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Risk factors for adolescent premarital pregnancy in Awassa Addis Ababa
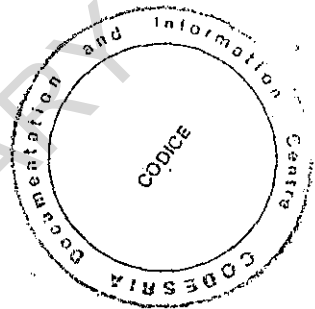
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RISK FACTORS FOR ADOLESCENT PREMARITAL

PREGNANCY IN AWASSA

By

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RISK FACTORS FOR ADOLESCENT PRE-MARITAL PREGNANCY IN AWASA TOWN

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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 yet 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 depicted clearly. However, there are some indirect evidences that presume to show their increasing tendencies. In light of this, the present research attempts to assess the extent to which adolescent premarital pregnancy has pervaded in the urban setting (Awassa). It also examines the inter-relationships between adolescent premarital pregnancy and the socio-economic, biological, behavioral, and family characteristics.

In order to analyze and discuss the association 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 are investigated. The major statistical tool

applied at different stages of the analysis is the logistic regression model.

The investigation on the prevalence rate of out-of-wedlock pregnancy among adolescent girls imparts that forty six percent of them were exposed to premarital pregnancy at least ones in their sexual life.

According to the findings of this research 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's religion significantly affect the degree of occurrence of premarital pregnancy among sexually active adolescents in Awassa.

These findings imply that family life education and access to modern methods of contraception as the key strategic components for programmatic intervention. In addition, secondary and beyond school girls should be the core target groups in programs aim at reducing the present high incidence of premarital pregnancy and fertility in urban settings 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, which have been documented in the developed countries, confirm that the premarital pregnancy and fertility of teenagers have been increasing and constituting 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 these situations.

Although surveys conducted so far in the developing countries are very scarce in number, 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 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 births before age 20 were 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 available survey data, it is very difficult to delineate the specific patterns and prevalence rates of premarital sex, pregnancy and fertility. However, some indirect measures have been made to indicate the increasing trends of premarital sex, pregnancy and fertility among urban adolescents. The following indirect evidences presume to verify 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 breakdowns of women.

(b) Marriage Pattern

In the survey cited above, about 90% of the women aged between 15 and 19 had 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). For these reasons, in urban areas particularly, it is unlikely that a woman currently aged 20 or below to have been engaged in marriage; 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 conducted 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 rate of contraception strengthen the common belief for sizable proportions 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, sever burden of fostering a child which utterly falls only upon a mother and her family, and bleak marriage opportunity are just a few.

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 associated with 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, the issues have not yet got due attentions 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.
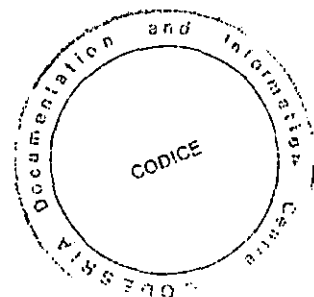
1:2 Review of Literature

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 inter-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) showed 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) depicted the association between the onset of first sexual initiation and motivation to the use of contraceptives. Based on their findings these scholars delineated that teens delay to practice family planning services after they have been engaged in sexual intercourse. For instance, in the United State about

70% of the teens who had entered into first sexual intercourse, in 1982, have delayed for two years before seeking contraceptives; and also 20 % of them had been pregnant after six months of becoming sexually active (Pollack 1992).

(b) Family Environment

Many researchers have devoted themselves on the measurements 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 at childhood ages (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) indicated parental marriage dissolution as factor contributing to the substantial occurrence of premarital conception and childbearing among adolescent girls; more specifically, teens who grow up in non-intact families are very likely to have had premarital pregnancy and birth than those intact family counterparts.

(b.2) Parental Education

Parental education also contributes to change in the risk of premarital conception and childbearing. The results of the studies made by Cooksey (1990); Kahn and Anderson (1992); and Haveman and et al (1993) strongly supported 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. The implication is that a girl who had an educated mother would have an inspiration to continue her education on a higher level and she was being aware of giving birth would handicap her further 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 revealed 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 suggested that, the risk of having premarital pregnancy/birth is prevalent to large 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 women. For instance, Bumpass and Mclanahan (1989) indicated that the great racial difference in premarital birth among blacks and whites, as categorized in higher risk group, has substantially dropped in high school completion. However, the effect of education in premarital pregnancy and childbearing should be interpreted cautiously because such pregnancy and fertility may sometimes have 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 showed a slight improvement in future economic advantage inspired by teen seems to have resulted in a substantial reduction in the probability of having out of wedlock birth.

(d) Marriage Opportunity

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

Although South and Lloyd estimated negative effects of a number of available mates on such pregnancy and fertility, they have also noted down 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 the light of all the above stated reasons, in this study, the investigator owes to hypothesize and examine the risk factors of premarital pregnancy as viewed and summarized in the literature and also on the bases of the observed facts in the context of urban Ethiopia.

1.3 OBJECTIVES

These days, premarital pregnancy and childbearing of teenagers have become major political and social concerns 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 loosing the chance of participating in higher political, social, and economic options. To deal with these grave social concerns, the study attempts to assess and interpret the extent of premarital

pregnancy and the direct and/or indirect factors responsible for such risk 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 exert influence on the risk of premarital pregnancy.

To indicate specific areas which call for an immediate program 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 affect occurrence of premarital pregnancy and birth, differ with overall cultural and socio-economic conditions of a country. In this study, the following hypotheses are tested on the bases of the cross-sectional data obtained from the representative sample of female adolescents in Awassa:

1. Premarital pregnancy reduces to large extent by use of contraception at the inception of premarital intercourse.

2. Knowledge of fecundity risk period of a monthly menstrual cycle brings about significant change in the probability of getting pregnancy among adolescents.

3. Educational attainment contributes to variation in 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 before marriage pregnancy 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. To this effect, 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 with multiple of socio-cultural characteristics. Since studies conducted on the demographic and socio-economic conditions of the people in the town are limited, this study serves as an additional input to contribute in alleviating the social ills of the town.

Second, the sample respondents are expected to fairly represent the major socio-economic categories to carry out 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).

MAP OF KEFETEGNA AND KEBELES OF AWASSA

KEY

- —·—·— KEFETEGNA BOUNDARY
- —··—··— KEBELE BOUNDARY
- ———— SAMPLE KEBELES

Lake Awassa

2-05

2-07   2-06

1-02

1-04

1-05

1-06

2-04

2-01   1-03

1-01

1-07

2-03

2-02

to Shashemene

to Yirgal Alem
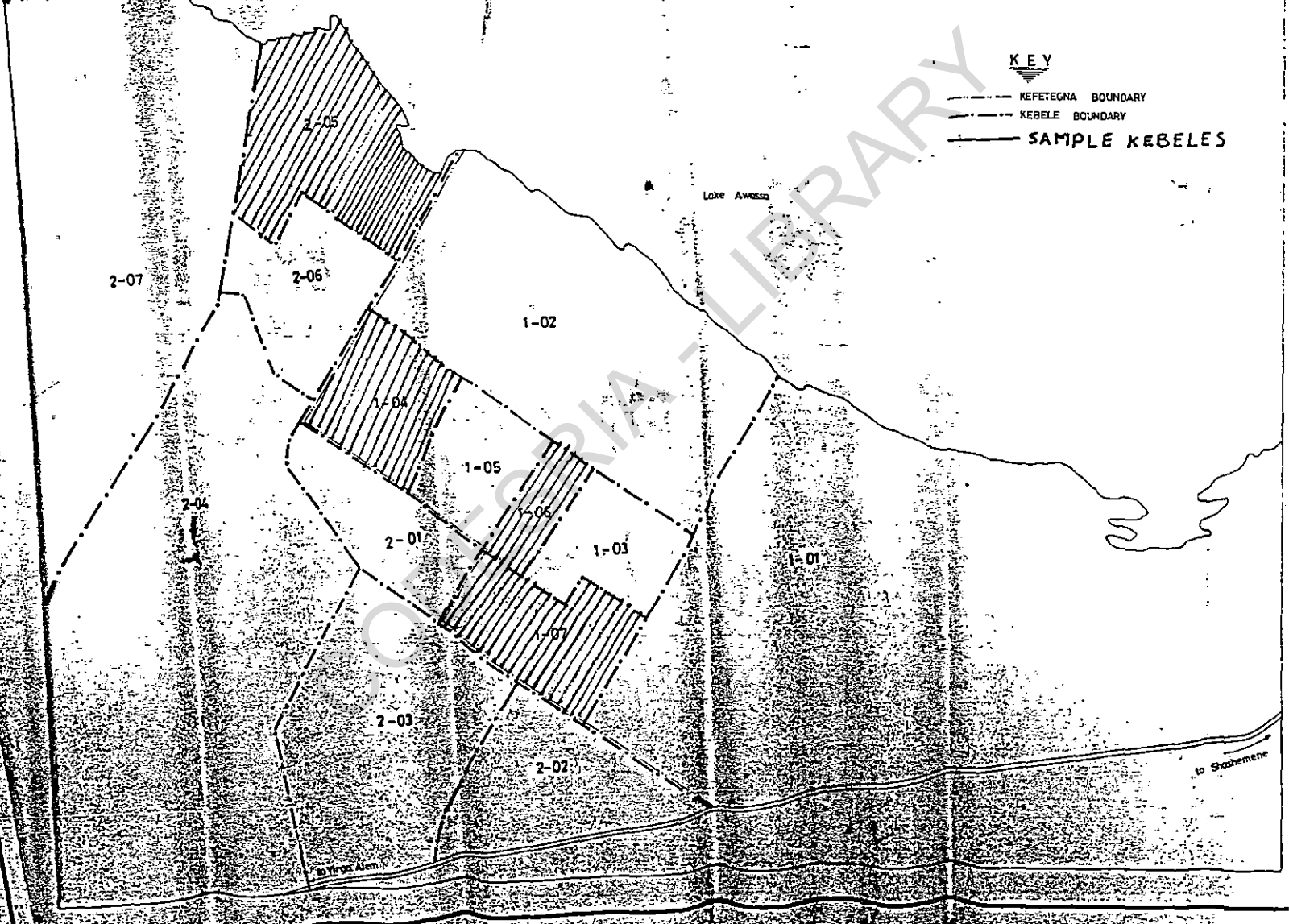
2.2 Scope and Coverage

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 available at the moment 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 picked 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 whose age 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 surveyed four kebeles. Therefore, the sample size of the

ultimate sampling units that should be used for analysis was decided to be 574.

2.3.2 Questionnaire

To the purpose of present research, data were collected by the help of the usual instrument for gathering survey information, which is known as questionnaire. For the intended purpose 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 (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 (handbooks) 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 enumeration experience. Providing intensive training and handing over manuals were compulsory before deploying the selected enumerators for field activities. Before the inception of the main enumeration the interviewers' field proficiency was examined; 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 checked at a spot; and also the completed questionnaires were edited and inconsistencies were carefully 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

At this stage of processing the data with the help of computer the final manual work was also 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 of these factors.

At the bivariate stage a chi-square test and univariate logistic regression are employed in order to identify the important explanatory variables that 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 model[1]

Is:

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

Where,

P_i is the probability of experiencing premarital pregnancy for an ith individual.

B_i is the parameter coefficient.

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

2.5 Constraints and Limitations of the Study

The lack of standard items for measurement of some personal attributes such as self-esteem and involvement in delinquent activities, which may be presumed to predict adolescent reproductive behavior, has compelled to exclude these variables from the analysis from the beginning. On the other hand, educational expectation and work status aspiration data are rejected from the analysis because of contradiction with the actual performance observed at the survey time.

The scarce distribution of respondents belonged to religious groups such as Protestant, catholic and Moslem has enforced these three groups to be lumped together as 'other religion'. Regardless of these limitations, the survey data provided best information for addressing the issue of interest.

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 residents of the sampled kebeles. The males and females constituted 6344 (47.6%) and 6928 (52.4%) of the total population respectively. The distribution of reported ages data indicates 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% were adults and old people.

The sex-ratio, which is a prime indicator of the sex-composition, was calculated for the whole population and for the population sub-groups. 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 were found to live in the town at the time of the survey. This finding is consistent with the general belief that excess females than males in a town/city. 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 age 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 seeming dubious is that the hypothetical expectation of more 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 presupposition (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	602	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 with dissolved marriage 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 account for the presence of some more married males who were living in Awassa and whose wives were residing in some other places at the moment. The large proportion for males than females in the population single seems to have emanated 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. 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 also not to remarry the old lineage members of the previous husbands if they die. In addition, in order to experience new independent urban mode of life. The common activities the migrant females usually involve in are commercial sex working, 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
Separated	23	25.6	67	74.4	90	1.1
Total	3780	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. Wolatita, 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 proportion, 74.8%, of the population was found to be Orthodox. The next major religious group which consisted 21.0% of the population was Protestant. The other two religious groups (Islam and Catholic) together included 4.2% of the people.

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 counted to be 3280; out of these adolescents, females were 1775. Among those females who were asked if they had experienced premarital sex in their life 574 (32%) answered

affirmatively. Out of the identified 574 eligibles 488 respondents had reported correctly during the main survey. The relevant data in this research were obtained from 488 respondents. Some of the selected backgrounds of the eligible respondents are summarized in table 3.5.

Out of wedlock conception at least once had occurred to 46.1% of premarital sexually experienced adolescents while to the remaining 53.9% such event had not appeared 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 15-24 years old women were raised at age 14 in families whose monthly incomes estimated below 200. Those families whose estimated monthly incomes laid between 201 and 500 had brought up 37% of the total respondents. Whereas, adolescents who were grown up within 500 and beyond incomes group families accounted for the rest 7%.

The percentage shares 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 those within non-Orthodox (Protestant, Moslem or Catholic) are 13.3%. The implication is that 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' ages group (23-24).

As the data on first onset of menses depict menstruation was begun before the celebration of the thirteenth birth date to 4.5% of the respondents. Respondents who were aged between 13 and 14 years old at the time of the first discharge of menses are 66.4%. About 29.1% were between 15 and 16 years old at the commencement of menstruation.

The percentage proportion for respondents who were entered into premarital sex at ages 16 and below is 30.9%; for those who were engaged in premarital intercourse at ages between 17 and 19 is 62.5%; while for those who were experienced in premarital sex after teenage (20-22) is 6.6%. This indicates that more than 90% of the sexually active adolescent females were exposed to premarital intercourse at teenage (15-19).

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 category of respondents by current religious background depicts that 80.1% of the adolescent girls were affiliated to Orthodox religion while 19.9% of them belonged to other religion (such as Protestant, Catholic and Moslem).

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

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

The collected school grade completion data show that 22.7% of the respondents had at most attended 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 grades 12 and above.

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

Fifty two percent of the interviewees 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 adolescent females were using any method of avoiding pregnancy, while the rest fifty one percent were not practicing contraceptive methods at the survey time.

Further investigation of the contraceptive use's data reveals that 19.5% of the respondents had practiced contraception when they were entered into 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 been engaged in premarital sexual relationship.

The data on frequency of discussion about methods of avoiding pregnancy and deleterious consequences of unintended conception show that 31.3% of the sexually active adolescents had never discussed the issues; 48.8% had discussed few times a year; while the remaining 20.1% had frequently discussed with their close peers. This percentage distribution suggests that less than one quarter of the adolescents in Awassa are more concerned about family life and who usually hold discussions on such critical issues 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 devotes to the examination of factors are expected to have had association with the incidence of premarital pregnancy among adolescents. Table 4.1 presents the Chi-Square results that testify the relationship between premarital pregnancy and the selected factors.

The statement that premarital pregnancy among adolescents is independent of the family structure in which girls grew up 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 that strictly affects the risk of exposure to premarital pregnancy among adolescent population.

The Chi-Square test assures 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 attributing 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 possessed 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 who 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. Its implication is that a difference in family's religious background during the formative years of a child behavior is not expected to bring about a variation in the proportion of being unmarried pregnant among urban young girls.

The Chi-Square statistics confirms the statement that the proportion of premarital pregnancy among adolescent women is identical to all those who reach puberty at different ages. 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 urban adolescents does not depend upon an early or late biological maturity.

The test result imparts that premarital pregnancy distribution is independent of the age of the adolescent at the commencement of premarital sexual relationship. The conclusion is that precocious sexual relationship or its postponement does not account for 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 urban adolescent women. It is not only religious background but also frequency of past religious attendance that does not significantly affect the proportion of unmarried pregnancy among the adolescent population.

The Chi-Square test's 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 presupposition that premarital pregnancy is independent of the educational accomplishment of an adolescent woman is rejected; while the alternative statement, i.e., premarital pregnancy 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 completed school grades. This finding enables to draw the conclusion that adolescents' educational achievements strongly affect the proportions of before marriage conception among urban young women.

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.

The proposition that premarital pregnancy is equally distributed between contraceptors and non-contraceptors at the inception of premarital sex is rejected; while the alternative proposition 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 use of contraception at first premarital sexual engagement on the likelihood of getting premarital conception among urban adolescents.

The Chi-Square test tells that there is no linear relationship between before marriage pregnancy and girl's agreement to have been entered into first premarital sexual relationship. That is, the proportion of premarital pregnancy among adolescent women is not affected by their consent to have had 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 their own concerns is rejected; while the alternative supposition which states that the proportion of pregnancy is associated with the degree of communication 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, from the obtained results, variables like 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. On the other hand, 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 chapter.

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

Results and Discussion

5.1. Univariate Logistic Results.

In order to examine the amount of effects of each of the explanatory variables that are presupposed to reveal a risk of premarital pregnancy among sexually active adolescents, a univariate logistic regression is applied. In turn, the important variables 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 associations between incidence of premarital pregnancy and each of the predictors.

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 in 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 age 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 intact family counterparts.

The odds of premarital pregnancy falls by a factor of 0.81 for adolescents whose families monthly incomes were estimated to be between 200 and 500 in contrast to those whose families incomes were found to be less than 200 birr at age 14. This effect of the change in family income on the likelihood occurrence 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 families estimated monthly earnings exceeded 500 birr than for those girls whose families income distribution was estimated below 200 birr at age fourteen. The result is also statistically significant, at p<0.005. One can draw the conclusion that the income earned by the family during the formative years of a child considerably suppresses a risk of before wed-lock conception among 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 had ever attended any type of education (formal or non-formal) than among those peers whose parents had never attended any form of education. That is, a daughter of educated family is exposed to 45%-reduced risk of adolescent premarital pregnancy than her counterpart from non-educated family background. The impact of parental education on the likelihood of being unmarried pregnant among adolescent female population is statistically significant, at p<0.005. Though the effect is statistically insignificant, parents' primary school achievement seems to contribute for worth reduction in odds of premarital conception among adolescents. For instance, the odds of pregnancy decreases by a factor of 0.748 for those girls whose parents had completed primary school grades level than their counterparts whose parents had attained no schooling. On the other hand, 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 accomplishments on child's 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 15 and above reduces premarital conception is 0.87 times the odds when it begins before the celebration of the thirteenth birth date.

The risk of pregnancy for those girls who are entered into premarital intercourse at age between 17 and 18 years old is 1.158 times the chance for those who are engaged in before being 17 years old; and the effect is statistically insignificant. On the other hand, the postponement of first sexual relationship up to age 19 and above lowers the occurrence of premarital pregnancy by a factor of 0.586 than early initiation at age under seventeen. 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 residential areas does not bring substantial change in the odds of 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 had resided 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 belong to other religious groups lumped together (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 congregations 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 appeared in such circumstances.

There is no substantial difference in the odds of premarital pregnancy among adolescents who had completed school grades level below primary and grades 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 at the most 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 at the most 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 risk of

adolescent before marriage pregnancy if it has been encouraged at least 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 happen is 3.813 times the probability of occurrence among peers that have correctly identified 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 contraceptives is 0.896 times the odds for those adolescents who are not using any method of contraceptives; the effect is not statistically   recognized.

The odds of premarital pregnancy is lowered by a factor of 0.008 for those females who used any method of avoiding pregnancy at their first sexual engagement 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 contraceptives is utmost important 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 of the adolescent woman's continuous contraception substantially affects the odds of before wed lock pregnancy. Every additional year of contraception reduces the odds of premarital pregnancy by a factor of o.422. This statistically

significant, at p<0.0001, result underscores the advantage of protracted contraception to suppress the incidence of premarital conception among urban adolescent women.

Adolescents who did not intend to have been engaged in premarital intercourse have odds of pregnancy that is 1.198 times the odds for those counterparts who intended to have had such relationship. Although this finding does not exert statistically sound influence, it reveals that the risk of premarital pregnancy among females who entered into unintentional non-marital intercourse increases by 20%.

Communication with close peer friends and relatives of the same age on methods of avoiding pregnancy and deleterious consequences of unmarried conception brings about a decline in the risk of having unwanted pregnancy among adolescent female population. The odds of premarital pregnancy among female adolescents who occasionally communicated with close friends and relatives are 0.944 times the odds among those adolescent females who did not communicate at all. While on the other hand, for those adolescents who frequently discussed about contraception and harmful impacts 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 the univariate results variables like 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 sexual initiation, duration of contraception, agreement to have had first sex, and communication with peer friends and relatives have found useful to be further assessed in the multivariate logistic regression approach.

Table 5.1 Univariate logistic Model Predicting the Risk of

Pregnancy Among Adolescents (Unweighted N=488),

Awassa, 1995.

Predictor Variables	Coefficients		Signif.
	b	exp(b)	
Parental Structure Nonintact (vs Intact)	0.402	1.495	0.1069
Family Income (vs <201) 201-500	-0.213	0.808	0.2597
>500	-1.343	0.261**	0.0038
Parents' Education Educated (vs Noneducated)	-0.607	0.545**	0.0029
Parents' Schooling (vs No Schooling) Primary School (0-6)	-0.291	0.748	0.2260
Beyond Primary (>6)	-0.701	0.496***	0.0003
Family's Religion Other Religion(vs Orthodox)	0.074	1.076	0.7830
Age at Onset of Menses (vs <13) 13-14	0.097	1.102	0.6152
15-16	-0.139	0.870	0.4878
Age at First Intercourse (vs <17) 17-18	0.146	1.158	0.4209
19-22	-0.534	0.586*	0.0337
Marital Status (vs Single) Married	0.826	2.285***	0.0006
Marriage Broke Up	1.22	3.386**	0.0009
Childhood Residence Non-Awassa (vs Awassa)	0.0059	1.006	0.9742
Religious Background Other Religion(vs Orthodox)	-0.046	0.956	0.8442

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 No (vs Yes)	0.181	1.198	0.4954
Communication (vs None)			
Few Times	-0.057	0.944	0.7528
Frequently	-1.778	0.169***	0.0000
Length of Contraception	-0.862	0.422***	0.0000

* 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 every 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 analyzed in the model while confounding effects are controlled.

The general test for the goodness of the fitted multivariate model gives significant confirmation, at $p<0.00001$. The result corroborates the fact that at least one of the coefficients of the predictor variables is non-zero. The tests on the effects of individual variables reveal that contraception at first sexual contact, communication with close peer friends and relatives, current marital status, parents' schooling, agreement to have had first intercourse, completed school grades, knowledge of fecundity risk period and family religion are significant predictors of the incidence 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-contraceptor counterparts, 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 contraceptor counterparts. The highly significant, at $p<0.0001$, effect of contraception at

initiation of premarital sex suggests that contraception at the commencement of premarital intercourse is the first major factor to predict the risk of before marriage pregnancy among urban dweller female adolescents. Hence, it is very unlikely that an adolescent girl who begins contraception at the first initiation of premarital sexual relationship to have had unmarried pregnancy than her peer who delays or fails to practice.

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 peer friends and relatives on related matters to methods of avoiding pregnancy and detrimental effects of unwanted conception. The odds of premarital pregnancy for those adolescent females who had a habit of frequent discussion reduces by a factor of 0.167 than for those age peers who never had such a habit when other factors constant, which is statistically significant, at $p<0.0005$. While on the other hand, the odds of pregnancy for those adolescent women who discussed few times is 0.743 times the odds for those who did not ever discuss, controlling for all other predictor variables, this value is not statistically important. Thus, communication with close peer friends and relatives remarkably contributes to cut back the prevalence of unwanted premarital conception among urban adolescent population if it has been habitually performed throughout the adolescent ages; otherwise its suppressing effect is unimportant.

The estimated multiplicative coefficients for current marital status suggest a variation in the odds of before marriage conception among adolescent women. The data disclose that adolescent women who are currently married have odds of before wed-lock pregnancy, which

is 4.59 times greater than the odds for those counterparts who are currently never-married, controlling all other predictors. On the other hand, those adolescents with currently dissolved marriage have odds of pregnancy that is large by a factor of 2.53 than the odds for those peer girls who are currently single, when other predictor variables remain constant. Moreover, the difference in the odds of pregnancy between the married and the never-married women is statistically significant, at $p<0.0005$; whereas, the difference in such odds between the group of women whose marriages are currently dissolved and the single women is not statistically recognized, at $p<0.05$.

The probability of getting unwanted pregnancy among urban adolescents is significantly associated with parents' educational accomplishments. The odds of before marriage conception among adolescent girls who were fostered by parents whose educational achievements were beyond primary school levels is lower by a factor of 0.331 than the odds among those peers whose foster parents' school achievements were nil, controlling other variables. While on the other hand, female adolescents whose parents completed primary school grades only have odds of pregnancy which is 0.552 times 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 decreases 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.

Adolescent women who completed 12 and above school grades have odds of before wed-lock pregnancy that is 4.449 times higher than for those age peers who accomplished school grades at primary level only, controlling other variables. While for those adolescent females who achieved secondary school grades (7-11) the odds of premarital pregnancy increases by a factor of 1.022 than for those adolescents who completed primary school grades level, when other predictors remain constant. The former result depicts statistically significant effect for 12 and beyond grades level accomplishment, at $p<0.01$ while the latter assures no statistically appreciable difference for secondary school grades level completion, at $p<0.05$.

Though in both models (univariate and multivariate) school grades achievements data reveal significant impacts of escalated levels of schooling (12 and beyond) on odds of premarital pregnancy among urban adolescents, the direction of their impacts, under the two considerations, are quite contrary. This statement may further be elaborated as, when other factors are not controlled, bivariate

association, educational achievement data assert that 12 and beyond grades achievements significantly suppresses odds of pregnancy. While other factors are controlled, partial association, the same data confirm that 12 and above achievements significantly enhances the odds. The possible reason for results which seem inconsistent, in the two models, is that duration of premarital sexual exposure is directly related to the length of years spend in school environment. Once an adolescent girl is sexually active, an increase in the number of years spend in school compound elevates a risk of being pregnant unless it is complemented by regular use of effective methods of contraception. Thus, in the full model, controlling for variable like use of contraceptives, which is inversely related to odds of premarital conception raises the partial impact of 12 and above grade accomplishments in the opposite direction.

The multivariate logistic regression result assures the statistical visible impact, at $p<0.05$, of the knowledge about pregnancy risk period of the menstrual cycle on the odds of unmarried pregnancy among urban adolescent female population. The exponential coefficient reveals that adolescent women who could not correctly identify the fecund period of the ovulatory cycle have odds of before marriage conception that is 2.272 times the odds for those counterparts who could correctly identify the fertile hazardous period, held other predictors constant.

The last predictor, which significantly affects the odds of premarital conception among urban adolescent population, is family's religious affiliation during the formative ages of a girl. The estimate for family's religion depicts that the odds of premarital

pregnancy for those girls who had been grown up in the families whose religious background was not orthodox is 0.458 times the odds for those peers who had been raised in orthodox affiliated families, controlling all other predictor variables. The result is also found significant, at p<0.05.

Out of the total variables presupposed to have had distinct or common effects on the likelihood of having premarital conception among urban adolescent population, interpreted above are predictors emerged with outshining effects in the analyzed cross-sectional data. The full model results are summarized in Table 5.2.

Table 5.2 Multivariate logistic Model Predicting the Risk of

Pregnancy Among Adolescents (Unweighted N=488), Awassa, 1995.

Predictor Variables	Coefficients		Signif.
	b	exp(b)	
Parental Structure Nonintact (vs Intact)	0.0862	1.090	0.8213
Family Income (vs <201) 201-500 >500	0.2449 -0.3445	1.2776 0.7086	0.4652 0.6088
Parents' Schooling (vs No Schooling) Primary School (0-6) Beyond Primary (>6)	-0.593 -1.106**	0.5524 0.3308**	0.1525 0.0031
Family's Religion Other Religion(vs Orthodox)	-0.780*	0.4584*	0.0411
Age at Onset of Menses (vs <13) 13-14 15-16	0.151 0.718	1.163 2.051	0.8180 0.3202
Age at First Intercourse (vs <17) 17-18 19-22	0.544 0.559	1.723 1.750	0.0934 0.2879
Marital Status (vs Single) Married Marriage Broke Up	1.524*** 0.928	4.590*** 2.530	0.0003 0.0663
Childhood Residence Non-Awassa (vs Awassa)	-0.418	0.658	0.2140
Past Religiosity (vs Not at all) Few Times Frequently	-0.483 0.440	0.617 1.552	0.1852 0.2403

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)			
Few Times	-0.297	0.743	0.3480
Frequently	-1.791	0.167***	0.0001
Length of Contraception	-0.261	0.770	0.1691
Constant	13.206		0.0000

* 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 substantiates the fact that use of contraception at initiation of premarital sexual relationship plays paramount role in reducing the risk of having before marriage conception among sexually active urban adolescent females. The partial effect of use of contraception at inception of premarital intercourse elevates when other factors are controlled. For instance, in the bivariate association, the likelihood of having premarital pregnancy among non-contraceptors at the initiation of pre-marriage intercourse increases by a factor of 122; while controlling confounding effects,

the risk of premarital pregnancy for non-contraceptors rises by a factor of 137. This seems authentic because there are incorporated common risk factors for use of contraception and premarital pregnancy. Hence, controlling these factors enhances the impact of contraception.

In the full model, the second factor in predicting the incidence of premarital pregnancy among urban adolescent girls is the rate of communication with close peer friends and relatives. The risk of before marriage pregnancy is (1/0.167) 6 times higher for those who have had no communication with their close peer friends and relatives than for those who have had regular communication. Whereas, the effect in the univariate model is marginally suppressed; i.e., among non-communicating adolescents the likelihood of being unmarried pregnant increases by a factor of 5.8, when other factors are not controlled. Thus, control of factors with common effects slightly elevates the influence of communication.

The third predictor is the current marital status when other factors are controlled. The results of the full model reveal that the odds of premarital pregnancy for those currently with intact marriage and for those who were with currently dissolved marriage is respectively 4.59 times and 2.53 times the odds for that of who were not engaged in marriage (single). Moreover, the impact of current marital status on measuring the odds of premarital pregnancy among the married adolescents is statistically substantive; while among those with disrupted marriage is unimportant. However, in the bivariate relationships, other factors are not controlled, current marital status data significantly explain the odds of pregnancy among the

married group of adolescents as well as among those adolescents with dissolved marriage group, at p<0.001.

These results suggest that in the bivariate association, when other factors are controlled, the influence of current marital disruption in the occurrence of premarital conception be exaggerated. 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. In other words, the adolescent woman would reluctant to use contraceptives when she intended to perform the first marriage. Furthermore, period of regular contraception is inversely related to odds of pregnancy. Hence, controlling duration of continuous contraception suppresses the impact of current marital disruption. On the other hand, 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 levels achievement is a significant predictor of the incidence of premarital pregnancy among urban adolescent women; while primary school levels 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. That is, the odds of premarital pregnancy for those adolescents whose parents had never attended schooling increases by threefold (3.02), when other factors are controlled. While the odds increases by twofold (2.02) 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 indicate that urban adolescents whose parents had attended beyond primary school education are less likely to be affected by premarital conception than no schooling parents 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 to bleak future prospects.

The univariate model, other factors are not remained constant, shows that the odds of premarital pregnancy for those adolescents who were not agree to have had the first intercourse is 1.198 times for those who were agreed. While on the other hand, the multivariate model depicts that the odds of pregnancy among those girls who did not consent to be engaged in the first intercourse is 0.369 times lower than the odds among those peers who consented, when other factors held constant.

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 the same group of adolescents. These two diametrically opposite results, which are obtained in the uncontrolled and controlled models, may be acceptable. Due to the reason on one hand, a girl's permission at initiation of premarital intercourse is quite important when one is motivated to avoid risk of unmarried conception by use of contraception. On other hand, it increases the frequency of premarital coitus. Since use of contraception is inversely associated with odds of premarital pregnancy, controlling this factor brings about substantial rise in the odds of pregnancy among agreed adolescents.

So that, among adolescents who agreed to be engaged in premarital intercourse, a likelihood of having before wedlock pregnancy incomparably increases if the attitude towards the use of contraception remains the same. And it is also possible to accentuate that urban adolescent girls who did not allow the inception of premarital intercourse may be sexually sporadic and they may pose themselves to lower risk of unmarried pregnancy.

In the analysis, the completed school grades data suggest that in the absence or erratic use of contraception adolescent women who have completed grade levels between 12 and beyond are more likely to have been unmarried pregnant than those peers whose school levels completion is non or at primary (<6).

When other factors are not controlled, the odds of premarital pregnancy among adolescent women who did not correctly report the risk period at which pregnancy is most likely to occur is 3.81 times higher than the odds among those counterparts who could correctly report. On the other hand the figure falls to 2.27 when other factors are controlled. In both cases, the results are found to be statistically acceptable.

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

The last variable that affects the odds of premarital conception is family's religious affiliation during the childhood period of a girl. The bivariate association reveals the statistical irrelevance

of family's religious affiliation, while the partial association discloses the statistical importance, at p<0.05. In one hand, the effect is overshadowed when other factors are not controlled. On other hand, controlling other factors significantly adds up the impact of family's religious affiliation. However, from the estimates of the two models we can deduce 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 manifest the significant contributions 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 (unwanted pregnancy).

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 been increasing and covering substantial proportions.

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). This research paper is concerned itself to:

      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 two major objectives, a cross-sectional survey was conducted in Awassa. Using table of random numbers a 29% sample (4 kebeles) selected; and 506 eligible respondents were successfully interviewed. The pre-coded structural questionnaire was

used to obtain the relevant information; and also SPSSPC+ software was employed to enter and analyze the data.

The data indicate that the incidence of premarital pregnancy among adolescent population is pervasive; i.e., in the sampled population pre-wed-lock conception had occurred to 46.1% of the adolescent women at least for one time. Once the prevalence of premarital pregnancy among urban adolescent population is estimated the research has attempted to identify the specific risk factors that account for the widespread problem of an urban adolescent population of Ethiopia.

Results for differentials of premarital pregnancy by selected factors reveal that parents' educational status, family's estimated income at age 14, adolescent's educational achievement, knowledge of pregnancy risk period, use of contraception at first premarital sex, and communication with close peer friends and relatives have significantly changed the proportion of premarital pregnancy. However, in the multivariate model the effect of family's estimated income is found to be insignificant.

The univariate logistic regression results, bivariate associations, suggest that odds of premarital pregnancy are significantly affected by family's estimated income at age 14, parents' educational status, age of entry into premarital intercourse, current marital status, educational achievement, knowledge of fecundity risk period, contraception at inception of premarital intercourse, communication with close peer friends and relatives, and duration of continuous contraception. These stated factors and the remaining factors whose effects seem unimportant during the bivariate

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

The results of the multivariate analysis indicate that predictor variables 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, adolescent's educational achievement, 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 contraceptor counterparts. In other words, the odds of premarital conception for contraceptors at initiation of first intercourse are 0.007 times the odds for those non-users counterparts. This finding suggests that it is very unlikely that an adolescent girl who has used contraception at the commencement of premarital sexual intercourse to have been premarital pregnant than her peer who has delayed or failed to use contraception.

The odds of premarital conception for those female adolescents who had had no communication with close peer friends and relatives is 6 times higher than for those who had had regular communication. This leads to the conclusion that an adolescent girl who has no the habit of communicating with close peer friends and relatives puts herself into six fold higher risk of unwanted pregnancy than regularly communicating counterparts.

Married adolescents, 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 are highly exposed to unmarried pregnancy than the never-married counterparts during the premarital sexually active period. This finding further tells us that premarital conception is a motive to be entered untimely into marital career.

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 to early 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 are 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 premarital pregnant than their primary and below

school counterparts. Thus, sexually active adolescents have to regularly use effective methods of contraception when they are attending secondary and higher levels of education.

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 concise use of periodic abstinence and other traditional methods of contraception.

The odds of premarital conception for those adolescents who grew up in orthodox affiliated families increases by a factor of (1/. 458) 2.18 than the odds for those who raised in families of other religious background (one among 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 necessitate programmatic efforts on premarital sex, pregnancy and childbearing issues.

6.2 Policy's Implication.

The estimated proportion of premarital pregnancy among urban adolescent women in Awassa corroborates that quite a significant number of adolescents, in urban Ethiopia, are being unmarried pregnant at least once in their sexual life. 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 implications 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.

The 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 expedient.

As the result indicates more educated adolescents are more likely exposed to have had premarital conception, when reliance on modern contraception is constant. Thus, an increase in number of years spends in beyond primary school substantially elevates the risk of conception among sexually active adolescents. Since adolescents'

problems are 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 perspectives with strong male peers, parents, religious members and community involvement will be successful to lessen the current prevalence rate of unmarried conception among sexually active urban adolescents.
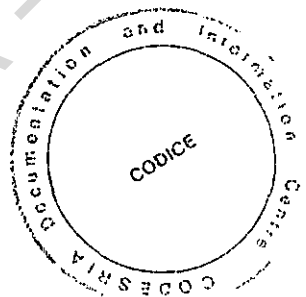
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ANNEX

List of Household Members and Eligible Respondents.

I.   Household Schedule.

Identification	
Region	_____
Town	_____
Higher	_____
Kebele	_____
Household No.	_____
Enumeration Area	_____
No. of Females Age Between 15 and 24	_____

List of Household Members						
Serial No.	Name	Age	Sex: 1. Male 2. Female	Marital Status: 1.Married 2.Single 3.Divorced 4.Widowed 5.Separated	Ethnicity	Religion

Interview Status: 1. Completed 2. Partially Completed
3. Postponed/Deferred4. Refused
5. Other, Please specify: _____

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

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Serial No.	Age	What is your current marital status?[1] (if single , skip to column '5')	If you are not currently single, had you engaged in sexual intercourse before you married for the first time? 1. Yes 2. no	If you are currently single, have you ever had boy friend (partner)? 1. Yes 2. no	If yes in column 5, have you experienced first sexual relationship with your boy friend (partner) 1? Yes 2. no	Eligibility (Whenever the code value in column 4 or 6 is '1', circle the serial number, in column 1, which corresponds to the name of the respondent listed on the household schedule.)

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

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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 age14?

                 1. Intact (Both natural parents)

                 2. Female headed (No adult male)

                 3. Other nonintact (Step-parents, Grant-
     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 illiterates 2. One of them is literate

3. Both are literate

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 birthday? —————
   (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

Q.	Method	Have you ever heard of this method?	Have you ever been familiar with this method?
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
	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-birth[2] outside of marriage ?
    (if no, skip to next part)

                1. Yes   2. No

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 : ————————————————

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

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 woman becomes pregnant?
    1. Marriage (with sexual partner)
    2. Giving birth outside marriage (being unmarried mother)
    3. Abortion

4. Other, Please specify:--------

15. When do you advise an unmarried pregnant girl to undergo abortion?

     1. If she does not plan to marry the boy by whom she is pregnant

     2. To terminate pregnancy due to rape

     3. If any of the partner does not want the pregnancy

     4. If it is dangerous to health or life of woman

     5. In all the above conditions

     6. Other, please specify:----------------

16. Where do women usually go for abortion?

     1. Hospital/health center/clinic

     2. Family guidance association service

     3. Doctor/nurse home   4. Friend's home

     5. At family home

     6. Other, please, specify:----------

     8. DK

17. Who usually perform abortion?

     1. Doctors   2. Female Nurses/Dressers

     3. Male/nurses/Dressers 4. Midwifes

     5. Female friends

     6. Others, please specify:------

18. Do you support abortion as method of avoiding unwanted birth?

     1. Never support   2. Support

     3. Strongly support

19. How many siblings do you have? (If none, fill '0')

     19.1 Sisters-----   19.2 Brothers--------

20. How many of your siblings are older than you?

     5:1 sisters-----   5:2 brothers-----

If there is no older sister, skip to----
21. Do you have any high school completed and above older sister?

              1 Yes   2 No

22. Do you have any employed older sisters?
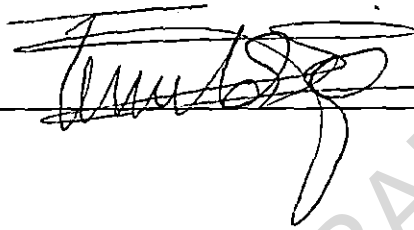
              1 Yes   2 No

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