0.7528
Few Times	-1.778	0.169***	0.0000
Frequently	-0.862	0.422***	0.0000
Length of Contraception			

* p<0.05

** p<0.005

*** p<0.0005

N.B. In the parenthesis is the reference category.

5.2 Multivariate Results

The bivariate associations so far assessed indicate the effect of each predictor variable without controlling other factors. Whereas, the multivariate logistic regression, employed at this stage, provides a measure of effect for each predictor after controlling all other factors. Thus, each of the multivariate coefficients is a measure of net effect of the explanatory variable retained in the model.

The general test for the goodness of the fitted multivariate model indicates that it is greatly significant, at $p < 0.00001$. This implies that at least one of the coefficients of the predictor variables is non-zero. On the other hand, the tests for significance of individual variables in the model reveal that contraception at first sex, communication with close friends and relatives, current marital status, parents' schooling, agreement to have had first sex, completed school grade, knowledge of fecundity risk period and family religion at age 14 have significantly affected odds of premarital pregnancy among urban adolescent population.

The multivariate coefficient for use of contraception at the inception of premarital sex depicts that the odds of premarital pregnancy for those adolescent women who had used contraception at first premarital sex is 0.0073 times the odds for non-contraceptors, controlling for all other explanatory variables. In other words, the odds of pregnancy for non-contraceptors is $(1/0.0073)$ 137 times higher than the odds for

their contraceptive counterparts. The highly significant, at $p < 0.0001$, effect of contraception suggests that use of contraception at the commencement of premarital intercourse is the first major predictor of the risk of before marriage pregnancy among urban dweller female adolescents. Hence, it is very unlikely that an adolescent girl who has begun use of contraception since the first initiation of premarital sexual relationship to have had unmarried pregnancy than her peer who has failed to do so.

The other most important predictor for difference in the odds of before marriage pregnancy among an urban adolescent women is the rate of discussion with close friends and relatives which has held with methods of avoiding pregnancy and deleterious consequences of unintended premarital conception. The results reveal that the odds of premarital pregnancy for those adolescent females who had discussed frequently reduces by a factor of 0.167 than for those who had never discussed when other factors constant, which is statistically significant, at $p < 0.0005$; while the odds of such conception for those adolescent women who had discussed few times is 0.743 times the odds for those who had never discussed, controlling for all other predictor variables, which is not statistically significant. Thus, communication with close friends and relatives results a substantial reduction in the likelihood of having premarital conception among urban adolescent population if it has been continued to hold for several times; otherwise its suppressing effect on the odds of pregnancy is unimportant.

smaller than the odds for those counterparts whose parents never had schooling. The test of significance of coefficients for beyond primary level and only primary level achievements respectively reveal the significance at $p < 0.005$ and the insignificance at $p < 0.05$.

Agreement to have had the first premarital sexual intercourse significantly predicts the odds of unmarried conception among an urban adolescent population. The estimated result shows that the odds of pregnancy among girls who did not agree to have had the first sexual contact diminishes by a factor of 0.369 than among those peers who agreed to have had, kept in all other predictors constant. In other words, the odds of premarital pregnancy for those adolescents who were agreed to have entered into the first premarital sex is 2.711 times the odds for those who were not agreed counterparts, controlling other predictor variables. Again, this statistically supported, at $p < 0.01$, result underscores the harmful effect of a consent of a girl at initiation of premarital intercourse, when other factors remain constant.

The multiplicative estimates for school grade accomplishment indicate that adolescent women who had completed school grades which are 12 and above have odds of before wedlock pregnancy that is 4.449 times higher than for those peers who had accomplished school grades at primary level only, controlling other variables; while for those adolescent females who had achieved secondary school grades (7-11) the odds of premarital pregnancy increases by a factor of 1.022 than for

those adolescents who had completed primary school level, when other predictors remain constant. The school grade accomplishment variable exhibits a significant difference, at $p < 0.01$, for those who had achieved grades between 12 and above; while it provides statistically no difference, at $p < 0.05$, for those who had completed secondary school grades in contrast to those who had attained primary school (0-6).

Though in both models (univariate and multivariate) grade 12 and beyond achievement confirms significant effect on odds of premarital pregnancy among urban adolescents, the direction of its effect, under the two cases, is quite contrary. That is, when other factors are not controlled, bivariate association, educational achievement data assert that 12 and beyond achievement significantly suppresses odds of pregnancy; while other factors are controlled, partial association, the data declare that 12 and above achievement significantly enhances the odds. The possible reason for such inconsistent findings, in the two models, is that duration of premarital period sexual exposure is directly related to length of years spend in school. Once an adolescent girl is sexually active, an increase in the number of years spend in school enhances a risk of getting pregnant unless it is complemented by regular use of contraception. Thus, controlling, in the full model, contraception variables and length of exposure to premarital intercourse, which are inversely related to odds of premarital conception, raise the impact of 12 and above grade accomplishment in the opposite direction.

Continued

Predictor Variables	Coefficients		Signif .
	b	exp(b)	
Completed School Grade (vs 0-6)			
7-11	0.022	1.022	0.9607
12 and Above	1.493*	4.449*	0.0078
Knowledge of Risk Period Not Correct (vs Correct)	0.823*	2.272*	0.0126
Contraception at First Sex Yes (vs No)	-4.921	0.007***	0.0000
Agree to Have Had First Sex No (vs Yes)	-0.997	0.369*	0.0076
Communication (vs None)	-0.297	0.743	0.3480
Few Times	-1.791	0.167***	0.0001
Frequently	-0.261	0.770	0.1691
Length of Contraception	13.206		0.0000
Constant			

* $p < 0.05$

** $p < 0.005$

*** $p < 0.0005$

N.B. In the parenthesis is the reference category

5.3 Discussion

The main finding of this research is to substantiate that among sexually active urban adolescent women, the use of contraception at initiation of premarital sexual relationship constitutes a considerable risk factor to have conception before marriage. When other factors are controlled, the impact of using contraception at inception of premarital sex elevates . For instance, in the bivariate association, the likelihood of

marital status to reflect the odds of premarital pregnancy among the married adolescents is substantively very important; while among those whose marriages were disrupted is unimportant. However, in the bivariate relationships, other factors are not controlled, current marital status significantly reflects the odds of pregnancy among the married group of adolescents as well as among those whose marriages were currently ended up, at $p < 0.001$. These results suggest that the bivariate association for those whose marriage were currently disrupted is exaggerated when other factors are not controlled.

This looks reasonable because marriage disruption markedly increases odds of premarital pregnancy while tending to shorten the use of continuous contraception until the first marriage. Furthermore, period of regular contraception is also inversely related to odds of pregnancy. Hence, controlling duration of continuous contraception refutes the impact of current marital disruption. The great prevalence of the odds of premarital pregnancy among currently married adolescent women is an indication that premarital conception is an impetus to a pregnant girl to marry the prospective husband.

Both the univariate and multivariate model results for parental education confirm that parents' beyond primary school level achievement is a significant predictor of the incidence of premarital pregnancy among urban adolescent women; while primary school level achievement is not important to predict the odds of premarital pregnancy. However, the impact of

parents' beyond primary school education raises when other factors are controlled i.e, the odds of premarital pregnancy for those adolescents whose parents had never attended schooling increases by (3.02) three fold, when other factors are controlled, while the odds increases by (2.02) two fold when other factors are not controlled in contrast to the odds for those whose parents had achieved beyond primary levels. Thus, parental educational level data suggest that urban adolescents whose parents had attended beyond primary school education are less likely to be exposed to premarital conception than their counterparts. This is reasonable because well educated parents are role models to their daughters to be aware of costs of unmarried teenage pregnancy/childbearing and its impacts as handicap for future prospects.

The univariate model, other factors not remain constant, provides that the odds of premarital pregnancy for those adolescents who did not agree to have had the first intercourse is 1.198 times for those who had agreed; while on the other hand, when other factors held constant, the multivariate model poses that the odds of pregnancy among those who did not agree to have been engaged in the first intercourse is 0.369 times lower than the odds among those who had agreed.

The former model manifests the increasing tendency of the risk of pregnancy among those adolescents who were not volunteer at initiation while the latter signifies its declining trend for such adolescents. These two diametrically opposite results, which are obtained in the uncontrolled and

identify pregnancy risk time of the menstrual cycle. In both cases, the results are found statistically acceptable.

The results for effect of knowledge about fecundity risk period imply that the likelihood of having premarital pregnancy among urban adolescent population accountably rises for those girls who could not identify the pregnancy risk period of the ovulatory cycle correctly.

The last predictor which affected odds of premarital conception is family's religion during the girl's childhood period. However, while the bivariate association reveals the statistical irrelevance of family's religious affiliation, controlling for other factors discloses the statistical importance, at $p < 0.05$. Thus, the effect is overshadowed, when other factors are not controlled. So, controlling other factors significantly adds up the impact of family's religious affiliation. The estimate suggests that the risk of getting before marriage conception is large among those adolescents who have grown up in orthodox affiliated families.

To sum up, the findings of this research stress the contribution of childhood environmental variables (parents' educational status and family's religious background), personal behavioral variables and demographic characteristics to address the critical urban adolescent females' problem.

CHAPTER VI

Conclusion and Policy Implication

6.1 Conclusion

Almost two decades have passed since changes in teens' premarital sexual behavior, pregnancy and childbearing were reputed to be serious social problems both in the developed and developing countries. Although documented research results are scanty in Sub-Saharan African countries, the findings show that premarital sex, pregnancy and fertility among adolescents have increased and covering a substantial proportion.

In light of this, the present research has tried to examine and understand the scope and magnitude of the issues by taking one sample town in one of the Sub-Saharan African country (Ethiopia). The issues examined and discussed were:

- i.) Assessment of prevalence of premarital pregnancy in urban setting of Ethiopia, Awassa.
- ii.) Examination of the key risk factors for adolescent premarital pregnancy.

In order to attain these major objectives, a cross-sectional survey was conducted in Awassa. A 29% sample (4 kebeles) was randomly selected by using table of random numbers; and 506 eligible respondents were successfully interviewed. The pre-coded structural questionnaire was used to obtain the relevant information; and also SPSSPC+ soft-ware was employed to enter and analyze the data.

analyzed in the full logistic regression model. The full model provides an estimate to the net effect of each predictor parameter by controlling other predictors.

The results of the multivariate analysis disclose that predictors such as contraception at the beginning of first intercourse, communication with close friends and relatives, current marital status, parents' schooling, agreement to have had first premarital sex, completed school grade level, knowledge of fecundity risk period, and family's religion at age fourteen have exerted substantial impacts on odds of before marriage pregnancy among urban adolescent population of Ethiopia.

The odds of premarital pregnancy among non-contraceptor adolescents is 137 times the odds among contraceptive counterparts. This finding suggests that it is very unlikely that an adolescent girl who has used contraception at the commencement of premarital sexual relation to have been premarital pregnant than her peer who has failed to use contraception.

The odds of premarital conception for those female adolescents who had had no communication with close friends and relatives is 6 times higher than for those who had had regular communication. This leads to the conclusion that the likelihood of having unmarried pregnancy rises by six fold for those adolescent women who have had no communication at all with close friends and relatives compared to regularly communicating counterparts.

Adolescent women who were married, at the time of the survey, have odds of premarital pregnancy that is 4.59 times larger than the odds for those peers who were never-married (single). This entails to draw the conclusion that married adolescents were highly exposed to unmarried pregnancy than the never-married counterparts during the premarital sexually active period.

The odds of premarital pregnancy for those adolescent girls whose parents had never attended school increases by a factor of 3.02 than the odds for those counterparts whose parents had completed school grades beyond primary level. This result enables to deduce that parents' beyond primary level school attendance results in 67% reduction in a daughter's chance of having premarital period pregnancy.

Those adolescent girls who agreed to have been engaged in the first premarital intercourse have odds of pregnancy which is 2.711 times larger than the odds for those peers who did not agree to have done so. This finding accentuates the harmful effect of girl's agreement to enter into premarital intercourse. Thus, if a teenage girl does not volunteer the initiation of premarital sexual contact, it reduces her risk of getting premarital conception by 63%.

The odds of premarital pregnancy for adolescent women who have accomplished grades between 12 and above is 4.449 times the odds for those who have had no schooling or primary level only (0-6). This imposes the conclusion that in the absence of regular contraception, adolescent girls who have more than 12

years of schooling are 4.45 times likely to be premaritally pregnant than their primary school counterparts. Thus, adolescents have to use effective methods of contraception regularly.

Among adolescents who could correctly identify the fecundity risk period of the menstrual cycle, the odds of pregnancy is estimated to be $(1/3.81)$ 0.262 times the odds among those peers who could not report correctly. This finding underscores the benefit of knowledge of pregnancy risk period, since well acquaintance to fecundity risk period of the ovulatory cycle helps to effective use of withdrawal and periodic abstinence methods of contraception.

The odds of premarital conception for those adolescents who had grown up in orthodox affiliated families increases by a factor of $(1/.458)$ 2.18 than the odds for those who had raised in families of other religious background (such as protestant, catholic and moslem). In this regard, it is possible to conclude that children who grow up in orthodox affiliated families are more likely exposed to a risk of having unmarried teenage pregnancy.

Therefore, though cross-sectional data are instructive, the findings of this research result in programmatic efforts on premarital sex, pregnancy and childbearing issues.

6.2 Policy Implication.

The estimated proportion of premarital pregnancy among urban adolescent women in Awassa confirms that quite a significant number of adolescents, in urban Ethiopia, have been at least once unmarried pregnant. Therefore, the government or other concerned organizations will benefit if they apply programmatic efforts to address adolescent reproductive issues.

The research findings on the link between risk factors and premarital pregnancy among sexually active urban adolescents have far-reaching policy implication for the development of specific programmatic interventions to alleviate the overwhelming problem of the adolescent population. Since adolescent reproductive behavior is multi-dimensional, policy goal should be program integration.

A key strategic components for intervention in programs aim at reducing the current prevalence rate of adolescent pregnancy and fertility should be family life education and facilitate access to modern methods of contraception. In this era of AIDS and other sexually transmitted diseases (STDs), and high incidence of illicit abortion among unmarried adolescents, programmatic efforts to provide comprehensive family life education for adolescent population are very important.

As the finding of this research points out more educated adolescents are more likely exposed to have had premarital conception, when reliance on modern contraception is constant. Thus, increase in number of years stayed on beyond primary

school substantially elevates the risk of conception among sexually active unmarried adolescents. Since adolescents' problem is more acute in consequence of high level of schooling, future policy or programmatic intervention should mainly target secondary and beyond school girls (7 and above).

In general, the findings manifest the importance of factors such as contraception at first premarital sex, communication with close friends and relatives, parents' schooling, current marital status, agreement at inception of first premarital intercourse, school achievement, knowledge of fecundity risk period, and family's religious background to address adolescents reproductive problem. Therefore, program integration for intervention from multi-dimensional perspective with strong male peers, parental, religious, and community involvement will be successful to lower the current prevalence rate of unmarried conception among sexually active urban adolescents.

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11. Adolescent Female's Questions
(Females Age Between 15 and 24)

[illegible]

Marital Status: 1. Single
2. Married
3. Divorced
4. Widowed
5. Separated

"A Survey on Adolescent's Premarital Pregnancy
and Fertility Behavior in Awassa, 1995 "

Identification	
Region	
Town	
Higher	
Kebele	
Random No.	
Household No.	
Serial No. of Eligibility in the Household Schedule.	

Interviewer's Visits	
Interviewer's Name	
Number of Visits	
Final Visit*	
Date	
Month	
Year	

* Interview status: 1. Completed 2. Partially Completed
3. Postponed/Deferred 4. Refused
5. Other, Please specify: _____

Field Supervised and Edited By	Finally Supervised and Edited By
Name	
Date	
Month	
Year	

PART I. HOUSEHOLD BACKGROUND.

1. How many rooms are there in the housing unit ? (excluding the bath room and kitchen): _____
2. Does the household own the following items (commodities)?

Item	Yes = 1	No = 2
Radio, or Tape Recorder		
TV Set		
Telephone		

3. How many usual (permanent) members are there in the household?

3.1 Females: _____

3.2 Males: _____

4. What was the household(parental) structure that you raised at age 14 ?

1. Intact (Both natural parents)
2. Female headed (No adult male)
3. Other nonintact (Step-parents, Grand-parents, etc.)
4. Other, please specify: _____

5. How much was the monthly income (in birr) of the household

(family) that you raised at age 14 ? _____

6. How many of the household members have been employed ?
 1. None 2. Only one 3. Two members 4. Three and above
7. What is the educational status of your parents ?
(if the code value is '1', skip to Q. 14)
 1. Both are illetrates 2. One of them is literate
 3. Both are literates
8. Is your father ever attended any type of education ?
(if no, skip to Q. 11)
 1. Yes 2. No
9. If yes, what type of education is your father attended ?

- (if the code value is '2' or '3', skip to Q. 11)
1. Formal 2. Adult literacy program
 3. Other nonformal (such as religious, etc.)
10. If your father attended formal education, what is the highest level of school attended ?
1. Primary school (< 6)
 2. Junior secondary school (7&8)
 3. High school (9-12) 4. Above high school (> 12)
11. Is your mother ever attended any type of education ?
(if no, skip to Q. 14)
1. Yes 2. No
12. If yes, what type of education is your mother attended ?
(if the code value is '2' or '3', skip to Q. 14)
1. Formal 2. Adult literacy program
 3. Other nonformal (such as religious, etc.)
13. If your mother attended formal education, what is the highest level of school attended ?
1. Primary school (< 6)
 2. Junior secondary school (7&8)
 3. High school (9-12) 4. Above high school (> 12)
14. What is the highest grade completed within the household that you grow up ? (Age 14)
1. None 2. Primary (< 6) 3. Secondary school (7-11)
 4. High school certificate
 5. Technical or Vocational school certificate
 6. College diploma/degree
 7. College incomplete (Year: _____)
15. What was the household religion when you were aged 14 ?
1. Orthodox 2. Moslem 3. Catholic 4. Protestant
 5. Other, please specify : _____
16. Was your mother worked when you were aged 14 ?
(if no, skip to Q. 18)
1. Yes 2. No
17. If yes, please specify the type of work :

18. Is your mother working currently ? (if no, skip Q. 19)

1. Yes 2. No

19. If yes, please specify the type of work :

PART II. DEMOGRAPHIC, SOCIO-ECONOMIC, CONTRACEPTIVE METHOD,
AND PREGNANCY/BIRTH QUESTIONS.

SECTION 1. Demographic Characteristics.

1. How old were you at your last birth day ? _____
(Age in completed years)
2. In what month and year were you born ?
 - 2:1. Month: _____
 - 2:2. Year : _____
3. How old were you at the first onset of menses ?

4. How old were you when you first began relationship with boy
friend (partner) ? _____
5. How old were you when you first engaged in sexual
intercourse? _____
6. What is your current marital status ?
 1. Single 2. Married 3. Divorced 4. Widowed
 5. Separated 6. With partner (Cohabited)
7. In what religion were you growing up ?
 1. Orthodox 2. Moslem 3. Catholic 4. Protestant
 5. Other, please specify : _____
8. How frequently did you attend religious services in the
past?
(Religiosity in the past)
 1. Not at all 2. Few times a year 3. 1-3 a month
 4. Once per a week and more
9. What is your current religion ?
 1. Orthodox 2. Moslem 3. Catholic 4. Protestant
 5. Other, please specify : _____
10. What is your ethnic background ?
 1. Amhara 2. Oromo 3. Tigray 4. Kenbata 5. Hadiya
 6. Wolita 7. Guraghe
 8. Other, please specify : _____

11. Were you lived for most of the time in Awassa before age 14?
(if yes, skip Q. 12)
1. Yes 2. No
12. If no, where were you lived for most of the time before age 14?
1. Addis Ababa 2. Other Urban 3. Village/Rural

SECTION 2. Socio-Economic Characteristics.

1. Have you ever attended any type of education ?
(if no, skip to Q. 6)
1. Yes 2. No
2. If yes, what type of education have you attended ?
(if the code value is '2' or '3' skip to Q. 6)
1. Formal 2. Adult literacy programme 3. Other nonformal
3. If you have attended formal education, what is the highest grade you completed ? _____
4. Have you ever been dropped out while you are attending school?
(if no, skip to Q. 6)
1. Yes 2. No
5. If yes, what is the reason for being dropped out ?

6. What is the highest level of schooling you aspire to attain?
1. None 2. Primary 3. Junior secondary
4. Some high school
5. High school completion 6. Some college
7. College diploma/degree
8. Other, please specify : _____
7. What is your current career status ?
(if not '2', skip to Q. 10)
1. Student 2. Employed
3. School dropped out and unemployed
4. High school completed and unemployed

5. College diploma/degree and unemployed
6. Other, please specify : _____
8. If you are currently employed, what is the type of occupation you employed ? _____
9. If you are currently employed, what is your monthly income? _____
10. If you are not currently employed, what type of occupation do you aspire to have ? _____

SECTION 3. Contraceptive Knowledge, Attitude, and Practice.

1. Have you ever heard about or seen any method of avoiding pregnancy?

(if no, skip to Q.3)

1. Yes 2. No

2. Which of the following listed methods of avoiding pregnancy have you heard about/been familiar ?

Q.	Method	Have you ever heard of this method ?	Have you ever been familiar with this method ?
2.1	Prolonged Abstinence. (Couples may not have sexual intercourse for many months)	1. Yes 2. No	1. Yes 2. No
2.2	Safe Period. (Couples may avoid intercourse at certain times during the woman's menstrual cycle)	1. Yes 2. No	1. Yes 2. No
2.3	Withdrawal. (Men can be careful and pull out before climax)	1. Yes 2. No	1. Yes 2. No
2.4	Pill. (Women can take a pill every day)	1. Yes 2. No	1. Yes 2. No

2.5	Injection. (Women can have an injection by a physician which stops them from becoming pregnant for several months)	1. Yes 2. No	1. Yes 2. No
2.6	Diaphragm, foam, jelly. (Women can place a sponge, a suppository, or cream inside them before intercourse)	1. Yes 2. No	1. Yes 2. No
2.7	Condom. (Men can use a rubber sheath during intercourse)	1. Yes 2. No	1. Yes 2. No
2.8	IUD. (Women can have a loop or coil placed inside them by a physician)	1. Yes 2. No	1. Yes 2. No
2.9	Female Sterilization. (Women can have an operation to avoid having any more children)	1. Yes 2. No	1. Yes 2. No
2.10	Male Sterilization. (Men can have an operation to avoid having any more children)	1. Yes 2. No	1. Yes 2. No
2.11	Traditional.	1. Yes 2. No If yes, please specify : _____	1. Yes 2. No If yes, please specify : _____
2.12	Any other methods. (Any other methods that men/women can use to avoid pregnancy)	1. Yes 2. No If yes, please specify : _____	1. Yes 2. No If yes, please specify : _____

3. In your thinking when during a woman's monthly menstrual cycle pregnancy is most likely to occur ?

(if DK, skip to Q. 5)

1. During the first few days at the beginning of the cycle
2. In the middle of the cycle
3. Immediately before menstruation

4. During menstruation 5. Near the end of the cycle
8. Don't know (DK)
4. Where did you get the information about the relationship between the woman's monthly menstrual cycle and pregnancy?
 1. Friends/Relatives
 2. Newspaper/Magazine/Poster/Pamphlet
 3. Books on health and sex education
 4. Subject matters taught in school
 5. Family Guidance Association Office
 6. Other, please specify : _____
5. Have you or your partner/s ever used any method of contraception ?

(if no, skip to Q. 15)

 1. Yes 2. No
6. Were you used any means of avoiding unwanted pregnancy when you first entered into sexual union ?

(if no, skip to Q. 8)

 1. Yes 2. No
7. If yes in Q. 6, what was the method used ?
 1. Pill 2. IUD (Loop) 3. Injection 4. Condom
 5. Diaphragm, foam, or jelly 6. Safe Period
 7. Withdrawal 8. Other, please specify : _____
8. How old were you when you first used contraceptive ?

Age (Years) : _____
9. Are you currently using any method of contraception ?

(if no, skip to Q. 11)

 1. Yes 2. No
10. If yes, what method are you using ?
 1. Pill 2. IUD 3. Injection 4. Condom
 5. Diaphragm, foam, or jelly 6. Safe Period
 7. Withdrawal 8. Prolonged Abstinence
 9. Female Sterilization
 10. Other, please specify : _____
11. For how long did you continuously use contraception ?

11;1. Months : _____

11:2. Years : _____

12. From where do you usually obtain contraceptives ?

1. Friends/Relatives
2. Sexual Partner
3. Pharmacy/Drug Shop
4. Government Hospital/Health Center/Clinic
5. Private Clinic
6. Other, please specify : _____

13. If you are not currently practicing contraceptive, what is the main reason ?

1. Not practicing sex
2. Currently pregnant
3. Want to get pregnant
4. Did not think I could get pregnant
5. Can't get contraceptives
6. Concern about safety of Contraceptives
7. Partner objects using contraceptives
8. Religious reason

9. Modern contraceptives are too costly

10. Other, please specify : _____

14. If you did not use contraceptive at first sexual contact then for what main reason ?

1. Want to get pregnant
2. Did not think I could get pregnant
3. Could not get contraceptive
4. Concerned about safety of method
5. First sexual partner objection
6. Religious reason
7. Other, please specify : _____

15. Do you intend to use contraceptives at any time in the future?

(if no, skip to next section)

1. Yes
2. No

16. If yes, which method do you prefer to use ?

1. Pill
2. IUD
3. Injection
4. Condom
5. Diaphragm, foam, or jelly
6. Safe Period
7. Withdrawal
8. Prolonged Abstinence
9. Female Sterilization

10. Other, please specify : _____

SECTION 4. Pregnancy/Birth Related Questions.

1. Do you think that most young females like you get pregnant before marriage ?

1. Yes 2. No 3. DK

2. Has any of your close friends/relatives become pregnant before marriage ?

1. Yes 2. No

3. Have you ever been pregnant before marriage ?

(if no, skip to next part)

1. Yes 2. No

4. How many times such pregnancies were occurred to you ?

5. How old were you when you became pregnant for the first time?

Age (Years) : _____

6. How had your first pregnancy terminated ? by :

1. Marrying partner after conception

2. Giving birth outside of marriage

3. Abortion

4. Mis-carriage or Still birth (due to involuntary incidence)

5. Yet not get resolution (if currently pregnant for the first time)

6. Other, please specify : _____

7. How did you get your first pregnancy ? by

1. Partner that I married after pregnancy

2. Boy friend 3. Rape

4. Other, please specify : _____

8. Have you ever given a live-birth² outside of marriage ?

(if no, skip to next part)

1. Yes 2. No

²A baby cried or showed any sign of life at birth.

9. How many such live-births have you given ? _____
 (if sex was identified) :
 9:1. Boy : _____
 9:2. Girl : _____
10. How old were you when you first gave a live-birth outside of marriage ? Age (Years) : _____
11. With whom were you lived when you had the first premarital birth ?
 1. Alone 2. With boy friend/partner
 3. Parents 4. Friends/Relatives
 5. Other, please specify : _____

PART III. MISCELLANEOUS QUESTIONS.

1. Were you okay (or agreed) to have had the first sexual intercourse with partner?
 1. Yes 2. No
2. Were you fallen in love with your first sexual partner?
 1. Yes 2. No
3. Have you had rape/unintended intercourse in the past years?
 1. Yes 2. No
4. Do you agree with an opinion that unmarried girl to have had sexual relationship with a man to whom she would not plan to marry?
 1. Disagree 2. Agree 3. Strongly agree
5. How many sexual partners were you had during the last two years?
 1. One 2. Two 3. Three or above
6. How often had you had sexual intercourse in the last month?
 1. None
 2. Once or twice a month
 3. Once or twice a week
 4. Three or four times a week
 5. Almost every day
 6. Other, please specify:-----
7. In your sexual life have you experienced for most of the time with one regular partner? (if no, skip to Q. 9)

1. Yes 2. No
8. If you have never experience with one partner regularly, how is your sexual life? (if Q7 is 2 skip to Q. 12)
 1. Once accidentally engaged in and stopped
 2. Having sexual contact with anybody at any time
 3. Other, please specify:-----
9. During his regular sexual relationship with you what was/is the highest school level he completed?

(Answer only if you have regular sexual partner in the past or currently)

 1. None 2. Primary
 3. Junior Secondary 4. Some high school
 5. High School Completed 6. Some College
 7. College Diploma/Degree
 8. Other, Please Specify:-----
10. What is the carrier status of this regular partner?
 1. Employed 2. Student
 3. School dropped out and unemployed
 4. High school completed and unemployed
 5. College diploma/degree and unemployed
 6. Other, please specify:-----
11. If he is employed, what is his monthly income? _____
12. Do you often discuss about contraception and negative consequences of pregnancy/birth outside of marriage with your sexual partner?
 1. Not at all 2. A few times
 3. Frequently 4. Most Frequently
13. Do you often discuss about contraception and negative consequences of pregnancy/birth outside of marriage with your close friends, relatives or elder siblings?
 1. Not at all 2. A few times
 3. Frequently 4. Most frequently
14. In your opinion, what is the best solution when unmarried young women becomes pregnant?
 1. Marriage (with sexual partner)

1 Yes

2 No

22. Do you have any employed older sisters?

1 Yes

2 No

DECLARATION

I, the undersigned, declare that this thesis is my work and that all sources of materials used for the thesis have been duly acknowledged.

Teweldbirhan Girma:



Addis Ababa

June, 1996