

## Contraceptive use Among Female Adolescents in Korle-Gonno, Accra, Ghana

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### Abstract

**Objective:** To find out the prevalence of contraceptive use among female adolescents and the associated factors for contraceptive choice and use.

**Methods:** Using systematic sampling technique, one female adolescent (10-19 years) from each of 110 houses was interviewed using structured questionnaire. One house was selected and a female adolescent who consented was administered structured questionnaire. Data collected included; socio-demographic factors, adolescent sexuality, contraceptive use/non-use and contraceptive choices. Data was analysed using SPSS: 16.0 and frequencies, means, Chi Squared test and Logistic regression was used, setting significance at  $p=0.05$ .

**Results:** The mean age at first sexual intercourse was 15.9 years (12-18 years) and 55.5% of female adolescents were sexually active. Contraceptive prevalence among sexually active female adolescents was 38.0%. The commonest method used was the male condom (73.9%).

Main reasons for choice of method were easy access and safety of method, and also dual protection specifically for the male condom. Most adolescents besides having not thought about protection at time of sexual intercourse had no specific reason for not using contraception. There was a generally low level of encouragement from social contacts to female adolescents to use contraceptives. Common reasons given for abstinence included being young and afraid of pregnancy and HIV/AIDS and also want to further education and achieve goals in life.

Discouragement from contraceptive use was generally low and was mainly from peers and sex partners and statements used in this regards stemmed mainly from misconceptions and misinformation.

Unadjusted analysis suggested that Mother's/female guardian's highest level of education and sex partner encouragement were significantly associated with contraceptive use ( $p=0.035$  and  $0.040$  respectively) and multivariable logistic regression analysis showed that only mother's/female guardian's highest level of education was a significant factor ( $p=0.047$ ).

With the current low level of contraceptive prevalence there is the urgent need to address perceived barriers from this study such as lack of encouragement from close social contacts of this vulnerable group, misinformation and misconceptions about contraceptives and also research into appropriate ways of helping abstaining youth and practical ways of empowering women by educating the girl child must be researched.

**Keywords:** Adolescent; Contraceptive use; Contraceptive method; Ghana, Sexually active

### Introduction

According to the Ghana Demographic and Health Survey of 2014, The survey also reported age at first marriage and first sex for women to be 19.3 years and 18.4 years respectively and women with no education begin sexual activity 3.1 years earlier than women with secondary education [1]. This implies most adolescents initiate sexual activity before marriage and that unplanned and unwanted pregnancy may therefore be a major issue. In Ghana 80% of adolescents know one or more forms of contraception however, 80% do not use contraception at first sex [2].

The adolescent health policy of Ghana has a vision to have well-informed adolescent, adopting healthy lifestyles physically and

psychologically and supported by a responsive health system. Its mission statement is to make available appropriate information on young people's health and provide comprehensive adolescent health services including reproductive health. These services will be delivered in a humane, efficient and effective manner by- trained, friendly, highly motivated and client oriented personnel [3].

One of the key elements of the adolescent health and development programme is adolescent contraception. The specific policy here is that sexually active adolescents who seek contraceptive services shall be counseled and served where appropriate. Information and counseling should be provided for adolescents who are not sexually active. For adolescents in general, emphasis shall be on abstinence.

In Ghana, one in eight pregnancies is to an adolescent and adolescent pregnancies had increased in absolute numbers from 2002 until 2006 when there was a decrease. The increase was especially

among early adolescents (10-14 years) [4]. It was found over the last decade that rises rapidly with age, from 1% at age 15 to 31% at age 19 [1].

These figures generally underestimate adolescent pregnancy rates because of difficulties in recording pregnancies that end in abortions and also coverage of antenatal services. Anecdotally there is high adolescent pregnancy rate in Korle-Gonno, with consequent high rate of unsafe abortion as evidenced from the comprehensive abortion care records of the Korle-Bu Teaching Hospital [5].

The high adolescent pregnancy rate may be due to several factors including the low contraceptive prevalence which in part is linked to contraceptive choices. Most studies on factors associated with contraceptive use among adolescents have been among predominantly literate populations either in schools or attending family planning clinics [6]. The adult female literacy rate is 65.29 % in Ghana [7]. And since education has a direct link with contraceptive use and the consequences thereof it is important to carry out a community based study of contraceptive use in order to get a more complete picture of any associated factors.

It has been suggested that adolescents from low socioeconomic background have added risk factors, which may explain low levels of contraceptive prevalence [8,9]. In spite of the fact that Korle-Gonno is a low socioeconomic suburb of Accra coupled with the fact of no data on contraceptive usage among adolescents in this community it is important to study the factors associated with contraceptive use in Korle-Gonno vis-a-vis the high adolescent pregnancy rate in Ghana.

## Methods

This was a study of households in Korle-Gonno where questionnaire were used to obtain information on adolescent contraceptive use. Korle-Gonno, is a suburb of Accra, located to the south of the metropolis. It has a total population of 27,826 and adolescent population of 5,900. The female adolescent population is 3,089. The total female population was 13,400 and thus 23% of the female population is made up of adolescents.

The study population consisted of female adolescents from 10-19 years of age and assuming a CPR of 6.9%, the calculated minimum sample size was 110 at 95% confidence level and 80% power with allowable margin of error of 1.9%.

There were 2490 houses in Korle-Gonno and the sample size required was 110 and therefore a sampling interval of 22 was used to select houses. Korle-Gonno is well demarcated with four corners and to ensure random selection one corner was selected by ballot and the direction (left or right) was also chosen by ballot. The first house was also selected by ballot from the first twenty two houses from the selected corner. Every twenty-second house was then selected till the required sample was reached. Only one adolescent who consented was interviewed at a scheduled time and place of her choice. If more than one adolescent consented only one was selected by ballot. In the event of no female adolescent in the house then the next house with a female adolescent was used. The study was approved by the Ghana Health Service (GHS) National Ethics Committee. Study specific structured questionnaire developed from literature and modified appropriately after pretesting on a conveniently selected 10 female adolescents who did not form part of final sample, were administered by trained female research assistants. Pre-coded data from survey questionnaire was entered in Epi Info version 3.4.1 and exported to SPSS version 16. For

analytical representation frequencies and means were calculated for some variables, The Chi-square statistic was used and statistical significance of all associations set at  $P < 0.05$ . Logistic regression was used to examine factors associated with contraceptive use.

## Results

Of the 110 respondents, 60(55.5%) had ever had heterosexual intercourse. Majority had their first sexual intercourse between 15 years and 18 years (66.7%), while 18.3% had their first sexual intercourse between 12 and 14 years, with only 15.0% having their first sexual intercourse after 18 years of age. The mean and median age at first sexual intercourse was 15.9 years. Majority, 24(40.0%), of sexually active respondents had sexual intercourse at least once every month, while 15% had sex at least once a week. Sixteen (26.7%) had been pregnant before and 6(10%) were currently pregnant (Table 1).

Sexuality issue	Frequency	Percent
<b>Heterosexual activity</b>		
Ever had sex	60	54.5
Never had sex	50	45.5
<b>Age at first sex</b>		
Oct-14	11	18.3
15-17	40	66.7
18-19	9	15
<b>Number of sexual partners</b>		
1	40	66.7
2	18	30
≥ 3	2	3.3
<b>Frequency of sexual activity</b>		
Only first encounter	16	26.7
At least once/week	9	15
At least once/month	24	40
At least once/year	6	10
Less than once/year	5	8.3
<b>Pregnancy</b>		
Ever pregnant	16	26.7
Never pregnant	38	73.3
Currently pregnant	6	10
<b>Pregnancy outcome for ever pregnant</b>		
Miscarried	1	6.2
Gave birth	12	75
Induced abortion	3	18.8

**Table 1:** Distribution of respondents by selected female adolescent sexual activity (N=110).

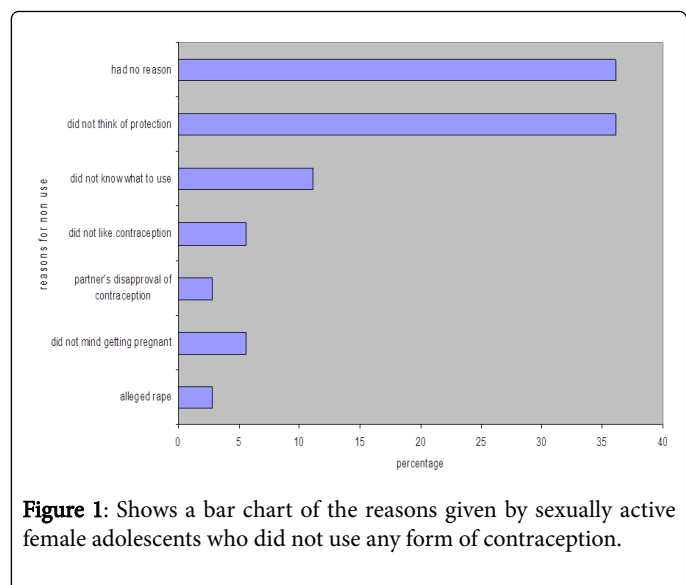
Contraceptive prevalence was 38.0% and 29.5% at first and last intercourse respectively. The main method used was the male condom 17(73.9%), followed by the use of safe period, 5(21.7%) and the withdrawal method 1(4.3%). No other methods were used. Majority (41.2%) used condom mainly to prevent pregnancy whereas 29.4% used for dual protection (Tables 2 and 3).

Contraceptive use	Frequency	Percent
<b>Contraceptive use at first sex</b>		
Yes	23	38.3
No	37	61.7
<b>Method used at first sex</b>		
Male condom	17	73.9
Safe period	5	21.7
Withdrawal	1	4.3
Douching*	1	

**Table 2:** Distribution of the 60 sexually active respondents by contraceptive use and choice of method at first sex.

Contraceptive use	Frequency	Percent
<b>Contraceptive use at last sex</b>		
Yes	13	29.5
No	31	70.5
<b>Method used at first sex</b>		
Male condom	11	84.6
Safe period	5	15.4

**Table 3:** Distribution of the 44 sexually active respondents by contraceptive use and choice of method at last sex.



**Figure 1:** Shows a bar chart of the reasons given by sexually active female adolescents who did not use any form of contraception.

Majority 72.2% of non-users had no specific reason for not using any form of contraception or had not thought of protection at the time of the sexual encounter (Figure 1).

Thirty percent of sexually active female adolescents had some encouragement to use contraception from their mothers/female guardians, 12(20%) from their fathers/male guardians, 17(28.3%) from their sex partners, 9(15.0%) from health service providers and 20(33.3%) from their peers. No parent/guardian or service provider discouraged any female adolescent from the use of contraception. Two (3.3%) had been discouraged by their sex partners and 4(6.7%) by their peers.

Background	Contraceptive use at first sex		p-value
	Yes	No	
	N %	N %	
<b>Age at first sex</b>			
Oct-14	1 (9.0%)	10 (90.9%)	0.067
15-17	17 (42.5%)	23 (57.5%)	
18-19	5 (55.6%)	4 (44.4%)	
<b>Number of sexual partners</b>			
1	14 (35.0%)	26 (65.0%)	0.745
2	8 (44.4%)	10 (55.6%)	
≥ 3	1 (50.0%)	1 (50.0%)	
<b>Frequency of sexual activity</b>			
Only first encounter	2 (22.2%)	7 (77.8%)	0.411
At least once/week	8 (33.3%)	16 (66.7%)	
At least once/ month	3 (50%)	3 (50%)	
At least once /year	2 (28.6%)	5 (71.4%)	
Less than once /year	8 (57.1%)	6 (42.9%)	
<b>Pregnancy</b>			
Ever pregnant	3 (18.8%)	13 (81.2%)	0.06
Never pregnant	20 (45.5%)	24 (54.5%)	
<b>Currently pregnant</b>			
Yes	1 (16.7%)	5 (83.3%)	0.25
No	22 (40.7%)	32 (59.3%)	
<b>Pregnancy outcome for ever pregnant</b>			
Miscarried	1 (100%)	0	0.08
Gave birth	2 (16.7%)	10 (83.3%)	
Induced abortion	0	3 (100%)	

**Table 4:** Relationship between adolescent sexuality and contraceptive use.

Forty-percent of female adolescents who had no sexual experience knew of peers who were sexually active. Their reasons for abstinence

were fear of pregnancy, HIV/AIDS and desire to further education and achieve set goals in life.

The only significant associations with contraceptive use was mother's/female guardian's highest level of education ( $p=0.035$ ) and encouragement from sex partner ( $p=0.040$ ) and logistic regression only mother's/female guardian's highest level of education ( $p=0.047$ ) remained significant (Tables 4-6).

Background	Contraceptive use at first sex		p-value
	Yes	No	
	N %	N %	
<b>Mother/female guardian Encouragement</b>			
Yes	5 (27.8%)	13 (72.2%)	0.271
No	18 (42.9%)	24 (57%)	
<b>Father/Male guardian Encouragement</b>			
Yes	5 (41.7%)	7 (58.3%)	0.791
No	18 (37.5%)	30 (62.5%)	
<b>Sex partner Encouragement</b>			
Yes	10 (58.8%)	7 (41.1%)	0.04
No	13 (30.2%)	30 (69.8%)	
<b>Health Service Provider Encouragement</b>			
Yes	4 (44.4%)	5 (55.5%)	0.683
No	19 (37.3%)	32 (62.7%)	
<b>Peers Encouragement</b>			
Yes	10 (50%)	10 (50%)	0.189
No	13 (32.5%)	27 (67.5%)	
<b>Peers discouragement</b>			
Yes	2 (50%)	2 (50%)	0.619
No	21 (37.5%)	35 (62.5%)	
<b>Sex partner discouragement</b>			
Yes	0	2 (100%)	0.257
No	23 (39.7%)	35 (60.3%)	

**Table 5:** Relationship between encouragement/discouragement and contraceptive use.

Variable	-2 log likelihood ratio	p-value
Mother's/female guardian's education	21.775	0.047
Encouragement from sex partner	18.929	0.07

**Table 6:** Logistic regression analysis of predictor variables of contraceptive use at first sexual intercourse.

## Discussion

This study indicated that majority of female adolescents in the study area had had heterosexual sexual intercourse and the mean age at first sexual intercourse being 15.9 years. However it is important to note that 18.3% had their first sexual intercourse as early adolescents (10-14 years). These findings are similar to that in a larger study in the Greater Accra and Eastern regions of Ghana that showed that 78.4% of the females were sexually experienced with a mean age of 16.2 years [10]. It is also similar to that in a South African study of 1025 female teens, that showed that 74.6% of them were sexually active and 18.7% had initiated coitus before menarche and the mean age at first coitus was 14.86 years [11]. The fact therefore is that majority of adolescents are sexually active, and so long as sexual activity may start before menarche any measures to protect adolescents will probably have to start before the average age of menarche.

About 27% of sexually active female adolescents had been pregnant previous and 10% were currently pregnant. Adolescent pregnancies turn to be similar across countries. For instance it was found that 34% of young women in the United States become pregnant at least once before age 20 and similarly Agyei et al. [10] found the incidence of pregnancy among the unmarried female adolescent respondents to be 37%, and was higher in urban than in rural areas. This has a reflection on adolescent contraceptive use.

The female adolescent contraceptive prevalence was 38% at first sexual intercourse and decreased to 29.5% at last sexual intercourse. The male condom was the commonest method used at both the first and last sexual intercourse. The main reason for condom use not only reflects the fact of easy access as was found in this study but probably also that most adolescent sexual encounters are initiated and dominated by their male partners, who tend to have earlier sexual experiences generally than the females. The females are generally stigmatized as "prostitutes" when they purchase condoms or carry condoms with them. Besides most first sexual encounters are not anticipated by the females and so they generally are not "combat ready", at the same time the low prevalence may be due to the misconception that familiarity indicates low risk.

Contraceptive prevalence and choice varies widely among female adolescents as evidenced by several studies, for instance whereas 75% of teens in the United States used contraception on first intercourse and the most popular method was the male condom [12,13]. Only 12.4% of 180 adolescents interviewed in Abia state used condom during the first intercourse [14] and ever use of the condom among ever sexually active adolescent females aged 15-19 was 32% in Burkina Faso and 43-48% in Ghana, Malawi and Uganda. It was also noted that among these sexually active female adolescents who had sex in the 12 months prior to the survey, 23-27% in Burkina Faso, Malawi and Uganda and 37% in Ghana used condoms at last intercourse [15]. The findings in the later study are consistent with that in this study.

Considering the low levels of contraceptive prevalence among adolescents and the fact that as many as 50% of female adolescents will become pregnant within 6 months of initiating sexual intercourse [16,17] and that because these pregnancies are largely unwanted will end in induced abortion most of which will be unsafe it is therefore implies that maternal morbidity and mortality due to unsafe abortions can only be reduced by strategies that will increase contraceptive prevalence among this vulnerable group.

Majority (36.1%) of sexually active female adolescents had no specific reason for not using contraception or did not think about

protection at the time of sexual intercourse (36.1%). This reinforces the fact that adolescents do not perceive the consequences of their actions before acting. The reasons for non-use of contraception by adolescents may vary widely but findings in this study are similar to that found by Agyei et al. [10] in the Greater Accra and Eastern regions of Ghana where the main reasons given for non-use were that they did not think about contraception, were concerned about the safety of contraceptives, and partner objection. And also the results of Brazilian study that found adolescents not thinking about contraception and partner disapproval as the main reasons [18,19].

Overall less than half of sexually active female adolescents had encouragement from anybody or group. The highest percent 33.3% and 30.0% of these adolescents had encouragement from their peers and mothers or female guardians respectively. Studies have shown that in general terms parents find it difficult to discuss sex related matters with their adolescent children and also that mothers tend to have such discussions with daughters and fathers with sons [20]. It therefore consistent that the only significant association with contraceptive use among respondents was mother's/female guardian's educational level, thus the more educated a mother, the more able she would be at such discussions, she may also be a role model for her daughters, who would aspire to greater heights of life achievements and so may delay child bearing and avoid risk behavior.

Female adolescents who had no sexual experience but knew peers, who had, gave fear of pregnancy and STI, especially of HIV/AIDS, as reasons for abstaining. Agreeably this group of adolescents should be encouraged to continue to abstain but they generally are more likely to use contraception appropriately if given the right kind of information at the right time before their fears give way to boldness as they interact with their bold peers who are not getting pregnant or getting STIs for the moment. The perceived limitations of this study include the inherent limitations in getting accurate and honest responses from adolescents on sexual matters in relation to the known fact that socio-culturally sexual issues have restricted discussions. This is more so with adolescents below 18 years whereby consent/assent had to be sort from guardians or parents.

## Conclusion and Recommendations

The study found that most female adolescents are not only sexually active but initiated at an early age and that most are not using contraception and thus are exposed to the risk of unplanned pregnancy over a long period. Majority of them had no specific reason for not using contraception or do not perceive the risk of pregnancy without contraception. Mother's educational level was significantly associated with female adolescent contraceptive use and so educating the girl child is important for future contraception of their children.

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